



2012-2013 Roadway Impact Fee Update

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Kimley-Horn
and Associates, Inc.

2012 - 2013 Roadway Impact Fee Update



City of McKinney, TX

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July 2013



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I. EXECUTIVE SUMMARY

This study was performed to update the City of McKinney Roadway Impact Fees. Transportation system analysis is an important tool for facilitating orderly growth of the transportation system and for providing adequate facilities that promote economic development in the City of McKinney. The implementation of an impact fee is a way to shift a portion of the burden of paying for new facilities onto new development.

For the purposes of implementing roadway impact fees, the City of McKinney is divided into thirteen (13) service areas. These service areas cover the entire ultimate boundary of the City of McKinney, and each service area is an individual study area. For each service area, the impact fee funds collected must be spent on projects identified in the Impact Fee Roadway Improvements Program (RIP) for that specific service area. Because Service Areas A, F, and M are outside of the existing City limits, no impact fees are included for these service areas at this time.

As part of the 2012-2013 Impact Fee Update, roadway improvements necessary to serve the 10-year (2012-2022) growth needs were evaluated. Typically, infrastructure improvements are sized beyond the 10-year requirements; however, Texas' impact fee law (Chapter 395) only allows recovery of costs to serve the identified 10-year planning period. The projected recoverable cost to construct the infrastructure needed through 2022 by service area is provided in the following table:

SERVICE AREA	COST OF RIP AND FINANCING ATTRIBUTABLE TO GROWTH
A	\$0
B	\$1,888,280
C	\$22,785,669
D	\$34,710,925
E	\$16,417,925
F	\$0
G	\$24,500,186
H	\$15,351,615
I	\$19,500,380
J	\$13,995,738
K	\$10,731,489
L	\$893,650
M	\$0

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the roadway 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.

Therefore, the City of McKinney defines a *service unit* as the number of vehicle-miles of travel during the afternoon peak-hour. For each type of development, the City of McKinney utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET) to determine the number of service units.



Based on the City’s 10-year growth projections and the associated demand (consumption), values for each service area in the terms of vehicle-miles are as follows:

SERVICE AREA	TOTAL VEHICLE-MILES OF NEW DEMAND OVER TEN YEARS
A	0
B	2,192
C	15,134
D	20,187
E	7,870
F	0
G	38,168
H	38,438
I	25,470
J	16,849
K	9,056
L	677
M	0

The cost for each vehicle-mile of travel is the cost of the RIP and financing attributable to growth divided by the total vehicle-miles of new demand over ten years is the maximum roadway impact fee. As a result, the City may assess a maximum roadway impact fee per vehicle-mile of:

SERVICE AREA	2012-2013 MAXIMUM ASSESSABLE FEE PER SERVICE UNIT	2007-2008 MAXIMUM ASSESSABLE FEE PER SERVICE UNIT
A	\$0	\$0
B	\$861	\$1,558
C	\$1,500	\$1,534
D	\$1,711	\$1,389
E	\$2,082	\$1,673
F	\$0	\$0
G	\$635	\$684
H	\$393	\$489
I	\$755	\$641
J	\$824	\$719
K	\$1,182	\$1,153
L	\$1,320	\$1,281
M	\$0	\$0



II. INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure that Texas cities must follow in order to create and implement impact fees. Senate Bill 243 (SB 243) amended Chapter 395 in September 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 roadway improvements or facility expansions necessitated by and attributable to the new development.”

Chapter 395 mandates that impact fees be reviewed and updated at least every five (5) years. Accordingly, the City of McKinney has initiated a review of its Land Use Assumptions, Roadway Improvements Plan, and Impact Fees. The City has retained Kimley-Horn and Associates, Inc., to provide professional transportation engineering services for the update of their Roadway Impact Fees. This report includes the update of the impact fee calculation in accordance with Chapter 395 and the adopted revisions to the Land Use Assumptions and the Roadway Improvements Plan.

This report introduces and references two of the basic inputs to the Roadway Impact Fee: the **Land Use Assumptions** and the **Roadway Improvements Plan (RIP)**. Information from these two components is used extensively in 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 Roadway Impact Fees and Impact Fee Calculation** addresses each of the components of the computation and modifications required for the update. The components include:

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

The final section of the report is the **Conclusion**, which presents the findings of the update analysis and summarizes the report.



III. ROADWAY IMPACT FEE CALCULATION INPUTS

A. LAND USE ASSUMPTIONS

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. The Land Use Assumptions used in this report were developed by City of McKinney staff and are presented in a separate report titled *Land Use Assumptions Report 2012-2013 Impact Fee Update (Land Use Assumptions)*. These Land Use Assumptions were adopted by City Council on June 18, 2013 by the McKinney City Council.

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 retail, service, and basic land uses. Each classification has unique trip making characteristics.

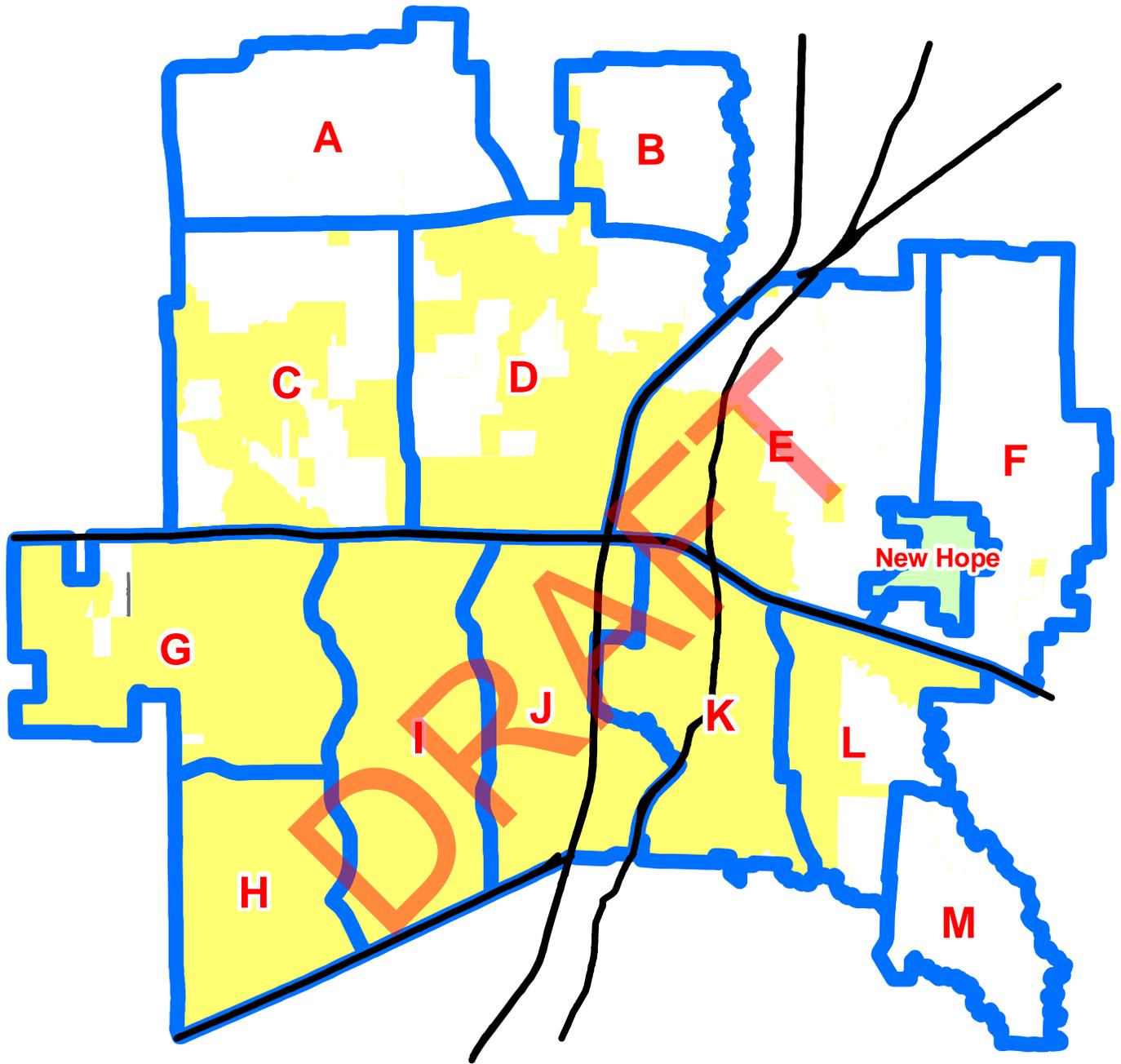
Retail: Land use activities which provide for the retail sale of goods that primarily serve households and whose location choice is oriented toward the household sector, such as grocery stores and restaurants.

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.

The geographic boundaries of the impact fee service areas for roadway facilities are shown in **Exhibit 1**. The City of McKinney is divided into thirteen (13) service areas, each based upon a six (6) mile limit as required in Chapter 395. The Land Use Assumptions for roadway facilities exclude areas outside the corporate limits of the city (as of July 16, 2013).

Table 1 summarizes the population and employment projections by service area within the City of McKinney for 2012 and 2022 from the previously referenced *Land Use Assumptions Report 2012-2013 Impact Fee Update*.



Legend

-  Service Area Boundary
-  McKinney City Limits

Impact Fee Service Areas
Exhibit 1
McKINNEY™ Unique by nature.™ **2012-2013 Roadway Impact Fee Update**

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 Miles

July 2013

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Table 1. Population and Employment Projections for the City of McKinney

Service Area	Year	Population	Units	Employment (Square Feet)			
				Basic	Service	Retail	Total
A	2012	0	0	0	0	0	0
	2022	0	0	0	0	0	0
B	2012	0	0	0	0	0	0
	2022	7,919	2,740	0	0	0	0
C	2012	3,501	1,245	10,233	108,704	488,070	607,007
	2022	11,718	4,088	10,233	370,175	1,160,762	1,541,170
D	2012	9,584	2,776	66,490	1,775,143	719,239	2,560,872
	2022	14,784	4,575	66,490	2,167,354	1,550,859	3,784,703
E	2012	2,550	635	3,159,347	759,829	984,216	4,903,392
	2022	4,989	1,479	3,690,079	759,829	1,154,758	5,604,666
F	2012	0	0	0	0	0	0
	2022	43	15	0	0	0	0
G	2012	35,028	12,584	138,680	1,201,866	883,757	2,224,303
	2022	49,264	17,510	176,588	1,638,004	1,501,971	3,316,563
H	2012	13,294	5,222	293,832	803,818	1,218,376	2,316,026
	2022	23,701	8,823	331,742	2,729,929	2,254,358	5,316,029
I	2012	33,327	11,881	101,530	1,259,562	872,364	2,233,456
	2022	40,864	14,489	158,395	2,115,000	1,199,670	3,473,065
J	2012	21,291	8,816	1,453,785	2,040,859	3,000,259	6,494,903
	2022	25,016	10,105	1,586,469	2,499,998	3,600,064	7,686,531
K	2012	18,223	6,584	5,628,221	1,852,784	1,723,306	9,204,311
	2022	20,691	7,438	5,959,928	1,978,381	1,967,401	9,905,710
L	2012	15	13	601,136	1,515	11,353	614,004
	2022	15	13	800,160	1,515	11,353	813,028
M	2012	0	0	0	0	0	0
	2022	0	0	0	0	0	0



B. ROADWAY IMPROVEMENTS PLAN

The City has identified the City-funded transportation projects needed to accommodate the projected growth within the City. The Roadway Improvements Plan (RIP) for Roadway 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 RIP includes arterial class roadway facilities, as well as intersection improvements. All of the arterial facilities are part of the currently adopted Master Thoroughfare Plan.

The RIP for Roadway Impact Fees that is proposed for the 2012-2013 Impact Fee Update is listed in **Table 2** and mapped in **Exhibit 2 (see also back pocket)**. The table shows the length of each project as well as the facility’s Master Thoroughfare Plan classification. The RIP was developed in conjunction with input from City of McKinney staff and represents those projects that will be needed to accommodate the growth projected in the *Land Use Assumptions Report 2012-2013 Impact Fee Update*.

Table 2.A. Roadway Improvement Plan for Roadway Impact Fees – Service Area A

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
A	A-1, D-1	M6D	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	0.30	50%

Table 2.B. Roadway Improvement Plan for Roadway Impact Fees – Service Area B

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
B	B-1	M6D	Hardin Blvd. (1)	CCR 204 to CCR 206	0.07	50%
	B-2	M6D	Hardin Blvd. (2)	1,665' N. of CCR 228 to CCR 226	0.45	50%
	S-2		Signal Installation	Hardin Blvd. & Fannin Rd.		50%



Table 2.C. Roadway Improvement Plan for Roadway Impact Fees – Service Area C

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
C	C-1	M6D	Future Arterial B (CCR 168) (1)	Ridge Rd. to 1,510' W. of Ridge Rd.	0.29	50%
	C-2	P6D	FM 1461 (1)	145' E. of Existing Custer Rd. to Future Custer Rd.	0.13	50%
	C-3	P6D	FM 1461 (2)	Future Custer Rd. to 1,175' E. of Future Custer Rd.	0.22	100%
	C-4	P6D	FM 1461 (3)	1,175' E. of Future Custer Rd. to 2,015' E. of Future	0.16	50%
	C-5	P6D	FM 1461 (4)	2,195' W. of Ridge Rd. to 1,210 E. of Ridge Rd.	0.64	50%
	C-6	M6D	Bloomdale Rd. (1)	Custer Rd. to 1,250' E. of Custer Rd.	0.24	100%
	C-7	M6D	Bloomdale Rd. (2)	1,250' E. of Custer Rd. to 275' E. of CCR 124	0.41	50%
	C-8	M6D	Bloomdale Rd. (3)	275' E. of CCR 124 to 3,195' E. of Stonebridge Dr.	0.96	100%
	C-9	M6D	Bloomdale Rd. (4)	3,195' E. of Stonebridge Dr. to 645' W. of Ridge Rd.	0.30	50%
	C-10	M6D	Bloomdale Rd. (5)	645' W. of Ridge Rd. to Ridge Rd.	0.12	100%
	C-11	M6D (1/3)	Bloomdale Rd. (6)	1,895' E. of Ridge Rd. to Lake Forest Dr.	0.62	50%
	C-12	M6D	Wilmeth Rd. (1)	1,825' E. of Custer Rd (Wilson Creek).	0.68	100%
	C-13	M6D	Wilmeth Rd. (2)	Future Stonebridge Dr. to 1,045' W. of Ridge Rd.	0.74	50%
	C-14	M6D	Wilmeth Rd. (3)	1,275' W. of Ridge Knoll to Ridge Knoll	0.24	50%
	C-15	M6D (1/3)	Wilmeth Rd. (4)	Ridgeknoll to 265' W. of Sunnyside Dr.	0.25	50%
	C-16	M6D (1/3)	Wilmeth Rd. (5)	265' W. of Sunnyside Dr. to Lake Forest Dr.	0.32	100%
	C-17	P6D	Custer Rd. (1)	1,290' N. of FM 1461 to FM 1461	0.24	50%
	C-18	P6D	Custer Rd. (2)	FM 1461 to 2,615' N of Bloomdale Rd.	0.52	100%
	C-19	P6D	Custer Rd. (3)	2,615' N. of Bloomdale Rd. to Bloomdale Rd.	0.50	50%
	C-20	P6D	Custer Rd. (4)	Bloomdale Rd. to S. City Limits (Creek)	0.69	50%
	C-21	M6D	Stonebridge Dr. (1)	1,600' S. of FM 1461 to Wilmeth Rd.	1.52	100%
	C-22	M6D	Stonebridge Dr. (2)	Wilmeth Rd. to 775' S. of Wilmeth Rd.	0.15	50%
	C-23	M6D	Stonebridge Dr. (3)	775' S. of Wilmeth Rd. to US 380	0.96	100%
	C-24	M6D	Ridge Rd. (1)	CCR 168 to 1,505' S. of CCR 168	0.29	50%
	C-25	M6D	Ridge Rd. (2)	FM 1461 to Baxter Well	0.59	100%
	C-26	M6D	Ridge Rd. (3)	Baxter Well to 1,330' S. of Bloomdale Rd.	0.68	50%
	C-27	M6D	Ridge Rd. (4)	1,330' S. of Bloomdale Rd. to 2,135' S. of Bloomdale Rd.	0.15	50%
	C-28	M6D	Ridge Rd. (5)	Wilson Creek to US 380	0.16	100%
	C-29	M6D (2/3)	Lake Forest Dr. (2)	Bloomdale Rd. to Wilmeth Rd.	1.01	50%
	C-30, D-13	M6D (1/3)	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	0.99	50%
	S-1		Signal Installation	Future Arterial (CCR 168) & Ridge Rd.		25%
	S-4		Signal Installation	Custer Rd. & FM 1461		75%
	S-5		Signal Installation	Ridge Rd. & FM 1461		50%
	S-6		Signal Installation	Custer Rd. & Bloomdale Rd.		50%
S-7		Signal Installation	Stonebridge Dr. & Bloomdale Rd.		100%	
S-8		Signal Installation	Ridge Rd. & Bloomdale Rd.		50%	
S-9		Signal Installation	Lake Forest Dr. & Bloomdale Rd.		25%	
S-10		Signal Installation	Stonebridge Dr. & Wilmeth Rd.		75%	
S-11		Signal Installation	Lake Forest Dr. & Wilmeth Rd.		50%	
S-12		Signal Installation	Tremont Blvd. & US 380		50%	
S-13		Signal Installation	Forest Ridge Dr. & US 380		50%	
S-14		Signal Installation	Wilmeth Rd. & Ridge Knoll		50%	



Table 2.D. Roadway Improvement Plan for Roadway Impact Fees – Service Area D

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
D	A-1, D-1	M6D	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	0.30	50%
	D-2	M6D	Future Arterial B (CCR 168) (3)	W. City Limits to CCR 229	0.43	100%
	D-3	P6D	Future Arterial C (1)	420' E. of Lake Forest Dr. to 3,715' E. of Lake Forest	0.62	50%
	D-4	P6D	Future Arterial C (2)	3,715' E. of Lake Forest Dr. to CCR 202	1.77	100%
	D-5	M6D	Bloomdale Rd. (7)	1,485' E. of CCR 1006 to 1,215 W. of CCR 1007	0.29	100%
	D-6	M6D	Bloomdale Rd. (8)	1,215 W. of CCR 1007 to CCR 1007	0.23	50%
	D-7	M6D	Bloomdale Rd. (9)	CCR 1007 to Community Ave.	0.86	100%
	D-8	M6D	Wilmeth Rd. (6)	Lake Forest Dr. to CCR 943 (Unnamed B)	0.90	50%
	D-9	M6D	Wilmeth Rd. (7)	CCR 943 (Unnamed B) to 2,260 W. of Hardin Blvd.	0.25	100%
	D-10	M6D	Wilmeth Rd. (8)	2,260 W. of Hardin Blvd. to Hardin Blvd.	0.43	50%
	D-11	M6D (1/3)	Wilmeth Rd. (9)	Hardin Blvd. to US 75 SBFR	1.16	100%
	D-12	M6D	Lake Forest Dr. (1)	820' S. of Geren Trl. to 510' S. of Baxter Well	0.51	50%
	C-30, D-13	M6D (1/3)	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	0.99	50%
	D-14	M6D	Future Unnamed B (1)	Future Arterial C to 945' S. of Future Arterial C	0.18	100%
	D-15	M6D	Future Unnamed B (2) / CCR 1006	945' S. of Future Arterial C to 2,305' S. of Future	0.26	50%
	D-16	M6D	Future Unnamed B (3) / CCR 943	2,045' N. of Wilmeth Rd. to Wilmeth Rd.	0.39	50%
	D-17	M6D	Hardin Blvd. (3)	CCR 229 to FM 543	0.44	100%
	D-18	M6D	Hardin Blvd. (4)	FM 543 to 1,230' S. of FM 543	0.23	50%
	D-19	M6D	Hardin Blvd. (5)	1,230' S. of FM 543 to CCR 201	1.39	100%
	D-20	M6D	Hardin Blvd. (6)	CCR 201 to CCR 164 (Future Bloomdale Rd.)	0.34	50%
	D-21	M6D	Hardin Blvd. (7)	CCR 164 (Bloomdale Rd.) to Holly Ridge Way	0.60	100%
	D-22	M6D (2/3)	Hardin Blvd. (8)	Holly Ridge Way to 1,770' N. of Wilmeth Rd.	0.22	100%
	D-23	M6D (1/3)	Hardin Blvd. (9)	1,770' N. of Wilmeth Rd. to Wilmeth Rd.	0.34	50%
	D-24	M6D (1/3)	Hardin Blvd. (10)	Wilmeth Rd. to US 380	1.23	100%
	D-25	M4U	Community Ave. (1)	Hardin Blvd. to 1,915' E. of Hardin Blvd.	0.36	100%
	D-26	M4U	Community Ave. (2)	1,915' E. of Hardin Blvd. to N. City Limits/Creek	0.20	50%
	D-27	M4U	Community Ave. (3)	N. City Limits/Creek to 2,645' N. of Bloomdale Rd.	0.18	100%
	D-28	M4U (1/2)	Community Ave. (4)	2,645' N. of Bloomdale Rd. to 90' S. of James Pitts Dr.	0.61	100%
	D-29	M4U (1/2)	Community Ave. (5)	90' S. of James Pitts Dr. to 230' S. of Brinlee Branch	0.33	100%
	D-30	P6D	Future Arterial C (3)	E. City Limits to W. City Limits	0.31	100%
	D-31	M6D	Future Unnamed C	N. City Limits to Future Arterial C (3)	0.08	100%
S-3		Signal Installation	Hardin Blvd. & Future Arterial B		100%	
S-11		Signal Installation	Lake Forest Dr. & Wilmeth Rd.		25%	
S-15		Signal Installation	Unnamed B & Future Arterial C		100%	
S-16		Signal Installation	Hardin Blvd. & Future Arterial C		100%	
S-17		Signal Installation	Hardin Blvd. & Community Ave.		75%	
S-18		Signal Installation	Hardin Blvd. & Bloomdale Rd.		100%	
S-19		Signal Installation	Community Ave. & Bloomdale Rd.		100%	
S-20		Signal Installation	Unnamed B & Wilmeth Rd.		75%	
S-21		Signal Installation	Hardin Blvd. & Wilmeth Rd.		75%	



Table 2.E. Roadway Improvement Plan for Roadway Impact Fees – Service Area E

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
E	E-1	M6D (1/3)	Bloomdale Rd. (10)	US 75 NBFR to 275' E. of Shawnee Dr.	0.48	100%
	E-2	M6D (2/3)	Bloomdale Rd. (11)	275' E. of Shawnee Dr. to FM 543	0.47	100%
	E-3	M6D	FM 543 (1)	Honey Creek to SH 5	0.49	100%
	E-4	M6D (1/3)	Wilmeth Rd. (10)	US 75 NBFR to Redbud Blvd.	0.26	100%
	E-5	M (1/3) OUTS	Wilmeth Rd. (11)	Redbud Blvd. to 1,340 E. of Redbud Blvd.	0.25	100%
	E-6	M6D (1/3)	Wilmeth Rd. (12)	1,340 E. of Redbud Blvd. to 2,005 E. of Redbud Blvd.	0.13	100%
	E-7	M6D (2/3)	Wilmeth Rd. (13)	2,005 E. of Redbud Blvd. to SH 5	0.52	100%
	E-8	M6D	Wilmeth Rd. (14)	SH 5 to McIntyre Rd. (CCR 274)	0.39	100%
	E-9	M6D	Wilmeth Rd. (15)	1,610' E. of SH 5 to RR tracks	0.26	100%
	E-10	M6D	Wilmeth Rd. (16)	RR tracks to 1,230' E. of the RR tracks (E. City Limits)	0.23	50%
	E-11	M6D	Wilmeth Rd. (17)/ CCR 331	265' E. of CCR 335 to FM 2933	0.28	50%
	E-12	M4D	Redbud Blvd. (1)	Bloomdale Rd. to 1,075' N. of Wilmeth Rd.	0.65	100%
	E-13	M4D (1/2)	Redbud Blvd. (2)	1,075' N. of Wilmeth Rd. to Wilmeth Rd.	0.20	100%
	E-14	M6D	Airport Dr. (1)	SH 5 to RR tracks (E. City Limits)	0.94	100%
	E-15	M6D	Airport Dr. (2)	McIntyre Rd. (Future Wilmeth Rd.) to US 380	1.58	100%
	E-16	M6D	FM 2933	CCR 331 to CCR 335	0.49	50%
	S-22		Signal Installation	Redbud Blvd. & Bloomdale Rd.		100%
	S-23		Signal Installation	Redbud Blvd. & Wilmeth Rd.		100%
	S-24		Signal Installation	Airport Dr. & Wilmeth Rd.		75%
	S-25		Signal Installation	FM 543 & Bloomdale Rd.		100%
	S-26		Signal Installation	FM 2933 & Wilmeth Rd.		50%

