

SIGNS OF PROGRESS



There has never been a time of greater opportunity — or achievement — for the North Texas Tollway Authority. The fourcounty area we serve is one of the fastestgrowing areas in the United States, both in transportation needs can be met with current state funds. Relieving this congestion, preserving mobility and driving economic growth in the region are at the heart of the NTTA's efforts. > The activities of the NTTA

population and economy. Between 1995 and 1998, more than 285,000 people and 256,000 new jobs were added to the region, which includes Collin, Dallas, Denton and Tarrant counties.



North Texas Tollway Authority 1999 Board of Directors-back row, from left: Kirk Wilson; Donna R. Parker, Vice Chairman; Donald D. Dillard; David D. Blair Jr.; on stairs, from bottom: Kay Walls; Leahwray S. Wroten; Jere W. Thompson Jr., Chairman.

mirror the region's exciting progress, as projects that began planning as long as 20 years ago are now being realized in the openings of the Addison Airport Toll Tunnel and the

Many corporate headquarters have relocated to the area, and construction is booming. • With growth comes traffic. Efficient transportation and mobility are essential, yet according to the Texas Department of Transportation, only 40% of Texas' President George Bush Turnpike. With new initiatives in all of the counties we serve, the NTTA is fulfilling its mission: to improve the quality of life, mobility and the regional economy of North Texas by providing fiscally sound toll facilities.

The information included in this report is not intended to present a comprehensive analysis of the Authority and its operations. It should not be used as a basis for making a financial decision with regard to the Authority or any of its securities or other obligations. For more complete information on the Authority and its obligations, please refer to the Authority's Annual Financial Report, the official statements relating to the Authority's bonds, and the annual and material event disclosures filed by the Authority with the nationally recognized municipal securities information repositories and the State Information Depository pursuant to Rule 15c2-12 of the Securities and Exchange Commission. The information in this report and each of the documents relative to above or elsewhere in this report may be obtained from Ms. Susan Buse, Trassuer, 2015 Ralegh Street, Dallas, Texas 75219.

. .



President George Bush Turnpike



The President George Bush Tunpike (PGBT) is a planned 30-mile tollway that will extend from SH-78 in Garland to Belt Line in Irving. It will pass through seven cities and three counties

upon completion in its presently approved alignment. At the present time, all construction contracts have been awarded for those portions from Midway to Campbell. The remaining construction contracts are anticipated to be awarded and completed according to the schedule below:



Construction Schedule

Limits	Award	Completion
Midway to Preston	2/97	12/98
Preston to Coit	11/97	7/99
Coft to US-75	5/98	12/99
US-75 to Campbell	10/98	12/99
Campbell to SH-78	3/99	4/2000
IH-35 Interchange	10/98	6/2001(PGBT access)
Dickerson to Josey	5/99	6/2001
Josey to Frankford	4/99	6/2001
Frankford to Midway	3/99	12/2000
IH-35 to 635	2001	7/2004
635 to Belt Line	1/2000	7/2002



Addison Airport Toll Tunnel



The Addison Airport Tolf Tunnel (AATT) is a 3,700-foot project that connects Keller Springs from Midway, beneath the Addison Airport, to the DNT. The actual tunnel is approximately

1,600 feet in length. Total project cost is estimated at over\$20 million upon completion.

Southwest Parkway

The Southwest Parkway is a 10-mile route that will connect to IH-30 at the southwest edge of downtown Fort Worth and proceed in a southwesterly direction to an intersection at Alta Mesa. This is a cooperative project with the City of Fort Worth and TxDOT. TxDOT plans to assist in the design and construction of interchanges at IH-30 and IH-20. In addition, TxDOT plans to extend the Southwest Parkway to FM-1187 in Johnson County. The initial feasibility study for this project is complete. The environmental process is under way and is estimated to be completed by the end of 1999. Final design and right-of-way acquisition are expected to take approximately two years, with construction expected to be completed late in 2004.



1998 NTTA STATISTICAL INFORMATION

NTTA Revenues

1998 NTTA revenues exceeded \$71 million, an increase of approximately 7% over the prior year. This continues a trend from the past several years.



Debt Service

The current outstanding debt of over \$1 billion includes funding for construction of Segments I through V of the PGBT, which will be completed and opened to traffic over the next five years. As the graph shows, annual debt service (net of capitalized interest) increases from \$23.6 million in 1999 to a maximum of \$100 million in 2020. Additional debt may be issued to fund expansion of the NTTA system or new projects as described elsewhere in this report.



NTTA Expenditures

1998 NTTA expenditures totaled \$12 million, an increase of 7% over 1997 expenditures. Of these expenditures, administrative costs accounted for 28%, toll collection 35%, engineering and maintenance 10%, utilities 3%, traffic control 9% and Tolltag store operations 15%.



Other Information

820

Southwest Parkway

Existing toll roads

30

• NTTA processed over 127 million vehicle transactions in 1998.

(30)

287

Study under way

Mou Crai Brid

20

::

- DPS troopers aided over 80,000 motorists through personal contacts.
- Almost 60,000 Tolltag transponders were issued.
- NTTA Lane Runner program collected over \$125,000 through December 1998.





The Addison Airport Toll Tunnel is Texas' only underground toll road.

PROSPECTS FOR 1999

- Award contracts for the construction of PGBT from Midway to IH-35 and Campbell to SH-78.
- Complete PGBT from Preston to Colt in July.
- Complete PGBT from Coit to Campbell by year's end.
- Complete design of PGBT from IH-635 to Belt Line.
- Open Addison Airport Toll Tunnel to traffic in February.
- Expedite the construction schedule for DNT screen walls.
- Award DNT resurfacing contract from Northwest Highway to Royal.
- Review and update NTTA policies: Purchasing/Procurement; Sound Mitigation; Right-of-Way.

A.C.

MILESTONES IN THE HISTORY OF THE TTA/NTTA

- **1953** June 9, Tumpike Act signed into law.
- 1957 Aug. 27, DFW Turnpike opened to traffic.
- **1968** June 30, Original 9.8 miles of Dallas North Tollway opened to traffic.
- 1978 Jan. 1, DFW Turnpike becomes toll-free and property of State Department of Highways and Public Transportation.
- **1979** April 30, Mountain Creek Lake Bridge opened to traffic.
- **1982** May 6, Houston Ship Channel Bridge opened to traffic.

ι.

- **1987** July, 5.3-mile extension of Dallas North Tollway opened to Briargrove.
- **1989** July, Tolltag system introduced to Dallas North Tollway customers, a world-first.
- 1994 April to December, 6.8-mile extension of Dallas North Tollway to State Highway 121 in Plano opened to traffic.
- **1994** May 6, Houston Ship Channel Bridge transferred to Harris County Tollroad Authority.
- **1994** June, Texas Turnpike Authority accepts President George Bush Turnpike as a project.
- 1997 Sept. 1, Texas Turnpike Authority becomes North Texas Tollway Authority.
- **1998** Dec. 4, President George Bush Turnpike opened from Midway to Preston.

1999 Feb. 17, Addison Airport Toll Tunnel opened to traffic.

- . Implement New Project/Debt Management policy.
- Complete five-year Strategic Plan.
- Complete five-year Capital Improvements Plan.
- Fill key staff positions, including seconds-in-command.
- Implement Mobility Enhancement projects: Northwest Highway ramp improvements; Expand Tolltag use on the system; Implement toll increase; Initiate design for express Tolltag lanes.
- Improve communications with Tolltag customers.
- Implement beginning phase of Strategic ITS and Traffic Management Plan.
- Implement restructured employee performance/evaluation review.



Dallas North Tollway

BILLES

The Dallas North Tollway (DNT) is the heart of the DNT System, a 21-mile, six-lane, main street of the Metroplex from downtown Dallas to cities in northern Dallas and southern

Collin and Denton counties, passing through or along the cities of Dallas, Highland Park, University Park, Addison, Farmer's Branch and Plano. Collin County and the City of Frisco have acquired right-of-way for a 10-mile corridor, 300 feet wide, on which to construct the future Dallas North Tollway Phase 3 and its parallel service roads. Collin County and Frisco have already built roads which could become service roads to a future Phase 3 extension. When traffic levels make it feasible, bonds will be sold to finance the tollway lanes of the extension 10 miles northward from the end of the current Dallas North Tollway at SH-121 to US-380. The Authority is already studying the feasibility of constructing an overpass over SH-121. Collin County and Frisco would be reimbursed for the service roads they have financed and constructed.





Trinity Parkway

The Trinity Parkway is a proposed 10-mile toll connector that borders the southern edge of downtown Dallas and will connect SH-183 to IH-45/US-175. The project is envisioned as a reliever route and will permit subsequent improvement by TxDOT of the congested IH-30/Mixmaster area. The Trinity Parkway will include directional connectors on both of the Trinity levees. The City of Dallas plans significant park and floodway improvements within the levees that will coordinate with and complement the Trinity Parkway roadway improvements. Environmental studies on the Trinity Parkway will begin in 1999, with completion of those studies expected by the end of 2000. Design and acquisition of right-of-way should be complete by 2003, with construction planned for completion by the end of 2006.

Mountain Creek Lake Bridge



Mountain Creek Lake Bridge (MCLB) in southwestern Dallas County extends two and one-half miles from the intersection of Spur 303 and Southeast 14th Street in Grand Prairie

on the west side of the lake, eastward across the lake to the intersection of Spur 303 and Mountain Creek Parkway in Dallas. It provides motorists with a direct east-west crossing between the Oak Cliff section of Dallas and Grand Prairie. The bridge design allows for a 34-foot-wide roadway for two 12-foot-wide traffic lanes and room for passing a stalled vehicle. The bridge structure is 7,425 feet long and provides a 10-foot clearance above the lake surface. The project also includes approaches, interchanges, a toll plaza, an operations/ utility building, a maintenance facility and a parking lot.

Construction Contracts

During 1998, NTTA awarded a number of contracts for construction of new portions of the Dalfas North Tollway (DNT) system and several significant maintenance contracts. These construction activities include:

- Awarded contract to construct 48 prefabricated toll booths for PG8T; \$2,080,000.
- Awarded contract to construct the toll plaza for Addison Airport Toll Tunnel: \$1,059,000.
- Awarded contract for the construction of PGBT ramp toll plazas between Midway and Preston: \$1,539,600.
- Awarded contract for the construction of DNT screening walls between University and Meaders: \$1,957,000.
- Awarded supplement to contract to expedite the construction of a box culvert on PGBT: \$699,000.
- Awarded contract for the construction of PGBT Barrier Plaza 7 (west of Coit): \$10,185,000.
- Awarded contract for the construction of PGBT between US-75 and Shiloh: \$19,439,000.
- Awarded supplement to contract to provide fiber optics communication in the Addison Airport Toll Tunnel; \$483,000.
- Awarded contract for construction of PGBT between Shiloh and Campbell; \$16,332,000.
- Awarded reimbursement to City of Dallas for relocation of utilities for PGBT: \$299,000.
- Awarded contract for the construction of PGBT Barrier Plaza 6 (west of Shiloh): \$7,724,000.
- Awarded contract for the pavement repair and overlay of DNT from Beverly to Lemmon.
- Awarded contract for the development of a strategic Intelligent Transportation System (ITS) Plan and Traffic Management System.
- Completed contracts for White Rock Creek Bridge, Preston Road Bridge and Hillcrest/Ohio/Mapleshade for three bridges on PGBT. White Rock Creek and Hillcrest/Ohio/ Mapleshade are substantially complete and open to traffic.

Design and Consulting Contracts.

The NTTA has also been active in designing new projects and improvements to the DNT system. These contracts and studies include:

- Awarded contracts for the DNT "Bottleneck" Study to Kimley Horn: \$223,000, and Wilbur Smith & Associates: \$200,000.
- Awarded contract to study feasibility of construction of the Phase III portion of DNT northerly extension through SH-121: \$145,000.
- Awarded supplement to contract to conduct an engineering study of the extension of DNT from SH-380 north through Grayson County: \$225,000.
- Authorized supplemental agreement to design the preliminary layout of DNT main lane bridge structures crossing over SH-121.
- Awarded contract for surveying of the Southwest Parkway: \$1,800,000.

- Authorized contract for design of the Administration/ Maintenance facilities: \$330,000.
- Authorized contract for integration of video and data toll collection and management system.
- Initiated preliminary financial feasibility study for construction of SH-161 from SH-183 to IH-20 as a toll facility.

Cooperation with State and Area Organizations

The NTTA has also been active in partnering on mobility projects with state and area governmental entities. These agreements and studies include:

- Approved an Advance Funding Agreement with the Texas Department of Transportation (TxDOT) for NTTA's portion of the construction costs of the PGBT/IH-35E interchange: \$18,330,000.
- Approved an interlocal agreement with TxDOT regarding construction of the PGBT/IH-635 interchange by TxDOT: \$25,000,000.
- Approved a three-party agreement with the City of Fort Worth and TxDOT regarding the process for continuing development of the Southwest Parkway.
- Approved a three-party agreement with the City of Dallas and TxDOT regarding the process for continuing development of the Trinity Parkway and allocating responsibilities and participation of all parties.
- Approved interlocal agreements on construction reimbursement and maintenance provisions with the cities of Garland, Plano, Richardson and Carrollton.
- Approved a cooperative study with Collin and Grayson counties to evaluate potential corridors for the extension of the DNT.
- Signed Memorandum of Understanding with Dallas/Fort Worth Airport and Central Dallas Business District examining feasibility of implementing a regional Tolltag^{*} system.
- Negotiated and purchased five right-of-way parcels along the DNT and eight parcels along the PGBT.
- Negotiated a three-party design modification for PGBT neighborhood enhancement at Ohio and Mapleshade.

Other Accomplishments for 1998 Include:

- Received a bond rating upgrade from Standard & Poor's from A- to A. In addition, NTTA's bond rating outlook was improved from "Stable" to "Positive" by Moody's.
- Sale of \$100.7 million in bonds to finance the design and construction of PGBT Segment V through the City of Irving.
- Organized and led a strategic partnering session including the Federal Highway Administration, Texas Department of Transportation, Dallas Regional Mobility Coalition, and NTTA design consultants to establish project review processes and scheduling.

1

2

 Selected new NTTA logo and awarded contract to develop and implement a public relations and marketing plan for the NTTA.



NORTH TEXAS TOLLWAY AUTHORITY

3015 Raleigh Street + P.O. Box 190369 + Dallas, Texas 75219 + www.ntta.dst.tx.us

NORTH TEXAS TOLLWAY AUTHORITY AUDITED FINANCIAL STATEMENTS DECEMBER 31, 1998

DALLAS NORTH TOLLWAY SYSTEMS MOUNTAIN CREEK LAKE BRIDGE TRANSITION AND FEASIBILITY FUNDS

Financial Statements And Supplementary Data

December 31, 1998

(With Independent Auditors' Report Thereon)

 ~ 2

.



200 Crescent Court Suite 300 Dallas, TX 75201-1885

Independent Auditors' Report

Board of Directors North Texas Tollway Authority:

We have audited the special-purpose statement of assets and liabilities of the North Texas Tollway Authority (the Authority) Dallas North Tollway System (Tollway) as of December 31, 1998, and the related special-purpose statements of revenues and expenses and changes in fund equity for the year then ended. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying special-purpose financial statements were prepared for the purposes of complying with the provisions of the Trust Agreement, as supplemented, for the Dallas North Tollway System revenue bonds, dated July 1, 1989, as interpreted by the Authority and described in note 1 and are not intended to be a presentation in conformity with generally accepted accounting principles.

In our opinion, the special-purpose financial statements referred to above present fairly, in all material respects, the assets and liabilities of the North Texas Tollway Authority Dallas North Tollway System as of December 31, 1998 and its revenues and expenses and the changes in its fund equity for the year then ended, on the basis of accounting described in note 1.

Our audit for the year ended December 31, 1998 was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in Schedules 1 through 8 for the year ended December 31, 1998 is presented for purposes of additional analysis and continuing disclosure and is not a required part of the basic financial statements. Such information, except for that portion marked unaudited on which we express no opinion, has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects, in relation to the basic financial statements taken as a whole.

.....



As described in note 2 to the special-purpose financial statements, the North Texas Tollway Authority Dallas North Tollway System adopted the provisions of Government Accounting Standards Board Statement No. 31, "Accounting and Financial Reporting for Certain Investments and for External Investment Pools," in 1998.

The year 2000 supplementary information on page 23 is not a required part of the special-purpose financial statements, but is supplementary information required by the Governmental Accounting Standards Board, and we did not audit and do not express an opinion on such information. Further, we were unable to apply to the information certain procedures prescribed by professional standards because of the nature of the subject matter underlying the disclosure requirements and because sufficiently specific criteria regarding the matters to be disclosed have not been established. In addition, we do not provide assurance that the Authority is or will become year 2000 compliant, that the Authority's year 2000 remediation efforts will be successful in whole or in part, or that parties with which the Authority does business are or will become year 2000 compliant.

We have also previously audited, in accordance with the basis of accounting practices set forth in the provisions of the Trust Agreement for the Dallas North Tollway System revenue bonds, as interpreted by the Authority, the balance sheets of the North Texas Tollway Authority Dallas North Tollway System as of December 31, 1989 through December 31, 1997, and the related statements of revenues and expenses and changes in fund equity for the years then ended (none of which is presented herein), and we expressed unqualified opinions on those financial statements, on the basis of accounting described above. The supplementary information included in Schedules 1 through 8 related to the North Texas Tollway Authority Dallas North Tollway System's 1989 through 1998 financial statements was subjected to auditing procedures applied in the audits of those basic financial statements and, in our opinion is fairly stated in all material respects in relation to the basic financial statements from which it has been derived.

This report is intended solely for the information and use of the Board of Directors, management of the Authority, and trustees of the bonds and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LLP

March 19, 1999

~ • • <u>•</u> •

Statement of Assets and Liabilities

December 31, 1998

			Construction and	Revenue
Assets		Total	Property Fund	fund
Cash (note 2)	\$	5,481,457	520,430	1,636,060
Investments (note 2)		715,940,440	542.798,832	3,390,210
Accrued interest receivable		14,158,779	12,290,309	9,531
Interfund receivables		12,152,295		***********
Interproject Receivables		544.605	7,803	
Accounts receivable		2.038,804	1.913.736	1,697
Inventory, at average cost		5,013,727		
Prepaid expenses		81,243		
Deferred amount on refunding (note 5)		35,448,174	35,448,174	
Capitalized cost of Dallas North Tollway System (note 3)	_	583,090.740	583,090,740	
	\$	1,373.950,264	1,176,070,024	5,037,498
Liabilities				
Vouchers payable	\$	745,354		
Accounts payable		7.362,475	5,360,703	
Retained from contractors		5,590,014	5,568,364	
Interfund payables		12.152,295	11,686.521	465.774
Accrued liabilities (notes 4, 7 and 10)		734,852	16,245	*********
Accrued interest payable		18,611,050		5,4
Accrued arbitrage rebate payable (note 5)		939,669	799,416	
Deferred revenue		4,214,775		4,198,883
Tolltag deposits		372.841		372,841
Texas Department of Transportation loan payable (note 5) Texas Department of Transportation ISTEA loan payable		4.600,000	4,600.000	
(note 5)		115,000,000	115.000,000	
Dallas North Tollway System revenue bonds payable (note 5 Texas Department of Transportation, Senate)	940.701.711	940.701,711	**********
Bill 370 Payable (note 10)		5,034,742		300000 gan-
		1,116,059,778	1,083,732.960	5,037,498
Fund Equity				
Contributed capital		6.115,432	6,115,432	*******
Retained earnings		251.775,057	86,221,632	
Total fund equity	_	257.890.489	92,337,064	
Commitments and contingencies (notes 6, 7, 8, 9, 10 and 11)				
	\$	1,373,950.267	1.176,070,024	5,037,498

r.

;

1

See accompanying notes to financial statements.

Operation and	Reserve	Capital		runds			
maintenance	maintenance	improvement	Bond interest	Reserve	Redemption		
fund	fund	fund	account	account	account		
3 374 967							
358 [8]	6 750 921	86 346 249	7 087 787	62 205 451	7 003 314		
6.987	8.050	572.144	15.687	1.241.726	14.346		
		465.775	11.686,521				
<u> </u>		536,802					
116.690	6.682	- PARLANT		·			
5.013,727							
81,243		—					
277600			******				
	·····	········	•=				
8,901,795	6,765,653	87,920,970	18,789.490	63,447,177	7,017,660		
745,354		_			•		
307,007	52.582	337,840		1,304,343			
*********		21,650	***********	********			
718 607			-9889-9444-Y	*			
/18.007			18 611 050		3400400.		
		: 		140,253			
15.892	*******		-	5-14WA	uncone:		
400000044	********	<u> </u>		***********			

		интер ициј.			Sec. As		
		5,034,742					
1.786,860	52.582	5.394,232	18.611,050	1.444.596			

7.114,935	6.713.071	82,526.738	178.440	62.002,581	7,017,660		
7.114,935	6,713.071	82.526,738	178,440	62.002,581	7,017,660		
8,901,795	6.765.653	87.920,970	18.789,490	63.447.177	7,017,660		

And Associated a the manufacture of Annual contractions : . K herease cores The second second second second second and Alexandra be .

Statement of Revenues and Expenses

For the year ended December 31, 1998

Revenues:		
Toll revenues	S	57.253,744
Interest revenue		8,726,550
Tolltag store revenue		5,197,365
Other revenue		188.697
Gross revenues		71,366,356
Operating expenses:		
Administration:		
General administration		1.507.633
Accounting		167,641
Data processing		140,842
Insurance		1,332.620
Vault		260,047
Audit		73,764
Safety and security		317,799
	-	3,800.346
Operations:	-	
Toll collection		4,006,613
Engineering and maintenance		1,179,054
		405,487
Tallic control		1,139,929
1 ontag store	-	1,603,807
	-	8,230,922
Total operating expenses	-	12,337,298
Net revenues available for debt service (note 5)		59,029,058
Net increase (decrease) in the fair value of investments		1.165,390
Interest on bonded debt		
Bond interest net of \$22.552.604 capitalized		16,799,552
Bond discount amortized		1.257.991
Interest accretion		2.110.819
Amortization of deferred amount on refunding (note 5)		1,442,041
	-	21.610,403

Reserve Maintenance Fund expenses		886,901
Capital Improvement Fund expenses		1.498,400
		2.385,301
Construction fund earnings, net of transfers to the Bond		
Interest Account		4,982,748
Net revenues	\$	41.181,492

See accompanying notes to financial statements.

Statement of Changes in Fund Equity

December 31, 1998

			Construction and	Revenue
		Total	Property Fund	fund
Fund equity at beginning of year	\$	221.757.517	88.515.626	
Restatement	•	556.763	160,132	
Fund equity restated		222,314,280	88.675.758	
Gross revenues Net increase (decrease) in the fair value of investments Operating expenses Bond interest expense		98,901,708 1,165,390 (12,337,298) (40,610,147)	27,796.312 949,976 	62.899,590
Amortization of deferred amount on refunding (note 5) Reserve Maintenance Fund expenses Capital Improvement Fund expenses Interest accretion of 1995 bonds		(1.442.041) (886.901) (1,498,400) (2.110,819)	(1,442,041)	
Transfer of capitalized interest on construction fund investments			(22.552,606)	
Net revenues		41,181.492	3,493.654	62.899,590
Interfund transactions: Distribution from revenue fund Transfer from construction fund Transfer form bond redemption Transfer of excess money from other Capitalized costs transferred to construction and property fund Revenue bonds retired Transfer of interest accretion on 1995 bonds Transfer of capital accounts Transfer to escrow agent Transfer to bond interest fund Revenue bond refunded - 89, 90 Capitalization of investment earnings in excess of capitalized		(1.858) (397.327) (8.337.739) 8.735.000 (15.711.740) 62.343 12,535,000	(3,737.597) (3,737.597) (3,443.175 (3,735,000 (2,110,821) (16,205,348) 12.535,000	(71.561.865)
 Capitalization of investment earlings in excess of capitalized interest and amortization of bond discount and deferred amount on refunding Cost of equipment retired Transfer to feasibility study fund Equity realized from sale or trade-in of equipment 		(2,282,718) (209,039) 	(2,282,718) (209,039) —	
Net changes during the year		35,576,209	3,661,306	
Fund equity at end of year	\$	257.890,489	92,337,064	

1

:

· · · ;

ŗ

See accompanying notes to financial statements.

Operation and	Reserve	Capital	Debt Service Funds			
maintenance fund	maintenance fund	improvement fund	Bond interest account	Reserve account	Redemption account	
5,485,864	7.232.518	48,430,692	1.791,349	63,280,838	7.020,630	
	(1.980)	89.067		309,544		
5,485,864	7,230,538	48.519,759	1.791,349	63,590,382	7,020.630	
110,078	395,502 11.625	3.529,107 188.636	463,885	3,426.474 15,153	280,760	
(12,337.298)		6017 (1996)	(20.252.160)			
_		-4-4 - 4468887	(39,352,100)			
	(886 901)					
	(005.767)	(1.498.400)		<u> </u>		
_		······	(2,110.819)	<u> </u>		
			22.552,606	—		
(12,227,220)	(479.774)	2.219,343	(18.446.488)	3,441,627	280,760	
12,301,336	1,493,100	35,357,567	11.901.369		10,508,493	
		(105.323)	8,870,490	(5.029,428)		
	(397,327)		<u></u>			
			(6,542.709)		(2,119.566)	
1,554,955	(1.136,261)	(3,464,608)			(8.735.000)	
		whether				
		tabidda.	2.110,821			
			103 608			
			495,000		62.343	
			<u> </u>			
_			_			
			_		Second con 444	
	2,795	•		·		
1.629,071	(517.467)	34,006,979	(1,612,909)	(1.587.801)	(2,970)	
7,114,935	6,713,071	82.526,738	178,440	62,002,581	7,017,660	

.

í

Notes to Financial Statements

December 31, 1998

(1) Organization and Summary of Significant Accounting Policies

(a) Organization

In June 1997, the Texas Legislature approved a bill to create the North Texas Tollway Authority, a regional tollway authority under Chapter 366, Transportation Code. Effective September 1, 1997, the North Texas Tollway Authority (the Authority) became the successor agency to the Texas Turnpike Authority and succeeded to all assets, rights, liabilities, and other property of the Texas Turnpike Authority located in Collin, Dallas, Denton or Tarrant County. The Authority also assumed and became liable for all duties and obligations related to the Texas Turnpike Authority at that time.

The Authority is a political subdivision of the State of Texas, authorized and empowered by the Regional Tollway Authority Act (Act) to construct, maintain, repair and operate turnpike projects at such locations within Collin, Dallas, Denton or Tarrant Counties, as may be determined by the Authority. The Authority is further authorized to issue turnpike revenue bonds, payable solely from tolls and other revenue of the Authority, for the purpose of paying all or any part of the cost of a turnpike project. Under the provisions of the Act, these revenue bonds shall not be deemed to constitute a debt or a pledge of the faith and credit of the State of Texas or of any other political subdivision thereof.

The Dallas North Tollway System is a turnpike project of the Authority and consists of the Dallas North Tollway, the Addison Airport Tunnel, and the President George Bush Turnpike. The Authority also operates Mountain Creek Lake Bridge, which is a separate turnpike project, and for which separate individual financial statements are prepared in accordance with the trust agreement. In addition, separate financial statements are prepared to present the accounts of the Dallas-Fort Worth Turnpike Transition Trust Fund, the Feasibility Study Fund and the Equipment Account.

(b) Accounting Policies

The accounts of the Dallas North Tollway System (Tollway) are maintained in accordance with the practices set forth in the provisions of the Trust Agreement for the Dallas North Tollway System Revenue Bonds, as interpreted by the Authority. These practices are similar to generally accepted accounting principles for an enterprise fund on an accrual basis except that depreciation and amortization of the Tollway and related acquisition and revenue bond issuance costs are not r. Laverand H, H

Notes to Financial Statements

December 31, 1998

included as an operating expense or otherwise provided, and interest accrued for certain periods after official completion on certain of the Tollway's bond issues is capitalized as allowed by the Trust Agreement and bond resolution, rather than being reflected as an expense. Otherwise, revenues are recognized when they are earned, expenses are recognized in the period in which they are incurred, and all assets and liabilities associated with the operation of the Dallas North Tollway System are included in the balance sheet in accordance with the Trust Agreement as described above.

The assets of the Tollway are stated at cost which includes interest paid prior to, during and one year subsequent to construction, less retired assets and income earned from investments, in accordance with the terms of the Trust Agreement.

i

The various funds which are required by the Trust Agreement are grouped as follows in the financial statements:

- Construction and Property Fund The Construction and Property Fund was created to
 account for that portion of the proceeds from the sale of the Dallas North Tollway System
 Revenue Bonds which were required to be deposited with the trustee in order to pay all costs
 of construction. There also may be deposited in the Construction and Property Fund any
 monies received from any other source for paying the cost of the Tollway.
- Revenue Fund The Revenue Fund was created to account for all revenues (all tolls, other revenues and income) arising or derived by the Authority from the operation and ownership of the Tollway. All revenues of this fund are distributed to other funds in accordance with the Trust Agreement.
- Operation and Maintenance Fund The Operation and Maintenance Fund was created to account for and pay current operating expenses of the Tollway.
- Reserve Maintenance Fund The Reserve Maintenance Fund was created to account for those expenses of maintaining the Tollway which do not recur on an annual or shorter basis. As defined in the Trust Agreement such items include repairs, painting, renewals and replacements necessary for safe or efficient operation of the Tollway or to prevent loss of revenues, engineering expenses relating to the functions of the Authority, equipment, maintenance expenses and operating expenses not occurring at annual or shorter periods.

Notes to Financial Statements

December 31, 1998

- Capital Improvement Fund The Capital Improvement Fund was created to account for the cost of repairs, enlargements, extensions, resurfacing, additions, renewals, improvements, reconstruction and replacements, capital expenditures, engineering and other expenses relating to the powers or functions of the Authority in connection with the Tollway, or for any other purpose now or hereafter authorized by law.
- Bond Interest Account The Bond Interest Account was created to account for the payment of the semiannual interest requirements of the revenue bonds.
- Reserve Account The Reserve Account was created for the purpose of paying interest on and principal of the bonds whenever and to the extent that the monies held for the credit of the Bond Interest Account and the Redemption Account shall be insufficient for such purpose. The required reserve is an amount equal to the average annual debt service requirements of all bonds outstanding. At December 31, 1998, the Authority was in compliance with this requirement.
- Redemption Account The Redemption Account was created to account for the payment of the annual principal requirements of the revenue bonds.

As a political subdivision of the State of Texas, the income of the Authority is not subject to federal or state income tax under the Internal Revenue Code Section 115.

The preparation of financial statements requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

(2) Cash and Investments

The Authority may purchase investments as authorized by the Trust Agreement and as further authorized by the revised investment policy and strategy approved by the Board of Directors in December 1998. These investments include but are not limited to obligations of the United States or its agencies and instrumentality's; direct obligations of the State of Texas or its agencies and

Notes to Financial Statements

December 31, 1998

instrumentalityis; collateralized mortgage obligations directly issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States; other obligations, the principal of and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of, the State of Texas or the United States or their respective agencies and instrumentalityis; obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than A or its equivalent; certificates of deposit issued by a state or national bank; fully collateralized repurchase agreements; commercial paper with a stated maturity of 270 days or fewer from the date of its issuance; and no load money market mutual funds which have a dollar-weighted average stated maturity of 90 days or fewer and includes in its investment objectives the maintenance of a stable net asset value of \$1 for each share.

The Authority does not invest in financial instruments other than those authorized by the investment policy, and does not invest in any state or local government investment pools.

The Authority adopted Statement of Governmental Accounting Standards (GASB) No. 31, Accounting and Financial Reporting for Certain Investments and External Investment Pools, during 1998. Statement No. 31 establishes accounting and financial reporting standards for all investments held by governmental entities. This statement generally requires all equity securities and debt instruments with readily determinable market values to be carried at fair value, with changes in fair value reflected in the statement of revenues and expenses.

(a) Deposits of Cash in Bank

.....

ţ

Ì

í

The carrying amount of \$5,481,457 for cash in bank is presented below. The bank balance of the Authority has been classified according to the following risk categories:

- Category 1 insured or collateralized with securities held by the governmental entity or by its agent in the name of the governmental entity.
- Category 2 collateralized with securities held by the pledging financial institution's trust department or agent in the governmental entity's name.

Notes to Financial Statements

December 31, 1998

• Category 3 - uncollateralized (which would include any deposits collateralized with securities held by the pledging financial institution, or by its trust department or agent but not in the governmental entity's name).

Category 1	Category 2	Category 3	Bank balance	Carrying amount
\$ 	1,786,955	verst 618.0000-	1,786,955	5,280,757

Reconciling items comprised of deposits in transit, outstanding payments and bank errors are present which cause the difference between the bank balance and the carrying amount. The carrying amount does include the toll attendants' change fund and petty cash of \$200,700.

(b) Investments

Both the carrying amount and market value of investments as of December 31, 1998 are shown below. Investments are categorized to give an indication of the level of credit risk assumed by the agency at year-end. The three categories are:

- Category 1 investments that are insured or registered or for which the securities are held by the agency or its agent in the agency's name.
- Category 2 uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the agency's name.
- Category 3 uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent, but not in the agency's name.

Notes to Financial Statements

December 31, 1998

			Category			Amortized	Fair
Type of security		1	2	3		Cost	value
U.S. Treasury notes	\$	26.623.278			\$	26.623.278	27,001,277
Association (FNMA)		, 20.299.960		3600#8010##C		20.299.960	20.281,742
Goldman Sachs TR FINL Square Government		17,645.474	Vizien			17,645,474	17.645.473
Federal Home Loan Bank (FHLB)		12,998,501	490-ogenog			12.998.501	13.049.730
Student LN Marketing Assn Medium		3,600,000		telekinin		3,600,000	3,589,200
Federal Farm Credit Banks Commercial paper		1.400.000 50.369.046		********		1.400,000 50.369.046	1,396.024 50,471,982
Repurchase agreements	-	541,541.177	······		-	541,541,177	542,765,012
Totals	\$ =	674.477.436				674,477,436	676.200.440
Uncategorized investments -	money	market funds				39.740.000	39.740,000
Total investments					\$	714.218,286	715,940,440

In accordance with Governmental Accounting Standards Board (GASB) Statement Number 3, Deposits with Financial Institutions. Investments (including Repurchase Agreements) and Reverse Repurchase Agreements, amounts invested in money market funds are not categorized because they are not evidenced by securities that exist in physical or book entry form.

(3) Construction and Property

í

Included in the capitalized costs of the Construction and Property Fund, in accordance with the Trust Agreement, are costs incurred in connection with the offering, sale and issuance of bonds for construction purposes; unamortized discount on the sale of those bonds; and bond interest expense net of income earned from investment of funds during construction; the cost of certain real estate for rightof-way requirements; and administrative and legal expenses incurred during the construction period.

(4) Accrued Vacation

Vested or accumulated vacation leave is recorded as an expense and liability as the benefits accrue to employees. No liability is recorded for nonvesting accumulating rights to receive sick pay benefits.

Notes to Financial Statements

December 31, 1998

(5) Revenue Bonds and Loans Payable

To provide for the refunding of the Dallas North Tollway System Series 1985 Revenue Bonds and additional funds for supplementary development of the Dallas North Tollway System - Extension Phase 2, the Texas Turnpike Authority authorized and issued \$237,695,000 in principal amount of revenue bonds dated July 1, 1989. Such bonds included \$48,465,000 of serial bonds which mature beginning January 1, 1995 in amounts as set forth in the Trust Agreement and bear interest at rates ranging from 6.55% to 6.875%. The remaining \$189,230,000 of 6.00% to 7.125% term bonds are subject to mandatory sinking fund redemption at their principal amount in part on January 1, 2009 and in years thereafter in amounts as set forth in the Trust Agreement. Interest on the bonds is to be paid semiannually on January 1 and July 1 of each year.

To fund the Dallas North Tollway System - Extension Phase 2, the Texas Turnpike Authority authorized and issued \$133,070,000 in principal amount of revenue bonds dated May 15, 1990. The bonds were issued June 20, 1990 as parity bonds with the Series 1989 revenue bonds, and included \$30,385,000 of serial bonds which mature beginning January 1, 1995 and bear interest at rates ranging from 6.60% to 7.25%. The remaining \$102,685,000 of 6.00% to 7.25% term bonds are subject to mandatory sinking fund redemption at their principal amount beginning on January 1, 2010. Interest on the bonds is to be paid semiannually on January 1 and July 1 of each year.

