

FORT WORTH



TRANSPORTATION IMPACT FEE (Report)

FINAL REPORT

December 2007



Kimley-Horn
and Associates, Inc.

Transportation Impact Fee Study



City of Fort Worth, Texas

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Note: Service Areas H, I, J, K, P, Q, R, and V are no-fee areas and therefore do not have Capital Improvements Plan tables.

EXECUTIVE SUMMARY

Introduction

Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. They originated and evolved in Florida, California and other fast-growing municipalities and counties, primarily in the Southern and Western United States. Across the country, they are used to fund police and fire facilities, parks, schools, roads and utilities. In Texas, the legislature has allowed their use for water, wastewater, roadway and drainage facilities. Since 1989, they have been used to fund public water and wastewater improvements in the City of Fort Worth, and are being considered for use in funding transportation infrastructure. Although other funding mechanisms have been considered (e.g., assessment paving policy, the establishment of roadway improvement districts or transportation user fees), City staff believes that transportation impact fees are the preferred funding mechanism for achieving the strategic goals of the City.

In the most basic terms, impact fees are meant to recover the incremental cost of each new unit of development in terms of new infrastructure needs. In the case of transportation impact fees, the infrastructure need is increased capacity on arterial roadways. The purpose of this Impact Fee Study is to identify the fee per unit of new development necessary to fund these improvements in accordance with the enabling legislation, Chapter 395 of the Texas Local Government Code.

Impact Fees are a one-time fee, and are charged only against new development. They are based on the cost of the arterial capacity improvements necessary to accommodate new growth. New development currently contributes to arterial roadway improvements in Fort Worth through the Community Facilities Agreement (CFA); a Transportation Impact Fee would significantly modify the CFA requirements for arterial roadway improvements.

There are a number of differences in the basic structure of the two policies. Most important, CFA requirements are not determined by the actual impact of new development. In most cases, the CFA requires that a developer improve not more than one-half of an adjacent arterial roadway for the length of the development's frontage. This approach does not distinguish the impact of a 100-unit residential development from a 10,000-unit development or a 100,000-squarefoot retail use, assuming that all three uses had the same amount of frontage. Additionally, projects that are not adjacent to an unimproved arterial are not required to make any contribution to the arterial system, as though they do not generate any demand for arterial capacity. In contrast, an Impact Fee program is designed to directly correlate fees with actual impacts and to spread the cost of needed improvements across all new developments. In this way, all new development shares the cost of expanding the roadway network in a predictable and equitable fashion.

Impact Fee Basics

Transportation Impact Fees are determined by several key variables, each described below in greater detail.

Impact Fee Study

The primary purpose of the Impact Fee Study is to determine the maximum impact fee per unit of new development allowed by state law. This determination is not a recommendation; the actual fee amount ultimately assessed is at the discretion of the Fort Worth City Council, so long as it does not exceed the maximum assessable by law. The study looks at a period of 10 years to project new growth and corresponding capacity needs, as required by state law. The study (and corresponding maximum fees) must

be updated at least every five years. The study can be updated at any time, however, to accommodate significant changes in any of the key variables of the impact fee equation.

Service Areas

A Service Area is a geographic area within which a unique maximum impact fee is determined. All fees collected within the Service Area must be spent on eligible improvements within the same Service Area. For Transportation Impact Fees, the Service Area may not exceed 6 miles. In Fort Worth, this restriction necessitated the creation of 27 separate Service Areas. A map of the Service Areas can be found on Page 5.

In defining the Service Area boundaries, the project team considered the corporate boundary, required size limit, adjacent land uses, and topography. Since each Service Area has a unique maximum impact fee, the per-unit fee for an identical land use will vary from one Service Area to the next. For this reason, the team avoided where possible drawing a Service Area boundary through uniform land uses.

Land Use Assumptions

The Impact Fee determination is required to be based on the projected growth and corresponding capacity needs in a 10-year window. This study considers the years 2006-2016. Acknowledging that the parameters of the study (the corporate boundaries, Master Thoroughfare Plan, Comprehensive Plan, zoning maps, platting history, etc.) are changing constantly, this study is based on conditions as they were on January 1, 2006. Population growth that has occurred since 2006 is accounted for in the projections for 2006-2017. Within five years of adoption, or sooner if necessary, changes to these study parameters will be included in an update of the Impact Fee Study.

One of the key elements in the determination of the impact fee is the amount of new development anticipated over 10 years. In order to arrive at a reasonable projection of growth, staff compiled a team of subject-experts from the Transportation & Public Works and Planning and Development departments to evaluate each service area individually. A map of each service area was overlaid with an aerial photograph, preliminary and final plats, water plats and the Future Land Use Plan defined in the Comprehensive Plan. The team that studied these maps was comprised of the staff that administers zoning, platting and pre-development applications; Master Thoroughfare Plan alignments; construction plan reviews; and planning efforts. All vacant parcels were discussed and projected to either develop by 2016 or to remain undeveloped at that time, based on zoning, platting and pre-development history, utility availability and any additional information regarding development potential or stated intentions. It was assumed that vacant parcels without recorded zoning or platting information would develop according to the land use specified in the Comprehensive Plan.

In projecting whether a particular parcel was likely to develop by 2016, the project team erred on the side of greater growth. An assumption of greater growth ultimately decreases the per-unit fee amount assessed to future development. Because the impact fee is calculated by dividing the eligible costs for arterial improvements by the amount of future growth, a higher rate of growth results in a lower maximum impact fee. Therefore, the study team felt it was appropriate to err on the higher end of a reasonable growth rate.

Finally, tables were created to compare existing population and employment data to the ultimate population and employment figures anticipated in the Comprehensive Plan. The effort described above generated a percentage of the ultimate population and employment figures anticipated within each service area by the year 2016. These projections can be found in the Population and Employment Projections tables on Pages 7-10. It is worth noting here that the percentage of ultimate population expected by 2016 does not directly correlate to the percentage of the planned arterial network that will be required by that date. The Master Thoroughfare Plan, which defines the future arterial network, is not based solely on future growth

projections; therefore the percentage of the planned arterial network needed to accommodate future growth exceeds 100% in some service areas.

Capital Improvements Plan (CIP) for Impact Fees

The Impact Fee CIP is distinct and separate from the City's bond program, which is also called a CIP. The Impact Fee CIP is simply the list of projects eligible for funding through impact fees. Only those capacity improvements included in the City's adopted Master Thoroughfare Plan are included in the Transportation Impact Fee CIP. Capacity improvements may include the addition of lanes, intersection improvements, or the extension of a new road. Resurfacing or other maintenance activities do not qualify as capacity improvements under impact fee law in Texas.

The cost of the Impact Fee CIP is one of the fundamental factors in the calculation of the per-unit impact fee amount. The Impact Fee CIP cost was calculated through systematic evaluation of each eligible project. The project team visited each project site to determine the project scope, the presence of any special conditions (such as the need for significant drainage improvements) and whether various additional construction costs were applicable (such as construction phase traffic control). In determining project limits, the team identified roadway segments with uniform need. For example, Beach Street is separated into several projects in the Impact Fee CIP; one project includes the construction of a new six-lane divided roadway, while another consists of the construction of the median lanes necessary to complete a separate section of the divided roadway. The team utilized a standard methodology for estimating construction costs once the project scope was defined. Referencing dozens of recent arterial projects within Fort Worth and the immediate vicinity, uniform costs were determined for the major items of work, additional construction items, and project delivery costs. A listing of the Impact Fee CIP by service area can be found in Tables 2.A – 2.Z. Maps of the Impact Fee CIP by service area can be found in Section III. Finally, detailed cost projections by project can be found in **Appendix A**. It should be noted that these cost projections are based on conceptual level planning, and are subject to refinement upon final design. Also, note that on the detailed cost projections, where applicable, funds previously collected by the City through the CFA have been deducted from a project's eligible total.

Only those projects listed in the Impact Fee CIP are eligible to utilize impact fee funds. In order to optimize future flexibility, all capacity improvements included in the Master Thoroughfare Plan are included in the Impact Fee CIP and will be eligible to utilize impact fee funds. However, only the costs associated with providing the additional capacity necessitated by 10 years' growth can be used to calculate the maximum impact fee. In order to calculate the fee, the total cost of the CIP was reduced, although no projects were removed (preserving future flexibility). Specifically, the full cost of the Impact Fee CIP was reduced to account for (1) the portion of new capacity that will address existing needs, and (2) the portion of new capacity that will not be necessitated until beyond the 10-year growth window. A ratio that compares 10 years' demand for capacity to the net supply of capacity (total new capacity in the CIP minus existing needs) can be calculated. That ratio, which may not exceed 100%, is then applied to the cost of the net capacity supplied. The result is a determination of the costs attributable to the next 10 years' growth, which is then used to calculate the maximum impact fee in accordance with state law.

Impact Fee Calculation

In simplest terms, the maximum impact fee allowable by law is calculated by dividing the total cost of the Impact Fee CIP by the number of new units of development. In accordance with state law, both the cost of the CIP and the number of new units of development used in the equation are based on the growth and corresponding capacity needs projected to occur within a 10-year window. This calculation is performed for each service area individually; each service area has a stand-alone CIP and 10-year growth projection.

In practice, there are many factors that complicate this calculation. The maximum impact fee allowable by law for each service area is calculated in Table 7. A detailed discussion of the calculation precedes Table 7, found on Pages 60-61. Notice that Service Areas H, I, J, K, P, Q, R, and V are not included in Table 7. These Service Areas are “No Fee” areas, where no impact fee will be assessed for new development. In most cases, a service area was classified as a no-fee area because there were no capacity improvements necessary to accommodate new development (such as in the Central City). In some cases, the projected growth or number of eligible projects was not sufficient to support the administration of an impact fee policy.

Collection and Use of Impact Fees

Impact fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. Impact fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the transportation system. Funds collected within a service area can be used only within the same service area. Finally, fees must be utilized within 10 years of collection, or must be refunded with interest.

Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Impact Fees. An Advisory Committee is required to review the Land Use Assumptions and CIP used in calculating the maximum fee, and to provide its finding for consideration by the City Council. The composition of the Advisory Committee is required to adequately represent the building and development communities. The City Council must then conduct a public hearing on the Land Use Assumptions and CIP before considering an Impact Fee ordinance.

The Impact Fee ordinance is considered separately from the Land Use Assumptions and CIP. The Advisory Committee must review the Impact Fee ordinance and provide its findings to the City Council. Following receipt of the report by the Advisory Committee, the City Council is required to conduct at least one public hearing on the Impact Fee ordinance prior to adoption.

Following policy adoption, the Advisory Committee is tasked with advising the City Council of the need to update the Land Use Assumptions or CIP at any time within five years of adoption. Finally, the Advisory Committee oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

I. INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure Texas cities must follow in order to create and implement impact fees. Senate Bill 243 (SB 243) amended Chapter 395 in 2001 to define an Impact Fee as “a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development.”

Accordingly, the City of Fort Worth has developed its Land Use Assumptions and Capital Improvements Plan (CIP) with which to implement transportation (roadway) Impact Fees. The City has retained Kimley-Horn and Associates, Inc., to provide professional transportation engineering services for the development of the transportation impact fee policy. This report includes details of the impact fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the CIP, and the Land Use Equivalency Table.

This report introduces and references two of the basic inputs to the Transportation Impact Fee: the **Land Use Assumptions** and the **Capital Improvements Plan (CIP)**. Information from these two components is used extensively throughout the remainder of the report. This report consists of a detailed discussion of the methodology for the computation of impact fees. This discussion - **Methodology for Transportation Impact Fees and Impact Fee Calculation** addresses each of the components of the computation and calculations required for the policy. The components include:

- Service Areas
- Service Units
- Cost Per Service Unit
- Cost of the CIP
- Service Unit Calculation
- Maximum Assessable Impact Fee Per Service Unit
- Service Unit Demand Per Unit of Development

The report also includes a section concerning the **Plan for Awarding the Transportation Impact Fee Credit**. In the case of Transportation Impact Fees, this involves the calculation of the applicable credit required by law to offset the City’s use of ad valorem taxes to help fund the Impact Fee CIP. This plan, prepared by R.W. Beck, Inc., and upon which we relied, details the maximum assessable impact fee per service unit the City of Fort Worth may apply under Chapter 395 of the Texas Local Government Code.

II. LAND USE ASSUMPTIONS

A. PURPOSE AND OVERVIEW

In order to assess an impact fee, Land Use Assumptions must be developed to provide the basis for population and employment growth projections within a political subdivision. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and population in the service area. In addition, these assumptions are useful in assisting the City of Fort Worth in determining the need and timing of capital improvements to serve future development.

In accordance with Chapter 395, information from the following sources was compiled: the City of Fort Worth Comprehensive Plan, the North Central Texas Council of Governments (NCTCOG), and consultation with City of Fort Worth staff.

The Land Use Assumptions include the following components:

- **Methodology** – An overview of the general methodology used to generate the land use assumptions;
- **Impact Fee Service Areas** – Explanation of the division of Fort Worth into service areas for transportation facilities;
- **Population and Employment**– Data on population and employment within the service area for the base year (2006), the completely developed (Build Out) scenario, and growth projections by service area over the next ten years (2006 – 2016); and
- **Land Use Assumptions Summary** – a synopsis of the land use assumptions.

The population and employment estimates and projections were all compiled in accordance with the following categories:

Units: Number of dwelling units, both single and multi-family.

Population: Number of people, based on person per dwelling unit factors.

Employment: Square feet of building area based on three (3) different classifications. Each classification has unique trip making characteristics.

Retail: Land use activities which provide for the retail sale of goods that primarily serve households and whose location choice is oriented toward the household sector, such as grocery stores and restaurants.

Service: Land use activities which provide personal and professional services such as government and other professional administrative offices.

Basic: Land use activities that produce goods and services such as those that are exported outside of the local economy, such as manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses.

B. METHODOLOGY

The population and employment growth projections formulated in this report were done using reasonable and generally accepted planning principles. The following factors were considered in developing these projections:

- Character, type, density, and quantity of existing development;
- Current zoning plans;
- Future Land Use Plan (as currently adopted);
- Growth trends;
- Location of vacant land; and
- Physical holding capacity of Fort Worth.

Existing population and employment data was compiled using data collected in the field and an aerial survey of existing development. For the remaining undeveloped areas, assumptions based upon existing development patterns and the future land use plan was utilized. Consultation with City staff and submitted plat information helped to determine the approximate portion of build out to assume for 2016. Following completion of the inventory of existing development, discussions were held with representatives from multiple City departments (Planning and Development & Transportation and Public Works) for each service area to determine what undeveloped portions of the City were likely to develop (or redevelop) in the next ten years.

It should be noted that the project team's approach to determining the growth projections was to error on the side of a higher growth rate within the next ten years. While the project team believes the resulting growth assumptions are reasonable, they may be considered aggressive by others. The reason for this approach is to end up with a conservative (lower) amount for the maximum assessable impact fee. For example, if you analyze **Table 7**, Service Area U, the pre-credit maximum assessable impact fee per service unit (see Line 15) is \$577. This is the result of Line 14 (Cost of CIP and Financing Attributable to Growth) divided by Line 8 (Total Vehicle-Miles of Demand over the Next Ten Years). If you reduce Line 8 by 25% (from 186,429 to 139,822), the resulting pre-credit maximum assessable impact fee would *increase* from \$577 to \$769. This is a result of similar thoroughfare needs being spread amongst a smaller amount of projected growth (i.e., the per unit costs would be greater).

C. IMPACT FEE SERVICE AREAS

The geographic boundary of the proposed impact fee service areas for transportation facilities is shown in **Exhibit 1**. The City of Fort Worth is divided into twenty-seven (27) service areas, each based upon the six (6) mile limit as required in Chapter 395. For transportation facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) (as of January 1, 2006) are excluded from this study.

It should be noted that at locations where service area boundaries follow a thoroughfare facility, the proposed boundary is intended to follow the centerline of the roadway. In cases where a service area boundary follows the City Limits, only those portions of the facility within the City Limits are included in the service area.

D. POPULATION AND EMPLOYMENT

Population and employment estimates for the base year (2006) were performed based upon a survey of the existing land uses. Build Out projections were prepared based upon combining the existing land uses within the service area with reasonable density assumptions for undeveloped land based upon the currently adopted Future Land Use Plan. Ten year growth projections were prepared based upon consultation with City staff and analysis of submitted plat information regarding the approximate portions of currently vacant property that will be developed by 2016. **Exhibit 2** presents the existing City limits and the proposed service areas, combined with the Future Land Use Plan (as currently adopted). **Table 1** summarizes the population and employment projections within the City of Fort Worth for 2006, 2016, and Build Out.

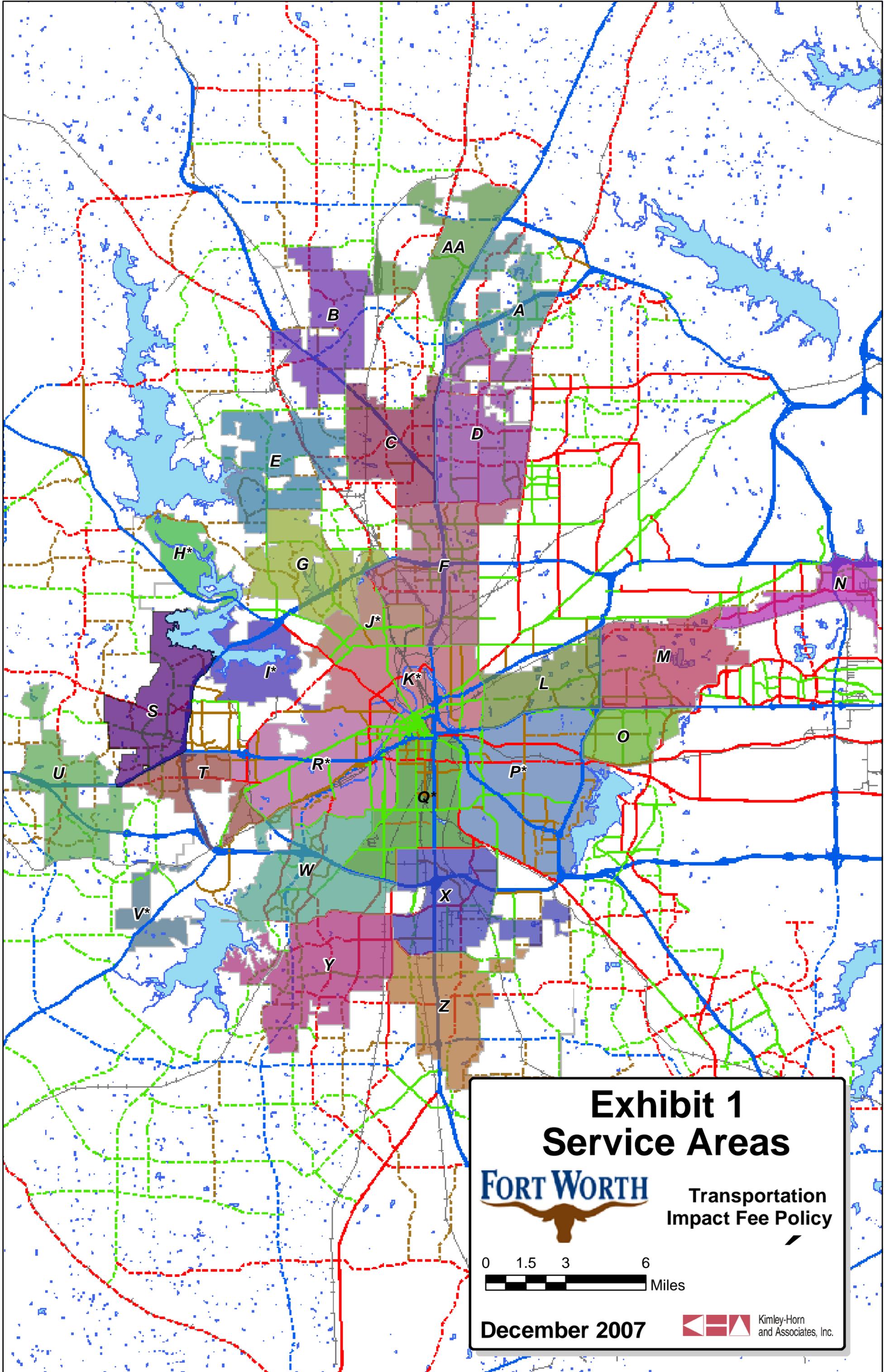
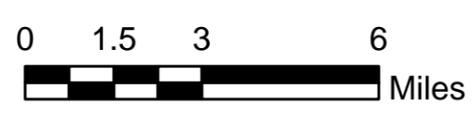


Exhibit 1 Service Areas



Transportation
Impact Fee Policy



December 2007

 Kimley-Horn
and Associates, Inc.

Insert Exhibit 2 – Citywide Future Land Use Map

Table 1. Population and Employment Projections for the City of Fort Worth

Service Area	Year	Population	Units	Employment (Square Feet)			
				Basic	Service	Retail	Total
A	2006	6,293	2,133	648,400	1,086,964	3,044,759	4,780,123
		32.77%		5.96%	26.10%	66.90%	24.39%
	2016	17,966	6,160	4,646,446	2,465,440	4,145,207	11,257,094
		93.00%		42.71%	59.20%	91.08%	57.45%
Build Out	19,203	6,653	10,879,449	4,164,364	4,551,013	19,594,826	
AA	2006	2,208	736	0	2,748,590	8,245,771	10,994,361
		68.24%		0.00%	59.55%	82.56%	39.92%
	2016	8,312	2,809	1,823,428	3,355,073	8,681,092	13,859,593
		80.00%		16.08%	54.93%	86.05%	50.33%
Build Out	10,351	3,598	11,343,059	6,107,991	10,088,993	27,540,043	
B	2006	795	265	15,587	391,054	1,167,967	1,574,608
		1.57%		0.60%	22.98%	28.55%	18.76%
	2016	10,868	3,655	795,149	742,323	1,874,184	3,411,656
		21.52%		30.59%	43.63%	45.81%	40.65%
Build Out	50,509	17,253	2,599,452	1,701,382	4,091,590	8,392,424	
C	2006	4,173	1,391	228,632	646,936	1,864,596	2,740,164
		7.63%		5.32%	24.57%	33.24%	21.84%
	2016	41,220	13,879	3,322,077	2,036,388	4,401,412	9,759,877
		76.12%		77.23%	77.33%	78.46%	77.80%
Build Out	54,159	18,233	4,301,335	2,633,384	5,609,398	12,544,117	
D	2006	47,118	15,706	211,017	841,707	2,454,783	3,507,508
		51.34%		6.47%	20.93%	23.37%	19.72%
	2016	74,419	25,385	1,506,314	2,102,230	5,448,743	9,057,287
		82.98%		46.20%	52.26%	51.88%	50.92%
Build Out	88,508	30,591	3,260,499	4,022,397	10,502,785	17,785,680	
E	2006	8,340	2,847	150,610	317,534	902,398	1,370,543
		14.08%		3.31%	21.51%	40.59%	16.62%
	2016	38,198	12,870	150,610	585,392	1,528,806	2,264,808
		63.66%		3.31%	39.66%	68.77%	27.46%
Build Out	59,927	20,217	4,548,605	1,476,165	2,223,080	8,247,850	
F	2006	29,025	10,090	4,328,708	6,908,870	19,283,708	30,521,286
		68.24%		24.19%	59.55%	82.56%	57.75%
	2016	39,058	13,727	9,618,860	9,267,616	22,574,056	41,460,533
		92.84%		53.76%	79.89%	96.64%	78.45%
Build Out	41,981	14,786	17,893,678	11,601,026	23,357,744	52,852,449	

*Note: Service Areas H, I, J, K, P, Q, R, and V are no-fee areas.