Table 2.F. Roadway Improvement Plan for Roadway Impact Fees – Service Area F

No Impact Fee Eligible Roadway Projects





Table 2.G. Roadway Improvement Plan for Roadway Impact Fees – Service Area G

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
G	G-1	M6D	Virginia Pkwy. (1)	Coit Rd. to 500' W. of Independence Pkwy.	0.90	100%
	G-2	M6D	Virginia Pkwy. (2)	500' W. of Independence Pkwy. to Independence Pkwy.	0.09	50%
	G-3	M6D	Virginia Pkwy. (3)	Independence Pkwy. to 325' E. of Forkhorn Dr.	0.19	50%
	G-4	M6D (1/3)	Virginia Pkwy. (4)	325' E. of Forkhorn Dr. to 935' W. of Virginia Hills	0.28	50%
	G-5	M6D (1/3)	Virginia Pkwy. (5)	935' W. of Virginia Hills to Custer Rd.	0.50	100%
	G-6	M6D (1/3)	Virginia Pkwy. (6)	Custer Dr. to 410' E. of Danbury Dr.	0.52	100%
	G-7	M6D (1/6)	Virginia Pkwy. (7)	410' E. of Danbury Dr. to Virginia Parklands Blvd.	0.36	100%
	G-8	M6D	Westridge Blvd. (1)	Coit Rd. to 1,650' E. of Coit Rd.	0.31	50%
	G-9	M6D (1/3)	Westridge Blvd. (2)	1,650' E. of Coit Rd. to Independence Pkwy.	0.70	100%
	G-10	M6D (1/3)	Westridge Blvd. (3)	Independence Pkwy. to Memory Ln.	0.51	100%
	G-11	M6D (1/3)	Westridge Blvd. (4)	Memory Ln. to Custer Rd.	0.50	50%
	G-12	M6D (1/3)	Coit Rd. (1)	US 380 to 2,780' S. of US 380	0.53	50%
	G-13	M6D	Coit Rd. (2)	2,685 N. of Virginia to 2,610 S. of Virginia	1.00	50%
	G-14	M6D (1/3)	Coit Rd. (3)	Westridge Rd. to 270' S. of Calgary Dr.	0.50	50%
	G-15	M6D	Independence Pkwy. (1)	3,100' N. of Virginia Pkwy. to 720' N. of Virginia Pkwy.	0.45	100%
	G-16	M6D (1/3)	Independence Pkwy. (2)	Virginia Pkwy. to George Washington Dr. (S. City Limits)	1.49	100%
	G-17	P6D	Custer Rd. (5)	US 380 to Westridge Rd.	2.01	100%
	G-18	P6D	Custer Rd. (6)	Westridge Rd. to 1,110' S. of Cotton Ridge Rd. S	0.51	50%
	G-19	P6D	Custer Rd. (7)	705' N. of Fountainview Dr. to Eldorado Pkwy.	0.38	50%
	G-20, I-8	G4D	Ridge Rd. (6)	US 380 to Creekside Dr.	1.30	50%
	S-12		Signal Installation	Tremont Blvd. & US 380		50%
	S-13		Signal Installation	Forest Ridge Dr. & US 380		50%
	S-27		Signal Installation	Custer Rd. & Bristol Dr.		100%
	S-28		Signal Installation	Stonebridge Dr. & LaCima Dr.		100%
	S-29		Signal Installation	Coit Rd. & Virginia Pkwy.		50%
	S-30		Signal Installation	Independence Pkwy. & Virginia Pkwy.		50%
	S-31		Signal Installation	Custer Rd. & Cotton Ridge Rd. North		100%
	S-32		Signal Installation	Coit Rd. & Westridge Rd.		25%
	S-33		Signal Installation	Independence Pkwy. & Westridge Rd.		100%
	S-34		Signal Installation	Glen Oaks Dr. & Stonebridge Dr.		100%
	S-35		Signal Installation	Ridge Rd. & Glen Oaks Dr.		50%
	S-36		Signal Installation	Custer Rd. & Cotton Ridge Rd. South		50%
	S-37		Signal Installation	Stonebridge Dr. & Alma Dr.		100%
	S-38		Signal Installation	Ridge Rd. & Rush Creek Rd.		50%
	S-39		Signal Installation	Ridge Rd. & Berkshire Rd.		50%



Table 2.H. Roadway Improvement Plan for Roadway Impact Fees – Service Area H

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
H	H-1	M4D	Silverado Trl. (1)	Custer Rd. to 100' W. of Amon Carter Dr.	0.40	100%
	H-2	M4D	Silverado Trl. (2)	Alma Rd. to Alfalfa Dr.	0.22	100%
	H-3	M4D	Silverado Trl. (3)	Alfalfa Dr. to 145' W. of Ironstone Ln.	0.28	100%
	H-4	P6D (1/3)	Stacy Rd. (1)	Custer Rd. to Ridge Rd.	2.03	100%
	H-5, I-11	P6D (1/3)	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	0.82	50%
	H-6	M6D (1/3)	McKinney Ranch Pkwy. (1)	Stacy Rd. to Ridge Rd.	0.77	100%
	H-7	G4D	Collin McKinney Pkwy. (1)	Weiskopf Ave. to Alma (Couplet)	0.79	100%
	H-8	M6D	Craig Ranch Pkwy.	Collin McKinney Pkwy. To SH 121	0.65	100%
	H-9	G4D	Alma Rd. (1)	Eldorado to 805' S. of Beaver Ck.	0.66	100%
	H-10	G4D	Alma Rd. (2)	805' S. of Beaver Ck. to Silverado Trl.	0.38	100%
	H-11	M6D (1/3)	Alma Rd. (3)	Silverado Trl. to Stacy Rd.	0.49	100%
	H-12	M6D	Alma Rd. (4)	Stacy Rd. to SH 121	1.41	100%
	H-13, I-9	G4D	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	1.08	50%
	H-14, I-10	M6D (1/3)	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	0.69	50%
	H-15	P6D	Custer Rd. (8)	Eldorado Pkwy. To Stonebridge Dr.	0.39	50%
	S-40		Signal Installation	Custer Rd. & Silverado Trl.		50%
	S-41		Signal Installation	Alma Rd. & Silverado Trl.		100%
	S-42		Signal Installation	McKinney Ranch Pkwy. & Silverado Trl.		100%
	S-43		Signal Installation	McKinney Ranch Pkwy. & Stacy Rd.		100%
	S-44		Signal Installation	Custer Rd. & Paradise Dr.		50%
	S-45		Signal Installation	Collin McKinney Pkwy. & Craig Ranch Pkwy.		100%
	S-46		Signal Installation	Collin McKinney Pkwy. & Stacy Rd.		50%
	S-47		Signal Installation	Alma Rd. & Hennemen Way		100%

Table 2.I. Roadway Improvement Plan for Roadway Impact Fees – Service Area I

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
I	I-1	M6D (1/3)	Virginia Pkwy. (8)	1,035' E. of Ridge Rd. to 1,355' W. of Hardin Blvd.	1.44	100%
	I-2	G4D	Eldorado Pkwy. (1)	Ridge Rd. to 850' E. of Ridge Rd.	0.16	100%
	I-3	M6D (1/3)	McKinney Ranch Pkwy. (2)	Ridge Rd. to Hardin Blvd.	1.80	100%
	I-4	G4D	Collin McKinney Pkwy. (2)	Stacy Rd. to Village Park	0.54	100%
	I-5	G4D	Collin McKinney Pkwy. (3)	Lake Forest Dr. to Cottonwood Creek	0.31	100%
	I-6	G4D (1/2)	Collin McKinney Pkwy. (4)	Cottonwood Creek to 1,110' E. of Tina	0.55	100%
	I-7	G4D	Collin McKinney Pkwy. (5)	1,110' E. of Tina to Hardin Blvd.	0.19	100%
	G-20, I-8	G4D	Ridge Rd. (6)	US 380 to Creekside Dr.	1.30	50%
	H-13, I-9	G4D	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	1.08	50%
	H-14, I-10	M6D (1/3)	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	0.69	50%
	H-5, I-11	P6D (1/3)	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	0.82	50%
	I-12	M6D (1/3)	Lake Forest Dr. (4)	McKinney Ranch Pkwy. to SH 121	1.02	100%
	I-13, J-8	G4D	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	1.58	50%
	I-14, J-9	M6D (1/3)	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	0.57	50%
	S-35		Signal Installation	Ridge Rd. & Glen Oaks Dr.		50%
	S-38		Signal Installation	Ridge Rd. & Rush Creek Rd.		50%
	S-39		Signal Installation	Ridge Rd. & Berkshire Rd.		50%
	S-46		Signal Installation	Collin McKinney Pkwy. & Stacy Rd.		50%
	S-48		Signal Installation	Virginia Pkwy. & Joplin Dr.		100%
	S-49		Signal Installation	Virginia Pkwy. & Crutcher Crossing		100%
	S-50		Signal Installation	Virginia Pkwy. & Village Dr.		100%
	S-51		Signal Installation	Virginia Pkwy. & Mallard Lakes Dr.		100%
	S-52		Signal Installation	Lake Forest Dr. & Glen Oaks Dr.		100%
	S-53		Signal Installation	Hardin Blvd. & Maverick Trl.		50%
	S-54		Signal Installation	Eldorado Pkwy. & Woodson Dr.		100%
	S-55		Signal Installation	Eldorado Pkwy. & Highlands Dr.		100%
	S-56		Signal Installation	Lake Forest Dr. & Collin McKinney Pkwy.		100%
	S-57		Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.		50%



Table 2.J. Roadway Improvement Plan for Roadway Impact Fees – Service Area J

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
J	J-1	M4D	White Ave. (1)	Hardin Blvd. to Bois D'Arc	0.17	100%
	J-2	M4D	White Ave. (2)	Bois D'Arc to Community Ave.	0.93	100%
	J-3	M6D (1/3)	McKinney Ranch Pkwy. (3)	Hardin Blvd. to 515' E. of Hardin Blvd.	0.10	100%
	J-4	M6D	McKinney Ranch Pkwy. (4)	515' E. of Hardin Blvd. to US 75 SBFR	0.82	100%
	J-5	G4D	Collin McKinney Pkwy. (6)	Hardin Blvd. to 1,010' E. of Hardin Blvd.	0.19	100%
	J-6	M4U	Collin McKinney Pkwy. (7)	1,010' E. of Hardin Blvd. to McKinney Ranch Pkwy.	0.54	100%
	J-7	M4U	Collin McKinney Pkwy. (8)	720' W. of Test Dr. to Craig Dr.	0.58	100%
	I-13, J-8	G4D	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	1.58	50%
	I-14, J-9	M6D (1/3)	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	0.57	50%
	J-10	M4U	Community Ave. (6)	US 380 to 2,120' S. of US 380	0.40	100%
	S-53		Signal Installation	Hardin Blvd. & Maverick Trl.		50%
	S-57		Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.		50%
	S-58		Signal Installation	White Ave. & Jordan Rd.		100%
	S-59		Signal Installation	Virginia St. & Redbud Blvd.		50%
	S-60		Signal Installation	Collin McKinney Pkwy. & McKinney Ranch Pkwy.		100%
	S-61		Signal Installation	Collin McKinney Pkwy. & Craig Dr.		100%
S-63		Signal Installation	SH 5 & Stewart Rd.		50%	
S-64		Signal Installation	SH 5 & Enterprise Dr.		50%	

Table 2.K. Roadway Improvement Plan for Roadway Impact Fees – Service Area K

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
K	K-1	P6D	FM 546 (1)	SH 5 to Existing FM 546	1.64	100%
	K-2, L-1	M6D (1/3)	Airport Dr. (3)	US 380 to 355' S. of US 380	0.07	50%
	K-3, L-2	M6D (1/3)	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	1.74	50%
	K-4, L-3	M6D (1/3)	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	0.50	50%
	K-5	M6D (1/3)	Airport Dr. (6) / Country Ln.	FM 546 to 2,110' N. of CCR 326	0.30	100%
	K-6	M6D	Airport Dr. (7)	2,110' N. of CCR 326 to Old Mill Rd.	0.10	100%
	S-59		Signal Installation	Redbud Blvd. & Virginia St.		50%
	S-62		Signal Installation	SH 5 & Old Mill Rd.		100%
	S-63		Signal Installation	SH 5 & Stewart Rd.		50%
	S-64		Signal Installation	SH 5 & Enterprise Dr.		50%
	S-65		Signal Installation	SH 5 & Smith St.		100%
	S-66		Signal Installation	Wilson Creek Pkwy. & College St.		100%
	S-67		Signal Installation	Airport Dr. & Elm St.		50%
	S-68		Signal Installation	Eldorado Blvd. & College St.		100%
S-69		Signal Installation	Airport Dr. & FM 546		100%	



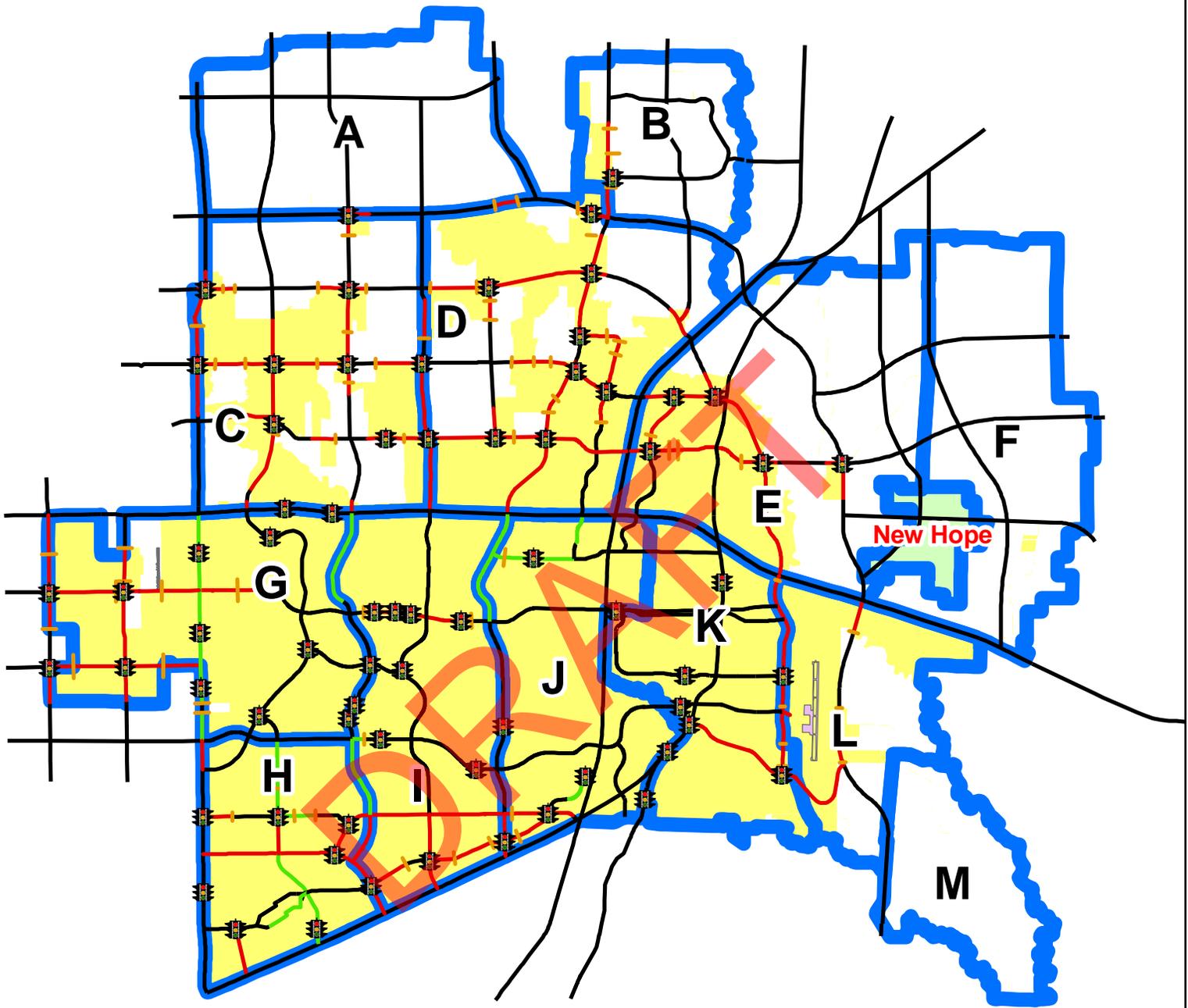
Table 2.L. Roadway Improvement Plan for Roadway Impact Fees – Service Area L

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
L	K-2, L-1	M6D (1/3)	Airport Dr. (3)	US 380 to 355' S. of US 380	0.07	50%
	K-3, L-2	M6D (1/3)	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	1.74	50%
	K-4, L-3	M6D (1/3)	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	0.50	50%
	L-4	P6D	FM 546 (2)	Existing FM 546 to E. City Limits	0.95	100%
	L-5	M6D	Unnamed D (1)	US 380 to Trinity River (S. City Limits)	0.44	100%
	L-6	M6D	Unnamed D (2)	CCR 722 to CCR 722 Bend	0.27	50%
	L-7	M6D	Unnamed D (3)	CCR 722 Bend to FM 546	0.74	100%
	S-67		Signal Installation	Airport Dr. & Wilson Creek Pkwy.		50%

Table 2.M. Roadway Improvement Plan for Roadway Impact Fees – Service Area M

No Impact Fee Eligible Roadway Projects

DRAFT



Legend

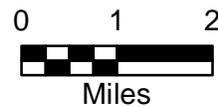
-  Other Thoroughfare Facilities
-  Impact Fee Eligible Projects
-  Completed Impact Fee Eligible
-  Impact Fee Project Limits
-  Intersection Improvements
-  Service Area Boundary
-  McKinney City Limits

Roadway Impact Fee RIP

Exhibit 2



2012-2013 Roadway
Impact Fee Update



July 2013

 Kimley-Horn
and Associates, Inc.



IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. SERVICE AREAS

The thirteen (13) service areas used in the 2012-2013 Roadway Impact Fee Update are shown in the previously referenced **Exhibit 1**. These service areas cover the entire corporate boundary of the City of McKinney. 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.” The service areas used in the 2012-2013 Roadway Impact Fee Update are generally the same as in the previous impact fee update (adopted in 2008) with some minor modifications to reflect recent annexations and adjustment to service area boundaries where a future roadway was recently constructed. These service area boundaries were modified to match the actual constructed roadway alignment.

B. SERVICE UNITS

A “service unit” is a measure of consumption or use of the roadway facilities by new development. In other words, it is the measure of supply and demand for roads in the City. For transportation purposes, a service unit is defined as a vehicle-mile. On the supply side, this is a lane-mile of an arterial street. On the demand side, this 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 created by new development.

Another aspect of a service unit is the service volume that is provided (supplied) by a lane-mile of roadway facility. This number, also referred to as capacity, is a function of the facility type, facility configuration, number of lanes, and level of service.

The hourly service volumes used in the Roadway Impact Fee Update are based upon Thoroughfare Capacity Criteria published by the North Central Texas Council of Governments (NCTCOG). **Tables 3A** and **3B** show the service volumes as a function of the facility type.

**Table 3A. Level of Use for Proposed Facilities
(used in Appendix B – RIP Units of Supply)**

Roadway Type (MTP Classifications)	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
M4U – Minor Arterial	Undivided	525
M5U – Minor Arterial	TWLTL	625
M4D – Minor Arterial	Divided	700
G4D – Greenway Arterial	Divided	700
M6D – Major Arterial	Divided	700
P6D – Principal Arterial	Divided	780



**Table 3B. Level of Use for Existing Facilities
(used in Appendix C – Existing Facilities Inventory)**

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-R	Rural Cross-Section (i.e. gravel, dirt, etc.)	150
2U	Two lane undivided	475
2D	Two lane divided	525
3U	Three lane undivided (TWLTL)	525
4U	Four lane undivided (TWLTL)	525
4D	Four lane divided	700
5U	Five lane undivided (TWLTL)	625
6D	Six lane divided	700
7U	Seven lane undivided (TWLTL)	700
RA2U	Regional Arterial – Two lane undivided (TWLTL)	700
RA4D	Regional Arterial – Four lane divided	800
RA5U	Regional Arterial – Five lane undivided (TWLTL)	800
RA6D	Regional Arterial – Six lane divided	850

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 roadway 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 be 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 (see Section IV.E.). As noted earlier, the units of demand are vehicle-miles of travel.



D. COST OF THE RIP

The costs that may be included in the cost per service unit are all of the implementation costs for the Impact Fee Update, as well as project costs for arterial system elements within the Roadway 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 Roadway improvements plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the RIP 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 costs for location-specific items such as bridges, traffic signals, highway ramps, drainage structures, and any other special components are added to each project as appropriate. In addition State, Collin County, and developer driven projects in which the City has contributed a portion of the total project cost have been included in the RIP as lump sum costs, based upon discussions with City of McKinney staff. For future projects on the state highway system, a separate costing methodology was utilized that incorporated design criteria and unit prices unique to state highway projects. Based on discussions with City of McKinney staff, it was determined that on average, 50% of TxDOT projects would be funded by the City.

A typical roadway project consists of a number of costs; including construction, design engineering, survey, and right-of way acquisition. While the construction cost component may actually consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. Each new project's construction cost was divided into two cost components: roadway construction cost and major construction component allowances. The roadway construction components consist of the following pay items: (1) unclassified street excavation, (2) lime stabilization, (3) concrete pavement, (4) topsoil, (5) curb and gutter, and (6) allotment for turn lanes and median openings. A seventh pay item (HMAC Underlayment) is allotted for TxDOT projects in the Metroplex. The unit price for these pay items are based on recently completed construction projects.

Based on the above paving construction cost subtotal, a percentage of this total is calculated to allot for major construction component allowances. These allowances include preparation of right-of-way, traffic control, pavement markings/markers, roadway drainage, special drainage structures, incidental water and sewer relocations, turf / erosion control, and illumination. These allowance percentages are also based on historical data. The paving and allowance subtotal is given a five percent (5%) allotment for mobilization and a fifteen percent (15%) contingency to determine the construction cost total. To determine the total Impact Fee Project Cost, a percentage of the construction cost total is added for engineering, surveying, testing, mobilization, and right-of-way/easement acquisition. While the percentage is fixed for a majority of these allowances, the percentage of right-of-way acquisition costs vary between 20% for



existing roadway alignments and 35% for new roadway alignments. Based on a compilation of recently completed projects, 35% is a reasonable value for new roadway alignments, while 20% is appropriate for roadway widenings where a portion of the ROW is already in place.

The construction costs are variable based on the proposed Master Thoroughfare Plan classification of the roadway. Additional classifications are utilized in cases where a portion of the facility currently exists. The following indications are used for these projects: (1/2) for facilities where half the facility still needs to be constructed; (2/3) for future six-lane divided facilities where two lanes currently exist; (1/3) for future six-lane divided facilities where only the two-lanes within the median are needed; (1/6) for future six-lane divided facilities where only one lane within the median is needed; and (1/3)^{Outside} for future six-lane divided facilities where the outside two lanes are needed.

Table 4 is the RIP project list for each service area with conceptual level project cost projections. Detailed cost projections and methodology used for each individual project can be seen in **Appendix A**, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are potentially recoverable through impact fees. Actual costs of construction are likely to change with time and are dependent on market and economic conditions that cannot be precisely predicted at this time.