To provide for the partial refunding of the Dallas North Tollway System Series 1990 Revenue Bonds and additional funds for supplementary development of the Dallas North Tollway System - Extension Phase 2, the Texas Turnpike Authority authorized and issued \$140,135,000 in principal amount of revenue bonds dated September 15, 1993 (Series 1993). Such bonds included \$87,225,000 of serial bonds which mature beginning January 1, 1995 in amounts as set forth in the Trust Agreement and bear interest at rates ranging from 3.25% to 5.125%. The remaining \$52,910,000 of 5.00% term bonds are subject to mandatory sinking fund redemption at their principal amount in part on January 1, 2015 and in years thereafter in amounts as set forth in the Trust Agreement. Interest on the bonds is to be paid semiannually on January 1 and July 1 of each year.

The Texas Turnpike Authority purchased sufficient U.S. Treasury securities - State and Local Government Series with the net proceeds from the Series 1993 bonds for the partial retirement of the Series 1990 bonds and placed them in an irrevocable escrow account with Bank of New York. At December 31, 1998, the irrevocable escrow account holds sufficient investments to pay for the outstanding refunded principal of \$121,975,000 on the defeased Series 1990 bonds

Notes to Financial Statements

December 31, 1998

~~~~~

.....

ĺ

[

1

ł,

The Authority follows the provisions of Governmental Accounting Standards Board's Statement No. 23, "Accounting and Financial Reporting for Refundings of Debt Reported by Proprietary Activities" (Statement No. 23). Under the provisions of Statement No. 23, the difference between the reacquisition price and the net carrying amount of the Series 1990 Bonds (\$22,554,605) was deferred to be amortized over the life of the Series 1993 Bonds as an adjustment to the bond interest expense. The provisions of Statement No. 23 were not retroactively applied to debt refundings of previous years. Amortization of the deferred amount on refunding was approximately \$1,057,000 for the year ended December 31, 1998.

To provide funds for the purpose of constructing the Addison Airport Toll Tunnel project, an addition to and expansion of the Dallas North Tollway System, the Texas Turnpike Authority authorized and issued \$26,800,000 in principal amount of revenue bonds dated December 1, 1994. The bonds were issued January 5, 1995 on a parity with other obligations of the Authority and included \$7,250,000 of serial bonds which mature beginning January 1, 1998 and bear interest rates ranging from 5.5% to 6.7%. The remaining \$19,550,000 of 6.6% to 6.75% term bonds are subject to mandatory sinking fund redemption at their principal amount beginning on January 1, 2010. Interest on the bonds is to be paid semiannually on January 1 and July 1 of each year.

To fund a portion of the costs of the President George Bush Turnpike (the PGBT), an addition to and expansion of the Dallas North Tollway System, the Texas Turnpike Authority issued \$446,411,475 in principal amount of revenue bonds, dated December 1, 1995. The bonds were issued January 23, 1996 on a parity with other obligations of the Texas Turnpike Authority and included \$419,220,000 of serial bonds which mature beginning January 1, 2012 and bear interest at rates ranging from 5.00% to 5.40%. The remaining \$27,191,475 consist of capital appreciation bonds which mature beginning January 1, 2006.

Additionally, the North Texas Tollway Authority intends to fund, in part, costs of the construction of the President George Bush Turnpike with proceeds from a loan, which will ultimately total \$135,000,000, made by Texas Department of Transportation (TxDOT) pursuant to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The first three advances from TxDOT totaling \$75,000,000 were received through 1997 and the fourth advance from TxDOT in the amount of \$40,000,000 was received during 1998. Future funding to TxDOT is subject to appropriation by Congress. Repayment of the loan to TxDOT is to be made from amounts on deposit in the Capital Improvement Fund with payments subordinate to bonds or other obligations of the North Texas Tollway Authority issued or entered into and secured by the tolls and revenues of the system. Interest at the rate of 4.2% will begin to accrue on October 1, 2000, compounding annually on January 1, 2001 with the first payment to be made in October 2004.

Notes to Financial Statements

December 31, 1998

TxDOT has incurred \$4,600,000 in costs for interchange improvements relating to the President George Bush Turnpike, which will be repaid by the Authority. Repayment of these costs will be paid in annual payments (without interest) of \$500,000 beginning on October 1 of the year after the 1STEA loan is fully paid, currently 2019.

The North Texas Tollway Authority issued \$129,270,000 in principal amount of Dallas North Tollway System Revenue Refunding Bonds, Series 1997, dated January 1, 1996 on October 8, 1997, for the purpose of refunding \$123,945,000 of Series 1989 revenue bonds. Interest on the bonds is payable on January 1 and July 1 of each year commencing on January 1, 1998. Principal is payable on January 1 commencing on January 1, 1999. The bonds included of \$78,665,000 of serial bonds which mature beginning January 1, 1999 and bear interest rates ranging from 5.0% to 6.5%. The remaining \$50,605,000 of 5.5% term bonds are due January 1, 2015.

The Authority purchased sufficient U.S. Treasury Note with the net proceeds from the Series 1997 bonds for the partial retirement of the Series 1989 bonds and placed it in an irrevocable escrow account with Bank One. On December 31, 1997, the U.S. Treasury Note matured and the irrevocable escrow account held sufficient cash to pay for the outstanding refunded principal of \$123,945,000 on the defeased Series 1989 bonds. Under the provisions of Statement No. 23, the difference between the reacquisition price and the net carrying amount of the Series 1989 Bonds (\$11,430,835) was deferred and will be amortized over the stated term of the Series 1997 Bonds as an adjustment to the bond interest expense. The deferred amount on refunding will be amortized over the stated term of the or shorter than the remaining life of the new debt is equal to or shorter than the remaining life of the old debt. Amortization of the deferred amount on the refunding was approximately \$178,000 for the year ended December 31, 1998.

The North Texas Tollway Authority issued \$129,005,000 in principal amount of Dallas North Tollway System Revenue Refunding bonds, Series 1997A, on October 20, 1997, for the purpose of refunding a portion of the Dallas North Tollway System Revenue Bonds, Series 1989, dated July 1, 1989, and the outstanding Dallas North Tollway System Revenue Bonds, Series 1994 dated December 1, 1994. The amount of refunded principal related to the Series 1989 bonds is \$98,040,000 and the amount related to the Series 1994 bonds is \$22,575,000. Interest on the bonds will be payable on January 1 and July 1 of each year commencing on January 1, 1998. Principal will be payable on January 1 commencing on January 1, 1998. The bonds included \$67,685,000 of serial bonds which mature beginning January 1, 1998 and bear interest rates ranging from 4.0% to 5.375%, \$56,655,000 of 5.0% term bonds due January 1, 2020 and \$4,665,000 of 5.0% term bonds due January 1, 2023.

(Continued)

تمتعنا

Notes to Financial Statements

December 31, 1998

The North Texas Tollway Authority purchased sufficient U.S. Treasury securities - State and Local Government Series with the net proceeds from the Series 1997A bonds for the partial retirement of the Series 1989 bonds and 1994 bonds and placed them in an irrevocable escrow account with Bank One. At December 31, 1998, the irrevocable escrow account holds sufficient investments to pay for the outstanding refunded principal of \$98,040,000 on the defeased Series 1989 bonds and \$22,575,000 on the defeased Series 1994 bonds. Under the provisions of Statement No. 23, the difference between the reacquisition price and the net carrying amount of the Series 1989 Bonds and 1994 Bonds (\$9,217,525) was deferred and will be amortized over the stated term of the Series 1997A Bonds as an adjustment to the bond interest expense. The deferred amount on refunding will be amortized over the stated term of the or shorter than the remaining life of the new debt is equal to or shorter than the remaining life of the old debt. Amortization of the deferred amount on the refunding was approximately \$208,000 for the year ended December 31, 1998.

The Series 1997 and 1997A Bonds were issued to provide funds to refund the Series 1989 and 1994 Bonds in the amounts of \$221,985,000 and \$22,575,000, respectively. Serial 1989 bonds in the amount of \$4,045,000 were not refunded and matured January 1, 1998. Serial 1994 bonds in the amount of \$4,225,000 were not refunded and mature annually up to January 1, 2005 of which \$3,805,000 remains outstanding at December 31, 1998.

The \$100,660,000 North Texas Tollway Authority Dallas North Tollway System Revenue Bonds, Series 1998 were authorized to be issued by the Authority pursuant to the resolution of the Board of Directors and the Finance Committee adopted on August 19, 1998, and the Trust Agreement dated as of July 1, 1989. The bonds were dated September 15, 1998 and were issued for the purpose of financing Section V of the PGBT. The proceeds of Bonds, together with TxDOT's contributions, are expected to be sufficient to fully fund the acquisition and construction of Section V. Pursuant to an agreement between TxDOT and the Authority (the "1998 Two-Party Agreement"), TxDOT will construct certain parts of Section V. Upon completion of the improvements to be constructed by TxDOT, the Authority will reimburse TxDOT for TxDOT's construction costs in excess of \$24,000,000, plus TxDOT's engineering costs attributable to the tolled portion of the improvements it constructed. The issuance consists of \$22,515,000 serial bonds, \$22,065,000 term bonds and \$56,080,000 term bonds. Interest on the bonds will be payable on January 1 of each year commencing on January 1, 2004. Principal will be payable on January 1 commencing on January 1, 2008. The bonds consist of \$22,515,000 4.1-4.75% Serial Bonds maturing from 2008-2018 with a yield of 4.150%-4.94% and \$22,065,000 4.75% Term Bonds due January 1, 2022 at a yield of 5.00% and \$56,080,000 Term Bonds due January 1, 2029 at a yield of 5.010%.

#### Notes to Financial Statements

December 31, 1998

Debt service requirements on the bonds payable, TxDOT loan payable and TxDOT ISTEA loan payable subsequent to December 31, 1998 are as follows:

| 1999                               | \$<br>47,523,902    |
|------------------------------------|---------------------|
| 2000                               | 53,666,509          |
| 2001                               | 53,671,651          |
| 2002                               | 51,972,351          |
| 2003                               | 57,135,291          |
| Thereafter                         | 1,775,144,817       |
| Less amounts representing interest | (978,812,809)       |
| Principal due                      | \$<br>1,060,301,711 |

Pursuant to the Trust Agreement, the North Texas Tollway Authority has agreed that it will at all times keep in effect a plan for toll collecting facilities and a schedule of rates of tolls which will produce during each construction fiscal year an amount of net revenues equal to 1.00 times the scheduled debt service requirements during construction and for each of the three fiscal years following the last construction fiscal year net revenues equal to 1.10 times each years debt service requirements, and 1.20 times debt service requirements for each fiscal year thereafter.

In 1998, the requirement was 1.0 times the scheduled debt service requirement for the year. Scheduled debt service for December 31, 1998 is equal to bond interest expense, net of amounts capitalized for the calendar year and the principal amount due on January 1, 1999 of \$6,845,000. At December 31, 1998, net revenues were 2.50 times scheduled debt service.

Rebatable arbitrage resulting from investing proceeds of tax-exempt debt in higher yielding taxable securities has been estimated to be \$939,669 and is recorded as an accrued arbitrage rebate liability in the accompanying financial statements.

## (6) Employees' Retirement Plan

As discussed in note 1, effective September 1, 1997, the North Texas Tollway Authority (the Authority), a regional tollway authority under Chapter 366, Transportation Code, became the successor agency to the Texas Turnpike Authority. In connection with this transition, the Authority changed from being a participant in the plans administered by the Employees Retirement System of Texas (System), which are considered single employer defined benefit pension plans, to being a participant in

Notes to Financial Statements

December 31, 1998

the Texas County and District Retirement System (TCDRS) which is a non-profit public trust fund that provides pension, disability and death benefits to eligible employees of the counties and districts that participate in TCDRS. Information related to the System, TCDRS, the Authority's 401(k) plan and its refrain from participation in social security is included herein.

## Texas County and District Retirement System

The Texas County and District Retirement System was established by legislative act in 1967. Individuals are required to become a TCDRS member at the time of their employment regardless of their age, unless the individual is ineligible for one of the reasons specified by the System (i.e. part-time, temporary employee, etc.).

The percentage of salary that both the individual and employer contribute toward retirement is determined by the governing body of the political subdivision. The employee and employer contribution rate established was 6% and 7.45%, respectively, at December 31, 1998.

Once an individual reaches vested status, he or she may end employment with a TCDRS subdivision and retain their right to future benefits as long as the individual does not die or withdraw personal contributions. Once a vested employee has satisfied both the service and age requirements for retirement, he or she is considered retirement eligible. Employees are eligible to receive lifetime monthly pension payments following the termination of their employment if the individual has 12 or more years of service credit at age 60 or older or the individual has 30 or more years of service credit at any age.

An individual is also eligible to receive lifetime monthly pension payments after their termination of employment if their political subdivision has authorized, and the individual has satisfied 10 years of service credit at age 60 or older or 8 years of service credit at age 60 or older or the individual's combined age and total service is 80 or more or the individual's combined age and total service is 75 or more.

If an individual is eligible for service or disability retirement pension payments, the amount of the lifetime monthly pension to be received after retirement is determined by dividing the total dollars of accumulated retirement credit earned at retirement by the appropriate annuity purchase rate used to convert dollars of retirement credit to a lifetime monthly pension payment.

If an individual has at least eight years of service credit and become disabled for any reason, the individual may be approved for disability retirement benefits if the TCDRS Medical Board finds that the individual is mentally or physically incapacitated for any gainful occupation and the incapacity is considered to permanent.

Notes to Financial Statements

December 31, 1998

Total pension expense allocated to Dallas North Tollway System by the Authority for the year ended December 31, 1998, was approximately \$340,937 based on a covered payroll of approximately \$5,554,126. The actuarially required contribution was made by the Authority.

## 401(k) Plan

As a state agency of the State of Texas, the Texas Turnpike Authority was a participating employer in the State of Texas Texa\$aver 401(k) Profit Sharing Plan sponsored by the Employees Retirement System of Texas (System). The Texas Turnpike Authority, as a state agency, was permitted to participate in the System's retirement system under Section 812.003 of the Texas Government Code.

Because the Regional Tollway Authority Act established the Authority as a political subdivision of the State of Texas instead of a state agency, it is no longer eligible to participate in the Texaaver 401(k) Plan maintained by the System. As a successor of the Texas Turnpike Authority, however, the Authority is eligible under current IRS rules and regulations to adopt the North Texas Tollway Authority 401(k) Plan as a successor qualified cash or deferred arrangement to the Texaaver 401(k) Plan.

Prior to 1986, the Internal Revenue Code (IRC) of 1986 permitted state or local governments and taxexempt organizations to maintain a qualified cash or deferred arrangement. The Tax Reform Act (TRA) of 1986 amended IRC to provide that a cash or deferred arrangement shall not be treated as a "qualified cash or deferred arrangement" if it is part of a retirement plan maintained by a Governmental Unit. However, TRA 1986 provides specific exception for cash or deferred arrangements adopted by a Governmental Unit prior to 1986 ("Grandfather Employer"). The Authority, a government entity is eligible to adopt the 401(k) Plan because it is a successor entity to the Texas Turnpike Authority, a Grandfathered Employer, and is adopting a cash or deferred arrangement substantially similar to the Texas Turnpike Authority's cash or deferred arrangement.

Effective September 1, 1997, each Authority employee became eligible to participate in the North Texas Tollway Authority 401(k) plan. The plan requires that each employee be required to make a mandatory employee contribution, deposited by the Authority towards the cost of the 401(k) plan, in an amount equal to (i) 6.2% of wages up to the Social Security Wage Base, for the period between 9/1/97 and 10/5/97 and (ii) 4% of wages up to the Social Security Wage Base, for the period between October 6, 1997 and January 11, 1998. All mandatory employee contributions to the 401(k) plan for payroll periods following September 1, 1997 shall be made on a pre-tax basis, provided they are subject to the Hospital Insurance portion of the Federal Insurance Contributions Act and the Federal

(Continued)

Notes to Financial Statements

December 31, 1998

Unemployment Tax Act and the withholding of those Acts. Employee contributions and plan earnings are vested at all times and a terminating employee shall be paid all mandatory contributions and plan earnings pursuant to the Plan's terms. The Authority is authorized to make discretionary employer matching contributions in such amounts as may be determined by the Board and Authority employees are vested in employer contributions at 20% after 6 years services, 40% after 7 years, 60% after 8 years, 80% after 9 years and 100% after 10 or more years. Former Texas Turnpike Authority employees employed by the Authority on or before October 31, 1997 shall receive past service credit for service with the Texas Turnpike Authority for purposes of determining the vested percentage and the Authority's Board of Directors is allowed to further amend or terminate the Plan at any time.

Total 401(k) contributions allocated to Dallas North Tollway System by the Authority for the year ended December 31, 1998, was approximately \$198,040 based on a covered payroll of approximately \$5,658,298.

#### Social Security

Effective September 1, 1997, the Authority elected to refrain from participation in Social Security and will instead participate in both the TCDRS and the Authority 401(k) plan. The Authority requires mandatory employee participation in both of these plans.

#### (7) Risk Management

The Authority established a limited risk management program for workers' compensation. Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Claim liabilities are calculated considering the effects of inflation, recent claim settlement trends including frequency and amount of pay-outs and other economic and social factors. The liability for claims and judgments is reported in the Operation and Maintenance Fund. As of December 31, 1998, approximately \$305,345 is accrued to recognize actuarially determined claim liabilities. Effective September 25, 1997, the Authority terminated its limited risk management program for workers' compensation. The Authority is now insured for workers' compensation by an external insurance company.

#### (8) **Post-employment Benefits**

1

The Authority provides post-employment health care benefits to all retired employees of Dallas North Tollway System, funded on a pay-as-you-go basis. Currently, 53 individuals meet these requirements. During the year ended December 31, 1998, expenses of approximately \$136,214 were recognized for post-employment health care premiums paid.

Notes to Financial Statements

December 31, 1998

#### (9) Commitments and Contingencies

Contract and purchase order commitments at December 31, 1998 aggregate approximately \$36,462,332. This amount includes construction contracts payable from the Construction and Property Fund. The Authority has an operating lease agreement for the rental of the Tolltag Store. The expiration of the agreement is July 2001. Lease expense for the year ended December 31, 1998 totaled approximately \$49,649 under this lease. The following represents required remaining payments under the terms of the Tolltag Store lease agreement:

| 1999 | \$      | 49,649  |
|------|---------|---------|
| 2000 |         | 49,649  |
| 2001 | <b></b> | 24,824  |
|      | \$      | 124,122 |

On August 19, 1993, the Board authorized the creation of a Revolving Fund as permitted by Senate Bill 242. The Authority entered into a Memorandum of Understanding with Collin County and Dallas County to fund the Revolving Fund from capital improvement funds from the Dallas North Tollway System, if matched by a contribution by the Texas Department of Transportation (TxDOT). To date, the Texas Department of Transportation has not taken any action regarding its contribution to the Revolving Fund, nor has the Board acted to establish the Revolving Fund.

#### (10) Payable to Texas Department of Transportation

As discussed in note 1, effective September 1, 1997, the Authority, a regional tollway authority under Chapter 366, Transportation Code, became the successor agency to the Texas Turnpike Authority. In connection with this transition, the Authority was required to make a payment to the Texas Department of Transportation in an amount equal to \$14,760,056. The corresponding liability is reflected in the Capital Improvement Fund of the accompanying financial statements. The Authority made the first 2 required payments during 1998 and the final payment of \$5,034,742 is required to be made on August 31, 1999.

Annual Street of

1

ί

-

ł

ł

i

÷

÷Ì

į

1.4

\* ^w.\* .

1

ţ

•

Required Supplementary Information Year 2000 Disclosure (Unaudited)

December 31, 1998

The Year 2000 (Y2K) issue refers to the fact that many computer programs use only the last two digits to refer to a year. Therefore, both 1900 and 2000 would be referred to as "00". Computer programs have to be adjusted to recognize the difference between those two years or the programs will fail or create errors.

The Authority has implemented a Y2K readiness program with the objective of having all of their significant centralized computer systems functioning properly with respect to the Y2K issue before January 1, 2000. Each system within the Authority is in a different stage of the Y2K readiness.

The first component of the Y2K readiness program was to identify the internal computer systems that are susceptible to system failures or processing errors as a result of the Y2K issue. This effort is substantially complete with respect to centrally administered systems. Those computer systems considered most critical to continuing operations are being given the highest priority.

The second component of the Y2K readiness program involves the actual remediation and replacement of the Authority computer systems.

The Authority has elected to partially rely on the representation of third-party software, hardware and equipment suppliers regarding the Y2K compliance of purchased systems. Based on these representations received, the Authority deemed it necessary to validate or test remediated or replaced computer systems to the full extent possible to determine that no errors are introduced during the conversion process.

The Authority is developing a formal contingency plan to mitigate the possible disruption in business operations that may result from the Y2K issue. Contingency plans include developing alternative methods of processing information. Once developed, contingency plans and related cost estimates will be refined, as additional information becomes available.

It is currently estimated that the aggregate cost of the Authority's Y2K efforts will be approximately \$400,000. The Authority's Y2K readiness program is an ongoing process and the estimates of cost and completion dates for various components of the Y2K readiness program described above are subject to change.

23

Schedule 1

. .

Concernant of

Number of the

Number of

in the second second

\*\*\*\*\*

:

. 1

-----

and the second

-----

-

12.10

1 1 exten

÷

## NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

## Schedule of Capitalized Costs

For the year ended December 31, 1998

|                                                  |    | Capitalized<br>during year<br>ended<br>December 31,<br>1998 | Cumulative<br>total (hrough<br>Dccember 31,<br>1998 |
|--------------------------------------------------|----|-------------------------------------------------------------|-----------------------------------------------------|
| Cumulative from 1989, 1990 and 1993 bond issues: | -  |                                                             |                                                     |
| Preliminary costs                                | \$ | 2.338.750                                                   | 22,786,693                                          |
| Construction                                     |    | 14,169,373                                                  | 223.235.083                                         |
| Right-of-way                                     |    | 4.262.752                                                   | 63.780,500                                          |
| Engineering                                      |    | 1.331.013                                                   | 33.916.075                                          |
| Administration                                   |    | 206.597<br>c.03c.997                                        | 4.728,175                                           |
| Equipment                                        | -  | 2,023,660                                                   | 12,000,587                                          |
|                                                  |    | 27.334.971                                                  | 361.312.913                                         |
| Financing costs                                  | -  | (4.550.705)                                                 | 53.035,584                                          |
| Total capitalized costs - 1989, 1990             |    |                                                             |                                                     |
| and 1993 bond issues                             | -  | 22.784.266                                                  | 414,348.497                                         |
| Series 1994 bond issue:                          |    |                                                             |                                                     |
| Preliminary costs                                |    | 248,472                                                     | 1,244,082                                           |
| Construction                                     |    | 14,674,491                                                  | 14.675,897                                          |
| Right-of-way                                     |    | (559.680)                                                   | 747,516                                             |
| Engineering                                      |    | 1.644,530                                                   | 3.919.228                                           |
| Administration                                   |    | 73.564                                                      | 133.019                                             |
| Equipment                                        | ** | 52.272                                                      | 52.272                                              |
|                                                  |    | 16.133.649                                                  | 20.772,014                                          |
| Financing costs                                  |    | (899,776)                                                   | 238.720                                             |
| Total capitalized costs - Series 1994 bond issue |    | 15.233.873                                                  | 21,010,734                                          |
| Series 1995 bond issue:                          |    |                                                             |                                                     |
| Preliminary costs                                |    | 177.424                                                     | 7.586.644                                           |
| Construction                                     |    | 55,999,054                                                  | 62.575,985                                          |
| Right-of-way                                     |    | 12.253.654                                                  | 23.348.331                                          |
| Engineering                                      |    | 26.335.414                                                  | 34.840,591                                          |
| Administration                                   |    | 282.886                                                     | 961,165                                             |
| Equipment                                        | -  | 116.894                                                     | 120.055                                             |
|                                                  |    | 95,165,326                                                  | 129.432.771                                         |
| Financing costs                                  | _  | (5.466.061)                                                 | 12,179,951                                          |
| Total capitalized costs - Series 1995 bond issue | _  | 89,699.265                                                  | 141.612.722                                         |
| Series 1998 hand issue                           |    |                                                             |                                                     |
| Preliminary costs                                |    | 1,596.209                                                   | 1.596.209                                           |
| Construction                                     |    | 538 686                                                     | 138 686                                             |
| Right-of-way                                     |    |                                                             |                                                     |
| Engineering                                      |    | 564 654                                                     | 564 6SA                                             |
| Administration                                   |    | 23 134                                                      | 27-134                                              |
|                                                  |    | 32.134                                                      | 34,134                                              |
| сцирнки.                                         |    |                                                             |                                                     |
|                                                  |    | 2.731,683                                                   | 2,731,683                                           |
| Financing costs                                  |    | 3.387.104                                                   | 3.387,104                                           |
| Total capitalized cost - Series 1998 bond issue  |    | 6.118.787                                                   | 6.118,787                                           |
| Total capitalized costs at December 31, 1998     | 5  | 133,836,191                                                 | 583,090,740                                         |

See accompanying independent auditors' report.

#### Miscellaneous Revenue Bond Information

#### For the year ended December 31, 1998

Information on outstanding bonds at December 31, 1998 is as follows:

| Description |   | <b>Bonds</b> issued | Range of       | Maturities |           | ange of Maturities First ca | First call |
|-------------|---|---------------------|----------------|------------|-----------|-----------------------------|------------|
| of issue    |   | to date             | interest rates | First year | Last year | date                        |            |
| Series '89  | s | 237,695,000         | 6,00% - 7.125% | 1995       | 2020      | 01/01/98                    |            |
| Series '90  |   | 133,070.000         | 6.00% - 7.25%  | 1995       | 2020      | 01/01/99                    |            |
| Series '93  |   | 140,135,000         | 3.25% - 3.125% | 1995       | 2020      | 01/01/99                    |            |
| Series '94  |   | 26,800,000          | 5.50% - 6.75%  | 1998       | 2023      | 01/01/05                    |            |
| Series '95  |   | 446.411.475         | 5.00% - 5.55%  | 2006       | 2025      | 01/01/06                    |            |
| Series 197  |   | 129,270,000         | 5,00% - 6.50%  | 1999       | 2015      | 01/01/08                    |            |
| Series '97A |   | 129,005,000         | 4.00% - 5.375% | 1998       | 2023      | 01/01/08                    |            |
| Series '98  |   | 100,660,000         | 4.10% - 4.75%  | 2008       | 2029      |                             |            |
|             | s | 1.343.046.475       |                |            |           |                             |            |

Changes in Bonded Indebtedness:

1

;}

Ì

,

1

j

.

1

1

. j

ļ

| Description<br>of issue | _    | Bonds<br>outstanding<br>January 1, 1998 | Bonds<br>issued | Interest<br>accretion | Bonds<br>matured<br>or retired | Bonds<br>refunded or<br>extinguished | Bonds<br>Outstanding<br>December 31,<br>1998 |
|-------------------------|------|-----------------------------------------|-----------------|-----------------------|--------------------------------|--------------------------------------|----------------------------------------------|
| Series '89              | S    | 4,316.000                               | _               | _                     | (4,310,000)                    | _                                    | _                                            |
| Series '90              |      | 4,880,000                               | _               | _                     | (2,360.000)                    | (2,520,000)                          |                                              |
| Series '93              |      | 137,005,000                             | _               | _                     | (1,120,000)                    | (10,015,000)                         | 125,870,000                                  |
| Series '94              |      | 4,225,000                               | _               | _                     | (420,000)                      | _                                    | 3,805,000                                    |
| Series '95              |      | 450,505,892                             | -               | 2,110,819             |                                | _                                    | 452,616,711                                  |
| Series '97              |      | 129,270,000                             | _               | _                     | -                              | _                                    | 129,270,000                                  |
| Series -97A             |      | 129,005,000                             |                 | _                     | (525.000)                      |                                      | 128,480,000                                  |
| Series -98              |      | —                                       | 100,660,000     | —                     | _                              |                                      | 100,660,000                                  |
| 5                       | \$ _ | 859,200,892                             | 100,660,000     | 2.110,819             | (8.735.000)                    | (12,535,000)                         | 940,701,711                                  |

Debt Service Requirements (including interest):

| Description<br>of issue | 1<br> | 1999       | 2000       | 2001       | 2002       | 2003       | 2004<br>and beyond | Total<br>requirements |
|-------------------------|-------|------------|------------|------------|------------|------------|--------------------|-----------------------|
| Series '89              | s     | _          | _          | -          | _          | _          | _                  | -                     |
| Series '90              |       | 86,940     | _          | _          | _          | -          | _                  | 86,940                |
| Series '93              |       | 3,283.551  | 6,141.023  | 6,141,023  | 9,506,023  | 10,417,963 | 177,204.973        | 212,694,556           |
| Series '94              |       | 675,215    | 684,850    | 686,530    | 685,930    | 688,530    | 1,374,090          | 4,795,145             |
| Series '95              |       | 21,732,169 | 21,732,169 | 21,732,169 | 21,732,169 | 21,732,169 | 838,537,231        | 947,198,076           |
| Series '97              |       | 8,699,468  | 8,700,563  | 8,701,775  | 7,354,575  | 13,624,575 | 168,917,099        | 215,998,055           |
| Series 197A             |       | 11,643,876 | 11,644,076 | 11,646,326 | 7,929,826  | 5.908.226  | 188,107,009        | 236,879,339           |
| Series *98              |       | 1,402,683  | 4.763.828  | 4,763,828  | 4,763.828  | 4,763,828  | 193,770,096        | 214,228,091           |
|                         | s _   | 47,523,902 | 53,666,509 | 53,671,651 | 51,972,351 | 57,135,291 | 1.567,910,498      | 1,831,880,202         |
|                         |       |            |            |            |            |            |                    |                       |

See accompanying independent auditors report.
## NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

#### Bond Maturity Information

#### For the Year ended December 31, 1998

|           |    | Series 1993    | Bonds    | Series 19 | 94 Bonds  |    | Series 1995 | Bonds    |    | Series 1997                        |
|-----------|----|----------------|----------|-----------|-----------|----|-------------|----------|----|------------------------------------|
| Due       | -  | Principal      | Interest | Principal | Interest  |    | Principal   | Interest | -  | Principal                          |
| January I | L  | amount         | rate     | amount    | rate      |    | amount      | rate     |    | amount                             |
| 1999      | \$ | ********       | 4.00     | 445.000   | 5 70      | \$ |             |          | \$ | 1155.000                           |
| 2000      | •  |                | 4.23     | 480.000   | 5.90      | •  |             |          | •  | 1215.000                           |
| 2001      |    |                | 4 30     | 510 000   | 6.00      |    | —           | 1007 v   |    | 1.280.000                          |
| 2002      |    | 3.365.000      | 4 40     | 540.000   | 6.00      |    |             |          |    | 114 VU.12VV                        |
| 2003      |    | 4,425,000      | 4.50     | 575.000   | 6.10      |    |             |          |    | 6.270.000                          |
| 2004      |    | 4,630,000      | 4.60     | 610.000   | 6.20      |    |             |          |    | 6,650,000                          |
| 2005      |    | 4,840,000      | 4 70     | 645,000   | 6.30      |    |             | +        |    | 6,780,000                          |
| 2005      |    | 5.075.000      | 4,80     |           |           |    | 2,515,508   | 5.20     |    | 7,485,000                          |
| 2007      |    | 5,310,000      | 4,90     |           |           |    | 3,382,799   | 5.30     |    | 7,975,000                          |
| 2008      |    | 5.575.000      | 5.00     |           |           |    | 4,192,214   | 5 40     |    | 8,490.000                          |
| 2009      |    | 5,850.000      | \$.00    | terren    | <b></b>   |    | 4,977.026   | 5.45     |    | 9,850,000                          |
| 2010      |    | 6,150,000      | 5.13     |           | **        |    | 5,714,945   | 5,50     |    | 10.495.000                         |
| 2011      |    | 6,460,000      | 4.75     |           |           |    | 6,408,983   | 5.55     |    | 11,020,000                         |
|           |    |                |          |           |           |    |             |          |    | 78.665.000                         |
|           |    |                |          |           |           |    |             |          | 1  | Due January 1,<br>2015 <u>(</u> 1) |
| 2012      |    | 6,770,000      | 4.75     | Natura.   | *******   |    | 15,380,000  | 5.30     |    | 11.655.000                         |
| 2013      |    | 7,085,000      | 4 75     |           |           |    | 17,065.000  | 5 35     |    | 12,295,000                         |
| 2014      |    | 7,425.000      | 4.75     |           | States.   |    | 18.865.000  | 5.40     |    | 12,970,000                         |
|           |    | 72,960,000     |          |           |           |    |             |          |    |                                    |
| 2015      |    |                |          |           |           |    | 20,775,000  | 5 40     |    | 13,685,000                         |
|           | ]  | Due January 1, |          |           |           |    |             |          |    |                                    |
|           |    | 2020(1)        |          |           |           |    |             |          |    |                                    |
| 2015      |    | 7,775.000      | 5 00     | Line.     |           |    |             | *****    |    |                                    |
| 2016      |    | 8.170.000      | 5.00     |           |           |    | 22,800.000  | 5.00     |    | *                                  |
|           |    |                |          |           |           |    |             |          |    | 50.605,000                         |
| 2017      |    | 8,575,000      | 5 00     |           | veterging |    | 25,930,000  | 5 25     |    |                                    |
|           |    |                |          |           |           | -  | 148 006 175 |          |    |                                    |
|           |    |                |          |           |           |    | 140,000,472 |          |    |                                    |

- 1 |

5

1

| ...|

, ]

| Bonds           |   | Series 1997 | A Bonds  | Series 1998 | 8 Bonds  |                   |
|-----------------|---|-------------|----------|-------------|----------|-------------------|
| Interest        | _ | Principal   | Interest | Principal   | Interest |                   |
| rate            | _ | amount      | rate     | amount      | rate     | Total             |
| 5.10            | ç | 5 245 000   | 4.00     |             | _        | 6 845 000         |
| 5.75            | Ð | 5455000     | 5.00     | _           | _        | 7 150 000         |
| 5.25            |   | 5 730 000   | 5 00     | _           | _        | 7 520 000         |
| 5.25            |   | 2 300 000   | 4 70     | _           | -        | 6 205 000         |
| 6.00            |   | 375 000     | 4 30     |             | -        | 11 645 000        |
| 6.00            |   | 395,000     | 4.40     | _           | _        | 12.285.000        |
| 6.50            |   | 410.000     | 4 50     | _           | _        | 12.675.000        |
| 6.50            |   | 1,115,000   | 4 60     | _           |          | 16,190,508        |
| 6.50            |   | 1.165.000   | 4.60     |             | _        | 17.832.799        |
| 6.50            |   | 1,220,000   | 4.70     | 120,000     | 4.10     | 19,597,214        |
| 6.50            |   | 1,280,000   | 4.80     | 425.000     | 4.20     | 22,382,026        |
| 5.00            |   | 1,340,000   | 5 00     | 760,000     | 4,30     | 24,459,945        |
| 5.75            |   | 1,405,000   | 5 00     | 1.130,000   | 4.50     | 26,423,983        |
|                 |   |             |          |             |          | 78,665,000        |
|                 |   |             |          |             |          |                   |
|                 |   |             |          |             |          |                   |
|                 |   |             |          |             |          | - / - ^           |
| 6.03            |   | 1.480,000   | 5.10     | 1,495,000   | 4.60     | 36,780.000        |
| 6.03            |   | 1.550,000   | 5.10     | 1,900,000   | 4 50     | 39,895,000        |
| 6.03            |   | 1,630,000   | 5.13     | 2,335.000   | 4.70     | 43,225,000        |
|                 |   |             |          |             |          |                   |
| <del>6</del> 03 |   | 1,715.000   | 5 13     | 2.805.000   | 4.75     | 111.940,000       |
|                 |   |             |          |             |          |                   |
|                 |   |             |          |             |          |                   |
|                 |   |             |          | _           | _        | 7 775 000         |
|                 |   | _           |          |             |          | 7.775,000         |
| _               |   | 16,240,000  | 5 38     | 3,320,000   | 4.75     | 50,530,000        |
|                 |   |             |          |             |          | 50.605,000        |
|                 |   | 17 110 000  | - 00     | 2 855 000   | 4 75     | <i>55 470 000</i> |
|                 | _ | 17.110,000  | 5.00     | 3.833,000   | 4.75     | 55,470,000        |
|                 |   | 67,160,000  |          |             |          |                   |

1

1

i

1

-----

ł

Ì

7

1

1

(Continued)

.

## NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

•

1

;

ļ

#### Bond Maturity Information, Continued

#### For the Year ended December 31, 1998

|               |      | Series 1993                             | Bonds       | Series 199- | 4 Bonds  | Series 1995 Bonds          |           |  |
|---------------|------|-----------------------------------------|-------------|-------------|----------|----------------------------|-----------|--|
| Due           |      | Principal                               | Interest    | Principal   | Interest | Principal                  | Interest  |  |
| January 1     | •    | amount                                  | rate        | amount      | rate     | amount                     | rate      |  |
| 2018          | \$   | 9.005.000                               | 500 S       |             |          | 5 28,145,000               | 5.25      |  |
|               | •    |                                         |             |             |          |                            |           |  |
| 2010          |      | 8.450.000                               | 5.00        |             |          | 30 490 000                 | 5.25      |  |
| 2017          |      | 0 03 K 000                              | 5.00        |             |          | 37.455.000                 | ようえ       |  |
|               |      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |             |             |          |                            |           |  |
| 2021          |      |                                         |             |             |          | 35,590,000                 | 5.25      |  |
| 2022          |      | <del></del>                             |             |             | ·        | 38.380.000                 | 5.25      |  |
| 2000          |      |                                         |             |             |          |                            |           |  |
| 2022          |      |                                         |             |             |          | Due January 1,<br>2025 (1) | 5.00 5.35 |  |
| 2025          |      |                                         | Ling        | _           |          | 41,563,000                 | J.00*3.2J |  |
| 2024          |      |                                         | <del></del> |             |          | 44,390,000                 | 5 00      |  |
| 2025          |      |                                         |             |             |          | 47,590,000                 | 5.00      |  |