Table 1. Population and Employment Projections for the City of Fort Worth (cont.)

Service Area	Year	Population	Units	Employment (Square Feet)			
				Basic	Service	Retail	Total
G	2006	16,857	5,718	495,241	831,388	2,329,082	3,655,711
		27.17%		22.46%	42.09%	50.92%	41.76%
	2016	44,788	15,337	1,141,497	1,251,178	3,325,714	5,718,389
		72.87%		51.76%	63.34%	72.71%	65.32%
Build Out	61,314	21,048	2,205,242	1,975,455	4,573,674	8,754,371	
H*	2006	684	228	15,467	243,872	726,460	985,799
		30.46%		23.86%	86.79%	91.92%	87.56%
	2016	1,160	387	15,473	251,814	744,988	1,012,275
		51.66%		28.37%	89.62%	94.27%	89.91%
Build Out	2,246	749	54,542	280,995	790,291	1,125,828	
I*	2006	3,435	1,145	55,026	2,415,733	7,228,857	9,669,617
		26.70%		4.44%	82.05%	86.55%	77.37%
	2016	6,490	2,324	561,363	2,719,990	8,207,110	11,481,862
		50.45%		45.27%	92.39%	98.26%	91.59%
Build Out	12,865	4,474	1,240,108	2,944,091	8,352,287	12,536,485	
J*	2006	24,160	8,112	522,721	1,604,824	4,640,232	6,767,777
		79.56%		37.45%	84.90%	96.18%	83.45%
	2016	29,172	9,791	760,146	1,726,087	4,807,805	7,294,037
		96.06%		54.46%	91.31%	99.66%	89.93%
Build Out	30,368	10,225	1,395,664	1,890,363	4,824,431	8,110,458	
K*	2006	34,048	11,408	841,051	3,227,866	9,403,247	1,347,216
		83.37%		29.06%	75.22%	85.12%	7.39%
	2016	38,906	13,173	2,172,618	3,910,063	10,462,595	16,545,275
		95.26%		75.06%	91.12%	94.71%	90.74%
Build Out	40,840	13,892	2,894,625	4,291,149	11,047,269	18,233,043	
L	2006	18,162	6,746	648,623	2,272,059	6,599,970	9,520,652
		57.54%		16.19%	63.75%	86.21%	62.53%
	2016	20,424	7,533	1,602,209	2,624,798	6,866,952	11,093,958
		64.26%		40.00%	73.65%	89.69%	72.87%
Build Out	32,923	11,724	4,005,442	3,563,773	7,656,016	15,225,231	
M	2006	16,899	5,883	266,295	1,733,617	5,112,085	7,111,997
		30.22%		4.95%	49.42%	70.56%	44.07%
	2016	25,107	8,711	1,828,471	2,447,536	6,311,307	10,587,314
		44.75%		33.97%	69.77%	87.11%	65.61%
Build Out	57,109	19,465	5,383,002	3,507,918	7,245,241	16,136,161	

*Note: Service Areas H, I, J, K, P, Q, R, and V are no-fee areas.

Table 1. Population and Employment Projections for the City of Fort Worth (cont.)

Service Area	Year	Population	Units	Employment (Square Feet)			
				Basic	Service	Retail	Total
N	2006	15,013	5,644	1,608,071	2,415,863	6,711,565	10,735,498
		72.44%		26.43%	57.74%	77.22%	56.62%
	2016	19,718	7,419	3,647,577	3,438,811	8,288,098	15,374,486
		95.21%		59.96%	82.19%	95.36%	81.09%
Build Out	20,755	7,792	6,083,848	4,184,029	8,691,782	18,959,659	
O	2006	27,598	9,796	113,805	371,905	1,077,780	1,563,490
		77.64%		52.60%	52.61%	55.07%	54.28%
	2016	31,081	11,008	190,347	505,925	1,430,379	2,126,651
		87.24%		87.98%	71.57%	73.09%	73.83%
Build Out	35,736	12,617	216,359	706,939	1,956,992	2,880,290	
P*	2006	69,061	23,059	255,717	3,400,249	10,115,508	13,771,475
		75.47%		8.51%	71.85%	84.68%	69.97%
	2016	85,522	28,768	1,958,080	4,245,088	11,318,051	17,521,218
		93.46%		65.15%	89.70%	94.75%	89.02%
Build Out	91,509	30,817	3,005,419	4,732,697	11,945,134	19,683,250	
Q*	2006	56,291	18,964	562,167	1,957,090	5,683,881	8,203,138
		87.77%		36.79%	77.94%	85.11%	76.54%
	2016	63,111	21,422	951,564	2,346,213	6,521,812	9,819,589
		98.40%		62.27%	93.44%	97.66%	91.62%
Build Out	64,137	21,816	1,528,199	2,510,998	6,678,392	10,717,589	
R*	2006	74,234	26,012	131,430	3,317,648	9,909,135	13,358,213
		87.17%		23.92%	76.59%	79.30%	76.87%
	2016	78,227	27,440	540,414	3,739,778	10,776,282	15,056,473
		91.96%		98.34%	86.34%	86.24%	86.65%
Build Out	84,529	29,840	549,550	4,331,462	12,495,563	17,376,575	
S	2006	13,683	4,561	0	389,896	1,169,688	1,559,584
		26.99%		0.00%	28.33%	21.27%	20.18%
	2016	33,735	11,308	232,903	765,753	3,340,961	4,339,617
		66.92%		27.30%	55.64%	60.76%	56.15%
Build Out	50,013	16,899	853,257	1,376,343	5,498,665	7,728,264	
T	2006	30,003	10,965	15,265	1,981,820	5,940,371	7,937,456
		84.69%		3.48%	72.34%	73.23%	70.30%
	2016	31,818	11,623	146,318	2,398,090	7,013,768	9,558,177
		89.77%		33.32%	87.54%	86.46%	84.65%
Build Out	35,664	12,948	439,088	2,739,525	8,112,199	11,290,812	

*Note: Service Areas H, I, J, K, P, Q, R, and V are no-fee areas.

Table 1. Population and Employment Projections for the City of Fort Worth (cont.)

Service Area	Year	Population	Units	Employment (Square Feet)			
				Basic	Service	Retail	Total
U	2006	1,716	572	0	255,790	767,370	1,023,160
		2.74%		0.00%	15.57%	12.47%	10.98%
	2016	59,183	19,941	1,515,812	1,382,867	5,374,933	8,273,611
		95.46%		99.96%	84.15%	87.32%	88.82%
Build Out	61,758	20,888	1,516,459	1,643,271	6,155,662	9,315,392	
V*	2006	0	0	0	0	0	0
		0.00%		0.00%	0.00%	0.00%	0.00%
	2016	1,164	388	0	0	0	0
		4.50%		0.00%	0.00%	0.00%	0.00%
Build Out	25,877	8,626	0	0	0	0	
W	2006	69,035	24,683	0	3,449,396	10,348,187	13,797,583
		86.52%		0.00%	77.77%	74.79%	75.41%
	2016	73,452	26,265	24,232	3,775,111	11,779,524	15,578,867
		92.07%		100.00%	85.11%	85.13%	85.15%
Build Out	79,521	28,528	24,232	4,435,558	13,836,994	18,296,785	
X	2006	25,567	8,837	3,686,900	4,322,053	11,737,191	19,746,144
		62.96%		29.70%	61.33%	82.83%	58.71%
	2016	33,265	11,449	6,724,960	5,343,100	12,710,229	24,778,289
		81.57%		54.17%	75.82%	89.70%	73.68%
Build Out	40,528	14,036	12,414,004	7,047,310	14,169,442	33,630,757	
Y	2006	49,983	17,042	204,133	868,731	2,538,150	3,611,014
		47.78%	28.63%	35.66%	32.66%	33.06%	
	2016	79,170	26,990	534,938	1,371,509	4,137,008	6,043,455
		75.67%	75.02%	56.29%	53.23%	55.34%	
Build Out	104,499	35,666	713,033	2,436,404	7,771,883	10,921,320	
Z	2006	10,227	3,409	2,008,944	2,547,926	6,974,129	11,530,999
		20.34%	21.57%	48.78%	69.32%	46.88%	
	2016	32,461	11,019	4,257,018	3,541,974	8,443,294	16,242,285
		65.73%	45.72%	67.81%	83.92%	66.04%	
Build Out	49,211	16,764	9,311,704	5,223,657	10,060,898	24,596,258	

*Note: Service Areas H, I, J, K, P, Q, R, and V are no-fee areas.

E. SUMMARY

The City of Fort Worth is projected to experience a significant amount of population and employment growth within the next ten years, especially in those Service Areas located near the current City Limits. For the Service Areas with a majority of undeveloped land, a majority of the growth is projected to be in population (e.g. Service Areas A, B, and Y). For those Service Areas where a significant population base already exists, the rate of growth for employment exceeds that of population (e.g. Service Areas G and O).

III. CAPITAL IMPROVEMENTS PLAN

The City has identified the transportation projects needed to accommodate the projected growth within the City. The Capital Improvements Plan (CIP) for Transportation Impact Fees is made up of:

- Recently completed projects with excess capacity available to serve new growth;
- Projects currently under construction; and
- All remaining projects needed to complete the City’s Master Thoroughfare Plan.

The CIP includes arterial class roadway facilities as well as major intersection improvements. All of the facilities identified are included in the Master Thoroughfare Plan (as adopted in February 2006).

The proposed CIP for Transportation Impact Fees is listed in **Table 2** and mapped in **Exhibit 3**. The table shows the length of each project as well as the facility’s Master Thoroughfare Plan classification. The CIP was developed in conjunction with input from City of Fort Worth staff (Transportation & Public Works Department and Department of Engineering) and represents those projects that will be needed to accommodate the growth projected in the Land Use Assumptions section of this report.

Table 2.A. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area A

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
A	A-1	P6D	N. Beach St. (1)	Litsey Rd. to 1830' S. of Future Eagle	1.12	100%
	A-2	P6D	N. Beach St. (2)	Keller Haslet to SH 170	0.19	100%
	A-3, D-29	P6D	N. Beach St. (3)	SH 170 to Timberland	1.04	50%
	A-4	MA4D	Park Vista Blvd. (1)	900' S. of Henrietta Creek to SH 170	0.73	100%
	A-5	MA4D	Independence Pkwy. (1)	Litsey Rd. to Henrietta Creek	1.12	100%
	A-6	MA4D (1/2)	Independence Pkwy. (2)	Henrietta Creek to 255' N. of SH 170	0.50	100%
	A-7	P6D (1/3)	Cleveland Gibbs Rd.	N. City Limits (3670' S. of SH 114) to Litsey Rd.	0.92	100%
	A-8	P6D	Litsey Rd. (1)	190' E. of Elizabethtown to Cleveland Gibbs	0.51	100%
	A-9	MA4D	Litsey Rd. (2)	Cleveland Gibbs to 500' W. of Independence	0.96	100%
	A-10	MA4D	Litsey Rd. (3)	IH-35W to Future N. Beach St.	0.35	100%
	A-11	MA4D	Eagle Pkwy. (1)	Old Denton Rd. to 950' E. of Future Beach	0.50	100%
	A-12	MA4D	Eagle Pkwy. (2)	W. City Limits to Future Park Vista	0.54	100%
	A-13	MA4D	Henrietta Creek Rd.	700' E. of Future Park Vista to Independence	0.32	100%
	A-14	MA4D (1/2)	Westport Pkwy. (2)	IH-35W NBFR to 740' East of IH-35W NBFR	0.14	100%
	A-15	MA4D	Westport Pkwy. (3)	740' East of IH-35W NBFR to Future N. Beach St.	0.98	100%
	A-16	MA4D	Westport Pkwy. (4)	805' E. of Future N. Beach St. to Haslet Roanoke	0.46	100%
	A-17	MA4D	Westport Pkwy. (5)	770' E. of Haslet-Roanoke to SH 170 WBFR	0.37	100%
	A-18	MA4D	Westport Pkwy. (6)	SH 170 EBFR to 150' W. of Park Vista Blvd.	0.49	100%
	A-19	MA4D (1/2)	Westport Pkwy. (7)	165' E. of Park Vista to 1,450' W. of Independence	0.40	100%
	A-20, D-19	MA4D	Timberland Blvd. (1)	N. Beach St. to Cottageville Ln.	0.20	50%
	A-21, D-20	MA4D (1/2)	Timberland Blvd. (2)	Cottageville Ln. to 440' E. of Lillybrook Ln.	0.20	50%
	A-22	MA4D	Timberland Blvd. (3)	60' E. of Park Vista to E. City Limits	0.51	100%

Table 2.AA. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area AA

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
AA	AA-1	P6D (2/3)	Intermodal Pkwy.	FM 156 to Future FM 156 Alignment	0.70	100%
	AA-2	MA4D (1/2)	Westport Pkwy. (1)	W. City Limits to 1,495' W. of IH-35W	0.16	100%

Table 2.B. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area B

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
B	B-1	M4U	Willow Springs Rd. (1)	Avondale Haslet to Blue Mound Rd.	1.48	100%
	B-2	M4U	Willow Springs Rd. (2)	Blue Mound Rd. to S. City Limits	0.93	100%
	B-3	M4U	Blue Mound Rd. (1)	Willow Springs Rd. to Wagley Robertson Rd.	0.99	100%
	B-4	M4U	Avondale Haslet Rd. (1)	N. Willow Springs Rd. to Willow Springs Rd.	0.35	100%
	B-5	M4U	Avondale Haslet Rd. (2)	230' W. of Moonlake to Sendera Ranch	0.44	100%
	B-6	MA4D	Wagley Robertson Rd. (1)	875' SE of Avondale Haslet to Blue Mound Rd.	1.83	100%
	B-7	MA4D	Wagley Robertson Rd. (2)	Blue Mound Rd. to SA C Boundary	0.53	100%
	B-8, C-1	MA4D	Wagley Robertson Rd. (3)	SA C Boundary to SA B Boundary	0.41	50%
	B-9	P6D	Sendera Ranch Blvd. (1)	Future Eagle (ETJ) to 765' N of Rodeo Daze Dr.	1.84	100%
	B-10	P6D (1/3)	Sendera Ranch Blvd. (2)	765' N. Rodeo Daze to Diamondback	0.78	100%
	B-11	P6D (2/3)	Sendera Ranch Blvd. (3)	Diamondback to Avondale Haslet	0.97	100%
	B-12	M4U	Future E-W Minor Arterial	Future John Day to Future Sendera Ranch	2.55	100%
	B-13	MA4D	John Day Rd.	N. City Limits to S. City Limits	0.73	100%
	B-14	MA4D	Eagle Pkwy. (3)	785' W. of Sendera Ranch to E. City Limits	1.00	100%

Table 2.C. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area C

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
C	B-8, C-1	MA4D	Wagley Robertson Rd. (3)	SA C Boundary to SA B Boundary	0.41	50%
	C-2	MA4D	Wagley Robertson Rd. (4)	S. SA B Boundary to 540' N of McGill Dr.	0.20	100%
	C-3	MA4D (1/2)	Wagley Robertson Rd. (5)	540' N of McGill Dr. to 125' S of Darby Ln.	0.31	100%
	C-4, E-6	MA4D	Wagley Robertson Rd. (6)	Hillwood Blvd. to 1,800' S. of Bent Oak Dr.	0.63	50%
	C-5	MA4D	Wagley Robertson Rd. (7)	700' N. of Heritage Trace to S. City Limits	0.41	100%
	C-6, E-7	MA4D	Wagley Robertson Rd. (8)	145' N of Mystic River Trial to N. City Limits of Saginaw	0.15	50%
	C-7	MA4D	Harmon Rd. (1)	Keller Hicks Rd. to Existing Harmon Rd.	0.46	100%
	C-8	MA4D	Harmon Rd. (2)	Future Harmon Alignment. to Golden Triangle Blvd.	0.24	100%
	C-9	MA4D	Harmon Rd. (3)	Golden Heights Rd. to 540' S of El Camino Dr.	0.79	100%
	C-10	MA4D (1/2)	Harmon Rd. (4)	540' S of El Camino Dr. to 475' S. of Heritage Trace	0.43	100%
	C-11	MA4D	Harmon Rd. (5)	475' S. of Heritage Trace to 1,075' N. of US 287 NBFR	0.69	100%
	C-12	MA4D	Harmon Rd. (6)	1,075' N. of US 287 NBFR to N. Tarrant Pkwy.	0.41	100%
	C-13	M4U	Keller Hicks Rd. (1)	IH-35 SBFR to ETJ	0.07	100%
	C-14	MA4D	Golden Triangle Blvd. (1)	IH-35 SBFR to Harmon Road	0.40	100%
	C-15	MA4D	Bonds Ranch Rd. (1)	25' W. of Foothill to FM 156	1.40	100%
	C-16	MA4D	Bonds Ranch Rd. (2)	FM 156 to Harmon Rd.	1.01	100%
	C-17	MA4D	Bonds Ranch Rd. (3)	Harmon Rd. to Existing Golden Heights Rd.	0.68	100%
	C-18	P6D	Heritage Trace Pkwy. (1)	Wagley Robertson Rd. to 200' W. of Drovers View	1.43	100%
	C-19	P6D (1/3)	Heritage Trace Pkwy. (2)	200' W. of Drovers View. to FM 156	0.36	100%
	C-20	P6D	Heritage Trace Pkwy. (3)	FM 156 to Harmon Rd.	1.34	100%
	C-21	P6D (1/3)	Heritage Trace Pkwy. (4)	Harmon Rd. to IH-35W SB FR	0.83	100%
	C-22	P6D	Bailey Boswell Rd. (1)	FM 156 to US 287 NB FR	1.54	100%
	C-23, F-1	P6D	Basswood Blvd. (1)	FM 156 to 125' W. of Almondale Rd.	1.07	50%
	C-24, F-2	P6D (2/3)	Basswood Blvd. (2)	125' W. of Almondale Rd. to 590' W of IH-35 SBFR	0.25	50%
	C-26	P6D	N. Tarrant Pkwy. (1)	US 287 NB FR to IH-35W	0.73	100%
	C-27, D-6	n/a	N. Tarrant Pkwy. (2)	At IH-35W	0.00	50%

Table 2.D. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area D

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
D	D-1, F-4	P6D (1/3)	Basswood Blvd. (4)	670' E. of IH-35W To N. Riverside Dr.	0.62	50%
	D-2, F-5	P6D (1/3)	Basswood Blvd. (5)	N. Riverside Dr. To N. Beach St.	0.74	50%
	D-3, F-6	P6D (1/3)	Basswood Blvd. (6)	N. Beach St. To Park Vista Blvd.	1.30	50%
	D-4, F-7	P6D (1/3)	Basswood Blvd. (7)	Park Vista Blvd. to City Limits	0.39	50%
	D-5	M4U (1/2)	Summerfields Blvd.	Cannonwood Dr. to N. Riverside Dr.	0.18	100%
	C-27, D-6	n/a	N. Tarrant Pkwy. (2)	At IH-35W	n/a	50%
	D-7	MA4D	N. Tarrant Pkwy. (3)	IH-35W to US 377	3.51	100%
	D-8	P6D (1/3)	N. Tarrant Pkwy. (4)	IH-35W to US 377	3.51	100%
	D-9	M4U	Shiver Rd.	Stirrup Pkwy. to Park Vista Blvd.	0.48	100%
	D-10	P6D (1/3)	Heritage Trace Pkwy. (5)	N. Riverside Dr. to N. Beach	1.03	100%
	D-11	P6D (1/3)	Heritage Trace Pkwy. (6)	N. Beach St. to Park Vista Blvd.	1.13	100%
	D-12	P6D (2/3)	Heritage Trace Pkwy. (7)	Park Vista Blvd. to E. City Limits	0.95	100%
	D-13	P6D	Golden Triangle Blvd. (2)	IH-35W to 50' E. of N. Riverside Dr.	0.51	100%
	D-14	P6D	Golden Triangle Blvd. (3)	40' W. of N. Beach St. to 515' W. of Alta Vista	0.36	100%
	D-15	P6D	Golden Triangle Blvd. (4)	100' W. of Alta Vista to City Limits	1.57	100%
	D-16	M4U	Keller Hicks Rd. (2)	Timberland Blvd. to Old Denton Rd.	0.40	100%
	D-17	M4U	Keller Hicks Rd. (3)	735' W. of Rideview to Park Vista Blvd.	0.98	100%
	D-18	M4U	Keller Hicks Rd. (4)	Park Vista Rd. to E. City Limits	1.00	100%
	A-20, D-19	MA4D	Timberland Blvd. (1)	N. Beach St. to Cottageville Ln.	0.20	50%
	A-21, D-20	MA4D (1/2)	Timberland Blvd. (2)	Cottageville Ln. to 440' E. of Lillybrook Ln.	0.20	50%
	D-21	MA4D	Timberland Blvd. (4)	Hollow Valley Dr. to N. Beach St.	0.84	100%
	D-22	MA4D	N. Riverside Dr. (1)	SH 170 to 25' N. of Timberland	1.62	100%
	D-23	MA4D	N. Riverside Dr. (2)	300' S. of Timberland Blvd. to Keller Hicks Rd.	0.14	100%
	D-24	MA4D	N. Riverside Dr. (3)	Keller Hicks Rd. to Golden Triangle Blvd.	0.47	100%
	D-25	MA4D	N. Riverside Dr. (4)	Golden Triangle Blvd. to Heritage Trace Pkwy.	1.29	100%
	D-26	MA4D	N. Riverside Dr. (5)	Heritage Trace Pkwy. to N. Tarrant Pkwy.	1.23	100%
	D-27	MA4D	N. Riverside Dr. (6)	N. Tarrant Pkwy. to Summerfields	0.71	100%
	D-28	MA4D (1/2)	N. Riverside Dr. (7)	Summerfields Blvd. to Old Denton Rd.	0.29	100%
	A-3, D-29	P6D	N. Beach St. (3)	SH 170 to Timberland	1.04	50%
	D-30	P6D	N. Beach St. (4)	Future Timberland to Keller Hicks	1.03	100%
	D-31	P6D	N. Beach St. (5)	Keller Hicks to Golden Triangle	0.75	100%
	D-32	P6D (2/3)	N. Beach St. (6)	Golden Triangle Blvd to 185' N of Ray White Rd.	0.47	100%
	D-33	P6D (1/3)	N. Beach St. (7)	185' N of Ray White Rd. Vista Meadows Dr.	0.27	100%
	D-34	P6D	N. Beach St. (8)	Vista Meadows Dr. to Alta Vista Rd.	0.18	100%
	D-35	P6D	N. Beach St. (9)	Alta Vista to Heritage Trace Pkwy.	0.22	100%
	D-36	P6D	N. Beach St. (10)	Heritage Trace Pkwy. to 1185' N of N. Tarrant Pkwy.	1.23	100%
	D-37	MA4D	Park Vista Blvd. (2)	N. City Limits to Golden Triangle Blvd.	0.18	100%
	D-38	MA4D	Park Vista Blvd. (3)	Golden Triangle Blvd. to 780' S. of Wyndbrook St.	0.72	100%
	D-39	MA4D	Park Vista Blvd. (4)	Wall Price to Heritage Trace / Kroger	0.35	100%
	D-40	MA4D (1/2)	Park Vista Blvd. (5)	Emmeryville Ln. to N. Tarrant Pkwy.	0.87	100%