This RIP 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. This is different from a City’s construction CIP, which provides a broad list of projects for which the City is committed to building. 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 Roadway Improvements Plan for Roadway Impact Fees with Conceptual Level Project Cost Projections – Service Area A

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
A	A-1, D-1	M6D	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	0.30	50%	\$ 2,983,750	\$ 1,491,875
	Service Area Project Cost Subtotal							\$ 1,491,875
	Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615
Total Cost in SERVICE AREA A								\$ 1,501,490

Table 4.B – 10-Year Roadway Improvements Plan for Roadway Impact Fees with Conceptual Level Project Cost Projections – Service Area B

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
B	B-1	M6D	Hardin Blvd. (1)	CCR 204 to CCR 206	0.07	50%	\$ 425,600	\$ 212,800
	B-2	M6D	Hardin Blvd. (2)	1,665' N. of CCR 228 to CCR 226	0.45	50%	\$ 2,856,000	\$ 1,428,000
	S-2		Signal Installation	Hardin Blvd. & Fannin Rd.		50%	\$ 200,000	\$ 100,000
	Service Area Project Cost Subtotal							\$ 1,740,800
Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
Total Cost in SERVICE AREA B								\$ 1,750,415



**Table 4.C – 10-Year Roadway Improvements Plan for Roadway Impact Fees
with Conceptual Level Project Cost Projections – Service Area C**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
C	C-1	M6D	Future Arterial B (CCR 168) (1)	Ridge Rd. to 1,510' W. of Ridge Rd.	0.29	50%	\$ 1,804,600	\$ 902,300
	C-2	P6D	FM 1461 (1)	145' E. of Existing Custer Rd. to Future Custer Rd.	0.13	50%	\$ 562,100	\$ 281,050
	C-3	P6D	FM 1461 (2)	Future Custer Rd. to 1,175' E. of Future Custer Rd.	0.22	100%	\$ 943,600	\$ 943,600
	C-4	P6D	FM 1461 (3)	1,175' E. of Future Custer Rd. to 2,015' E. of Future Custer Rd.	0.16	50%	\$ 674,800	\$ 337,400
	C-5	P6D	FM 1461 (4)	2,195' W. of Ridge Rd. to 1,210 E. of Ridge Rd.	0.64	50%	\$ 2,733,500	\$ 1,366,750
	C-6	M6D	Bloomdale Rd. (1)	Custer Rd. to 1,250' E. of Custer Rd.	0.24	100%	\$ 1,493,800	\$ 1,493,800
	C-7	M6D	Bloomdale Rd. (2)	1,250' E. of Custer Rd. to 275' E. of CCR 124	0.41	50%	\$ 2,563,400	\$ 1,281,700
	C-8	M6D	Bloomdale Rd. (3)	275' E. of CCR 124 to 3,195' E. of Stonebridge Dr.	0.96	100%	\$ 6,070,400	\$ 6,070,400
	C-9	M6D	Bloomdale Rd. (4)	3,195' E. of Stonebridge Dr. to 645' W. of Ridge Rd.	0.30	50%	\$ 2,303,000	\$ 1,151,500
	C-10	M6D	Bloomdale Rd. (5)	645' W. of Ridge Rd. to Ridge Rd.	0.12	100%	\$ 771,400	\$ 771,400
	C-11	M6D (1/3)	Bloomdale Rd. (6)	1,895' E. of Ridge Rd. to Lake Forest Dr.	0.62	50%	\$ 957,600	\$ 478,800
	C-12	M6D	Wilmeth Rd. (1)	1,825' E. of Custer Rd (Wilson Creek). to Future Stonebridge Dr.	0.68	100%	\$ 4,781,750	\$ 4,781,750
	C-13	M6D	Wilmeth Rd. (2)	Future Stonebridge Dr. to 1,045' W. of Ridge Rd.	0.74	50%	\$ 5,093,200	\$ 2,546,600
	C-14	M6D	Wilmeth Rd. (3)	1,275' W. of Ridge Knoll to Ridge Knoll	0.24	50%	\$ 1,524,600	\$ 762,300
	C-15	M6D (1/3)	Wilmeth Rd. (4)	Ridgeknoll to 265' W. of Sunnyside Dr.	0.25	50%	\$ 490,398	\$ 245,199
	C-16	M6D (1/3)	Wilmeth Rd. (5)	265' W. of Sunnyside Dr. to Lake Forest Dr.	0.32	100%	\$ 900,960	\$ 900,960
	C-17	P6D	Custer Rd. (1)	1,290' N. of FM 1461 to FM 1461	0.24	50%	\$ 1,036,000	\$ 518,000
	C-18	P6D	Custer Rd. (2)	FM 1461 to 2,615' N. of Bloomdale Rd.	0.52	100%	\$ 2,342,050	\$ 2,342,050
	C-19	P6D	Custer Rd. (3)	2,615' N. of Bloomdale Rd. to Bloomdale Rd.	0.50	50%	\$ 2,099,300	\$ 1,049,650
	C-20	P6D	Custer Rd. (4)	Bloomdale Rd. to S. City Limits (Creek)	0.69	50%	\$ 2,909,900	\$ 1,454,950
	C-21	M6D	Stonebridge Dr. (1)	1,600' S. of FM 1461 to Wilmeth Rd.	1.52	100%	\$ 10,102,900	\$ 10,102,900
	C-22	M6D	Stonebridge Dr. (2)	Wilmeth Rd. to 775' S. of Wilmeth Rd.	0.15	50%	\$ 979,600	\$ 489,800
	C-23	M6D	Stonebridge Dr. (3)	775' S. of Wilmeth Rd. to US 380	0.96	100%	\$ 10,205,200	\$ 10,205,200
	C-24	M6D	Ridge Rd. (1)	CCR 168 to 1,505' S. of CCR 168	0.29	50%	\$ 1,799,000	\$ 899,500
	C-25	M6D	Ridge Rd. (2)	FM 1461 to Baxter Well	0.59	100%	\$ 3,909,100	\$ 3,909,100
	C-26	M6D	Ridge Rd. (3)	Baxter Well to 1,330' S. of Bloomdale Rd.	0.68	50%	\$ 4,267,200	\$ 2,133,600
	C-27	M6D	Ridge Rd. (4)	1,330' S. of Bloomdale Rd. to 2,135' S. of Bloomdale Rd.	0.15	50%	\$ 963,200	\$ 481,600
	C-28	M6D	Ridge Rd. (5)	Wilson Creek to US 380	0.16	100%	\$ 2,022,750	\$ 2,022,750
	C-29	M6D (2/3)	Lake Forest Dr. (2)	Bloomdale Rd. to Wilmeth Rd.	1.01	50%	\$ 4,487,000	\$ 2,243,500
	C-30, D-13	M6D (1/3)	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	0.99	50%	\$ 2,015,440	\$ 1,007,720
S-1		Signal Installation		Future Arterial (CCR 168) & Ridge Rd.		25%	\$ 200,000	\$ 50,000
S-4		Signal Installation		Custer Rd. & FM 1461		75%	\$ 215,000	\$ 161,250
S-5		Signal Installation		Ridge Rd. & FM 1461		50%	\$ 215,000	\$ 107,500
S-6		Signal Installation		Custer Rd. & Bloomdale Rd.		50%	\$ 215,000	\$ 107,500
S-7		Signal Installation		Stonebridge Dr. & Bloomdale Rd.		100%	\$ 200,000	\$ 200,000
S-8		Signal Installation		Ridge Rd. & Bloomdale Rd.		50%	\$ 200,000	\$ 100,000
S-9		Signal Installation		Lake Forest Dr. & Bloomdale Rd.		25%	\$ 200,000	\$ 50,000
S-10		Signal Installation		Stonebridge Dr. & Wilmeth Rd.		75%	\$ 200,000	\$ 150,000
S-11		Signal Installation		Lake Forest Dr. & Wilmeth Rd.		50%	\$ 200,000	\$ 100,000
S-12		Signal Installation		Tremont Blvd. & US 380		50%	\$ 215,000	\$ 107,500
S-13		Signal Installation		Forest Ridge Dr. & US 380		50%	\$ 215,000	\$ 107,500
S-14		Signal Installation		Wilmeth Rd. & Ridge Knoll		50%	\$ 215,000	\$ 107,500
Service Area Project Cost Subtotal							\$ 64,524,579	
Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
Total Cost in SERVICE AREA C							\$ 64,534,194	



**Table 4.D – 10-Year Roadway Improvements Plan for Roadway Impact Fees
with Conceptual Level Project Cost Projections – Service Area D**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
D	A-1, D-1	M6D	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	0.30	50%	\$ 2,983,750	\$ 1,491,875
	D-2	M6D	Future Arterial B (CCR 168) (3)	W. City Limits to CCR 229	0.43	100%	\$ 2,836,500	\$ 2,836,500
	D-3	P6D	Future Arterial C (1)	420' E. of Lake Forest Dr. to 3,715' E. of Lake Forest Dr.	0.62	50%	\$ 4,729,050	\$ 2,364,525
	D-4	P6D	Future Arterial C (2)	3,715' E. of Lake Forest Dr. to CCR 202	1.77	100%	\$ 19,647,800	\$ 19,647,800
	D-5	M6D	Bloomdale Rd. (7)	1,485' E. of CCR 1006 to 1,215' W. of CCR 1007	0.29	100%	\$ 1,859,200	\$ 1,859,200
	D-6	M6D	Bloomdale Rd. (8)	1,215' W. of CCR 1007 to CCR 1007	0.23	50%	\$ 1,453,200	\$ 726,600
	D-7	M6D	Bloomdale Rd. (9)	CCR 1007 to Community Ave.	0.86	100%	\$ 7,694,200	\$ 7,694,200
	D-8	M6D	Wilmeth Rd. (6)	Lake Forest Dr. to CCR 943 (Unnamed B)	0.90	50%	\$ 7,413,650	\$ 3,706,825
	D-9	M6D	Wilmeth Rd. (7)	CCR 943 (Unnamed B) to 2,260' W. of Hardin Blvd.	0.25	100%	\$ 1,566,600	\$ 1,566,600
	D-10	M6D	Wilmeth Rd. (8)	2,260' W. of Hardin Blvd. to Hardin Blvd.	0.43	50%	\$ 2,700,600	\$ 1,350,300
	D-11	M6D (1/3)	Wilmeth Rd. (9)	Hardin Blvd. to US 75 SBFR	1.16	100%	\$ 2,727,220	\$ 2,727,220
	D-12	M6D	Lake Forest Dr. (1)	820' S. of Geren Trl. to 510' S. of Baxter Well	0.51	50%	\$ 1,851,500	\$ 925,750
	C-30, D-13	M6D (1/3)	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	0.99	50%	\$ 2,015,440	\$ 1,007,720
	D-14	M6D	Future Unnamed B (1)	Future Arterial C to 945' S. of Future Arterial C	0.18	100%	\$ 1,193,500	\$ 1,193,500
	D-15	M6D	Future Unnamed B (2) / CCR 1006	945' S. of Future Arterial C to 2,305' S. of Future Arterial C	0.26	50%	\$ 1,625,400	\$ 812,700
	D-16	M6D	Future Unnamed B (3) / CCR 943	2,045' N. of Wilmeth Rd. to Wilmeth Rd.	0.39	50%	\$ 2,444,400	\$ 1,222,200
	D-17	M6D	Hardin Blvd. (3)	CCR 229 to FM 543	0.44	100%	\$ 2,910,900	\$ 2,910,900
	D-18	M6D	Hardin Blvd. (4)	FM 543 to 1,230' S. of FM 543	0.23	50%	\$ 1,554,650	\$ 777,325
	D-19	M6D	Hardin Blvd. (5)	1,230' S. of FM 543 to CCR 201	1.39	100%	\$ 15,504,650	\$ 15,504,650
	D-20	M6D	Hardin Blvd. (6)	CCR 201 to CCR 164 (Future Bloomdale Rd.)	0.34	50%	\$ 2,261,450	\$ 1,130,725
	D-21	M6D	Hardin Blvd. (7)	CCR 164 (Bloomdale Rd.) to Holly Ridge Way	0.60	100%	\$ 4,558,550	\$ 4,558,550
	D-22	M6D (2/3)	Hardin Blvd. (8)	Holly Ridge Way to 1,770' N. of Wilmeth Rd.	0.22	100%	\$ 964,600	\$ 964,600
	D-23	M6D (1/3)	Hardin Blvd. (9)	1,770' N. of Wilmeth Rd. to Wilmeth Rd.	0.34	50%	\$ 529,200	\$ 264,600
	D-24	M6D (1/3)	Hardin Blvd. (10)	Wilmeth Rd. to US 380	1.23	100%	\$ 4,204,201	\$ 4,204,201
	D-25	M4U	Community Ave. (1)	Hardin Blvd. to 1,915' E. of Hardin Blvd.	0.36	100%	\$ 1,260,000	\$ 1,260,000
	D-26	M4U	Community Ave. (2)	1,915' E. of Hardin Blvd. to N. City Limits/Creek	0.20	50%	\$ 1,103,200	\$ 551,600
	D-27	M4U	Community Ave. (3)	N. City Limits/Creek to 2,645' N. of Bloomdale Rd.	0.18	100%	\$ 628,600	\$ 628,600
	D-28	M4U (1/2)	Community Ave. (4)	2,645' N. of Bloomdale Rd. to 90' S. of James Pitts Dr.	0.61	100%	\$ 1,094,800	\$ 1,094,800
	D-29	M4U (1/2)	Community Ave. (5)	90' S. of James Pitts Dr. to 230' S. of Brinlee Branch Ln.	0.33	100%	\$ 600,600	\$ 600,600
	D-30	P6D	Future Arterial C (3)	E. City Limits to W. City Limits	0.31	100%	\$ 2,346,700	\$ 2,346,700
	D-31	M6D	Future Unnamed C	N. City Limits to Future Arterial C (3)	0.08	100%	\$ 525,450	\$ 525,450
S-3		Signal Installation	Hardin Blvd. & Future Arterial B		100%	\$ 200,000	\$ 200,000	
S-11		Signal Installation	Lake Forest Dr. & Wilmeth Rd.		25%	\$ 200,000	\$ 50,000	
S-15		Signal Installation	Unnamed B & Future Arterial C		100%	\$ 215,000	\$ 215,000	
S-16		Signal Installation	Hardin Blvd. & Future Arterial C		100%	\$ 215,000	\$ 215,000	
S-17		Signal Installation	Hardin Blvd. & Community Ave.		75%	\$ 200,000	\$ 150,000	
S-18		Signal Installation	Hardin Blvd. & Bloomdale Rd.		100%	\$ 200,000	\$ 200,000	
S-19		Signal Installation	Community Ave. & Bloomdale Rd.		100%	\$ 200,000	\$ 200,000	
S-20		Signal Installation	Unnamed B & Wilmeth Rd.		75%	\$ 200,000	\$ 150,000	
S-21		Signal Installation	Hardin Blvd. & Wilmeth Rd.		75%	\$ 200,000	\$ 150,000	
Service Area Project Cost Subtotal							\$ 89,986,816	
Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
Total Cost in SERVICE AREA D							\$ 89,996,431	



**Table 4.E – 10-Year Roadway Improvements Plan for Roadway Impact Fees
with Conceptual Level Project Cost Projections – Service Area E**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
E	E-1	M6D (1/3)	Bloomdale Rd. (10)	US 75 NBFR to 275' E. of Shawnee Dr.	0.48	100%	\$ 734,400	\$ 734,400	
	E-2	M6D (2/3)	Bloomdale Rd. (11)	275' E. of Shawnee Dr. to FM 543	0.47	100%	\$ 2,100,000	\$ 2,100,000	
	E-3	M6D	FM 543 (1)	Honey Creek to SH 5	0.49	100%	\$ 2,450,700	\$ 2,450,700	
	E-4	M6D (1/3)	Wilmeth Rd. (10)	US 75 NBFR to Redbud Blvd.	0.26	100%	\$ 400,800	\$ 400,800	
	E-5	M6D (1/3)	Wilmeth Rd. (11)	Redbud Blvd. to 1,340 E. of Redbud Blvd.	0.25	100%	\$ 387,600	\$ 387,600	
	E-6	M6D (1/3)	Wilmeth Rd. (12)	1,340 E. of Redbud Blvd. to 2,005 E. of Redbud Blvd.	0.13	100%	\$ 194,400	\$ 194,400	
	E-7	M6D (2/3)	Wilmeth Rd. (13)	2,005 E. of Redbud Blvd. to SH 5	0.52	100%	\$ 2,279,200	\$ 2,279,200	
	E-8	M6D	Wilmeth Rd. (14)	SH 5 to McIntyre Rd. (CCR 274)	0.39	100%	\$ 3,079,850	\$ 3,079,850	
	E-9	M6D	Wilmeth Rd. (15)	1,610' E. of SH 5 to RR tracks	0.26	100%	\$ 5,644,800	\$ 5,644,800	
	E-10	M6D	Wilmeth Rd. (16)	RR tracks to 1,230' E. of the RR tracks (E. City Limits)	0.23	50%	\$ 7,523,600	\$ 3,761,800	
	E-11	M6D	Wilmeth Rd. (17)/ CCR 331	265' E. of CCR 335 to FM 2933	0.28	50%	\$ 1,751,400	\$ 875,700	
	E-12	M4D	Redbud Blvd. (1)	Bloomdale Rd. to 1,075' N. of Wilmeth Rd.	0.65	100%	\$ 3,174,400	\$ 3,174,400	
	E-13	M4D (1/2)	Redbud Blvd. (2)	1,075' N. of Wilmeth Rd. to Wilmeth Rd.	0.20	100%	\$ 448,000	\$ 448,000	
	E-14	M6D	Airport Dr. (1)	SH 5 to RR tracks (E. City Limits)	0.94	100%	\$ 13,150,200	\$ 13,150,200	
	E-15	M6D	Airport Dr. (2)	McIntyre Rd. (Future Wilmeth Rd.) to US 380	1.58	100%	\$ 15,261,300	\$ 15,261,300	
	E-16	M6D	FM 2933	CCR 331 to CCR 335	0.49	50%	\$ 1,873,175	\$ 936,588	
	S-22		Signal Installation	Redbud Blvd. & Bloomdale Rd.		100%	\$ 200,000	\$ 200,000	
	S-23		Signal Installation	Redbud Blvd. & Wilmeth Rd.		100%	\$ 200,000	\$ 200,000	
	S-24		Signal Installation	Airport Dr. & Wilmeth Rd.		75%	\$ 200,000	\$ 150,000	
	S-25		Signal Installation	FM 543 & Bloomdale Rd.		100%	\$ 200,000	\$ 200,000	
	S-26		Signal Installation	FM 2933 & Wilmeth Rd.		50%	\$ 200,000	\$ 100,000	
	Service Area Project Cost Subtotal							\$ 55,729,738	
	Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
	Total Cost in SERVICE AREA E							\$ 55,739,353	

Table 4.F. Roadway Improvement Plan for Roadway Impact Fees – Service Area F

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
F								
	No Impact Fee Eligible Roadway Projects							
	Service Area Project Cost Subtotal							\$ -
Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
Total Cost in SERVICE AREA F							\$ 9,615	



**Table 4.G – 10-Year Roadway Improvements Plan for Roadway Impact Fees
with Conceptual Level Project Cost Projections – Service Area G**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
G	G-1	M6D	Virginia Pkwy. (1)	Coit Rd. to 500' W. of Independence Pkwy.	0.90	100%	\$ 5,658,800	\$ 5,658,800	
	G-2	M6D	Virginia Pkwy. (2)	500' W. of Independence Pkwy. to Independence Pkwy.	0.09	50%	\$ 597,800	\$ 298,900	
	G-3	M6D	Virginia Pkwy. (3)	Independence Pkwy. to 325' E. of Forkhorn Dr.	0.19	50%	\$ 1,219,400	\$ 609,700	
	G-4	M6D (1/3)	Virginia Pkwy. (4)	325' E. of Forkhorn Dr. to 935' W. of Virginia Hills	0.28	50%	\$ 675,596	\$ 337,798	
	G-5	M6D (1/3)	Virginia Pkwy. (5)	935' W. of Virginia Hills to Custer Rd.	0.50	100%	\$ 1,205,863	\$ 1,205,863	
	G-6	M6D (1/3)	Virginia Pkwy. (6)	Custer Dr. to 410' E. of Danbury Dr.	0.52	100%	\$ 804,000	\$ 804,000	
	G-7	M6D (1/6)	Virginia Pkwy. (7)	410' E. of Danbury Dr. to Virginia Parklands Blvd.	0.36	100%	\$ 232,800	\$ 232,800	
	G-8	M6D	Westridge Blvd. (1)	Coit Rd. to 1,650' E. of Coit Rd.	0.31	50%	\$ 1,972,600	\$ 986,300	
	G-9	M6D (1/3)	Westridge Blvd. (2)	1,650' E. of Coit Rd. to Independence Pkwy.	0.70	100%	\$ 1,070,400	\$ 1,070,400	
	G-10	M6D (1/3)	Westridge Blvd. (3)	Independence Pkwy. to Memory Ln.	0.51	100%	\$ 782,400	\$ 782,400	
	G-11	M6D (1/3)	Westridge Blvd. (4)	Memory Ln. to Custer Rd.	0.50	50%	\$ 771,600	\$ 385,800	
	G-12	M6D (1/3)	Coit Rd. (1)	US 380 to 2,780' S. of US 380	0.53	50%	\$ 810,000	\$ 405,000	
	G-13	M6D	Coit Rd. (2)	2,685 N. of Virginia to 2,610 S. of Virginia	1.00	50%	\$ 6,328,000	\$ 3,164,000	
	G-14	M6D (1/3)	Coit Rd. (3)	Westridge Rd. to 270' S. of Calgary Dr.	0.50	50%	\$ 768,000	\$ 384,000	
	G-15	M6D	Independence Pkwy. (1)	3,100' N. of Virginia Pkwy. to 720' N. of Virginia Pkwy.	0.45	100%	\$ 3,007,000	\$ 3,007,000	
	G-16	M6D (1/3)	Independence Pkwy. (2)	Virginia Pkwy. to George Washington Dr. (S. City Limits)	1.49	100%	\$ 2,314,250	\$ 2,314,250	
	G-17	P6D	Custer Rd. (5)	US 380 to Westridge Rd.	2.01	100%	\$ 2,653,673	\$ 2,653,673	
	G-18	P6D	Custer Rd. (6)	Westridge Rd. to 1,110' S. of Cotton Ridge Rd. S	0.51	50%	\$ 669,350	\$ 334,675	
	G-19	P6D	Custer Rd. (7)	705' N. of Fountainview Dr. to Eldorado Pkwy.	0.38	50%	\$ 498,266	\$ 249,133	
	G-20, I-8	G4D	Ridge Rd. (6)	US 380 to Creekside Dr.	1.30	50%	\$ 550,813	\$ 275,407	
	S-12		Signal Installation	Tremont Blvd. & US 380		50%	\$ 215,000	\$ 107,500	
	S-13		Signal Installation	Forest Ridge Dr. & US 380		50%	\$ 215,000	\$ 107,500	
	S-27		Signal Installation	Custer Rd. & Bristol Dr.		100%	\$ 215,000	\$ 215,000	
	S-28		Signal Installation	Stonebridge Dr. & LaCima Dr.		100%	\$ 185,000	\$ 185,000	
	S-29		Signal Installation	Coit Rd. & Virginia Pkwy.		50%	\$ 200,000	\$ 100,000	
	S-30		Signal Installation	Independence Pkwy. & Virginia Pkwy.		50%	\$ 200,000	\$ 100,000	
	S-31		Signal Installation	Custer Rd. & Cotton Ridge Rd. North		100%	\$ 215,000	\$ 215,000	
	S-32		Signal Installation	Coit Rd. & Westridge Rd.		25%	\$ 200,000	\$ 50,000	
	S-33		Signal Installation	Independence Pkwy. & Westridge Rd.		100%	\$ 200,000	\$ 200,000	
	S-34		Signal Installation	Glen Oaks Dr. & Stonebridge Dr.		100%	\$ 185,000	\$ 185,000	
	S-35		Signal Installation	Ridge Rd. & Glen Oaks Dr.		50%	\$ 185,000	\$ 92,500	
	S-36		Signal Installation	Custer Rd. & Cotton Ridge Rd. South		50%	\$ 215,000	\$ 107,500	
	S-37		Signal Installation	Stonebridge Dr. & Alma Dr.		100%	\$ 185,000	\$ 185,000	
	S-38		Signal Installation	Ridge Rd. & Rush Creek Rd.		50%	\$ 185,000	\$ 92,500	
	S-39		Signal Installation	Ridge Rd. & Berkshire Rd.		50%	\$ 185,000	\$ 92,500	
								Service Area Project Cost Subtotal	\$ 27,194,899
								Roadway Impact Fee Update Cost (Per Service Area)	\$ 9,615
								Total Cost in SERVICE AREA G	\$ 27,204,514



**Table 4.H – 10-Year Roadway Improvements Plan for Roadway Impact Fees
with Conceptual Level Project Cost Projections – Service Area H**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
H	H-1	M4D	Silverado Trl. (1)	Custer Rd. to 100' W. of Amon Carter Dr.	0.40	100%	\$ 2,709,400	\$ 2,709,400	
	H-2	M4D	Silverado Trl. (2)	Alma Rd. to Alfalfa Dr.	0.22	100%	\$ 143,311	\$ 143,311	
	H-3	M4D	Silverado Trl. (3)	Alfalfa Dr. to 145' W. of Ironstone Ln.	0.28	100%	\$ 99,386	\$ 99,386	
	H-4	P6D (1/3)	Stacy Rd. (1)	Custer Rd. to Ridge Rd.	2.03	100%	\$ 3,710,457	\$ 3,710,457	
	H-5, I-11	P6D (1/3)	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	0.82	50%	\$ 5,622,280	\$ 2,811,140	
	H-6	M6D (1/3)	McKinney Ranch Pkwy. (1)	Stacy Rd. to Ridge Rd.	0.77	100%	\$ 1,186,800	\$ 1,186,800	
	H-7	G4D	Collin McKinney Pkwy. (1)	Weiskopf Ave. to Alma (Couplet)	0.79	100%	\$ 1,676,564	\$ 1,676,564	
	H-8	M6D	Craig Ranch Pkwy.	Collin McKinney Pkwy. To SH 121	0.65	100%	\$ 4,778,650	\$ 4,778,650	
	H-9	G4D	Alma Rd. (1)	Eldorado to 805' S. of Beaver Ck.	0.66	100%	\$ 191,558	\$ 191,558	
	H-10	G4D	Alma Rd. (2)	805' S. of Beaver Ck. to Silverado Trl.	0.38	100%	\$ 181,098	\$ 181,098	
	H-11	M6D (1/3)	Alma Rd. (3)	Silverado Trl. to Stacy Rd.	0.49	100%	\$ 990,389	\$ 990,389	
	H-12	M6D	Alma Rd. (4)	Stacy Rd. to SH 121	1.41	100%	\$ 588,973	\$ 588,973	
	H-13, I-9	G4D	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	1.08	50%	\$ 187,500	\$ 93,750	
	H-14, I-10	M6D (1/3)	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	0.69	50%	\$ 1,108,000	\$ 554,000	
	H-15	P6D	Custer Rd. (8)	Eldorado Pkwy. To Stonebridge Dr.	0.39	50%	\$ 509,505	\$ 254,753	
	S-40		Signal Installation	Custer Rd. & Silverado Trl.		50%	\$ 215,000	\$ 107,500	
	S-41		Signal Installation	Alma Rd. & Silverado Trl.		100%	\$ 200,000	\$ 200,000	
	S-42		Signal Installation	McKinney Ranch Pkwy. & Silverado Trl.		100%	\$ 200,000	\$ 200,000	
	S-43		Signal Installation	McKinney Ranch Pkwy. & Stacy Rd.		100%	\$ 215,000	\$ 215,000	
	S-44		Signal Installation	Custer Rd. & Paradise Dr.		50%	\$ 215,000	\$ 107,500	
	S-45		Signal Installation	Collin McKinney Pkwy. & Craig Ranch Pkwy.		100%	\$ 200,000	\$ 200,000	
	S-46		Signal Installation	Collin McKinney Pkwy. & Stacy Rd.		50%	\$ 215,000	\$ 107,500	
	S-47		Signal Installation	Alma Rd. & Hennemen Way		100%	\$ 215,000	\$ 215,000	
	Service Area Project Cost Subtotal							\$ 21,322,729	
	Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
	Total Cost in SERVICE AREA H							\$ 21,332,344	