| 2026          |      | ********                                | w- <b></b>  |             |          |                            |           |  |
| 2027          |      |                                         |             |             |          |                            |           |  |
| 2028          |      |                                         |             |             |          |                            |           |  |
| 2029          |      |                                         | _           |             | ****     | _                          | -1044     |  |
| Plus interest |      |                                         |             |             |          | ሬ ንስና ንገሩ                  |           |  |
| accretion (3) |      |                                         |             | - <u></u>   |          | 0,202,202                  |           |  |
|               | \$ = | 125.870.000                             | 2           | 3.805.000   | :        | \$ 452,616,711             |           |  |

- --- --

| Series 1997 Bonds |             | Series 1997 | A Bonds        | Series 1998 J |                         |          |                                         |
|-------------------|-------------|-------------|----------------|---------------|-------------------------|----------|-----------------------------------------|
|                   | Principal   | Interest    | Principal      | Interest      | Principal               | Interest |                                         |
| _                 | amount      | rate        | amount         | rate          | amount                  | rate     | Total                                   |
|                   |             |             |                |               |                         |          |                                         |
| S                 | _           | -           | \$ 17,975,000  | 5.00 \$       | 4,370,000               | 4.75 \$  | 59,495,000                              |
|                   |             |             |                |               | 22,515,000              | -        | 22,515,000                              |
|                   |             |             |                |               | Due January I,<br>2,022 |          |                                         |
|                   |             |             | 18 870 000     | 5.00          | 1 860 000               | .1 75    | 63 670 000                              |
|                   |             | _           | 19.810.000     | 5,00          | 5.315,000               | 4.75     | 67,515,000                              |
|                   |             |             | Due January 1, |               |                         |          | , , , , , , , , , , , , , , , , , , , , |
|                   |             |             | 2025 (1)       |               |                         |          |                                         |
|                   |             |             | 1.480.000      | 5.00          | 5.370.000               | 4.75     | 42,440,000                              |
|                   | _           | -           | 1,555,000      | 5.00          | 6,160.000               | 4.75     | 46,095,000                              |
|                   |             |             |                |               | 22,065,000              | -        | 187,125,000                             |
|                   |             |             |                |               | Due January 1,<br>2,022 |          |                                         |
|                   |             | -           | 1.630.000      | 5 00          | 6,610,000               | 4.75     | 49,605,000                              |
|                   |             |             | 4.665,000      |               |                         | =        | 4,665,000                               |
|                   |             |             |                |               |                         |          |                                         |
|                   | _           |             |                | _             | 7,075,000               | 4 75     | 51,465,000                              |
|                   | _           | _ <b>_</b>  | _              | _             | 7,535,000               | 4.75     | 55,125.000                              |
|                   | —           | _           |                |               | 8.005.000               | 4 75     | 8,005,000                               |
|                   | _           | _           | -              | —             | 8,480,000               | 4.75     | 8.480,000                               |
|                   |             |             | —              | —             | 8.950,000               | 4.75     | 8,950,000                               |
|                   | _           |             | —              |               | 9,425,000               | 4/5 -    | 9,425,000                               |
|                   |             |             |                |               | 56,080.000              |          | 56.080,000                              |
|                   |             |             |                |               |                         | -        | _                                       |
| \$                | 129.270.000 |             | \$ 128,480,000 | \$            | 100,660,000             | \$ _     | 940,701,711                             |

;

......

1

ł

Í

ן ן

1

ł

יי. ו

Ì

Schedule 3

P.

and sector

States and the second

. American de la companya de la company

Actual Contraction

\* - \* \*

100 Co.

····

#### NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

Statement of Revenues and Expenses

#### For the Year ended December 31, 1998 (with comparative totals for the year ended December 31, 1997)

|                                                          |    | 1998       | 1997       |
|----------------------------------------------------------|----|------------|------------|
| Revenues:                                                |    |            |            |
| Toll revenues                                            | \$ | 57,253,744 | 53.758,516 |
| Interest revenue                                         |    | 8,726.550  | 8,146,115  |
| Tolltag store revenue                                    |    | 5.197.365  | 4,251.278  |
| Other revenue                                            |    | 188,697    | 152,641    |
| Gross revenues                                           |    | 71.366.356 | 66,308,550 |
| Operating expenses:                                      |    |            |            |
| Administration:                                          |    |            |            |
| General administration                                   |    | 1.507.633  | 963,740    |
| Accounting                                               |    | 167.641    | 165,277    |
| Data processing                                          |    | 140,842    | 121,758    |
| Insurance                                                |    | 1,332,620  | 1,101,708  |
| Vault                                                    |    | 260,047    | 283,780    |
| Audit                                                    |    | 73.764     | 74,599     |
| Safety and security                                      |    | 317,799    | 254,336    |
|                                                          |    | 3.800,346  | 2.965,198  |
| Operations:                                              |    |            |            |
| Toll collection                                          |    | 4.006,613  | 4,494.868  |
| Engineering and maintenance                              |    | 1.179.054  | 893,155    |
| Utilities                                                |    | 405,487    | 410,805    |
| Traffic control                                          |    | 1.139.929  | 1.087,886  |
| lolitag store                                            |    | 1,805.869  | 1.612,517  |
|                                                          |    | 8,536,952  | 8.499.231  |
| Total operating expenses                                 |    | 12,337,298 | 11,464,429 |
| Net revenues available for debt service                  |    | 59.029,058 | 54,844,121 |
| Net increase (decrease) in the fair value of investments |    | 1.165.390  | 536,763    |
| Interest on bonded debr:                                 |    |            |            |
| Bond interest, net of amount capitalized                 |    | 16,799.552 | 22,296,149 |
| Bond discount amortized                                  |    | 1,257,991  | 1,322,601  |
| Interest accretion                                       |    | 2.110.819  | 2,110.821  |
| Amortization of deferred amount on refunding             |    | 1.442,041  | 2,422.966  |
|                                                          |    | 21,610,403 | 28,152,537 |
| Reserve Maintenance Fund expenses                        |    | 886,901    | 1.233,358  |
| Capital Improvement Fund expenses                        |    | 1,498.400  | 1,144,405  |
|                                                          |    | 2,385.301  | 2,377.763  |
| Construction fund earnings, net of transfers to the Bond |    |            |            |
| Interest Account                                         |    | 4,982.748  | 6,107.856  |
| Net revenues                                             | S  | 41.181,492 | 30.978.440 |

See accompanying independent auditors' report.

~ ~ ~ ~ · · · · · ·

## NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

# Toll Revenue and Traffic Analysis

# For the year ended December 31, 1998 (with comparative totals for the year ended December 31, 1997)

|                                        | -    | 1998        | 1997            |
|----------------------------------------|------|-------------|-----------------|
| Toll Revenue                           |      |             |                 |
| Two-axle vehicles                      | \$   | 54,909,950  | 52,902,366      |
| Multi-axle vehicles                    |      | 995,777     | 527,332         |
| Revenue adjustments                    | -    | 1,348,017   | 328,818         |
| Total                                  | \$ _ | 57,253,744  | 53,758,516      |
| Vehicles (unaudited)                   |      |             |                 |
| Two-axle vehicles                      |      | 125,539,848 | 121,942,091     |
| Multi-axle vehicles                    |      | 1,217,877   | 611,502         |
| Nonrevenue vehicles                    | _    | 625,900     | 623,409         |
| Total                                  | =    | 127,383,625 | 123,177,002     |
| Toll Revenue - Average Per Day         |      |             |                 |
| Two-axle vehicles                      | \$   | 150,438     | 144,938         |
| Multi-axle vehicles                    |      | 2,728       | 1,445           |
| Revenue adjustments                    | _    | 3,693       | 901             |
| Average                                | \$ = | 156,859     | 147,284         |
| Vehicles - Average Per Day (unaudited) |      |             |                 |
| Two-axle vehicles                      |      | 343,945     | 334,0 <b>88</b> |
| Multi-axle vehicles                    |      | 3,337       | 1,675           |
| Nonrevenue vehicles                    | _    | 1.715       | 1,708           |
| Average                                |      | 348,997     | 337,471         |

See accompanying independent auditors' report.

ł

Í

[

1

i 1

Í

## NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

Toll Revenue and Traffic by Class of Vehicle

For the year ended December 31, 1998 (with comparative totals for the year ended December 31, 1997)

|                                      |    | 1          | 98                      |  |
|--------------------------------------|----|------------|-------------------------|--|
| Class of Vehicle                     |    | Revenue    | Vehicles<br>(Unaudited) |  |
| Two-axle vehicles                    | \$ | 54.909,950 | 125,539,848             |  |
| Three-axle vehicles and combinations |    | 558,635    | 756,600                 |  |
| Four-axle vehicles and combinations  |    | 259,732    | 291,111                 |  |
| Five-axle vehicles and combinations  |    | 156,346    | 149,299                 |  |
| Special vehicles                     |    | 21,064     | 20,867                  |  |
|                                      |    | 995,777    | 1,217,877               |  |
| Toll revenue                         |    | 55,905,727 | 126,757,725             |  |
| Toll revenue variance                |    | 1,348,017  |                         |  |
| Nonrevenue vehicles                  |    |            | 625,900                 |  |
| Toll revenue and traffic             | \$ | 57,253,744 | 127,383,625             |  |
|                                      |    | 1          | 997                     |  |
| Class of Vehicle                     | -  |            | Vehicles                |  |

| Class of venicle                     |    | Revenue    | (Unaudited) |
|--------------------------------------|----|------------|-------------|
| Two-axle vehicles                    | \$ | 52,902,366 | 121,942,091 |
| Three-axle vehicles and combinations |    | 234,209    | 323,188     |
| Four-axle vehicles and combinations  |    | 147,774    | 160,270     |
| Five-axle vehicles and combinations  |    | 142,503    | 125,519     |
| Special vehicles                     | _  | 2,846      | 2,525       |
|                                      | _  | 527,332    | 611,502     |
| Toll revenue                         |    | 53,429,698 | 122,553,593 |
| Toll revenue variance                |    | 328,818    | · •         |
| Nonrevenue vehicles                  | _  |            | 623,409     |
| Toll revenue and traffic             | \$ | 53,758,516 | 123,177,002 |

See accompanying independent auditors' report.

4

ċ

ar an Long and An Ar

------

# NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

# Cash Receipts and Disbursements

Year ended December 31, 1998

Norman State

r .....

;

: 1

: 1

:

....

. . . . . . .

|                                        | Total<br>(memorandum<br>only) | Construction<br>and<br>property fund | Revenue<br>fund      |
|----------------------------------------|-------------------------------|--------------------------------------|----------------------|
| Balance of cash December 31, 1997 \$   | 8,169.823                     | 325,206                              | 1,586,720            |
| Receipts:                              |                               |                                      |                      |
| Sale of 1998 Bond Series               | 100,660,000                   | 100,660.000                          |                      |
| Toll revenues                          | 56,328,759                    |                                      | 56,328,759           |
| Matured investments                    | 978,481.720                   | 563,415,763                          | 66,764,695           |
| Earnings received from investments     | 35,375,996                    | 27,545,779                           | 260,259              |
| Gain/loss from sale of investments     |                               | Augustum                             |                      |
| Prepaid customers' accounts            | 33,906.869                    |                                      | 33,906,869           |
| Tolltag deposits                       | 175,739                       |                                      | 175,739              |
| Damage claims collected                | 90,518                        | , <b></b> ,                          | 61180, au            |
| Public telephones                      | 599                           | Winterstation                        | 599                  |
| Reimbursable receipts                  | 59,719                        | 54,899                               | . See and the second |
| Rental fee                             | 28,982                        |                                      | 28,982               |
| Lane violation fee                     |                               |                                      |                      |
| Miscellaneous revenue                  | 185,960                       | A state                              | 140,450              |
| Miscellaneous revenue - store tag      | 4,488,663                     |                                      | 4,488,663            |
| ISTEA loan                             | 40,000,000                    | 40,000,000                           |                      |
|                                        | 1,249,783,524                 | 731,676,441                          | 162,095,015          |
| Disbursements:                         |                               |                                      |                      |
| Transfer to escrow agent 1989 and 1990 |                               |                                      |                      |
| revenue bonds                          | (14.610.327)                  | (16.205.346)                         | ********             |
| Bond discount on 1997 and 1997A        | (······,                      | <pre>&lt;</pre>                      |                      |
| revenue honds                          | (3 343 502)                   | (3 343 597)                          |                      |
| Interest on bonded debt                | (39.278.621)                  | (23 <sup>-1</sup> -22)               |                      |
| Damage claims                          | (12.856)                      | (36 993)                             |                      |
| Interim investments                    | (1.044.714.103)               | (601 612 180)                        | (68 144 723)         |
| Operating expenses                     | (11114.704)                   | (001:0:2,100)                        | (00,144,720)         |
| Reserve maintenance fund expenses      | (730.283)                     |                                      |                      |
| Capital improvement fund expenses      | (856,937)                     |                                      | 101000 PT-           |
| Capitalized costs                      | (83 400 341)                  | (80.195.180)                         |                      |
| Revenue bonds retired                  | (8,735,000)                   | (00,100,100)                         | second second        |
| Fauinment (net of trade-in)            | (616.250)                     |                                      |                      |
| Reimbursable costs                     | (62,144)                      |                                      |                      |
|                                        | (1.207,475,158)               | (701,393,291)                        | (68,144,723)         |

· · · · ·

;

| Operation and                           | Reserve                                | Capital                               | Debt Service Funds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                 |                                        |
|-----------------------------------------|----------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------|
| maintenance                             | maintenance                            | improvement                           | Bond interest                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Reserve                                                                                                         | Redemption                             |
| fund                                    | fund                                   | fund                                  | account                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | account                                                                                                         | account                                |
| 2,570,397                               |                                        | 3,687,500                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Augunus                                                                                                         |                                        |
|                                         |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
|                                         |                                        | 48.4mm.e.t.                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 | 100 and 10                             |
|                                         |                                        | Maximum gay                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 | 10 Martin 1                            |
| 2,389,171                               | 17,742,712                             | 193,234,018                           | 72,035,198                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 23,427,200                                                                                                      | 39,472,963                             |
| 106,249                                 | 402,216                                | 3,666,511                             | 471,930                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2,636,759                                                                                                       | 286,293                                |
|                                         |                                        |                                       | ******                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                 |                                        |
|                                         | Valuation and                          |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
| <b>We</b> llinger                       |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 | 6                                      |
| 90,518                                  |                                        | *******                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 | •••••••                                |
|                                         |                                        | ********                              | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ******                                                                                                          | ******                                 |
| 4,820                                   | *****                                  |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -1000 (0.0. Marco                                                                                               | ,                                      |
|                                         | h                                      |                                       | andersteint                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Participation of the second |                                        |
| 4+6-000000, v                           |                                        | <del></del>                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
| 45,540                                  |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | _                                                                                                               |                                        |
|                                         |                                        |                                       | and the second s |                                                                                                                 |                                        |
|                                         |                                        | Annunn                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
| 2,636,298                               | 18,144.928                             | 196,900,529                           | 72,507,128                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 26,063,959                                                                                                      | 39,759,256                             |
| *************************************** |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
|                                         |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
|                                         |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
|                                         |                                        | *** 1977                              | 1,532,677                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                 | 62,342                                 |
|                                         |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
|                                         | AP 488707                              |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2                                                                                                               |                                        |
| .veningshage                            | *********                              |                                       | *******                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                 |                                        |
| (12,856)                                | *********                              | <b></b>                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
| (2, 133, 212)                           | (16,983,283)                           | (220,715,947)                         | (39,278,621)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <u> </u>                                                                                                        |                                        |
| (11,114,704)                            | · · · · ·                              | • • •                                 | (72,180,467)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (23,468,766)                                                                                                    | (39,475,525)                           |
|                                         | (730,283)                              | donalide ar                           | · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                 |                                        |
|                                         | · · ·                                  | (856.937)                             | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
|                                         | (16,332)                               | (3,188,629)                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |                                        |
| use sector a                            | ······································ | · · · · · · · · · · · · · · · · · · · | 10010010000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1000 (1000)                                                                                                     | (8,735.000)                            |
| :000000000.s.                           | (616,250)                              |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 | ×                                      |
| (14,650)                                | (10,501)                               |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u> </u>                                                                                                        |                                        |
| (13,275,422)                            | (18,356,649)                           | (224,761.513)                         | (109,926,411)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (23.468.766)                                                                                                    | (48,148,183)                           |
|                                         |                                        |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 | · · · · · · · · · · · · · · · · · · ·  |

ł

ŧ

## NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

Cash Receipts and Disbursements, Continued

Year ended December 31, 1998

|                                                                                                    |    | Total<br>(memorandum<br>only) | Construction<br>and<br>property fund | Revenue<br>fund |
|----------------------------------------------------------------------------------------------------|----|-------------------------------|--------------------------------------|-----------------|
| Interfund and interproject transactions:                                                           |    |                               |                                      |                 |
| Distribution from Revenue Fund                                                                     | S  | ş                             |                                      | (70,234,700)    |
| Transfer of capitalized interest                                                                   |    |                               | (22,607,888)                         |                 |
| Transfer of excess monies                                                                          |    | 1,799,552                     | 5,029,429                            | 8,681,275       |
| Transfer of deferred revenue                                                                       |    | (32,383,740)                  |                                      | (32,383,740)    |
| Other interfund transactions - net                                                                 |    | (12,810,836)                  | (10,760,259)                         |                 |
| North Texas Tollway Authority Feasibility Study                                                    |    |                               |                                      |                 |
| Fund - net                                                                                         |    | (1,747,451)                   | (1,748,948)                          |                 |
| Mountain Creek Lake Bridge - net                                                                   |    | 104,485                       | (260)                                | 36,213          |
| Dallas-Fort Worth Turnpike Transition Trust Fund                                                   |    |                               |                                      |                 |
| net                                                                                                |    | 41,258                        |                                      |                 |
|                                                                                                    |    | (44,996,732)                  | (30,087,926)                         | (93,900,952)    |
| Receipts over (under) disbursements and interfund and interproject transactions for the year ended |    |                               |                                      |                 |
| December 31, 1998                                                                                  |    | 2,688,366                     | 195.224                              | 49,340          |
| Balance of cash December 31, 1998                                                                  | \$ | 5,481,457                     | 520,430                              | 1,636,060       |
|                                                                                                    | ,  |                               |                                      |                 |

See accompanying independent auditors' report.

| Operation and       | Reserve                | Capital             | D                        | ebt Service Fund   | ls                    |
|---------------------|------------------------|---------------------|--------------------------|--------------------|-----------------------|
| maintenance<br>fund | maintenance<br>fund    | improvement<br>fund | Bond interest<br>account | Reserve<br>account | Redemption<br>account |
| 11.515,072          | 1,493,100              | 34,816,667          | 11,901,369               | -                  | 10.508,492            |
|                     | #n#nn#n                |                     | (6.542,710)              | (1,576,877)        | (3,791,565)           |
| (232,635)           | (1,281.179)            | (10,643,183)        | 9.422,730                | (1,018,316)        | 1,672,000             |
| 1,497<br>68,532     | Managaran<br>Quantagan |                     |                          |                    |                       |
| 41,258              |                        |                     |                          |                    |                       |
| 11,393,724          | 211.921                | 24,173,484          | 37.419,283               | (2,595.193)        | 8,388,927             |
|                     |                        |                     |                          |                    |                       |
| 754,570             |                        | (3.687,000)         | ********                 |                    |                       |
| 3.324.967           |                        |                     | Aduited                  |                    |                       |

;

Schedule 7

7.5

1

1

to breach of

Metal Sector Sector

.

antersatio

.

.

4

#### NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

Toll Schedule

Year ended December 31, 1998

|                                               |   | Two-axie<br>passenger<br>cars<br>and trucks | Three-axle<br>vehicles and<br>vehicle<br>combinations | Four-axle<br>vehicles and<br>vehicle<br>combinations | Five-axle<br>vehicles and<br>vehicle<br>combinations | Six or more<br>axle vehicles<br>and special<br>permits |
|-----------------------------------------------|---|---------------------------------------------|-------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------|
| Dallas North Tollway:                         |   |                                             |                                                       |                                                      |                                                      |                                                        |
| Barrier No. 1                                 | S | 0.50                                        | 0.80                                                  | 1.00                                                 | 1.20                                                 | 1.40                                                   |
| Mockingbird                                   |   | 0.40                                        | 0.60                                                  | 0.80                                                 | 1.00                                                 | 1.20                                                   |
| Northwest Highway                             |   | 0.30                                        | 0.50                                                  | 0.70                                                 | 0.90                                                 | 1.10                                                   |
| Royal Lane                                    |   | 0.25                                        | 0.40                                                  | 0.50                                                 | 0.60                                                 | 0,70                                                   |
| Spring Valley                                 |   | 0.25                                        | 0.40                                                  | 0.50                                                 | 0.60                                                 | 0.70                                                   |
| Belt Line                                     |   | 0.30                                        | 0.50                                                  | 0.70                                                 | 0.90                                                 | 1.10                                                   |
| Barrier No. 2                                 |   | 0.50                                        | 0.80                                                  | 1,00                                                 | 1.20                                                 | 1.40                                                   |
| Keller Springs                                |   | 0.25                                        | 0,40                                                  | 0.50                                                 | 0.60                                                 | 0.70                                                   |
| Frankford                                     |   | 0.25                                        | 0.40                                                  | 0.50                                                 | 0.60                                                 | 0.70                                                   |
| FM 544                                        |   | 0.25                                        | 0.40                                                  | 0.50                                                 | 0.60                                                 | 0.70                                                   |
| Barrier No. 3                                 |   | 0.50                                        | 0.80                                                  | 1.00                                                 | 1.20                                                 | 1.40                                                   |
| Parker Rd.                                    |   | 0.25                                        | 0.40                                                  | 0.50                                                 | 0.60                                                 | 0.70                                                   |
| Spring Creek                                  |   | 0.25                                        | 0,40                                                  | 0.50                                                 | 0.60                                                 | 0.70                                                   |
| Addison Airport Toll Tunnel:<br>Barrier No. 5 |   | 0.50                                        | 0.50                                                  | 0.50                                                 | 0.50                                                 | 0.50                                                   |
| President George Bush Turnpike                |   |                                             |                                                       |                                                      |                                                      |                                                        |
| West of Custer Rd.                            |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| West of Independence                          |   |                                             |                                                       |                                                      |                                                      |                                                        |
| Parkway                                       |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Barrier No. 7                                 |   | 0.50                                        | 1.00                                                  | 1.50                                                 | 2.00                                                 | 2.50                                                   |
| Preston Road                                  |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| East of Blackburn Rd.                         |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Shiloh Koad                                   |   | 0.25                                        | 0,50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Barrier No. 6                                 |   | 0.50                                        | 1.00                                                  | 1.50                                                 | 2.00                                                 | 2.50                                                   |
| East of Renner Road                           |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| East of Jupiter Road                          |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Marsh Lane                                    |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Barrier No. 8                                 |   | 0.50                                        | 1.00                                                  | 1.50                                                 | 2.00                                                 | 2.50                                                   |
| Kelly Boulevard                               |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Josey Lane                                    |   | 0.25                                        | 0.50                                                  | 0.75                                                 | 1.00                                                 | 1.25                                                   |
| Belt Line Road                                |   | 0.50                                        | 1.00                                                  | 1.50                                                 | 2.00                                                 | 2.50                                                   |
| Barrier No. 9                                 |   | 0.50                                        | 1.00                                                  | 1,50                                                 | 2.00                                                 | 2.50                                                   |

The toll schedule for the System is set forth above. The Authority has not increased the toll rates on the Dallas North Tollway System since 1982,

See accompanying independent auditors' report.

Ş

#### NORTH TEXAS TOLLWAY AUTHORITY DALLAS NORTH TOLLWAY SYSTEM

Year ended December 31, 1998

#### Historical Traffic and Toll Revenue

The table below sets forth the annual revenue vehicle transactions and gross toll revenue with respect to the Dallas North Tollway System for the ten calendar years 1989 through 1998:

| Year     | Annual revenue<br>vehicle<br>transactions<br>(Unaudited) | _ | Annual toll<br>revenue |
|----------|----------------------------------------------------------|---|------------------------|
| 1989 (2) | 60.934.081                                               | S | 27.028.284             |
| 1990     | 67,281,576                                               | - | 29,754,559             |
| 1991     | 69,797,550                                               |   | 30,739,282             |
| 1992     | 73,810,118                                               |   | 32,382,169             |
| 1993     | 78,201,173                                               |   | 34,248,187             |
| 1994 (3) | 88,534,528                                               |   | 38,627,799             |
| 1995     | 106,222,806                                              |   | 46,036,092             |
| 1996     | 117,051,337                                              |   | 50,793,546             |
| 1997     | 123,177,002                                              |   | 53,758,516             |
| 1998     | 127,383,625                                              |   | 57,253,744             |

2) Reflects the opening of the Keller Springs ramp plaza in May 1989.

3) Reflects the opening of DNT Extension Phase 2 in September 1994.

#### Historical Net Revenues

The table set forth below shows the Net Revenues for debt service of the Dallas North Tollway System for the ten calendar years 1989 through 1998:

|      | Toll revenue     | Current<br>expenses | Investment and<br>other earnings | Net revenues |
|------|------------------|---------------------|----------------------------------|--------------|
| 1989 | \$<br>27,028,284 | 6,343,415           | 6,969,654                        | 27,654,523   |
| 1990 | 29,754,559       | 7,389,016           | 4,942,946                        | 27,308,489   |
| 1991 | 30,739,282       | 7,289,657           | 4,593,950                        | 28,043,575   |
| 1992 | 32,382,169       | 7,475,298           | 4,382,828                        | 29,289,699   |
| 1993 | 34.248,187       | 7,758,058           | 4,251,440                        | 30,741,569   |
| 1994 | 38,627,799       | 9 269 854           | 6,660,762(1)                     | 36,018,707   |
| 1995 | 46,036,092       | 10.923.301          | 9,055,623 (2)                    | 44,168,414   |
| 1996 | 50,793,546       | 11,307,470          | 11,173,704 (3)                   | 50,659,780   |
| 1997 | 53,758,516       | 11,464,429          | 12,550,034 (4)                   | 54,844,121   |
| 1998 | 57,253,744       | 12,337,298          | 14,112,612                       | 59,029,058   |

(1) Reflects the impact of the issuance of the Series 1993 Bonds.

(2) Reflects the impact of the issuance of the Series 1994 Bonds.

(3) Reflects the impact of the issuance of the Series 1995 Bonds.

(4) Reflects the impact of the issuance of the Series 1997 and 1997A bonds.

See accompanying independent auditors' report.

11 <u>ا</u> ، ۲ I 

Financial Statements and Supplementary Data

December 31, 1998

(With Independent Auditors' Report Thereon)

| <b>1</b> <i>1</i>                     |
|---------------------------------------|
|                                       |
| A Second Second                       |
|                                       |
| -<br>Inter-                           |
| A A A A A A A A A A A A A A A A A A A |
| ( ) Second                            |
|                                       |
|                                       |
|                                       |
|                                       |
|                                       |



200 Crescent Court Suite 300 Dallas, TX 75201-1885

## **Independent Auditors' Report**

Board of Directors North Texas Tollway Authority:

We have audited the special-purpose statement of assets and liabilities of the North Texas Tollway Authority (the Authority) Mountain Creek Lake Bridge (Bridge), as of December 31, 1998 and the related specialpurpose statements of revenues and expenses and changes in retained earnings for the year then ended. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying special-purpose financial statements were prepared for the purposes of complying with the provisions of the Trust Agreement for the Mountain Creek Lake Bridge revenue bonds, as interpreted by the Authority and described in note 1 and are not intended to be a presentation in conformity with generally accepted accounting principles.

In our opinion, the special-purpose financial statements referred to above present fairly, in all material respects, the assets and liabilities of the North Texas Tollway Authority Mountain Creek Lake Bridge as of December 31, 1998, and its revenues and expenses and changes in its retained earnings for the year then ended, on the basis of accounting described in note 1.



As described in note 2 to the special-purpose financial statements, the North Texas Tollway Authority Mountain Creek Lake Bridge System adopted the provisions of Government Accounting Standards Board Statement No. 31, "Accounting and Financial Reporting for Certain Investors and For External Investment Pools," in 1998.

The year 2000 supplementary information on page 18 is not a required part of the special-purpose financial statements, but is supplementary information required by the Governmental Accounting Standards Board, and we did not audit and do not express an opinion on such information. Further, we were unable to apply to the information certain procedures prescribed by professional standards because of the nature of the subject matter underlying the disclosure requirements and because sufficiently specific criteria regarding the matters to be disclosed have not been established. In addition, we do not provide assurance that the Authority is or will become year 2000 compliant, that the Authority's year 2000 remediation efforts will be successful in whole or in part, or that parties with which the Authority does business are or will become year 2000 compliant.

Our audit for the year ended December 31, 1998 was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in Schedules I through 5 for the year ended December 31, 1998 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information, except for that portion marked unaudited on which we express no opinion, has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects, in relation to the basic financial statements taken as a whole.