Table 2.E. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area E

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
E	E-1	MA4D	Boat Club Rd. (1)	Bonds Ranch Rd. to Park Dr.	2.67	100%
	E-2	M4U	Old Decatur Rd. (1)	95' S. of Park Dr. to 130' S. of Millstone Trl.	0.15	100%
	E-3	M4U	Willow Springs Rd. (3)	1,715' S of Bonds Ranch to Wagley Robertson Rd.	1.43	100%
	E-4	MA4D	Heritage Trace (9)	Existing Boat Club Rd. to BUS 287	1.47	100%
	E-5	P6D	Heritage Trace Pkwy. (10)	BUS 287 to 300' W. of Wagley Robertson	1.25	100%
	C-4, E-6	MA4D	Wagley Robertson Rd. (6)	Hillwood Blvd. to 1,800' S. of Bent Oak Dr.	0.63	50%
	C-6, E-7	MA4D	Wagley Robertson Rd. (8)	145' N of Mystic River Trial to N. City Limits of Saginaw	0.15	50%
	E-8	M4U	Park Dr. (1)	Boat Club Rd. to Park Dr. (Right-Angle Turn)	1.01	100%
	E-9	M4U	Park Dr. (2)	Park Dr. to 515' E. of Park Dr.	0.10	100%
	E-10	MA4D (1/2)	Bailey Boswell Rd. (2)	Boat Club Rd to 700' W of Bowman Roberts Rd	0.38	100%
	E-11	MA4D	Bailey Boswell Rd. (3)	85' W of Bowman Roberts Rd to 85' W of Old Decatur	1.52	100%
	E-12, G-1	M4U	WJ Boaz Rd.	Boat Club to 130' W of Old Decatur	2.03	50%
	E-13	M4U	Robertson Rd.	665' W of Future Lake Country to Boat Club Rd.	0.87	100%
	E-14	M4U	Lake Country Dr (1)	155' S. of Waterfront to Robertson Rd.	0.84	100%

Table 2.F. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area F

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
F	C-23, F-1	P6D	Basswood Blvd. (1)	FM 156 to 125' W. of Almondale Rd.	1.07	50%
	C-24, F-2	P6D (2/3)	Basswood Blvd. (2)	125' W. of Almodale Rd. to 590' W of IH-35 SBFR	0.25	50%
	C-25, F-3	P6D (1/3)	Basswood Blvd. (3)	590' W of IH-35 SBFR to 375' W. of IH-35 SBFR	0.04	50%
	D-1, F-4	P6D (1/3)	Basswood Blvd. (4)	670' E. of IH-35W To N. Riverside Dr.	0.62	50%
	D-2, F-5	P6D (1/3)	Basswood Blvd. (5)	N. Riverside Dr. To N. Beach St.	0.74	50%
	D-3, F-6	P6D (1/3)	Basswood Blvd. (6)	N. Beach St. To Park Vista Blvd.	1.30	50%
	D-4, F-7	P6D (1/3)	Basswood Blvd. (7)	Park Vista Blvd. to City Limits	0.39	50%
	F-8	MA4D	Robert W. Downing Dr. (1)	Basswood to 290' N. of Lou Menk	0.36	100%
	F-9	MA4D	Western Center Blvd. (1)	City Limits to 160' W. of Overland St.	0.07	100%
	F-10	MA4D	Cantrell Sansom Rd. (1)	City Limits to 145' W. of Maiden Ln.	0.21	100%
	F-11	MA4D (1/2)	Cantrell Sansom Rd. (2)	145' W. of Maiden Ln. to Mark IV Pkwy.	0.49	100%
	F-12	MA4D	Cantrell Sansom Rd. (3)	Mark IV Pkwy. to Old Denton Rd.	0.30	100%
	F-13	MA4D	Cantrell Sansom Rd. (4)	Old Denton Rd. to IH-35W SBFR	0.18	100%
	F-14	M4U (1/2)	Old Denton Rd. (1)	1,095' N. of Caldton Way to Cantrell Sansom Rd.	0.58	100%
	F-15	MA4D (1/2)	Mark IV Pkwy. (1)	Cantrell Sansom to IH-820 WBFR	0.52	100%
	F-16	M4U	Northeast Pkwy	Exsting Dead End to Mark IV Pkwy.	0.20	100%
	F-17	M4U	Lone Star Blvd.	Existing Dead End to 780' N. of Meacham Blvd.	0.68	100%
	F-18	M4U	Great Southwest Pwky.	Lone Star Blvd. to Existing Dead End	0.10	100%
	F-19	P6D (1/3)O	Meacham Blvd. (1)	BUS 287 to Golden Spike Dr.	0.21	100%
	F-20	P6D (1/3)O	Meacham Blvd. (2)	Gold Spike Dr. to 1,030' W FM 156	0.40	100%
	F-21	P6D (1/2)	Meacham Blvd. (3)	320' E. of FM 156 to Bridge over RR tracks	0.45	100%
	F-22	P6D (1/3)O	Meacham Blvd. (4)	Bridge over RR tracks	0.20	100%
	F-23	P6D (1/3)O	Meacham Blvd. (5)	RR Bridge to 80' E. of Future Lone Star	0.05	100%
	F-24	P6D (1/2)	Meacham Blvd. (6)	Deen Rd. to 630' W. of Gemini Pl.	0.50	100%
	F-25	P6D (1/3)	Meacham Blvd. (7)	Little Fossil Creek Bridge to N. Beach St.	0.89	100%
	F-26	M4U	N. Sylvania Ave.	Melody Hills to Quorum Dr.	0.32	100%
	F-27	P6D (1/3)	N. Beach St. (9)	Fossil Creek Blvd. to Sandshell Dr.	0.56	100%
	F-28	MA4D	N. Riverside Bridge	Stone Creek Pkwy to Riverside	0.06	100%
	F-29	MA4D	Long Bridge	375' W. of Railroad to Half Moon	0.31	100%

Table 2.G. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area G

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
G	E-12, G-1	M4U	WJ Boaz Rd.	Boat Club to 130' W of Old Decatur	2.03	50%
	G-2	M4U	Cromwell Marine Creek (1)	Ten Mile Bridge to Northern City Limits	0.73	100%
	G-3	MA4D	Cromwell Marine Creek (2)	Boat Club Rd. to Stonewater Bend Trl..	1.63	100%
	G-4	MA4D	Cromwell Marine Creek (3)	Stone Water Bend to Marine Creek Pkwy	0.58	100%
	G-5	MA4D	Longhorn Rd. (1)	Marine Creek Pkwy. to Old Decatur Rd.	0.24	100%
	G-6	M4U	Ten Mile Bridge (1)	Cromwell Marine Creek to Boat Club Rd.	1.08	100%
	G-7	M4U	Ten Mile Bridge (2)	Boat Club Rd. to Bowman Roberts Rd.	0.55	100%
	G-8	M4U	Ten Mile Bridge (3)	Westgate Dr. to Huffines Blvd.	0.41	100%
	G-9	MA4D	Marine Creek Pkwy (1)	440' S of McLeroy Blvd. to Ex. Cromwell Marine Crk.	0.40	100%
	G-10	MA4D	Marine Creek Pkwy (2)	Ex. Cromwell Marine Creek to 220' N. of NW College	1.13	100%
	G-11	MA4D	Marine Creek Pkwy (3)	Angle Ave. to 120' N. of Azle Ave.	0.95	100%
	G-12	M4U	Old Decatur Rd. (2)	Future Marine Creek Pkwy. to Ex. Old Decatur Rd.	0.08	100%
	G-13	M4U (1/2)	Old Decatur Rd. (3)	River Rock Blvd. to IH-820 WBFR	0.29	100%
	G-14	M4U	Old Decatur Rd. (4)	IH-820 EBFR to Angle Ave.	0.81	100%
	G-15	M4U	Huffines Blvd. (1)	Cromwell Marine Creek to Texas Shiner Dr.	0.62	100%
	G-16	M4U (1/2)	Huffines Blvd. (2)	Texas Shiner Dr. to Sea Bass Dr.	0.34	100%
	G-17	M4U	Huffines Branch	Huffines Blvd. to Cromwell Marine Creek	0.65	100%
	G-18	M4U	Hodgkins Rd.	Ten Mile Bridge to 110' S. of Hatch Rd.	1.03	100%
	G-19	M4U	Delfin St	135' S. of Mantis St. to Future Marine Creek Pkwy.	0.70	100%

Table 2.L. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area L

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
L	L-1	MA4D	E. 1st St. (1)	N. Beach St. to 2,635 E. of Streams and Valley Circle	1.18	100%
	L-2	MA4D (1/2)	E. 1st St. (2)	2,635 E. of S and V Circle to 860' W. of Oakland	0.35	100%
	L-3	MA4D (1/2)	Randol Mill Rd. (1)	600' E of Lake Havasu To 515' W. of Woodhaven	0.77	100%

Table 2.M. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area M

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
M	M-1	MA4D	Precinct Line Rd (1)	Trinity Railway Express to Trinity Blvd.	0.34	100%
	M-2	MA4D	Precinct Line Rd. (2)	Trinity Blvd. to Ex. Randol Mill Rd.	1.75	100%
	M-3	M4U	Norwood Dr. (1)	65' S. of SH 10 to 500' S. of RR	0.31	100%
	M-4	M4U (1/2)	Norwood Dr. (2)	500' S. of RR to Trinity Blvd.	0.14	100%
	M-5, N-5	MA4D	Raider Dr.	260' S. of Tube to Trinity Blvd.	0.21	50%
	M-6	M4U	Sandy Ln. (1)	Randol Mill Rd. to 275' N. of Winters	0.08	100%
	M-7	M4U	Sandy Ln. (2)	275' N. of Winters to John T. White Rd.	0.97	100%
	M-8	MA4D	Sandy Ln. (3)	John T. White Rd. to IH-30	0.45	100%
	M-9	MA4D	Cooks Ln. (1)	Existing Randol Mill to Existing Cooks Ln.	0.65	100%
	M-10	MA4D	Cooks Ln. (2)	Existing Cooks Ln. to 135' N. of Hidden Gate Ct.	0.33	100%
	M-11	MA4D (1/2)	Cooks Ln. (3)	135' N of Hidden Gate to 340' N. of John T. White	0.26	100%
	M-12	MA4D	Randol Mill Rd. (2)	Stoneview Circle to 135' W. of Flyaway Ln.	0.79	100%
	M-13	MA4D (1/2)	Randol Mill Rd. (3)	135' W. of Flyaway Ln. to 45' W. of Goldeneye Ln.	0.11	100%
	M-14	MA4D	Randol Mill Rd. (4)	45' W. of Goldeneye Ln. to Cooks Ln.	0.61	100%
	M-15	MA4D	Randol Mill Rd. (5)	Cooks Ln. to Existing Randol Mill Rd.	0.79	100%
	M-16	MA4D	Randol Mill Rd. (6)	Existing Randol Mill to Racquet Club Dr.	0.70	100%
	M-17	M4U	Randol Mill Rd. (7)	John T. White to 165' S. of Winding Ln.	0.19	100%
	M-18	M4U (1/2)	Randol Mill Bridge	Bridge over IH-30	0.07	100%
	M-19	M4U	Anderson Blvd. (1)	1310' W. of Williams to 1050' W. of Williams	0.05	100%
	M-20	M4U (1/2)	Anderson Blvd. (2)	1050' W. of Williams to Sandy Ln.	0.48	100%
	M-21	M4U	House Anderson Rd. (1)	Northern City Limits to Southern City Limits	0.69	100%
	M-22	P6D	Trinity Blvd. (1)	IH-820 to Precinct Line Rd.	1.77	100%
	M-23	P6D	Trinity Blvd. (2)	Precinct Line Rd. to Norwood Dr.	0.86	100%
	M-24	P6D	Trinity Blvd. (3)	Norwood Dr. to Bell Helicopter W. Entry	0.25	100%
	M-25	P6D (1/3)O	Trinity Blvd. (4)	Bell Helicopter W. Entry to 1,435' W. of Bell Spur	0.22	100%
	M-26	P6D	Trinity Blvd. (5)	1,435' W. of Bell Spur to Bell Spur	0.27	100%
	M-27	P6D	Trinity Blvd. (6)	Bell Spur to 1,110' W. of Greenbelt	0.56	100%
	M-28	P6D	Trinity Blvd. (7)	1110' W. of Greenbelt to Raider	0.70	100%

Table 2.N. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area N

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
N	N-1	M4U	S. Pipeline Rd. (1)	Raider Dr. to House Anderson Rd	0.69	100%
	N-2	M4U	S. Pipeline Rd. (2)	House Anderson Rd. to E. City Limits	0.33	100%
	N-3	M4U	S. Pipeline Rd. (3)	W. City Limits to FM 157	0.51	100%
	N-4	M4U	S. Pipeline Rd (4)	FM 157 to American Blvd.	1.69	100%
	M-5, N-5	MA4D	Raider Dr.	260' S. of Tube to Trinity Blvd.	0.21	50%
	N-6	MA4D	House Anderson Rd. (2)	S. Pipeline to Trinity Blvd.	0.27	100%
	N-7	M4U	House Anderson Rd. (3)	Trinity Blvd. to 120' S. of Trinity Railway Express	0.53	100%
	N-8	P6D	Euleess South Main St (1)	S. Pipeline Rd. to Trinity Blvd.	0.19	100%
	N-9	P6D	Euleess South Main St. (2)	Trinity Blvd. to 70' S. of Trinity Railway Express	0.50	100%
	N-10	MA4D	FAA Blvd	SH 360 NBFR to Amon Carter	0.66	100%
	N-11	MA4D	Centreport Dr.	Future FAA to Existing Centreport Dead End	0.60	100%
	N-12	MA4D	Sovereign Rd.	Future Centreport to Existing Sovereign Dead End	0.24	100%
	N-13	P6D	Trinity Blvd. (8)	Raider to FM 157	2.39	100%
	N-14	P6D (2/3)	Trinity Blvd. (9)	300' N Trinity Railway Express to E. City Limits	0.59	100%

Table 2.O. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area O

Service Area	Proj. #	Classification	Roadway	Limits	Length (mi)	% In Service Area
O	O-1	M4U	Handley Dr. (1)	Meadowbrook to 160' N. of Church	0.80	100%
	O-2	MA4D	Sandy Ln. (4)	IH-30 to Brentwood Stair	0.36	100%
	O-3	MA4D	Sandy Ln. (5)	Brentwood Stair to Meadowbrook	0.61	50%
	O-4	MA4D	Sandy Ln. (6)	Meadowbrook to Lancaster	1.18	100%
	O-5	MA4D	Cooks Ln. (4)	Brentwood Stair to 160' S. of Whitney	0.78	100%
	O-6	MA4D (1/2)	Cooks Ln. (5)	160' S. of Whitney to 115' N. of N. Maegen Cir	0.16	100%
	O-7	MA4D	Cooks Ln. (6)	115' N. of N. Maegen Cir. to S. Maegen Cir.	0.07	100%
	O-8	MA4D	Cooks Ln. (7)	S. Maegen Cir. To Dottie Lynn	0.27	100%

Table 2.S. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area S

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
S	S-1	MA4D	Silver Creek Rd. (1)	W. City Limits to Existing Silver Creek	1.22	100%
	S-2	MA4D	Silver Creek Rd. (2)	1,150' N. of Verna to 260' W. of Loop 820 SBFR	1.10	100%
	S-3	M4U	Las Vegas Trail (1)	Future Silver Creek to Existing Las Vegas	1.50	100%
	S-4	M4U	Las Vegas Trail (2)	Existing Las Vegas to Loop 820 W SBFR	0.24	100%
	S-5	MA4D	Academy Blvd. (1)	Silver Creek Rd. to 130' N. of Sparrow Hawk	0.54	100%
	S-6	MA4D	Academy Blvd. (2) (Longvue)	75' S. of Caravelle to Amber Ridge	0.38	100%
	S-7	P6D	White Settlement Rd. (1)	West City Limits to Silver Ridge	1.14	100%
	S-8	P6D	White Settlement Rd. (2)	Silver Ridge to 230' W. of Chapel Creek	0.87	100%
	S-9	P6D (1/3)	Clifford St. (1)	230' W. of Chapel Creek to Academy	0.55	100%
	S-10	P6D (1/3)	Clifford St. (2)	Academy to 585' E. of White Settlement	0.62	100%
	S-11	M4U	Silver Ridge Blvd. (1)	Existing Silver Ridge to Existing American Flyer	0.51	100%
	S-12	MA4D	Westpoint Blvd. (1)	W. City Limits to Basset Lock	0.67	100%
	S-13	MA4D (1/2)	Westpoint Blvd. (2)	Basset Lock to American Flyer	0.30	100%
	S-14	MA4D	Westpoint Blvd. (3)	Academy to IH-820 SBFR	0.69	100%
	S-15	M4U	N-S Minor Arterial (1)	Future Westpoint to Old Weatherford	0.92	100%
	S-16	M4U	Old Weatherford (1)	W. City Limits to Chapel Creek	1.17	100%
	S-17	M4U (1/2)	Amber Ridge (1)	Chapel Creek to Wind Star Way	0.26	100%
	S-18	M4U	Amber Ridge (2)	Existing Amber Ridge Dead End to Alameda	0.96	100%
	S-19	M4U	Alameda Rd. (1)	Academy to Sterlinghill	0.17	100%
	S-20	M4U	Chapin Rd (1)	W. City Limits to Wakecrest	0.80	100%
	S-21	M4U	Chapin Rd. (2)	Wakecrest to Chapel Creek Blvd.	0.41	100%
	S-22	MA4D	Chapel Creek Blvd. (1)	Chapin Rd. to IH-30 WBFR	0.13	100%
	S-23	MA4D	Longvue Rd (1)	Future Amber Ridge to IH-30 WBFR	0.48	100%

Table 2.T. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area T

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
T	T-1	MA4D	Chapel Creek Blvd. (2)	Camp Bowie West to Longvue Rd.	0.61	100%
	T-2	MA4D	Longvue (2)	I-30 EBFR to Camp Bowie West	0.48	100%
	T-3	MA4D	Longvue (3)	Camp Bowie West to 330' N. of Chapin Rd.	0.42	100%
	T-4	M4U	Alameda Rd. (2)	Camp Bowie West to Chapin Rd.	0.44	100%
	T-5	M4U	Chapin Rd (3)	Longvue Rd. to Chapin Curve	0.48	100%
	T-6	M4U	Chapin Rd. (4)	Chapin Curve to Alameda	0.21	100%
	T-7	M4U	Chapin Rd. (5)	Alameda to IH-820 NBFR	0.30	100%

Table 2.U. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area U

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
U	U-1	M4U	Old Weatherford (2)	W. City Limits to ~2,085' W. of Future Cattle Baron	0.32	100%
	U-2	M4U	Old Weatherford (3)	~2,085' W. of Future Cattle Baron to Future Cattle Baron	0.39	100%
	U-3	P6D	Cattle Baron Rd. (1)	North City Limits to Future Weatherford Rd.	0.52	100%
	U-4	P6D	Cattle Baron Rd. (2)	Future Old Weatherford to IH-30 EBFR	1.57	100%
	U-5	P6D	Cattle Baron Rd. (3)	IH-30 EBFR to Future Aledo Iona	2.85	100%
	U-6	M4U	Future E-W Minor Arterial (1)	Future Cattle Baron to Future Live Oak	1.18	100%
	U-7	M4U	Live Oak Place (1)	W. City Limits to Future Cattle Baron	0.22	100%
	U-8	M4U	Live Oak Place (2)	Future Cattle Baron to IH-20	2.18	100%
	U-9	M4U	Live Oak Place (3)	IH-20 to ETJ (3,365' S. of IH-30 EBFR)	1.04	100%
	U-10	M4U	Live Oak Place (4)	IH-30 WBFR to N. City Limits (Mary's Creek)	1.07	100%
	U-11	MA4D	Future Major Arterial (1)	W. City Limits to Future Cattle Baron	0.74	100%
	U-12	MA4D	Future Major Arterial (2)	Future Cattle Baron to Future Live Oak	1.59	100%
	U-13	MA4D	Future Major Arterial (3)	Future Live Oak to RR tracks	0.68	100%
	U-14	M4U	Future IH-30 Parallel Arterial	W. City Limits to IH-30/20 Intersection	1.31	100%
	U-15	M4U	Future N-S Minor Arterial (1)	S. City Limits to IH-30 WBFR	0.66	100%
	U-16	M4U	Future N-S Minor Arterial (2)	S. City Limits to Old Weatherford	0.40	100%
	U-17	MA4D	Westpoint Blvd. (4)	W. City Limits to E. City Limits	0.53	100%

Table 2.W. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area W

Service Area	Proj. #	Classification	Roadway	Limits	Length (mi)	% In Service Area
W	W-1, R-x	P6D (1/3)	Bryant Irvin Rd. (1)	UP RR to SA R Boundary	0.96	50%
	W-2	P6D (1/3)	Bryant Irvin Rd. (2)	SA R Boundary to Bellaire Dr.	0.13	100%
	W-3	M4U	Harris Pkwy.	Dutch Branch to Dirks	0.48	100%
	W-4	M4U	Dutch Branch Rd.	Oakmont Trail to 45' W. of RR	0.20	100%
	W-5	M4U	Lakeside Dr.	Trinity River to E. City Limits	1.21	100%
	W-6, Y-1	P6D	Dirks Rd.	Railroad to Granbury Rd.	0.24	50%

Table 2.X. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area X

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
X	X-1, Q-x	P6D (1/3)	Seminary Dr. (1)	Carter Park to Campus Dr.	0.62	50%
	X-2, Q-x	P6D (1/3)	Seminary Dr. (2)	Campus Dr. to Old Mansfield Rd.	0.48	50%
	X-3	M4U	Oak Grove Rd. (1)	Oak Grove Ln. to Oak Grove Rd / Campus	0.32	100%
	X-4	MA4D	Altamesa Blvd. (1)	Oak Grove Rd. to Wichita St.	1.30	100%
	X-5	MA4D	Altamesa Blvd. (2)	Lana to Forest Hill Dr.	0.58	100%
	X-6	M4U	Joel East Rd.	Oak Grove Rd. to Wichita St.	1.10	100%
	X-7, Z-1	P6D	Everman Pkwy. (1)	Butterwick to 140' W. of Ballwood St.	0.66	50%
	X-8, Z-2	P6D (2/3)	Everman Pkwy. (2)	140' W. of Ballwood St. to 240' E. of Sheridan Rd.	0.18	50%
	X-9, Z-3	P6D (1/3)	Everman Pkwy. (3)	240' E. of Sheridan to IH-35W SBFR	0.19	50%
	X-10	MA4D	Hemphill St. (1)	645' S. of Alta Mesa to Sycamore School Rd.	0.85	100%
	X-11	MA4D (1/2)	Hemphill St. (2)	360' S. of Sycamore School to Rosedale Springs	0.41	100%
	X-12	MA4D	Hemphill St. (3)	Rosedale Springs to Everman Pkwy.	0.15	100%
	X-13	P6D (2/3)	Oak Grove Rd. (1)	Alta Mesa to RR tracks	0.19	100%
	X-14	P6D	Oak Grove Rd. (2)	RR tracks to Joel East	0.33	100%
	X-15	P6D	Oak Grove Rd. (3)	Joel East to Everman Pkwy.	1.25	100%
	X-16	MA4D	Wichita St. (1)	350' N. of Alta Mesa to 280' N. of RR tracks	0.38	100%
	X-17	MA4D	Forest Hill Dr. (1)	Lon Stevenson to S. City Limits	0.72	100%
	X-18	M4U	Anglin Dr.	Lon Stevenson to Enon Ave.	1.00	100%
	X-19	M4U	Dick Price Rd.	40' S. of RR tracks to S. City Limits	0.48	100%
	X-20	M4U	Enon Ave.	W. City Limits to Anglin	0.50	100%