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**Table 4.I – 10-Year Roadway Improvements Plan for Roadway Impact Fees
with Conceptual Level Project Cost Projections – Service Area I**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
I	I-1	M6D (1/3)	Virginia Pkwy. (8)	1,035' E. of Ridge Rd. to 1,355' W. of Hardin Blvd.	1.44	100%	\$ 2,308,000	\$ 2,308,000	
	I-2	G4D	Eldorado Pkwy. (1)	Ridge Rd. to 850' E. of Ridge Rd.	0.16	100%	\$ 213,745	\$ 213,745	
	I-3	M6D (1/3)	McKinney Ranch Pkwy. (2)	Ridge Rd. to Hardin Blvd.	1.80	100%	\$ 10,004,688	\$ 10,004,688	
	I-4	G4D	Collin McKinney Pkwy. (2)	Stacy Rd. to Village Park	0.54	100%	\$ 2,973,000	\$ 2,973,000	
	I-5	G4D	Collin McKinney Pkwy. (3)	Lake Forest Dr. to Cottonwood Creek	0.31	100%	\$ 1,694,000	\$ 1,694,000	
	I-6	G4D (1/2)	Collin McKinney Pkwy. (4)	Cottonwood Creek to 1,110' E. of Tina	0.55	100%	\$ 1,903,419	\$ 1,903,419	
	I-7	G4D	Collin McKinney Pkwy. (5)	1,110' E. of Tina to Hardin Blvd.	0.19	100%	\$ 1,051,000	\$ 1,051,000	
	G-20, I-8	G4D	Ridge Rd. (6)	US 380 to Creekside Dr.	1.30	50%	\$ 550,813	\$ 275,407	
	H-13, I-9	G4D	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	1.08	50%	\$ 187,500	\$ 93,750	
	H-14, I-10	M6D (1/3)	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	0.69	50%	\$ 1,108,000	\$ 554,000	
	H-5, I-11	P6D (1/3)	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	0.82	50%	\$ 5,622,280	\$ 2,811,140	
	I-12	M6D (1/3)	Lake Forest Dr. (4)	McKinney Ranch Pkwy. to SH 121	1.02	100%	\$ 1,628,000	\$ 1,628,000	
	I-13, J-8	G4D	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	1.58	50%	\$ 8,352,097	\$ 4,176,049	
	I-14, J-9	M6D (1/3)	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	0.57	50%	\$ 914,000	\$ 457,000	
	S-35		Signal Installation	Ridge Rd. & Glen Oaks Dr.		50%	\$ 185,000	\$ 92,500	
	S-38		Signal Installation	Ridge Rd. & Rush Creek Rd.		50%	\$ 185,000	\$ 92,500	
	S-39		Signal Installation	Ridge Rd. & Berkshire Rd.		50%	\$ 185,000	\$ 92,500	
	S-46		Signal Installation	Collin McKinney Pkwy. & Stacy Rd.		50%	\$ 215,000	\$ 107,500	
	S-48		Signal Installation	Virginia Pkwy. & Joplin Dr.		100%	\$ 215,000	\$ 215,000	
	S-49		Signal Installation	Virginia Pkwy. & Crutcher Crossing		100%	\$ 215,000	\$ 215,000	
	S-50		Signal Installation	Virginia Pkwy. & Village Dr.		100%	\$ 215,000	\$ 215,000	
	S-51		Signal Installation	Virginia Pkwy. & Mallard Lakes Dr.		100%	\$ 215,000	\$ 215,000	
	S-52		Signal Installation	Lake Forest Dr. & Glen Oaks Dr.		100%	\$ 185,000	\$ 185,000	
	S-53		Signal Installation	Hardin Blvd. & Maverick Trl.		50%	\$ 185,000	\$ 92,500	
	S-54		Signal Installation	Eldorado Pkwy. & Woodson Dr.		100%	\$ 185,000	\$ 185,000	
	S-55		Signal Installation	Eldorado Pkwy. & Highlands Dr.		100%	\$ 185,000	\$ 185,000	
	S-56		Signal Installation	Lake Forest Dr. & Collin McKinney Pkwy.		100%	\$ 200,000	\$ 200,000	
	S-57		Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.		50%	\$ 200,000	\$ 100,000	
								Service Area Project Cost Subtotal	\$ 32,335,697
								Roadway Impact Fee Update Cost (Per Service Area)	\$ 9,615
								Total Cost in SERVICE AREA I	\$ 32,345,312

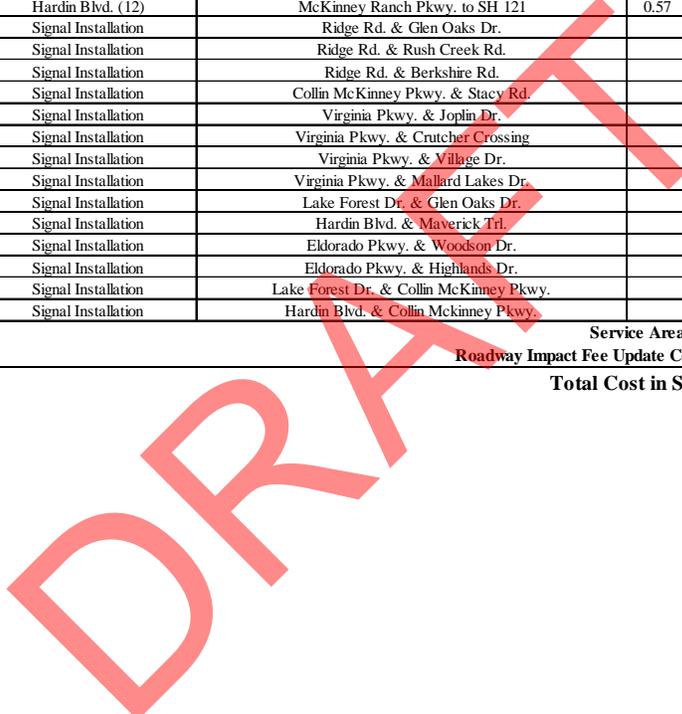




Table 4.J – 10-Year Roadway Improvements Plan for Roadway Impact Fees with Conceptual Level Project Cost Projections – Service Area J

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
J	J-1	M4D	White Ave. (1)	Hardin Blvd. to Bois D'Arc	0.17	100%	\$ 981,328	\$ 981,328	
	J-2	M4D	White Ave. (2)	Bois D'Arc to Community Ave.	0.93	100%	\$ 213,991	\$ 213,991	
	J-3	M6D (1/3)	McKinney Ranch Pkwy. (3)	Hardin Blvd. to 515' E. of Hardin Blvd.	0.10	100%	\$ 450,000	\$ 450,000	
	J-4	M6D	McKinney Ranch Pkwy. (4)	515' E. of Hardin Blvd. to US 75 SBFR	0.82	100%	\$ 5,589,000	\$ 5,589,000	
	J-5	G4D	Collin McKinney Pkwy. (6)	Hardin Blvd. to 1,010' E. of Hardin Blvd.	0.19	100%	\$ 1,452,350	\$ 1,452,350	
	J-6	M4U	Collin McKinney Pkwy. (7)	1,010' E. of Hardin Blvd. to McKinney Ranch Pkwy.	0.54	100%	\$ 2,416,450	\$ 2,416,450	
	J-7	M4U	Collin McKinney Pkwy. (8)	720' W. of Test Dr. to Craig Dr.	0.58	100%	\$ 41,575	\$ 41,575	
	I-13, J-8	G4D	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	1.58	50%	\$ 8,352,097	\$ 4,176,049	
	I-14, J-9	M6D (1/3)	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	0.57	50%	\$ 914,000	\$ 457,000	
	J-10	M4U	Community Ave. (6)	US 380 to 2,120' S. of US 380	0.40	100%	\$ 350,000	\$ 350,000	
	S-53		Signal Installation	Hardin Blvd. & Maverick Trl.		50%	\$ 185,000	\$ 92,500	
	S-57		Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.		50%	\$ 200,000	\$ 100,000	
	S-58		Signal Installation	White Ave. & Jordan Rd.		100%	\$ 185,000	\$ 185,000	
	S-59		Signal Installation	Virginia St. & Redbud Blvd.		50%	\$ 175,000	\$ 87,500	
	S-60		Signal Installation	Collin McKinney Pkwy. & McKinney Ranch Pkwy.		100%	\$ 200,000	\$ 200,000	
	S-61		Signal Installation	Collin McKinney Pkwy. & Craig Dr.		100%	\$ 185,000	\$ 185,000	
	S-63		Signal Installation	SH 5 & Stewart Rd.		50%	\$ 215,000	\$ 107,500	
	S-64		Signal Installation	SH 5 & Enterprise Dr.		50%	\$ 215,000	\$ 107,500	
								Service Area Project Cost Subtotal	\$ 17,192,743
								Roadway Impact Fee Update Cost (Per Service Area)	\$ 9,615
							Total Cost in SERVICE AREA J	\$ 17,202,358	

Table 4.K – 10-Year Roadway Improvements Plan for Roadway Impact Fees with Conceptual Level Project Cost Projections – Service Area K

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
K	K-1	P6D	FM 546 (1)	SH 5 to Existing FM 546	1.64	100%	\$ 10,652,727	\$ 10,652,727	
	K-2, L-1	M6D (1/3)	Airport Dr. (3)	US 380 to 355' S. of US 380	0.07	50%	\$ 190,706	\$ 95,353	
	K-3, L-2	M6D (1/3)	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	1.74	50%	\$ 3,732,544	\$ 1,866,272	
	K-4, L-3	M6D (1/3)	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	0.50	50%	\$ 1,359,687	\$ 679,844	
	K-5	M6D (1/3)	Airport Dr. (6) / Country Ln.	FM 546 to 2,110' N. of CCR 326	0.30	100%	\$ 601,087	\$ 601,087	
	K-6	M6D	Airport Dr. (7)	2,110' N. of CCR 326 to Old Mill Rd.	0.10	100%	\$ 1,036,000	\$ 1,036,000	
	S-59		Signal Installation	Redbud Blvd. & Virginia St.		50%	\$ 175,000	\$ 87,500	
	S-62		Signal Installation	SH 5 & Old Mill Rd.		100%	\$ 215,000	\$ 215,000	
	S-63		Signal Installation	SH 5 & Stewart Rd.		50%	\$ 215,000	\$ 107,500	
	S-64		Signal Installation	SH 5 & Enterprise Dr.		50%	\$ 215,000	\$ 107,500	
	S-65		Signal Installation	SH 5 & Smith St.		100%	\$ 215,000	\$ 215,000	
	S-66		Signal Installation	Wilson Creek Pkwy. & College St.		100%	\$ 185,000	\$ 185,000	
	S-67		Signal Installation	Airport Dr. & Elm St.		50%	\$ 200,000	\$ 100,000	
	S-68		Signal Installation	Eklorado Blvd. & College St.		100%	\$ 185,000	\$ 185,000	
	S-69		Signal Installation	Airport Dr. & FM 546		100%	\$ 215,000	\$ 215,000	
								Service Area Project Cost Subtotal	\$ 16,348,782
								Roadway Impact Fee Update Cost (Per Service Area)	\$ 9,615
								Total Cost in SERVICE AREA K	\$ 16,358,397



Table 4.L – 10-Year Roadway Improvements Plan for Roadway Impact Fees with Conceptual Level Project Cost Projections – Service Area L

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
L	K-2, L-1	M6D (1/3)	Airport Dr. (3)	US 380 to 355' S. of US 380	0.07	50%	\$ 190,706	\$ 95,353
	K-3, L-2	M6D (1/3)	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	1.74	50%	\$ 3,732,544	\$ 1,866,272
	K-4, L-3	M6D (1/3)	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	0.50	50%	\$ 1,359,687	\$ 679,844
	L-4	P6D	FM 546 (2)	Existing FM 546 to E. City Limits	0.95	100%	\$ 4,473,300	\$ 4,473,300
	L-5	M6D	Unnamed D (1)	US 380 to Trinity River (S. City Limits)	0.44	100%	\$ 5,558,300	\$ 5,558,300
	L-6	M6D	Unnamed D (2)	CCR 722 to CCR 722 Bend	0.27	50%	\$ 1,727,600	\$ 863,800
	L-7	M6D	Unnamed D (3)	CCR 722 Bend to FM 546	0.74	100%	\$ 4,913,500	\$ 4,913,500
	S-67		Signal Installation	Airport Dr. & Wilson Creek Pkwy.		50%	\$ 200,000	\$ 100,000
Service Area Project Cost Subtotal							\$ 18,550,369	
Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
Total Cost in SERVICE AREA L								\$ 18,559,984

Table 4.M. Roadway Improvement Plan for Roadway Impact Fees – Service Area M

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
M	No Impact Fee Eligible Roadway Projects								
	Service Area Project Cost Subtotal							\$ -	
	Roadway Impact Fee Update Cost (Per Service Area)							\$ 9,615	
Total Cost in SERVICE AREA M								\$ 9,615	

Notes:

- a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
- b. The planning level cost projections shall not supersede the City’s design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

E. SERVICE UNIT CALCULATION

The basic service unit for the computation of McKinney’s roadway 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 2012 to 2022 is based upon projected changes in residential and non-residential growth for the period. In order to determine this growth, baseline estimates of population, basic square feet, service square feet, and retail square feet for 2012 were made by the City, along with projections for each of these demographic statistics through 2022. The *Land Use Assumptions Report 2012-2013 Impact Fee Update* 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 (2012) and projected (2022) transportation service units used to establish the roadway impact fee maximum rates within each service area. The roadway demand service units (vehicle-miles) for each service area are the sum of the vehicle-miles “generated” by each category of land use in the service area.

For the purpose 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 caused 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 provide existing and projected number of building square footages for three (3) categories of non-residential land uses square footage – basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the NAISC (North American Industrial Class System).

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, 9th 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 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, 9th Edition* and the latest Regional Origin-Destination Travel Survey performed by NCTCOG. The *ITE Trip Generation Manual, 9th 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. 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 rate 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:

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

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

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%)
- SA_L = Max Service Area Trip Length (see **Table 5**)



The maximum trip length, for land uses which are characterized by longer average trip lengths (primarily residential uses), has been limited to a length based on the nature of the roadway network within the service area, along with consideration of the existing City boundaries. Although Chapter 395 of the Texas Local Government Code allows for a service area diameter of six (6) miles, the City of McKinney has set service area boundaries in anticipation of the ultimate corporate limits. Therefore, the individual service areas have different trip characteristics. In order to account for these differences, the values shown in **Table 5** were used for calculation of the *transportation demand factor* for each service area.

Table 5. Maximum Trip Lengths by Service Area

Service Area	Maximum Trip Length (mi)
A	0.30
B	0.80
C	3.10
D	5.80
E	4.80
F	0.00
G	6.00
H	4.65
I	6.00
J	6.00
K	5.30
L	3.50
M	0.00

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 roadway 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 McKinney to both residential and non-residential land uses. To avoid counting these trips 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.



Tables 6A and **6B** show the derivation of the *transportation demand factor* for the residential land uses and the three (3) non-residential land use categories in Service Areas C and I. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 6A. Transportation Demand Factor Calculations – Service Area C Example

Variable	Residential	Basic	Service	Retail
T	1.00	0.97	1.49	3.71
P_b	0%	0%	0%	34%
L	17.21	10.02	10.92	6.43
L_{max} *	3.10	3.10	3.10	3.10
TDF	3.10	3.01	4.62	7.60

Table 6B. Transportation Demand Factor Calculations – Service Area I Example

Variable	Residential	Basic	Service	Retail
T	1.00	0.97	1.49	3.71
P_b	0%	0%	0%	34%
L	17.21	10.02	10.92	6.43
L_{max} *	6.00	5.01	5.46	3.22
TDF	6.00	4.86	8.14	7.89

* 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

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 7**. This table shows the total vehicle-miles by service area for the years 2012 and 2022. These estimates and projections lead to the Vehicle-miles of Travel for both 2012 and 2022.



Table 7. 10-Year Growth Projections

Year 2012

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
A	0	0	0.30	0	0	0	0	0.29	0.45	0.74	0	0	0	0
B	0	0	0.80	0	0	0	0	0.78	1.19	1.96	0	0	0	0
C	3,501	1,245	3.10	3,860	10,233	108,704	488,070	3.01	4.62	7.60	31	502	3,709	4,242
D	9,584	2,776	5.80	16,101	66,490	1,775,143	7,192,339	4.86	8.14	7.89	323	14,450	5,675	20,448
E	2,550	635	4.80	3,048	3,159,347	759,829	984,216	4.66	7.15	7.89	14,723	5,433	7,765	27,921
F	0	0	0.00	0	0	0	0	0.00	0.00	0.00	0	0	0	0
G	35,028	12,584	6.00	75,504	138,680	1,201,866	883,757	4.86	8.14	7.89	674	9,783	6,973	17,430
H	13,294	5,222	4.65	24,282	293,832	803,818	1,218,376	4.51	6.93	7.89	1,325	5,570	9,613	16,508
I	33,327	11,881	6.00	71,286	101,530	1,259,562	872,364	4.86	8.14	7.89	493	10,253	6,883	17,629
J	21,291	8,816	6.00	52,896	1,453,785	2,040,859	3,600,259	4.86	8.14	7.89	7,065	16,613	23,672	47,350
K	18,223	6,584	5.30	34,895	5,828,221	1,852,784	1,723,306	4.86	7.90	7.89	27,355	14,637	13,597	55,587
L	15	13	3.50	46	601,136	1,515	11,353	3.40	5.22	7.89	2,044	8	90	2,142
M	0	0	0.00	0	0	0	0	0.00	0.00	0.00	0	0	0	0
Totals	136,813	49,756		281,918	11,453,254	9,804,980	9,900,940				54,031	77,249	77,977	209,257
														491,175

Year 2022

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
A	0	0	0.30	0	0	0	0	0.29	0.45	0.74	0	0	0	0
B	7,919	2,740	0.80	2,192	0	0	0	0.78	1.19	1.96	0	0	0	2,192
C	11,718	4,088	3.10	12,673	10,233	370,175	1,160,762	3.01	4.62	7.60	31	1,710	8,822	10,563
D	14,784	4,575	5.80	26,535	66,490	2,167,354	1,550,859	4.86	8.14	7.89	323	17,642	12,236	30,201
E	4,989	1,479	4.80	7,099	3,690,079	759,829	1,154,758	4.66	7.15	7.89	17,196	5,433	9,111	31,740
F	43	15	0.00	0	0	0	0	0.00	0.00	0.00	0	0	0	0
G	49,264	17,510	6.00	105,060	176,588	1,638,004	1,501,971	4.86	8.14	7.89	858	13,333	11,851	26,042
H	23,701	8,823	4.65	41,027	331,742	2,729,929	2,254,358	4.51	6.93	7.89	1,496	18,918	17,787	38,201
I	40,864	14,489	6.00	86,934	158,395	2,115,000	1,199,670	4.86	8.14	7.89	770	17,216	9,465	27,451
J	25,016	10,105	6.00	60,630	1,586,469	2,499,998	3,600,064	4.86	8.14	7.89	7,710	20,350	28,405	56,465
K	20,691	7,438	5.30	39,421	5,959,928	1,978,381	1,967,401	4.86	7.90	7.89	28,965	15,629	15,523	60,117
L	15	13	3.50	46	800,160	1,515	11,353	3.40	5.22	7.89	2,721	8	90	2,819
M	0	0	0.00	0	0	0	0	0.00	0.00	0.00	0	0	0	0
Totals	198,004	71,275		381,617	12,780,064	14,260,185	14,401,196				60,070	110,239	113,290	283,599
														665,216

VEHICLE-MILES OF INCREASE¹¹ (2012 - 2022)

SERVICE AREA	VEH-MILES
A	0
B	2,192
C	15,134
D	20,187
E	7,870
F	0
G	38,168
H	38,438
I	25,470
J	16,849
K	9,056
L	677
M	0
Total	174,041

Notes:

- From Land Use Assumptions Report 2012-2013 Impact Fee Update
- Transportation Demand Factor for each Service Area (from LUVNET) using Single Family Detached Housing land use and trip generation rate
- Calculated by multiplying TDF by the number of dwelling units
- From Land Use Assumptions Report 2012-2013 Impact Fee Update
- Trip generation rate and Transportation Demand Factors from LUVNET for each land use
- 'Basic' corresponds to General Light Industrial land use and trip generation rate
- 'Service' corresponds to General Office land use and trip generation rate
- 'Retail' corresponds to Shopping Center land use and trip generation rate
- Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
- Residential plus non-residential vehicle-mile totals for each Service Area
- Total Vehicle-Miles (2012) subtracted from Total Vehicle-Miles (2022)



V. IMPACT FEE CALCULATIONS

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 RIP 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 8** 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 RIP</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 – RIP Units of Supply)

Each project identified in the Impact Fee RIP 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 – RIP Units of Supply)
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A number of facilities identified in the Impact Fee RIP 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 RIP – 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 RIP 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 RIP (in vehicle-miles) that may be recoverable through the collection of impact fees.



5	<i>Total Cost of the RIP 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 RIP 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 RIP available to serve future growth to the total vehicle-miles added, the total cost of the Impact Fee RIP 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 informational purposes only – it is to present the portion of the total cost of the Impact Fee RIP 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 7)
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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 RIP 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 RIP exceeds the growth projected to occur in the next ten years, the Impact Fee RIP 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 RIP 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 ROADWAY 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 following 395.014(T)(A) is summarized, as prepared by J. Stowe, Inc., in **Appendices D and E**, Plan for Awarding the Roadway Impact Fee Credit. The following table summarizes the portions of **Table 8** that utilize this credit calculation.

Line	Title	Description
12	<i>Principal Paid on Existing Debt Funded Project Costs</i>	(from Appendix D – Plan for Awarding the Roadway Impact Fee Credit)
13	<i>Financing Costs</i>	(from Appendix D – Plan for Awarding the Roadway Impact Fee Credit)
14	<i>Existing Fund Balance</i>	(from Appendix D – Plan for Awarding the Roadway Impact Fee Credit)
15	<i>Interest Earnings</i>	(from Appendix D – Plan for Awarding the Roadway Impact Fee Credit)
16	<i>Cost of the RIP 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+Line 14+Line 15)
17	<i>Pre-Credit Maximum Fee Per Service Unit</i>	Found by dividing the Cost of the RIP and Financing Attributable to New Growth (Line 16) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 16 / Line 8)
18	<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 Roadway Impact Fee Credit)
19	<i>Recoverable Cost of RIP and Financing</i>	The difference between the Cost of the RIP and Financing Attributable to New Growth (Line 16) and the Credit for Ad Valorem Taxes (Line 18). (Line 16 + Line 18)
20	<i>Maximum Assessable Fee Per Service Unit</i>	Found by dividing the Recoverable Cost of the RIP and Financing (Line 19) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 19 / Line 8)



C. FINANCIAL COMPONENT OF IMPACT FEE DETERMINATION

The impact fee determination method employed by J. Stowe & Co. is developed through a financial based model, which fully recognizes the requirements of Chapter 395, including the recognition of debt and/or non-debt funding, 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

- Funding;
 - Method of funding (i.e. debt or non-debt financing)
 - The level of funding (e.g. 50% debt / 50% non-debt)
 - 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 the assumptions employed in the maximum assessable impact fee determination provide a reasonable basis for forecasting, these assumptions may not necessarily reflect actual future conditions. To address this, Chapter 395 requires the monitoring of impact fees through the Capital Improvements 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 8, Line 11**) is determined, it must then be decided how the cost will be funded, debt and/or non-debt. Based on discussions with City staff and in reflection of the City's historical practices, it is assumed that the City will debt finance 50% of the new impact fee projects and non-debt fund 50% of the new impact fee projects. For debt financing of the new impact fee projects, the cost of financing is based on 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.