We have also previously audited, in accordance with the basis of accounting practices set forth in the provisions of the Trust Agreement for the Mountain Creek Lake Bridge revenue bonds, as interpreted by the Authority, the balance sheet of the North Texas Tollway Authority Mountain Creek Lake Bridge as of December 31, 1997 and the related statements of revenues and expenses and changes in retained earnings for the year then ended (none of which is presented herein), and we expressed an unqualified opinion on those financial statements, on the basis of accounting described above. The supplementary information included in Schedules I through 5 related to the North Texas Tollway Authority Mountain Creek Lake Bridge's 1997 financial statements was subjected to auditing procedures applied in the audit of those basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements from which it has been derived.

This report is intended solely for the information and use of the Board of Directors, management of the Authority and trustees of the bonds and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LIP

March 19, 1999

ļ

-

- 400 A 100

Statement of Assets and Liabilities

December 31, 1998

3

27

.

| Assets                                                                             |    | Total      | Construction<br>and<br>property fund | Revenue<br>fund |
|------------------------------------------------------------------------------------|----|------------|--------------------------------------|-----------------|
| Cash (note 2)                                                                      | \$ | 224,259    |                                      | 16,181          |
| Investments (note 2)                                                               |    | 2,410,520  | <del></del>                          |                 |
| Accrued earnings receivable on investments                                         |    | 9,040      |                                      | 481             |
| Interfund receivables                                                              |    | 16,666     |                                      |                 |
| Accounts receivable                                                                |    | 3,182      |                                      | 4               |
| Prepaid expenses                                                                   |    | 6,322      | <u></u>                              |                 |
| Inventory and supplies, at average cost<br>Capitalized cost of Mountain Creek Lake |    | 2,059      |                                      | 6.111-1999-     |
| Bridge (note 3)                                                                    | -  | 8,663,930  | 8,663,930                            |                 |
|                                                                                    | \$ | 11,335.978 | 8,663,930                            | 16,666          |
| Liabilities                                                                        |    |            |                                      |                 |
| Vouchers payable                                                                   | \$ | 8,976      | Testing.                             |                 |
| Accounts payable                                                                   |    | 1,108      |                                      |                 |
| Interfund payables                                                                 |    | 16,666     |                                      | 16,666          |
| Accrued interest payable on bonded debt                                            |    | 106,256    |                                      |                 |
| Accrued vacation                                                                   |    | 9,441      |                                      |                 |
| Recurring accrued liabilities                                                      |    | 26,409     | ation                                | ·               |
| Accrued liabilities (notes 6 and 7)                                                |    | 16,070     |                                      |                 |
| Deferred income from damage claims                                                 |    | 40         |                                      | ·               |
| Mountain Creek Lake Bridge Revenue Bonds                                           |    |            |                                      |                 |
| payable (note 4)                                                                   |    | 3.045,000  | 3,045,000                            | ······          |
|                                                                                    | _  | 3,229,966  | 3,045,000                            | 16,666          |
| Retained Earnings                                                                  |    |            |                                      |                 |
| Retained earnings                                                                  |    | 8,106,012  | 5,618,930                            | and the state   |
| Commitments and contingencies<br>(notes 5, 7, 8 and 9)                             |    |            |                                      |                 |
|                                                                                    | \$ | 11,335,978 | 8,663,930                            | 16.666          |

See accompanying notes to financial statements.

Exhibit A

2

н

÷

:

. . . . .

|                      |                      |         | 1              | Debt Service Fund | \$                                     |
|----------------------|----------------------|---------|----------------|-------------------|----------------------------------------|
| <b>Operation and</b> | Reserve              | Special | Bond           |                   | ······································ |
| maintenance          | maintenance          | reserve | interest       | Reserve           | Redemption                             |
| fund                 | fund                 | fund    | account        | account           | account                                |
| 200.027              | 5,197                | 2.854   | •••••••        |                   | *******                                |
|                      | 313,166              | 932,348 | 106.256        | 633,750           | 425,000                                |
|                      | 1,186                | 2,433   | 410            | 2,871             | 1.659                                  |
|                      |                      | 16,666  | 440 mga mga n  |                   |                                        |
| 3.178                | *********            |         | *******        |                   | <b>*</b> *********                     |
| 6,322                | **********           | _       |                |                   | Wasser                                 |
| 2,059                |                      |         |                |                   | .Missoure                              |
|                      |                      |         |                |                   | :nessay.                               |
| 211,586              | 319,549              | 954.301 | 106,666        | 636,621           | 426,659                                |
|                      |                      |         |                |                   |                                        |
| 8,976                | vauuuu               |         | Jupernis       |                   |                                        |
| 1,108                | ال ميرية بريون<br>ال |         |                |                   |                                        |
|                      | *******              |         |                | _                 | ********                               |
|                      | Non-Marine           |         | 106,256        | —                 | *********                              |
|                      | ********             |         | "en reason not | —                 |                                        |
|                      | 100000000°           |         | . <b>2000</b>  |                   | *****                                  |
| 51, <b>96</b> 0      |                      |         |                | _                 | *********                              |
| ~~~~                 |                      |         |                | _                 | **********                             |
|                      |                      |         |                |                   |                                        |
| 62,044               |                      |         | 106,256        |                   |                                        |
|                      |                      |         |                |                   |                                        |
| 149,542              | 319,549              | 954,301 | 410            | 636,621           | 426,659                                |
|                      |                      |         |                |                   |                                        |
| 211.586              | 319,549              | 954,301 | 106,666        | 636,621           | 426,659                                |

: •

] , `` . ] ' ] ` ] ] # - ¢ . . · ļ • ] A ... 经公式日 一日第一家祝来午日日,有人有有一一般来说有有是大部分 

# Exhibit B

:

# NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Statement of Revenues and Expenses

Year ended December 31, 1998

| Revenues:                                        |         |           |
|--------------------------------------------------|---------|-----------|
| Toll revenues                                    | \$      | 1,556,187 |
| Interest revenue                                 |         | 97,517    |
| Other                                            | _       | 199       |
| Gross revenues                                   |         | 1,653,903 |
| Operating expenses:                              |         |           |
| Administration:                                  |         |           |
| General administration                           |         | 69,658    |
| Accounting                                       |         | 7,331     |
| Data processing                                  |         | 5,181     |
| Insurance                                        |         | 72,295    |
| Vault                                            |         | 8,981     |
| Safety and security                              |         | 33,874    |
| Audit                                            |         | 5,721     |
|                                                  |         | 203,041   |
| Operations:                                      |         |           |
| Toll collection                                  |         | 226 314   |
| Engineering and maintenance                      |         | 45 203    |
| Litilities                                       |         | 18 858    |
| Ounico                                           |         | 10,000    |
|                                                  |         | 290,375   |
| Total operating expenses                         | _       | 493,416   |
| Net operating revenues                           |         | 1,160,487 |
| Reserve Maintenance Fund expenses                |         | 10,471    |
| Special Reserve Fund expenses                    |         | 269       |
| Net revenues available for debt service (note 4) |         | 1,149,747 |
| Bond interest expense                            |         | 212,513   |
| Net revenues                                     | -<br>\$ | 937.234   |
|                                                  |         |           |

See accompanying notes to financial statements.

ŝ

Statement of Changes in Retained Earnings

Reading and

----

terrary of

**NEWCOCK** 

-

11.11. 11.11.

: 1

Į.

1.1

. ... ... . .

.....

Year ended December 31, 1998

| Assets                                                 | - | Total     | Construction<br>and<br>property fund | Revenue<br>fund |
|--------------------------------------------------------|---|-----------|--------------------------------------|-----------------|
| Retained earnings at December 31, 1997                 | S | 7,168.778 | 3,183.730                            |                 |
| Gross revenues                                         |   | 1,653,903 |                                      | 1,559,768       |
| Operating expenses                                     |   | (493,416) |                                      |                 |
| Reserve Maintenance Fund expenses                      |   | (10,471)  | *****                                | M               |
| Special Reserve Fund expenses                          |   | (269)     |                                      |                 |
| Bond interest expense                                  |   | (212,513) |                                      |                 |
| Net revenues                                           | - | 937,234   | ******                               | 1,559,768       |
| Interfund transactions:                                |   |           |                                      |                 |
| Revenue Bonds retired                                  |   |           | 2,435,000                            |                 |
| Distribution from Revenue Fund                         |   |           |                                      | (1,766,434)     |
| Transfer of excess money                               |   |           | Management.                          | 206,675         |
| Transfer from Special Reserve Fund                     |   |           | ****                                 | *******         |
| Equipment purchase net of trade-in                     | - |           | 200                                  | ······          |
| Net changes during the year<br>ended December 31, 1998 |   | 937,234   | 2.435,200                            |                 |
| Retained earnings at December 31, 1998                 | S | 8,106,012 | 5,618,930                            |                 |

See accompanying notes to financial statements.

|                                      |                                |                            | Γ                           | Debt Service Funds | s                     |
|--------------------------------------|--------------------------------|----------------------------|-----------------------------|--------------------|-----------------------|
| Operation and<br>maintenance<br>fund | Reserve<br>maintenance<br>fund | Special<br>reserve<br>fund | Bond<br>interest<br>account | Reserve<br>account | Redemption<br>account |
| 42,838                               | 268.788                        | 445,679                    | 855                         | 781,047            | 2,445,841             |
| <br>(493,416)                        | 12,832                         | 25,862                     | 5,193                       | 39,745             | 10,503                |
|                                      | (10,471)                       | (269)                      | _                           | _                  | _                     |
|                                      |                                |                            | (212,513)                   |                    |                       |
| (493,416)                            | 2,361                          | 25,593                     | (207,320)                   | 39,745             | 10,503                |
|                                      |                                |                            |                             |                    | (2,435,000)           |
| 600,120                              | 48,600                         | 483,029                    | 209,694                     | (184 171)          | 425,000               |
| _                                    |                                | _                          | (2,017)                     |                    | (1),005)              |
|                                      | (200)                          |                            | <u> </u>                    |                    |                       |
| 106,704                              | 50,761                         | 508,622                    | (445)                       | (144,426)          | (2,019,182)           |
| 149,542                              | 319,549                        | 954,301                    | 410                         | 636,621            | 426,659               |

. .

] • . . . . ] -

;

× / - - - / - - /

·

Notes to Financial Statements

December 31, 1998

## (1) Organization and Summary of Significant Accounting Policies

#### (a) Organization

In June 1997, the Texas Legislature approved a bill to create the North Texas Tollway Authority, a regional tollway authority under Chapter 366, Transportation Code. Effective September 1, 1997, the North Texas Tollway Authority (the Authority) became the successor agency to the Texas Turnpike Authority and succeeded to all assets, rights, liabilities and other property of the Texas Turnpike Authority located in Collin, Dallas, Denton, or Tarrant County. The Authority also assumed and became liable for all duties and obligations related to the Texas Turnpike Authority at that time.

The Authority is a political subdivision of the State of Texas, authorized and empowered by the Regional Tollway Authority Act (Act) to construct, maintain, repair and operate turnpike and other projects at such locations within Collin, Dallas, Denton or Tarrant Counties, as may be determined by the Authority. The Authority is further authorized to issue revenue bonds, payable solely from tolls and other revenue of the Authority, for the purpose of paying all or any part of the cost of a project. Under the provisions of the Act, these revenue bonds shall not be deemed to constitute a debt or pledge of the faith and credit of the State of Texas or of any other political subdivision thereof.

#### (b) Accounting Policies

The accounts of Mountain Creek Lake Bridge are maintained in accordance with the practices set forth in the provisions of the Trust Agreement for the Mountain Creek Lake Bridge (Bridge) revenue bonds, as interpreted by the Authority. These practices are similar to generally accepted accounting principles for an enterprise fund on an accrual basis except that depreciation and amortization of the Bridge and related acquisition and revenue bond issuance costs are not included as an operating expense or otherwise provided and interest accrued for one year after official completion is capitalized as allowed by the Trust Agreement and bond resolution rather than being reflected as an expense. Otherwise, revenues are recognized when they are earned, expenses are recognized in the period in which they are incurred, and all assets and liabilities associated with the operation of the Bridge are included in the balance sheet in accordance with the Trust Agreement as described above.

The capitalized cost of the Bridge is stated at cost which includes interest paid prior to, during and one year subsequent to completion of construction, less income earned from investment of construction funds, in accordance with the terms of the Trust Agreement.

The various funds and accounts which are required by the Trust Agreement are grouped as follows in the financial statements:

Notes to Financial Statements

December 31, 1998

- Construction and Property Fund The Construction and Property Fund was created to
  account for that portion of the proceeds from the sale of the Mountain Creek Lake Bridge
  Revenue Bonds which are required to be deposited with the trustee in order to pay all costs
  of construction. There also may be deposited in the Construction and Property Fund any
  monies received from any other source for paying the cost of the Bridge, or for paying the
  cost of improving, extending, or enlarging the Bridge.
- Revenue Fund The Revenue Fund was created to account for all revenues (all tolls, other revenues and income) arising or derived by the Authority from the operation and ownership of the Bridge. All revenues of this fund are distributed to other funds in accordance with the Trust Agreement.
- Operation and Maintenance Fund The Operation and Maintenance Fund was created to account for the payment of current operating expenses of the Bridge.
- Reserve Maintenance Fund The Reserve Maintenance Fund was created to account for those expenses of maintaining the Bridge which do not recur on an annual or shorter basis. Based on the Trust Agreement, such items include repairs, painting, renewals and replacements necessary for safe or efficient operation of the Bridge or to prevent loss of revenues, for engineering expenses relating to the functions of the Authority and for equipment, maintenance expenses and operating expenses not occurring at annual or shorter periods.
- Special Reserve Fund The Special Reserve Fund was created to account for the cost of
  repairs, enlargements, resurfacing, additions, renewals, improvements, reconstruction and
  replacements, capital expenditures, engineering and other expenses relating to the functions
  of the Authority in connection with the Bridge, and for any other purpose relating to any
  other function of the Authority now or hereafter as authorized by law. In addition, the
  Special Reserve Fund may account for the payment of principal, interest and premium on
  subordinate lien bonds, notes or other obligations of the Authority and the purchase, payment
  or redemption prior to maturity of bonds issued pursuant to the Trust Agreement.
- Bond Interest Account The Bond Interest Account was created to account for the payment
  of the semiannual interest requirements of the revenue bonds.
- Reserve Account The Reserve Account was created for the purpose of paying interest on the bonds whenever and to the extent that the monies held for the credit of the Bond Interest Account and the Redemption Account shall be insufficient for such purposes.

Notes to Financial Statements

December 31, 1998

 Redemption Account - The Redemption Account was created to provide for the retirement of principal on Mountain Creek Lake Bridge Revenue Bonds.

The Bridge is a turnpike project of the Authority. The Authority also operates the Dallas North Tollway System, which is a separate turnpike project, and for which separate individual financial statements are prepared in accordance with the trust agreement. In addition, separate financial statements are prepared to present the accounts of the Dallas-Fort Worth Turnpike Transition Trust Fund, the Feasibility Study Fund and the Equipment Account.

As a political subdivision of the State of Texas, the income of the Authority is not subject to federal or state income tax under the Internal Revenue Code Section 115.

The preparation of financial statements requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

#### (2) Cash and Investments

ļ

-

ş

The Authority may purchase investments as authorized by the Trust Agreement and as further authorized by the revised investment policy and strategy approved by the Board of Directors in December 1998. These investments include but are not limited to obligations of the United States or its agencies and instrumentalities; direct obligations of the State of Texas or its agencies and instrumentalities; collateralized mortgage obligations directly issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States; other obligations, the principal of and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of, the State of Texas or the United States or their respective agencies and instrumentalities; obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than A or its equivalent; certificates of deposit issued by a state or national bank; fully collateralized repurchase agreements; commercial paper with a stated maturity of 270 days or fewer from the date of its issuance; and no load money market mutual funds which have a dollar-weighted average stated maturity of 90 days or fewer and includes in its investment objectives the maintenance of a stable net asset value of \$1 for each share.

The Authority does not invest in financial instruments other than those authorized by the investment policy, and does not invest in any state or local government investment pools.

Notes to Financial Statements

December 31, 1998

The Authority adopted Statement of Governmental Accounting Standards (GASB) No. 31, "Accounting and Financial Reporting for Certain Investments and External Investment Pools," during 1998. Statement No. 31 establishes accounting and financial reporting standards for all investments held by governmental entities. This statement generally requires all equity securities and debt instruments with readily determinable market values to be carried at fair value, with changes in fair value reflected in the statement of revenues and expenses.

## (a) Deposits of Cash in Bank

The carrying amount of \$205,259 for cash in bank is presented below. The bank balance of the Authority has been classified according to the following risk categories:

- Category 1 insured or collateralized with securities held by the governmental entity or by its agent in the name of the governmental entity
- Category 2 collateralized with securities held by the pledging financial institution's trust department or agent in the governmental entity's name
- Category 3 uncollateralized (which would include any deposits collateralized with securities held by the pledging financial institutions, or by its trust department or agent but not in the governmental entity's name).

| Category 1 | Category 2 | Category 3 | Bank<br>balance | Carrying<br>amount |
|------------|------------|------------|-----------------|--------------------|
| \$<br>**** | 94,168     |            | 94,168          | 205,259            |

Reconciling items comprised of deposits in transit, outstanding payments and bank errors are present which cause the difference between the bank balance and the carrying amount. The carrying amount does not include the toll attendants' change fund and petty cash of approximately \$19,000.

(Continued)

Concession of the local division of the loca

Notes to Financial Statements

December 31, 1998

## (b) Investments

ŝ

ł

-

Both the carrying amount and fair value of investments as of December 31, 1998 are shown below.

|                                                |      | Carrying<br>amount | Fair<br>value |
|------------------------------------------------|------|--------------------|---------------|
| Uncategorized investments - money market funds | \$ _ | 2,410,520          | 2,410,520     |

In accordance with Governmental Accounting Standards Board (GASB) Statement Number 3, Deposits with Financial Institutions, Investments (including Repurchase Agreements), and Reverse Repurchase Agreements, amounts invested in money market funds are not categorized because they are not evidenced by securities that exist in physical or book entry form.

#### (3) Construction and Property

Included in the capitalized costs of the Construction and Property Fund, in accordance with the Trust Agreement, are costs incurred in connection with the offering, sale and issuance of bonds for construction purposes; discount on the sale of bonds; bond interest expense, net of investment income earned from investment of funds; the cost of certain real estate for right-of-way requirements; and administrative and legal expenses incurred during the construction period.

#### (4) Revenue Bonds

To provide for the construction of the Mountain Creek Lake Bridge, the Authority authorized and issued \$9,200,000 principal amount of Mountain Creek Lake Bridge Revenue Bonds dated June 1, 1977 of which \$4,580,000 were Serial Bonds which bear interest at rates ranging from 6.30% to 7.50% and \$4,620,000 were Term Bonds which bear interest at a rate of 7.00%.

Under the terms of the Trust Agreement, redemption of the \$4,580,000 Serial Bonds began on January 1, 1981 in amounts as set forth in the Trust Agreement.

The \$4,620,000 of Term Bonds are subject to mandatory sinking fund redemption at their principal amount, in part, on January 1, 2000 and on January 1 of each year thereafter in amounts as set forth in the Trust Agreement. The bonds may also be redeemed prior to maturity at the option of the Authority at the redemption prices set forth in the Trust Agreement. The first call date of the revenue bonds was January 1, 1987.

Notes to Financial Statements

December 31, 1998

Scheduled maturities and sinking fund requirements on the serial and term bonds payable subsequent to December 31, 1998 are as follows:

| 1999                     | \$          | 637,513   |
|--------------------------|-------------|-----------|
| 2000                     |             | 633,400   |
| 2001                     |             | 631,900   |
| 2002                     |             | 633,300   |
| 2003                     |             | 632,250   |
| Thereafter               | <del></del> | 564,943   |
|                          |             | 3,733,306 |
| Less applicable interest | ****        | (688,306) |
| Principal due            | \$          | 3,045,000 |

The Authority exercised its option to redeem \$2,000,000 in aggregate principal amount of the Revenue Bonds on January 1, 1998, at a redemption price equal to the principal amount of the Bonds called for redemption and accrued interest thereon to the date of redemption plus a redemption premium equal to 2% of the principal amount of the Bonds to be redeemed. Accordingly, the Authority transferred \$2,040,000 from the Mountain Creek Lake Bridge Special Reserve Fund to the Redemption Account to be used to pay the principal amount of the Bonds to be redeemed and the redemption premium thereon on the redemption date. Accrued interest on the Bonds to be redeemed which is payable on the redemption date was paid from the Bond Interest Account.

Pursuant to the Trust Agreement, the Authority covenants that it will at all times keep in effect a plan for toll collecting facilities and a schedule of rates of tolls which will produce each year an amount of "Net Revenues of the Bridge" (net revenues), as defined in the Trust Agreement, at least equal to 1.2 times the scheduled debt service requirements for each fiscal year plus any additional amounts required to fund the deficiencies, if any, between such net revenues and the scheduled debt service requirements for the previous fiscal years to make up for any deficiencies. Scheduled debt service for December 31, 1998 is equal to bond interest expense for the calendar year and the principal amount due on January 1, 1999 of \$425,000. At December 31, 1998, net revenues were 1.66 times scheduled debt service.

(Continued)

::

Notes to Financial Statements

December 31, 1998

#### (5) Employees' Retirement Plan

ì

į

1

.

ł

As discussed in note 1, effective September 1, 1997, the North Texas Tollway Authority (the Authority), a regional tollway authority under Chapter 366, Transportation Code, became the successor agency to the Texas Turnpike Authority. In connection with this transition, the employees of the Authority changed from being participants in the plans administered by the Employees Retirement Systems of Texas (System), which are considered single employer defined benefit pension plans, to being participants in the Texas County and District Retirement System (TCDRS) which is a non-profit public trust fund that provides pension, disability and death benefits to eligible employees of the counties and districts that participate in TCDRS. Information related to the TCDRS and the Authority's 401(k) plan and its refrain from participation in social security is included herein.

#### **Texas County and District Retirement System**

The Texas County and District Retirement System was established by legislative act in 1967. Individuals are required to become a TCDRS member at the time of their employment regardless of their age, unless the individual is ineligible for one of the reasons specified by the System (i.e. part-time, temporary employee, etc.).

The percentage of salary that both the individual and employer contribute toward retirement is determined by the governing body of the political subdivision. The employee and employer contribution rate established by the Authority was 6% and 7.45%, respectively, at December 1, 1998.

Once an individual reaches vested status, he or she may end employment with a TCDRS subdivision and retain their right to future benefits as long as the individual does not die or withdraw personal contributions. Once a vested employee has satisfied both the service and age requirements for retirement, he or she is considered retirement eligible. Employees are eligible to receive lifetime monthly pension payments following the termination of their employment if the individual has 12 or more years of service credit at age 60 or older or the individual has 30 or more years of service credit at any age.

An individual is also eligible to receive lifetime monthly pension payments after their termination of employment if their political subdivision has authorized, and the individual has satisfied 10 years of service credit at age 60 or older or 8 years of service credit at age 60 or older or the individual's combined age and total service is 80 or more or the individual's combined age and total service is 75 or more.

If an individual is eligible for service or disability retirement pension payments, the amount of the lifetime monthly pension to be received after retirement is determined by dividing the total dollars of accumulated retirement credit earned at retirement by the appropriate annuity purchase rate used to convert dollars of retirement credit to a lifetime monthly pension payment.

Notes to Financial Statements

December 31, 1998

If an individual has at least eight years of service credit and becomes disabled for any reason, the individual may be approved for disability retirement benefits if the TCDRS Medical Board finds that the individual is mentally or physically incapacitated for any gainful occupation and the incapacity is considered to be permanent.

Total pension expense allocated to the Bridge by the Authority for the year ended December 31, 1998, was approximately \$17,489 based on a covered payroll of approximately \$234,762. The actuarily determined contribution was paid by the Authority.

## 401(k) Plan

As a state agency of the State of Texas, the Texas Turnpike Authority was a participating employer in the State of Texas Texa\$aver 401(k) Profit Sharing Plan sponsored by the Employees Retirement System of Texas (System). The Texas Turnpike Authority, as a state agency, was permitted to participate in the System's retirement system under Section 812.003 of the Texas Government Code.

Because the Regional Tollway Authority Act established the Authority as a political subdivision of the State of Texas instead of a state agency, it is no longer eligible to participate in the Texa\$aver 401(k) Plan maintained by the System. As a successor of the Texas Turnpike Authority, however, the Authority is eligible under current IRS rules and regulations to adopt the North Texas Tollway Authority 401(k) Plan as a successor qualified cash or deferred arrangement to the Texa\$aver 401(k) Plan.

Prior to 1986, the Internal Revenue Code (IRC) of 1986 permitted state or local governments and taxexempt organizations to maintain a qualified cash or deferred arrangement. The Tax Reform Act (TRA) of 1986 amended IRC to provide that a cash or deferred arrangement shall not be treated as a "qualified cash or deferred arrangement" if it is part of a retirement plan maintained by a Governmental Unit. However, TRA 1986 provides specific exception for cash or deferred arrangements adopted by a Governmental Unit prior to 1986 ("Grandfather Employer"). The Authority, a government entity, is eligible to adopt the 401(k) Plan because it is a successor entity, to the Texas Turnpike Authority, a Grandfathered Employer, and is adopting a cash or deferred arrangement substantially similar to the Texas Turnpike Authority's cash or deferred arrangement.

Effective September 1, 1997, each Authority employee became eligible to participate in the North Texas Tollway Authority 401(k) plan. The plan requires that each employee be required to make a mandatory employee contribution, deposited by the Authority towards the cost of the 401(k) plan, in an amount equal to (i) 6.2% of wages up to the Social Security Wage Base, for the period between September 1, 1997 and October 5, 1997 and (ii) 4% of wages up to the Social Security Wage Base, for the period between October 6, 1997 and January 11, 1998. All mandatory employee contributions to

(Continued)

**b**arrante

Supplements

Notes to Financial Statements

December 31, 1998

the 401(k) plan for payroll periods following September 1, 1997 shall be made on a pre-tax basis, provided they are subject to the Hospital Insurance portion of the Federal Insurance Contributions Act and the Federal Unemployment Tax Act and the withholding of those Acts. Employee contributions and plan earnings are vested at all times and a terminating employee shall be paid all mandatory contributions and plan earnings pursuant to the Plan's terms. The Authority is authorized to make discretionary employer matching contributions in such amounts as may be determined by the Board and Authority employees are vested in employer contributions at 20% after 6 years of service, 40% after 7 years, 60% after 8 years, 80% after 9 years and 100% after 10 or more years. Former Texas Turnpike Authority employees employed by the Authority on or before October 31, 1997 shall receive past service credit for service with the Texas Turnpike Authority for purposes of determining the vested percentage and the Authority's Board of Directors is allowed to further amend or terminate the Plan at any time.

Total 401(k) contributions allocated to Mountain Creek Lake Bridge by the Authority for the year ended December 31, 1998, was approximately \$9,390 based on a covered payroll of approximately \$234,761.

#### Social Security

Į

Effective September 1, 1997, the Authority elected to refrain from participation in Social Security and will instead participate in both the TCDRS and the Authority 401(k) plan. The Authority requires mandatory employee participation in both of these plans.

#### (6) Accrued Vacation

Vested or accumulated vacation leave is recorded as an expense and liability as the benefits accrue to employees. No liability is recorded for nonvesting accumulating rights to receive sick pay benefits.

#### (7) Risk Management

The Authority has established a limited risk management program for workers' compensation. Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Claim liabilities are calculated considering the effects of inflation, recent claim settlement trends including frequency and amount of pay-outs and other economic and social factors. The liability for claims and judgments is reported in the Operation and Maintenance Fund. As of
## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Notes to Financial Statements

December 31, 1998

December 31, 1998, approximately \$16,070 is accrued to recognize claim liabilities. Effective September 25, 1997, the Authority terminated its limited risk management program for workers' compensation. The Authority is now insured for workers' compensation by an external insurance company.

#### (8) Post-employment Benefits

The Authority provides post-employment health care benefits to all retired employees of Mountain Creek Lake Bridge, funded on a pay-as-you-go basis. Currently, 9 individuals meet these requirements. During the year ended December 31, 1998, expenses of approximately \$18,512 were recognized for post-employment health care premiums paid.

#### (9) Commitments

The Authority has a month to month operating lease agreement for the rental of the automatic toll collection equipment. Expense for the year ended December 31, 1998 was approximately \$36,192.

(Continued)

.

## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Required Supplementary Information Year 2000 Disclosure (Unaudited)

ł

ţ

i

1

ì

ł

T

December 31, 1998

The Year 2000 (Y2K) issue refers to the fact that many computer programs use only the last two digits to refer to a year. Therefore, both 1900 and 2000 would be referred to as "00". Computer programs have to be adjusted to recognize the difference between those two years or the programs will fail or create errors.

The Authority has implemented a Y2K readiness program with the objective of having all of their significant centralized computer systems functioning properly with respect to the Y2K issue before January 1, 2000. Each system within the Authority is in a different stage of the Y2K readiness.

The first component of the Y2K readiness program was to identify the internal computer systems that are susceptible to system failures or processing errors as a result of the Y2K issue. This effort is substantially complete with respect to centrally administered systems. Those computer systems considered most critical to continuing operations are being given the highest priority.

The second component of the Y2K readiness program involves the actual remediation and replacement of the Authority's computer systems.

The Authority has elected to partially rely on the representation of third-party software, hardware and equipment suppliers regarding the Y2K compliance of purchased systems. Based on these representations received, the Authority deemed it necessary to validate or test remediated or replaced computer systems to the full extent possible to determine that no errors are introduced during the conversion process.

The Authority is developing a formal contingency plan to mitigate the possible disruption in business operations that may result from the Y2K issue. Contingency plans include developing alternative methods of processing information. Once developed, contingency plans and related cost estimates will be refined, as additional information becomes available.

It is currently estimated that the aggregate cost of the Authority's Y2K efforts will be approximately \$400,000. The Authority's Y2K readiness program is an ongoing process and the estimates of cost and completion dates for various components of the Y2K readiness program described above are subject to change.

18

## Schedule 1

-----

herenced

Angener

Non-order

-----

ALC: NO.

. }

City Concernent

( and the second

14 N.

2

## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Schedule of Capitalized Costs

Year ended December 31, 1998

|                                                                        | _  | Cumulative<br>total<br>through<br>December 31,<br>1998 |
|------------------------------------------------------------------------|----|--------------------------------------------------------|
| Preliminary Costs                                                      | \$ | 483,970                                                |
| Administration                                                         |    | 379,131                                                |
| Right-of-way                                                           |    | 50,777                                                 |
| Completed Construction                                                 |    | 5,948,691                                              |
| Engineering and Maintenance                                            |    | 372,332                                                |
| Equipment                                                              | _  | 14,246                                                 |
| Total excluding financing costs                                        |    | 7,249,147                                              |
| Financing Costs<br>Less Earnings on Interim Investments                |    | 2,285,354<br>(870,571)                                 |
|                                                                        |    | 1,414,783                                              |
| Capitalized cost of Mountain Creek Lake Bridge at<br>December 31, 1998 | \$ | 8,663,930                                              |

See accompanying independent auditors' report.

.....

## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Statement of Revenues and Expenses

## Year ended December 31, 1998 (with comparative totals for the year ended December 31, 1997)

|                                         |    | 1998      | 1997            |
|-----------------------------------------|----|-----------|-----------------|
| Deveryon                                | -  |           |                 |
| Tell revenues                           | ¢  | 1 556 187 | 1 460 025       |
| 1011 revenues                           | Ð  | 97 517    | 1,400,035       |
| Ather                                   |    | 199       | 194,090         |
|                                         | -  | 1 (52 002 | 1.654.101       |
| Gross revenues                          | -  | 1,053,903 | 1,004,131       |
| Operating expenses:                     |    |           |                 |
| Administration:                         |    |           |                 |
| General administration                  |    | 69,658    | 53 <b>,7</b> 20 |
| Accounting                              |    | 7,331     | 7,202           |
| Data processing                         |    | 5,181     | 3,638           |
| Insurance                               |    | 72,295    | 59,550          |
| Vault                                   |    | 8,981     | 10,634          |
| Safety and security                     |    | 33,874    | 32,227          |
| Audit                                   | _  | 5,721     | 3,136           |
|                                         | _  | 203,041   | 170,107         |
| Operations                              |    |           |                 |
| Toll collection                         |    | 226 314   | 230 099         |
| Engineering and maintenance             |    | 45 203    | 43 162          |
| Litilities                              |    | 18 858    | 18 761          |
| otinues                                 | -  | 290 375   |                 |
|                                         | -  | 290,375   |                 |
| Total operating expenses                | _  | 493,416   | 462,129         |
| Net operating revenues                  |    | 1,160,487 | 1,192,002       |
| Reserve Maintenance Fund expenses       |    | 10,471    | 17,067          |
| Special Reserve Fund expenses           |    | 269       | 2,067           |
| Net revenues available for debt service | -  | 1,149,747 | 1,172,868       |
| Bond interest expense                   |    | 212 513   | 379 570         |
| Sond million of onpoliso                | -  |           |                 |
| Net revenues                            | \$ | 937,234   | 793,298         |

See accompanying independent auditors' report.

1

l

## Schedule 3

.....

## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Toll Revenue and Traffic Analysis

## Year ended December 31, 1998 (with comparative totals for the year ended December 31, 1997)

|                                        |      | 1998      | 1997      |
|----------------------------------------|------|-----------|-----------|
| Toll Revenue                           |      |           |           |
| Two-axle vehicles                      | \$   | 1,541,222 | 1,444,999 |
| Multi-axle vehicles                    |      | 7,172     | 6,848     |
| Revenue adjustments                    |      | 7,793     | 8,188     |
| Total                                  | \$   | 1,556,187 | 1,460,035 |
| Vehicles (unaudited)                   |      |           |           |
| Two-axle vehicles                      |      | 3,082,439 | 2,889,998 |
| Multi-axle vehicles                    |      | 7,774     | 7,590     |
| Nonrevenue vehicles                    |      | 10,312    | 7,686     |
| Total                                  |      | 3,100,525 | 2,905,274 |
| Toll Revenue - Average Per Day         |      |           |           |
| Two-axle vehicles                      | \$   | 4,223     | 3,959     |
| Multi-axle vehicles                    |      | 20        | 19        |
| Revenue adjustments                    | _    | 21        | 22        |
| Average                                | \$ _ | 4,264     | 4,000     |
| Vehicles - Average Per Day (unaudited) |      |           |           |
| Two-axle vehicles                      |      | 8,445     | 7,918     |
| Multi-axle vehicles                    |      | 21        | 21        |
| Nonrevenue vehicles                    |      | 28        | 21        |
| Average                                |      | 8,494     | 7,960     |

See accompanying independent auditors' report.

## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Toll Revenue and Traffic by Class of Vehicle

## Year ended December 31, 1998 (with comparative totals for the year ended December 31, 1997)

|                                      |    | 1998                                   |                         |  |  |
|--------------------------------------|----|----------------------------------------|-------------------------|--|--|
| Class of Vehicle                     | _  | Revenue                                | Vehicles<br>(unaudited) |  |  |
| Two-axle vehicles                    | \$ | 1,541,219                              | 3,082,439               |  |  |
| Three-axle vehicles and combinations |    | 3,042                                  | 4,055                   |  |  |
| Four-axle vehicles and combinations  |    | 2,148                                  | 2,148                   |  |  |
| Five-axle vehicles and combinations  | _  | 1,982                                  | 1,571                   |  |  |
|                                      |    | 7,172                                  | 7,774                   |  |  |