Table 2.Y. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area Y

Service Area	Proj. #	Classification	Roadway	Limits	Length (mi)	% In Service Area
Y	W-6, Y-1	P6D	Dirks Rd.	Railroad to Granbury Rd.	0.24	50%
	Y-2	MA4D	Columbus Trl. (1)	Future N-S Arterial to Old Granbury	0.15	100%
	Y-3	MA4D	Columbus Trl. (2)	W. City Limits to Future SH 121	0.30	100%
	Y-4	P6D (1/3)	Sycamore School Rd. (1)	Future 121 to Summer Creek	0.36	100%
	Y-5	P6D	Sycamore School Rd. (2)	Summer Creek to 145' W. of Creek Meadow	0.10	100%
	Y-6	P6D (1/3)	Sycamore School Rd. (3)	145' W. of Creek Meadow to Cleburne Rd. W.	1.65	100%
	Y-7	MA4D (1/2)	Risinger Rd. (1)	635' E. of McCart to Existing Risinger Dead End	0.69	100%
	Y-8	MA4D	Risinger Rd. (2)	Existing Risinger Dead End to FM 731	0.45	100%
	Y-9	MA4D	McPherson Blvd (1)	W. City Limits to Future SH 121	0.93	100%
	Y-10	P6D	McPherson Blvd (2)	Future SH 121 to 250' W. of Willow Branch	0.70	100%
	Y-11	P6D (1/3)	McPherson Blvd (3)	250' W. of Willow Branch to Cleburne Rd.	0.74	100%
	Y-12	P6D	McPherson Blvd. (4)	Cleburne Rd. to East City Limits	0.76	100%
	Y-13	M4U	Stewart Feltz Rd. (1)	Old Granbury Rd. to Stewart Feltz SB Bend	0.75	100%
	Y-14	M4U	Stewart Feltz Rd. (2)	Stewart Feltz SB Bend to Future Summer Creek	0.55	100%
	Y-15	MA4D	Cleburne Crowley Rd. (1)	Old Grabury Rd to Stewart Feltz	0.88	100%
	Y-16	MA4D	Cleburne Crowley Rd. (2)	Stewart Feltz to E. City Limits	0.52	100%
	Y-17	MA4D	Bryant Irvin Rd (3)	270' N. of Columbus Trl. To McPherson Blvd.	2.27	100%
	Y-18	MA4D	James W. Schell Pkwy. (1)	Scyamore School Rd. to McPherson Blvd.	1.59	100%
	Y-19	M4U	James W. Schell Pkwy. (1)	McPherson Blvd. to Stewart Feltz	0.57	100%
	Y-20	M4U	Old Granbury Rd.	Stewart Feltz to S/W City Limits	0.89	100%
	Y-21	MA4D	Granbury Rd. (1)	350' S. of Altamesa to 630' N. of Appalachian Way	0.25	100%
	Y-22	MA4D (1/2)	Granbury Rd. (2)	215' S. of Summer Meadows to Columbus Trail	0.49	100%
	Y-23	MA4D (1/2)	Summer Creek Dr. (1)	Summer Park to Risinger Rd.	0.41	100%
	Y-24	MA4D	Summer Creek Dr. (2)	Risinger Rd. to Cleburne Crowley Rd.	2.01	100%
	Y-25	MA4D	Summer Creek Dr. (3)	Cleburne Crowley Rd. to S. City Limits	0.93	100%
	Y-26	P6D (1/3)	Hulen St. (1)	Cinnamon Hill to Sycamore School	0.96	100%
	Y-27	P6D (1/3)	Hulen St. (2)	Sycamore School to Risinger Rd.	1.21	100%
	Y-28	P6D (1/3)	Hulen St. (3)	Risinger Rd. to McPherson Blvd.	1.02	100%
	Y-29	P6D (2/3)	Hulen St. (4)	McPherson Blvd. to Carriage Crossing	0.18	100%
	Y-30	P6D	Hulen St. (5)	Carriage Crossing to S. City Limits	0.14	100%
	Y-31	P6D	Hulen St. (6)	325' N. of Rancho Verde Pkwy. To S. City Limits	0.50	100%
	Y-32	P6D (2/3)	McCart Ave. (1)	580' S. of Risinger Rd. to 135' S. of Cayman	0.31	100%
	Y-33	P6D	McCart Ave. (2)	135' S. of Cayman to Future McPherson Blvd.	0.56	100%
	Y-34	M4U	McCart Ave. (3)	Future McPherson Blvd. to S. City Limits	1.16	100%

Table 2.Z. 10-Year Capital Improvements Plan for Transportation Impact Fees – Service Area Z

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
Z	X-7, Z-1	P6D	Everman Pkwy. (1)	Butterwick to 140' W. of Ballwood St.	0.66	50%
	X-8, Z-2	P6D (2/3)	Everman Pkwy. (2)	140' W. of Ballwood St. to 240' E. of Sheridan Rd.	0.18	50%
	X-9, Z-3	P6D (1/3)	Everman Pkwy. (3)	240' E. of Sheridan to IH-35W SBFR	0.19	50%
	Z-4	MA4D	Shelby Rd.	Race St. to Forest Hill	1.00	50%
	Z-5	MA4D	Risinger Rd. (3)	FM 731 to IH-35W SBFR	1.62	100%
	Z-6	MA4D	Risinger Rd. (4)	IH-35W SBFR to Old Burleson Rd.	0.29	100%
	Z-7	MA4D	Risinger Rd. (5)	Old Burleson Rd. to Oak Grove Rd.	0.77	100%
	Z-8	MA4D	Oak Grove Shelby (1)	Oak Grove Rd. to Race St.	1.01	100%
	Z-9	MA4D	Oak Grove Shelby (2)	Race St. to Forest Hill Dr.	1.00	100%
	Z-10	P6D	McPherson Blvd. (4)	FM 731 to UP RR	1.30	100%
	Z-11	P6D (1/2)	McPherson Blvd. (5)	375' W. of IH-35W SBFR to IH-35W NBFR	0.20	100%
	Z-12	P6D	McPherson Blvd. (6)	IH-35W NBFR to Oak Grove	0.68	100%
	Z-13	P6D	McPherson Blvd. (7)	Oak Grove to Forest Hill-Everman	1.44	100%
	Z-14	MA4D	Alsbury Blvd.	IH-35W NBFR to Stone	0.21	100%
	Z-15	MA4D	Hemphill St. (4)	Everman Pkwy. To 580' N. of Brasenose	2.83	100%
	Z-16	MA4D (1/2)	Hemphill St. (5)	580' N. of Brasenose to Oriel Circle	0.17	100%
	Z-17	M4U (1/2)	Hemphill (6)	FM 1187 to McAlister	0.28	100%
	Z-18	M4U	Hemphill (7)	McAlister Rd. to S. City Limits	0.21	100%
	Z-19	P6D	Oak Grove Rd. (4)	Oak Grove-Shelby to Nelson Pl.	1.89	100%
	Z-20	P6D	Oak Grove Rd. (5) [Stone]	Nelson Pl. to FM 1187	0.91	100%
	Z-21	MA4D	Stone Rd. (1)	FM 1187 to Alsbury Blvd.	1.07	100%
	Z-22	MA4D	Stone Rd. (2)	Alsbury Blvd. to S. City Limits	0.73	100%
	Z-23	M4U	Wildcat Way [Oak Grove S]	Abner Lee to FM 1187	2.20	100%
	Z-24	MA4D	Oak Grove Rd. (6) [East]	FM 1187 to Nelson Pl.	0.72	100%
	Z-25	MA4D	Oak Grove Rd. (7) [Wichita]	Nicoleway to E. City Limits	1.93	100%
	Z-26	MA4D	Wichita St. (2)	Oak Grove Shelby to Shelby	0.52	100%
	Z-27	MA4D	Rendon / Forest-Hill	275' S. of Enon to 100' S. of Shelby	0.47	50%

Insert Exhibit 3.A – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.AA – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.B – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.C – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.D – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.E – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.F – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.G – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.L – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.M – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.N – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.0 – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.S – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.T – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.U – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.W – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.X – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.Y – CIP for Transportation Impact Fees – Service Area

Insert Exhibit 3.Z – CIP for Transportation Impact Fees – Service Area

IV. METHODOLOGY FOR TRANSPORTATION IMPACT FEES

A. SERVICE AREAS

The twenty-seven (27) service areas used in the 2006 Transportation Impact Fee Study are shown in the previously referenced **Exhibit 1**. These service areas cover the entire corporate boundary of the City of Fort Worth. Chapter 395 of the Texas Local Government Code specifies that “the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles.”

B. SERVICE UNITS

The “service unit” is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the Transportation Impact Fee study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. On the supply side, vehicle-miles make up a lane-mile of an arterial street (the number of vehicle-miles available depend on the classification of a roadway facility). On the demand side, a vehicle-mile is a vehicle-trip of one-mile in length. The application of this unit as an estimate of either supply or demand is based on travel during the afternoon peak hour of traffic. This time period is commonly used as the basis for transportation planning and the estimation of trips caused by new development.

Another aspect to quantifying the number of service units supplied is the capacity that is provided (supplied) by a lane-mile of roadway facility. Capacity is a function of the facility’s classification, number of lanes, and level of service. The threshold utilized in the analysis is the actual capacity of the roadway (i.e. the point at which the volume to capacity ratio equals 1.0).

The capacity values used in the Transportation Impact Fee Study are based upon Thoroughfare Capacity Criteria published by the North Central Texas Council of Governments (NCTCOG) and applied to City of Fort Worth thoroughfare standards. **Table 3** shows the service volumes as a function of the facility classification.

Table 3. Level of Use Table

Facility Classification	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
Principal Arterial (P6D)	Divided	700
Major Arterial (M4D)	Divided	700
Minor Arterial (M4U)	Undivided	650
Collector (C2U)	Undivided	550
Rural Collector	Undivided	275

C. COST PER SERVICE UNIT

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the transportation impact fee, this is the cost for each vehicle-mile of travel. This cost per service unit is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel at a level of service corresponding to the City's standards. The cost per service unit is calculated for each service area based on a specific list of projects within that service area.

The second component of the cost per service unit is the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period. Chapter 395 requires that Impact Fees are assessed only to pay for growth projected to occur within the next ten years, a concept that will be covered in a later section of this report. As noted earlier, the units of demand are vehicle-miles of travel.

D. COST OF THE CIP

All of the project costs for an arterial system are eligible to be included in the Impact Fee Capital Improvements Plan. Chapter 395 of the Texas Local Government Code specifies that the allowable costs are "...including and limited to the:

1. Construction contract price;
2. Surveying and engineering fees;
3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the CIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The cost for location specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project as appropriate. Cash funds allocated from community facilities agreements have been subtracted from the corresponding City projects. In addition, based upon discussions with City of Fort Worth staff, state and county highway projects in which the City will contribute a portion of the total project cost have been included in the CIP as lump sum costs. **Table 4** is the CIP project list for each service area with planning level probable project costs. Individual project cost projections can be seen in **Appendix A**, Opinion of Project Cost Worksheets. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are recoverable through impact fees. Actual project costs are likely to change with time and are dependent on market and economic conditions that cannot be predicted. The Impact Fee CIP establishes the list of projects for which Impact Fees may be utilized. Essentially, it establishes a list of projects for which an impact fee funding program can be established. Projects not included in the Impact Fee CIP are not eligible to receive impact fee funding. The Impact Fee CIP is different from a City's construction CIP, which provides a short-term list of projects for which the City is committed to building. An Impact Fee CIP is simply an inventory of future projects needed to serve future development. The cost projections utilized in this study should not be utilized for the City's building program or construction CIP.

**Table 4.A – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area A**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
A	A-1	P6D	N. Beach St. (1)	Litsey Rd. to 1830' S. of Future Eagle	1.12	100%	\$ 7,605,000	\$ 7,605,000
	A-2	P6D	N. Beach St. (2)	Keller Haslet to SH 170	0.19	100%	\$ 1,219,000	\$ 1,219,000
	A-3, D-29	P6D	N. Beach St. (3)	SH 170 to Timberland	1.04	50%	\$ 7,037,000	\$ 3,518,500
	A-4	MA4D	Park Vista Blvd. (1)	900' S. of Henrietta Creek to SH 170	0.73	100%	\$ 3,789,000	\$ 3,789,000
	A-5	MA4D	Independence Pkwy. (1)	Litsey Rd. to Henrietta Creek	1.12	100%	\$ 5,907,000	\$ 5,907,000
	A-6	MA4D (1/2)	Independence Pkwy. (2)	Henrietta Creek to 255' N. of SH 170	0.50	100%	\$ 1,595,000	\$ 1,595,000
	A-7	P6D (1/3)	Cleveland Gibbs Rd.	N. City Limits (3670' S. of SH 114) to Litsey Rd.	0.92	100%	\$ 3,607,000	\$ 3,607,000
	A-8	P6D	Litsey Rd. (1)	190' E. of Elizabethtown to Cleveland Gibbs	0.51	100%	\$ 3,215,000	\$ 3,215,000
	A-9	MA4D	Litsey Rd. (2)	Cleveland Gibbs to 500' W. of Independence	0.96	100%	\$ 5,530,000	\$ 5,530,000
	A-10	MA4D	Litsey Rd. (3)	IH-35W to Future N. Beach St.	0.35	100%	\$ 1,727,000	\$ 1,727,000
	A-11	MA4D	Eagle Pkwy. (1)	Old Denton Rd. to 950' E. of Future Beach	0.50	100%	\$ 2,678,000	\$ 2,678,000
	A-12	MA4D	Eagle Pkwy. (2)	W. City Limits to Future Park Vista	0.54	100%	\$ 2,859,000	\$ 2,859,000
	A-13	MA4D	Henrietta Creek Rd.	700' E. of Future Park Vista to Independence	0.32	100%	\$ 1,569,000	\$ 1,569,000
	A-14	MA4D (1/2)	Westport Pkwy. (2)	IH-35W NBFR to 740' East of IH-35W NBFR	0.14	100%	\$ 748,000	\$ 748,000
	A-15	MA4D	Westport Pkwy. (3)	740' East of IH-35W NBFR to Future N. Beach St.	0.98	100%	\$ 5,447,000	\$ 5,447,000
	A-16	MA4D	Westport Pkwy. (4)	805' E. of Future N. Beach St. to Haslet Roanoke	0.46	100%	\$ 2,269,000	\$ 2,269,000
	A-17	MA4D	Westport Pkwy. (5)	770' E. of Haslet-Roanoke to SH 170 WBFR	0.37	100%	\$ 2,208,000	\$ 2,208,000
	A-18	MA4D	Westport Pkwy. (6)	SH 170 EBFR to 150' W. of Park Vista Blvd.	0.49	100%	\$ 2,390,000	\$ 2,390,000
	A-19	MA4D (1/2)	Westport Pkwy. (7)	165' E. of Park Vista to 1,450' W. of Independence	0.40	100%	\$ 1,102,000	\$ 1,102,000
	A-20, D-19	MA4D	Timberland Blvd. (1)	N. Beach St. to Cottageville Ln.	0.20	50%	\$ 959,000	\$ 479,500
	A-21, D-20	MA4D (1/2)	Timberland Blvd. (2)	Cottageville Ln. to 440' E. of Lillybrook Ln.	0.20	50%	\$ 533,000	\$ 266,500
	A-22	MA4D	Timberland Blvd. (3)	60' E. of Park Vista to E. City Limits	0.51	100%	\$ 2,032,000	\$ 2,032,000
							Service Area Project Cost Subtotal	\$ 61,760,500
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA A	\$ 61,784,277

**Table 4.AA – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area AA**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
AA	AA-1	P6D (2/3)	Intermodal Pkwy.	FM 156 to Future FM 156 Alignment	0.70	100%	\$ 3,325,000	\$ 3,325,000
	AA-2	MA4D (1/2)	Westport Pkwy. (1)	W. City Limits to 1,495' W. of IH-35W	0.16	100%	\$ 438,000	\$ 438,000
							Service Area Project Cost Subtotal	\$ 3,763,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA AA	\$ 3,786,777

**Table 4.B – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area B**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
B	B-1	M4U	Willow Springs Rd. (1)	Avondale Haslet to Blue Mound Rd.	1.48	100%	\$ 6,941,000	\$ 6,941,000
	B-2	M4U	Willow Springs Rd. (2)	Blue Mound Rd. to S. City Limits	0.93	100%	\$ 4,432,000	\$ 4,432,000
	B-3	M4U	Blue Mound Rd. (1)	Willow Springs Rd. to Wagley Robertson Rd.	0.99	100%	\$ 4,326,000	\$ 4,326,000
	B-4	M4U	Avondale Haslet Rd. (1)	N. Willow Springs Rd. to Willow Springs Rd.	0.35	100%	\$ 1,462,000	\$ 1,462,000
	B-5	M4U	Avondale Haslet Rd. (2)	230' W. of Moonlake to Sendera Ranch	0.44	100%	\$ 1,829,000	\$ 1,829,000
	B-6	MA4D	Wagley Robertson Rd. (1)	875' SE of Avondale Haslet to Blue Mound Rd.	1.83	100%	\$ 10,004,000	\$ 10,004,000
	B-7	MA4D	Wagley Robertson Rd. (2)	Blue Mound Rd. to SA C Boundary	0.53	100%	\$ 2,784,000	\$ 2,784,000
	B-8, C-1	MA4D	Wagley Robertson Rd. (3)	SA C Boundary to SA B Boundary	0.41	50%	\$ 2,006,000	\$ 1,003,000
	B-9	P6D	Sendera Ranch Blvd. (1)	Future Eagle (ETJ) to 765' N. of Rodeo Daze Dr.	1.84	100%	\$ 12,890,000	\$ 12,890,000
	B-10	P6D (1/3)	Sendera Ranch Blvd. (2)	765' N. Rodeo Daze to Diamondback	0.78	100%	\$ 1,236,000	\$ 1,236,000
	B-11	P6D (2/3)	Sendera Ranch Blvd. (3)	Diamondback to Avondale Haslet	0.97	100%	\$ 5,307,000	\$ 5,307,000
	B-12	M4U	Future E-W Minor Arterial	Future John Day to Future Sendera Ranch	2.55	100%	\$ 11,522,000	\$ 11,522,000
	B-13	MA4D	John Day Rd.	N. City Limits to S. City Limits	0.73	100%	\$ 4,205,000	\$ 4,205,000
	B-14	MA4D	Eagle Pkwy. (3)	785' W. of Sendera Ranch to E. City Limits	1.00	100%	\$ 5,323,000	\$ 5,323,000
							Service Area Project Cost Subtotal	\$ 73,264,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA B	\$ 73,287,777

**Table 4.C – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area C**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
C	B-8, C-1	MA4D	Wagley Robertson Rd. (3)	SA C Boundary to SA B Boundary	0.41	50%	\$ 2,006,000	\$ 1,003,000
	C-2	MA4D	Wagley Robertson Rd. (4)	S. SA B Boundary to 540' N of McGill Dr.	0.20	100%	\$ 983,000	\$ 983,000
	C-3	MA4D (1/2)	Wagley Robertson Rd. (5)	540' N of McGill Dr. to 125' S of Darby Ln.	0.31	100%	\$ 870,000	\$ 870,000
	C-4, E-6	MA4D	Wagley Robertson Rd. (6)	Hillwood Blvd. to 1,800' S. of Bent Oak Dr.	0.63	50%	\$ 4,110,000	\$ 2,055,000
	C-5	MA4D	Wagley Robertson Rd. (7)	700' N. of Heritage Trace to S. City Limits	0.41	100%	\$ 2,425,000	\$ 2,425,000
	C-6, E-7	MA4D	Wagley Robertson Rd. (8)	145' N of Mystic River Trail to N. City Limits of Saginaw	0.15	50%	\$ 740,000	\$ 370,000
	C-7	MA4D	Harmon Rd. (1)	Keller Hicks Rd. to Existing Harmon Rd.	0.46	100%	\$ 2,237,000	\$ 2,237,000
	C-8	MA4D	Harmon Rd. (2)	Future Harmon Alignment. to Golden Triangle Blvd.	0.24	100%	\$ 1,564,000	\$ 1,564,000
	C-9	MA4D	Harmon Rd. (3)	Golden Heights Rd. to 540' S of El Camino Dr.	0.79	100%	\$ 4,035,000	\$ 4,035,000
	C-10	MA4D (1/2)	Harmon Rd. (4)	540' S of El Camino Dr. to 475' S. of Heritage Trace	0.43	100%	\$ 1,191,000	\$ 1,191,000
	C-11	MA4D	Harmon Rd. (5)	475' S. of Heritage Trace to 1,075' N. of US 287 NBFR	0.69	100%	\$ 3,098,000	\$ 3,098,000
	C-12	MA4D	Harmon Rd. (6)	1,075' N. of US 287 NBFR to N. Tarrant Pkwy.	0.41	100%	\$ 2,015,000	\$ 2,015,000
	C-13	M4U	Keller Hicks Rd. (1)	IH-35 SBFR to ETJ	0.07	100%	\$ 292,000	\$ 292,000
	C-14	MA4D	Golden Triangle Blvd. (1)	IH-35 SBFR to Harmon Road	0.40	100%	\$ 1,988,000	\$ 1,988,000
	C-15	MA4D	Bonds Ranch Rd. (1)	25' W. of Foothill to FM 156	1.40	100%	\$ 7,729,000	\$ 7,729,000
	C-16	MA4D	Bonds Ranch Rd. (2)	FM 156 to Harmon Rd.	1.01	100%	\$ 5,784,000	\$ 5,784,000
	C-17	MA4D	Bonds Ranch Rd. (3)	Harmon Rd. to Existing Golden Heights Rd.	0.68	100%	\$ 3,973,000	\$ 3,973,000
	C-18	P6D	Heritage Trace Pkwy. (1)	Wagley Robertson Rd. to 200' W. of Drovers View	1.43	100%	\$ 11,302,000	\$ 11,302,000
	C-19	P6D (1/3)	Heritage Trace Pkwy. (2)	200' W. of Drovers View. to FM 156	0.36	100%	\$ 566,000	\$ 566,000
	C-20	P6D	Heritage Trace Pkwy. (3)	FM 156 to Harmon Rd.	1.34	100%	\$ 9,305,000	\$ 9,305,000
	C-21	P6D (1/3)	Heritage Trace Pkwy. (4)	Harmon Rd. to IH-35W SB FR	0.83	100%	\$ 1,324,000	\$ 1,324,000
	C-22	P6D	Bailey Boswell Rd. (1)	FM 156 to US 287 NB FR	1.54	100%	\$ 11,408,000	\$ 11,408,000
	C-23, F-1	P6D	Basswood Blvd. (1)	FM 156 to 125' W. of Almodale Rd.	1.07	50%	\$ 8,170,000	\$ 4,085,000
	C-24, F-2	P6D (2/3)	Basswood Blvd. (2)	125' W. of Almodale Rd. to 590' W of IH-35 SBFR	0.25	50%	\$ 1,103,000	\$ 551,500
	C-26	P6D	N. Tarrant Pkwy. (1)	US 287 NB FR to IH-35W	0.73	100%	\$ 699,963	\$ 699,963
	C-27, D-6	n/a	N. Tarrant Pkwy. (2)	At IH-35W	0.00	50%	\$ 931,818	\$ 465,909
	Service Area Project Cost Subtotal							\$ 81,319,372
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	\$ 23,777
Total Cost in SERVICE AREA C							\$ 81,343,149	\$ 81,343,149