For projects that have been financed through existing debt issues, a weighted average cost of the City's outstanding GO/CO debt was used to determine financing costs for these projects. For projects during the 2003-2008 period, it was assumed that debt was issued in 2003. For projects during the 2008-2012 period, it was assumed that debt was issued in 2008. Debt service payments were assumed to be constant for these hypothetical debt issues.

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 new impact fee capital projects, debt will be issued in equal annual amounts for years 1 through 10 and expenditure of debt funds will occur over a two-year time period with Year 10 proceeds spent within a single year.

Table 8. Maximum Assessable Roadway Impact Fee

SERVICE AREA:	A	B	C	D	E	F	G	H	I	J	K	L	M
1 TOTAL VEH-MI OF CAPACITY ADDED BY THE RIP (FROM RIP UNITS OF SUPPLY, APPENDIX B)	624	1,092	45,144	54,707	28,706	0	43,259	36,867	32,915	14,103	14,207	14,821	0
2 TOTAL VEH-MI OF EXISTING DEMAND (FROM RIP UNITS OF SUPPLY, APPENDIX B)	3	5	1,475	2,896	1,190	0	7,286	9,313	10,929	2,967	1,361	1,234	0
3 TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING FACILITIES INVENTORY, APPENDIX C)	0	0	155	0	2,207	0	50	1,133	198	44	2	239	0
4 NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	621	1,087	43,514	51,811	25,309	0	35,923	26,421	21,788	11,092	12,844	13,348	0
5 TOTAL COST OF THE RIP WITHIN SERVICE AREA (FROM TABLE 4)	\$ 1,501,490	\$ 1,750,415	\$ 64,534,194	\$ 89,996,431	\$ 55,739,353	\$ 9,615	\$ 27,204,514	\$ 21,332,344	\$ 32,345,312	\$ 17,202,358	\$ 16,358,397	\$ 18,559,984	\$ 9,615
6 COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	\$ 1,494,271	\$ 1,742,400	\$ 62,204,078	\$ 85,232,330	\$ 49,143,290	\$ -	\$ 22,591,085	\$ 15,287,977	\$ 21,410,896	\$ 13,529,643	\$ 14,788,995	\$ 16,715,381	\$ -
7 COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	\$ 7,219	\$ 8,015	\$ 2,330,116	\$ 4,764,101	\$ 6,596,063	\$ 9,615	\$ 4,613,429	\$ 6,044,367	\$ 10,934,416	\$ 3,672,715	\$ 1,569,402	\$ 1,844,603	\$ 9,615
8 TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 7 and Land Use Assumptions)	0	2,192	15,134	20,187	7,870	0	38,168	38,438	25,470	16,849	9,056	677	0
9 PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	0.0%	201.6%	34.7%	38.9%	31.0%	0.0%	106.2%	145.4%	116.8%	151.9%	70.5%	5.0%	0.0%
10 IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	0.0%	100.0%	34.7%	38.9%	31.0%	0.0%	100.0%	100.0%	100.0%	100.0%	70.5%	5.0%	0.0%
11 COST OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	\$ -	\$ 1,742,400	\$ 21,584,815	\$ 33,155,376	\$ 15,234,420	\$ -	\$ 22,591,085	\$ 15,287,977	\$ 21,410,896	\$ 13,529,643	\$ 10,426,241	\$ 835,769	\$ -
12 PRINCIPAL PAID ON EXISTING DEBT FUNDED PROJECT COSTS (FROM APPENDIX D)		\$ -	\$ (92,997)	\$ (503,220)	\$ -		\$ (587,605)	\$ (1,480,339)	\$ (3,015,847)	\$ (940,339)	\$ (248,062)	\$ (15,112)	
13 FINANCING COSTS (FROM APPENDIX D)		\$ 238,845	\$ 2,965,721	\$ 4,574,469	\$ 2,084,546		\$ 3,777,391	\$ 2,312,920	\$ 3,711,605	\$ 2,718,278	\$ 1,445,258	\$ 115,494	
14 EXISTING FUND BALANCE (FROM APPENDIX D)		\$ -	\$ (511,016)	\$ (784,214)	\$ (85,229)		\$ (168,403)	\$ (155,834)	\$ (1,812,501)	\$ (710,292)	\$ (354,289)	\$ -	
15 INTEREST EARNINGS (FROM APPENDIX D)		\$ (92,965)	\$ (1,160,669)	\$ (1,731,486)	\$ (815,812)		\$ (1,112,282)	\$ (613,109)	\$ (793,773)	\$ (605,002)	\$ (537,659)	\$ (42,501)	
16 COST OF RIP AND FINANCING ATTRIBUTABLE TO GROWTH (LINE 11 + LINE 12 + LINE 13 + LINE 14 + LINE 15)	\$ -	\$ 1,888,280	\$ 22,785,855	\$ 34,710,925	\$ 16,417,925	\$ -	\$ 24,500,186	\$ 15,351,615	\$ 19,500,380	\$ 13,992,288	\$ 10,731,489	\$ 893,650	\$ -
17 PRE-CREDIT MAX FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 16 / LINE 8)	\$ -	\$ 861	\$ 1,506	\$ 1,719	\$ 2,086	\$ -	\$ 642	\$ 399	\$ 766	\$ 830	\$ 1,185	\$ 1,320	\$ -
18 CREDIT FOR AD VALOREM TAXES (FROM APPENDIX D)		\$ (947)	\$ (81,540)	\$ (177,073)	\$ (29,449)		\$ (279,004)	\$ (231,567)	\$ (274,133)	\$ (104,037)	\$ (26,696)	\$ (157)	
19 RECOVERABLE COST OF RIP AND FINANCING (LINE 16 + LINE 18)	\$ -	\$ 1,887,333	\$ 22,704,315	\$ 34,533,852	\$ 16,388,476	\$ -	\$ 24,221,182	\$ 15,120,047	\$ 19,226,247	\$ 13,888,250	\$ 10,704,793	\$ 893,493	\$ -
20 MAX ASSESSABLE FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 19 / LINE 8)		\$861	\$1,500	\$1,711	\$2,082		\$635	\$393	\$755	\$824	\$1,182	\$1,320	



D. SERVICE UNIT DEMAND PER UNIT OF DEVELOPMENT

The roadway 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 9**. This table lists the predominant land uses that may occur within the City of McKinney. 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 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 source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 9th Edition*, the latest edition of the definitive source for trip generation data. 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 adjusted 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 the maximum trip length within the service area, the maximum trip length used for calculation is reduced to the corresponding value. 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 estimate to compute the number of service units consumed by each land use application. 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.

E. LAND USE DESCRIPTIONS

In the process of assessing and collecting roadway impact fees within the City of McKinney, there are instances in which questions have arisen as to the appropriate application of the Land Use / Vehicle-Mile Equivalency Table (LUVMET) when the type of land use may seem to fit into multiple categories. **Table 10** provides the City with a more detailed description of the various land uses for the *ITE Trip Generation Manual, 9th Edition* for a reference.



Table 9.A. Service Area A - Land Use / Vehicle-Mile Equivalency Table

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) SA - A	Veh-Mi Per Dev Unit SA - A
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	0.30	1.97
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	0.30	0.29
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	0.30	0.20
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	0.30	0.26
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	0.30	0.10
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	0.30	0.08
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	0.30	0.30
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	0.30	0.19
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	0.30	0.16
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	0.30	0.08
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	0.30	0.05
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	0.30	0.07
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	0.30	0.18
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	0.30	0.14
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	0.30	0.38
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	0.30	0.09
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	0.30	0.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	0.30	0.71
Miniature Golf	431	Holes	0.33			0.33	6.43	50%	3.22	0.30	0.10
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	0.30	4.09
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	0.30	1.01
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	0.30	0.17
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	0.30	2.07
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	0.30	0.05
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	0.30	0.04
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	0.30	0.04
University / College	550	Students	0.17			0.17	4.20	50%	2.10	0.30	0.05
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	0.30	1.55
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	0.30	0.43
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	0.30	0.07
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	0.30	0.99
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	0.30	0.42
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	0.30	0.45
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	0.30	1.07
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	0.30	0.52
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	0.30	0.44
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	6.43	50%	3.22	0.30	0.56
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	0.30	1.02
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.30	1.78
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	0.30	0.63
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	0.30	0.93
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.30	1.00
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	0.30	0.90
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	0.30	4.90
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	0.30	1.68
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	0.30	1.26
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	0.30	1.05
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	0.30	1.46
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	0.30	0.36
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	0.30	1.52
Shopping Center	820	1,000 SF GFA	3.71	34%	A	2.45	6.43	50%	3.22	0.30	0.74
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	0.30	1.82
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	0.30	1.05
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	0.30	2.18
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	0.30	5.29

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.B. Service Area B - Land Use / Vehicle-Mile Equivalency Table

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) SA - B	Veh-Mi Per Dev-Unit SA - B
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	0.80	5.24
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	0.80	0.78
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	0.80	0.54
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	0.80	0.68
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	0.80	0.26
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	0.80	0.21
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	0.80	0.80
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	0.80	0.50
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	0.80	0.42
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	0.80	0.20
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	0.80	0.14
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	0.80	0.18
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	0.80	0.48
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	0.80	0.38
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	0.80	1.00
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	0.80	0.24
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	0.80	2.19
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	0.80	1.89
Miniature Golf	431	Holes	0.33			0.33	6.43	50%	3.22	0.80	0.26
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	0.80	10.91
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	0.80	2.68
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	0.80	0.44
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	0.80	5.53
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	0.80	0.13
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	0.80	0.10
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	0.80	0.10
University / College	550	Students	0.17			0.17	4.20	50%	2.10	0.80	0.14
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	0.80	4.14
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	0.80	1.14
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	0.80	0.18
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	0.80	2.64
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	0.80	1.13
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	0.80	1.19
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	0.80	2.86
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	0.80	1.39
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	0.80	1.18
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	0.80	1.50
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	0.80	2.73
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	0.80	1.68
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	0.80	2.49
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	0.80	2.39
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	0.80	13.06
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	0.80	4.49
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	0.80	3.35
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	0.80	2.79
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	0.80	3.89
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	0.80	0.97
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	0.80	4.04
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	0.80	1.96
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	0.80	4.86
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	0.80	2.79
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	0.80	5.82
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	0.80	14.10

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.C. Service Area C - Land Use / Vehicle-Mile Equivalency Table

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) SA - C	Veh-Mi Per Dev Unit SA - C
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	3.10	20.31
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	3.10	3.01
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	3.10	2.11
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	3.10	2.64
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	3.10	0.99
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	3.10	0.81
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	3.10	3.10
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	3.10	1.92
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	3.10	1.61
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	3.10	0.78
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	3.10	0.53
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	3.10	0.68
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.10	1.86
Motel/ Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.10	1.46
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.10	3.88
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.10	0.93
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.10	8.49
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.10	7.32
Miniature Golf	431	Holes	0.33			0.33	6.43	50%	3.22	3.10	1.02
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	3.10	42.28
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.10	10.39
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.10	16.06
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.10	4.40
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.10	0.68
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.10	10.23
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	3.10	4.37
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	3.10	4.62
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	3.10	11.07
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	3.10	5.39
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	3.10	4.59
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.10	5.80
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.10	10.57
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.10	6.51
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.10	9.64
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.10	9.27
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.10	10.82
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.10	15.07
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.10	3.75
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.10	15.66
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.10	7.60
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.10	18.82
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.10	10.82
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:
A: ITE Trip Generation Handbook 2nd Edition (June 2004)
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



Table 9.D. Service Area D - Land Use / Vehicle-Mile Equivalency Table

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) SA - D	Veh-Mi Per Dev Unit SA - D
PORT AND TERMINAL										5.80	
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	5.01	32.82
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.01	4.86
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	0.85			0.85	10.02	50%	5.01	5.01	4.26
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.42	1.73
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	1.00			1.00	17.21	50%	8.61	5.80	5.80
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	5.80	3.60
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	5.80	3.02
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	5.80	1.45
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	5.80	0.99
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	5.80	1.28
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel/ Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School(1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	5.46	7.70
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	3.57			3.57	10.92	50%	5.46	5.46	19.49
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	5.46	9.50
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.46	8.08
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.E. Service Area E - Land Use / Vehicle-Mile Equivalency Table

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) SA - E	Veh-Mi Per Dev Unit SA - E
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	4.80	31.44
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	4.80	4.66
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	4.80	3.26
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	4.80	4.08
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	4.80	1.54
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	4.80	1.25
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	4.80	4.80
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	4.80	2.98
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	4.80	2.50
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	4.80	1.20
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	4.80	0.82
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	4.80	1.06
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	4.80	6.77
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	4.80	7.15
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	4.80	17.14
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	4.80	8.35
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	4.80	7.10
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.F. Service Area F - Land Use / Vehicle-Mile Equivalency Table

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) SA - F	Veh-Mi Per Dev Unit SA - F
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	0.00	0.00
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	0.00	0.00
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	0.00	0.00
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	0.00	0.00
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	0.00	0.00
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	0.00	0.00
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	0.00	0.00
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	0.00	0.00
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	0.00	0.00
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	0.00	0.00
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	0.00	0.00
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	0.00	0.00
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	0.00	0.00
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	0.00	0.00
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	0.00	0.00
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	0.00	0.00
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	0.00	0.00
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	0.00	0.00
Miniature Golf	431	Holes	0.33			0.33	6.43	50%	3.22	0.00	0.00
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	0.00	0.00
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	0.00	0.00
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	0.00	0.00
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	0.00	0.00
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	0.00	0.00
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	0.00	0.00
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	0.00	0.00
University / College	550	Students	0.17			0.17	4.20	50%	2.10	0.00	0.00
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	0.00	0.00
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	0.00	0.00
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	0.00	0.00
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	0.00	0.00
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	0.00	0.00
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	0.00	0.00
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	0.00	0.00
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	0.00	0.00
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	0.00	0.00
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	0.00	0.00
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	0.00	0.00
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.00	0.00
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	0.00	0.00
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	0.00	0.00
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.00	0.00
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	0.00	0.00
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	0.00	0.00
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	0.00	0.00
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	0.00	0.00
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	0.00	0.00
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	0.00	0.00
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	0.00	0.00
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	0.00	0.00
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	0.00	0.00
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	0.00	0.00
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	0.00	0.00
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	0.00	0.00
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	0.00	0.00

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.G. Service Area G - Land Use / Vehicle-Mile Equivalency Table

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) SA - G	Veh-Mi Per Dev Unit SA - G
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	5.01	32.82
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.01	4.86
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	0.85			0.85	10.02	50%	5.01	5.01	4.26
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.42	1.73
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	1.00			1.00	17.21	50%	8.61	6.00	6.00
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
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	6.00	1.50
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	6.00	1.02
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	6.00	1.32
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel/ Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School(1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	5.46	7.70
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	3.57			3.57	10.92	50%	5.46	5.46	19.49
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	5.46	9.50
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.46	8.08
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.H. Service Area H - Land Use / Vehicle-Mile Equivalency Table

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) SA - H	Veh-Mi Per Dev Unit SA - H
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	4.65	30.46
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	4.65	4.51
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	4.65	3.16
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	4.65	3.95
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	4.65	1.49
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	4.65	1.21
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	4.65	4.65
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	4.65	2.88
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	4.65	2.42
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	4.65	1.16
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	4.65	0.79
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	4.65	1.02
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	4.65	6.56
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	4.65	6.93
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	4.65	16.60
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	4.65	8.09
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	4.65	6.88
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	20%	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.I. Service Area I - Land Use / Vehicle-Mile Equivalency Table

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) SA - I	Veh-Mi Per Dev Unit SA - I
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	5.01	32.82
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.01	4.86
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	0.85			0.85	10.02	50%	5.01	5.01	4.26
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.42	1.73
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	1.00			1.00	17.21	50%	8.61	6.00	6.00
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
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	6.00	1.50
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	6.00	1.02
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	6.00	1.32
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	5.46	7.70
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	3.57			3.57	10.92	50%	5.46	5.46	19.49
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	5.46	9.50
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.46	8.08
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GFA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.J. Service Area J - Land Use / Vehicle-Mile Equivalency Table

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) SA - J	Veh-Mi Per Dev Unit SA - J
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	5.01	32.82
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.01	4.86
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	0.85			0.85	10.02	50%	5.01	5.01	4.26
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.42	1.73
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	1.00			1.00	17.21	50%	8.61	6.00	6.00
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
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	6.00	1.50
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	6.00	1.02
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	6.00	1.32
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel/ Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School(1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	5.46	7.70
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	3.57			3.57	10.92	50%	5.46	5.46	19.49
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	5.46	9.50
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.46	8.08
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.K. Service Area K - Land Use / Vehicle-Mile Equivalency Table

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) SA - K	Veh-Mi Per Dev Unit SA - K
PORT AND TERMINAL										5.30	
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	5.01	32.82
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.01	4.86
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	0.85			0.85	10.02	50%	5.01	5.01	4.26
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.30	1.70
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	5.30	1.38
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	5.30	5.30
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	5.30	3.29
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	5.30	2.76
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	5.30	1.33
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	5.30	0.90
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	5.30	1.17
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.78	5.37
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	5.30	7.47
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	5.30	7.90
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	5.30	18.92
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	5.30	9.22
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.30	7.84
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.L. Service Area L - Land Use / Vehicle-Mile Equivalency Table

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) SA - L	Veh-Mi Per Dev Unit SA - L
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	3.50	22.93
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	3.50	3.40
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	3.50	2.38
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	3.50	2.98
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	3.50	1.12
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	3.50	0.91
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	3.50	3.50
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	3.50	2.17
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	3.50	1.82
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	3.50	0.88
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	3.50	0.60
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	3.50	0.77
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	3.22	0.97
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	3.22	8.82
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf	431	Holes	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	43.92
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	2.10	14.51
Primary/Middle School(1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	580	Students	0.17			0.17	4.20	50%	2.10	2.10	0.36
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.50	18.13
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	3.50	4.97
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.50	0.77
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.50	11.55
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	3.50	4.94
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	3.50	5.22
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	3.50	12.50
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	3.50	6.09
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	3.50	5.18
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	3.22	6.02
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.56
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	3.22	6.76
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	3.22	9.63
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	2.40	39.19
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	2.40	13.46
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	3.22	11.24
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	3.22	15.65
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	3.22	3.90
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	3.22	16.26
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	3.22	19.55
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	1.70	29.95

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 9.M. Service Area M - Land Use / Vehicle-Mile Equivalency Table

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) SA - M	Veh-Mi Per Dev Unit SA - M
PORT AND TERMINAL											
Truck Terminal	030	Acres	6.55			6.55	10.02	50%	5.01	0.00	0.00
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	0.00	0.00
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	0.00	0.00
Industrial Park	130	1,000 SF GFA	0.85			0.85	10.02	50%	5.01	0.00	0.00
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	0.00	0.00
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	0.00	0.00
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	0.00	0.00
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	0.00	0.00
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	0.00	0.00
Senior Adult Housing	252	Dwelling Unit	0.25			0.25	17.21	50%	8.61	0.00	0.00
Congregate Care Facility	253	Dwelling Unit	0.17			0.17	17.21	50%	8.61	0.00	0.00
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	0.00	0.00
LODGING											
Hotel	310	Rooms	0.60			0.60	6.43	50%	3.22	0.00	0.00
Motel / Other Lodging Facilities	320	Rooms	0.47			0.47	6.43	50%	3.22	0.00	0.00
RECREATIONAL											
Driving Range	432	Tees	1.25			1.25	6.43	50%	3.22	0.00	0.00
Golf Course	430	Acres	0.30			0.30	6.43	50%	3.22	0.00	0.00
Health/Rec. Clubs and Facilities	495	1,000 SF GFA	2.74			2.74	6.43	50%	3.22	0.00	0.00
Ice Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	0.00	0.00
Miniature Golf	431	Holes	0.33			0.33	6.43	50%	3.22	0.00	0.00
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	0.00	0.00
Racquet / Tennis Club	491	Courts	3.35			3.35	6.43	50%	3.22	0.00	0.00
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	0.00	0.00
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	4.20	50%	2.10	0.00	0.00
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	0.00	0.00
High School (9-12)	530	Students	0.13			0.13	4.20	50%	2.10	0.00	0.00
Jr / Community College	540	Students	0.12			0.12	4.20	50%	2.10	0.00	0.00
University / College	550	Students	0.17			0.17	4.20	50%	2.10	0.00	0.00
MEDICAL											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	0.00	0.00
Hospital	610	Beds	1.42			1.42	7.55	50%	3.78	0.00	0.00
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	0.00	0.00
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	0.00	0.00
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	10.92	50%	5.46	0.00	0.00
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	0.00	0.00
Medical/Dental Office	720	1,000 SF GFA	3.57			3.57	10.92	50%	5.46	0.00	0.00
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	10.92	50%	5.46	0.00	0.00
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	0.00	0.00
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GLA	3.11	40%	B	1.87	6.43	50%	3.22	0.00	0.00
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	0.00	0.00
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.00	0.00
New and Used Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	6.43	50%	3.22	0.00	0.00
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	0.00	0.00
Self-Service Car Wash	947	Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.00	0.00
Tire Store	848	1,000 SF GFA	4.15	0.28	A	2.99	6.43	0.50	3.22	0.00	0.00
Dining											
Fast Food Restaurant	934	1,000 SF GFA	32.65	50%	A	16.33	4.79	50%	2.40	0.00	0.00
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	4.79	50%	2.40	0.00	0.00
Sit Down Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	0.00	0.00
Other Retail											
Free-Standing Retail Store	815	1,000 SF GFA	4.98	30%	C	3.49	6.43	50%	3.22	0.00	0.00
Garden Center (Nursery)	817	1,000 SF GFA	6.94	30%	B	4.86	6.43	50%	3.22	0.00	0.00
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.43	50%	3.22	0.00	0.00
Pharmacy/Drugstore	881	1,000 SF GFA	9.91	49%	A	5.05	6.43	50%	3.22	0.00	0.00
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	0.00	0.00
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	6.43	50%	3.22	0.00	0.00
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	0.00	0.00
SERVICES											
Bank (Walk-In)	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	0.00	0.00
Bank (Drive In)	912	Drive-in Lanes	33.24	47%	A	17.62	3.39	50%	1.70	0.00	0.00

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

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



Table 10. Land Use Descriptions

Land Use Category	TTE Land Use Code	Land Use Description
PORT AND TERMINAL		
Truck Terminal	030	Point of good transfer between trucks or between trucks and rail
INDUSTRIAL		
General Light Industrial	110	Emphasis on activities other than manufacturing; typically employing fewer than 500 workers
General Heavy Industrial	120	Primary activity is conversion of raw materials or parts into finished products
Industrial Park	130	Area containing a number of industries or related facilities
Warehousing	150	Devoted to storage of materials but may include office and maintenance areas
Mini-Warehouse	151	Facilities with a number of units rented to others for the storage of goods
RESIDENTIAL		
Single-Family Detached Housing	210	Single-family detached homes on individual lots
Apartment/Multi-family	220	At least 4 rental dwelling units per building
Residential Condominium/Townhome	230	Single-family ownership units that have at least one other single-family owned unit within the same building
Senior Adult Housing	252	Independent living developments without centralized dining or on-site medical facilities
Congregate Care Facility	253	Independent living developments with centralized amenities such as dining, housekeeping, transportation and organized social/recreational activities
Assisted Living	254	Residential settings that provide either routine general protective oversight or assistance with activities.
LODGING		
Hotel	310	Lodging facilities that typically have on-site restaurants, lounges, meeting and/or banquet rooms, or other retail shops and services
Motel/ Other Lodging Facilities	320	Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space
RECREATIONAL		
Driving Range	432	Facilities with driving tees for practice; may provide individual or group lessons; may have pro shop and/or refreshment facilities
Golf Course	430	May include municipal courses and private country clubs; may have driving ranges, pro shops, and restaurant/banquet facilities
Health/ Rec. Clubs and Facilities	495	Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's
Ice Rink	465	Rinks for ice skating and related sports; may contain spectator areas and refreshment facilities
Miniature Golf	431	One or more individual putting courses; category should not be used when part of a larger entertainment center (with batting cages, video game centers, etc)
Multiplex/Movie Theater	445	Movie theater with audience seating, minimum of ten screens, lobby, and refreshment area.
Racquet / Tennis Club	491	Indoor or outdoor facilities specifically designed for playing tennis
INSTITUTIONAL		
Church	560	Churches and houses of worship
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds
Primary/Middle School (1-8)	522	
High School (9-12)	530	
Jr / Community College	540	
University / College	550	
MEDICAL		
Clinic	630	Facilities with limited diagnostic and outpatient care
Hospital	610	Medical and surgical facilities with overnight accommodations
Nursing Home	620	Rest and convalescent homes with residents who do little or no driving
Animal Hospital/Veterinary Clinic	640	Rest and convalescent homes with residents who do little or no driving
OFFICE		
Corporate Headquarters Building	714	Office building housing corporate headquarters of a single company or organization
General Office Building	710	Office buildings which house multiple tenants
Medical/Dental Office	720	Multi-tenant building with offices for physicians and/or dentists
Single Tenant Office Building	715	Single tenant office buildings other than corporate headquarters
Office Park	750	Office buildings (typically low-rise) in a campus setting and served by a common roadway system
COMMERCIAL		
Automobile Related		
Automobile Care Center	942	Automobile repair and servicing including stereo installations and upholstery
Automobile Parts Sales	843	Retail sale of auto parts but no on-site vehicle repair
Gasoline/Service Station w/ Conv Market	945	Gasoline sales with convenience store where the primary business is gasoline sales
New and Used Car Sales	841	New car dealerships, typically with automobile servicing, part sales, and used car sales
Quick Lubrication Vehicle Shop	941	Primary business is to perform oil changes and fluid/filter changes with other repair services not provided
Self-Service Car Wash	947	Has stalls for driver to park and wash the vehicle
Tire Store	848	Primary business is sales and installation of tires; usually do not have large storage or warehouse area
Dining		
Fast Food Restaurant	934	High-turnover fast food restaurant for carry-out and eat-in customers with a drive-thru window
High Turnover (Sit-Down) Restaurant	932	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Sit Down Restaurant	931	Restaurants with turnover rates of one hour or longer; typically require reservations
Other Retail		
Free-Standing Retail Store	815	Category includes free-standing stores with off-street parking; typically offer a variety of products and services with long store hours
Garden Center (Nursery)	817	Building with a yard of planting or landscape stock; may have office, storage, shipping or greenhouse facilities
Home Improvement Superstore	862	Warehouse-type facilities offering a large variety of products and services including lumber, tool, paint, lighting, and fixtures, among other items.
Pharmacy/Drugstore	881	Includes facilities with and without drive-thru windows
Shopping Center	820	Integrated group of commercial establishments; planning, owned, and managed as a unit
Supermarket	850	Primary business is sale of groceries, food, and household cleaning items; may include photo, pharmacy, video rental, and/or ATM; category includes facilities
Toy/Children's Superstore	864	Businesses specializing in child-oriented merchandise
SERVICES		
Bank (Walk-In)	911	Bank without drive-thru lanes
Bank (Drive In)	912	Bank with drive-thru lanes



VI. SAMPLE CALCULATIONS

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

Example 1:

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

Roadway Impact Fee Calculation Steps – Example 1	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 9 [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: 3.10
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit
	<i>From Table 8, Line 20 [Maximum Assessable Fee Per Service Unit]</i> Service Area C: \$1,500
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 * 3.10 * \$1,500 Maximum Assessable Impact Fee = \$4,650

Example 2:

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

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 9 [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: 3.90
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit
	<i>From Table 8, Line 20 [Maximum Assessable Fee Per Service Unit]</i> Service Area I: \$755
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 * 3.90 * \$755 Maximum Assessable Impact Fee = \$358,062.50



VII. CONCLUSION

The City of McKinney has established a process to implement the assessment and collection of roadway 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 roadway impact fee that could be assessed by the City of McKinney within each of the thirteen (13) service areas. The maximum assessable roadway impact fees calculated in this report are presented in below. For comparison purposes, the Maximum Assessable Roadway Impact Fee as they were calculated during the 2007-2008 Roadway Impact Fee Update are also included.