| Toll revenue variance                |    | 7,793                                  |                         |  |  |
| Nonrevenue vehicles                  | _  | ······································ | 10,312                  |  |  |
| Toll revenue and traffic             | \$ | 1,556,184                              | 3,100,525               |  |  |

|                                      |    | 19        | 997                     |
|--------------------------------------|----|-----------|-------------------------|
| Class of Vehicle                     | -  | Revenue   | Vehicles<br>(unaudited) |
| Two-axle vehicles                    | \$ | 1,444,999 | 2,889,998               |
| Three-axle vehicles and combinations |    | 3,289     | 4,385                   |
| Four-axle vehicles and combinations  |    | 1,865     | 1,865                   |
| Five-axle vehicles and combinations  | _  | 1,694     | 1,340                   |
|                                      |    | 6,848     | 7,590                   |
| Toll revenue variance                |    | 8,188     |                         |
| Nonrevenue vehicles                  |    |           | 7,686                   |
| Toll revenue and traffic             | \$ | 1,460,035 | 2,905,274               |

See accompanying independent auditors' report.

.

ţ

1

## NORTH TEXAS TOLLWAY AUTHORITY MOUNTAIN CREEK LAKE BRIDGE

Ĩ

-

Assessed in

and the second

-

\_\_\_\_\_

**January** 

biotesta, d

- -----

ł

\*\*\*\*\*\*\*\*

Cash Receipts and Disbursements

Year ended December 31, 1998

|                                                   |     | Total<br>(memorandum<br>only) | Construction<br>and<br>property fund | Revenue<br>fund |
|---------------------------------------------------|-----|-------------------------------|--------------------------------------|-----------------|
| Balance of cash December 31, 1997                 | S . | 245,742                       |                                      | 20,057          |
| Receipts:                                         |     |                               |                                      |                 |
| Toll revenues                                     |     | 1,556,186                     |                                      | 1,556,186       |
| Matured investments                               |     | 4,854,792                     |                                      | 1,752,042       |
| Earnings received from investments                |     | 105,684                       |                                      | 3,293           |
|                                                   |     | 6,516,662                     |                                      | 3,311,521       |
| Disbursements:                                    |     |                               |                                      |                 |
| Revenue bonds retired                             |     | (2,435,000)                   |                                      |                 |
| Interest paid on bonded debt                      |     | (296,041)                     | homes                                |                 |
| Interim investments                               |     | (3,275,607)                   |                                      | (1,745,040)     |
| Operating expenses                                |     | (147,849)                     |                                      |                 |
| Reserve maintenance fund expenses                 |     | (10,301)                      | Maked of Televisor                   |                 |
| Equipment purchase net of trade-in                |     | (200)                         |                                      | ·               |
| Special reserve maintenance fund expenses         |     | (1,911)                       |                                      |                 |
|                                                   |     | (6,166,909)                   |                                      | (1,745,040)     |
| Interfund transactions:                           |     |                               |                                      |                 |
| Distribution from Revenue Fund                    |     |                               | ***                                  | (1,740,819)     |
| Transfer of excess monies from other funds        |     | (36,213)                      | <u></u>                              | 170,462         |
| Reimbursements to Dallas North Tollway System     |     | (335,023)                     |                                      | •               |
| Transfer to redemption fund                       | -   |                               | ······                               |                 |
|                                                   |     | (371,236)                     |                                      | (1,570,357)     |
| Receipts over (under) disbursements and interfund |     |                               |                                      |                 |
| transactions for year ended December 31, 1998     |     | (21,483)                      |                                      | (3,876)         |
| Balance of cash December 31, 1998                 | \$  | 224,259                       |                                      | 16,181          |

See accompanying independent auditors' report.

ġ.

|                                      |                                |                            | Debt Service Funds          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|--------------------------------------|--------------------------------|----------------------------|-----------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Operation and<br>maintenance<br>fund | Reserve<br>maintenance<br>fund | Special<br>reserve<br>fund | Bond<br>interest<br>account | Reserve<br>account | Redemption<br>account                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| 82,978                               | 32,868                         | 109,839                    |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|                                      |                                |                            |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|                                      | 40,598                         | 24.060                     | 298,895                     | 186,161            | 2,577,096                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|                                      | 11,720                         | 24,909                     | 5,602                       | 40,409             | 19,085                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                      | 52,324                         | 24,969                     | 304,497                     | 226,570            | 2,596,781                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|                                      |                                |                            |                             | -                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|                                      |                                |                            | .vvvvvddate                 |                    | (2,435,000)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|                                      |                                | 4465.300rr                 | (296,041)                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|                                      | (117,924)                      | (587,817)                  | (215,331)                   | (42,399)           | (567,096)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| (147,849)                            |                                | -                          | <b></b>                     |                    | Terrine.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|                                      | (10,301)                       | 200.000                    |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|                                      | (200)                          | (1.011)                    |                             | added distant      | 500 OTT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| •***********                         |                                | (1,911)                    | *******                     |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| (147,849)                            | (128,425)                      | (589,728)                  | (511,372)                   | (42,399)           | (3,002,096)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|                                      |                                |                            |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| <b>599,92</b> 1                      | 76,600                         | 429,604                    | 209,694                     |                    | 425,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| www.helest                           |                                | <u></u>                    |                             |                    | and a second sec |  |
|                                      |                                | _                          | (2,819)                     | (184,171)          | (19,685)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| (335,023)                            | (28,170)                       | 28,170                     |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 264,898                              | 48,430                         | 457,774                    | 206,875                     | (184,171)          | 405,315                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|                                      |                                |                            |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 117,049                              | (27,671)                       | (106,985)                  |                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 200,027                              | 5,197                          | 2,854                      | ********                    |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |

۱ • • • . . . Ì [] : i . . · -----• • ; ] · \*\*\* · \*\*\*\*

......

# NORTH TEXAS TOLLWAY AUTHORITY DALLAS-FORT WORTH TURNPIKE TRANSITION TRUST FUND NORTH TEXAS TOLLWAY AUTHORITY FEASIBILITY STUDY FUND NORTH TEXAS TOLLWAY AUTHORITY EQUIPMENT ACCOUNT

Financial Statements And Supplementary Data

December 31, 1998

(With Independent Auditors' Report Thereon)

[..... • ] Management 4 \*\*\*\* \* \* \* \* ۲. <sup>ا</sup>لام الم ] 1444 - 14 

- . . . . .



200 Crescent Court Suite 300 Dallas, TX 75201-1885

## **Independent Auditors' Report**

Board of Directors North Texas Tollway Authority:

We have audited the special-purpose statements of assets and liabilities of the Dallas-Fort Worth Turnpike Transition Trust Fund, the North Texas Tollway Authority Feasibility Study Fund and the Equipment Account of the North Texas Tollway Authority (the Authority) as of December 31, 1998 and the related special-purpose statements of revenues and expenses and changes in fund equity for the year then ended. These special-purpose financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying special-purpose financial statements were prepared for the purpose of complying with provisions of Senate Bill 194 as discussed in Note 1, and are not intended to be a presentation in conformity with generally accepted accounting principles.

In our opinion, the special-purpose financial statements referred to above present fairly, in all material respects, the assets and liabilities of the Dallas-Fort Worth Turnpike Transition Trust Fund, the North Texas Tollway Authority Feasibility Study Fund and the Equipment Account of the North Texas Tollway Authority as of December 31, 1998 and the results of their operations and the changes in their fund equity for the year then ended, on the basis of accounting described in note 1.

The Year 2000 supplementary information on page 11 is not a required part of the special-purpose financial statements, but is supplementary information required by the Governmental Accounting Standards Board, and we did not audit and do not express an opinion on such information. Further, we were unable to apply to the information certain procedures prescribed by professional standards because of the nature of the subject matter underlying the disclosure requirements and because sufficiently specific criteria regarding the matters to be disclosed have not been established. In addition, we do not provide assurance that the Authority is or will become Year 2000 compliant, that the Authority's Year 2000 remediation efforts will be successful in whole or in part, or that parties with which the Authority does business are or will become Year 2000 compliant.



Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in Schedule 1 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects, in relation to the basic financial statements taken as a whole.

1

This report is intended solely for the information and use of the Board of Directors, management of the Authority, and trustees of the bonds and is not intended to be and should not be used by anyone other than those specified parties.

KPMG LIP

March 19, 1999

## Exhibit A

#### NORTH TEXAS TOLLWAY AUTHORITY

## Statement of Assets and Liabilities

December 31, 1998

| Assets                                        |    | Total     | DFW Turnpike<br>transition<br>trust fund | NTTA<br>feasibility<br>study fund | NTTA<br>equipment<br>account |
|-----------------------------------------------|----|-----------|------------------------------------------|-----------------------------------|------------------------------|
| Cook (note 2)                                 | e  | 176 000   | 5 780                                    | 170 200                           |                              |
| Cash (note 2)                                 | 20 | 170,000   | 3,107                                    | 170,239                           |                              |
| investments (note 2)                          |    | 031,230   | 228,888                                  | 92,348                            |                              |
| Accrued interest receivable on                |    | 1.880     | 068                                      | 017                               |                              |
| Deferred study assts (note th)                |    | 2 706 816 | 305                                      | 2 706 816                         |                              |
| Equipment                                     |    | 741 764   |                                          | 2,700,010                         | 741 764                      |
| Edubueur                                      |    | 741,704   |                                          | ······                            | /41,704                      |
|                                               | \$ | 4,277,784 | 565,645                                  | 2,970,375                         | 741,764                      |
| Liabilities                                   |    |           |                                          |                                   |                              |
| Accounts payable                              | \$ | 81,197    |                                          | 81,197                            |                              |
| Retained from contractors                     |    | 56,452    |                                          | 56,452                            |                              |
| Other accrued liabilities                     |    | 9,588     | 4.756                                    | 4,832                             |                              |
| Due to Dallas North Tollway System            |    | 544.605   |                                          | 544,605                           | _                            |
|                                               |    | 691.842   | 4,756                                    | 687.086                           |                              |
| Fund Equity                                   |    |           |                                          |                                   |                              |
| Fund balances                                 |    | 3,585,942 | 560,889                                  | 2.283,289                         | 741,764                      |
| Commitments and contingencies (notes 3 and 4) |    |           |                                          |                                   |                              |
| Total liabilities and fund equity             | \$ | 4,277,784 | 565,645                                  | 2,970,375                         | 741,764                      |

See accompanying notes to financial statements.

## Exhibit B

i: 1

]

ſ

Ę

· ·

## NORTH TEXAS TOLLWAY AUTHORITY

Statement of Revenues and Expenses

Year ended December 31, 1998

| Assets                                                                                                                        | 5             | Total                     | DFW Turnpike<br>transition<br>trust fund | NTTA<br>feasibility<br>study fund |
|-------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|------------------------------------------|-----------------------------------|
| Revenues - interest from investments                                                                                          | \$            | 67.730                    | 31.385                                   | 36,345                            |
| Expenses:<br>Administration<br>Retiree health care costs (note 3)<br>Accounting<br>Write-off of deferred study costs (note 4) |               | 32,861<br>41,994<br>1,088 | 4,422<br>41,258<br>                      | 28,439<br>736<br>1,088            |
|                                                                                                                               | second states | 75,943                    | 45,680                                   | 30,263                            |
| Expenses in excess of revenues                                                                                                | \$            | (8,213)                   | (14,295)                                 | 6,082                             |

See accompanying notes to financial statements.

4

#### Exhibit C

;

ç

. . .

 $(1,1)^{*}$ 

. ~

## NORTH TEXAS TOLLWAY AUTHORITY

## Statement of Changes in Fund Equity

## Year ended December 31, 1998

| Assets                                                 | <br>Total       | DFW Turnpike<br>transition<br>trust fund | NTTA<br>feasibility<br>study fund | NTTA<br>equipment<br>account |
|--------------------------------------------------------|-----------------|------------------------------------------|-----------------------------------|------------------------------|
| Fund equity at December 31, 1997                       | \$<br>3,597,048 | 575,184                                  | 2,277,207                         | 744,657                      |
| Revenues                                               | 67,730          | 31,385                                   | 36,345                            |                              |
| Expenses                                               | <br>(75,943)    | (45,680)                                 | (30.263)                          |                              |
|                                                        | 143,673         | (14,295)                                 | 6,082                             |                              |
| Cost of equipment retired                              | (2,893)         |                                          |                                   | (2,893)                      |
| Net changes during the year<br>ended December 31, 1998 | <br>(11,106)    | (14,295)                                 | 6.082                             | (2,893)                      |
| Fund equity at December 31, 1998                       | \$<br>3,585,942 | 560,889                                  | 2,283,289                         | 741,764                      |

See accompanying notes to financial statements.

Notes to Financial Statements

December 31, 1998

#### (1) Organization and Accounting Policies

#### (a) Organization

In June 1997, the Texas Legislature approved a bill to create the North Texas Tollway Authority, a regional tollway authority under Chapter 366, Transportation Code. Effective September 1, 1997, the North Texas Tollway Authority (the Authority) became the successor agency to the Texas Turnpike Authority and succeeded to all assets, rights, liabilities and other property of the Texas Turnpike Authority located in Collin, Dallas, Denton, or Tarrant County. As a result of this transition, the Authority paid \$1,845,000 from the Feasibility Study Fund to the Texas Department of Transportation (TxDOT) on October 1, 1997. The Authority also assumed and became liable for all duties and obligations related to the Texas Turnpike Authority at that time.

The Authority is a political subdivision of the State of Texas, authorized and empowered by the Regional Tollway Authority Act (Act) to construct, maintain, repair and operate turnpike and other projects at such locations within Collin, Dallas, Denton or Tarrant Counties, as may be determined by the Authority. The Authority is further authorized to issue revenue bonds, payable solely from tolls and other revenue of the Authority, for the purpose of paying all or any part of the cost of a project. Under the provisions of the Act, these revenue bonds shall not be deemed to constitute a debt or pledge of the faith and credit of the State of Texas or of any other political subdivision thereof.

Under the administration of the Texas Turnpike Authority, the Dallas-Fort Worth Turnpike became a toll free highway on December 31, 1977 in accordance with Senate Bill 194, an Act of the 65th Legislature of Texas, which provided for the transition of the Dallas-Fort Worth Turnpike and all related properties, as a toll free highway to TxDOT (Transition). In connection with the Transition, Senate Bill 194 provided for the following as interpreted by the Authority:

- The establishment of the Dallas-Fort Worth Turnpike Transition Trust Fund to account for the payment of transition costs and other obligations payable from funds of the Dallas-Fort Worth Turnpike at December 31, 1977, such as post-employment benefits (see note 3),
- The establishment of the Texas Turnpike Authority Feasibility Study Fund (subsequently known as North Texas Tollway Authority Feasibility Study Fund) for the financing of feasibility studies, as authorized by the Authority, and

(Continued)

1

#### Notes to Financial Statements

#### December 31, 1998

#### (a) Deposits of Cash in Bank

The carrying amount of \$176,088 for cash in bank is presented below. The bank balance of the Authority has been classified according to the following risk categories:

- Category 1 insured or collateralized with securities held by the governmental entity or by its agent in the name of the governmental entity
- Category 2 collateralized with securities held by the pledging financial institution's trust department or agent in the governmental entity's name
- Category 3 uncollateralized (which would include any deposits collateralized with securities held by the pledging financial institutions, or by its trust department or agent but not in the governmental entity's name)

| Category 1      | Category 2 | Category 3 | Bank<br>balance | Carrying<br>amount |
|-----------------|------------|------------|-----------------|--------------------|
| \$<br>pagaaaaaa | 20,099     |            | 20,099          | 176,088            |

#### (b) Investments

Both the carrying amount and market value of investments as of December 31, 1998 are shown below. Investments are categorized to give an indication of the level of credit risk assumed by the agency at December 31, 1998. The three categories are:

- Category 1 investments that are insured or registered or for which the securities are held by the agency or its agent in the agency's name.
- Category 2 uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the agency's name.
- Category 3 uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent, but not in the agency's name.

Notes to Financial Statements

December 31, 1998

|                         |            | (              | Category | Carrying | Fair       |         |
|-------------------------|------------|----------------|----------|----------|------------|---------|
| Type of security        |            | 1              | 2        | 3        | amount     | value   |
| Commercial paper        | S          | 313,058        |          |          | 313,058    | 313,153 |
| Totals                  | \$         | 313,058        |          |          | 313,058    | 313,153 |
| Uncategorized investmen | its - mone | y market funds |          |          | 338,178    | 338,178 |
| Total investme          | ints       |                |          |          | \$ 651,236 | 651,331 |

In accordance with Governmental Accounting Standards Board Statement Number 3, Deposits with Financial Institutions, Investments (including Repurchase Agreements), and Reverse Repurchase Agreements, amounts invested in money market funds are not categorized because they are not evidenced by securities that exist in physical or book entry form.

#### (3) Post-employment Benefits

The Authority provides post-employment health care benefits, in accordance with State law, to all retired employees of the Dallas-Fort Worth Turnpike, funded on a pay-as-you-go basis. Currently 15 individuals meet these requirements. During the year ended December 31, 1998, expenses of approximately \$42,000 were recognized for post-employment health care premiums paid.

\*

## (4) Commitments

Contract commitments at December 31, 1998 aggregate approximately \$3,632,663.

Notes to Financial Statements

December 31, 1998

• The retention for the Authority of such equipment and related assets as usable by the Authority in the operation of other projects. Such assets are accounted for in the Equipment Account and are not subjected to depreciation as the equipment and related assets are held in a custodial capacity only and will not be replaced by the Authority.

The accounts of the Dallas-Fort Worth Turnpike Transition Trust Fund and the Equipment Account assets and liabilities were transferred from the Dallas-Fort Worth Turnpike in accordance with provisions of Senate Bill 194 as described in the preceding paragraph. All assets and liabilities transferred have been recorded at predecessor carrying values, generally at cost.

The Authority currently operates the Dallas North Tollway System and Mountain Creek Lake Bridge, which are separate turnpike projects, and for which separate individual financial statements are prepared in accordance with trust agreements.

#### (b) Accounting Policies

1

f

ļ

In accordance with House Bill 749, an act of the 72nd Legislature of Texas, the Authority may transfer an amount from a surplus fund established for a turnpike project to the North Texas Tollway Feasibility Study Fund (Feasibility Study Fund). However, the Authority may not transfer an amount that results in a balance in the surplus fund that is less than the minimum balance required in the trust agreement for that project, if any.

Revenues are recognized when they are earned, expenses are recorded in the period in which they are incurred, and contributed capital is recorded for amounts contributed by other governments.

The costs of studies funded by the Feasibility Study Fund are deferred until such time as the feasibility of the project is determined. If the project is pursued, the Feasibility Study Fund is reimbursed for related study costs from the proceeds of the project's bond issue. However, the study costs associated with projects determined to be unfeasible are removed from the balance sheet and written off to expense when approved by the Executive Director.

As a political subdivision of the State of Texas, the income of the Authority is not subject to federal or state income tax under the Internal Revenue Code Section 115.

(Continued)

Notes to Financial Statements

December 31, 1998

#### (2) Cash and Investments

The preparation of financial statements requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

The Authority may purchase investments as authorized by the Trust Agreement and as further authorized by the revised investment policy and strategy approved by the Board of Directors in December 1998. These investments include but are not limited to obligations of the United States or its agencies and instrumentalities; direct obligations of the State of Texas or its agencies and instrumentalities; collateralized mortgage obligations directly issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States; other obligations, the principal of and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of, the State of Texas or the United States or their respective agencies and instrumentalities; obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than A or its equivalent; certificates of deposit issued by a state or national bank; fully collateralized repurchase agreements; commercial paper with a stated maturity of 270 days or fewer from the date of its issuance; and no load money market mutual funds which have a dollar-weighted average stated maturity of 90 days or fewer and includes in its investment objectives the maintenance of a stable net asset value of \$1 for each share.

The Authority does not invest in financial instruments other than those authorized by the investment policy, and does not invest in any state or local government investment pools.

The Authority adopted Statement of Governmental Accounting Standards (GASB) No. 31, "Accounting and Financial Reporting for Certain Investments and External Investment Pools," during 1998. The impact of the adoption was immaterial to the accompanying financial statements. Statement No. 31 establishes accounting and financial reporting standards fro all investments held by governmental entities. This statement generally requires all equity securities and debt instruments with readily determinable market values to be carried at fair value, with changes in fair value reflected in the statement of revenues and expenses.

(Continued)

## Required Supplementary Information Year 2000 Disclosure (Unaudited)

- w w

The Year 2000 (Y2K) issue refers to the fact that many computer programs use only the last two digits to refer to a year. Therefore, both 1900 and 2000 would be referred to as "00". Computer programs have to be adjusted to recognize the difference between those two years or the programs will fail or create errors.

The Authority has implemented a Y2K readiness program with the objective of having all of their significant centralized computer systems functioning properly with respect to the Y2K issue before January 1, 2000. Each system within the Authority is in a different stage of the Y2K readiness.

The first component of the Y2K readiness program was to identify the internal computer systems that are susceptible to system failures or processing errors as a result of the Y2K issue. This effort is substantially complete with respect to centrally administered systems. Those Computer Systems considered most critical to continuing operations are being given the highest priority.

The second component of the Y2K readiness program involves the actual remediation and replacement of the Authority's computer systems.

The Authority has elected to partially rely on the representation of third-party software, hardware and equipment suppliers regarding the Y2K compliance of purchased systems. Based on these representations received, the Authority deemed it necessary to validate or test remediated or replaced computer systems to the full extent possible to determine that no errors are introduced during the conversion process.

The Authority is developing a formal contingency plan to mitigate the possible disruption in business operations that may result from the Y2K issue. Contingency plans include developing alternative methods of processing information. Once developed, contingency plans and related cost estimates will be refined, as additional information becomes available.

It is currently estimated that the aggregate cost of the Authority's Y2K efforts will be approximately \$400,000. The Authority's Y2K readiness program is an ongoing process and the estimates of cost and completion dates for various components of the Y2K readiness program described above are subject to change.

Schedule 1

**ONLINE AND** 

Contraction of the local division of the loc

NAME AND ADDRESS OF ADD

Contraction of the

Altered and

10000

-----

jan second

laws we have

......

1 

. ]

-----

ŝ ₹. •

١,

## NORTH TEXAS TOLLWAY AUTHORITY

## Cash Receipts and Disbursements

Year ended December 31, 1998

| Assets                                                                           |           | Total               | DFW Turnpike<br>transition<br>trust fund | NTTA<br>feasibility<br>study fund |
|----------------------------------------------------------------------------------|-----------|---------------------|------------------------------------------|-----------------------------------|
| Balance of cash December 31, 1997                                                | s         | 999                 | 999                                      |                                   |
| Receipts:                                                                        |           |                     |                                          |                                   |
| Matured investments<br>Earnings received from investments                        |           | 4,407,993<br>73,642 | 1,323,920<br>35,802                      | 3,084,073<br>37,840               |
|                                                                                  |           | 4,481,635           | 1,359,722                                | 3,121,913                         |
| Disbursements:                                                                   |           |                     |                                          |                                   |
| Purchase of investments                                                          |           | (3.406.493)         | (1.309,474)                              | (2.097.019)                       |
| Operating expenses                                                               |           | (19,787)            | (4,200)                                  | (15.587)                          |
| Deferred study costs                                                             |           | (1,420,135)         |                                          | (1,420,135)                       |
|                                                                                  |           | (4,846,415)         | (1,313,674)                              | (3,532,741)                       |
| Interproject transactions:                                                       |           |                     |                                          |                                   |
| Reimbursements (to) from Dallas North                                            |           |                     |                                          |                                   |
| Tollway System                                                                   |           | 539,869             | (41,258)                                 | 581,127                           |
| Receipts over (under) disbursement and<br>interproject transactions for the year |           | 176 090             | 4 700                                    | 170 200                           |
| chara Decennoer 51, 1778                                                         | venuelete | 112,007             | 4,170                                    | 1/0,237                           |
| Balance of cash December 31, 1998                                                | \$        | 176,088             | 5,789                                    | 170,299                           |

See accompanying independent auditors' report.



The second s



**Traffic and Revenues** 

# ADDISON AIRPORT TOLL TUNNEL

**Prepared For** 



# Ву

×-----4

# WILBUR SMITH ASSOCIATES

FEBRUARY, 1992

# **TEXAS TURNPIKE AUTHORITY**

LUTHER G. JONES, JR., Chairman CHARLES R. MATTHEWS, Vice Chairman

RAY C. STOKER, JR., Director

MICHAEL Y. CHOU, Director

HENRY R. MUNOZ, III, Director

RAUL A. BESTEIRO, JR., Director

JAMES N. MUNS, Director

ţ

JERE W. THOMPSON, JR., Director

DAVID E. BERNSEN, Director

**CLIVE RUNNELS, Director** 

**PHILIP MONTGOMERY, Director** 

WILLIAM P. MAHOMES, JR., Director

## JOHN B. RAMMING, Executive Director

HARRY KABLER, Secretary - Treasurer JOE H. STALEY - LOCKE PURNELL RAIN HARRELL, General Counsel



#### EXECUTIVE SUMMARY

On July 12, 1991, the Board of Directors of the Texas Turnpike Authority authorized Wilbur Smith Associates (WSA) to perform an investment grade traffic and revenue study of the proposed Addison Airport Tunnel. This report summarizes the results of our analysis of the proposed toll tunnel beneath the Addison Airport. The primary purpose of this comprehensive traffic and revenue study was to present annual estimates of traffic and toll revenue and design year traffic estimates for a single 2-lane toll tunnel with an assumed opening year of 1996 over a 15-year projection period. The study was to address optimum toll rates, local area economic growth potential and obtain information on observed travel patterns and trip characteristics on competing routes in the tunnel corridor. This study built upon the earlier initial feasibility assessment studies presented in June 1991 and enhanced the available database by collecting current origin and destination information and trip characteristic data through a motorist mailback questionnaire survey.

Route reconnaissance and travel time distance studies were conducted in the corridor of the proposed tunnel. All principal arterials within the focus area bordered by Frankford Road on the north, Preston Road on the east, Alpha Road on the south and Josey Lane on the west, were included in the field reconnaissance survey. During these route reconnaissance investigations, information was obtained regarding roadway cross sections, left-turn provisions, major traffic controls, vehicle restrictions, and nature of roadside development.

Collection of travel pattern and trip characteristic information through the corridor was obtained through a motorist interview mailback questionnaire form and utilized to update the North Central Texas Council of Governments (NCTCOG) trip tables to better reflect the "real world" conditions in this specific study area. Four survey stations were operated during a 12-hour period between 7:00 a.m. and 7:00 p.m. along a north-south screenline passing through the Addison Airport.

The transportation model developed by the NCTCOG, which forecasts highway traffic in the study area, was then utilized to assist in the evaluation of traffic on the system at 1991, 1996 and 2010 levels. NCTCOG forecasts of population and employment growth in the study area were the basis for the estimation of future year traffic. Alternate toll rate assignments were used to determine the optimum toll rate for use in an assignment with the proposed S.H. 190 route included in the 1995 network. Comparing the assignments (with and without S.H. 190) provided an estimate of the traffic impact S.H. 190 will have on the proposed Addison Airport Toll Tunnel. For purposes of this analysis, S.H. 190 was assumed to be opened to traffic by January 1, 1998. The final capacity constrained computer traffic assignment tested both a \$0.75 and \$1.00 toll for all vehicle classes at 2010 levels.

Annual traffic and toll revenues for the forecast period were prepared based on the traffic assignments, optimum toll analysis and anticipated annual traffic growth schedule developed in the study. A. 11

## TABLE OF CONTENTS

\* \*\*\*\*

| PAGE                                         |
|----------------------------------------------|
| 1<br>1<br>2<br>3                             |
| 6<br>8<br>10<br>11<br>13                     |
| 16<br>16<br>19<br>22<br>22<br>22             |
| 30<br>30<br>36<br>38                         |
| 43<br>43<br>45<br>46<br>47<br>49<br>49<br>53 |
|                                              |

APPENDIX A - Survey Questionnaire

2

## **ILLUSTRATIONS**

| FIGURE |                                                    | FOLLOWS<br>PAGE |
|--------|----------------------------------------------------|-----------------|
| 1      | Regional Map                                       | 1               |
| 2      | Location Map                                       | 2               |
| 3      | Socioeconomic Regions                              | 9               |
| 4      | Estimated Median Household Income                  | 10              |
| 5      | Survey Station Location Map                        | 30              |
| 6      | Estimated Trip Purpose - Total Vehicles            | 34              |
| 7      | Estiamted Trip Frequency - Total Vehicles          | 35              |
| 8      | Estimated Vehicle Occupancy - Total Passenger Cars | 36              |
| 9      | Superzone Grouping                                 | 38              |
| 10     | Toll Sensitivity Curve                             | 46              |
| 11     | Anticipated 2010 Peak Hour Traffic Volumes         | 53              |

# TABULATIONS

<u>PAGE</u>

..........

**TABLE** 

|          | An a second a second a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 1        | Socioeconomic Trends and Projections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 9   |
| 2        | Annual Traffic Trends                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 17  |
| 3        | Annual Traffic Experience Selected Toll Plazas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 18  |
| 4        | Monthly Transactions Trend                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 20  |
| 5        | Monthly Traffic Variations - 1991                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 21  |
| 6        | Daily Traffic Variations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 23  |
| 7        | Hourly Traffic Variations - Belt Line Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 24  |
| 8        | Hourly Traffic Variations - Lindberg Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 25  |
| <u> </u> | Hourly Traffic Variations - Soujourn Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 26  |
| 10       | Hourly Traffic Variations - Trinity Mills                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 27  |
| 11       | Vehicle Classification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 78  |
| 12       | Motorist Interview Survey Sample Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 32  |
| 12       | Estimated Trin Purnose - Total Vehicles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 22  |
| 1/       | Estimated Trip Fraguenzy - Total Vehicles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 24  |
| 14       | Estimated The requency - I that vehicles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |
| 15       | Estimated vehicle Occupancy - Total vehicles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 30  |
| 10       | Sample I ravel 1 ime Savings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 31  |
| 1/       | Travel Pattern Summary - Belt Line Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 39  |
| 18       | Travel Pattern Summary - Lindberg Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 40  |
| 19       | Travel Pattern Summary - Soujourn Lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 41  |
| 20       | Travel Pattern Summary - Trininty Mills Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 42  |
| 21       | Estimated Annual Traffic Growth Schedule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 50  |
| 22       | Estimated Average Daily Traffic and Gross Toll Revenue-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |
|          | \$0.75 Toll Rate Scenario                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 51  |
| 23       | Estimated Average Daily Traffic and Gross Toll Revenue -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |
|          | \$1.00 Toll Rate Scenario                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 52  |
|          | A we may a set a s | ~~~ |

## Chapter 1 INTRODUCTION

On July 12, 1991, the Board of Directors of the Texas Turnpike Authority authorized Wilbur Smith Associates (WSA) to perform an investment grade traffic and revenue study of the proposed Addison Airport Tunnel. In accord with a letter of authorization of September 9, 1991, WSA is pleased to submit this report summarizing the results of our analysis of the proposed toll tunnel beneath the Addison Airport. The primary purpose of this comprehensive traffic and revenue study is to present annual estimates of traffic and toll revenue and design year traffic estimates for the proposed Tunnel. This study built upon the earlier initial feasibility assessment studies presented in June 1991 and enhanced the available database by collecting current origin and destination information and trip characteristic data through a motorist mailback questionnaire survey.

## Description of Proposed Toll Tunnel

Addison Municipal Airport lies in northern Dallas County, east of the communities of Carrollton and Farmers Branch, and west of Richardson, Texas. The regional location of the proposed Addison Airport Toll Tunnel is depicted in Figure 1. Currently, the Addison Airport disrupts the continuity of Keller Springs Road, an east-west thoroughfare that is constructed from Campbell Road in the east to Addison Road on the eastside of the Addison Airport. West of Addison Airport, Keller Springs Road connects with I.H. 35E, and Sandy Lake Road, which extends west of I.H. 35E into the City of Coppell.

Keller Springs Road is one of only a few major east-west routes north of the Belt Line Road in Dallas County. The cities of Dallas and Carrollton have planned, for quite some time, for Keller Springs Road to be a major divided roadway providing an east-west connection in the north Dallas area. Consequently, without the proposed Addison Airport Toll Tunnel to provide continuity to Keller Springs Road, ;



:.'

•

.

traffic impacts may be expected along Belt Line, Trinity Mills and Frankford Roads, which will have to carry the additional east-west demand.

Figure 2 depicts the proposed single 2-lane tunnel project alignment analyzed under this study. The Addison Airport is bounded on the south by the St. Louis - Southwestern Railroad tracks, Midway Road on the west, Sojourn Lane on the north, and Addison Road on the east. The Airport facilities include the 7,000 foot long runway, several taxiways and hangar buildings for general aviation and corporate type aircraft usage. The total proposed tunnel project will have a length of approximately 3,700 feet from Midway Road to Addison Road, with the actual tunnel length being 800 feet long under the runway. It is understood that Dooley Road will overpass the tunnel near its/west portal in order to maintain access to properties north of Keller Spring Road. The proposed toll plaza would be located at the western terminus of the project between the proposed Dooley Road cul-de-sac and Midway Road.

#### **Background and Study Objective**

In 1985, a preliminary traffic analysis was conducted to assess the future traffic volumes surrounding the Addison Airport, as well as an engineering feasibility assessment to evaluate several alignments and tunnel designs. These initial studies were conducted on the proposed project by Ginn, Inc., in association with Barton-Aschman and Howard Needles Tammen and Bergendoff (HNTB). Although this study evaluated three construction alternatives and provided an indication of the feasibility of such a project, it did not consider the potential impacts of tolling the tunnel.

For this reason, in September 1990, the Board of Directors of the Texas Turnpike Authority authorized WSA to perform an initial feasibility assessment of traffic and revenue of the proposed Addison Airport tunnel as a toll facility under two scenarios. The first scenario assumed the construction of two separate 2-lane



····· · ···· ·

tunnels beneath the Airport. The second scenario assumed the construction of a single 2-lane tunnel. Preliminary project construction costs and maintenance and operating costs were developed by Ginn, Inc. and HNTB then provided to WSA for use in the Initial Financial Feasibility Assessment report, for the proposed tunnel. These preliminary project construction cost estimates included right-of-way costs which include costs of lease buy-outs and relocation. The purpose of that study was to provide a broad-brush measure of financial feasibility of a tolled facility, primarily to determine if more detailed studies were warranted. The results of the Initial Feasibility Assessment indicated that only the single 2-lane tunnel scenario showed promise of potential financial feasibility.

Thus, the primary objective of this comprehensive traffic and revenue study was to develop annual estimates of traffic and toll revenue for a single 2-lane toll tunnel with an assumed opening year of 1996 over a 15-year projection period. The study was to address optimum toll rates, local area economic growth potential and obtain information on observed travel patterns and trip characteristics on competing routes in the tunnel corridor.