**Table 4.D – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area D**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
D	D-1, F-4	P6D (1/3)	Basswood Blvd. (4)	670' E. of IH-35W To N. Riverside Dr.	0.62	50%	\$ 988,000	\$ 494,000
	D-2, F-5	P6D (1/3)	Basswood Blvd. (5)	N. Riverside Dr. To N. Beach St.	0.74	50%	\$ 1,176,000	\$ 588,000
	D-3, F-6	P6D (1/3)	Basswood Blvd. (6)	N. Beach St. To Park Vista Blvd.	1.30	50%	\$ 2,066,000	\$ 1,033,000
	D-4, F-7	P6D (1/3)	Basswood Blvd. (7)	Park Vista Blvd. to City Limits	0.39	50%	\$ 619,000	\$ 309,500
	D-5	M4U (1/2)	Summerfields Blvd.	Cannonwood Dr. to N. Riverside Dr.	0.18	100%	\$ 367,000	\$ 367,000
	C-27, D-6	n/a	N. Tarrant Pkwy. (2)	At IH-35W	n/a	50%	\$ 931,818	\$ 465,909
	D-7	MA4D	N. Tarrant Pkwy. (3)	IH-35W to US 377	3.51	100%	\$ 6,904,000	\$ 6,904,000
	D-8	P6D (1/3)	N. Tarrant Pkwy. (4)	IH-35W to US 377	3.51	100%	\$ 5,593,000	\$ 5,593,000
	D-9	M4U	Shiver Rd.	Stirrup Pkwy. to Park Vista Blvd.	0.48	100%	\$ 2,285,000	\$ 2,285,000
	D-10	P6D (1/3)	Heritage Trace Pkwy. (5)	N. Riverside Dr. to N. Beach	1.03	100%	\$ 1,633,000	\$ 1,633,000
	D-11	P6D (1/3)	Heritage Trace Pkwy. (6)	N. Beach St. to Park Vista Blvd.	1.13	100%	\$ 1,799,000	\$ 1,799,000
	D-12	P6D (2/3)	Heritage Trace Pkwy. (7)	Park Vista Blvd. to E. City Limits	0.95	100%	\$ 4,470,000	\$ 4,470,000
	D-13	P6D	Golden Triangle Blvd. (2)	IH-35W to 50' E. of N. Riverside Dr.	0.51	100%	\$ 3,531,000	\$ 3,531,000
	D-14	P6D	Golden Triangle Blvd. (3)	40' W. of N. Beach St. to 515' W. of Alta Vista	0.36	100%	\$ 2,381,000	\$ 2,381,000
	D-15	P6D	Golden Triangle Blvd. (4)	100' W. of Alta Vista to City Limits	1.57	100%	\$ 11,438,000	\$ 11,438,000
	D-16	M4U	Keller Hicks Rd. (2)	Timberland Blvd. to Old Denton Rd.	0.40	100%	\$ 1,626,000	\$ 1,626,000
	D-17	M4U	Keller Hicks Rd. (3)	735' W. of Rideview to Park Vista Blvd.	0.98	100%	\$ 3,979,000	\$ 3,979,000
	D-18	M4U	Keller Hicks Rd. (4)	Park Vista Rd. to E. City Limits	1.00	100%	\$ 3,997,000	\$ 3,997,000
	A-20, D-19	MA4D	Timberland Blvd. (1)	N. Beach St. to Cottageville Ln.	0.20	50%	\$ 959,000	\$ 479,500
	A-21, D-20	MA4D (1/2)	Timberland Blvd. (2)	Cottageville Ln. to 440' E. of Lillybrook Ln.	0.20	50%	\$ 533,000	\$ 266,500
	D-21	MA4D	Timberland Blvd. (4)	Hollow Valley Dr. to N. Beach St.	0.84	100%	\$ 5,170,000	\$ 5,170,000
	D-22	MA4D	N. Riverside Dr. (1)	SH 170 to 25' N. of Timberland	1.62	100%	\$ 8,547,000	\$ 8,547,000
	D-23	MA4D	N. Riverside Dr. (2)	300' S. of Timberland Blvd. to Keller Hicks Rd.	0.14	100%	\$ 667,000	\$ 667,000
	D-24	MA4D	N. Riverside Dr. (3)	Keller Hicks Rd. to Golden Triangle Blvd.	0.47	100%	\$ 3,099,000	\$ 3,099,000
	D-25	MA4D	N. Riverside Dr. (4)	Golden Triangle Blvd. to Heritage Trace Pkwy.	1.29	100%	\$ 6,735,000	\$ 6,735,000
	D-26	MA4D	N. Riverside Dr. (5)	Heritage Trace Pkwy. to N. Tarrant Pkwy.	1.23	100%	\$ 6,743,000	\$ 6,743,000
	D-27	MA4D	N. Riverside Dr. (6)	N. Tarrant Pkwy. to Summerfields	0.71	100%	\$ 3,737,000	\$ 3,737,000
	D-28	MA4D (1/2)	N. Riverside Dr. (7)	Summerfields Blvd. to Old Denton Rd.	0.29	100%	\$ 809,000	\$ 809,000
	A-3, D-29	P6D	N. Beach St. (3)	SH 170 to Timberland	1.04	50%	\$ 7,037,000	\$ 3,518,500
	D-30	P6D	N. Beach St. (4)	Future Timberland to Keller Hicks	1.03	100%	\$ 6,244,000	\$ 6,244,000
	D-31	P6D	N. Beach St. (5)	Keller Hicks to Golden Triangle	0.75	100%	\$ 5,882,000	\$ 5,882,000
	D-32	P6D (2/3)	N. Beach St. (6)	Golden Triangle Blvd to 185' N of Ray White Rd.	0.47	100%	\$ 2,112,000	\$ 2,112,000
	D-33	P6D (1/3)	N. Beach St. (7)	185' N of Ray White Rd. Vista Meadows Dr.	0.27	100%	\$ 425,000	\$ 425,000
	D-34	P6D	N. Beach St. (8)	Vista Meadows Dr. to Alta Vista Rd.	0.18	100%	\$ 1,578,000	\$ 1,578,000
	D-35	P6D	N. Beach St. (9)	Alta Vista to Heritage Trace Pkwy.	0.22	100%	\$ 1,111,000	\$ 1,111,000
	D-36	P6D	N. Beach St. (10)	Heritage Trace Pkwy. to 1185' N of N. Tarrant Pkwy.	1.23	100%	\$ 8,437,000	\$ 8,437,000
	D-37	MA4D	Park Vista Blvd. (2)	N. City Limits to Golden Triangle Blvd.	0.18	100%	\$ 739,000	\$ 739,000
	D-38	MA4D	Park Vista Blvd. (3)	Golden Triangle Blvd. to 780' S. of Wyndrook St.	0.72	100%	\$ 4,573,000	\$ 4,573,000
	D-39	MA4D	Park Vista Blvd. (4)	Wall Price to Heritage Trace / Kroger	0.35	100%	\$ 1,757,000	\$ 1,757,000
	D-40	MA4D (1/2)	Park Vista Blvd. (5)	Emmeryville Ln. to N. Tarrant Pkwy.	0.87	100%	\$ 2,972,000	\$ 2,972,000
							Service Area Project Cost Subtotal	\$ 128,494,909
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA D	\$ 128,518,686

Table 4.E – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area E

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
E	E-1	MA4D	Boat Club Rd. (1)	Bonds Ranch Rd. to Park Dr.	2.67	100%	\$ 15,342,000	\$ 15,342,000
	E-2	M4U	Old Decatur Rd. (1)	95' S. of Park Dr. to 130' S. of Millstone Trl.	0.15	100%	\$ 311,000	\$ 311,000
	E-3	M4U	Willow Springs Rd. (3)	1,715' S of Bonds Ranch to Wagley Robertson Rd.	1.43	100%	\$ 6,266,000	\$ 6,266,000
	E-4	MA4D	Heritage Trace Pkwy. (9)	Existing Boat Club Rd. to BUS 287	1.47	100%	\$ 7,620,000	\$ 7,620,000
	E-5	P6D	Heritage Trace Pkwy. (10)	BUS 287 to 300' W. of Wagley Robertson	1.25	100%	\$ 8,872,000	\$ 8,872,000
	C-4, E-6	MA4D	Wagley Robertson Rd. (6)	Hillwood Blvd. to 1,800' S. of Bent Oak Dr.	0.63	50%	\$ 4,110,000	\$ 2,055,000
	C-6, E-7	MA4D	Wagley Robertson Rd. (8)	145' N of Mystic River Trial to N. City Limits of Saginaw	0.15	50%	\$ 740,000	\$ 370,000
	E-8	M4U	Park Dr. (1)	Boat Club Rd. to Park Dr. (Right-Angle Turn)	1.01	100%	\$ 4,612,000	\$ 4,612,000
	E-9	M4U	Park Dr. (2)	Park Dr. to 515' E. of Park Dr.	0.10	100%	\$ 400,000	\$ 400,000
	E-10	MA4D (1/2)	Bailey Boswell Rd. (2)	Boat Club Rd to 700' W of Bowman Roberts Rd	0.38	100%	\$ 1,065,000	\$ 1,065,000
	E-11	MA4D	Bailey Boswell Rd. (3)	85' W of Bowman Roberts Rd to 85' W of Old Decatur	1.52	100%	\$ 7,974,000	\$ 7,974,000
	E-12, G-1	M4U	WJ Boaz Rd.	Boat Club to 130' W of Old Decatur	2.03	50%	\$ 9,748,000	\$ 4,874,000
	E-13	M4U	Robertson Rd.	665' W of Future Lake Country to Boat Club Rd.	0.87	100%	\$ 3,805,000	\$ 3,805,000
	E-14	M4U	Lake Country Dr. (1)	155' S. of Waterfront to Robertson Rd.	0.84	100%	\$ 3,665,000	\$ 3,665,000
Service Area Project Cost Subtotal							\$ 67,231,000	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	
Total Cost in SERVICE AREA E							\$ 67,254,777	

Table 4.F – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area F

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
F	C-23, F-1	P6D	Basswood Blvd. (1)	FM 156 to 125' W. of Almondale Rd.	1.07	50%	\$ 8,170,000	\$ 4,085,000
	C-24, F-2	P6D (2/3)	Basswood Blvd. (2)	125' W. of Almodale Rd. to 590' W of IH-35 SBFR	0.25	50%	\$ 1,103,000	\$ 551,500
	C-25, F-3	P6D (1/3)	Basswood Blvd. (3)	590' W of IH-35 SBFR to 375' W. of IH-35 SBFR	0.04	50%	\$ 66,000	\$ 33,000
	D-1, F-4	P6D (1/3)	Basswood Blvd. (4)	670' E. of IH-35W To N. Riverside Dr.	0.62	50%	\$ 988,000	\$ 494,000
	D-2, F-5	P6D (1/3)	Basswood Blvd. (5)	N. Riverside Dr. To N. Beach St.	0.74	50%	\$ 1,176,000	\$ 588,000
	D-3, F-6	P6D (1/3)	Basswood Blvd. (6)	N. Beach St. To Park Vista Blvd.	1.30	50%	\$ 2,066,000	\$ 1,033,000
	D-4, F-7	P6D (1/3)	Basswood Blvd. (7)	Park Vista Blvd. to City Limits	0.39	50%	\$ 619,000	\$ 309,500
	F-8	MA4D	Robert W. Downing Dr. (1)	Basswood to 290' N. of Lou Menk	0.36	100%	\$ 1,746,000	\$ 1,746,000
	F-9	MA4D	Western Center Blvd. (1)	City Limits to 160' W. of Overland St.	0.07	100%	\$ 369,000	\$ 369,000
	F-10	MA4D	Cantrell Sansom Rd. (1)	City Limits to 145' W. of Maiden Ln.	0.21	100%	\$ 1,438,000	\$ 1,438,000
	F-11	MA4D (1/2)	Cantrell Sansom Rd. (2)	145' W. of Maiden Ln. to Mark IV Pkwy.	0.49	100%	\$ 1,355,000	\$ 1,355,000
	F-12	MA4D	Cantrell Sansom Rd. (3)	Mark IV Pkwy. to Old Denton Rd.	0.30	100%	\$ 1,518,000	\$ 1,518,000
	F-13	MA4D	Cantrell Sansom Rd. (4)	Old Denton Rd. to IH-35W SBFR	0.18	100%	\$ 866,000	\$ 866,000
	F-14	M4U (1/2)	Old Denton Rd. (1)	1,095' N. of Caldon Way to Cantrell Sansom Rd.	0.58	100%	\$ 1,412,000	\$ 1,412,000
	F-15	MA4D (1/2)	Mark IV Pkwy. (1)	Cantrell Sansom to IH-820 WBFR	0.52	100%	\$ 1,652,000	\$ 1,652,000
	F-16	M4U	Northeast Pkwy.	Existing Dead End to Mark IV Pkwy.	0.20	100%	\$ 1,256,000	\$ 1,256,000
	F-17	M4U	Lone Star Blvd.	Existing Dead End to 780' N. of Meacham Blvd.	0.68	100%	\$ 3,009,000	\$ 3,009,000
	F-18	M4U	Great Southwest Pwky.	Lone Star Blvd. to Existing Dead End	0.10	100%	\$ 428,000	\$ 428,000
	F-19	P6D (1/3)O	Meacham Blvd. (1)	BUS 287 to Golden Spike Dr.	0.21	100%	\$ 5,072,000	\$ 5,072,000
	F-20	P6D (1/3)O	Meacham Blvd. (2)	Gold Spike Dr. to 1,030' W FM 156	0.40	100%	\$ 840,000	\$ 840,000
	F-21	P6D (1/2)	Meacham Blvd. (3)	320' E. of FM 156 to Bridge over RR tracks	0.45	100%	\$ 1,617,000	\$ 1,617,000
	F-22	P6D (1/3)O	Meacham Blvd. (4)	Bridge over RR tracks	0.20	100%	\$ 5,072,000	\$ 5,072,000
	F-23	P6D (1/3)O	Meacham Blvd. (5)	RR Bridge to 80' E. of Future Lone Star	0.05	100%	\$ 137,000	\$ 137,000
	F-24	P6D (1/2)	Meacham Blvd. (6)	Deen Rd. to 630' W. of Gemini Pl.	0.50	100%	\$ 1,999,000	\$ 1,999,000
	F-25	P6D (1/3)	Meacham Blvd. (7)	Little Fossil Creek Bridge to N. Beach St.	0.89	100%	\$ 1,421,000	\$ 1,421,000
	F-26	M4U	N. Sylvania Ave.	Melody Hills to Quorum Dr.	0.32	100%	\$ 1,344,000	\$ 1,344,000
	F-27	P6D (1/3)	N. Beach St. (9)	Fossil Creek Blvd. to Sandshell Dr.	0.56	100%	\$ 897,000	\$ 897,000
	F-28	MA4D	N. Riverside Bridge	Stone Creek Pkwy to Riverside	0.06	100%	\$ 5,320,000	\$ 5,320,000
	F-29	MA4D	Long Bridge	375' W. of Railroad to Half Moon	0.31	100%	\$ 4,942,000	\$ 4,942,000
Service Area Project Cost Subtotal							\$ 50,804,000	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	
Total Cost in SERVICE AREA F							\$ 50,827,777	

**Table 4.G – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area G**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
G	E-12, G-1	M4U	WJ Boaz Rd.	Boat Club to 130' W of Old Decatur	2.03	50%	\$ 9,748,000	\$ 4,874,000
	G-2	M4U	Cromwell Marine Creek (1)	Ten Mile Bridge to Northern City Limits	0.73	100%	\$ 3,222,000	\$ 3,222,000
	G-3	MA4D	Cromwell Marine Creek (2)	Boat Club Rd. to Stonewater Bend Trl.	1.63	100%	\$ 9,086,000	\$ 9,086,000
	G-4	MA4D	Cromwell Marine Creek (3)	Stone Water Bend to Marine Creek Pkwy	0.58	100%	\$ 3,454,000	\$ 3,454,000
	G-5	MA4D	Longhorn Rd. (1)	Marine Creek Pkwy. to Old Decatur Rd.	0.24	100%	\$ 1,193,000	\$ 1,193,000
	G-6	M4U	Ten Mile Bridge Rd. (1)	Cromwell Marine Creek to Boat Club Rd.	1.08	100%	\$ 4,912,000	\$ 4,912,000
	G-7	M4U	Ten Mile Bridge Rd. (2)	Boat Club Rd. to Bowman Roberts Rd.	0.55	100%	\$ 2,453,000	\$ 2,453,000
	G-8	M4U	Ten Mile Bridge Rd. (3)	Westgate Dr. to Huffines Blvd.	0.41	100%	\$ 1,584,000	\$ 1,584,000
	G-9	MA4D	Marine Creek Pkwy. (1)	440' S of McLeroy Blvd. to Ex.Cromwell Marine Crk.	0.40	100%	\$ 1,964,000	\$ 1,964,000
	G-10	MA4D	Marine Creek Pkwy. (2)	Ex. Cromwell Marine Creek to 220' N. of NW College	1.13	100%	\$ 5,991,000	\$ 5,991,000
	G-11	MA4D	Marine Creek Pkwy. (3)	Angle Ave. to 120' N. of Azle Ave.	0.95	100%	\$ 5,293,000	\$ 5,293,000
	G-12	M4U	Old Decatur Rd. (2)	Future Marine Creek Pkwy. to Ex. Old Decatur Rd.	0.08	100%	\$ 323,000	\$ 323,000
	G-13	M4U (1/2)	Old Decatur Rd. (3)	River Rock Blvd. to IH-820 WBFR	0.29	100%	\$ 296,000	\$ 296,000
	G-14	M4U	Old Decatur Rd. (4)	IH-820 EBFR to Angle Ave.	0.81	100%	\$ 3,584,000	\$ 3,584,000
	G-15	M4U	Huffines Blvd. (1)	Cromwell Marine Creek to Texas Shiner Dr.	0.62	100%	\$ 3,165,000	\$ 3,165,000
	G-16	M4U (1/2)	Huffines Blvd. (2)	Texas Shiner Dr. to Sea Bass Dr.	0.34	100%	\$ 703,000	\$ 703,000
	G-17	M4U	Huffines Branch	Huffines Blvd. to Cromwell Marine Creek	0.65	100%	\$ 2,869,000	\$ 2,869,000
	G-18	M4U	Hodgkins Rd.	Ten Mile Bridge to 110' S. of Hatch Rd.	1.03	100%	\$ 4,512,000	\$ 4,512,000
	G-19	M4U	Delfin St.	135' S. of Mantis St. to Future Marine Creek Pkwy.	0.70	100%	\$ 3,067,000	\$ 3,067,000
Service Area Project Cost Subtotal							\$ 62,545,000	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	
Total Cost in SERVICE AREA G							\$ 62,568,777	

**Table 4.L – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area L**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
L	L-1	MA4D	E. 1st St. (1)	N. Beach St. to 2,635 E. of Streams and Valley Circle	1.18	100%	\$ 7,042,000	\$ 7,042,000
	L-2	MA4D (1/2)	E. 1st St. (2)	2,635 E. of S and V Circle to 860' W. of Oakland	0.35	100%	\$ 964,000	\$ 964,000
	L-3	MA4D (1/2)	Randol Mill Rd. (1)	600' E of Lake Havasu To 515' W. of Woodhaven	0.77	100%	\$ 2,338,000	\$ 2,338,000
Service Area Project Cost Subtotal							\$ 10,344,000	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	
Total Cost in SERVICE AREA L							\$ 10,367,777	

Table 4.M – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area M

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
M	M-1	MA4D	Precinct Line Rd. (1)	Trinity Railway Express to Trinity Blvd.	0.34	100%	\$ 2,105,000	\$ 2,105,000
	M-2	MA4D	Precinct Line Rd. (2)	Trinity Blvd. to Ex. Randol Mill Rd.	1.75	100%	\$ 10,642,000	\$ 10,642,000
	M-3	M4U	Norwood Dr. (1)	65' S. of SH 10 to 500' S. of RR	0.31	100%	\$ 1,307,000	\$ 1,307,000
	M-4	M4U (1/2)	Norwood Dr. (2)	500' S. of RR to Trinity Blvd.	0.14	100%	\$ 296,000	\$ 296,000
	M-5, N-5	MA4D	Raider Dr.	260' S. of Tube to Trinity Blvd.	0.21	50%	\$ 1,065,000	\$ 532,500
	M-6	M4U	Sandy Ln. (1)	Randol Mill Rd. to 275' N. of Winters	0.08	100%	\$ 330,000	\$ 330,000
	M-7	M4U	Sandy Ln. (2)	275' N. of Winters to John T. White Rd.	0.97	100%	\$ 4,224,000	\$ 4,224,000
	M-8	MA4D	Sandy Ln. (3)	John T. White Rd. to IH-30	0.45	100%	\$ 2,220,000	\$ 2,220,000
	M-9	MA4D	Cooks Ln. (1)	Existing Randol Mill to Existing Cooks Ln.	0.65	100%	\$ 3,377,000	\$ 3,377,000
	M-10	MA4D	Cooks Ln. (2)	Existing Cooks Ln. to 135' N. of Hidden Gate Ct.	0.33	100%	\$ 1,168,000	\$ 1,168,000
	M-11	MA4D (1/2)	Cooks Ln. (3)	135' N of Hidden Gate to 340' N. of John T. White	0.26	100%	\$ 719,000	\$ 719,000
	M-12	MA4D	Randol Mill Rd. (2)	Stoneview Circle to 135' W. of Flyaway Ln.	0.79	100%	\$ 4,110,000	\$ 4,110,000
	M-13	MA4D (1/2)	Randol Mill Rd. (3)	135' W. of Flyaway Ln. to 45' W. of Goldeneye Ln.	0.11	100%	\$ 295,000	\$ 295,000
	M-14	MA4D	Randol Mill Rd. (4)	45' W. of Goldeneye Ln. to Cooks Ln.	0.61	100%	\$ 3,241,000	\$ 3,241,000
	M-15	MA4D	Randol Mill Rd. (5)	Cooks Ln. to Existing Randol Mill Rd.	0.79	100%	\$ 4,063,000	\$ 4,063,000
	M-16	MA4D	Randol Mill Rd. (6)	Existing Randol Mill to Racquet Club Dr.	0.70	100%	\$ 3,686,000	\$ 3,686,000
	M-17	M4U	Randol Mill Rd. (7)	John T. White to 165' S. of Winding Ln.	0.19	100%	\$ 794,000	\$ 794,000
	M-18	M4U (1/2)	Randol Mill Bridge	Bridge over IH-30	0.07	100%	\$ 1,449,000	\$ 1,449,000
	M-19	M4U	Anderson Blvd. (1)	1310' W. of Williams to 1050' W. of Williams	0.05	100%	\$ 203,000	\$ 203,000
	M-20	M4U (1/2)	Anderson Blvd. (2)	1050' W. of Williams to Sandy Ln.	0.48	100%	\$ 1,001,000	\$ 1,001,000
	M-21	M4U	House Anderson Rd. (1)	Northern City Limits to Southern City Limits	0.69	100%	\$ 3,056,000	\$ 3,056,000
	M-22	P6D	Trinity Blvd. (1)	IH-820 to Precinct Line Rd.	1.77	100%	\$ 12,173,000	\$ 12,173,000
	M-23	P6D	Trinity Blvd. (2)	Precinct Line Rd. to Norwood Dr.	0.86	100%	\$ 6,582,000	\$ 6,582,000
	M-24	P6D	Trinity Blvd. (3)	Norwood Dr. to Bell Helicopter W. Entry	0.25	100%	\$ 2,047,000	\$ 2,047,000
	M-25	P6D (1/3)O	Trinity Blvd. (4)	Bell Helicopter W. Entry to 1,435' W. of Bell Spur	0.22	100%	\$ 479,000	\$ 479,000
	M-26	P6D	Trinity Blvd. (5)	1,435' W. of Bell Spur to Bell Spur	0.27	100%	\$ 1,780,000	\$ 1,780,000
	M-27	P6D	Trinity Blvd. (6)	Bell Spur to 1,110' W. of Greenbelt	0.56	100%	\$ 4,245,000	\$ 4,245,000
	M-28	P6D	Trinity Blvd. (7)	1110' W. of Greenbelt to Raider	0.70	100%	\$ 1,267,000	\$ 1,267,000
							Service Area Project Cost Subtotal	\$ 77,391,500
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA M	\$ 77,415,277