SERVICE AREA	2012-2013 MAXIMUM ASSESSABLE FEE PER SERVICE UNIT	2007-2008 MAXIMUM ASSESSABLE FEE PER SERVICE UNIT
A	\$0	\$0
B	\$861	\$1,558
C	\$1,500	\$1,534
D	\$1,711	\$1,389
E	\$2,082	\$1,673
F	\$0	\$0
G	\$635	\$684
H	\$393	\$489
I	\$755	\$641
J	\$824	\$719
K	\$1,182	\$1,153
L	\$1,320	\$1,281
M	\$0	\$0

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

In conclusion, it is our opinion that the data and methodology used in this update are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Roadway Improvements Plan are appropriately incorporated into the process.



APPENDICES

A. CONCEPTUAL LEVEL PROJECT COST PROJECTIONS

SERVICE AREA A
SERVICE AREA B
SERVICE AREA C
SERVICE AREA D
SERVICE AREA E
SERVICE AREA G
SERVICE AREA H
SERVICE AREA I
SERVICE AREA J
SERVICE AREA K
SERVICE AREA L

B. RIP SERVICE UNITS OF SUPPLY

C. EXISTING ROADWAY FACILITIES INVENTORY

D. PLAN FOR AWARDING THE ROADWAY IMPACT FEE CREDIT SUMMARY

(from J. Stowe & Co.)

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

(from J. Stowe & Co.)

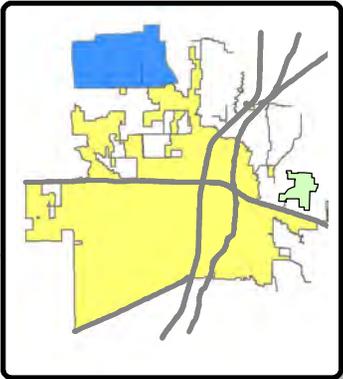
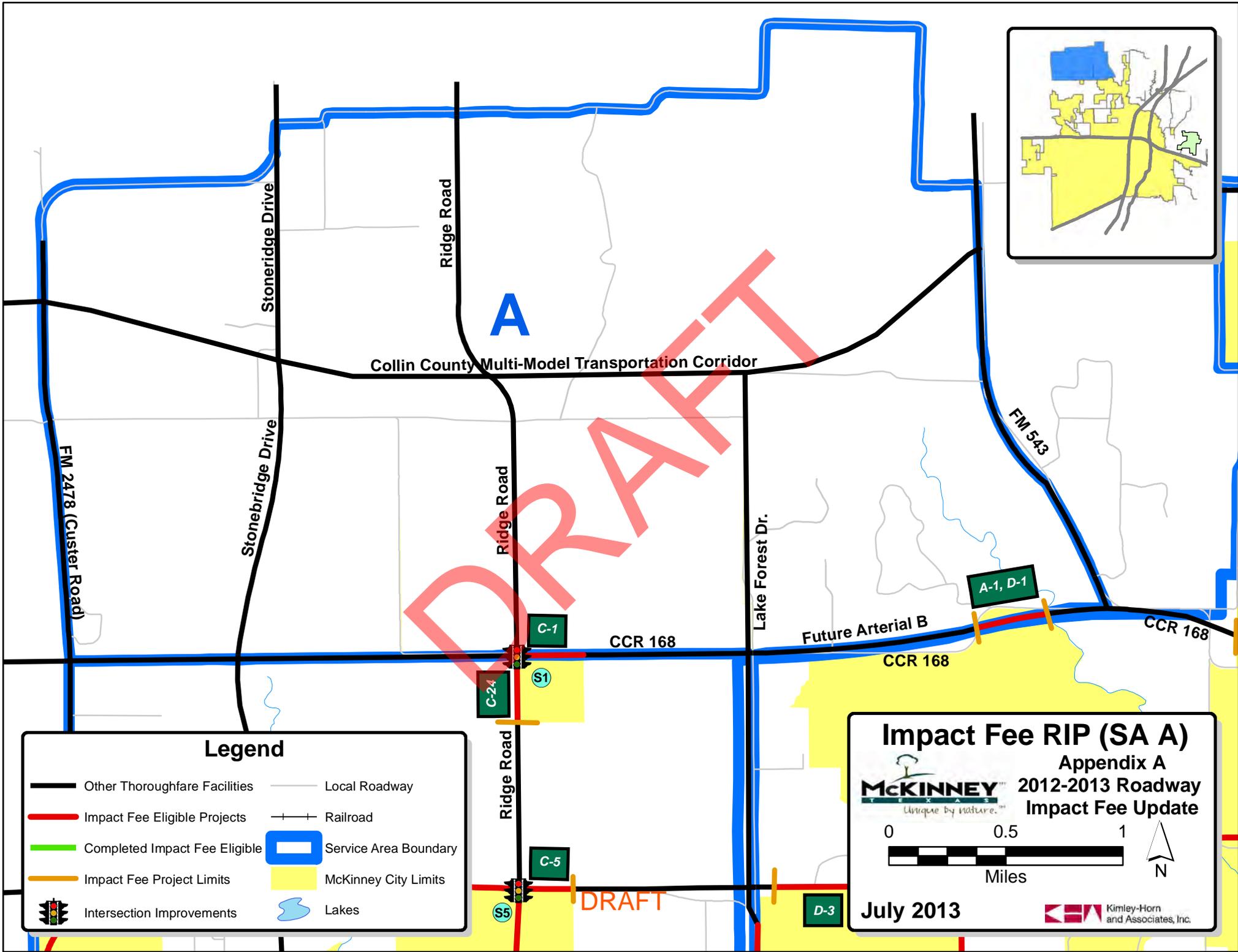


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Appendix A – Conceptual Level Project Cost Projections

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A

Collin County Multi-Model Transportation Corridor

Stonebridge Drive

Ridge Road

Ridge Road

Lake Forest Dr.

FM 543

FM 2478 (Custer Road)

C-1

CCR 168

Future Arterial B

A-1, D-1

CCR 168

C-24

S1

CCR 168

C-5

DRAFT

D-3

S5

Legend

- Other Thoroughfare Facilities
- Local Roadway
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Service Area Boundary
- McKinney City Limits
- Railroad
- Lakes

Impact Fee RIP (SA A)
 Appendix A
McKINNEY Unique by Nature.
 2012-2013 Roadway
 Impact Fee Update

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 Miles

July 2013

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area A

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
A-1, D-1	M6D	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	\$ 2,983,750	50%	\$ 1,491,875
TOTAL				\$ 2,983,750		\$ 1,491,875

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

DRAFT

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Future Arterial B (CCR 168) (2)	<p>This project consists of the construction of a new six-lane divided major arterial that roughly follows the alignment of CCR 168, a two-lane asphalt facility.</p>	A-1, D-1
Limits:	Existing CCR 168 to E. City Limits (Creek)		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,570		
Service Area(s):	A, D		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	17,444	cy	\$ 8.00	\$ 139,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	13,607	sy	\$ 5.00	\$ 68,033
307	8" Concrete Pavement	12,909	sy	\$ 36.00	\$ 464,720
407	4" Topsoil	6,629	sy	\$ 2.80	\$ 18,561
507	6" Curb & Gutter	6,280	lf	\$ 4.00	\$ 25,120
607	Allotment for Turn Lanes and Median Openings	1,130	sy	\$ 36.00	\$ 40,677

Paving Construction Cost Subtotal: \$ 756,667

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		3%	\$ 22,700
√ Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 22,700
√ Roadway Drainage	Standard Internal System	25%	\$ 189,167
√ Special Drainage Structures	Minor Stream Crossing		\$ 561,000
√ Water	Incidental Adjustments	3%	\$ 22,700
√ Sewer	Incidental Adjustments	3%	\$ 22,700
√ Establish Turf / Erosion Control		4%	\$ 30,267
√ Illumination	Standard Illumination System	6%	\$ 45,400
Other:			

**Allowances based on % of Paving Construction Cost Subtotal

Allowance Subtotal: \$ 916,634

Paving and Allowance Subtotal: \$ 1,673,301

Mobilization: 5% \$ 83,665

Construction Contingency: 15% \$ 250,995

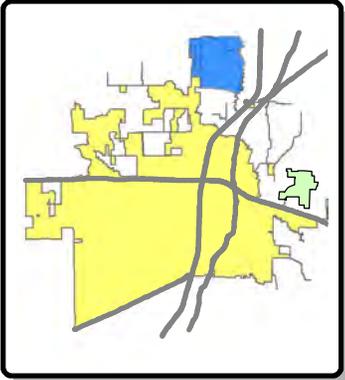
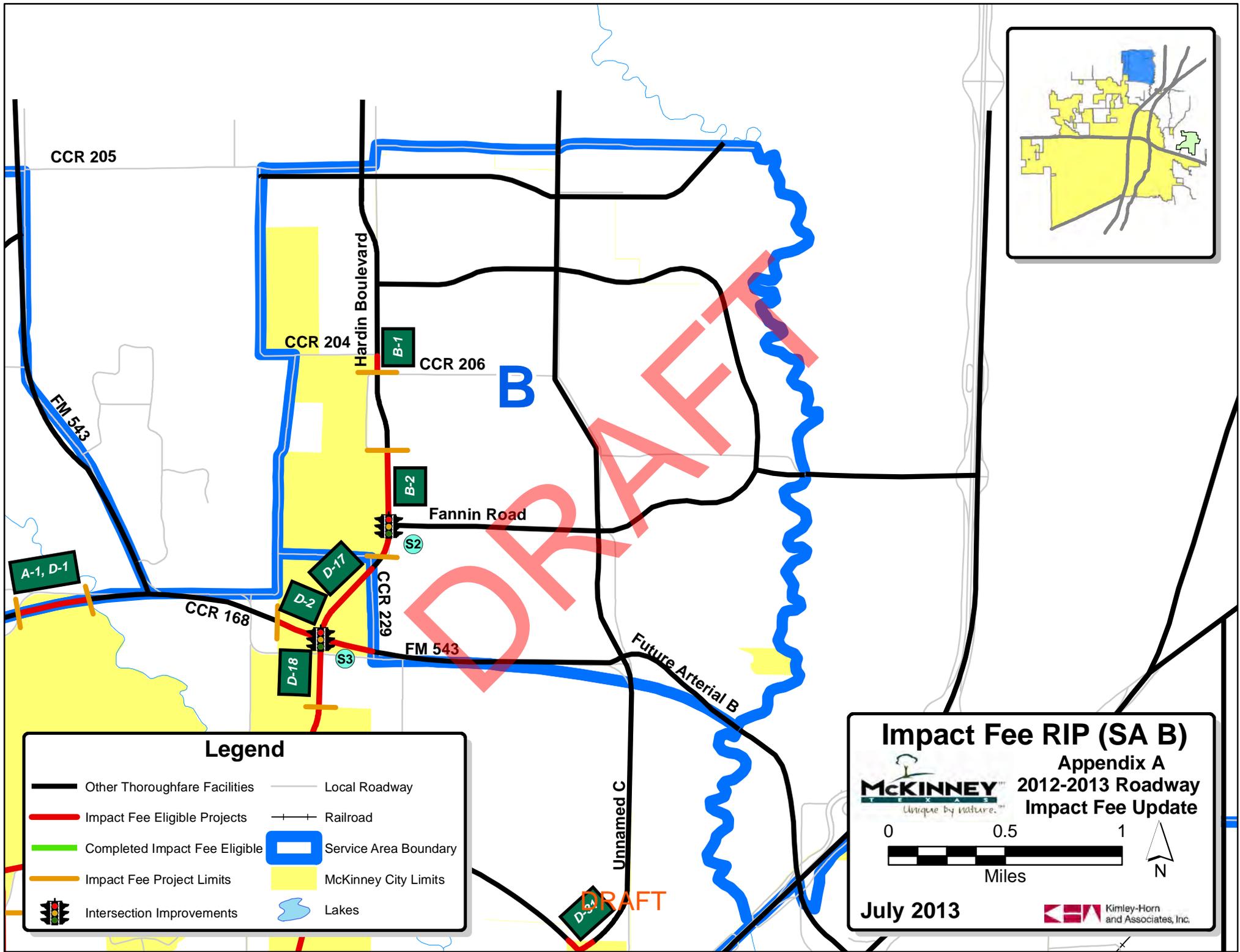
Construction Cost TOTAL: \$ 1,925,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,925,000
Engineering/Survey/Testing:		20%	\$ 385,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 673,750
Impact Fee Project Cost TOTAL:			\$ 2,983,750

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.

The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.



Legend

Other Thoroughfare Facilities	Local Roadway
Impact Fee Eligible Projects	Railroad
Completed Impact Fee Eligible	Service Area Boundary
Impact Fee Project Limits	McKinney City Limits
Intersection Improvements	Lakes

Impact Fee RIP (SA B)

Appendix A
2012-2013 Roadway
Impact Fee Update

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update
 Roadway Improvement Plan for Roadway Impact Fees
 Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area B

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
B-1	M6D	Hardin Blvd. (1)	CCR 204 to CCR 206	\$ 425,600	50%	\$ 212,800
B-2	M6D	Hardin Blvd. (2)	1,665' N. of CCR 228 to CCR 226	\$ 2,856,000	50%	\$ 1,428,000
S-2		Signal Installation	Hardin Blvd. & Fannin Rd.	\$ 200,000	50%	\$ 100,000
TOTAL				\$ 3,481,600		\$ 1,740,800

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (1)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 206) to a six-lane divided major arterial. Based on the existing city limits, the eastern half of the roadway is not included in the Impact Fee RIP.	B-1
Limits:	CCR 204 to CCR 206		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	355		
Service Area(s):	B, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	3,944	cy	\$ 8.00	\$ 31,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	3,077	sy	\$ 5.00	\$ 15,383
307	8" Concrete Pavement	2,919	sy	\$ 36.00	\$ 105,080
407	4" Topsoil	1,499	sy	\$ 2.80	\$ 4,197
507	6" Curb & Gutter	1,420	lf	\$ 4.00	\$ 5,680
607	Allotment for Turn Lanes and Median Openings	255	sy	\$ 36.00	\$ 9,198
Paving Construction Cost Subtotal:					\$ 171,094
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	8,555	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	8,555	
√ Pavement Markings/Markers		3%	\$	5,133	
√ Roadway Drainage	Standard Internal System	25%	\$	42,773	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	5,133	
√ Sewer	Incidental Adjustments	3%	\$	5,133	
√ Establish Turf / Erosion Control		4%	\$	6,844	
√ Illumination	Standard Illumination System	6%	\$	10,266	
Other:					
Allowance Subtotal:					\$ 92,390
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 263,484
Mobilization:					5% \$ 13,174
Construction Contingency:					15% \$ 39,523
Construction Cost TOTAL:					\$ 304,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 304,000
Engineering/Survey/Testing:		20%	\$ 60,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 60,800
Impact Fee Project Cost TOTAL:			\$ 425,600

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
 The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

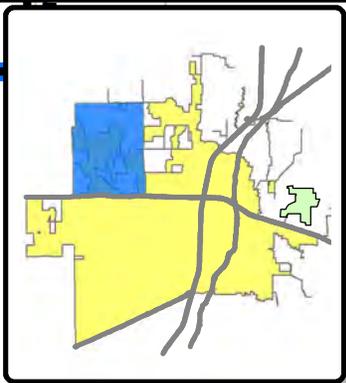
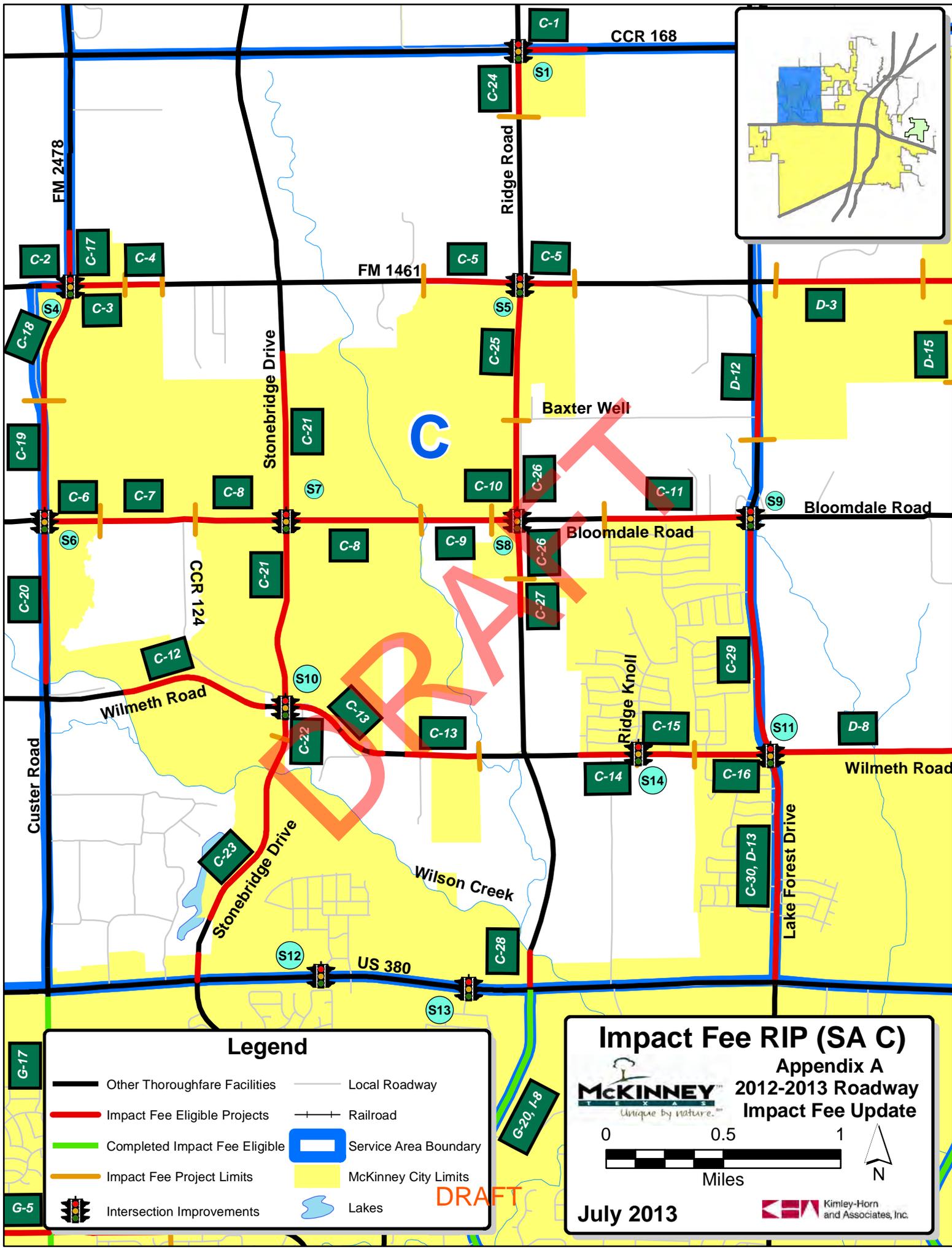
Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (2)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 227) to a six-lane divided major arterial.	B-2
Limits:	1,665' N. of CCR 228 to CCR 226		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,390		
Service Area(s):	B, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	26,556	cy	\$ 8.00	\$ 212,444
207	8" Lime Stabilization (with Lime @ 32#/sy)	20,713	sy	\$ 5.00	\$ 103,567
307	8" Concrete Pavement	19,651	sy	\$ 36.00	\$ 707,440
407	4" Topsoil	10,091	sy	\$ 2.80	\$ 28,255
507	6" Curb & Gutter	9,560	lf	\$ 4.00	\$ 38,240
607	Allotment for Turn Lanes and Median Openings	1,720	sy	\$ 36.00	\$ 61,923
Paving Construction Cost Subtotal:					\$ 1,151,869
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	57,593	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	57,593	
√ Pavement Markings/Markers		3%	\$	34,556	
√ Roadway Drainage	Standard Internal System	25%	\$	287,967	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	34,556	
√ Sewer	Incidental Adjustments	3%	\$	34,556	
√ Establish Turf / Erosion Control		4%	\$	46,075	
√ Illumination	Standard Illumination System	6%	\$	69,112	
Other:					
Allowance Subtotal:					\$ 622,009
Paving and Allowance Subtotal:					\$ 1,773,878
Mobilization:					5% \$ 88,694
Construction Contingency:					15% \$ 266,082
Construction Cost TOTAL:					\$ 2,040,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,040,000
Engineering/Survey/Testing:		20%	\$ 408,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 408,000
Impact Fee Project Cost TOTAL:			\$ 2,856,000

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
 The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.



Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Railroad
- Service Area Boundary
- McKinney City Limits
- Lakes

Impact Fee RIP (SA C)
 Appendix A
McKINNEY™
Unique by nature.™
2012-2013 Roadway Impact Fee Update

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area C

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
C-1	M6D	Future Arterial B (CCR 168) (1)	Ridge Rd. to 1,510' W. of Ridge Rd.	\$ 1,804,600	50%	\$ 902,300
C-2	P6D	FM 1461 (1)	145' E. of Existing Custer Rd. to Future Custer Rd.	\$ 562,100	50%	\$ 281,050
C-3	P6D	FM 1461 (2)	Future Custer Rd. to 1,175' E. of Future Custer Rd.	\$ 943,600	100%	\$ 943,600
C-4	P6D	FM 1461 (3)	1,175' E. of Future Custer Rd. to 2,015' E. of Future Custer Rd.	\$ 674,800	50%	\$ 337,400
C-5	P6D	FM 1461 (4)	2,195' W. of Ridge Rd. to 1,210 E. of Ridge Rd.	\$ 2,733,500	50%	\$ 1,366,750
C-6	M6D	Bloomdale Rd. (1)	Custer Rd. to 1,250' E. of Custer Rd.	\$ 1,493,800	100%	\$ 1,493,800
C-7	M6D	Bloomdale Rd. (2)	1,250' E. of Custer Rd. to 275' E. of CCR 124	\$ 2,563,400	50%	\$ 1,281,700
C-8	M6D	Bloomdale Rd. (3)	275' E. of CCR 124 to 3,195' E. of Stonebridge Dr.	\$ 6,070,400	100%	\$ 6,070,400
C-9	M6D	Bloomdale Rd. (4)	3,195' E. of Stonebridge Dr. to 645' W. of Ridge Rd.	\$ 2,303,000	50%	\$ 1,151,500
C-10	M6D	Bloomdale Rd. (5)	645' W. of Ridge Rd. to Ridge Rd.	\$ 771,400	100%	\$ 771,400
C-11	M6D (1/3)	Bloomdale Rd. (6)	1,895' E. of Ridge Rd. to Lake Forest Dr.	\$ 957,600	50%	\$ 478,800
C-12	M6D	Wilmeth Rd. (1)	1,825' E. of Custer Rd (Wilson Creek) to Future Stonebridge Dr.	\$ 4,781,750	100%	\$ 4,781,750
C-13	M6D	Wilmeth Rd. (2)	Future Stonebridge Dr. to 1,045' W. of Ridge Rd.	\$ 5,093,200	50%	\$ 2,546,600
C-14	M6D	Wilmeth Rd. (3)	1,275' W. of Ridge Knoll to Ridge Knoll	\$ 1,524,600	50%	\$ 762,300
C-15	M6D (1/3)	Wilmeth Rd. (4)	Ridgeknoll to 265' W. of Sunnyside Dr.	\$ 490,398	50%	\$ 245,199
C-16	M6D (1/3)	Wilmeth Rd. (5)	265' W. of Sunnyside Dr. to Lake Forest Dr.	\$ 900,960	100%	\$ 900,960
C-17	P6D	Custer Rd. (1)	1,290' N. of FM 1461 to FM 1461	\$ 1,036,000	50%	\$ 518,000
C-18	P6D	Custer Rd. (2)	FM 1461 to 2,615' N of Bloomdale Rd.	\$ 2,342,050	100%	\$ 2,342,050
C-19	P6D	Custer Rd. (3)	2,615' N. of Bloomdale Rd. to Bloomdale Rd.	\$ 2,099,300	50%	\$ 1,049,650
C-20	P6D	Custer Rd. (4)	Bloomdale Rd. to S. City Limits (Creek)	\$ 2,909,900	50%	\$ 1,454,950
C-21	M6D	Stonebridge Dr. (1)	1,600' S. of FM 1461 to Wilmeth Rd.	\$ 10,102,900	100%	\$ 10,102,900
C-22	M6D	Stonebridge Dr. (2)	Wilmeth Rd. to 775' S. of Wilmeth Rd.	\$ 979,600	50%	\$ 489,800
C-23	M6D	Stonebridge Dr. (3)	775' S. of Wilmeth Rd. to US 380	\$ 10,205,200	100%	\$ 10,205,200
C-24	M6D	Ridge Rd. (1)	CCR 168 to 1,505' S. of CCR 168	\$ 1,799,000	50%	\$ 899,500
C-25	M6D	Ridge Rd. (2)	FM 1461 to Baxter Well	\$ 3,909,100	100%	\$ 3,909,100
C-26	M6D	Ridge Rd. (3)	Baxter Well to 1,330' S. of Bloomdale Rd.	\$ 4,267,200	50%	\$ 2,133,600
C-27	M6D	Ridge Rd. (4)	1,330' S. of Bloomdale Rd. to 2,135' S. of Bloomdale Rd.	\$ 963,200	50%	\$ 481,600
C-28	M6D	Ridge Rd. (5)	Wilson Creek to US 380	\$ 2,022,750	100%	\$ 2,022,750
C-29	M6D (2/3)	Lake Forest Dr. (2)	Bloomdale Rd. to Wilmeth Rd.	\$ 4,487,000	50%	\$ 2,243,500
C-30, D-13	M6D (1/3)	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	\$ 2,015,440	50%	\$ 1,007,720
S-1		Signal Installation	Future Arterial (CCR 168) & Ridge Rd.	\$ 200,000	25%	\$ 50,000
S-4		Signal Installation	Custer Rd. & FM 1461	\$ 215,000	75%	\$ 161,250
S-5		Signal Installation	Ridge Rd. & FM 1461	\$ 215,000	50%	\$ 107,500
S-6		Signal Installation	Custer Rd. & Bloomdale Rd.	\$ 215,000	50%	\$ 107,500
S-7		Signal Installation	Stonebridge Dr. & Bloomdale Rd.	\$ 200,000	100%	\$ 200,000
S-8		Signal Installation	Ridge Rd. & Bloomdale Rd.	\$ 200,000	50%	\$ 100,000
S-9		Signal Installation	Lake Forest Dr. & Bloomdale Rd.	\$ 200,000	25%	\$ 50,000
S-10		Signal Installation	Stonebridge Dr. & Wilmeth Rd.	\$ 200,000	75%	\$ 150,000
S-11		Signal Installation	Lake Forest Dr. & Wilmeth Rd.	\$ 200,000	50%	\$ 100,000
S-12		Signal Installation	Tremont Blvd. & US 380	\$ 215,000	50%	\$ 107,500
S-13		Signal Installation	Forest Ridge Dr. & US 380	\$ 215,000	50%	\$ 107,500
S-14		Signal Installation	Wilmeth Rd. & Ridge Knoll	\$ 215,000	50%	\$ 107,500
TOTAL				\$ 85,297,748		\$ 64,524,579

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-1
Name:	Future Arterial B (CCR 168) (1)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-line divided major arterial. Based on the existing city limits, the northern half (Service Area A) of this roadway is not included in the Impact Fee RIP.	
Limits:	Ridge Rd. to 1,510' W. of Ridge Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,510		
Service Area(s):	A, C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	16,778	cy	\$ 8.00	\$ 134,222
207	8" Lime Stabilization (with Lime @ 32#/sy)	13,087	sy	\$ 5.00	\$ 65,433
307	8" Concrete Pavement	12,416	sy	\$ 36.00	\$ 446,960
407	4" Topsoil	6,376	sy	\$ 2.80	\$ 17,852
507	6" Curb & Gutter	6,040	lf	\$ 4.00	\$ 24,160
607	Allotment for Turn Lanes and Median Openings	1,087	sy	\$ 36.00	\$ 39,123
Paving Construction Cost Subtotal:					\$ 727,750
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	36,387	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	36,387	
√ Pavement Markings/Markers		3%	\$	21,832	
√ Roadway Drainage	Standard Internal System	25%	\$	181,937	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	21,832	
√ Sewer	Incidental Adjustments	3%	\$	21,832	
√ Establish Turf / Erosion Control		4%	\$	29,110	
√ Illumination	Standard Illumination System	6%	\$	43,665	
Other:					
Allowance Subtotal:					\$ 392,985
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,120,735
Mobilization:					5% \$ 56,037
Construction Contingency:					15% \$ 168,110
Construction Cost TOTAL:					\$ 1,289,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,289,000
Engineering/Survey/Testing:		20%	\$ 257,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 257,800
Impact Fee Project Cost TOTAL:			\$ 1,804,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	FM 1461 (1)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial. Based on the existing city limits, the northern half of the roadway is not included in the Impact Fee RIP.	C-2
Limits:	145' E. of Existing Custer Rd. to Future Custer Rd.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	700		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	4,278	cy	\$ 9.28	\$ 39,698
209	8" Lime Stabilization (with Lime @ 48#/sy)	6,067	sy	\$ 6.00	\$ 36,400
309	4" TY D HMAC Underlayment	6,067	sy	\$ 3.00	\$ 18,200
409	10" Concrete Pavement	5,756	sy	\$ 50.00	\$ 287,778
509	4" Topsoil	3,733	sy	\$ 4.40	\$ 16,427
609	6" Curb & Gutter	2,800	lf	\$ 12.00	\$ 33,600
709	Allotment for Turn Lanes and Median Openings	504	sy	\$ 42.00	\$ 21,159
Paving Construction Cost Subtotal:					\$ 453,261
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	22,663	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	22,663	
√ Pavement Markings/Markers		3%	\$	13,598	
√ Roadway Drainage	Standard Internal System	25%	\$	113,315	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	13,598	
√ Sewer	Incidental Adjustments	3%	\$	13,598	
√ Establish Turf / Erosion Control		4%	\$	18,130	
√ Illumination	Standard Illumination System	6%	\$	27,196	
Other:					
Allowance Subtotal:					\$ 244,761
Paving and Allowance Subtotal:					\$ 698,022
Mobilization:					5% \$ 34,901
Construction Contingency:					15% \$ 104,703
Construction Cost TOTAL:					\$ 803,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 803,000
Engineering/Survey/Testing:		20%	\$ 160,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 160,600
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 562,100

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	FM 1461 (2)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial.	C-3
Limits:	Future Custer Rd. to 1,175' E. of Future Custer Rd.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	1,175		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	7,181	cy	\$ 9.28	\$ 66,636
209	8" Lime Stabilization (with Lime @ 48#/sy)	10,183	sy	\$ 6.00	\$ 61,100
309	4" TY D HMAC Underlayment	10,183	sy	\$ 3.00	\$ 30,550
409	10" Concrete Pavement	9,661	sy	\$ 50.00	\$ 483,056
509	4" Topsoil	6,267	sy	\$ 4.40	\$ 27,573
609	6" Curb & Gutter	4,700	lf	\$ 12.00	\$ 56,400
709	Allotment for Turn Lanes and Median Openings	846	sy	\$ 42.00	\$ 35,517
Paving Construction Cost Subtotal:					\$ 760,831
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	38,042	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	38,042	
√ Pavement Markings/Markers		3%	\$	22,825	
√ Roadway Drainage	Standard Internal System	25%	\$	190,208	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	22,825	
√ Sewer	Incidental Adjustments	3%	\$	22,825	
√ Establish Turf / Erosion Control		4%	\$	30,433	
√ Illumination	Standard Illumination System	6%	\$	45,650	
Other:					
Allowance Subtotal:					\$ 410,849
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,171,680
Mobilization:					5% \$ 58,584
Construction Contingency:					15% \$ 175,752
Construction Cost TOTAL:					\$ 1,348,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,348,000
Engineering/Survey/Testing:		20%	\$ 269,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 269,600
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 943,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-4
Name:	FM 1461 (3)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial. Based on the existing city limits, the northern half of the roadway is not included in the Impact Fee RIP.	
Limits:	1,175' E. of Future Custer Rd. to 2,015' E. of		
Impact Fee Class:	P6D Future Custer Rd.		
Thoroughfare Class:	Principal Arterial		
Length (lf):	840		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	5,133	cy	\$ 9.28	\$ 47,637
209	8" Lime Stabilization (with Lime @ 48#/sy)	7,280	sy	\$ 6.00	\$ 43,680
309	4" TY D HMAC Underlayment	7,280	sy	\$ 3.00	\$ 21,840
409	10" Concrete Pavement	6,907	sy	\$ 50.00	\$ 345,333
509	4" Topsoil	4,480	sy	\$ 4.40	\$ 19,712
609	6" Curb & Gutter	3,360	lf	\$ 12.00	\$ 40,320
709	Allotment for Turn Lanes and Median Openings	605	sy	\$ 42.00	\$ 25,391
Paving Construction Cost Subtotal:					\$ 543,914
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	27,196	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	27,196	
√ Pavement Markings/Markers		3%	\$	16,317	
√ Roadway Drainage	Standard Internal System	25%	\$	135,978	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	16,317	
√ Sewer	Incidental Adjustments	3%	\$	16,317	
√ Establish Turf / Erosion Control		4%	\$	21,757	
√ Illumination	Standard Illumination System	6%	\$	32,635	
Other:					
Allowance Subtotal:					\$ 293,713
Paving and Allowance Subtotal:					\$ 837,627
Mobilization:					5% \$ 41,881
Construction Contingency:					15% \$ 125,644
Construction Cost TOTAL:					\$ 964,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 964,000
Engineering/Survey/Testing:		20%	\$ 192,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 192,800
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 674,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-5
Name:	FM 1461 (4)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	
Limits:	2,195' W. of Ridge Rd. to 1,210 E. of Ridge Rd.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	3,405		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	20,808	cy	\$ 9.28	\$ 193,101
209	8" Lime Stabilization (with Lime @ 48#/sy)	29,510	sy	\$ 6.00	\$ 177,060
309	4" TY D HMAC Underlayment	29,510	sy	\$ 3.00	\$ 88,530
409	10" Concrete Pavement	27,997	sy	\$ 50.00	\$ 1,399,833
509	4" Topsoil	18,160	sy	\$ 4.40	\$ 79,904
609	6" Curb & Gutter	13,620	lf	\$ 12.00	\$ 163,440
709	Allotment for Turn Lanes and Median Openings	2,451	sy	\$ 42.00	\$ 102,924
Paving Construction Cost Subtotal:					\$ 2,204,793
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	110,240	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	110,240	
√ Pavement Markings/Markers		3%	\$	66,144	
√ Roadway Drainage	Standard Internal System	25%	\$	551,198	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	66,144	
√ Sewer	Incidental Adjustments	3%	\$	66,144	
√ Establish Turf / Erosion Control		4%	\$	88,192	
√ Illumination	Standard Illumination System	6%	\$	132,288	
Other:					
Allowance Subtotal:					\$ 1,190,588
Paving and Allowance Subtotal:					\$ 3,395,380
Mobilization:					5% \$ 169,769
Construction Contingency:					15% \$ 509,307
Construction Cost TOTAL:					\$ 3,905,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,905,000
Engineering/Survey/Testing:		20%	\$ 781,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 781,000
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 2,733,500

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-6
Name:	Bloomdale Rd. (1)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 123) to a six-lane divided major arterial.	
Limits:	Custer Rd. to 1,250' E. of Custer Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,250		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	13,889	cy	\$ 8.00	\$ 111,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	10,833	sy	\$ 5.00	\$ 54,167
307	8" Concrete Pavement	10,278	sy	\$ 36.00	\$ 370,000
407	4" Topsoil	5,278	sy	\$ 2.80	\$ 14,778
507	6" Curb & Gutter	5,000	lf	\$ 4.00	\$ 20,000
607	Allotment for Turn Lanes and Median Openings	900	sy	\$ 36.00	\$ 32,386
Paving Construction Cost Subtotal:					\$ 602,442
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	30,122	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	30,122	
√ Pavement Markings/Markers		3%	\$	18,073	
√ Roadway Drainage	Standard Internal System	25%	\$	150,610	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	18,073	
√ Sewer	Incidental Adjustments	3%	\$	18,073	
√ Establish Turf / Erosion Control		4%	\$	24,098	
√ Illumination	Standard Illumination System	6%	\$	36,147	
Other:					
Allowance Subtotal:					\$ 325,319
Paving and Allowance Subtotal:					\$ 927,761
Mobilization:					5% \$ 46,388
Construction Contingency:					15% \$ 139,164
Construction Cost TOTAL:					\$ 1,067,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,067,000
Engineering/Survey/Testing:		20%	\$ 213,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 213,400
Impact Fee Project Cost TOTAL:			\$ 1,493,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-7
Name:	Bloomdale Rd. (2)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 123) to a six-lane divided major arterial. Based on the existing city limits, the southern half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,250' E. of Custer Rd. to 275' E. of C		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,145		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	23,833	cy	\$ 8.00	\$ 190,667
207	8" Lime Stabilization (with Lime @ 32#/sy)	18,590	sy	\$ 5.00	\$ 92,950
307	8" Concrete Pavement	17,637	sy	\$ 36.00	\$ 634,920
407	4" Topsoil	9,057	sy	\$ 2.80	\$ 25,359
507	6" Curb & Gutter	8,580	lf	\$ 4.00	\$ 34,320
607	Allotment for Turn Lanes and Median Openings	1,544	sy	\$ 36.00	\$ 55,575
Paving Construction Cost Subtotal:					\$ 1,033,790
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	51,690	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	51,690	
√ Pavement Markings/Markers		3%	\$	31,014	
√ Roadway Drainage	Standard Internal System	25%	\$	258,448	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	31,014	
√ Sewer	Incidental Adjustments	3%	\$	31,014	
√ Establish Turf / Erosion Control		4%	\$	41,352	
√ Illumination	Standard Illumination System	6%	\$	62,027	
Other:					
Allowance Subtotal:					\$ 558,247
Paving and Allowance Subtotal:					\$ 1,592,037
Mobilization:					5% \$ 79,602
Construction Contingency:					15% \$ 238,806
Construction Cost TOTAL:					\$ 1,831,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,831,000
Engineering/Survey/Testing:		20%	\$ 366,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 366,200
Impact Fee Project Cost TOTAL:			\$ 2,563,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Bloomdale Rd. (3)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 123) to a six-lane divided major arterial.	C-8
Limits:	275' E. of CCR 124 to 3,195' E. of Stonebridge Dr.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,080		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	56,444	cy	\$ 8.00	\$ 451,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	44,027	sy	\$ 5.00	\$ 220,133
307	8" Concrete Pavement	41,769	sy	\$ 36.00	\$ 1,503,680
407	4" Topsoil	21,449	sy	\$ 2.80	\$ 60,057
507	6" Curb & Gutter	20,320	lf	\$ 4.00	\$ 81,280
607	Allotment for Turn Lanes and Median Openings	3,656	sy	\$ 36.00	\$ 131,618
Paving Construction Cost Subtotal:					\$ 2,448,324
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	122,416	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	122,416	
√ Pavement Markings/Markers		3%	\$	73,450	
√ Roadway Drainage	Standard Internal System	25%	\$	612,081	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	73,450	
√ Sewer	Incidental Adjustments	3%	\$	73,450	
√ Establish Turf / Erosion Control		4%	\$	97,933	
√ Illumination	Standard Illumination System	6%	\$	146,899	
Other:					
Allowance Subtotal:					\$ 1,322,095
Paving and Allowance Subtotal:					\$ 3,770,419
Mobilization:					5% \$ 188,521
Construction Contingency:					15% \$ 565,563
Construction Cost TOTAL:					\$ 4,336,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,336,000
Engineering/Survey/Testing:		20%	\$ 867,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 867,200
Impact Fee Project Cost TOTAL:			\$ 6,070,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. C-9
Name:	Bloomdale Rd. (4)	<p>This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 123) to a six-lane divided major arterial. Based on the existing city limits, the southern half of this roadway is not included in the Impact Fee RIP.</p>	
Limits:	3,195' E. of Stonebridge Dr. to 645' W. of Ridge Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,590		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	17,667	cy	\$ 8.00	\$ 141,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	13,780	sy	\$ 5.00	\$ 68,900
307	8" Concrete Pavement	13,073	sy	\$ 36.00	\$ 470,640
407	4" Topsoil	6,713	sy	\$ 2.80	\$ 18,797
507	6" Curb & Gutter	6,360	lf	\$ 4.00	\$ 25,440
607	Allotment for Turn Lanes and Median Openings	1,144	sy	\$ 36.00	\$ 41,195
Paving Construction Cost Subtotal:					\$ 766,306
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	38,315	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	38,315	
√ Pavement Markings/Markers		3%	\$	22,989	
√ Roadway Drainage	Standard Internal System	25%	\$	191,577	
√ Special Drainage Structures	Minor Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	22,989	
√ Sewer	Incidental Adjustments	3%	\$	22,989	
√ Establish Turf / Erosion Control		4%	\$	30,652	
√ Illumination	Standard Illumination System	6%	\$	45,978	
Other:					
**Allowances based on % of Paving Construction Cost Subtotal					Allowance Subtotal: \$ 663,805
Paving and Allowance Subtotal:					\$ 1,430,111
Mobilization:					5% \$ 71,506
Construction Contingency:					15% \$ 214,517
Construction Cost TOTAL:					\$ 1,645,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,645,000
Engineering/Survey/Testing:		20%	\$ 329,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 329,000
Impact Fee Project Cost TOTAL:			\$ 2,303,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Bloomdale Rd. (5)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 123) to a six-lane divided major arterial.	C-10
Limits:	645' W. of Ridge Rd. to Ridge Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	645		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	7,167	cy	\$ 8.00	\$ 57,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	5,590	sy	\$ 5.00	\$ 27,950
307	8" Concrete Pavement	5,303	sy	\$ 36.00	\$ 190,920
407	4" Topsoil	2,723	sy	\$ 2.80	\$ 7,625
507	6" Curb & Gutter	2,580	lf	\$ 4.00	\$ 10,320
607	Allotment for Turn Lanes and Median Openings	464	sy	\$ 36.00	\$ 16,711
Paving Construction Cost Subtotal:					\$ 310,860
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	15,543	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	15,543	
√ Pavement Markings/Markers		3%	\$	9,326	
√ Roadway Drainage	Standard Internal System	25%	\$	77,715	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	9,326	
√ Sewer	Incidental Adjustments	3%	\$	9,326	
√ Establish Turf / Erosion Control		4%	\$	12,434	
√ Illumination	Standard Illumination System	6%	\$	18,652	
Other:					
Allowance Subtotal:					\$ 167,864
Paving and Allowance Subtotal:					\$ 478,724
Mobilization:					5% \$ 23,936
Construction Contingency:					15% \$ 71,809
Construction Cost TOTAL:					\$ 551,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 551,000
Engineering/Survey/Testing:		20%	\$ 110,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 110,200
Impact Fee Project Cost TOTAL:			\$ 771,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. C-11
Name:	Bloomdale Rd. (6)	This project consists of the construction of two additional through lanes within the existing median. Note, this project does not include the southern lanes that still need to be constructed that are outside the City Limits.	
Limits:	1,895' E. of Ridge Rd. to Lake Forest Dr.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,290		
Service Area(s):	C, Half		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
110	Unclassified Street Excavation	11,698	cy	\$ 93,582
210	8" Lime Stabilization (with Lime @ 32#/sy)	10,967	sy	\$ 54,833
310	8" Concrete Pavement	9,139	sy	\$ 329,000
410	4" Topsoil	1,462	sy	\$ 4,094
510	6" Curb & Gutter	6,580	lf	\$ 26,320
610	Allotment for Turn Lanes and Median Openings	2,368	sy	\$ 85,241
Paving Construction Cost Subtotal:				\$ 593,071
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Prep ROW		5%	\$	29,654
√ Traffic Control	Construction Phase Traffic Control	5%	\$	29,654
√ Pavement Markings/Markers		3%	\$	17,792
Roadway Drainage	None Anticipated	0%	\$	-
Special Drainage Structures	None Anticipated	0%	\$	-
Water	None Anticipated	0%	\$	-
Sewer	None Anticipated	0%	\$	-
√ Establish Turf / Erosion Control		4%	\$	23,723
Illumination	None Anticipated	0%	\$	-
Other:				
			Allowance Subtotal:	\$ 100,822
Paving and Allowance Subtotal:				\$ 693,893
Mobilization:				5% \$ 34,695
Construction Contingency:				15% \$ 104,084
Construction Cost TOTAL:				\$ 798,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 798,000
Engineering/Survey/Testing:		20%	\$ 159,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$?
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 957,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (1)	<p>This project consists of the construction of a new six-lane divided major arterial. Based on the existing city limits, 220' of this roadway is not included in the Impact Fee RIP.</p>	C-12
Limits:	1,825' E. of Custer Rd (Wilson Creek). to Future Stonebridge Dr.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,610		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	40,111	cy	\$ 8.00	\$ 320,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	31,287	sy	\$ 5.00	\$ 156,433
307	8" Concrete Pavement	29,682	sy	\$ 36.00	\$ 1,068,560
407	4" Topsoil	15,242	sy	\$ 2.80	\$ 42,678
507	6" Curb & Gutter	14,440	lf	\$ 4.00	\$ 57,760
607	Allotment for Turn Lanes and Median Openings	2,598	sy	\$ 36.00	\$ 93,532
Paving Construction Cost Subtotal:					\$ 1,739,852
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW	None Anticipated	3%	\$	52,196	
Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	52,196	
√ Roadway Drainage		25%	\$	434,963	
√ Special Drainage Structures	Half of Minor Stream Crossing		\$	125,000	
√ Water	Incidental Adjustments	3%	\$	52,196	
√ Sewer	Incidental Adjustments	3%	\$	52,196	
√ Establish Turf / Erosion Control	Standard Illumination System	4%	\$	69,594	
√ Illumination		6%	\$	104,391	
Other:					
**Allowances based on % of Paving Construction Cost Subtotal					Allowance Subtotal: \$ 942,731
Paving and Allowance Subtotal:					\$ 2,682,583
Mobilization:					5% \$ 134,129
Construction Contingency:					15% \$ 402,387
Construction Cost TOTAL:					\$ 3,085,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,085,000
Engineering/Survey/Testing:		20%	\$ 617,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,079,750
Impact Fee Project Cost TOTAL:			\$ 4,781,750