#### Scope of Work

WSA was previously involved in earlier studies conducted for the proposed Tunnel project as well as the Dallas North Tollway (DNT) and the DNT Phase I and II Extension. These earlier studies provide a broad-based knowledge of the Dallas area involved and some of the related problems and issues.

Meetings were held with the Texas Turnpike Authority staff, design consultants and other parties involved in the proposed project. Discussions were also held with regional planning officials, developers and others conversant in development patterns regarding the future growth potential for the proposed corridor. Information was sought on the nature of new developments and probable build-out schedules.

:

. ....

Programmed highway improvements that could affect the usage of the proposed
tunnel were reviewed and the status of their development identified with regard to construction schedule and implementation programming. Route reconnaissance and travel time distance studies were conducted in the corridor of the proposed tunnel. All principal arterials within the focus area bordered by Frankford Road on the north, Preston Road on the east, Alpha Road on the south and Josey Lane on the west, were included in the field reconnaissance survey. The most important routes were covered during both peak and off-peak travel periods. During these route reconnaissance investigations, information was obtained regarding roadway cross sections, left-turn provisions, major traffic controls, vehicle restrictions, and nature of roadside development.

Collection of travel pattern and trip characteristic information through the corridor was obtained through a motorist interview mailback questionnaire form and utilized to update the North Central Texas Council of Governments (NCTCOG) trip tables to better reflect the "real world" conditions in this specific study area. Four survey stations were operated during a 12-hour period between 7: 00 a.m. and 7:00 p.m. along a north-south screenline passing through the Addison Airport. Surveys were conducted on Thursday, October 3 through Saturday, October 5., in an effort to collect both weekday and weekend day data. A total of 16,738 usable interviews were received and coded during this analysis. This represents a return rate of 20.0 percent.

The transportation model developed by the NCTCOG, which forecasts highway traffic in the study area, was then utilized to assist in the evaluation of traffic on the system at 1991, 1996 and 2010 levels. NCTCOG forecasts of population and employment growth in the study area were the basis for the estimation of future year traffic. Using a windowed version of the full NCTCOG North Dallas model, WSA conducted a series of capacity constrained diversion traffic assignments. A total of eight traffic assignments were made, including a "no-build" condition at 1996 and 2010 levels, a toll-free condition with the tunnel in place, and three additional assignments analyzing three toll rates for the proposed toll tunnel at 1996 levels. These alternate rate assignments were used to determine the optimum toll rate for

-4-

use in an assignment with the proposed S.H. 190 route included in the 1995 network. Comparing the two assignments (with and without S.H. 190) provided an estimate of the traffic impact S.H. 190 will have on the proposed Addison Airport Toll Tunnel. For purposes of this analysis, S.H. 190 was assumed to be opened to traffic by January 1, 1998. The final capacity constrained computer traffic assignment tested the optimum toll rate at 2010 levels.

Annual traffic and toll revenues for the forecast period were prepared based on the traffic assignments, optimum toll analysis and anticipated annual traffic growth schedule developed in the study.

.....

# Chapter 2 SOCIOECONOMIC GROWTH CONSIDERATIONS

As an integral part of this study, a review was made of socioeconomic and land use characteristics associated with the proposed Addison Airport Toll Tunnel. Contacts were made with the NCTCOG from whom the latest regional planning data was obtained. Transportation planning models were developed directly from this data and used by WSA. Contacts were also made with planning personnel at the City of Dallas Planning Department as well as within the cities of Carrollton, Farmer's Branch and Addison.

: 1

....

Throughout the 1980s the far north Dallas area in which Addison is located has been the focal point of the city's fastest growing suburban sectors. Potential growth is expected to remain strong into the next decade. As such, the far north Dallas area is rapidly becoming a second regional Central Business District (CBD) which will eventually equal or surpass the current CBD in employment.

Origin/destination surveys conducted by WSA for use in traffic assignment modeling have indicated the primary demand for the proposed airport tunnel will be focused within several miles of each end of the tunnel. The western portion of the service area is described as an area approximately from Wiley Post Road on the south to halfway between Kellway Drive and Sojourn Lane on the north and west from the Addison Airport to Marsh Lane. The eastern portion is an area found along Addison Road, running north and south between Sojourn Lane and Belt Line Road and east to the Dallas North Tollway. This area of primary demand has been identified as producing the majority of the total assigned trips to the proposed project. At the present time, additional demand does originate farther west within Carrollton and Farmer's Branch and farther to the east into the towns of Richardson and North Dallas. However, the early demand profile will rely primarily on the aforementioned areas of demand.

Within the west side of the primary demand area, very large concentrations of office and manufacturing employment exists. Examples of the primary employers within this demand area includes Intreco, Inc. Reservations Systems which acts as an umbrella organization for American Airlines Data Center and the Hilton and Budget Reservation Systems. Marriott Hotel chain is also represented within the Intreco network although Marriott does not have an immediate presence in the area. Altogether the total employment within this one operation amounts to nearly 2,000 Other major employers run the gamut between food processors to employees. engineering to telecommunications equipment. Also found in the immediate study area are such companies as Intellicall, Inc. which has a headquarters in the corridor and employs 400 persons, Forney Engineering which makes control systems for power plants with manufacturing facilities employing 850, while the AER Manufacturing Company makes and remakes engine blocks for Ford Motor Company, with 350 employed. Within that area there remains many other small warehousing distribution type operations as well as other office related employment.

İ

The eastern side of the primary service area in the town of Addison possesses a great deal of office related employment in the area previously mentioned. Records from the Addison Tax Assessors Office indicate that this area possesses 409 firms employing a total of 2,581. To the east of the Dallas North Tollway, Keller Springs Road currently changes to a two lane secondary arterial which runs through a residential area with little right-of-way on either side to accommodate any large scale development particularly of a commercial office or industrial nature.

It should be mentioned that a substantial amount of demand for the proposed project results in the presence of rapidly growing employment areas, particularly in the Town of Addison. This information is first identified in the regional socioeconomic data set by NCTCOG and later converted into the trip tables used by WSA in the traffic modeling phase. In one traffic zone alone, located between Keller Springs and Belt Line Roads employment is expected to increase by over 9,000 persons between 1986 and 2010. As a result, related trip making activity in that same zone is estimated to be increased by a factor of almost 10 between 1991 and 2010.

-7-

#### Socioeconomic Trends and Projections

Table 1 breaks out socioeconomic trends and projections by large Super Zone areas which are defined in Figure 3. Super Zones 7 and 8 represent population, employment and households found in the primary service corridor of the proposed Addison Airport Toll Tunnel. While growth rates of all three categories tend to compare favorably to the regionwide totals in each case, they have now ceased to grow at the once rapid pace experienced in the early part of the 1980s. For example, housing unit completions in Dallas County peaked between 1984 and 1985 with a total of 81,038 units coming on the market at that time. Real estate formation declined in each subsequent year after 1984-85. This decline was most severe in 1989 when the County's completion rate slowed dramatically. In 1989, only 6,412 units were built throughout the County compared to 42,826 completions in 1984.

1.1

In that same time period, 1980-85, the combined residential completions of Farmers Branch, Carrollton and Addison peaked, having grown from 28,573 units in 1980 to 45,097 in 1985. Since 1987 only Carrollton has seen appreciable residential development although at rates of more than ten times slower than seen during the high point of the mid 1980s. The geographic density of this accumulated growth in part necessitates the need for improved East-West linkage through that portion of the region's transportation network.

Both cities grew rapidly during the 1980s. Although this trend has slowed in recent years due to the national and regional economic slowdown, employment continues to grow at rates that are more rapid than the county. Data from the NCTCOG projects county wide employment growth at an annual rate of 1.8 percent during the 1990s. Within the primary corridor, average annual growth is expected at rates of 3.1 and 7.4 percent in Farmer's Branch and Carrollton, respectively, between 1990 and 2000.

The demographic data which has been aggregated and displayed in Table 1 is considered to be conservative. Employment growth between 1986 and 2000, for

-8-

Table 1 SOCIOECONOMIC TRENDS AND PROJECTIONS

> : j. .

:

÷

\_

| *             | POPULATION         |                    |                  |                   |                   |  |  |  |  |
|---------------|--------------------|--------------------|------------------|-------------------|-------------------|--|--|--|--|
| × ·           |                    | Average            |                  | Average           |                   |  |  |  |  |
| *             |                    | Annual             |                  | Annual            |                   |  |  |  |  |
| SOCIOECONOMIC |                    | Percent            |                  | Percent           |                   |  |  |  |  |
| REGIONS       | <u>1986</u>        | Change             | 2000             | Change            | 2010              |  |  |  |  |
| 1             | 17.1 (332)         | 2 1                | 100134.84        | 1 7               | 217 200           |  |  |  |  |
| 1<br>7        | 95 909             | 3.1<br>1 17        | 12034444         | 1                 | 217,200           |  |  |  |  |
| 2             | 53,000             | 4.7                | 09171            | <u>2</u> ./<br>mm | 214,0.39          |  |  |  |  |
| , _3<br>A     | 29.791             | 4.J<br>2 S         | 50,171           | 2.2               | 121,70J<br>97 100 |  |  |  |  |
| 4<br>5        | 107 709            | نۍ <u>د</u><br>۲۰۰ | 130 396          | 07                | 124524            |  |  |  |  |
| 5             | 152 547            | 1.2                | 121,203          | 0.5               | 124,004           |  |  |  |  |
| ~7            | 114 500            | 1.2                | 101,001          | 0.0               | 172,000           |  |  |  |  |
| /<br>0        | 22 409             | 1.5                | 122,070          | 0.2               | 100 503           |  |  |  |  |
| 0             | 02,400             | 1.0                | 101,705          | 0.0               | 2 110 032         |  |  |  |  |
| 3             | 1,494,960          | 1.6                | 1,900,007        | 1.0               | 2,110,020         |  |  |  |  |
| 10            | 100,004            | 1.5                | 130,092          | 0.7               | 139,492           |  |  |  |  |
| 11            | 34/,/28            | 0.3                | 303,971          | 0.2               | 3/0,313           |  |  |  |  |
| 12            |                    | 1.3                | 095,131          | 0.7               | 142,982           |  |  |  |  |
| TOTAL         | 3,289,247          | 1.7                | 4,140,951        | 1.0               | 4,553,212         |  |  |  |  |
|               |                    |                    | EMPLOYMEN        | <u>T</u>          |                   |  |  |  |  |
| <b>4</b> • •  | 20 701             | 25                 | <b>KE 0E</b> A   | 16                | 25 791            |  |  |  |  |
| 1             | 39,701             | 2.3<br>5 6         | 50,004<br>60,007 | 1.0               | 20,701            |  |  |  |  |
| <i></i>       | 20,000             | 3.0                | 37,707           | J.0               | 00,737<br>99 041  |  |  |  |  |
| 3             | 47,324             | 3.4                | 13,291           | 1.9               | 55,241<br>20,017  |  |  |  |  |
| 44<br>//      | 8,043              | 0.9                | 21,990           | 3.2               | 30,237            |  |  |  |  |
| 3             | 40,011             | 2.1                | 01,190           | 2.4               | 77,408            |  |  |  |  |
| 6             | 121,439            | 1.7                | 154,299          | 0.8               | 166,/64           |  |  |  |  |
| 7             | 90,526             | 2.6                | 129,763          | 1.2               | 145,727           |  |  |  |  |
| 8             | 88,581             | 2.0                | 117,155          | 1.4               | 134,238           |  |  |  |  |
| 9             | 856,676            | 1.9                | 1,112,548        | 1.7               | 1,318,783         |  |  |  |  |
| 10            | 135,962            | 2.5                | 191,239          | 2.0               | 234,103           |  |  |  |  |
| 11            | 236,568            | 1.5                | 291,621          | 0.8               | 316,126           |  |  |  |  |
| 12            | 373,184            | 1.4                | 455,683          | 1.2               | 513,206           |  |  |  |  |
| TOTAL         | 2,072,665          | 2.0                | 2,724,558        | 1.5               | 3,171,411         |  |  |  |  |
|               |                    |                    | HOUSEHOLD        | <u>s</u>          |                   |  |  |  |  |
| 1             | 48 965             | 32                 | 76 393           | 1.6               | 89.915            |  |  |  |  |
| 2             | 28 003             | <u> </u>           | 59 452           | 2.9               | 79 200            |  |  |  |  |
| * *           | 20,505             | 46                 | 22.015           | 2.5               | 48 796            |  |  |  |  |
| 3             | 14 641             | 7.9                | 24 709           | 20                | 37 851            |  |  |  |  |
| *<br>5        | 14,041             | 3.0                | 49,130           | 2.3               | 14 021            |  |  |  |  |
| ך<br>ב        | 53,377             | 1 5                | 43,077           | 0.5               | 70 128            |  |  |  |  |
| 0<br>7        | J0,070             | 1.0                | (JJ)17<br>82 770 | 0.7               | (7,120<br>EQ (7)Q |  |  |  |  |
| /             | 49,400             | 1.0                | 30,779           | 0.4               | 30,920            |  |  |  |  |
| 0             | 33,271<br>672 00 c | 1.9                | 43,400           | U.Ģ               | 4/,413            |  |  |  |  |
| У<br>10       | 3/2,990            | 2.0                | /3/,810          | 1.2               | 00,001            |  |  |  |  |
| 10            | 43,013             | 1.9                | 58,201           | U.Y               | 03,430            |  |  |  |  |
| 11            | 157,067            | 0.6                | 1/0,898          | 6.0               | 1/0,032           |  |  |  |  |
| 12            | 219,767            | . 1.5              | 270,060          | 0.8               | 291,769           |  |  |  |  |
| TOTAL         | 1,284,751          | 1.9                | 1,673,287        | 1.1               | 1,863,876         |  |  |  |  |

SOURCE: North Central Texas Council of Governments, North Dallas Regional Arterial Needs Assessment Study, September 1988.



δ.

example, while expected to average 2.0 - 2.6 percent annually in the primary study area, could in fact exceed that pace. The EDS - Legacy project just to the north is one well known example, which may have been significantly underrated in the regional data set and therefore within the official transportation model used for such purposes as this study. Large office vacancies in the Dallas North Tollway Corridor could in fact successfully compete for surges in demand for office space once the local economy is revived late in the 1990s.

In 1985 the city of Dallas and the North Dallas Chamber of Commerce funded a study to review the land uses and transportation along the Dallas North Tollway. The study concluded that only if extraordinary measures were taken, such as improved infrastructure and implementation of a mandatory transportation management program, that given the maximum zoning rights in the corridor now available, land use demand could never be developed given the existing transportation structure. In order to meet the transportation needs of the build-out within the immediate area of the proposed tunnel, the level of development would require more than tripling the roadway capacity in the area requiring double decking expressways, extensive widening of collector and arterial roadways and CBD-like transit service.

### Household Income

Figure 4 profiles median household income in portions of the primary demand corridor. Statistics on household income profiles show that within the primary corridor incomes of \$25,000 per year and up amount to about 72 and 73 percent of all households in Farmer's Branch and Carrollton, respectively. Close to half of all households in these cities had 1990 incomes of between \$35,000 to \$75,000 per year. Dallas County had 60.3 percent of all households above \$25,000 per year and only 33.2 percent between \$35,000 and \$75,000 per year by contrast.(1)

<sup>(1)</sup> Data provided to individual cities by Donnelley Marketing Information Systems.



-----

Other sources of median household income such as Sales and Marketing Management also point to the unusually high household income levels found in and around the project corridor. In 1990, the cities of Richardson and Plano were identified as having median household income levels of \$35,083 and \$53,710, respectively. Furthermore, the proportion of all households earning above \$50,000 per year was 55.5 percent in the case of Plano and 44.6 percent in Richardson. By contrast, the State and the U.S. reached levels amounting to \$25,847 and \$27,912, respectively.

Economic Overview - Similar to other metropolitan areas which were dependent on petro dollars in the late 1970s and early 1980s, the Dallas metro area grew until 1986. Employment in the metropolitan area increased annually during that period at the rate of 4.4 percent in terms of non-farm employment. With the crash of oil prices in 1986 the economic expansion was notably slow by 1987 resulting from the contraction in the flow of petro dollars and construction related employment which followed and, to some extent, continues at the present time. According to figures released by the State Comptroller's Office, construction employment in Dallas fell by over 40,000, approximately 45 percent, from a 1985 high level mark of more than By 1990, the reported number of jobs in the construction sector 87,000 jobs. throughout the metroplex was in the range of 46.7 thousand. The rate of decline in construction employment which had been averaging more than 11.0 percent annually between 1985 and 1990 has now begun to lessen. Between August 1990 and August 1991 the decrease in construction employment was only 2.7 percent.

Another sector of the economy which has been severely impacted in the late 1980s has been the finance, insurance and real estate sector. Energy and real estate loans have contributed to severe financial problems throughout the metropolitan area's banking system. The peak level of employment in the finance, insurance and real estate sector occurred in 1986 creating slightly over 133,000 jobs. This sector has lost more than 11,000 jobs through August 1991. However, there are positive signs that the real estate problems of the area are slowly resolving the declining rate of new foreclosures being posted throughout Dallas County. In 1988 slightly more than 21,000 foreclosures were posted throughout the County while through all of 1990 the number had fallen to slightly above 16,000. September

foreclosures continue this trend with 576 in 1991 compared to 746 the previous September.

Other areas of weakness in recent years have focused in the manufacturing sector. Dallas has an extremely important manufacturing sector which had concentrated in areas of electronics, transportation and industrial machinery. A large portion of the transportation related manufacturing can be found to be defense related. Therefore, with the decline in demand for U.S. defense related manufacturing as well as the U.S. recession which reduced the demand for U.S. electronic consumer goods, the region suffered once again. Of course, not all sectors are now showing declines in employment. Employment in the trades, service, government and transportation, public utilities and communications sectors are showing modest growths. Overall employment is increasing slightly, but at only 0.01 percent between August 1991 over August 1990.

The outlook for the Dallas metropolitan area is positive although not considered robust in the near term of two years. In terms of the overall employment outlook for the metropolitan area, the worst performance is likely in 1992 with slight improvements being registered into the short-term with total non-farm employment growing by 1 percent into 1993 and then 1.8 percent the following year.(2) Construction which had been severely negative is expected to regain a positive growth path along with the finance and real estate industries. Only mining shows some decline and is relatively unimportant due to its overall percentage of the metropolitan area employment. Unemployment rates which are now near 6 percent are expected to fall to around 5 percent by 1993-94.

The longer term economic outlook for the Dallas metropolitan area is considered promising. As has been the trend over the last decade, service related business and

<sup>(2)</sup> Texas Comptroller of Public Accounts, <u>The Texas Outlook - Dallas Metropolitan</u> Area, 1991.

employment will grow and dominate while manufacturing and goods producing employment will tend to represent smaller portions of the economic picture. While the economic outlook for the Dallas metropolitan area will have leverage on the nature of travel demand through the proposed tunnel, it should be pointed out that a large number of companies within the immediate service area of the project represent national headquarters or businesses with a national orientation. Therefore, while the local economy may respond to the price of oil and the flow of funds resulting from it in the short-term, other factors related to the larger U.S. economic picture will have a bearing on the service area of the proposed Addison Airport Toll Tunnel and therefore, may be expected to offset local business cycle turns particularly those of a negative nature.

<u>Energy Considerations</u> - Another important factor impacting vehicular travel is energy price availability. Over the past 20 years, the price and availability of crude oil has been negatively impacted twice to the point of disrupting normal travel patterns on the nation's highways and toll facilities. The resulting impact was further complicated during those episodes via an economic downturn which followed specifically in the wake of the 1973 and 1979 episodes. In the past year and a half, between August 1990 and the end of the Persian Gulf war in the early part of 1991 motor fuel prices rose rapidly. The effect did not seem to create the same impact as in the 1973 and 1979 energy crises.

Unlike the earlier situations which were marked by rapid unprecedented price rises and erratic disruption of supplies, the recent situation was much more orderly and seemingly less unpredictable. Motor fuel prices in Dallas-Fort Worth and throughout the U.S. increased on the order of 30 to 50 percent over the period of October 1990 - January 1991. Although these increases have been unusually rapid, they have not reached the potential levels they could have if prices had increased at nominal rates of inflation since 1982. During this time period, average incomes have increased nominally, making the cost of fuel (in real terms) less. In conjunction with this, the U.S. automobile fleet's average fuel efficiency has also increased from approximately 14 miles per gallon to about 20 miles per gallon. In

.....

\*\*\*\*\*

-

fact, many automobiles exceed this average, thereby further decreasing the effect of motor fuel price increases.

Motor fuel prices for all grades of gasoline in the Dallas-Fort Worth area increased in late 1990 similarly to prices nationwide, increasing approximately 30 percent during January 1991. Since that time, like prices nationwide, those in the Dallas-Fort Worth area have also declined although not to levels seen during early 1990. At the present time motor fuel prices in the Dallas-Fort Worth area have declined to levels between \$1.10 and \$1.15 per gallon. This trend is not so much a result of increased demand for motor fuel, shortages of supply, or a type of panic buying by traders around the world, but it seems to be primarily the result of increases in taxes at all levels.

According to the Petroleum Industry Research Foundation from December 1989 to September 1991 the states and local communities have raised taxes on gasoline by an average of \$0.037 per gallon (more than 20 percent). As of September 1991 the national weighted average gasoline tax charged by states and local communities beyond the \$0.1445 per gallon federal tax - was \$0.204 per gallon compared to December 1, 1989's \$0.167 a gallon. The Federal government has raised its excise tax by \$0.05 (more than 50 percent) during this period and imposed additional new fees. Total gasoline taxes, at \$0.348 per gallon, represented a total of 30 percent of the average retail price prevailing by September 1991. In December 1989 at \$0.26, it represented 26 percent of the prevailing retail price. After the closing date of the survey by the Petroleum Industry Research Foundation from which this information was obtained, additional tax increases have been imposed: Nevada and Texas at \$0.025 and \$0.05 per gallon, respectively on October 1, 1991.(3) Despite this trend of increasing taxation the current level of prices for motor fuel are still within a range which are not expected to impact a motorist's decision to purchase fuel and make normal travel decisions.

<sup>(3)</sup> Petroleum Industry Research Foundation, Inc., <u>The Rising Tax Burden on</u> <u>Gasoline</u>, December 1991.

Ultimately, fuel availability will be the focus of any disruption great enough to effect travel patterns. The world's shortfall of crude oil, which developed following the Iraqi invasion of Kuwait, was immediately replaced by worldwide overproduction. In fact, worldwide storage today continues to be at levels which more than meet demand. In addition to that the U.S. and other international energy agency members of the western industrialized nations continue to coordinate and stock pile petroleum in various ways. The United States continues to increase its Strategic Petroleum Reserve which at current levels of demand could supply approximately three months of U.S. demand for crude oil. The real value of the petroleum reserve is to be able to alleviate a panic buying spree should the unlikely event of an oil embargo or other serious form of disruption occur. As we saw during the early days of the Persian Gulf situation the rise in oil prices was primarily driven by international oil traders and not a shortage of supply.

Overall, the assumptions of supply for motor fuel and prices used for this report do not contain any unusual disruption or availability constraint. Unprecedented price rise or constrained supplies would potentially impact the annual levels of demand for traffic and revenue calculated and presented in this report.

#### Chapter 3

### **RECENT TRAFFIC TRENDS ON CORRIDOR ROUTES**

Traffic trends in the Addison Airport Toll Tunnel area are reasonably defined by the recorded volumes on the roadways within the limits of the study area. The town of Addison as well as the county of Dallas, maintains a traffic count data base and provided WSA with available count data at several key locations within the study area.

#### Annual Traffic Volume Trends

Table 2 summarizes the average annual daily traffic for the period from 1982 through 1989 at six selected arterials within the study corridor. The town of Addison conducts traffic counts approximately every three years. The most recent traffic count data was obtained in 1989 and appears in Table 2. Traffic growth in the north Dallas area was strong during the period between 1982 and 1986 as evidenced by the 39.4 percent annual growth rate on Midway Road between Wiley Post and Keller Springs Roads. Development was still expanding rapidly at this time and the impact of the economic recession and the oil production cutback was not reflected until the following period when the area traffic decreased. In most cases, traffic declines are shown in the next three years, due mostly to the economic downturn.

Also during this time period sections of the DNT Extension were opened to traffic with ramps at Spring Valley and Belt Line Roads opening in the fourth quarter of 1986. The DNT Mainline Barrier, Toll Plaza 2, opened to traffic in the second quarter of 1987 with the Keller Springs ramp toll plazas opening in the second quarter of 1989. A summary of the annual toll transactions for the three ramp toll plazas and one mainline barrier of the Dallas North Tollway within the proposed tunnel corridor are presented in Table 3.

-16-

## ANNUAL TRAFFIC TRENDS

| LOCATION               | <u>    1982                                </u> | AVERAGE<br>ANNUAL<br>PERCENT<br><u>CHANGE</u><br> | <u>1986</u><br>erage daily tra | AVERAGE<br>ANNUAL<br>PERCENT<br><u>CHANGE</u><br>Affic | _ <u>1989</u> ) |
|------------------------|-------------------------------------------------|---------------------------------------------------|--------------------------------|--------------------------------------------------------|-----------------|
| Keller Springs Road    |                                                 |                                                   |                                |                                                        |                 |
| between Quorum and     |                                                 |                                                   |                                |                                                        |                 |
| Dallas North Tollway   | 5,900                                           | 9.1                                               | 8,359                          | (1.7)                                                  | 7,942           |
| Soujourn Lane between  |                                                 |                                                   |                                |                                                        |                 |
| Addison and Voss       |                                                 |                                                   |                                |                                                        |                 |
| Road                   | 4,700                                           | 2.0                                               | 5,091                          | (7.7)                                                  | 4,001           |
| Midway Road between    |                                                 |                                                   |                                |                                                        |                 |
| Wiley Post and Keller  |                                                 |                                                   |                                |                                                        |                 |
| Springs Road           | 8,500                                           | 39.4                                              | 32,137                         | (1.7)                                                  | 30,562          |
| Belt Line Road between |                                                 |                                                   |                                |                                                        |                 |
| Midway and Runyon      |                                                 |                                                   |                                |                                                        |                 |
| Roads                  | 25,200                                          | 11.1                                              | 38,435                         | (1.8)                                                  | 36,396          |
| Belt Line Road between |                                                 |                                                   |                                |                                                        |                 |
| Dallas North Tollway   |                                                 |                                                   |                                |                                                        |                 |
| and Quorum             | NA                                              | <b>E.</b> 77                                      | 38 <b>,084</b>                 | 2.3                                                    | 40,788          |
| Araphao Road between   |                                                 |                                                   |                                |                                                        |                 |
| Dallas North Tollway   |                                                 |                                                   |                                |                                                        |                 |
| and Quorum Roads       | 8,300                                           | 8.8                                               | 11,640                         | (3.7)                                                  | 10,379          |

ł

# Table 3 ANNUAL TRAFFIC EXPERIENCE SELECTED TOLL PLAZAS **Dallas North Tollway**

;; ·

۸.

.

| TOLL<br><u>PLAZA</u>                    | 1987      | PERCENT<br>CHANGE | 1988       | PERCENT<br>CHANGE | 1989       | PERCENT<br><u>CHANGE</u> | _1990_         | PERCENT<br>CHANGE | 1991              |
|-----------------------------------------|-----------|-------------------|------------|-------------------|------------|--------------------------|----------------|-------------------|-------------------|
| Spring Valley                           |           |                   |            |                   |            |                          |                |                   |                   |
| Road                                    | 2,421,681 | 3.3               | 2,501,534  | 7.1               | 2,678,644  | 11.0                     | 2,971,984      | 1.8               | 3,024,296         |
|                                         |           |                   |            |                   |            |                          |                |                   |                   |
| Belt Line                               |           |                   |            |                   |            |                          |                |                   |                   |
| Road                                    | 5,028,247 | (9.4)             | 4,555,898  | 11.5              | 5,081,798  | 11.5                     | 5,668,078      | 5.6               | 5,987,071         |
| Main Damian                             |           |                   |            |                   |            |                          |                |                   |                   |
| WIATH DATTICI                           |           |                   |            |                   |            |                          |                |                   |                   |
| Plaza 2 (1)                             |           | -*                | 14,249,169 | 16.3              | 16,568,981 | 14.6                     | 18,981,408     | 5.6               | 20,045,060        |
| Keller Springs                          |           |                   |            |                   |            |                          |                |                   |                   |
| Road (2)                                |           |                   |            |                   |            |                          | 327.487        | 10.8              | 362,924           |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |           |                   |            |                   |            |                          | and a group of |                   | an an an an an an |

(1) DNT Mainline Barrier, Toll Plaza 2, opened to traffic in June 1987.
(2) Kelter Springs ramp toll plazas opened to traffic in May 1989.
SOURCE: Texas Turnpike Authority.

· · · · ·

:

Transactions at the Spring Valley Road ramp toll plazas have grown at an average annual rate of 5.7 percent between 1987 and 1991. Belt Line Road has grown at an average annual rate of 4.5 percent during the same time period. The mainline barrier, Toll Plaza 2, opened to traffic in June of 1987. The year 1989 showed a 16.3 percent growth over the first full year of operation and then continued to show a strong growth rate of 14.6 percent into 1990. Ramp toll plazas at Keller Springs Road opened in May of 1989 and showed 10.8 percent annual growth rate between 1991 and 1990.

#### Monthly Traffic Volume Trends

1

Monthly toll transactions for all vehicles using the DNT ramps at Belt Line and Keller Springs Roads are presented in Table 4. This monthly growth comparison clearly indicates the influence of many events which have occurred over the last several years. One such event is the opening of the Tollway Extension to Keller Springs Road which included the north mainline toll barrier on June 28, 1987 and the Keller Springs ramp plazas opened May 11, 1989.

Over the past 16 months at the Belt Line Road Toll ramps, the percent change on a month by month basis ranged from 1.5 to 10.7 resulting in an annual percent change of 5.6 percent for 1991 versus 1990. Exceptionally strong growth continued during the first 12 months from June of 1989 to May of 1990 being influenced by the opening of the Keller Springs Road ramps. The past seven months reflect a 11.9 percent growth for 1991 versus 1990.

Table 5 shows monthly traffic variations for ramp plazas on the DNT at Belt Line and Keller Springs Roads during 1991. Average daily transactions peaked during the month of October at the Belt Line Ramp Plaza reaching 17,295, or 5 percent above the monthly average. The peak month occurred in December at the Keller Springs Road toll plazas reaching 1,167 or 15.9 percent above the monthly average. Traffic volumes typically are above the monthly average during the months of April through August.

;ו••

-19-

### MONTHLY TRANSACTIONS TREND

## Dallas North Tollway

12

÷

, •

|           |             | BELTLINE ROAD TOLL RAMP PLAZAS |           |         |             |         |           |  |  |  |  |
|-----------|-------------|--------------------------------|-----------|---------|-------------|---------|-----------|--|--|--|--|
|           |             | Percent                        |           | Percent | 4           | Percent |           |  |  |  |  |
| MONTH     | <u>1988</u> | Change                         | 1989      | Change  | <u>1990</u> | Change  | 1991      |  |  |  |  |
| January   | 328,234     | 21.6                           | 399,077   | 14.2    | 455,725     | 4.4     | 475,794   |  |  |  |  |
| February  | 334,524     | 5.1                            | 351,537   | 19.4    | 419,824     | 8.6     | 455,736   |  |  |  |  |
| March     | 377,065     | 11.7                           | 421,305   | 15.3    | 485,773     | 3.6     | 503,237   |  |  |  |  |
| April     | 365,899     | 11.1                           | 406,332   | 13.4    | 460,821     | 10.7    | 510,036   |  |  |  |  |
| May       | 371,282     | 16.1                           | 430,876   | 13.2    | 487,920     | 6.7     | 520,692   |  |  |  |  |
| June      | 390,102     | 10.6                           | 431,468   | 11.6    | 481,442     | 3.3     | 497,244   |  |  |  |  |
| July      | 383,172     | 7.9                            | 413,457   | 14.9    | 475,075     | 5.0     | 498,641   |  |  |  |  |
| August    | 407,922     | 11.1                           | 453,250   | 11.3    | 504,262     | 1.5     | 511,714   |  |  |  |  |
| September | 386,848     | 10.2                           | 426,347   | 6.8     | 455,279     | 5.0     | 478,037   |  |  |  |  |
| October   | 401,578     | 13.3                           | 454,957   | 9.0     | 496,057     | 7.4     | 532,576   |  |  |  |  |
| November  | 385,775     | 13.9                           | 439,305   | 7.3     | 471,236     | 4.0     | 490,070   |  |  |  |  |
| December  | 423,497     | 7.2                            | 453,887   | 4.6     | 474,664     | 8.1     | 513,294   |  |  |  |  |
| TOTAL     | 4,555,898   | 11.5                           | 5,081,798 | 11.5    | 5,668,078   | 5.6     | 5,987,071 |  |  |  |  |

|                   | KELLER SPRINGS ROAD TOLL RAMP PLAZAS |               |                 |          |                  |               |             |  |  |  |
|-------------------|--------------------------------------|---------------|-----------------|----------|------------------|---------------|-------------|--|--|--|
|                   | Percent                              |               |                 | Percent  |                  | Percent       |             |  |  |  |
| MONTH             | 1988                                 | <u>Change</u> | 1989            | Change   | 1990             | <u>Change</u> | <u>1991</u> |  |  |  |
| January           | -man bala                            |               |                 | -441 688 | 25,264           | (3.3)         | 24,441      |  |  |  |
| February          | **                                   | فذبله         |                 | **       | 23,520           | 9.7           | 25,811      |  |  |  |
| March             | **                                   |               |                 |          | 27,496           | 6.4           | 29,261      |  |  |  |
| April             | **                                   | *** ***       |                 |          | 24,973           | 20.4          | 30,069      |  |  |  |
| May               |                                      |               | hadt still-     |          | 28,219           | 12.7          | 31,804      |  |  |  |
| June(1)           |                                      | ~ ~           | 18,252          | 61.7     | 29,508           | 6.3           | 31,380      |  |  |  |
| July              |                                      |               | 19,417          | 52.5     | 29,617           | 6.9           | 31,658      |  |  |  |
| August            | **                                   |               | 21,673          | 33.1     | 28,856           | 13.0          | 32,603      |  |  |  |
| September         |                                      | <b>**</b> **  | 22,225          | 15.3     | 25,617           | 13.7          | 29,138      |  |  |  |
| October           | **                                   | aller sale.   | 22,635          | 19.2     | 26,988           | 14.4          | 30,871      |  |  |  |
| November          | **                                   | **            | 23,582          | 14.5     | 27,013           | 12.1          | 30,288      |  |  |  |
| December          |                                      |               | 28,025          | 8.5      | <u>30,416</u>    | 17.0          | 35,600      |  |  |  |
| SEVEN MONTH TOTAL |                                      |               | 155 <b>,809</b> | 27.1     | 1 <b>98,0</b> 15 | 11.9          | 221,538     |  |  |  |
| TOTAL             | **                                   |               | ···· •          |          | 327,487          | 10.8          | 362.924     |  |  |  |

First full month of operation. Ramps opened to traffic on May 11, 1989. CE: Texas Turnpike Authority (1) First SOURCE:

## MONTHLY TRAFFIC VARIATIONS

1991

|           | BELT LINE<br>RAMP TOLL | EROAD<br>. PLAZA      | KELLER SPRINGS ROAD<br>RAMP TOLL PLAZA |                       |  |
|-----------|------------------------|-----------------------|----------------------------------------|-----------------------|--|
|           | Average<br>Daily       | Percent<br>of Average | Average<br>Daily                       | Percent of<br>Average |  |
| MONTH     | Transactions           | Month                 | Transactions                           | Month                 |  |
| January   | 15,348                 | 93.4                  | 788                                    | 78.5                  |  |
| February  | 15,715                 | 95.6                  | 890                                    | 88.6                  |  |
| March     | 16,234                 | 98.8                  | 944                                    | 94.0                  |  |
| April     | 17,002                 | 103.5                 | 1,003                                  | 99.9                  |  |
| May       | 16,915                 | 103.0                 | 1,045                                  | 104.1                 |  |
| June      | 16,682                 | 101.5                 | 1,060                                  | 105.6                 |  |
| July      | 16,194                 | 98.6                  | 1,040                                  | 103.6                 |  |
| August    | 16,616                 | 101.1                 | 1,070                                  | 106.6                 |  |
| September | 16,047                 | 97.7                  | 994                                    | 99.0                  |  |
| October   | 17,295                 | 105.3                 | 1,016                                  | 101.2                 |  |
| November  | 16,448                 | 100.1                 | 1,030                                  | 102.6                 |  |
| December  | 16,667                 | 101.4                 | 1,167                                  | 116.3                 |  |
| AVERAGE   | 16,430                 | 100.0                 | 1,004                                  | 100.0                 |  |

SOURCE: Texas Turnpike Authority.

•

ł

:

-----

.

Variations at the ramp plazas at Belt Line Road are generally shown to be less significant than at Keller Springs Road. The average daily traffic in 1991 for each month ranges from a high of 105.3 percent of ADT in October to a low of 93.4 percent in January for the Belt Line Road plazas and 116.3 percent in December to 78.5 in January for Keller Springs Road. This pattern is indicative of a commuter oriented facility.

### **Daily Traffic Variations**

Data for the month of June 1991 was used for daily variations for the total DNT System. As shown in Table 6, the peak day continues to be Friday, which averaged 25.9 percent above the average day for five weeks in June. Thursday was next with 18.0 percent above average, while Saturday and Sunday averaged 78.1 percent and 54.1 percent of average, respectively. This pattern is highly indicative of a commuter oriented facility.

#### **Hourly Traffic Variations**

Hourly traffic variations at four selected locations within the proposed tunnel corridor are presented in Tables 7 through 10. They represent a Thursday or Friday condition, by direction, during the month of October 1991. The peaking characteristics of eastbound and westbound traffic on each of the four arterials show up very clearly. Each location indicates a peak period during the morning hours of 7:00 a.m. and 9:00 a.m. For each of the four locations, the p.m. peak hour occurs between 5:00 and 6:00 p.m. A spike or traffic influx occurs during 12:00 and 1:00 p.m. at each of the four locations. This hourly data, along with the daily variations discussed previously, illustrates the commuter orientated nature of the major roadways within this corridor.

#### <u>Vehicle Mix</u>

Table 11 presents the vehicle classification mix currently found on the existing

;

# Table 6 DAILY TRAFFIC VARIATIONS Dailas North Tollway Total System 1991

•