Table 4.N – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area N

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
N	N-1	M4U	S. Pipeline Rd. (1)	Raider Dr. to House Anderson Rd	0.69	100%	\$ 3,049,000	\$ 3,049,000
	N-2	M4U	S. Pipeline Rd. (2)	House Anderson Rd. to E. City Limits	0.33	100%	\$ 1,363,000	\$ 1,363,000
	N-3	M4U	S. Pipeline Rd. (3)	W. City Limits to FM 157	0.51	100%	\$ 2,316,000	\$ 2,316,000
	N-4	M4U	S. Pipeline Rd. (4)	FM 157 to American Blvd.	1.69	100%	\$ 7,443,000	\$ 7,443,000
	M-5, N-5	MA4D	Raider Dr.	260' S. of Tube to Trinity Blvd.	0.21	50%	\$ 1,065,000	\$ 532,500
	N-6	MA4D	House Anderson Rd. (2)	S. Pipeline to Trinity Blvd.	0.27	100%	\$ 1,344,000	\$ 1,344,000
	N-7	M4U	House Anderson Rd. (3)	Trinity Blvd. to 120' S. of Trinity Railway Express	0.53	100%	\$ 2,419,000	\$ 2,419,000
	N-8	P6D	Euleess South Main St (1)	S. Pipeline Rd. to Trinity Blvd.	0.19	100%	\$ 1,240,000	\$ 1,240,000
	N-9	P6D	Euleess South Main St. (2)	Trinity Blvd. to 70' S. of Trinity Railway Express	0.50	100%	\$ 3,404,000	\$ 3,404,000
	N-10	MA4D	FAA Blvd.	SH 360 NBFR to Amon Carter	0.66	100%	\$ 3,424,000	\$ 3,424,000
	N-11	MA4D	Centreport Dr.	Future FAA to Existing Centreport Dead End	0.60	100%	\$ 3,142,000	\$ 3,142,000
	N-12	MA4D	Sovereign Rd.	Future Centreport to Existing Sovereign Dead End	0.24	100%	\$ 1,158,000	\$ 1,158,000
	N-13	P6D	Trinity Blvd. (8)	Raider to FM 157	2.39	100%	\$ 5,050,220	\$ 5,050,220
	N-14	P6D (2/3)	Trinity Blvd. (9)	300' N Trinity Railway Express to E. City Limits	0.59	100%	\$ 2,855,000	\$ 2,855,000
							Service Area Project Cost Subtotal	\$ 38,739,720
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA N	\$ 38,763,497

Table 4.O – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area O

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
O	O-1	M4U	Handley Dr. (1)	Meadowbrook to 160' N. of Church	0.80	100%	\$ 3,544,000	\$ 3,544,000
	O-2	MA4D	Sandy Ln. (4)	IH-30 to Brentwood Stair	0.36	100%	\$ 1,795,000	\$ 1,795,000
	O-3	MA4D	Sandy Ln. (5)	Brentwood Stair to Meadowbrook	0.61	50%	\$ 3,611,000	\$ 1,805,500
	O-4	MA4D	Sandy Ln. (6)	Meadowbrook to Lancaster	1.18	100%	\$ 6,260,000	\$ 6,260,000
	O-5	MA4D	Cooks Ln. (4)	Brentwood Stair to 160' S. of Whitney	0.78	100%	\$ 4,186,000	\$ 4,186,000
	O-6	MA4D (1/2)	Cooks Ln. (5)	160' S. of Whitney to 115' N. of N. Maegen Cir	0.16	100%	\$ 423,000	\$ 423,000
	O-7	MA4D	Cooks Ln. (6)	115' N. of N. Maegen Cir. to S. Maegen Cir.	0.07	100%	\$ 354,000	\$ 354,000
	O-8	MA4D	Cooks Ln. (7)	S. Maegen Cir. To Dottie Lynn	0.27	100%	\$ 1,165,000	\$ 1,165,000
Service Area Project Cost Subtotal							\$ 19,532,500	\$ 19,532,500
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	\$ 23,777
Total Cost in SERVICE AREA O							\$ 19,556,277	\$ 19,556,277

Table 4.S – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area S

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
S	S-1	MA4D	Silver Creek Rd. (1)	W. City Limits to Existing Silver Creek	1.22	100%	\$ 6,799,000	\$ 6,799,000
	S-2	MA4D	Silver Creek Rd. (2)	1,150' N. of Verna to 260' W. of Loop 820 SBFR	1.10	100%	\$ 5,864,000	\$ 5,864,000
	S-3	M4U	Las Vegas Trail (1)	Future Silver Creek to Existing Las Vegas	1.50	100%	\$ 6,798,000	\$ 6,798,000
	S-4	M4U	Las Vegas Trail (2)	Existing Las Vegas to Loop 820 W SBFR	0.24	100%	\$ 917,000	\$ 917,000
	S-5	MA4D	Academy Blvd. (1)	Silver Creek Rd. to 130' N. of Sparrow Hawk	0.54	100%	\$ 2,831,000	\$ 2,831,000
	S-6	MA4D	Academy Blvd. (2) (Longvue)	75' S. of Caravelle to Amber Ridge	0.38	100%	\$ 1,876,000	\$ 1,876,000
	S-7	P6D	White Settlement Rd. (1)	West City Limits to Silver Ridge	1.14	100%	\$ 9,034,000	\$ 9,034,000
	S-8	P6D	White Settlement Rd. (2)	Silver Ridge to 230' W. of Chapel Creek	0.87	100%	\$ 5,900,000	\$ 5,900,000
	S-9	P6D (1/3)	Clifford St. (1)	230' W. of Chapel Creek to Academy	0.55	100%	\$ 873,000	\$ 873,000
	S-10	P6D (1/3)	Clifford St. (2)	Academy to 585' E. of White Settlement	0.62	100%	\$ 980,000	\$ 980,000
	S-11	M4U	Silver Ridge Blvd. (1)	Existing Silver Ridge to Existing American Flyer	0.51	100%	\$ 2,291,000	\$ 2,291,000
	S-12	MA4D	Westpoint Blvd. (1)	W. City Limits to Basset Lock	0.67	100%	\$ 3,465,000	\$ 3,465,000
	S-13	MA4D (1/2)	Westpoint Blvd. (2)	Basset Lock to American Flyer	0.30	100%	\$ 767,000	\$ 767,000
	S-14	MA4D	Westpoint Blvd. (3)	Academy to IH-820 SBFR	0.69	100%	\$ 3,611,000	\$ 3,611,000
	S-15	M4U	N-S Minor Arterial (1)	Future Westpoint to Old Weatherford	0.92	100%	\$ 3,992,000	\$ 3,992,000
	S-16	M4U	Old Weatherford Rd. (1)	W. City Limits to Chapel Creek	1.17	100%	\$ 6,087,000	\$ 6,087,000
	S-17	M4U (1/2)	Amber Ridge (1)	Chapel Creek to Wind Star Way	0.26	100%	\$ 548,000	\$ 548,000
	S-18	M4U	Amber Ridge (2)	Existing Amber Ridge Dead End to Alameda	0.96	100%	\$ 4,151,000	\$ 4,151,000
	S-19	M4U	Alameda Rd. (1)	Academy to Sterlinghill	0.17	100%	\$ 724,000	\$ 724,000
	S-20	M4U	Chapin Rd (1)	W. City Limits to Wakecrest	0.80	100%	\$ 3,891,000	\$ 3,891,000
	S-21	M4U	Chapin Rd. (2)	Wakecrest to Chapel Creek Blvd.	0.41	100%	\$ 2,089,000	\$ 2,089,000
	S-22	MA4D	Chapel Creek Blvd. (1)	Chapin Rd. to IH-30 WBFR	0.13	100%	\$ 669,000	\$ 669,000
	S-23	MA4D	Longvue Rd. (1)	Future Amber Ridge to IH-30 WBFR	0.48	100%	\$ 2,367,000	\$ 2,367,000
Service Area Project Cost Subtotal							\$ 76,524,000	\$ 76,524,000
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	\$ 23,777
Total Cost in SERVICE AREA S							\$ 76,547,777	\$ 76,547,777

Table 4.T – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area T

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
T	T-1	MA4D	Chapel Creek Blvd. (2)	Camp Bowie West to Longvue Rd.	0.61	100%	\$ 3,174,000	\$ 3,174,000
	T-2	MA4D	Longvue Rd. (2)	I-30 EBFR to Camp Bowie West	0.48	100%	\$ 2,407,000	\$ 2,407,000
	T-3	MA4D	Longvue Rd. (3)	Camp Bowie West to 330' N. of Chapin Rd.	0.42	100%	\$ 2,101,000	\$ 2,101,000
	T-4	M4U	Alemeda Rd. (2)	Camp Bowie West to Chapin Rd.	0.44	100%	\$ 1,836,000	\$ 1,836,000
	T-5	M4U	Chapin Rd (3)	Longvue Rd. to Chapin Curve	0.48	100%	\$ 1,998,000	\$ 1,998,000
	T-6	M4U	Chapin Rd. (4)	Chapin Curve to Alemeda	0.21	100%	\$ 863,000	\$ 863,000
	T-7	M4U	Chapin Rd. (5)	Alemeda to IH-820 NBFR	0.30	100%	\$ 1,261,000	\$ 1,261,000
							Service Area Project Cost Subtotal	\$ 13,640,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA T	\$ 13,663,777

Table 4.U – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area U

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
U	U-1	M4U	Old Weatherford Rd. (2)	W. City Limits to ~2,085' W. of Future Cattle Baron	0.32	100%	\$ 1,323,000	\$ 1,323,000
	U-2	M4U	Old Weatherford Rd. (3)	~2,085' W. of Future Cattle Baron to Future Cattle Baron	0.39	100%	\$ 1,619,000	\$ 1,619,000
	U-3	P6D	Cattle Baron Rd. (1)	North City Limits to Future Weatherford Rd.	0.52	100%	\$ 3,970,000	\$ 3,970,000
	U-4	P6D	Cattle Baron Rd. (2)	Future Old Weatherford to IH-30 EBFR	1.57	100%	\$ 11,184,000	\$ 11,184,000
	U-5	P6D	Cattle Baron Rd. (3)	IH-30 EBFR to Future Aledo Iona	2.85	100%	\$ 20,220,000	\$ 20,220,000
	U-6	M4U	Future E-W Minor Arterial (1)	Future Cattle Baron to Future Live Oak	1.18	100%	\$ 5,265,000	\$ 5,265,000
	U-7	M4U	Live Oak Place (1)	W. City Limits to Future Cattle Baron	0.22	100%	\$ 2,551,000	\$ 2,551,000
	U-8	M4U	Live Oak Place (2)	Future Cattle Baron to IH-20	2.18	100%	\$ 10,175,000	\$ 10,175,000
	U-9	M4U	Live Oak Place (3)	IH-20 to ETJ (3,365' S. of IH-30 EBFR)	1.04	100%	\$ 4,694,000	\$ 4,694,000
	U-10	M4U	Live Oak Place (4)	IH-30 WBFR to N. City Limits (Mary's Creek)	1.07	100%	\$ 4,795,000	\$ 4,795,000
	U-11	MA4D	Future Major Arterial (1)	W. City Limits to Future Cattle Baron	0.74	100%	\$ 3,812,000	\$ 3,812,000
	U-12	MA4D	Future Major Arterial (2)	Future Cattle Baron to Future Live Oak	1.59	100%	\$ 9,220,000	\$ 9,220,000
	U-13	MA4D	Future Major Arterial (3)	Future Live Oak to RR tracks	0.68	100%	\$ 3,973,000	\$ 3,973,000
	U-14	M4U	Future IH-30 Parallel Arterial	W. City Limits to IH-30/20 Intersection	1.31	100%	\$ 6,192,000	\$ 6,192,000
	U-15	M4U	Future N-S Minor Arterial (1)	S. City Limits to IH-30 WBFR	0.66	100%	\$ 2,935,000	\$ 2,935,000
	U-16	M4U	Future N-S Minor Arterial (2)	S. City Limits to Old Weatherford	0.40	100%	\$ 1,643,000	\$ 1,643,000
	U-17	MA4D	Westpoint Blvd. (4)	W. City Limits to E. City Limits	0.53	100%	\$ 2,799,000	\$ 2,799,000
							Service Area Project Cost Subtotal	\$ 96,370,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA U	\$ 96,393,777

Table 4.W – 10-Year Capital Improvements Plan for Transportation Impact Fees with Conceptual Level Cost Opinions – Service Area W

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
W	W-1, R-x	P6D (1/3)	Bryant Irvin Rd. (1)	UP RR to SA R Boundary	0.96	50%	\$ 2,250,000	\$ 1,125,000
	W-2	P6D (1/3)	Bryant Irvin Rd. (2)	SA R Boundary to Bellaire Dr.	0.13	100%	\$ 204,000	\$ 204,000
	W-3	M4U	Harris Pkwy.	Dutch Branch to Dirks	0.48	100%	\$ 1,210,800	\$ 1,210,800
	W-4	M4U	Dutch Branch Rd.	Oakmont Trail to 45' W. of RR	0.20	100%	\$ 526,000	\$ 526,000
	W-5	M4U	Lakeside Dr.	Trinity River to E. City Limits	1.21	100%	\$ 5,445,000	\$ 5,445,000
	W-6, Y-1	P6D	Dirks Rd.	Railroad to Granbury Rd.	0.24	50%	\$ 1,152,232	\$ 576,116
							Service Area Project Cost Subtotal	\$ 9,086,916
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 23,777
							Total Cost in SERVICE AREA W	\$ 9,110,693

**Table 4.X – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area X**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
X	X-1, Q-x	P6D (1/3)	Seminary Dr. (1)	Carter Park to Campus Dr.	0.62	50%	\$ 987,000	\$ 493,500
	X-2, Q-x	P6D (1/3)	Seminary Dr. (2)	Campus Dr. to Old Mansfield Rd.	0.48	50%	\$ 769,000	\$ 384,500
	X-3	M4U	Oak Grove Rd. (1)	Oak Grove Ln. to Oak Grove Rd / Campus	0.32	100%	\$ 1,327,000	\$ 1,327,000
	X-4	MA4D	Altamesa Blvd. (1)	Oak Grove Rd. to Wichita St.	1.30	100%	\$ 7,196,000	\$ 7,196,000
	X-5	MA4D	Altamesa Blvd. (2)	Lana to Forest Hill Dr.	0.58	100%	\$ 3,040,000	\$ 3,040,000
	X-6	M4U	Joel East Rd.	Oak Grove Rd. to Wichita St.	1.10	100%	\$ 4,972,000	\$ 4,972,000
	X-7, Z-1	P6D	Everman Pkwy. (1)	Butterwick to 140' W. of Ballwood St.	0.66	50%	\$ 5,297,000	\$ 2,648,500
	X-8, Z-2	P6D (2/3)	Everman Pkwy. (2)	140' W. of Ballwood St. to 240' E. of Sheridan Rd.	0.18	50%	\$ 763,000	\$ 381,500
	X-9, Z-3	P6D (1/3)	Everman Pkwy. (3)	240' E. of Sheridan to IH-35W SBFR	0.19	50%	\$ 301,000	\$ 150,500
	X-10	MA4D	Hemphill St. (1)	645' S. of Alta Mesa to Sycamore School Rd.	0.85	100%	\$ 4,774,000	\$ 4,774,000
	X-11	MA4D (1/2)	Hemphill St. (2)	360' S. of Sycamore School to Rosedale Springs	0.41	100%	\$ 1,542,000	\$ 1,542,000
	X-12	MA4D	Hemphill St. (3)	Rosedale Springs to Everman Pkwy.	0.15	100%	\$ 755,000	\$ 755,000
	X-13	P6D (2/3)	Oak Grove Rd. (1)	Alta Mesa to RR tracks	0.19	100%	\$ 861,000	\$ 861,000
	X-14	P6D	Oak Grove Rd. (2)	RR tracks to Joel East	0.33	100%	\$ 2,183,000	\$ 2,183,000
	X-15	P6D	Oak Grove Rd. (3)	Joel East to Everman Pkwy.	1.25	100%	\$ 8,832,000	\$ 8,832,000
	X-16	MA4D	Wichita St. (1)	350' N. of Alta Mesa to 280' N. of RR tracks	0.38	100%	\$ 1,870,000	\$ 1,870,000
	X-17	MA4D	Forest Hill Dr. (1)	Lon Stevenson to S. City Limits	0.72	100%	\$ 3,494,000	\$ 3,494,000
	X-18	M4U	Anglin Dr.	Lon Stevenson to Enon Ave.	1.00	100%	\$ 4,572,000	\$ 4,572,000
	X-19	M4U	Dick Price Rd.	40' S. of RR tracks to S. City Limits	0.48	100%	\$ 2,006,000	\$ 2,006,000
	X-20	M4U	Enon Ave.	W. City Limits to Anglin	0.50	100%	\$ 2,081,000	\$ 2,081,000
Service Area Project Cost Subtotal							\$ 53,563,500	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	
Total Cost in SERVICE AREA X							\$ 53,587,277	

**Table 4.Y – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area Y**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
Y	W-6, Y-1	P6D	Dirks Rd.	Railroad to Granbury Rd.	0.24	50%	\$ 1,152,232	\$ 576,116
	Y-2	MA4D	Columbus Trl. (1)	Future N-S Arterial to Old Granbury	0.15	100%	\$ 755,000	\$ 755,000
	Y-3	MA4D	Columbus Trl. (2)	W. City Limits to Future SH 121	0.30	100%	\$ 1,499,000	\$ 1,499,000
	Y-4	P6D (1/3)	Sycamore School Rd. (1)	Future 121 to Summer Creek	0.36	100%	\$ 567,000	\$ 567,000
	Y-5	P6D	Sycamore School Rd. (2)	Summer Creek to 145' W. of Creek Meadow	0.10	100%	\$ 647,000	\$ 647,000
	Y-6	P6D (1/3)	Sycamore School Rd. (3)	145' W. of Creek Meadow to Cleburne Rd. W.	1.65	100%	\$ 2,632,000	\$ 2,632,000
	Y-7	MA4D (1/2)	Risinger Rd. (1)	635' E. of McCart to Existing Risinger Dead End	0.69	100%	\$ 1,918,000	\$ 1,918,000
	Y-8	MA4D	Risinger Rd. (2)	Existing Risinger Dead End to FM 731	0.45	100%	\$ 2,233,000	\$ 2,233,000
	Y-9	MA4D	McPherson Blvd. (1)	W. City Limits to Future SH 121	0.93	100%	\$ 5,158,000	\$ 5,158,000
	Y-10	P6D	McPherson Blvd. (2)	Future SH 121 to 250' W. of Willow Branch	0.70	100%	\$ 5,147,000	\$ 5,147,000
	Y-11	P6D (1/3)	McPherson Blvd. (3)	250' W. of Willow Branch to Cleburne Rd.	0.74	100%	\$ 1,176,000	\$ 1,176,000
	Y-12	P6D	McPherson Blvd. (4)	Cleburne Rd. to East City Limits	0.76	100%	\$ 5,530,000	\$ 5,530,000
	Y-13	M4U	Stewart Feltz Rd. (1)	Old Granbury Rd. to Stewart Feltz SB Bend	0.75	100%	\$ 3,320,000	\$ 3,320,000
	Y-14	M4U	Stewart Feltz Rd. (2)	Stewart Feltz SB Bend to Future Summer Creek	0.55	100%	\$ 2,435,000	\$ 2,435,000
	Y-15	MA4D	Cleburne Crowley Rd. (1)	Old Grabury Rd to Stewart Feltz	0.88	100%	\$ 4,488,000	\$ 4,488,000
	Y-16	MA4D	Cleburne Crowley Rd. (2)	Stewart Feltz to E. City Limits	0.52	100%	\$ 2,791,000	\$ 2,791,000
	Y-17	MA4D	Bryant Irvin Rd. (3)	270' N. of Columbus Trl. To McPherson Blvd.	2.27	100%	\$ 12,763,000	\$ 12,763,000
	Y-18	MA4D	James W. Schell Pkwy. (1)	Sycamore School Rd. to McPherson Blvd.	1.59	100%	\$ 9,248,000	\$ 9,248,000
	Y-19	M4U	James W. Schell Pkwy. (1)	McPherson Blvd. to Stewart Feltz	0.57	100%	\$ 2,551,000	\$ 2,551,000
	Y-20	M4U	Old Granbury Rd.	Stewart Feltz to S/W City Limits	0.89	100%	\$ 4,306,000	\$ 4,306,000
	Y-21	MA4D	Granbury Rd. (1)	350' S. of Altamesa to 630' N. of Appalachian Way	0.25	100%	\$ 1,228,000	\$ 1,228,000
	Y-22	MA4D (1/2)	Granbury Rd. (2)	215' S. of Summer Meadows to Columbus Trail	0.49	100%	\$ 1,293,000	\$ 1,293,000
	Y-23	MA4D (1/2)	Summer Creek Dr. (1)	Summer Park to Risinger Rd.	0.41	100%	\$ 1,133,000	\$ 1,133,000
	Y-24	MA4D	Summer Creek Dr. (2)	Risinger Rd. to Cleburne Crowley Rd.	2.01	100%	\$ 11,299,000	\$ 11,299,000
	Y-25	MA4D	Summer Creek Dr. (3)	Cleburne Crowley Rd. to S. City Limits	0.93	100%	\$ 4,835,000	\$ 4,835,000
	Y-26	P6D (1/3)	Hulen St. (1)	Cinnamon Hill to Sycamore School	0.96	100%	\$ 1,537,000	\$ 1,537,000
	Y-27	P6D (1/3)	Hulen St. (2)	Sycamore School to Risinger Rd.	1.21	100%	\$ 1,920,000	\$ 1,920,000
	Y-28	P6D (1/3)	Hulen St. (3)	Risinger Rd. to McPherson Blvd.	1.02	100%	\$ 1,628,000	\$ 1,628,000
	Y-29	P6D (2/3)	Hulen St. (4)	McPherson Blvd. to Carriage Crossing	0.18	100%	\$ 819,000	\$ 819,000
	Y-30	P6D	Hulen St. (5)	Carriage Crossing to S. City Limits	0.14	100%	\$ 872,000	\$ 872,000
	Y-31	P6D	Hulen St. (6)	325' N. of Rancho Verde Pkwy. To S. City Limits	0.50	100%	\$ 3,526,000	\$ 3,526,000
	Y-32	P6D (2/3)	McCart Ave. (1)	580' S. of Risinger Rd. to 135' S. of Cayman	0.31	100%	\$ 1,761,000	\$ 1,761,000
	Y-33	P6D	McCart Ave. (2)	135' S. of Cayman to Future McPherson Blvd.	0.56	100%	\$ 3,806,000	\$ 3,806,000
	Y-34	M4U	McCart Ave. (3)	Future McPherson Blvd. to S. City Limits	1.16	100%	\$ 6,004,000	\$ 6,004,000
Service Area Project Cost Subtotal							\$ 111,401,116	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 23,777	
Total Cost in SERVICE AREA Y							\$ 111,424,893	

**Table 4.Z – 10-Year Capital Improvements Plan for Transportation Impact Fees
with Conceptual Level Cost Opinions – Service Area Z**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
Z	X-7, Z-1	P6D	Everman Pkwy. (1)	Butterwick to 140' W. of Ballwood St.	0.66	50%	\$ 5,297,000	\$ 2,648,500
	X-8, Z-2	P6D (2/3)	Everman Pkwy. (2)	140' W. of Ballwood St. to 240' E. of Sheridan Rd.	0.18	50%	\$ 763,000	\$ 381,500
	X-9, Z-3	P6D (1/3)	Everman Pkwy. (3)	240' E. of Sheridan to IH-35W SBFR	0.19	50%	\$ 301,000	\$ 150,500
	Z-4	MA4D	Shelby Rd.	Race St. to Forest Hill	1.00	50%	\$ 5,365,000	\$ 2,682,500
	Z-5	MA4D	Risinger Rd. (3)	FM 731 to IH-35W SBFR	1.62	100%	\$ 9,026,000	\$ 9,026,000
	Z-6	MA4D	Risinger Rd. (4)	IH-35W SBFR to Old Burleson Rd.	0.29	100%	\$ 1,409,000	\$ 1,409,000
	Z-7	MA4D	Risinger Rd. (5)	Old Burleson Rd. to Oak Grove Rd.	0.77	100%	\$ 4,384,000	\$ 4,384,000
	Z-8	MA4D	Oak Grove Shelby (1)	Oak Grove Rd. to Race St.	1.01	100%	\$ 5,398,000	\$ 5,398,000
	Z-9	MA4D	Oak Grove Shelby (2)	Race St. to Forest Hill Dr.	1.00	100%	\$ 5,081,000	\$ 5,081,000
	Z-10	P6D	McPherson Blvd. (4)	FM 731 to UP RR	1.30	100%	\$ 8,799,000	\$ 8,799,000
	Z-11	P6D (1/2)	McPherson Blvd. (5)	375' W. of IH-35W SBFR to IH-35W NBFR	0.20	100%	\$ 717,000	\$ 717,000
	Z-12	P6D	McPherson Blvd. (6)	IH-35W NBFR to Oak Grove	0.68	100%	\$ 4,987,000	\$ 4,987,000
	Z-13	P6D	McPherson Blvd. (7)	Oak Grove to Forest Hill-Everman	1.44	100%	\$ 10,238,000	\$ 10,238,000
	Z-14	MA4D	Alsbury Blvd.	IH-35W NBFR to Stone	0.21	100%	\$ 1,055,000	\$ 1,055,000
	Z-15	MA4D	Hemphill St. (4)	Everman Pkwy. To 580' N. of Brasenose	2.83	100%	\$ 15,714,000	\$ 15,714,000
	Z-16	MA4D (1/2)	Hemphill St. (5)	580' N. of Brasenose to Oriol Circle	0.17	100%	\$ 466,000	\$ 466,000
	Z-17	M4U (1/2)	Hemphill St. (6)	FM 1187 to McAlister	0.28	100%	\$ 588,000	\$ 588,000
	Z-18	M4U	Hemphill St. (7)	McAlister Rd. to S. City Limits	0.21	100%	\$ 847,000	\$ 847,000
	Z-19	P6D	Oak Grove Rd. (4)	Oak Grove-Shelby to Nelson Pl.	1.89	100%	\$ 13,703,000	\$ 13,703,000
	Z-20	P6D	Oak Grove Rd. (5) [Stone]	Nelson Pl. to FM 1187	0.91	100%	\$ 6,475,000	\$ 6,475,000
	Z-21	MA4D	Stone Rd. (1)	FM 1187 to Alsbury Blvd.	1.07	100%	\$ 5,656,000	\$ 5,656,000
	Z-22	MA4D	Stone Rd. (2)	Alsbury Blvd. to S. City Limits	0.73	100%	\$ 3,832,000	\$ 3,832,000
	Z-23	M4U	Wildecat Way [Oak Grove S]	Abner Lee to FM 1187	2.20	100%	\$ 10,278,000	\$ 10,278,000
	Z-24	MA4D	Oak Grove Rd. (6) [East]	FM 1187 to Nelson Pl.	0.72	100%	\$ 4,167,000	\$ 4,167,000
	Z-25	MA4D	Oak Grove Rd. (7) [Wichita]	Nicoleway to E. City Limits	1.93	100%	\$ 10,905,000	\$ 10,905,000
	Z-26	MA4D	Wichita St. (2)	Oak Grove Shelby to Shelby	0.52	100%	\$ 2,767,000	\$ 2,767,000
	Z-27	MA4D	Rendon / Forest-Hill	275' S. of Enon to 100' S. of Shelby	0.47	50%	\$ 2,713,000	\$ 1,356,500
Service Area Project Cost Subtotal							\$ 133,711,500	
Transportation Impact Fee Study Cost (Per Service Area)								\$ 23,777
Total Cost in SERVICE AREA Z								\$ 133,735,277

Notes:

- a. These costs projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Fort Worth.
- b. This project cost total within each Service Area may differ from the total shown in the Summary sheets contained within **Appendix A** due to some projects that are split between multiple service areas.

E. SERVICE UNIT CALCULATION

The basic service unit for the computation of Fort Worth's transportation impact fees is the vehicle-mile of travel during the afternoon peak-hour. To determine the cost per service unit, it is necessary to project the growth in vehicle miles of travel for the service area for the ten-year period.

The growth in vehicle miles from 2006 to 2016 is based upon projected changes in population and employment for the period. In order to determine this growth, estimates of population, basic employment, service employment, and retail employment for 2006 were made, along with growth projections for each of these demographic statistics through 2016. The Land Use Assumptions section of this report details the growth estimates used for impact fee determination.

The population and employment statistics in the Land Use Assumptions provides the "independent variables" that are used to calculate the existing (2006) and projected (2016) transportation service units. The roadway demand for each service area is the sum of the service units (vehicle miles) "generated" by each category of land use in the service area.

For the purposes of impact fees, all developed and developable land is categorized as either residential or non-residential. For residential land uses, the existing and projected population is converted to dwelling units. The number of dwelling units in each service area is multiplied by a *transportation demand factor* to compute the vehicle miles of travel that occur during the afternoon peak hour. This factor computes the average amount of demand created by the residential land uses in the service area. The *transportation demand factor* is discussed in more detail below.

For non-residential land uses, the process is similar. The Land Use Assumptions section of this report provides existing and projected number of building square footages for three (3) categories of employment – basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the Standard Industrial Classification Code.

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Edition*. This statistic is more appropriate than the number of employees because building square footage is tied more closely to trip generation and is known at the time of application for any development or development modification (e.g. increase in density or change in land use) that would require the assessment of an impact fee.

The existing and projected land use assumptions for the dwelling units and the square footage of basic, service, and retail land uses provide the basis for the projected increase in vehicle miles of travel. As noted earlier, a *transportation demand factor* is applied to these values and then summed to calculate the total peak hour vehicle-miles of demand for each service area.

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 7th Edition* and the Regional Origin-Destination Travel Survey performed by NCTCOG. The *ITE Trip Generation Manual, 7th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail trip generation rates to avoid double counting trips.

The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics survey conducted by NCTCOG.

The computation of the *transportation demand factor* is detailed in the following equation:

$$TDF = T * (1 - P_b) * L_{\max}$$

where... $L_{\max} = \min(L * OD \text{ or } 6)$

Variables:

- TDF = Transportation Demand Factor,
- T = Trip Rate (peak hour trips / unit),
- P_b = Pass-By Discount (% of trips),
- L_{max} = Maximum Trip Length (miles),
- L = Average Trip Length (miles), and
- OD = Origin-Destination Reduction (50%)

The maximum trip length was limited to six (6) miles based on the maximum trip length within each service area. Chapter 395 of the Texas Local Government Code allows for a service area of six (6) miles, and the service areas within Fort Worth are closely approximated with a six (6) mile distance.

The adjustment made to the average trip length statistic in the computation of the maximum trip length is the origin-destination reduction. This adjustment is made because the transportation impact fee is charged to both the origin and destination end of the trip. For example, impact fee methodology will account for a trip from home to work within Fort Worth to both residential and non-residential land uses. To avoid counting these trips twice as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use, and the total trip is only counted once. This methodology is consistent with that used in the NCTCOG Regional Origin-Destination Travel Survey.

Table 5 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land use categories. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 5. Transportation Demand Factor Calculations

Variable	Residential	Basic	Service	Retail
T	1.01	0.98	1.49	5.06
P_b	0%	0%	0%	30%
L	17.21	10.02	10.92	6.43
L_{max}*	6.00	5.01	5.46	3.22
TDF	6.06	4.91	8.14	11.38

* L_{max} is less than 6 miles for non-residential land uses; therefore this lower trip length is used for calculating the TDF for non-residential land uses

Variables:

- TDF = Transportation Demand Factor,
- T = Trip Rate (peak hour trips / unit),
- P_b = Pass-By Discount (% of trips),
- L_{max} = Maximum Trip Length (miles),
- L = Average Trip Length (miles), and
- OD = Origin-Destination Reduction (50%)

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 6**. This table shows the total vehicle miles by service area for the years 2006 and 2016. These estimates and projections lead to the Vehicle Miles of Travel for both 2006 and 2016.



Table 6. 10-Year Growth Projections

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			SQUARE FEET ⁴			TRANS. DEMAND FACTOR ⁵			NON-RESIDENTIAL VEHICLE-MILES ⁹				TOTAL VEHICLE MILES ¹⁰	
	POPULATION ¹	DWELLING UNITS ¹	TDF ²	VEHICLE MILES ³	BASIC	SERVICE	RETAIL	BASIC ⁶	SERVICE ⁷	RETAIL ⁸	BASIC	SERVICE	RETAIL	TOTAL	TOTAL
A	6,293	2,133	6.06	12,926	648,400	1,086,964	3,044,759	4.91	8.14	11.38	3,184	8,848	34,849	46,681	59,607
AA	2,208	736	6.06	4,460	0	2,748,590	8,245,771	4.91	8.14	11.38	0	22,374	93,837	116,211	120,671
B	795	265	6.06	1,606	15,587	391,054	1,167,967	4.91	8.14	11.38	77	3,183	13,291	16,551	18,157
C	4,173	1,391	6.06	8,429	228,632	646,936	1,864,596	4.91	8.14	11.38	1,123	5,266	21,219	27,608	36,037
D	47,118	15,706	6.06	95,178	211,017	841,707	2,454,783	4.91	8.14	11.38	1,036	6,851	27,935	35,822	131,000
E	8,340	2,847	6.06	17,253	150,610	317,534	902,398	4.91	8.14	11.38	739	2,585	10,269	13,593	30,846
F	29,025	10,090	6.06	61,145	4,328,708	6,908,870	19,283,708	4.91	8.14	11.38	21,254	56,238	219,449	296,941	358,086
G	16,857	5,718	6.06	34,651	495,241	831,388	2,329,082	4.91	8.14	11.38	2,432	6,767	26,505	35,704	70,355
L	18,162	6,746	6.06	40,881	648,623	2,272,059	6,599,970	4.91	8.14	11.38	3,185	18,495	75,108	96,788	137,669
M	16,899	5,883	6.06	35,651	266,295	1,733,617	5,112,085	4.91	8.14	11.38	1,308	14,112	58,176	73,596	109,247
N	15,013	5,644	6.06	34,203	1,608,071	2,415,863	6,711,565	4.91	8.14	11.38	7,896	19,665	76,378	103,939	138,142
O	27,598	9,796	6.06	59,364	113,805	371,905	1,077,780	4.91	8.14	11.38	559	3,027	12,265	15,851	75,215
S	13,683	4,561	6.06	27,640	0	389,896	1,169,688	4.91	8.14	11.38	0	3,174	13,311	16,485	44,125
T	30,003	10,965	6.06	66,448	15,265	1,981,820	5,940,371	4.91	8.14	11.38	75	16,132	67,601	83,808	150,256
U	1,716	572	6.06	3,466	0	255,790	767,370	4.91	8.14	11.38	0	2,082	8,733	10,815	14,281
W	69,035	24,683	6.06	149,579	0	3,449,396	10,348,187	4.91	8.14	11.38	0	28,078	117,762	145,840	295,419
X	25,567	8,837	6.06	53,552	3,686,900	4,322,053	11,737,191	4.91	8.14	11.38	18,103	35,182	133,569	186,854	240,406
Y	49,983	17,042	6.06	103,275	204,133	868,731	2,538,150	4.91	8.14	11.38	1,002	7,071	28,884	36,957	140,232
Z	10,227	3,409	6.06	20,659	2,008,944	2,547,926	6,974,129	4.91	8.14	11.38	9,864	20,740	79,366	109,970	130,629
Totals	392,695	137,024		830,366	14,630,232	34,382,098	98,269,551				71,837	279,870	1,118,307	1,470,014	2,300,380

Notes:

- ¹ From Land Use Assumptions
- ² Transportation Demand Factor for each SA (from LUVNET) using Single Family Detached Housing land use and trip generation rate.
- ³ Calculated by multiplying TDF by the number of dwelling units.
- ⁴ From Land Use Assumptions
- ⁵ Trip generation rate and Transportation Demand Factors from LUVNET for each land use
- ⁶ 'Basic' corresponds to General Light Industrial land use and trip generation rate
- ⁷ 'Service' corresponds to General Office land use and trip generation rate
- ⁸ 'Retail' corresponds to Free-Standing Retail land use and trip generation rate
- ⁹ Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
- ¹⁰ Residential plus non-residential vehicle-mile totals for each SA
- ¹¹ Total Vehicle-Miles (2006) subtracted from Total Vehicle-Miles (2016)



Table 6. 10-Year Growth Projections (cont.)

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			SQUARE FEET ⁴			TRANS. DEMAND FACTOR ⁵			NON-RESIDENTIAL VEHICLE-MILES ⁸			TOTAL VEHICLE MILES ¹⁰		
	POPULATION ¹	DWELLING UNITS ¹	TDF ²	VEHICLE MILES ³	BASIC	SERVICE	RETAIL	BASIC ⁶	SERVICE ⁷	RETAIL ⁸	BASIC	SERVICE		RETAIL	TOTAL
A	17,966	6,160	6.06	37,330	4,646,446	2,465,440	4,145,207	4.91	8.14	11.38	22,814	20,069	47,172	90,055	127,385
AA	8,312	2,809	6.06	17,023	1,823,428	3,355,073	8,681,092	4.91	8.14	11.38	8,953	27,310	98,791	135,054	152,077
B	10,868	3,655	6.06	22,149	795,149	742,323	1,874,184	4.91	8.14	11.38	3,904	6,043	21,328	31,275	53,424
C	41,220	13,879	6.06	84,110	3,322,077	2,036,388	4,401,412	4.91	8.14	11.38	16,311	16,576	50,088	82,975	167,085
D	74,419	25,385	6.06	153,830	1,506,314	2,102,230	5,448,743	4.91	8.14	11.38	7,396	17,112	62,007	86,515	240,345
E	38,198	12,870	6.06	77,994	150,610	585,392	1,528,806	4.91	8.14	11.38	739	4,765	17,398	22,902	100,896
F	39,058	13,727	6.06	83,185	9,618,860	9,267,616	22,574,056	4.91	8.14	11.38	47,229	75,438	256,893	379,560	462,745
G	44,788	15,337	6.06	92,943	1,141,497	1,251,178	3,325,714	4.91	8.14	11.38	5,605	10,185	37,847	53,637	146,580
L	20,424	7,533	6.06	45,652	1,602,209	2,624,798	6,866,952	4.91	8.14	11.38	7,867	21,366	78,146	107,379	153,031
M	25,107	8,711	6.06	52,791	1,828,471	2,447,536	6,311,307	4.91	8.14	11.38	8,978	19,923	71,823	100,724	153,515
N	19,718	7,419	6.06	44,957	3,647,577	3,438,811	8,288,098	4.91	8.14	11.38	17,910	27,992	94,319	140,221	185,178
O	31,081	11,008	6.06	66,707	190,347	505,925	1,430,379	4.91	8.14	11.38	935	4,118	16,278	21,331	88,038
S	33,735	11,308	6.06	68,527	232,903	765,753	3,340,961	4.91	8.14	11.38	1,144	6,233	38,020	45,397	113,924
T	31,818	11,623	6.06	70,435	146,318	2,398,090	7,013,768	4.91	8.14	11.38	718	19,520	79,817	100,055	170,490
U	59,183	19,941	6.06	120,843	1,515,812	1,382,867	5,374,933	4.91	8.14	11.38	7,443	11,257	61,167	79,867	200,710
W	73,452	26,265	6.06	159,166	24,232	3,775,111	11,779,524	4.91	8.14	11.38	119	30,729	134,051	164,899	324,065
X	33,265	11,449	6.06	69,381	6,724,960	5,343,100	12,710,229	4.91	8.14	11.38	33,020	43,493	144,642	221,155	290,536
Y	79,170	26,990	6.06	163,557	1,371,509	1,371,509	4,137,008	4.91	8.14	11.38	6,734	11,164	47,079	64,977	228,534
Z	32,461	11,019	6.06	66,778	4,257,018	3,541,974	8,443,294	4.91	8.14	11.38	20,902	28,832	96,085	145,819	212,597
Totals	714,242	247,089	6.06	1,497,358	44,545,737	49,401,112	127,675,667				218,721	402,125	1,452,951	2,073,797	3,571,155

Notes:

- ¹ From Land Use Assumptions
- ² Transportation Demand Factor for each SA (from LUVMET) using Single Family Detached Housing land use and trip generation rate.
- ³ Calculated by multiplying TDF by the number of dwelling units.
- ⁴ From Land Use Assumptions
- ⁵ Trip generation rate and Transportation Demand Factors from LUVMET for each land use
- ⁶ 'Basic' corresponds to General Light Industrial land use and trip generation rate
- ⁷ 'Service' corresponds to General Office land use and trip generation rate
- ⁸ 'Retail' corresponds to Free-Standing Retail land use and trip generation rate
- ⁹ Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
- ¹⁰ Residential plus non-residential vehicle-mile totals for each SA
- ¹¹ Total Vehicle-Miles (2006) subtracted from Total Vehicle-Miles (2016)



Table 6. 10-Year Growth Projections (cont.)

VEHICLE-MILES OF INCREASE¹¹ (2006 - 2016)

SERVICE AREA	VEH-MILES
A	67,778
AA	31,406
B	35,267
C	131,048
D	109,345
E	70,050
F	104,659
G	76,225
L	15,362
M	44,268
N	47,036
O	12,823
S	69,799
T	20,234
U	186,429
W	28,646
X	50,130
Y	88,302
Z	81,968
Total	1,270,775

Notes:

- ¹ From *Land Use Assumptions*
- ² Transportation Demand Factor for each SA (from LUVMET) using Single Family Detached Housing land use and trip generation rate.
- ³ Calculated by multiplying TDF by the number of dwelling units.
- ⁴ From *Land Use Assumptions*
- ⁵ *Trip generation rate* and Transportation Demand Factors from LUVMET for each land use
- ⁶ 'Basic' corresponds to General Light Industrial land use and *trip generation rate*
- ⁷ 'Service' corresponds to General Office land use and *trip generation rate*
- ⁸ 'Retail' corresponds to Free-Standing Retail land use and *trip generation rate*
- ¹⁰ Residential plus non-residential vehicle-mile totals for each SA
- ¹¹ Total Vehicle-Miles (2006) subtracted from Total Vehicle-Miles (2016)

V. IMPACT FEE CALCULATION

A. MAXIMUM ASSESSABLE IMPACT FEE PER SERVICE UNIT

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible Impact Fee CIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. **Table 7** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation.

Line	Title	Description
1	<i>Total Vehicle-Miles of Capacity Added by the CIP</i>	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project (from Appendix B – CIP Units of Supply)

Each project identified in the Impact Fee CIP will add a certain amount of capacity to the City’s roadway network based on its length and classification. This line displays the total amount added within each service area.

2	<i>Total Vehicle-Miles of Existing Demand</i>	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added. (from Appendix B – CIP Units of Supply)
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A number of facilities identified in the Impact Fee CIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently be used by existing traffic.

3	<i>Total Vehicle-Miles of Existing Deficiencies</i>	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from Appendix C – Existing Facilities Inventory)
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In order to ensure that existing deficiencies on the City’s roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient – even those not identified on the Impact Fee CIP – will have these additional trips removed from the calculation.

4	<i>Net Amount of Vehicle-Miles of Capacity Added</i>	A measurement of the amount of vehicle-miles added by the CIP that will not be utilized by existing demand (Line 1 – Line 2 – Line 3)
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This calculation identifies the portion of the Impact Fee CIP (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	<i>Total Cost of the CIP within the Service Area</i>	The total cost of the projects within each service area (from Table 4: 10-Year Capital Improvements Plan with Conceptual Level Cost Opinions)
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This line simply identifies the total cost of all of the projects identified in each service area.

6	<i>Cost of Net Capacity Supplied</i>	The total CIP cost (Line 5) prorated by the ratio of Net Capacity Added (Line 4) to Total Capacity Added (Line 1). [(Line 4 / Line 1) * (Line 5)]
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Using the ratio of vehicle-miles added by the Impact Fee CIP available to serve future growth to the total vehicle-miles added, the total cost of the Impact Fee CIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	<i>Cost to Meet Existing Needs and Usage</i>	The difference between the Total Cost of the CIP (Line 5) and the Cost of the Net Capacity supplied (Line 6). (Line 5 – Line 6)
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This line is provided for information purposes only – it is to present the portion of the total cost of the Impact Fee CIP that is required to meet existing demand.