|                               |         | Ŷ       | VEEK END       | DING    |         | AVERAGE | PERCENT<br>OF AVERAGE |
|-------------------------------|---------|---------|----------------|---------|---------|---------|-----------------------|
| DAY                           | June 2  | June 9  | <u>June 16</u> | June 23 | June 30 | DAY     | DAY                   |
| Monday                        | 99,744  | 215,670 | 209,103        | 210,039 | 214,248 | 189,761 | 96.9                  |
| Tuesday                       | 214,574 | 222,356 | 221,914        | 219,830 | 225,334 | 220,802 | 112.8                 |
| Wednesday                     | 224,329 | 222,255 | 224,889        | 221,719 | 225,303 | 223,699 | 114.2                 |
| Thursday                      | 232,850 | 229,646 | 228,735        | 229,495 | 234,569 | 231,059 | 118.0                 |
| Friday                        | 253,357 | 237,359 | 246,652        | 244,973 | 249,956 | 246,459 | 125.9                 |
| Saturday                      | 158,334 | 151,565 | 150,134        | 153,696 | 150,833 | 152,912 | 78.1                  |
| Sunday                        | 110,207 | 104,585 | 101,021        | 108,844 | 105,371 | 106,006 | 54.1                  |
| SEVEN DAY<br>AVE <b>RA</b> GE | 184,771 | 197,634 | 197,493        | 198,371 | 200,802 | 195,814 | 100.0                 |

SOURCE: Texas Turnpike Authority.

~

-23-

# Table 7 HOURLY TRAFFIC VARIATIONS 12 Hour Period(1) Belt Line Road

| EASTBOUND                |        | WESTB               | WESTBOUND |                     |        |                     |  |
|--------------------------|--------|---------------------|-----------|---------------------|--------|---------------------|--|
| HOUR<br><u>BEGINNING</u> | Volume | Percent<br>of Total | Volume    | Percent<br>of Total | Volume | Percent<br>of Total |  |
| 7:00 a.m.                | 1,581  | 7.6                 | 1,518     | 8.0                 | 3,099  | 7.8                 |  |
| 8:00                     | 1,503  | 7.3                 | 1,708     | 9.1                 | 3,211  | 8.1                 |  |
| 9:00                     | 1,239  | 6.0                 | 1,201     | 6.4                 | 2,440  | 6.2                 |  |
| 10:00                    | 1,272  | 6.1                 | 1,160     | 6.1                 | 2,432  | 6.1                 |  |
| 11:00                    | 1,482  | 7.2                 | 1,684     | 8.9                 | 3,166  | 8.0                 |  |
| 12:00 р.т.               | 2,284  | 11.0                | 1,746     | 9.3                 | 4,030  | 10.2                |  |
| 1:00                     | 1,994  | 9.6                 | 1,532     | 8.1                 | 3,526  | 8.9                 |  |
| 2:00                     | 1,670  | 8.1                 | 1,479     | 7.8                 | 3,149  | 8.0                 |  |
| 3:00                     | 1,649  | 8.0                 | 1,424     | 7.6                 | 3,073  | 7.8                 |  |
| 4:00                     | 1,929  | 9.3                 | 1,584     | 8.4                 | 3,513  | 8.9                 |  |
| 5:00                     | 2,236  | 10.8                | 2,212     | 11.7                | 4,448  | 11.2                |  |
| 6:00                     | 1,875  | _9.0                | _1,622    | <u>    8.6</u>      | 3,497  | 8.8                 |  |
| TOTAL                    | 20,714 | 100.0               | 18,870    | 100.0               | 39,584 | 100.0               |  |

(1) Data collected at survey station location as depicted in Figure 5. Survey conducted on Thursday, October 3, 1991.

.....

ь т

# Table 8 HOURLY TRAFFIC VARIATIONS 12 Hour Period(1) Lindberg Drive

|                          | EASTB       | OUND                | WESTE  | OUND                | TO       | <u>ral</u>          |
|--------------------------|-------------|---------------------|--------|---------------------|----------|---------------------|
| HOUR<br><u>BEGINNING</u> | Volume      | Percent<br>of Total | Volume | Percent<br>of Total | Volume   | Percent<br>of Total |
| 7:00 a.m.                | 320         | 8.6                 | 303    | 8.3                 | 623      | 8.4                 |
| 8:00                     | 348         | 9.4                 | 453    | 12.3                | 801      | 10.9                |
| 9:00                     | <b>22</b> 1 | 5.9                 | 185    | 5.0                 | 406      | 5.5                 |
| 10:00                    | 180         | 4,9                 | 178    | 4.9                 | 358      | 4.9                 |
| 11:00                    | 184         | 5.0                 | 254    | 6.9                 | 438      | 5.9                 |
| 12:00 p.m.               | 417         | 11.2                | 410    | 11.2                | 827      | 11 <b>.2</b>        |
| 1:00                     | 238         | 6.4                 | 347    | 9.5                 | 585      | 7.9                 |
| 2:00                     | 238         | 6.4                 | 215    | 5.9                 | 453      | 6.1                 |
| 3:00                     | 302         | 8.1                 | 232    | 6.3                 | 534      | 7.2                 |
| 4:00                     | 379         | 10.2                | 342    | 9.3                 | 721      | 9.8                 |
| 5:00                     | 581         | 15.6                | 488    | 13.3                | 1,069    | 14.5                |
| 6:00                     | 309         | 8.3                 | 262    | 7.1                 | <u> </u> | 7.7                 |
| TOTAL                    | 3,717       | 100.0               | 3,669  | 100.0               | 7,386    | 100.0               |

(1) Data collected at survey station location as depicted in Figure 5. Survey conducted on Friday, October 4, 1991.

.

# Table 9 HOURLY TRAFFIC VARIATIONS 12 Hour Period(1) Sojourn Lane

|                          | EASTB  | OUND                | WESTE  | OUND                | TO     | TOTAL               |  |  |
|--------------------------|--------|---------------------|--------|---------------------|--------|---------------------|--|--|
| HOUR<br><u>BEGINNING</u> | Volume | Percent<br>of Total | Volume | Percent<br>of Total | Volume | Percent<br>of Total |  |  |
| 7:00 a.m.                | 191    | 14.0                | 127    | 8.7                 | 318    | 11.2                |  |  |
| 8:00                     | 121    | 8.9                 | 87     | 5.9                 | 208    | 7.4                 |  |  |
| 9:00                     | 67     | 4.9                 | 56     | 3.8                 | 123    | 4.4                 |  |  |
| 10:00                    | 64     | 4.7                 | 49     | 3.4                 | 113    | 4.0                 |  |  |
| 11:00                    | 93     | 6.8                 | 82     | 5.6                 | 175    | 6.2                 |  |  |
| 12:00 p.m.               | 131    | 9.6                 | 127    | 8.7                 | 258    | 9.1                 |  |  |
| 1:00                     | 147    | 10.7                | 153    | 10.5                | 300    | 10.6                |  |  |
| 2:00                     | 78     | 5.7                 | 122    | 8.3                 | 200    | 7.1                 |  |  |
| 3:00                     | 98     | 7.2                 | 106    | 7.2                 | 204    | 7.2                 |  |  |
| 4:00                     | 99     | 7.2                 | 131    | 9.0                 | 230    | 8.1                 |  |  |
| 5:00                     | 154    | 11.3                | 282    | 19.3                | 436    | 15.4                |  |  |
| 6:00                     | 123    | <u>9.0</u>          | 140    | <u>9.6</u>          | 263    | 9.3                 |  |  |
| TOTAL                    | 1,366  | 10 <b>0.0</b>       | 1,462  | 10 <b>0.0</b>       | 2,828  | 100.0               |  |  |

(1) Data collected at survey station location as depicted in Figure 5. Survey conducted on Friday, October 4, 1991.

.

----

# Table 10 HOURLY TRAFFIC VARIATIONS 12 Hour Period(1) Trinity Mills Road

| EAS                      |        | ASTBOUND            |              | OUND                | TO           | TOTAL               |  |  |
|--------------------------|--------|---------------------|--------------|---------------------|--------------|---------------------|--|--|
| HOUR<br><u>BEGINNING</u> | Volume | Percent<br>of Total | Volume       | Percent<br>of Total | Volume       | Percent<br>of Total |  |  |
| 7:00 a.m.                | 1,183  | 11.1                | 388          | 4.0                 | 1,571        | 7.7                 |  |  |
| 8:00                     | 1,367  | 12.9                | 607          | 6.3                 | 1,974        | 9.7                 |  |  |
| 9:00                     | 800    | 7.5                 | 568          | 5.9                 | 1,368        | 6.7                 |  |  |
| 10:00                    | 630    | 5.9                 | 473          | 4.9                 | 1,103        | 5.4                 |  |  |
| 11:00                    | 628    | 5.9                 | 770          | 7.9                 | 1,398        | 6.9                 |  |  |
| 12:00 p.m.               | 897    | 8.4                 | 908          | 9.4                 | 1,805        | 8.9                 |  |  |
| 1:00                     | 884    | 8.3                 | 687          | 7.1                 | 1,571        | 7.7                 |  |  |
| 2:00                     | 707    | 6.7                 | 828          | 8.5                 | 1,535        | 7.6                 |  |  |
| 3:00                     | 751    | 7.1                 | 748          | 7.7                 | 1,499        | 7.4                 |  |  |
| 4:00                     | 823    | 7.7                 | 1,164        | 12.0                | 1,987        | 9.8                 |  |  |
| 5:00                     | 1,102  | 10.4                | 1,490        | 15.4                | 2,592        | 12.8                |  |  |
| 6:00                     | 856    | 8.1                 | <u>1,056</u> | 10.9                | <u>1,912</u> | 9.4                 |  |  |
| TOTAL                    | 10,628 | 100.0               | 9,687        | 100.0               | 20,315       | 100.0               |  |  |

(1) Data collected at survey station location as depicted in Figure 5. Survey conducted on Thursay, October 3, 1991.

\*\*\*\*\*\*

## Table 11 **VEHICLE CLASSIFICATION**

|          |                                         | <u>BELT LIN</u> | EROAD (1)  | LINDBER | <u>G DRIVE (2)</u> | SOJOURN | LANE (2) | TRINITY | MILLS ROAD (1) |         | <u>AL</u>           |
|----------|-----------------------------------------|-----------------|------------|---------|--------------------|---------|----------|---------|----------------|---------|---------------------|
| <u>C</u> | ASSIFICATION                            | Volume          | Of Total   | Volume  | Of Total           | Volume  | Of Total | Volume  | Of Total       | Volume  | Percent<br>Of Total |
| 1        | Two-Axle Vehicles                       | 72,689          | 97.3       | 7,190   | 97.3               | 2,730   | 96.6     | 37,100  | 97.7           | 119,709 | 97.4                |
| 2        | Two-Axle 6-Tire<br>Vehicles             | 1,281           | 1.7        | 121     | 1.7                | 12      | 0.4      | 230     | 0.6            | 1,644   | 1.3                 |
| 3        | Three-Axle Vehicles<br>and Combinations | 559             | 0.7        | 22      | 0.3                | 63      | 2.2      | 614     | 1.6            | 1,258   | 1.0                 |
| 4        | Four-Axle Vehicles<br>and Combinations  | 45              | 0.1        | 21      | 0.3                | 23      | 0.8      | 19      | 0.1            | 108     | 0.1                 |
| 5        | Five-Axle Vehicles<br>and Combinations  | 148             | 0.2        | 32      | 0.4                | 40 MH   | <u></u>  | 5       |                | 185     | 0.2                 |
| Sı       | ibtotal (Classes 2-5)                   | 2,033           | <u>2.7</u> | 196     | 2.7                | 98      | <u> </u> | 868     | 2.3            | 3,195   | 2.6                 |
|          | TOTAL                                   | 74,722          | 100.0      | 7,386   | 100.0              | 2,828   | 100.0    | 37,968  | 100.0          | 122,904 | 100.0               |

.

τ...

(1) Manual Vehicle Classification Counts conducted for a 12-hour period on Thursday, October 3, and Saturday, October 5, 1991. Manual Vehicle Classification Counts conducted for a 12-hour period on Friday, October 4, 1991.

.

(2)

• 5. •

÷.,

......

four roadways. Two-axle vehicles represent approximately 97.4 percent of the total vehicle traffic. Two-axle, six-tire vehicles represent 1.7 percent of the traffic found on Belt Line and Lindberg Drive, with approximately 0.4 percent of the traffic mix on Soujourn Lane and 0.6 percent on Trinity Mills Road. These two vehicle classifications make up approximately 98.7 percent of the total vehicles.

AND PROPERTY.

# Chapter 4 TRAVEL PATTERNS AND CHARACTERISTICS SURVEY

A major effort in the data collection and update stage of this study was to conduct a mailback and roadside motorist interview survey at four locations within the proposed tunnel corridor. An extensive route reconnaissance effort was included during the early stages of the study to obtain a current measure of travel distances, speeds, and highway characteristics. Manual vehicle classification count programs were conducted at each of the four survey station locations during a 12-hour period to provide information on traffic volumes and the mix of vehicle classifications currently in the corridor. Some machine traffic counts were also taken at key locations in the corridor on east-west routes by WSA.

The field reconnaissance and motorist interview survey was completed in order to obtain an up-to-date and accurate database from which to estimate the traffic potential of the proposed Addison Toll Tunnel.

### Motorist Interview Survey

The mailback and roadside motorist interview survey was conducted in October of 1991. This method of surveying allowed for minimal disruption of traffic. A sample mailback survey form is shown in Figure A-1 of the Appendix. Motorists were asked to complete this questionnaire at their convenience, and drop it in the mail free of charge to the survey respondent. As shown in the Appendix Figure A-1, questions were asked relative to the motorist's origin and destination, trip purpose, frequency and vehicle occupancy.

Figure 5 depicts the four survey station locations. Placement of the four survey stations was done to maximize the probability of interception of potential tunnel trips with minimal delay or inconvenience to the motoring public. Survey Stations 1 and 4 were located on the major east-west routes both north and south of



------

the Addison Airport. Survey Stations 2 and 3 are located on two minor east-west routes within the proposed project corridor.

Table 12 shows the motorist interview survey station locations and schedule. Four survey stations were operated during daylight hours (from 7:00 a.m. to 7:00 p.m.) positioned along a north-south screenline passing through the Addison Airport. This table also summarizes the number of usable interviews obtained and corresponding sample size as a percent of passing traffic.

Station 1 was located on Belt Line Road between Midway and Addison Roads. Station 2 was located on Lindberg Road between Midway and Addison. Stations 3 and 4 were located between Voss and Addison Roads on Soujourn and Trinity Mills Roads, respectively. As shown in Table 12, the total usable coded interviews obtained was 17,821 interviews, or 14.5 percent of the passing traffic. This represented about 68.2 percent sample size. The return rate ranged between 14.4 percent and 33.0 percent resulting in an average total return rate of 21.3 percent for the entire survey effort. Based on our experience on a national level, this is considered a reasonable return rate for surveys of this nature.

The motorist survey data was factored to 1991 average annual daily traffic levels, and then used in developing a current profile of motorists in the proposed tunnel corridor. Tabulations of this survey data are summarized in Tables 13 through 15.

Table 13 and Figure 6 presents a summary of trip purpose distribution for each of the four survey station locations. As shown in this table, trips to/from work accounted for the highest percentage of motorists for all stations. This category, when combined with the "company business" category amounts to over 48.7 percent of the total responses at all four survey stations. The combined categories of "personal business" and "shopping" amounted to 34.4 percent of the total.

....

-----

Table 14 and Figure 7 summarizes the trip frequency distribution by survey station, recorded during the October 1991 surveys. Consistent with the trip purpose

# Table 12 MOTORIST INTERVIEW SURVEY SAMPLE SIZE

- -

· . .

-----

. .

A. 4. 4

October 1991

| STATION           | ROITE                 | LOCATION                               | DAY(1)                                 | DIRECTION   | PASSING | SURVEY<br>FORMS<br>DISTRIBUTED | NUMBER OF<br>CODED | CODED<br><u>AS A PI</u><br>Passing<br>Traffic | INTERVIEWS<br>ERCENT OF<br>Survey Forms | SAMPLE     |
|-------------------|-----------------------|----------------------------------------|----------------------------------------|-------------|---------|--------------------------------|--------------------|-----------------------------------------------|-----------------------------------------|------------|
| <u>oranon</u>     | <u>INVERE</u>         | <b>Loothio</b>                         | FOHT                                   | MINDO FIGIN | HVLIN   | DUIMPORCO                      | DILL TIL TO        | 310110                                        |                                         | <u>MZE</u> |
| 1                 | Belt Line Road        | Between Midway<br>and Addison<br>Rowis | Thursday<br>October 3                  | Eastbound   | 20,714  | 13,588                         | 3,389              | 16.4                                          | 24.9                                    | 65.6       |
|                   |                       |                                        |                                        | Westbound   | 18,870  | 12,869                         | 2,916              | 15.5                                          | 22.7                                    | 68.2       |
|                   |                       |                                        | Saturday<br>October 5                  | Eastbound   | 16,452  | 12,310                         | 1,770              | 10.8                                          | 14.4                                    | 74.8       |
|                   |                       |                                        | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | Westbound   | 18,686  | 8,295                          | 1,336              | 7.2                                           | 16.1                                    | 44.4       |
| 2                 | Lindberg Rd.          | Between Midway<br>and Addison          | Friday<br>October 4                    | Eastbound   | 3,717   | 2,899                          | 752                | 20.2                                          | 25.9                                    | 78.0       |
|                   |                       |                                        | Westbound                              | 3,669       | 2,477   | 724                            | 19.7               | 29.2                                          | 67.5                                    |            |
| 3                 | Sojourn Lane          | Between Voss<br>and Addison<br>Boads   | Friday<br>October 4                    | Eastbound   | 1,366   | 906                            | 299                | 21.9                                          | 33.0                                    | 66.3       |
|                   |                       | CADENIA                                |                                        | Westbound   | 1,462   | 877                            | 280                | 19.2                                          | 31.9                                    | 60.0       |
| 4 Trinity<br>Road | Trinity Mills<br>Road | Between Voss<br>and Addision<br>Roads  | Thursday<br>October 3                  | Eastbound   | 10,628  | 8,146                          | 2,134              | 20.1                                          | 26.2                                    | 76.6       |
|                   |                       |                                        |                                        | Westbound   | 9,687   | 7,654                          | 1,898              | 19.6                                          | 24.8                                    | 79.0       |
|                   |                       |                                        | Saturday                               | Eastbound   | 9,218   | 7,331                          | 1,323              | 14.4                                          | 18.0                                    | 79.5       |
|                   |                       |                                        | Second 2                               | Westbound   | 8,435   | 6,401                          | 1,000              | 11.9                                          | 15.6                                    | 75.9       |
| TOTAL             |                       |                                        |                                        |             | 122,904 | 83,753                         | 17,821             | 14.5                                          | 21.3                                    | 68.2       |

(1) Survey stations were operated for a 12-hour period between 7:00 a.m. and 7:00 p.m. Values shown in this table are for the 12-hour period.

. ..

,

----

\*\*\*\*\*\*\*\*\*

-32-

.

## ESTIMATED TRIP PURPOSE

## **Total Vehicles**

|                     | TRIP PURPOSE                           |                     |                      |        |                 |            |        |                   |  |
|---------------------|----------------------------------------|---------------------|----------------------|--------|-----------------|------------|--------|-------------------|--|
| STATION(1)          | Journey<br>To/From<br><u>Work</u><br>( | Company<br>Business | Personal<br>Business | School | Shopping<br>ent | Recreation | Social | <u>TOTAL</u><br>) |  |
| 1                   | 31.3                                   | 14.0                | 16.7                 | 1.7    | 20.1            | 7.1        | 9.1    | 100.0             |  |
| 2                   | 56.6                                   | 17.6                | 11.4                 | 0.9    | 6.2             | 3.2        | 4.1    | 100.0             |  |
| 3                   | 42.6                                   | 8.5                 | 19.4                 | 15.2   | 9.8             | 2.1        | 2.4    | 100.0             |  |
| 4                   | 38.4                                   | 9.4                 | 18.9                 | 2.8    | 16.7            | 6.6        | 7.2    | 100.0             |  |
| PERCENT OF<br>TOTAL | 36.0                                   | 12.7                | 17.0                 | 2.7    | 17.4            | 6.4        | 7.8    | 100.0             |  |

٠

2

(1) See Table 12 for stations locations.

 $(1, 1) \in \mathbb{R}^{n}$ 

### ESTIMATED TRIP FREQUENCY

### Total Vehicles

|                     | TRIPS PER WEEK             |      |      |       |      |      |                       |       |
|---------------------|----------------------------|------|------|-------|------|------|-----------------------|-------|
| STATION(1)          | Less<br>Than<br><u>One</u> | One  | Two  | Three | Four | Five | Six or<br><u>More</u> | TOTAL |
| 1                   | 30.0                       | 11.1 | 11.1 | 9.4   | 4.3  | 17.6 | 16.5                  | 100.0 |
| 2                   | 12.7                       | 6.3  | 9.5  | 8.4   | 5.8  | 33.4 | 23.9                  | 100.0 |
| 3                   | 12.2                       | 7.3  | 8.6  | 9,3   | 4.2  | 29.4 | 29.0                  | 100.0 |
| 4                   | 22.9                       | 10.5 | 9.5  | 9.1   | 5.3  | 20.9 | 21.8                  | 100.0 |
| PERCENT OF<br>TOTAL | 25.5                       | 10.3 | 10.4 | 9.3   | 4.7  | 20.5 | 19.3                  | 100.0 |

(1) See Table 12 for station locations.

-----

**\***.•

م محمد المحمد مع ما محمد المحمد ال المحمد .

.

h . ...

1.2

----

## ESTIMATED VEHICLE OCCUPANCY

## **Total Vehicles**

|                     |              |      | VEHICI     | LE OCCU | PANCY           |       |                                 |
|---------------------|--------------|------|------------|---------|-----------------|-------|---------------------------------|
| STATION(1)          | One          | Two  | Three Four |         | Five<br>or more | Total | AVERAGE<br>VEHICLE<br>OCCUPANCY |
| 1                   | 69.5         | 22.6 | 4.6        | 2.3     | 1.0             | 100.0 | 1.43                            |
| 2                   | <b>84.</b> 2 | 12.5 | 2.0        | 0.8     | 0.5             | 100.0 | 1.21                            |
| 3                   | 73.6         | 16.3 | 7.0        | 1.6     | 1.5             | 100.0 | 1.41                            |
| 4                   | 73.1         | 19.5 | 4.5        | 2.1     | 0.8             | 100.0 | 1.38                            |
| PERCENT OF<br>TOTAL | 72.1         | 20.5 | 4.4        | 2.1     | 0.9             | 100.0 | 1.39                            |

Ş.

(1) See Table 12 for station locations.



. . .


х ж. <sup>11</sup> Ччы жила т т. т. К. ж. distribution results, the highest percentage of surveyed trips were made five or more times per week; 39.8 percent of the motorists responding to the survey. The next highest percentage related to less than one trip per week. This category represented 25.5 percent of the total motorists responding to the survey.

A vehicle occupancy summary is presented in Table 15 and Figure 8. Between 69.5 and 84.2 percent of motorists passing through the survey station were driving alone. The average for the four survey stations for vehicle occupancies of one, amounted to 72.1 percent. Approximately 20.5 percent of the vehicles contained a driver and one passenger. The average vehicle occupancy for the four survey locations amounted to approximately 1.39 persons. This occupancy level is comparable to national averages, and is consistent with the higher proportion of work trips which traditionally have low average occupancies.

### **Typical Travel Time Distance Relationships**

The development of the proposed Addison Airport Toll Tunnel will be expected to create a bypass of the Airport by producing continuity for a section of Keller Springs Road currently being used by traffic destined from the west to the east on Keller Springs Road on either Trinity Mills Road to the north or Belt Line Road to the south. Travel time studies were conducted on the major east/west routes in this area as well as the existing Keller Springs Road to understand the current conditions by which traffic flows in the corridor. Table 16 summarizes the anticipated travel distance/time savings produced by the construction of the proposed tunnel. The configuration of the extended Keller Springs Road will only be attractive to a user group from either the Carrollton or Addison area to the east along the Dallas North Tollway and Richardson, Texas. The most significant time savings, as presented in the table, is between the University of Texas and Carrollton which amounts to a time savings of 8.4 minutes and a distance reduction of 2.1 miles. These relationships generally represent current travel conditions; travel time savings may be expected to increase in the future as traffic continues to grow and congestion on competing routes increases.



•\*\* • ··· · \* ·····

· ·

## Table 16

## SAMPLE TRAVEL TIME SAVINGS

-

# Proposed Toll Tunnel vs Existing Routing

## P.M. Peak Travel Period

| MOVEM<br>BETWEE               | ENT<br>EN                             |                                                              |       |                | SAVING<br>ADDISC | S USING |
|-------------------------------|---------------------------------------|--------------------------------------------------------------|-------|----------------|------------------|---------|
| From                          | To                                    | VIA                                                          | MILES | <b>MINUTES</b> | Miles            | Minutes |
| University<br>of Texas        | Josey Lane<br>(Carroliton)            | Campbell, Keller<br>Springs, Toll<br>Tunnel                  | 8.7   | 16.0           | 2.1              | 8.4     |
|                               |                                       | Campbell, Belt<br>Line Road and<br>Josey Lane                | 10.8  | 24.4           |                  |         |
| DNT and<br>Keller<br>Springs  | IH 35E and<br>Keller<br>Springs Rd.   | Keller Springs<br>and Tunnel                                 | 5.7   | 13.6           | 1.9              | 6.4     |
|                               | ,                                     | Keller Springs<br>Addison Belt<br>Line, Midway               | 7.6   | 20.0           |                  |         |
| Preston &<br>Arapaho<br>Roads | Marsh Lane<br>& Keller<br>Springs Rd. | Keller Springs<br>and Tunnel                                 | 4.2   | 11.3           | 0.5              | 4.3     |
|                               |                                       | Keller Springs,<br>Midway, Belt<br>Line, and Preston<br>Road | 4.7   | 15.6           |                  |         |
| Preston<br>and West-<br>grove | Keller<br>Springs &<br>Marsh Lane     | Preston, Keller,<br>Springs and<br>Tunnel                    | 3.5   | 9.3            | 1.9              | 6.4     |
|                               |                                       | Westgrove, Addison<br>Trinity Milts,<br>Marsh Lane           | 5.4   | 15.7           |                  |         |

.

and the second

÷.

۰.

.

. .

-----

### **Distribution of Potential Tunnel Trips**

An analysis was performed using the computer traffic model developed by NCTCOG at 1991 levels, to identify the origins and destinations of potential trips. An output from this assignment is the number of trips originating and terminating in 15 superzone groupings. The 743 NCTCOG traffic zones were aggregated together in the windowing process into 453 traffic zones to which the survey responses were coded. The network zone system was then further aggregated into 15 Super Zones in order to simplify the travel pattern analysis. Figure 9 depicts the location of these super zone groupings. Tables 17 through 20 presents the percentages of origins and destinations of potential trips utilizing the proposed tunnel.

Super Zone 5 represents the Addison Airport, which is estimated to be the origin or destination of 3.6 percent of all trips using the proposed tunnel. The regional significance and patronage of the tunnel is evidenced by the fact that 74.6 percent of all potential trips have an origin or destination within Super Zones 1, 2, 3, 4, 5, 6, 7 and 8. Traffic destined for Super Zones 14 and 15, which include downtown Dallas, makes up approximately 6.8 percent of the potential trips using the tunnel. The patronage of the tunnel will be primarily from motorists traveling east and west within the eight localized Super Zones listed above.



\*----

ماممان مهمه الرقية إكوال محام للأخام كالتيان ورجاوا متعما

Se . 18

40

......

# Table 17 TRAVEL PATTERN SUMMARY

...

# 1991 Daily Traffic

## Beltline Road

| SUPERZONE |       |       |               |       |     |       | SUPER | ZONE       | NUMBE | R           |           |       |         |       |       |              |
|-----------|-------|-------|---------------|-------|-----|-------|-------|------------|-------|-------------|-----------|-------|---------|-------|-------|--------------|
| REGION    | _1    | _2_   | 3             | _4_   | _5  | 6     | _7_   | _8_        | 9     | · <u>10</u> | <u>11</u> | 12    | 13      | _14_  | 15    | <u>TOTAL</u> |
| 1         | 14    | 36    | 244           | 435   | 112 | 2,799 | 796   | 1,342      | 375   | 412         | 250       | 28    |         | 337   | 25    | 7,205        |
| 2         |       | 4     | 55            | 188   | 11  | 1,076 | 356   | 482        | 197   | 224         | 154       |       | 5       | 236   | 39    | 3,027        |
| · 3       |       | 30    | 64            | 287   | 46  | 1,134 | 721   | 633        | 249   | 318         | 338       | 4     | <b></b> | 287   | 26    | 4,137        |
| 4         | 419   | 356   | 504           | 40    | 21  | 222   | 15    | 78         | 245   | 9           | ···· =    | 29    | 82      | 73    | 163   | 2,256        |
| 5         | 64    | 93    | 56            | 29    |     | 82    | 22    | 40         | 63    | 5           | 4         | 14    | 38      | 57    | 32    | 599          |
| 6         | 1,277 | 879   | 1,292         | 149   | 121 | 284   | 83    | 122        | 331   | 37          | 72        | 303   | 285     | 45    | 284   | 5,564        |
| 7         | 902   | 875   | 1,097         | 31    | 29  | 245   |       | 37         | 395   | 4           | 6         | 106   | 289     | 39    | 316   | 4,371        |
| 8         | 1,225 | 911   | 1,215         | 64    | 73  | 359   |       | 9          | 276   | 13          | 19        | 247   | 463     | 49    | 233   | 5,156        |
| 9         | 275   | 337   | 552           | 283   | 145 | 766   | 362   | 282        | 119   | 44          | 131       | 93    | - 24    | 52    | 72    | 3,537        |
| 10        | 396   | 315   | 563           | 11    | 44  | 107   |       | 4          | 63    |             |           | 47    | 94      | 9     | 74    | 1,727        |
| 11        | 271   | 336   | 696           | 4     | 14  | 202   | 35    | 3          | 202   | 9           | 5         | 5     | 64      | 49    | 52    | 1,947        |
| 12        | 6     | 45    | 105           | 72    | 40  | 927   | 85    | 352        | 81    | 111         | 38        |       |         | 59    | 27    | 1,948        |
| 13        | 10    | 32    | 31            | 118   | 25  | 548   | 248   | 338        | 32    | 87          | 46        | 24    |         | 64    | 18    | 1,621        |
| 14        | 310   | 408   | 489           | 103   | 55  | 286   | 49    | 41         | 102   | 9           | 8         | 85    | 72      | 19    | 64    | 2,100        |
| 15        | 28    | _30   | <u>   121</u> | 207   | _87 | _552  | 219   | <u>198</u> | _41   | _69         | _42       | 24    | 5       | 94    | _26   | 1,743        |
| TOTAL     | 5,197 | 4,687 | 7,084         | 2,021 | 823 | 9,589 | 2,991 | 3,961      | 2,771 | 1,351       | 1,113     | 1,009 | 1,421   | 1,469 | 1,451 | 46,938       |

××

··· .

-39-

÷.,

-- -- --

۰ŝ.

. ..

# Table 18 TRAVEL PATTERN SUMMARY 1991 Daily Traffic Lindberg Road

•

| SUPERZONE |     |           |          |             |            |            | SUPER?     | ZONE N     | IUMBEF | ζ        |             |           |           |           |         |              |
|-----------|-----|-----------|----------|-------------|------------|------------|------------|------------|--------|----------|-------------|-----------|-----------|-----------|---------|--------------|
| REGION    | 1   | _2        | 3        | _4_         | <u>· 5</u> | 6          | 7_         | 8          | 9      | 10       | 11          | <u>12</u> | <u>13</u> | <u>14</u> | 15      | <u>TOTAL</u> |
| 1         |     |           | 3        | 411         | 6          | 194        | 72         | 82         | 45     | 28       | 22          | **        | ***       | 12        | <b></b> | 875          |
| 2         |     |           | **       | 158         | 6          | 93         | 89         | 25         | 20     | 24       | 18          |           |           | 6         |         | 439          |
| 3         |     |           | 3        | 146         | 10         | 67         | 178        | 10         |        | 14       | 49          |           |           | 17        |         | 494          |
| 4         | 238 | 308       | 320      | 37          | 29         | 93         |            | 15         | 109    | 10       |             | 22        | 112       | 13        | 48      | 1,354        |
| 5         | 32  | 18        | 23       | 54          |            | 44         | 28         | 61         | 18     | 15       |             | 6         | 21        | 20        | 6       | 346          |
| 6         | 117 | 112       | 40       | 60          | 80         | 151        | 90         | 10         | 13     |          | 34          | 41        | 47        | 26        | 61      | 882          |
| 7         | 141 | 142       | 206      | 11          | 46         | 61         | **         | <b></b>    | 41     |          | -           | 4         | 91        | **        | 38      | 781          |
| 8         | 45  | 39        | 30       | 31          | 30         | 7          | **         | **         |        |          |             | 5         | 16        |           | 5       | 208          |
| 9         | 18  | 26        |          | 76          | 23         | 18         | 35         |            | 5      |          |             | 6         | 5         | 5         |         | 217          |
| 10        | 27  | 6         | 16       | 5           | 6          | 7          |            |            |        |          | <b>4</b> -m | 6         | ant.ant   | **        | Acch.   | 73           |
| 11        | 25  | 52        | 85       | 8           | 14         | 43         |            |            | 11     |          | **          | 5         |           |           | 6       | 249          |
| 12        |     |           |          | 49          | ðar, fan   | 53         | -          | 5          |        |          |             |           | 300.300   | 10        | ***     | 117          |
| 13        | 6   |           |          | 138         | 9          | 102        | 49         | 8          |        |          |             |           | 3         | **        |         | 315          |
| 14        | 37  | 40        | 13       | 34          | 31         | 12         | **         |            | 13     |          |             |           | 9         |           |         | 189          |
| 15        |     | <u>10</u> | <u> </u> | <u>_148</u> | <u>15</u>  | <u>_91</u> | <u>_48</u> | <u>_11</u> |        | <u> </u> | <u> </u>    |           |           | _6        |         | 338          |
| TOTAL     | 686 | 753       | 739      | 1,366       | 305        | 1,036      | 589        | 227        | 275    | 91       | 132         | 95        | 304       | 115       | 164     | 6,877        |

. . . . .

::

....

an energy aga

`.-

## Table 19 TRAVEL PATTERN SUMMARY 1991 Daily Traffic Sojourn Lane

2

.....

.

4

| SUPERZONE |     |     |              |            |     |     | SUPER2     | ZONE N | IUMBER | ζ    |            |          |           |           |     |              |
|-----------|-----|-----|--------------|------------|-----|-----|------------|--------|--------|------|------------|----------|-----------|-----------|-----|--------------|
| REGION    | 1   | 2   | 3            | _4         | _5  | 6   | 7          | 8      | 9      | 10   | <u>_11</u> | 12       | <u>13</u> | <u>14</u> | 15  | <u>TOTAL</u> |
| 1         |     |     |              | 72         |     |     | б          |        | 9      |      | 17         |          | **        | 9         |     | 113          |
| 2         |     |     |              | 244        | 8   | 9   | 48         | 7 ·    | ***    | **   | 108        |          |           |           |     | 424          |
| 3         |     |     |              | 18         |     |     | 21         |        |        | **=  | 36         |          | an a-     |           |     | 75           |
| 4         | 82  | 260 | 36           | 591        | 83  | 41  | 228        | 53     | 159    | 9    | 98         | 9        | 53        | 89        | 54  | 1,845        |
| 5         | **  | 27  |              | 69         |     |     | 32         |        | 18     |      | 29         |          | **        |           | +-  | 175          |
| б         |     | 11  | **           | 46         | **  |     | 9          |        |        | w == | 15         | 7        |           |           |     | 88           |
| 7         | 26  | 88  | 23           | 137        | 32  | 9   |            |        | 35     |      |            | 23       |           | = #       | 9   | 382          |
| 8         |     | 40  |              | 66         | 9   | **  | -10 va     |        |        |      |            | 9        |           | **        | **  | 124          |
| 9         | 9   | 9   | ` <u>-</u> - | 204        |     |     |            | -      | 17     | **   | 15         | 7        |           |           |     | 261          |
| 10        |     | 9   | **           | 19         | 8   |     |            |        |        |      |            | **       |           |           |     | 36           |
| 11        | 12  | 80  | 28           | 106        | 17  | 3   | ****       |        | 17     |      |            |          | 8         | 8         | *** | 279          |
| 12        | *** | ~~  |              | 104        | 8   | 5   | 9          | 8      | ***    | -    | 4 14       | 24.44    |           | 18        |     | 152          |
| 13        |     |     |              | 14         | *** | *-  | -          |        |        | **   | ***        | ****     | <b></b>   | 9         |     | 23           |
| 14        |     | 30  | -            | 81         | 18  | *** | ~ ~        |        |        |      |            | 9        |           | =         | **  | 138          |
| 15        |     |     |              | 65         | 9   |     | <u>_11</u> |        | Xe 44  |      | <br>       | <u> </u> |           |           |     | 85           |
| TOTAL     | 129 | 554 | 87           | 1,836      | 192 | 67  | 364        | 68     | 255    | 9    | 318        | 64       | 61        | 133       | 63  | 4,200        |
|           |     |     |              | <b>*</b> * |     |     |            |        |        |      |            |          |           |           |     |              |

·--- ×\*\*\*

۰.

11 A. A.

.

.

## Table 20 TRAVEL PATTERN SUMMARY 1991 Daily Traffic Trinity Mills Road

.

----

.....

٠.,

|                  |       |       |       |       |            |            | SUPE        | RZONE     | NUMB  | ER   |       |             |           |           |       |              |
|------------------|-------|-------|-------|-------|------------|------------|-------------|-----------|-------|------|-------|-------------|-----------|-----------|-------|--------------|
| SUPERZONE REGION | 1     | _2_   | 3     | _4    | 5          | 6          | <u>_7</u> _ | _8        | 9     | 10   | _11_  | <u>12</u>   | <u>13</u> | <u>14</u> | 15    | <u>TOTAL</u> |
| 1                | 15    | 2     | 4     | 486   | 18         | 40         | 645         | 63        | 4     | 58   | 246   |             | *** ***   | 67        | 17    | 1,665        |
| 2                | 19    | **    | ***   | 804   | 9          | 33         | 528         | · 16      | 31    | 15   | 367   | 38          | 4         | 51        | 11    | 1,926        |
| 3                | -     | 6     | **    | 200   |            | 5          | 254         | 4         | 5     |      | 200   | 10          |           | 13        |       | 697          |
| 4                | 496   | 563   | 231   | 737   | 15         | 61         | 301         | 53        | 517   | - 34 | 125   | 511         | 111       | 148       | 515   | 4,418        |
| 5                | 20    | 7     | ***   | 61    | **         | ••         | 4           | **        |       |      | 26    | 92          | 7         | 7         | 23    | 247          |
| 6                | 39    | 19    | 8     | 45    |            | **         | 40          |           |       |      | 14    | 209         |           | 4         | 3     | 381          |
| 7                | 849   | 877   | 542   | 332   | 50         | 44         | 11          | 8         | 687   | 7    | 52    | 637         | 269       | 98        | 653   | 5,116        |
| 8                | 68    | 41    | 7     | 40    |            | 4          | 8           | 4         |       |      | 4     | 144         |           | 19        | 4     | 343          |
| 9                | 40    | 45    |       | 403   | 19         |            | 647         | 6         | 7     | 9    | 299   | 79          | 5         | 14        | 8     | 1,581        |
| 10               | 101   | 22    | 8     | 34    |            |            | 4           |           | 4     |      | ***   | 61          | 12        |           | 10    | 256          |
| 11               | 269   | 478   | 243   | 309   | 29         | 68         | 73          | 24        | 229   | 7    |       | 26          | 82        | 62        | 244   | 2,143        |
| 12               | *-    | 29    | 6     | 890   | 79         | 160        | 519         | 150       | 94    | 78   | 37    | 2           | Men Men   | 78        | 23    | 2,145        |
| 13               | 8     | 12    |       | 115   | 6          | -          | 373         | 8         |       | 3    | 83    |             | den den   | 21        |       | 629          |
| 14               | 111   | 102   | 61    | 183   | 20         | 7          | 132         |           | 18    |      | 51    | 86          | 19        | 4         | 15    | 809          |
| 15               | 17    | _23   | _2    | 427   | <u>_30</u> | <u>_16</u> | <u>451</u>  | <u>10</u> | _11   | - 44 | 203   | _ <u>34</u> |           | _19       | _8    | <u>1,251</u> |
| TOTAL            | 2,052 | 2,226 | 1,112 | 5,066 | 275        | 438        | 3,990       | 346       | 1,607 | 211  | 1,707 | 1,929       | 509       | 605       | 1,534 | 23,607       |

-42-

-----

\*\* \*\*

.

## Chapter 5 ESTIMATED TRAFFIC AND REVENUE

As part of the preliminary study of the Addison Airport Toll Tunnel completed in June 1991, WSA had previously obtained the year 2010 North Dallas focused area model from the NCTCOG. For this final traffic and revenue study, WSA made use of these networks and trip tables and also obtained the 1986 base year network and trip table for the same model, previously not available.

### Traffic Modeling Methodology

The original focused model developed by NCTCOG covered the entire metropolitan Dallas/Fort Worth area. Maximum network and zone detail were included only in the North Dallas area. The remainder of the metropolitan area outside the primary study area was presented by larger zones and a "skeleton" network, or major freeway links. These serve the purpose in the model of carrying trips into and through the focused study area.

Due to the localized nature of the impact of implementing the Addison Airport Toll Tunnel, it was decided to create a still more concentrated network by "windowing" out a portion of the network and trip table. The windowed network consists of the area generally bounded by I.H. 635 to the south, I.H. 35 to the west, F.M. 544 to the north and U.S. 75 to the east.

The windowing process was accomplished by first running a traditional capacity restrained assignment on the complete NCTCOG focused model for both years 1986 and 2010. The minimum time travel paths created by this assignment were saved. Once the cordon stations around the boundary of the focused windowed network were determined, the trip patterns on the links entering and leaving the windowed area, as well as trips generated inside the windowed area were retained. The remainder of the network and the trip table consisting of trips not generated within

or passing to, from, or through the focused windowed area were eliminated. This greatly reduced the size of the model and yet retained the original trip patterns of the larger focused model within the windowed area.

Once the WSA 1986 windowed network was created, the network was updated to 1991 levels by adjusting speeds and capacities on certain selected links based on information collected during the route reconnaissance. Additional zone detail was added in the immediate vicinity of the proposed Toll Tunnel. The 1995 "no-build" network was then created by including the extension of the Dallas North Tollway. Another network was then created at 1995 levels which included the proposed Addison Airport Toll Tunnel. The 2010 windowed network was updated to include accurate speeds, capacities and committed and funded highway improvements.

Trip tables were then created. The 1986 windowed trip table was then grown to 1991 levels using what is called the Fratar process. In this process, the socioeconomic data provided by NCTCOG is used to estimate changes in trip potential for each zone within the windowed area. Trips from the original 1991 trip table which pass through the links which represent the survey stations where the travel pattern surveys were conducted are removed. These were replaced by the trip table developed from the travel pattern surveys. This hybrid trip table incorporates a "real world" measure of travel patterns which would be most likely to use the Addison Airport Toll Tunnel into the model, while still retaining model estimates of other trips in area.