8	<i>Total Vehicle-Miles of New Demand over Ten Years</i>	Based upon the growth projection provided in the Land Use Assumptions , an estimate of the number of new vehicle-miles within the service area over the next ten years. (from Table 6)
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This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

9	<i>Percent of Capacity Added Attributable to New Growth</i>	The result of dividing Total Vehicle-Miles of New Demand (Line 8) by the Net Amount of Capacity Added (Line 4), limited to 100% (Line 10). This calculation is required by Chapter 395 to ensure capacity added is attributable to new growth.
10	<i>Chapter 395 Check</i>	

In order to ensure that the vehicle-miles added by the Impact Fee CIP do not exceed the amount needed to accommodate growth beyond the ten-year window, a comparison of the two values is performed. If the amount of vehicle-miles added by the Impact Fee CIP exceeds the growth projected to occur in the next ten years, the Impact Fee CIP cost is reduced accordingly.

11	<i>Cost of Capacity Added Attributable to New Growth</i>	The result of multiplying the Cost of Net Capacity Added (Line 6) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (Line 9).
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This value is the total Impact Fee CIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

B. PLAN FOR AWARDING THE TRANSPORTATION IMPACT FEE CREDIT

Chapter 395 of the Texas Local Government Code requires the Capital Improvements Plan for Transportation Impact Fees contain specific enumeration of a plan for awarding the impact fee credit. Section 395.014 of the Code states:

“(7) A plan for awarding:

- (A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or
- (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan...”

The plan is summarized, as prepared by R.W. Beck, Inc., in **Appendix D** and **E**, Plan for Awarding the Transportation Impact Fee Credit. The following table summarizes the portions of **Table 7** that utilize this credit calculation.

Line	Title	Description
12	<i>Financing Costs</i>	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
13	<i>Interest Earnings</i>	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
14	<i>Cost of the CIP and Financing Attributable to New Growth</i>	The sum of the Cost of Capacity Added Attributable to New Growth, Financing Costs, and Interest Earnings. (Line 11 + Line 12 + Line 13)
15	<i>Pre-Credit Maximum Fee Per Service Unit</i>	Found by dividing the Cost of the CIP and Financing Attributable to New Growth (Line 14) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 14 / Line 8)
16	<i>Credit for Ad Valorem Taxes</i>	A credit for the portion of ad valorem taxes projected to be generated by the new service units, as per Section 395.014 of the Local Government Code. (from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
17	<i>Recoverable Cost of CIP and Financing</i>	The difference between the Cost of the CIP and Financing Attributable to New Growth (Line 14) and the Credit for Ad Valorem Taxes (Line 16). (Line 14 + Line 16)
18	<i>Maximum Assessable Fee Per Service Unit</i>	Found by dividing the Recoverable Cost of the CIP and Financing (Line 17) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 17 / Line 8)

C. MAXIMUM ASSESSABLE IMPACT FEE DETERMINATION

The impact fee determination method employed by R.W. Beck is developed through a financial based model, which fully recognizes the requirements of Chapter 395, including the recognition of cash and/or debt financing, interest earnings, fund balances, and applicable credits associated with the use of ad valorem taxes. In developing the components of the financial model several assumptions must be made, including

- Financing;
 - Method of financing (i.e. cash or debt financing)
 - The level of financing (e.g. 60% debt / 40% cash)
 - Cost of financing
 - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth
- Portion of Ad Valorem Tax Revenue Used to Fund Impact Fee Capital Improvements

While it is our opinion that the assumptions employed in the maximum assessable impact fee determination provide a reasonable basis for forecasting, we must emphasize that these assumptions may not necessarily reflect actual future conditions. To address this, Chapter 395 requires the monitoring of impact fees through the Impact Fee Advisory Committee, and allows for the option to update or revise impact fees to reflect the actual implementation of the impact fee program.

Once the cost of capacity added that is attributable to growth (Table 7 line 11) is determined, it must then be decided how the cost will be financed, cash and/or debt. Based on discussions with City staff, it is assumed that the City will debt finance 60% of the project costs and cash finance 40%. For debt financing, the cost of financing is based on the City staff's estimates of future debt costs for bonds issued with 20-year terms, as shown in **Appendix E**. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.

Currently, the exact timing and annual level of capital expenditures over the 10-year forecast is indeterminate; therefore, it is assumed that capital expenditures will occur in equal amounts over the 10-year program period. It is also assumed that for debt financed capital projects the City will annually accumulate these capital expenditures through the City's line of credit and then issue debt. For the calculation of the maximum assessable impact fee, debt is assumed to be issued in equal amounts for years 2 through 9. Because of the ten 10-year forecast limitation, and in order to recognize the full amount of debt to be issued for the cost of capacity added that is attributable to growth during the 10-year period, debt issued in year 10 reflects the capital expenditures accumulated from year 9 for the line of credit and the capital expenditures to be debt financed in year 10.

Because debt is issued over 20-year terms and impact fees developed herein are to be charged over a 10-year period, sufficient fund balance must be generated to meet the future debt service obligations. Because of the generation of the fund balance, excess monies will be available for interest earnings. Chapter 395 states that interest earnings are funds of the impact fee account and are to be held to the same restrictions as impact fee revenues. Therefore, in order recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the costs recoverable through impact fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the impact fee determination; however, in an effort to acknowledge the time value of the impact fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 4.05% based on the City's average annual return on consolidated cash funds as of 4/30/06.

As with the timing and level of the capital expenditures over the 10-year forecast, the timing and annual level of service unit growth over the 10-year program period is indeterminate at the present time. As such, it is assumed that service unit growth will be consistent over the 10-year forecast.

Chapter 395 requires a plan for awarding either a credit for the portion of ad valorem tax and/or utility service revenues generated by new service units during the program period that are used for payment of improvements that are included in the impact fee capital improvements plan. As an alternative, a credit equal to 50% of the total cost of implementing the impact fee capital improvements plan may be used. The City has elected to pursue the determination of a credit for the portion of ad valorem tax revenues generated by new service units during the program period that are used for payment of improvements that are included in the impact fee capital improvements plan. It should be noted that the credit is not a determination to recognize the total ad valorem tax revenue generated by new service units, but is only a credit for the portion of ad valorem tax revenue that is used for payment of improvements that are included in the impact fee capital improvements plan. Theoretically, the credit determination could be zero (0) if the City does not utilize any of the new service unit ad valorem tax revenue to fund improvements that are included in the impact fee capital improvements plan. However, to be conservative and recognize potential cash flow issues that can occur with the funding of major capital improvement projects, it is assumed that the cash funded projects (40% of the improvement costs included in the impact fee capital improvements plan) could potentially be funded by ad valorem tax revenue.

In reviewing **Table 7**, which is based on the assumption that 40% of the improvement costs will be funded by ad valorem taxes, Service Area U has a credit of (see Line 16) \$1,735,913 and a maximum assessable impact fee per service unit (see Line 18) of \$567. If the assumption was made that 0% of the improvement costs are funded by ad valorem taxes, then the credit would be reduced to \$0 and the maximum assessable fee would rise by \$10 to \$577. If the assumption was made that 100% of the improvement costs were funded by ad valorem taxes then the credit would rise to approximately \$4,340,049 and the maximum assessable fee would be reduced by \$13 to \$554. The purpose of conducting this sample analysis for Service Area U was to show the minimal impact this assumption has on the resulting maximum assessable impact fee.

Since payments made through ad valorem tax revenue will consist of not only the revenue generated by new service units in the defined service area, but also existing property owners throughout the City, the portion attributable to the new service units in the defined service area must be isolated, as illustrated in the credit calculation in **Appendix E**.

The following summarizes the financial model's determination of the maximum assessable impact fee.

Recoverable Impact Fee Capital Improvement Costs (Table 7, line 11)
Plus: Financing Costs
Less: Interest Earnings
Pre Credit Recoverable Costs for Impact Fee
Less: Credit for Ad Valorem Revenues
Maximum Recoverable Costs for Impact Fee

Table 7. Maximum Assessable Roadway Impact Fee

SERVICE AREA:	A	AA	B	C	D	E	F	G	L	M	N	O	S	T	U	W	X	Y	Z
1 TOTAL VEH-MI OF CAPACITY ADDED BY THE CIP (FROM CIP UNITS OF SUPPLY, APPENDIX B)	37,688	3,388	40,448	51,562	105,535	35,167	34,089	32,075	6,440	45,280	28,914	10,510	44,052	7,374	49,954	7,224	31,679	80,962	73,139
2 TOTAL VEH-MI OF EXISTING DEMAND (FROM CIP UNITS OF SUPPLY, APPENDIX B)	878	746	1,244	3,369	22,289	3,052	9,382	5,114	1,135	10,715	4,476	414	6,068	258	18	2,985	3,981	10,200	5,643
3 TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING FACILITIES INVENTORY, APPENDIX C)	0	1,063	0	42	3,149	0	296	288	0	808	1,050	0	737	0	0	1,775	1,086	383	2,032
4 NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	36,810	1,579	39,204	48,151	80,096	32,115	24,411	26,672	5,305	33,756	23,387	10,096	37,247	7,116	49,936	2,464	26,611	70,378	65,464
5 TOTAL COST OF THE CIP WITHIN SERVICE AREA (FROM TABLE 4)	\$ 61,784,277	\$ 3,786,777	\$ 73,287,777	\$ 81,343,149	\$ 128,518,686	\$ 67,254,777	\$ 50,827,777	\$ 62,568,777	\$ 10,367,777	\$ 77,415,277	\$ 38,763,497	\$ 19,556,277	\$ 76,547,777	\$ 13,663,777	\$ 96,393,777	\$ 9,110,693	\$ 53,587,277	\$ 111,424,893	\$ 133,735,277
6 COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	\$ 60,345,655	\$ 1,765,070	\$ 71,033,482	\$ 75,961,370	\$ 97,539,818	\$ 61,418,058	\$ 36,397,895	\$ 52,029,850	\$ 8,540,376	\$ 57,713,463	\$ 31,354,115	\$ 18,785,953	\$ 64,722,963	\$ 13,184,859	\$ 96,359,526	\$ 3,107,835	\$ 45,015,020	\$ 96,858,846	\$ 119,701,710
7 COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 / LINE 6)	\$ 1,438,622	\$ 2,021,707	\$ 2,254,295	\$ 5,381,779	\$ 30,978,868	\$ 5,836,719	\$ 14,429,882	\$ 10,538,927	\$ 1,827,401	\$ 19,701,814	\$ 7,409,382	\$ 770,324	\$ 11,824,814	\$ 478,918	\$ 34,251	\$ 6,002,858	\$ 8,572,257	\$ 14,566,047	\$ 14,033,567
8 TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 6 and Land Use Assumptions)	67,778	31,406	35,267	131,048	109,345	70,050	104,659	76,225	15,362	44,268	47,036	12,823	69,799	20,234	186,429	28,646	50,130	88,302	81,968
9 PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	184%	1989%	90%	272%	137%	218%	429%	286%	290%	131%	201%	127%	187%	284%	373%	1162%	188%	125%	125%
10 IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
11 COST OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	\$ 60,345,655	\$ 1,765,070	\$ 63,900,317	\$ 75,961,370	\$ 97,539,818	\$ 61,418,058	\$ 36,397,895	\$ 52,029,850	\$ 8,540,376	\$ 57,713,463	\$ 31,354,115	\$ 18,785,953	\$ 64,722,963	\$ 13,184,859	\$ 96,359,526	\$ 3,107,835	\$ 45,015,020	\$ 96,858,846	\$ 119,701,710
12 FINANCING COSTS (FROM APPENDIX D)	\$ 25,517,062	\$ 746,357	\$ 27,020,145	\$ 32,120,141	\$ 41,244,553	\$ 25,970,526	\$ 15,390,791	\$ 22,000,737	\$ 3,611,284	\$ 24,404,044	\$ 13,258,036	\$ 7,943,610	\$ 27,367,999	\$ 5,575,196	\$ 40,745,468	\$ 1,314,143	\$ 19,034,528	\$ 40,956,605	\$ 50,615,673
13 INTEREST EARNINGS (FROM APPENDIX D)	\$ (18,575,687)	\$ (543,515)	\$ (19,671,836)	\$ (23,347,365)	\$ (29,996,597)	\$ (18,885,180)	\$ (11,205,190)	\$ (16,000,242)	\$ (2,630,462)	\$ (17,769,263)	\$ (9,655,668)	\$ (5,785,682)	\$ (19,912,948)	\$ (4,061,093)	\$ (29,583,524)	\$ (957,092)	\$ (13,860,011)	\$ (29,783,886)	\$ (36,823,134)
14 COST OF CIP AND FINANCING ATTRIBUTABLE TO GROWTH (LINE 11 + LINE 12 + LINE 13)	\$ 67,287,030	\$ 1,967,912	\$ 71,248,626	\$ 84,734,146	\$ 108,787,774	\$ 68,503,403	\$ 40,583,496	\$ 58,030,345	\$ 9,521,198	\$ 64,348,243	\$ 34,956,483	\$ 20,943,880	\$ 72,178,014	\$ 14,698,963	\$ 107,521,471	\$ 3,464,886	\$ 50,189,537	\$ 108,031,565	\$ 133,494,249
15 PRE-CREDIT MAX FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 14 / LINE 8)	\$ 993	\$ 63	\$ 2,020	\$ 647	\$ 995	\$ 978	\$ 388	\$ 761	\$ 620	\$ 1,454	\$ 743	\$ 1,633	\$ 1,034	\$ 726	\$ 577	\$ 121	\$ 1,001	\$ 1,223	\$ 1,629
16 CREDIT FOR AD VALOREM TAXES (FROM APPENDIX D)	\$ (231,297)	\$ (3,558)	\$ (211,704)	\$ (900,313)	\$ (860,406)	\$ (590,973)	\$ (120,114)	\$ (469,248)	\$ (6,406)	\$ (156,109)	\$ (48,794)	\$ (21,670)	\$ (422,462)	\$ (7,939)	\$ (1,735,913)	\$ (4,542)	\$ (114,256)	\$ (911,667)	\$ (864,400)
17 RECOVERABLE COST OF CIP AND FINANCING (LINE 14 + LINE 16)	\$ 67,055,733	\$ 1,964,354	\$ 71,036,922	\$ 83,833,833	\$ 107,927,368	\$ 67,912,430	\$ 40,463,382	\$ 57,561,097	\$ 9,514,792	\$ 64,192,134	\$ 34,907,689	\$ 20,922,210	\$ 71,755,552	\$ 14,691,023	\$ 105,785,558	\$ 3,460,344	\$ 50,075,280	\$ 107,119,898	\$ 132,629,848
18 MAX ASSESSABLE FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 17 / LINE 8)	\$ 989	\$ 63	\$ 2,014	\$ 640	\$ 987	\$ 969	\$ 387	\$ 755	\$ 619	\$ 1,450	\$ 742	\$ 1,632	\$ 1,028	\$ 726	\$ 567	\$ 121	\$ 999	\$ 1,213	\$ 1,618

D. SERVICE UNIT DEMAND PER UNIT OF DEVELOPMENT

The transportation impact fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 8**. This table lists the predominant land uses that may occur within the City of Fort Worth. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of local uses are found in this table. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column, if applicable to the land use, presents the number of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The definitive source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 7th Edition*, the latest edition. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The trip length values are based on the *Regional Origin-Destination Travel Survey* performed by the North Central Texas Council of Governments (NCTCOG). The other adjustment to trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above six (6) miles, the maximum trip length used for calculation is reduced to six (6) miles. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the *Transportation Demand Factor*, is used in the impact fee to compute the number of service units attributed to each land use category. The number of service units is multiplied by the impact fee rate (established by City ordinance) in order to determine the impact fee for a development.

Table 8. Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	NCTCOG Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL											
Truck Terminal	030	Acre	6.55			6.55	10.02	50%	5.01	5.01	32.82
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.98			0.98	10.02	50%	5.01	5.01	4.91
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	5.01	3.41
Industrial Park	130	1,000 SF GFA	0.86			0.86	10.02	50%	5.01	5.01	4.31
Warehousing	150	1,000 SF GFA	0.59			0.59	10.83	50%	5.42	5.42	3.19
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	5.42	1.41
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.01			1.01	17.21	50%	8.61	6.00	6.06
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	6.00	3.72
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	6.00	3.12
Mobile Home Park	240	Dwelling Unit	0.59			0.59	17.21	50%	8.61	6.00	3.54
Assisted Living	254	Dwelling Unit	0.22			0.22	17.21	50%	8.61	6.00	1.32
LODGING											
Hotel	310	Room	0.59			0.59	6.43	50%	3.22	3.22	1.90
Motel / Other Lodging Facilities	320	Room	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tee	1.25			1.25	6.43	50%	3.22	3.22	4.02
Golf Course	430	Acre	0.30			0.30	6.43	50%	3.22	3.22	0.96
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	1.64			1.64	6.43	50%	3.22	3.22	5.27
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.59
Miniature Golf	431	Hole	0.33			0.33	6.43	50%	3.22	3.22	1.06
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	3.22	43.85
Racquet / Tennis Club	491	Court	3.35			3.35	6.43	50%	3.22	3.22	10.77
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.66			0.66	4.20	50%	2.10	2.10	1.39
Day Care Center	565	1,000 SF GFA	13.18			13.18	4.20	50%	2.10	2.10	27.68
Primary/Middle School (1-8)	522	Students	0.15			0.15	4.20	50%	2.10	2.10	0.32
High School (9-12)	530	Students	0.14			0.14	4.20	50%	2.10	2.10	0.29
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.21			0.21	4.20	50%	2.10	2.10	0.44
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.55
Hospital	610	Beds	1.30			1.30	7.55	50%	3.78	3.78	4.91
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.40			1.40	10.92	50%	5.46	5.46	7.64
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	5.46	8.14
Medical/Dental Office	720	1,000 SF GFA	3.72			3.72	10.92	50%	5.46	5.46	20.31
Single Tenant Office Building	715	1,000 SF GFA	1.73			1.73	10.92	50%	5.46	5.46	9.45
Office/Business Park	750	1,000 SF GFA	1.50			1.50	10.92	50%	5.46	5.46	8.19
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.38	40%	B	2.03	6.43	50%	3.22	3.22	6.53
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.96
Gasoline/Service Station	944	Fueling Position	13.86	42%	A	8.04	1.20	50%	0.60	0.60	4.82
Gasoline/Service Station w/ Conv Market	945	Fueling Position	13.38	56%	B	5.89	1.20	50%	0.60	0.60	3.53
Service Station w/ Conv Market and Car Wash	946	Fueling Position	13.33	56%	A	5.87	1.20	50%	0.60	0.60	3.52
New and Used Car Sales	841	1,000 SF GFA	2.64	20%	B	2.11	6.43	50%	3.22	3.22	6.78
Quick Lubrication Vehicle Center	941	Service Position	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.00
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	5.03	28%	A	3.62	6.43	50%	3.22	3.22	11.64
Dining											
Fast Food Restaurant with Drive-Thru	934	1,000 SF GFA	34.64	50%	A	17.32	4.79	50%	2.40	2.40	41.48
Fast Food Restaurant without Drive-Thru	933	1,000 SF GFA	26.15	50%	B	13.08	4.79	50%	2.40	2.40	31.33
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	10.92	43%	A	6.22	4.79	50%	2.40	2.40	14.90
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.04
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	5.06	30%	C	3.54	6.43	50%	3.22	3.22	11.38
Garden Center (Nursery)	817	1,000 SF GFA	3.80	30%	B	2.66	6.43	50%	3.22	3.22	8.55
Home Improvement Superstore	862	1,000 SF GFA	2.45	30%	B	1.72	6.43	50%	3.22	3.22	5.53
Pharmacy/Drugstore	881	1,000 SF GFA	8.62	49%	A	4.40	6.43	50%	3.22	3.22	14.15
Shopping Center	820	1,000 SF GFA	3.75	34%	A	2.48	6.43	50%	3.22	3.22	7.97
Supermarket	850	1,000 SF GFA	10.45	36%	A	6.69	6.43	50%	3.22	3.22	21.51
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.22
Video Rental Store	896	1,000 SF GFA	13.60	50%	B	6.80	6.43	50%	3.22	3.22	21.86
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	33.15	40%	B	19.89	3.39	50%	1.70	1.70	33.71
Bank (Drive In)	912	1,000 SF GFA	45.74	47%	A	24.24	3.39	50%	1.70	1.70	41.09

Key to Sources of Pass-by Rates:

A: October 1998 ITE Trip Generation handbook

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

VI. SAMPLE CALCULATIONS

The following section details two (2) examples of maximum assessable transportation impact fee calculations.

Example 1:

- **Development Type - One (1) Unit of Single-Family Housing in Service Area C**

Transportation Impact Fee Calculation Steps – Example 1	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 8 [Land Use – Vehicle Mile Equivalency Table]</i> Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 6.06
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle Mile)
	<i>From Table 7, Line 18 [Maximum Assessable Fee Per Service Unit]</i> Service Area C: \$640
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit
	Impact Fee = 1 * 6.06 * \$640 Maximum Assessable Impact Fee = \$3,878.40

Example 2:

- **Development Type – 125,000 square foot Home Improvement Superstore in Service Area W**

Transportation Impact Fee Calculation Steps – Example 2	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 8 [Land Use – Vehicle Mile Equivalency Table]</i> Development Type: 125,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 5.53
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle Mile)
	<i>From Table 7, Line 18 [Maximum Assessable Fee Per Service Unit]</i> Service Area W: \$121
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit
	Impact Fee = 125 * 5.53 * \$121 Maximum Assessable Impact Fee = \$83,641.25

VII. CONCLUSIONS

The City of Fort Worth has established a process to implement the assessment and collection of transportation impact fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable transportation impact fee that could be assessed by the City of Fort Worth, as shown in the previously referenced **Table 7**.

This document serves as a guide to the assessment of transportation impact fees pertaining to future development and the City's need for transportation improvements to accommodate that growth. Following the public hearing process, the City Council may establish an impact fee amount to be assessed (if any) up to the calculated maximum and establish the Transportation Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this analysis are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Capital Improvements Plan are appropriately incorporated into the development of the maximum assessable transportation impact fee.

APPENDICES

A. CONCEPTUAL LEVEL PROJECT COST PROJECTIONS

SERVICE AREA A
SERVICE AREA AA
SERVICE AREA B
SERVICE AREA C
SERVICE AREA D
SERVICE AREA E
SERVICE AREA F
SERVICE AREA G
SERVICE AREA L
SERVICE AREA M
SERVICE AREA N
SERVICE AREA O
SERVICE AREA S
SERVICE AREA T
SERVICE AREA U
SERVICE AREA W
SERVICE AREA X
SERVICE AREA Y
SERVICE AREA Z

B. CIP SERVICE UNITS OF SUPPLY

C. EXISTING ROADWAY FACILITIES INVENTORY

D. PLAN FOR AWARDING THE TRANSPORTATION IMPACT FEE CREDIT SUMMARY

E. PLAN FOR AWARDING THE TRANSPORTATION IMPACT FEE CREDIT SUPPORTING EXHIBITS