After model calibration, traffic assignments were run with this new hybrid trip table. The traffic assignment was checked for reasonableness, particularly on the links representing the survey stations. When the assignment was judged reasonable, which resulted in a good base for estimating future travel, the hybrid 1991 trip table was grown to 1995 levels using the same Fratar process. This trip table was then assigned to the 1995 windowing networks; one under the no-build and five with the proposed Tunnel. This included the Tunnel toll-free, and with passenger car toll rates of \$0.50, \$0.75, \$1.00, and \$1.25.

-44-

The traffic assignments were run using a capacity constrained diversion technique. With this technique, the model builds two paths between each pair of zones, one including the Tunnel link (where appropriate) and the next best path excluding the Tunnel link. The travel cost using both of these travel paths is then computed. The amount of trips using the "free" routes and the amount diverted to the Tunnel for each zone pair are determined. The travel cost is computed for each toll rate charged on the proposed Tunnel

At the same time an incremental capacity restrained process is occurring, in which the travel times on the links are increased as the speeds change due to increased loading of trips. Therefore, the expected motorists decision to use a toll or free route, depending on differences in the time and cost to use those routes, is effectively simulated. The same process was repeated with the year 2010 model with a no-build, toll-free, and alternative toll routes on the Tunnel.

The assignment output was evaluated for reasonableness using a screenline analysis, and a select link analysis. Minor adjustments were made to the assignment output based on capacity considerations on parallel routes and any trips that may have been assigned to the proposed tunnel that appeared to be marginal.

The trip table, traffic networks and growth factors that were used within this analysis of the Addison Airport Toll Tunnel were initially developed as part of a focus study in the north Dallas County area by the NCTCOG. The NCTCOG, which has historically developed the basis for the traffic forecasting in the area, provided updated estimates related to this specific corridor. The NCTCOG network used in this study contained 678 traffic zones and 65 external stations. Committed highway improvement projects were identified from the 1991 Transportation Improvement Program, provided for use on this project by the NCTCOG.

#### Toll Sensitivity Analysis

As discussed previously, traffic assignments were made to the proposed toll Tunnel under a toll-free condition and under a variety of progressively higher toll \*\*\*\*

rates. The results of this toll sensitivity analysis are shown graphically in Figure 10.

Under a toll-free condition, average daily traffic at opening year, 1995 levels is estimated at a approximately 22,000 daily vehicles. This would be expected to decrease significantly as progressively higher toll rates are introduced. Under a toll rate of \$0.50, average daily traffic estimates are reduced to approximately 12,500 vehicles, and at a toll rate of \$0.75, estimated opening year average daily traffic falls to approximately 10,200 vehicles per day.

Annual toll revenues are estimated at slightly more than \$2 million at the \$0.50 rate. This would be expected to increase to about \$2.8 million at the \$0.75 rate. Beyond this rate, the toll revenue curve is shown to begin to flatten considerably, with relatively little increase in revenues. For example, at an assumed toll rate of \$1.00 per trip, toll revenue is estimated at approximately \$3.0 million, an increase of about 7 percent in toll revenue over that which would be expected under the toll of \$0.75, as a result of the 33 percent increase in toll rates.

The results of the toll sensitivity analysis shows that the optimum toll is generally in the range of \$0.75 to \$1.00. Tolls above this rate would not be expected to significantly increase revenues and would significantly dampen the effectiveness of the Tunnel in meeting regional traffic demands. As a result of this toll sensitivity analysis, the toll rates of \$0.75 and \$1.00 were used to develop estimated traffic and gross toll revenues for the proposed Toll Tunnel.

Based on the existing traffic mix on adjacent routes, passenger cars would be expected to make up the vast majority of Tunnel users, with total two-axle vehicles accounting for over 98 percent of the traffic. As such, and following discussions with Authority staff, it is suggested a single toll rate be assessed all categories of vehicles. Due to the large proportion of the anticipated traffic using the Tunnel being passenger cars and the high commuter use of the facility, it may be more operationally efficient to assess a single toll rate to all vehicle classes and not vary the toll rate based on the weight or number of axles of the vehicle. It is

-46-



-----

suggested that the Authority analyze the levels of commercial vehicle traffic that develops after the project opening to determine if such volume is sufficient to merit a more complex auditing system and use of a multiple axle toll surcharge.

Until such time that the single toll collection per vehicle is amended the Authority has an opportunity to collect tolls at significant savings. A simple toll collection system will make minimal use of expensive equipment and auditing procedures. Loop detection and modified equipment designed only to secure monies should prove sufficient. It is understood that more sophisticated equipment and software may be implemented in the future if the vehicle mix warrants. However, revenue estimates included in this report assume all vehicles would be charged the same rate.

## **Basic Assumptions**

;

;

Traffic and revenue estimates for the proposed Addison Airport Toll Tunnel are predicated on the following basic assumptions:

- 1. The alignment of the Addison Airport Toll Tunnel will be generally as shown in this report, and constructed with one travel lane in each direction.
- 2. Access to the proposed toll facility will be limited to the two end points; at the intersection of Keller Springs Road/Midway Road on the west and Keller Springs Road/Addison Road on the east. Existing Dooley Road would be terminated in a cul-de-sac preventing access to Keller Springs Road.
- 3. The proposed Addison Airport Toll Tunnel will be opened to traffic on January 1, 1996.
- 4. The toll schedule will remain constant, with all vehicle classes being assessed the same toll. The toll rate will not be increased during the projection period.

-47-

- 5 Presently programmed and funded highway improvements in or near the project corridor and identified in the 1991 Transportation Improvement Program are assumed to be in place at or near the same time that the proposed project is expected to be opened to traffic.
- 6. No other competing highway projects, toll or toll free, are assumed to be constructed in the project corridor during the forecast period.

÷

. . . . .

- 7. The proposed Arapaho Road Extension is not assumed to be constructed at any time during the forecast period, since this project is not yet finalized and its implementation is generally considered an alternative to the proposed Tunnel, and may not be warranted should the proposed Tunnel be constructed.
- 8. Proposed S.H. 190 was assumed to be completed and opened to traffic by January 1, 1998.
- 9. The proposed Addison Airport Toll Tunnel will be well maintained, efficiently operated, and effectively signed to encourage maximum usage.
- 10. The present supply level of motor vehicle fuel will continue to be in adequate supply and the rate of increase in the price of motor fuel will not significantly exceed the overall rate of inflation.
- 11. No local, regional or national emergency will arise which would abnormally restrict the use of motor vehicles.
- 12. The overall level of economic development and growth in the project corridor will be substantially as projected in the 2010 travel pattern matrices provided by the NCTCOG for use in this study.

Any significant departure from the above assumptions could materially affect estimated traffic and revenue for the proposed project.

### **Estimated Annual Traffic Growth**

Contacts were made with various planning agencies in the Dallas region in order to ascertain and confirm population trends and projections as well as employment factors affecting growth in recent years so that traffic growth estimates that might be anticipated for the tunnel corridor could be prepared. Growth factors were developed to reflect the anticipated growth during the forecast period assuming a 1996 opening year.

Table 21 shows estimated annual traffic growth for the proposed Toll Tunnel, with the figures representing the growth over the previous year in each case. Traffic growth during the early years of Tunnel operation is expected to be relatively high, coincident with significant employment increases in the local service area, particularly on the east side of the Airport. Normal annual traffic growth is estimated in the range of 5-7 percent per year for the first five years of operation. This would be expected to decrease somewhat over time, dropping to 3 percent per year and less after 2005.

The Toll Tunnel would be added to a travel corridor which already includes significant alternative routes, as therefore not expected to result in extremely high levels of induced travel demand. It is likely, however, that some additional travel would be induced by the construction of the Tunnel, particularly for local trips which would recognize significant time savings over the congested alternative routes. Induced traffic growth is estimated at 6.0 percent in 1996, dropping to 4 percent the following year and 2 percent after the second year of operation.

### Estimated Average Daily Traffic Estimates and Annual Toll Revenue

Average daily traffic and gross toll revenue estimates for the 15-year projection period under both toll rate scenarios are presented in Tables 22 and 23.

ł

# Table 21 ESTIMATED ANNUAL TRAFFIC GROWTH SCHEDULE (Growth Over Previous Year)

| YEAR         | NORMAL | INDUCED  | TOTAL |
|--------------|--------|----------|-------|
| 1996         | 7.0    | 6.0      | 13.4  |
| 1 <b>997</b> | 6.0    | 4.0      | 10.2  |
| 1998         | 6.0    | 2.0      | 8.1   |
| 1 <b>999</b> | 5.0    | THE NO.  | 5.0   |
| 2000         | 5.0    |          | 5.0   |
| <b>200</b> 1 | 4.5    | **       | 4.5   |
| 2002         | 4.5    | nig da   | 4.5   |
| 2003         | 4.0    |          | 4.0   |
| 2004         | 4.0    |          | 4.0   |
| 2005         | 3.0    | 766 (M   | 3.0   |
| 2006         | 3.0    |          | 3.0   |
| 2007         | 3.0    |          | 3.0   |
| 2008         | 2.0    | dan việt | 2.0   |
| 2009         | 2.0    | <b></b>  | 2.0   |
| 2010         | 2.0    |          | 2.0   |

### Addison Airport Toll Tunnel

email to Mike Murphy at mmurphy@ci.addision.tx.us phone number at Addison 972-450-2871

# AUDITED TRAFFIC COUNTS

Opened February 18, 1999

.

Only the most current audited week's information will be sent as the file is getting large. (beginning April 21, 1999)

÷

;

....

\$

|   |            |         | Week   | Daily   |
|---|------------|---------|--------|---------|
| _ | Date       | Traffic | Total  | Average |
|   | 07/31/2000 | 8,578   |        |         |
|   | 08/01/2000 | 8,931   |        |         |
|   | 08/02/2000 | 8,848   |        |         |
|   | 08/03/2000 | 9,075   |        |         |
|   | 08/04/2000 | 9,527   |        |         |
|   | 08/05/2000 | 4,241   |        |         |
|   | 08/06/2000 | 3,081   | 52,281 | 7,469   |
|   |            |         |        |         |

## Addison Airport Toll Tunnel

email to Mike Murphy at mmurphy@ci.addision.tx.us phone number at Addison 972-450-2871

## AUDITED TRAFFIC COUNTS

Opened February 18, 1999

Only the most current audited week's information will be sent as the file is getting large. (beginning April 21, 1999)

:

[1

\*\*\*\*

.....

| <b>D</b> _1 |       | Week   | Daily   |
|-------------|-------|--------|---------|
| Date        |       | lotal  | Average |
| 07/31/2000  | 8,578 |        |         |
| 08/01/2000  | 8,931 |        |         |
| 08/02/2000  | 8,848 |        |         |
| 08/03/2000  | 9,075 |        |         |
| 08/04/2000  | 9,527 |        |         |
| 08/05/2000  | 4,241 |        |         |
| 08/06/2000  | 3,081 | 52,281 | 7,489   |
|             |       |        |         |

### Addison Airport Toll Tunnel

email to Mike Murphy at mmurphy@ci.addision.tx.us phone number at Addison 972-450-2871

### **AUDITED TRAFFIC COUNTS**

**Opened February 18, 1999** 

Only the most current audited week's information will be sent as the file is getting large. (beginning April 21, 1999)

:

•

•

\* >\* \*

| <br>Date   | Traffic | Week<br>Total | Daily<br>Average |
|------------|---------|---------------|------------------|
| 07/31/2000 | 8.578   |               |                  |
| 08/01/2000 | 8,931   |               |                  |
| 08/02/2000 | 8,848   |               |                  |
| 08/03/2000 | 9,075   |               |                  |
| 08/04/2000 | 9,527   |               |                  |
| 08/05/2000 | 4,241   |               |                  |
| 08/06/2000 | 3,081   | 52,281        | 7,469            |
|            |         |               |                  |

CLOSE

# 9:03:25 TOWN OF ADDISON DAILY PUMP STATION ACTIVITY 08/14/2000



: :

:.

1.12 XEAL

:

÷

SURVEYOR PUMP STATION

CELESTIAL ROAD PUMP STATION

| 6.5.                                      | R.                              |                          | DALLAS <b>H</b> FLU                               | ENT TOTAL                                         | E               | SR.                 |       | DALLAS                        | VELUENT TO                     | TAL                           |
|-------------------------------------------|---------------------------------|--------------------------|---------------------------------------------------|---------------------------------------------------|-----------------|---------------------|-------|-------------------------------|--------------------------------|-------------------------------|
| HAX, LEVEL<br>HAX, LEVEL<br>CURRENT LEVEL | 13.37<br>19.19<br>14.68         | FT.<br>FT.<br>FT.        | TODAY'S TOTAL<br>Vesterday's total<br>Month total | 3,622,000 MGD<br>9,054,000 MGD<br>121,097,000 MGD |                 | EL 9.95<br>EL 17.98 | FI. < | ICDAY'S IC<br>VESTERDAY'S IC  | )TAL <u>7</u><br>)TAL <u>7</u> | 98,000 MGD<br>97,000 MGD      |
| DISCHARGE                                 | PSI<br>FC CO                    |                          | TOTAL DIS                                         | CHARGE                                            |                 | H. 14.16            | FI.   |                               | JAL 10,                        | 961,000 MGD                   |
| MAX.<br>Current                           | 20.09<br>83.84<br>71.09         |                          | YESTERDAY'S TOTAL<br>MONTH TOTAL                  | 4,517,000 MGD<br>8,524,000 MGD<br>114,154,000MGD  | DISCHAR         | GE PSI<br>58.20     |       | TOTA<br>TODAY'S TOI           | L DISCHARG<br>[Al 4            | e<br>67.000 MgD               |
|                                           | PUMP                            | STARTS<br>THIS           | PUMP R                                            | UNTRE (Hr.)<br>THS                                | MAX.<br>CURRENT | 80.13<br>73.49      |       | YESTERDAY'S TOTA<br>MONTH TOT | NL 9<br>TAL 10,0               | 04,000 MGD<br>895,000 MGD     |
| P#1 500 HP                                | DALY<br>2                       | MONTH<br>17              | DAL<br>6.4                                        | Y MONTH<br>74.3                                   |                 |                     | PUMP  | STARTS<br>THS                 | PUMP RI                        | NTHE (Hr.)<br>Ths             |
| P#2 200 HP<br>P#3 500 HP                  | 0<br>1                          | 6<br>18<br>1             | 0.0<br>11.8                                       | 11.3<br>115.9                                     |                 |                     | DALY  | <b>NONTH</b><br>7             | DALL<br>1.8<br>0.0             | / <b>Month</b><br>20.0<br>D.0 |
| P#4 123 HP<br>P#5 500 HP                  | u<br>1                          | 1<br>13                  | 0.0<br>3.2                                        | 3.3<br>103.5<br>8.0                               |                 | PUMP #2             | 0     | 7                             | 0.0                            | 24.7                          |
|                                           |                                 | V                        | <b></b>                                           |                                                   |                 |                     | W     | ATER TOWER                    |                                |                               |
| RIELLEVEL<br>98.4 %                       |                                 |                          | DALY RAINFA<br>MONTHLY RAINFA<br>PREV. MO. RAINFA | LL 0.00 NL<br>LL 0.00 NL<br>LL 0.05 NL            | CURRENT         | VALUE               | 33.14 | FT. MANUALI<br>Maximum        | NVALUE 1<br>NVALUE 3           | 9,39 FT.<br>8,09 FT.          |
|                                           | Kell                            | .WAY I                   | LIFT STATION                                      | ***************************************           |                 |                     | DALL  | AS OUTSIDE                    | ROF                            |                               |
| WEIWE                                     | ALLEVEL                         |                          | DISCHARG                                          | ETOTALS                                           |                 | ELESTIAL            | P.S.  |                               | SURVEY                         | ORP.S.                        |
| HANDAUM VA<br>Maximum va<br>Current va    | LUE 3.9<br>LUE 12.0<br>LUE 11.3 | 5 FT.<br>16 FT.<br>20 FT | TODAY'S TOTAL<br>Yesterday's total<br>North total | 039,900 MGD<br>126,000 MGD<br>2.052,080 MGD       | TODAY           |                     |       | TODA<br>YESTERDA              | Y                              |                               |
| ******                                    |                                 | P                        | UMP STARIS                                        | PUMP RUNTIME (Hr.)                                | TOTAL           |                     |       | TOTA                          | L                              |                               |
|                                           | PU<br>PU                        | DA<br>副学新<br>副学校         | <b>THIS<br/>ILY MONTH<br/>4 60</b><br>4 60        | THIS<br>DALLY MONTH<br>1.8 28.9<br>1.5 25.4       | COMMENTS .      | GRAND 1             | IOTAL | ·                             |                                |                               |
|                                           |                                 |                          | DAILY RAINFALL<br>MONTHLY RAINFALL                | 0.90 NL<br>0.00 NL                                | -               |                     |       |                               |                                |                               |
|                                           |                                 |                          | PREV. INJ. KAINFALL                               | U,1/ <b>N.</b>                                    |                 |                     |       | NAME                          |                                |                               |





. . .

÷

n a transferience de la co

SURVEYOR PUMP STATION

CLOSE

# CELESTIAL ROAD PUMP STATION

| (                                | isr                     |                           |                           | DALLAS <b>H</b> FLU                                      | IENT TOTAL                                                                               | 6.5.                                   | R.                         |                   | DALLAS INF                                       | LUENT TOT                    | <u>U</u>                            |
|----------------------------------|-------------------------|---------------------------|---------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------|----------------------------|-------------------|--------------------------------------------------|------------------------------|-------------------------------------|
| MAX LEA<br>MAX LEA<br>URRENT LEA |                         | 13.37<br>19.19<br>14.68   | त.<br>त.<br>त.            | TODAY'S TOTAL<br>YESTERDAY'S TOTAL<br>BONTH TOTAL        | 3,622,000 INSE<br>9,054,000 INSE<br>121,097,000INSE<br>(TUARKE                           | MIN. LEVE<br>Max. Leve<br>Current leve | 9_95  <br>17.98  <br>14.16 | FT.<br>FT.<br>FT. | TODAY'S TOT<br>Yesterday's tot<br>Month tot      | AL 294<br>AL 797<br>AL 10,30 | 1,000 MGI<br>1,000 MGI<br>1,000 MGI |
| MAX.                             | luic 1<br>56<br>83      | rsi<br>1.09<br>1.84       |                           | TODAY'S TOTAL<br>Yesterday's Total                       | 4,517,000 MGL<br>8,524,000 MGL                                                           | DISCHARG                               | PSI                        |                   | TOTALI                                           | NSCHARGE                     |                                     |
| CURRENT                          | 71                      | 1.09<br>Pump :            | STARTS                    | MONTH TOTAL<br>Pump F                                    | 114,154,000MGE<br>Rantene (H.)                                                           | MIN.<br>Max.<br>Current                | 58.80<br>80.13<br>73.49    |                   | TODAY'S TOTAL<br>Yesterday's Total<br>Month Tota | L 467<br>804<br>I 10.89      | ,000 Mge<br>,000 Mge<br>5.000 Mge   |
| P#1 500                          | ₩P                      | DALLY<br>2                | inis<br>Month<br>17       | DA1<br>6.4                                               | THIS<br>LY MONTH<br>74.3                                                                 |                                        |                            | PUM               | STARTS<br>THIS                                   | PUMPRU                       | TTME (Hr.)<br>THIS                  |
| P#2 200<br>P#3 500               | I₽<br>I₽                | 0                         | 6<br>18                   | 9.0<br>11.8                                              | 11.3<br>115.9                                                                            |                                        |                            | DAILY<br>1        | NONTH<br>7                                       | DALLY<br>1.8                 | MONTH 20.0                          |
| P#4 125<br>P#5 500               | HP<br>HP<br>MP          | 0<br>1                    | 1<br>13                   | 0.0<br>3.2                                               | 3.3<br>103.5<br>0.4                                                                      |                                        | PUMP #2<br>PUMP #3         | 0                 | U<br>7                                           | 0.0                          | 24.7                                |
|                                  | UN                      |                           | ¥                         |                                                          |                                                                                          |                                        |                            | W.                | ATER TOWER                                       |                              |                                     |
| GENERAT<br>FUEL LEV<br>98.4      | OR<br>EL<br>S           |                           |                           | DALLY RAINFA<br>Monthly Rainfa<br>Prev. Mo. Rainfa       | 11 0.00 <b>N.</b><br>11 0.00 N.<br>11 0.05 N.                                            | CURRENT                                | ALUE                       | 33.14             | FT. MANANAN<br>Maximum V                         | VALUE 19.<br>/Alue 38.       | 39 FT.<br>09 FT.                    |
|                                  |                         | Kell                      | WAY                       | LIFT STATION                                             |                                                                                          |                                        | ]                          | DALL              | AS OUTSIDE R                                     | OF                           |                                     |
| WE                               | IMEI (                  | LEVEL                     |                           | DISCHARG                                                 | ETOTALS                                                                                  | a                                      | LESTIAL                    | P.S.              |                                                  | SURVEYO                      | RP.S.                               |
| MAXIMU<br>Maximu<br>Current      | IVALU<br>Ivalu<br>Ivalu | E 3.9<br>E 12.0<br>E 11.1 | 5 FT.<br>16 FT.<br>19 FT. | TODAY'S TOTAL<br>Yesterday's total<br>Nonth total        | 039,000 MGD<br>126,000 MGD<br>2,062,000 MGD                                              | TODAY<br>Yesterday                     |                            |                   | TODAY<br>YESTERDAY                               |                              |                                     |
|                                  |                         | •                         | P                         | UNP STARTS                                               | PUMP RUNTIME (H                                                                          | TOTAL                                  |                            | <u></u>           | — TOTAL .                                        |                              |                                     |
|                                  |                         | PU<br>PU                  | DA<br>昭和<br>昭記            | <b>THIS</b><br>ILY MONTH<br>4 60<br>4 60                 | THIS           DAILY         MONTH           1.8         20.9           1.5         25.4 | comments _                             | GRAND T                    | IOTAL_            |                                                  | 5                            |                                     |
|                                  |                         |                           |                           | DAILY RAINFALL<br>Monthly Rainfall<br>Prev. Mo. Rainfall | 8.00 <b>N.</b><br>0.69 <b>N.</b><br>0.17 <b>N.</b>                                       | ·   -                                  |                            |                   |                                                  |                              |                                     |
|                                  |                         |                           |                           |                                                          |                                                                                          |                                        |                            |                   | NAME .                                           |                              |                                     |

#### TOWN OF ADDISON DAILY PUMP STATION ACTIVITY 08/14/2000 9:03:25



:

:

.

|                          | (                                    | CELES                         | TIAL R                        | OAD PUMP ST                                                        | ATIOI                                | N ·                                                 |                                        | SUR                    | VEY(                    | OR PUMP STAT                                   | <b>ion</b>                      |                                                  |
|--------------------------|--------------------------------------|-------------------------------|-------------------------------|--------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------|----------------------------------------|------------------------|-------------------------|------------------------------------------------|---------------------------------|--------------------------------------------------|
|                          | 6.5.                                 | R                             |                               | DALLAS <b>N</b> FL                                                 | UENT T(                              | DTAL                                                | 6.5                                    | R                      |                         | DALLASINF                                      | UENT TOT                        | AL.                                              |
| MA<br>MA<br>URRE         | N LEVEL<br>X LEVEL<br>NT LEVEL       | 13.3<br>19.1<br>14.6          | 7 FT.<br>9 FT.<br>8 FT.       | TODAY'S TOTAL<br>Yesterday's total<br>Month total                  | 3<br>9<br>12                         | ,622,000 MGD<br>,054,000 MGD<br>1,097,000MGD        | MIN. LEVE<br>Max. Leve<br>Current leve | 9,95<br>17,98<br>14,16 | FT.<br>FT.<br>FT.       | TODAY'S TOTA<br>Yesterday's tota<br>Month tota | NL 29<br>NL 79<br>NL 10,31      | 8,000 MGD<br>7,000 MGD<br>31,000 MGD             |
| UA:<br>CUR               | NAX.<br>RENT                         | 56.09<br>83.84<br>71.09       |                               | TODAY'S TOTAL<br>TODAY'S TOTAL<br>YESTERDAY'S TOTAL<br>MONTH TOTAL | Sunanti<br>4<br>8<br>11:             | n:<br>,517,000 MGD<br>,524,000 MGD<br>1.154,000 MGD | DISCHARG                               | E PSI                  |                         | TOTAL E                                        | ISCHARGE<br>16                  |                                                  |
|                          | 2 <b>2</b> 131                       | PUM                           | STARTS<br>This                | PUMP                                                               | RUNTIN<br>TI                         | E (Hr.)<br>HS                                       | NAX.<br>Current                        | 80.13<br>73.49         |                         | YESTERDAY'S TOTAL<br>MONTH TOTAL               | - 40<br>80<br>10,89             | 4,000 MGD<br>15,000 MGD                          |
| P#1<br>P#2<br>P#3<br>P#4 | 500 HP<br>200 HP<br>500 HP<br>125 HP | DAILY<br>2<br>0<br>1          | 7 MONTI<br>17<br>6<br>18<br>1 | i DA<br>6<br>0.(<br>11.<br>0.(                                     | LY 11<br>  74<br>) 11<br>8 11<br>) 3 | DNTH<br>1.3<br>5.9<br>.3                            |                                        | PUMP 約<br>PUMP 約       | PUMF<br>Daily<br>1<br>0 | P STARTS<br>THIS<br>HONTH<br>7<br>0            | PUMP RUI<br>Daily<br>1.8<br>0.0 | <b>THE (Hr.)</b><br>This<br>Nonth<br>20.0<br>0.0 |
| P#5<br>GED               | 500 HP<br>Erator                     | <b>1</b>                      | 13<br>0                       | 32                                                                 | 2 10<br>0.                           | 3.5<br>.0                                           |                                        | PU解P約<br>              | U<br>W                  | 7<br>ATER TOWER                                | 0.0                             | 24.7                                             |
| GE)<br>FUE               | ERATOR<br>1 LEVEL<br>98.4 %          |                               |                               | DAILY RAINF<br>Monthly Rainf<br>Prev. Mo. Rainf                    | ALL (<br>ALL (<br>ALL (              | 0.00 N.<br>0.00 N.<br>0.05 N.                       | CURRENT                                | /ALUE                  | 33.14                   | FT. MANUFACIAIN<br>Maximumin                   | /ALUE 19<br>/ALUE 38            | .39 FT.<br>109 FT.                               |
|                          |                                      | KEL                           | LWAY                          | LIFT STATION                                                       |                                      |                                                     |                                        |                        | DALL                    | AS OUTSIDE R                                   | OF                              |                                                  |
|                          | WETW                                 | ELLLEVE                       | Ł                             | DISCHAR                                                            | E TOTA                               | LS                                                  | a                                      | LESTAL                 | P.S.                    |                                                | SURVEYO                         | RP.S.                                            |
| MI<br>Maj<br>Cu          | NIMUM VI<br>Kimum VI<br>Rrent Vi     | ALUE 3.<br>Alue 12<br>Alue 11 | 95 FT.<br>206 FT.<br>20 FT.   | TODAY'S TOTAL<br>Yesterday's total<br>Month total                  | . 0<br>1<br>2,0                      | 39,900 MGD<br>26,000 MGD<br>162,000 MGD             | TODAY<br>Yesterday<br>Total            |                        |                         | TODAY<br>YESTERDAY<br>TOTAL .                  |                                 |                                                  |
|                          |                                      | PI                            | D)<br>配P計<br>配P部2             | PUMP STARTS<br>This<br>Ally Month<br>4 60<br>4 60                  | PUMP<br>DALEY<br>1.8<br>1.5          | RUNTINE (Hr.)<br>THIS<br>Y MONTH<br>28.9<br>25.4    | comments _                             | GRAND 1                | IOTAL_                  |                                                |                                 |                                                  |
|                          |                                      |                               |                               | DAILY RAINFALL<br>Monthly Rainfall<br>Prev. Mo. Rainfall           | 0,1<br>0,1<br>0,1                    | CO N.<br>Do N.<br>17 N.                             | -                                      |                        |                         |                                                |                                 |                                                  |
|                          |                                      |                               |                               |                                                                    |                                      |                                                     |                                        |                        |                         | NAME -                                         |                                 |                                                  |

CLOSE

# Table 22 ESTIMATED AVERAGE DAILY TRAFFIC AND GROSS TOLL REVENUE Addison Airport Toll Tunnel \$0.75 Toll Rate Scenario

1

ł

.....

÷

| <u>YEAR</u> | AVERAGE<br>DAILY<br><u>TRAFFIC</u> | ANNUAL<br>GROSS TOLL<br><u>REVENUE(1)</u> |
|-------------|------------------------------------|-------------------------------------------|
| 1996(2)     | 11,600                             | 3,176,000                                 |
| 1997        | 12,700                             | 3,477,000                                 |
| 1998(3)     | 13,100                             | 3,586,000                                 |
| 1999        | 13,700                             | 3,750,000                                 |
| 2000        | 14,400                             | 3,942,000                                 |
| 2001        | 15,100                             | 4,134,000                                 |
| 2002        | 15,700                             | 4,298,000                                 |
| 2003        | 16,400                             | 4,490,000                                 |
| 2004        | 17,000                             | 4,654,000                                 |
| 2005        | 17,500                             | 4,791,000                                 |
| 2006        | 18,000                             | 4,928,000                                 |
| 2007        | 18,500                             | 5,064,000                                 |
| 2008        | 19,000                             | 5,201,000                                 |
| 2009        | 19,400                             | 5,311,000                                 |
| 2010        | 19,800                             | 5,420,000                                 |

Assumes a \$0.75 toll rate for all vehicle classes.

 $\overline{(1)}$  (2) (3)Assumes opening data January 1, 1996. Assumes S.H. 190 will be completed between U.S. 75 and the Dallas North Tollway and opened to traffic on January 1, 1998.

# Table 23 ESTIMATED AVERAGE DAILY TRAFFIC AND GROSS TOLL REVENUE Addison Airport Toll Tunnel \$1.00 Toll Rate Scenario

÷

2

:

| YEAR    | AVERAGE<br>DAILY<br><u>TRAFFIC</u> | ANNUAL<br>GROSS TOLL<br><u>REVENUE(1)</u> |
|---------|------------------------------------|-------------------------------------------|
| 1996(2) | 9,200                              | 3,358,000                                 |
| 1997    | 10,100                             | 3,687,000                                 |
| 1998(3) | 10,400                             | 3,796,000                                 |
| 1999    | 10,900                             | 3,979,000                                 |
| 2000    | 11,500                             | 4,198,000                                 |
| 2001    | 12,000                             | 4,380,000                                 |
| 2002    | 12,500                             | 4,563,000                                 |
| 2003    | 13,000                             | 4,745,000                                 |
| 2004    | 13,500                             | 4,928,000                                 |
| 2005    | 13,900                             | 5,074,000                                 |
| 2006    | 14,400                             | 5,256,000                                 |
| 2007    | 14,800                             | 5,402,000                                 |
| 2008    | 15,100                             | 5,512,000                                 |
| 2009    | 15,400                             | 5,621,000                                 |
| 2010    | 15,700                             | 5,731,000                                 |

Assumes a \$1.00 toll rate for all vehicle classes. Assumes opening date January 1, 1996. Assumes S.H. 190 will be completed between U.S. 75 and the Dallas North Tollway and opened to traffic on January 1, 1998.  $\overline{(1)}_{(2)}_{(3)}$ 

Estimated average daily traffic and gross toll revenue under a \$0.75 toll rate scenario is shown in Table 22 for the proposed Tunnel. Normal average daily traffic in the opening year 1996, is estimated at 11,600. Annual gross toll revenue generated in 1995, therefore has been estimated to be \$3,176,000. As a result of traffic growth from the anticipated development in the corridor, average daily traffic is estimated to reach 14,400 by the year 2000, generating annual gross toll revenue of \$3,942,000. By the year 2005 annual gross toll revenue is estimated to be \$4,791,000, reaching \$5,420,000 by the year 2010.

Table 23 presents estimated average daily traffic and gross toll revenues under an assumed toll rate of \$1.00. Average daily traffic in 1996 is estimated at 9,200 generating an annual gross toll revenue of \$3,358,000 in that year. Under this toll rate scenario, average daily traffic is estimated to reach 11,500 by the year 2000, resulting in an estimated annual gross toll revenue of \$4,198,000. By the year 2005 annual gross toll revenue is estimated to be \$5,074,000, from an average daily traffic volume of 13,900. In the final forecast year, average daily traffic is estimated to reach 15,700 generating annual gross toll revenues of \$5,731,000.

The most current accepted professional practices and procedures were used in the development of these findings. However, there are sometimes differences between forecasted and actual results, caused by events and circumstances beyond the control of the forecasters and these differences could be material.

## Estimated 2010 Peak Hour Traffic Volumes

Anticipated 2010 peak hour traffic volumes for the proposed Addison Airport Toll Tunnel and complementary major highway connections are presented in Figure 11 under the \$0.75 toll scenario. Traffic estimates for the \$1.00 toll level would be somewhat lower. Directional volumes are presented for both a.m. and p.m. peak hours. Estimated turning movement volumes are provided at the intersections with Addison and Midway Roads.

-----



.

Traffic volumes through the proposed Toll Tunnel during the a.m. peak hour are estimated to be 1,850 vehicles, representing approximately 9.4 percent of the estimated daily traffic. This would be heavily oriented to the east in the morning peak. Estimated traffic volume during the p.m. peak hour is 2,200, with the major travel direction during the p.m. peak hour becomes westbound with an estimated 1,300 vehicles. This represents approximately 11 percent of the estimated total daily traffic.

# A P P E N D I X A Survey Questionnaire

÷

| 12         | Please fill out this card even if you have received more than one card.<br>Please mail this card as soon as possible. Thank you for your<br>cooperation.                                                                                 |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 17         | Gergo regarding nezerous meterials. (Circle One)<br>1. No hezardous meterials. 4. Radioactive<br>2. Explosives. 5. Other Hazardous Category<br>3. Flammable                                                                              |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|            | 7. Operators of commercial vehicles, please indicate the nature of your                                                                                                                                                                  |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| 1          | <ol> <li>How many people were in your vehicle, including the driver?<br/>(Circle one)</li> <li>2 3 4 5 6 or more</li> </ol>                                                                                                              |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| л<br>—     | Loss Than More Than<br>1 1 2 3 4 5 5                                                                                                                                                                                                     |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| -          | <ul> <li>a. acrigor</li> <li>b. How often each week do you use this roadway to make this trip in this direction for the above ourses? (Circle one)</li> </ul>                                                                            |    |       | land the second s |           |
| 14         | <ol> <li>What was the purpose of this trip when given this card? (Circle one)</li> <li>Journey to or from work</li> <li>Shopping</li> <li>Company Business</li> <li>Recreation</li> <li>Personal Business</li> <li>Social</li> </ol>     |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|            | with trailer     8. Six- or more axie truck or bus       4. Two-axie, six tire truck or bus     9. Other                                                                                                                                 |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| 1          | 3. Please identify type of vehicle you were driving. (Circle one)<br>1. Passenger car, pickup or van 8. Three-axie truck or bus<br>2. Motorcycle 8. Four-axie truck or bus<br>9. Four-axie truck or bus                                  |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| 15         | Do you live at this address?<br>Yes No                                                                                                                                                                                                   |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|            | Major Intersection or Street Address City County State Zip Code                                                                                                                                                                          |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| <u>~</u>   | eirport, snopping meils, etc. (snolld not be the same as answer to<br>Question 1.)                                                                                                                                                       |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|            | 2. Where will this particular trip (in this direction) end? include<br>nearest intersection, street address, or other explanation, e.g.,                                                                                                 |    | ***** |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| 10         | Do you live at this address?<br>Yes No                                                                                                                                                                                                   |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|            | City County State Zip Code                                                                                                                                                                                                               |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| و          | airport, shopping mails, etc. Please be as specific as possible.                                                                                                                                                                         |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
|            | 1. Where did you begin this particular trip in this direction? Include<br>nearest intersection, street address, or other explanation, e.g.,                                                                                              |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |
| ß          | this postage-paid questionnaire at your earliest convenience.<br>Your cooperation will help the Texas Turnpike Authority serve<br>you better. Please help make this mailback survey successful<br>by returning the completed form today. |    | ST/   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 118<br>EA |
|            | This survey is undertaken to obtain important information<br>shout present travel patterns needed for planning local<br>blobwey improvements. You are astron to complete and mail                                                        |    |       | DO N<br>WRI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IOT<br>TE |
| <b>_</b> _ |                                                                                                                                                                                                                                          | Ά. | DAY   | DIR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | HR        |

# SURVEY FORM

,

.



May 24, 1999

Ron Whitehead City Manager City of Addison P. O. Box 9010 Addison, TX 75001-9010

Dear Mr. Whitehead:

3015 Raleigh Street P.O. Box 190369 • Dallas, TX 75219 214-522-6200 • Fax 214-528-4826



The North Texas Tollway Authority (NTTA) is pleased to provide you with a copy of our annual report and annual summary.

1998 was an exciting year for the NTTA. Substantial progress was made toward construction of the President George Bush Turnpike (PGBT). The two mile section between Midway and Preston opened to traffic in December. Bonds were sold in September to finance construction of the PGBT from I-635 to Belt Line Road. At the present time, 15.3 miles of the PGBT are either opened to traffic or under construction.

In addition to construction on the PGBT, the Addison Airport Toll Tunnel was recently completed and opened to traffic.

Several potential future projects of the NTTA were significantly advanced during 1998. A preliminary feasibility study for the Trinity Parkway was completed and showed the ability to support some of the construction through toll revenues. An interlocal agreement between the City of Dallas and NTTA was adopted by both entities, and the environmental impact study for the project is now underway.

An interlocal agreement was also executed between the City of Fort Worth and the NTTA relative to the design and funding of the proposed Southwest Parkway in Tarrant County.

Corridor studies for the future extension of the Dallas North Tollway (DNT) and connections between the DNT and I-35 E are presently underway for portions of Collin and Denton counties.

The North Texas Tollway Authority is ready to be an active partner with county and local governments as the mobility and transportation needs of the region are identified, planned and constructed. We look forward to an exciting and challenging 1999.

Best Wishes,

Jerry Hiebert Executive Director

cc: NTTA Board of Directors

Jere W. Thompson, Jr., Chairman + Donna R. Parker, Vice Chairman + David D. Blair, Jr. + Donald D. Ditlard + Kay Walls + Kirk Wilson + Leahray S. Wroten Jerry Hiebert, Executive Director + Katharine D. Nees, Deputy Executive Director + Susan A. Buse, Treasurer