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (2)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 124) to a six-lane divided major arterial. Based on the existing city limits, the southern half of the roadway is not included in the Impact Fee RIP for the 2,855' western section while the northern half of the roadway is not included for the remaining 1,045' eastern section. 805' of this roadway is not included in the Impact Fee RIP.	C-13
Limits:	Future Stonebridge Dr. to 1,045' W. of Ridge Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,925		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	43,611	cy	\$ 8.00	\$ 348,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	34,017	sy	\$ 5.00	\$ 170,083
307	8" Concrete Pavement	32,272	sy	\$ 36.00	\$ 1,161,800
407	4" Topsoil	16,572	sy	\$ 2.80	\$ 46,402
507	6" Curb & Gutter	15,700	lf	\$ 4.00	\$ 62,800
607	Allotment for Turn Lanes and Median Openings	2,825	sy	\$ 36.00	\$ 101,693
Paving Construction Cost Subtotal:					\$ 1,891,668
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	94,583	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	94,583	
√ Pavement Markings/Markers		3%	\$	56,750	
√ Roadway Drainage	Standard Internal System	25%	\$	472,917	
√ Special Drainage Structures	Crosses Minor Creek		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	56,750	
√ Sewer	Incidental Adjustments	3%	\$	56,750	
√ Establish Turf / Erosion Control		4%	\$	75,667	
√ Illumination	Standard Illumination System	6%	\$	113,500	
Other:					
Allowance Subtotal:					\$ 1,271,501
Paving and Allowance Subtotal:					\$ 3,163,168
Mobilization:					5% \$ 158,158
Construction Contingency:					15% \$ 474,475
Construction Cost TOTAL:					\$ 3,638,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,638,000
Engineering/Survey/Testing:		20%	\$ 727,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 727,600
Impact Fee Project Cost TOTAL:			\$ 5,093,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-14
Name:	Wilmeth Rd. (3)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided major arterial. Based on the existing city limits, the southern half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,275' W. of Ridge Knoll to Ridge Knoll		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,275		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	14,167	cy	\$ 8.00	\$ 113,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	11,050	sy	\$ 5.00	\$ 55,250
307	8" Concrete Pavement	10,483	sy	\$ 36.00	\$ 377,400
407	4" Topsoil	5,383	sy	\$ 2.80	\$ 15,073
507	6" Curb & Gutter	5,100	lf	\$ 4.00	\$ 20,400
607	Allotment for Turn Lanes and Median Openings	918	sy	\$ 36.00	\$ 33,034
Paving Construction Cost Subtotal:					\$ 614,491
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	30,725	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	30,725	
√ Pavement Markings/Markers		3%	\$	18,435	
√ Roadway Drainage	Standard Internal System	25%	\$	153,623	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	18,435	
√ Sewer	Incidental Adjustments	3%	\$	18,435	
√ Establish Turf / Erosion Control		4%	\$	24,580	
√ Illumination	Standard Illumination System	6%	\$	36,869	
Other:					
Allowance Subtotal:					\$ 331,825
Paving and Allowance Subtotal:					\$ 946,316
Mobilization:					5% \$ 47,316
Construction Contingency:					15% \$ 141,947
Construction Cost TOTAL:					\$ 1,089,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,089,000
Engineering/Survey/Testing:		20%	\$ 217,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 217,800
Impact Fee Project Cost TOTAL:			\$ 1,524,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-15
Name:	Wilmeth Rd. (4)	This project consists of the construction of two additional through lanes within the existing median. Note, this project does not include the southern lanes that still need to be constructed that are outside the City Limits. From 2003 - 2008, the City contributed \$112,398 for the construction of the existing two-lanes.	
Limits:	Ridgeknoll to 265' W. of Sunnyside Dr.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,295		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	4,604	cy	\$ 8.00	\$ 36,836
210	8" Lime Stabilization (with Lime @ 32#/sy)	4,317	sy	\$ 5.00	\$ 21,583
310	8" Concrete Pavement	3,597	sy	\$ 36.00	\$ 129,500
410	4" Topsoil	576	sy	\$ 2.80	\$ 1,612
510	6" Curb & Gutter	2,590	lf	\$ 4.00	\$ 10,360
610	Allotment for Turn Lanes and Median Openings	932	sy	\$ 36.00	\$ 33,552
Paving Construction Cost Subtotal:					\$ 233,443
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	11,672	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	11,672	
√ Pavement Markings/Markers		3%	\$	7,003	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	9,338	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 39,685
Paving and Allowance Subtotal:					\$ 273,128
Mobilization:					5% \$ 13,656
Construction Contingency:					15% \$ 40,969
Construction Cost TOTAL:					\$ 315,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 315,000
Engineering/Survey/Testing:		20%	\$ 63,000
2003 - 2008 City contribution	'07-'08 Impact Fee Project C-12		\$ 112,398
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 490,398

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-16
Name:	Wilmeth Rd. (5)	<p>This project consists of the construction of two additional through lanes within the existing median. From 2003 - 2008, the City contributed \$408,960 for the construction of the existing four-lanes.</p>	
Limits:	265' W. of Sunnyside Dr. to Lake Forest Dr.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,690		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	6,009	cy	\$ 8.00	\$ 48,071
210	8" Lime Stabilization (with Lime @ 32#/sy)	5,633	sy	\$ 5.00	\$ 28,167
310	8" Concrete Pavement	4,694	sy	\$ 36.00	\$ 169,000
410	4" Topsoil	751	sy	\$ 2.80	\$ 2,103
510	6" Curb & Gutter	3,380	lf	\$ 4.00	\$ 13,520
610	Allotment for Turn Lanes and Median Openings	1,216	sy	\$ 36.00	\$ 43,786
Paving Construction Cost Subtotal:					\$ 304,647
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	15,232	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	15,232	
√ Pavement Markings/Markers		3%	\$	9,139	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	12,186	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 51,790
Paving and Allowance Subtotal:					\$ 356,437
Mobilization:					5% \$ 17,822
Construction Contingency:					15% \$ 53,466
Construction Cost TOTAL:					\$ 410,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 410,000
Engineering/Survey/Testing:		20%	\$ 82,000
2003 - 2008 City contribution	'07-'08 Impact Fee Project C-13		\$ 408,960
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 900,960

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. C-17
Name:	Custer Rd. (1)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,290' N. of FM 1461 to FM 1461		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	1,290		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	7,883	cy	\$ 9.28	\$ 73,157
209	8" Lime Stabilization (with Lime @ 48#/sy)	11,180	sy	\$ 6.00	\$ 67,080
309	4" TY D HMAC Underlayment	11,180	sy	\$ 3.00	\$ 33,540
409	10" Concrete Pavement	10,607	sy	\$ 50.00	\$ 530,333
509	4" Topsoil	6,880	sy	\$ 4.40	\$ 30,272
609	6" Curb & Gutter	5,160	lf	\$ 12.00	\$ 61,920
709	Allotment for Turn Lanes and Median Openings	928	sy	\$ 42.00	\$ 38,993
Paving Construction Cost Subtotal:					\$ 835,296
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	41,765	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	41,765	
√ Pavement Markings/Markers		3%	\$	25,059	
√ Roadway Drainage	Standard Internal System	25%	\$	208,824	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	25,059	
√ Sewer	Incidental Adjustments	3%	\$	25,059	
√ Establish Turf / Erosion Control		4%	\$	33,412	
√ Illumination	Standard Illumination System	6%	\$	50,118	
Other:					
Allowance Subtotal:					\$ 451,060
Paving and Allowance Subtotal:					\$ 1,286,356
Mobilization:					5% \$ 64,318
Construction Contingency:					15% \$ 192,953
Construction Cost TOTAL:					\$ 1,480,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,480,000
Engineering/Survey/Testing:		20%	\$ 296,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 296,000
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 1,036,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Custer Rd. (2)	This project consists of the construction of a new alignment of Custer Rd.	C-18
Limits:	FM 1461 to 2,615' N of Bloomdale Rd.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	2,760		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	16,867	cy	\$ 9.28	\$ 156,523
209	8" Lime Stabilization (with Lime @ 48#/sy)	23,920	sy	\$ 6.00	\$ 143,520
309	4" TY D HMAC Underlayment	23,920	sy	\$ 3.00	\$ 71,760
409	10" Concrete Pavement	22,693	sy	\$ 50.00	\$ 1,134,667
509	4" Topsoil	14,720	sy	\$ 4.40	\$ 64,768
609	6" Curb & Gutter	11,040	lf	\$ 12.00	\$ 132,480
709	Allotment for Turn Lanes and Median Openings	1,986	sy	\$ 42.00	\$ 83,427
Paving Construction Cost Subtotal:					\$ 1,787,145
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	53,614	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	53,614	
√ Roadway Drainage	Standard Internal System	25%	\$	446,786	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	53,614	
√ Sewer	Incidental Adjustments	3%	\$	53,614	
√ Establish Turf / Erosion Control		4%	\$	71,486	
√ Illumination	Standard Illumination System	6%	\$	107,229	
Other:					
Allowance Subtotal:					\$ 839,958
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,627,103
Mobilization:					\$ 131,355
Construction Contingency:					\$ 394,065
Construction Cost TOTAL:					\$ 3,022,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,022,000
Engineering/Survey/Testing:		20%	\$ 604,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,057,700
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 2,342,050

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. C-19
Name:	Custer Rd. (3)	<p>This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.</p>	
Limits:	2,615' N. of Bloomdale Rd. to Bloomdale Rd.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	2,615		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	15,981	cy	\$ 9.28	\$ 148,300
209	8" Lime Stabilization (with Lime @ 48#/sy)	22,663	sy	\$ 6.00	\$ 135,980
309	4" TY D HMAC Underlayment	22,663	sy	\$ 3.00	\$ 67,990
409	10" Concrete Pavement	21,501	sy	\$ 50.00	\$ 1,075,056
509	4" Topsoil	13,947	sy	\$ 4.40	\$ 61,365
609	6" Curb & Gutter	10,460	lf	\$ 12.00	\$ 125,520
709	Allotment for Turn Lanes and Median Openings	1,882	sy	\$ 42.00	\$ 79,044
Paving Construction Cost Subtotal:					\$ 1,693,255
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	84,663	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	84,663	
√ Pavement Markings/Markers		3%	\$	50,798	
√ Roadway Drainage	Standard Internal System	25%	\$	423,314	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	50,798	
√ Sewer	Incidental Adjustments	3%	\$	50,798	
√ Establish Turf / Erosion Control		4%	\$	67,730	
√ Illumination	Standard Illumination System	6%	\$	101,595	
Other:					
Allowance Subtotal:					\$ 914,358
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,607,612
Mobilization:					5% \$ 130,381
Construction Contingency:					15% \$ 391,142
Construction Cost TOTAL:					\$ 2,999,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,999,000
Engineering/Survey/Testing:		20%	\$ 599,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 599,800
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 2,099,300

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Custer Rd. (4)	This project consists of the reconstruction of a two-lane asphalt facility to a six-lane divided principal arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	C-20
Limits:	Bloomdale Rd. to S. City Limits (Creek)		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	3,625		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	22,153	cy	\$ 9.28	\$ 205,578
209	8" Lime Stabilization (with Lime @ 48#/sy)	31,417	sy	\$ 6.00	\$ 188,500
309	4" TY D HMAC Underlayment	31,417	sy	\$ 3.00	\$ 94,250
409	10" Concrete Pavement	29,806	sy	\$ 50.00	\$ 1,490,278
509	4" Topsoil	19,333	sy	\$ 4.40	\$ 85,067
609	6" Curb & Gutter	14,500	lf	\$ 12.00	\$ 174,000
709	Allotment for Turn Lanes and Median Openings	2,609	sy	\$ 42.00	\$ 109,574
Paving Construction Cost Subtotal:					\$ 2,347,246
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	117,362	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	117,362	
√ Pavement Markings/Markers		3%	\$	70,417	
√ Roadway Drainage	Standard Internal System	25%	\$	586,812	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	70,417	
√ Sewer	Incidental Adjustments	3%	\$	70,417	
√ Establish Turf / Erosion Control		4%	\$	93,890	
√ Illumination	Standard Illumination System	6%	\$	140,835	
Other:					
Allowance Subtotal:					\$ 1,267,513
Paving and Allowance Subtotal:					\$ 3,614,759
Mobilization:					5% \$ 180,738
Construction Contingency:					15% \$ 542,214
Construction Cost TOTAL:					\$ 4,157,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,157,000
Engineering/Survey/Testing:		20%	\$ 831,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 831,400
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 2,909,900

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Stonebridge Dr. (1)	This project consists of the construction of a new six-lane divided major arterial.	C-21
Limits:	1,600' S. of FM 1461 to Wilmeth Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	8,000		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	88,889	cy	\$ 8.00	\$ 711,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	69,333	sy	\$ 5.00	\$ 346,667
307	8" Concrete Pavement	65,778	sy	\$ 36.00	\$ 2,368,000
407	4" Topsoil	33,778	sy	\$ 2.80	\$ 94,578
507	6" Curb & Gutter	32,000	lf	\$ 4.00	\$ 128,000
607	Allotment for Turn Lanes and Median Openings	5,758	sy	\$ 36.00	\$ 207,273
Paving Construction Cost Subtotal:					\$ 3,855,628
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	115,669	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	115,669	
√ Roadway Drainage	Standard Internal System	25%	\$	963,907	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	115,669	
√ Sewer	Incidental Adjustments	3%	\$	115,669	
√ Establish Turf / Erosion Control		4%	\$	154,225	
√ Illumination	Standard Illumination System	6%	\$	231,338	
Other:					
Allowance Subtotal:					\$ 1,812,145
Paving and Allowance Subtotal:					\$ 5,667,774
Mobilization:					5% \$ 283,389
Construction Contingency:					15% \$ 850,166
Construction Cost TOTAL:					\$ 6,518,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,518,000
Engineering/Survey/Testing:		20%	\$ 1,303,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 2,281,300
Impact Fee Project Cost TOTAL:			\$ 10,102,900

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-22
Name:	Stonebridge Dr. (2)	This project consists of the construction of a new six-lane divided major arterial.	
Limits:	Wilmeth Rd. to 775' S. of Wilmeth Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	775		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	8,611	cy	\$ 8.00	\$ 68,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	6,717	sy	\$ 5.00	\$ 33,583
307	8" Concrete Pavement	6,372	sy	\$ 36.00	\$ 229,400
407	4" Topsoil	3,272	sy	\$ 2.80	\$ 9,162
507	6" Curb & Gutter	3,100	lf	\$ 4.00	\$ 12,400
607	Allotment for Turn Lanes and Median Openings	558	sy	\$ 36.00	\$ 20,080
Paving Construction Cost Subtotal:					\$ 373,514
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	11,205	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	11,205	
√ Roadway Drainage	Standard Internal System	25%	\$	93,378	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	11,205	
√ Sewer	Incidental Adjustments	3%	\$	11,205	
√ Establish Turf / Erosion Control		4%	\$	14,941	
√ Illumination	Standard Illumination System	6%	\$	22,411	
Other:					
Allowance Subtotal:					\$ 175,552
Paving and Allowance Subtotal:					\$ 549,066
Mobilization:					\$ 27,453
Construction Contingency:					\$ 82,360
Construction Cost TOTAL:					\$ 632,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 632,000
Engineering/Survey/Testing:		20%	\$ 126,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 221,200
Impact Fee Project Cost TOTAL:			\$ 979,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. C-23
Name:	Stonebridge Dr. (3)	This project consists of the construction of a new six-lane divided major arterial which includes a new bridge to cross Wilson Creek. Based on the existing city limits, 880' of this roadway is not included in the Impact Fee RIP.	
Limits:	775' S. of Wilmeth Rd. to US 380		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,075		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	56,389	cy	\$ 8.00	\$ 451,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	43,983	sy	\$ 5.00	\$ 219,917
307	8" Concrete Pavement	41,728	sy	\$ 36.00	\$ 1,502,200
407	4" Topsoil	21,428	sy	\$ 2.80	\$ 59,998
507	6" Curb & Gutter	20,300	lf	\$ 4.00	\$ 81,200
607	Allotment for Turn Lanes and Median Openings	3,652	sy	\$ 36.00	\$ 131,489
Paving Construction Cost Subtotal:					\$ 2,445,914
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	73,377	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	73,377	
√ Roadway Drainage	Standard Internal System	25%	\$	611,479	
√ Special Drainage Structures	Crosses Wilson Creek (1,690' Flood Plain)		\$	2,129,000	
√ Water	Incidental Adjustments	3%	\$	73,377	
√ Sewer	Incidental Adjustments	3%	\$	73,377	
√ Establish Turf / Erosion Control		4%	\$	97,837	
√ Illumination	Standard Illumination System	6%	\$	146,755	
Other:					
Allowance Subtotal:					\$ 3,278,580
Paving and Allowance Subtotal:					\$ 5,724,494
Mobilization:					5% \$ 286,225
Construction Contingency:					15% \$ 858,674
Construction Cost TOTAL:					\$ 6,584,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,584,000
Engineering/Survey/Testing:		20%	\$ 1,316,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 2,304,400
Impact Fee Project Cost TOTAL:			\$ 10,205,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-24
Name:	Ridge Rd. (1)	This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	
Limits:	CCR 168 to 1,505' S. of CCR 168		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,505		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	16,722	cy	\$ 8.00	\$ 133,778
207	8" Lime Stabilization (with Lime @ 32#/sy)	13,043	sy	\$ 5.00	\$ 65,217
307	8" Concrete Pavement	12,374	sy	\$ 36.00	\$ 445,480
407	4" Topsoil	6,354	sy	\$ 2.80	\$ 17,792
507	6" Curb & Gutter	6,020	lf	\$ 4.00	\$ 24,080
607	Allotment for Turn Lanes and Median Openings	1,083	sy	\$ 36.00	\$ 38,993
Paving Construction Cost Subtotal:					\$ 725,340
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	36,267	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	36,267	
√ Pavement Markings/Markers		3%	\$	21,760	
√ Roadway Drainage	Standard Internal System	25%	\$	181,335	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	21,760	
√ Sewer	Incidental Adjustments	3%	\$	21,760	
√ Establish Turf / Erosion Control		4%	\$	29,014	
√ Illumination	Standard Illumination System	6%	\$	43,520	
Other:					
Allowance Subtotal:					\$ 391,684
Paving and Allowance Subtotal:					\$ 1,117,024
Mobilization:					5% \$ 55,851
Construction Contingency:					15% \$ 167,554
Construction Cost TOTAL:					\$ 1,285,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,285,000
Engineering/Survey/Testing:		20%	\$ 257,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 257,000
Impact Fee Project Cost TOTAL:			\$ 1,799,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (2)	This project consists of the construction of a new six-lane divided major arterial.	C-25
Limits:	FM 1461 to Baxter Well		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,095		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	34,389	cy	\$ 8.00	\$ 275,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	26,823	sy	\$ 5.00	\$ 134,117
307	8" Concrete Pavement	25,448	sy	\$ 36.00	\$ 916,120
407	4" Topsoil	13,068	sy	\$ 2.80	\$ 36,590
507	6" Curb & Gutter	12,380	lf	\$ 4.00	\$ 49,520
607	Allotment for Turn Lanes and Median Openings	2,227	sy	\$ 36.00	\$ 80,189
Paving Construction Cost Subtotal:					\$ 1,491,646
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	44,749	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	44,749	
√ Roadway Drainage	Standard Internal System	25%	\$	372,912	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	44,749	
√ Sewer	Incidental Adjustments	3%	\$	44,749	
√ Establish Turf / Erosion Control		4%	\$	59,666	
√ Illumination	Standard Illumination System	6%	\$	89,499	
Other:					
Allowance Subtotal:					\$ 701,074
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,192,720
Mobilization:					5% \$ 109,636
Construction Contingency:					15% \$ 328,908
Construction Cost TOTAL:					\$ 2,522,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,522,000
Engineering/Survey/Testing:		20%	\$ 504,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 882,700
Impact Fee Project Cost TOTAL:			\$ 3,909,100

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	C-26
Name:	Ridge Rd. (3)	<p>This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 163 / CCR 161) to a six-lane divided major arterial. Based on the existing city limits, the eastern half of this roadway is not included in the Impact Fee RIP.</p>		
Limits:	Baxter Well to 1,330' S. of Bloomdale Rd.			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	3,570			
Service Area(s):	C, Half			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	39,667	cy	\$ 8.00	\$ 317,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	30,940	sy	\$ 5.00	\$ 154,700
307	8" Concrete Pavement	29,353	sy	\$ 36.00	\$ 1,056,720
407	4" Topsoil	15,073	sy	\$ 2.80	\$ 42,205
507	6" Curb & Gutter	14,280	lf	\$ 4.00	\$ 57,120
607	Allotment for Turn Lanes and Median Openings	2,569	sy	\$ 36.00	\$ 92,495
Paving Construction Cost Subtotal:					\$ 1,720,574
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	86,029	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	86,029	
√ Pavement Markings/Markers		3%	\$	51,617	
√ Roadway Drainage	Standard Internal System	25%	\$	430,144	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	51,617	
√ Sewer	Incidental Adjustments	3%	\$	51,617	
√ Establish Turf / Erosion Control		4%	\$	68,823	
√ Illumination	Standard Illumination System	6%	\$	103,234	
Other:					
Allowance Subtotal:					\$ 929,110
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,649,684
Mobilization:					5% \$ 132,484
Construction Contingency:					15% \$ 397,453
Construction Cost TOTAL:					\$ 3,048,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,048,000
Engineering/Survey/Testing:		20%	\$ 609,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 609,600
Impact Fee Project Cost TOTAL:			\$ 4,267,200

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-27
Name:	Ridge Rd. (4)	This project consists of the reconstruction of a two-lane gravel/dirt facility (CCR 163 / CCR 161) to a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,330' S. of Bloomdale Rd. to 2,135' S. of Bloomdale Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	805		
Service Area(s):	C, Half		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	8,944	cy	\$ 8.00	\$ 71,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	6,977	sy	\$ 5.00	\$ 34,883
307	8" Concrete Pavement	6,619	sy	\$ 36.00	\$ 238,280
407	4" Topsoil	3,399	sy	\$ 2.80	\$ 9,517
507	6" Curb & Gutter	3,220	lf	\$ 4.00	\$ 12,880
607	Allotment for Turn Lanes and Median Openings	579	sy	\$ 36.00	\$ 20,857

Paving Construction Cost Subtotal: \$ 387,973

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 19,399
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 19,399
√ Pavement Markings/Markers		3%	\$ 11,639
√ Roadway Drainage	Standard Internal System	25%	\$ 96,993
Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 11,639
√ Sewer	Incidental Adjustments	3%	\$ 11,639
√ Establish Turf / Erosion Control		4%	\$ 15,519
√ Illumination	Standard Illumination System	6%	\$ 23,278
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 209,505

Paving and Allowance Subtotal: \$ 597,478

Mobilization: 5% \$ 29,874

Construction Contingency: 15% \$ 89,622

Construction Cost TOTAL: \$ 688,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 688,000
Engineering/Survey/Testing:		20%	\$ 137,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 137,600
Impact Fee Project Cost TOTAL:			\$ 963,200

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (5)	This project consists of the construction of a new six-lane divided major arterial. It does not include the construction cost of the bridge over Wilson Creek, which is outside the existing city limits.	C-28
Limits:	Wilson Creek to US 380		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	850		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	9,444	cy	\$ 8.00	\$ 75,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	7,367	sy	\$ 5.00	\$ 36,833
307	8" Concrete Pavement	6,989	sy	\$ 36.00	\$ 251,600
407	4" Topsoil	3,589	sy	\$ 2.80	\$ 10,049
507	6" Curb & Gutter	3,400	lf	\$ 4.00	\$ 13,600
607	Allotment for Turn Lanes and Median Openings	612	sy	\$ 36.00	\$ 22,023
Paving Construction Cost Subtotal:					\$ 409,661
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	12,290	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	12,290	
√ Roadway Drainage	Standard Internal System	25%	\$	102,415	
√ Special Drainage Structures	Half on Wilson Creek Bridge		\$	532,000	
√ Water	Incidental Adjustments	3%	\$	12,290	
√ Sewer	Incidental Adjustments	3%	\$	12,290	
√ Establish Turf / Erosion Control		4%	\$	16,386	
√ Illumination	Standard Illumination System	6%	\$	24,580	
Other:					
Allowance Subtotal:					\$ 724,540
Paving and Allowance Subtotal:					\$ 1,134,201
Mobilization:					\$ 56,710
Construction Contingency:					\$ 170,130
Construction Cost TOTAL:					\$ 1,305,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,305,000
Engineering/Survey/Testing:		20%	\$ 261,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 456,750
Impact Fee Project Cost TOTAL:			\$ 2,022,750

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-29
Name:	Lake Forest Dr. (2)	This project consists of the widening of an existing two-lane concrete facility into a six-lane divided major arterial. Based on the existing city limits, the eastern half of this roadway is not included in the Impact Fee RIP.	
Limits:	Bloomdale Rd. to Wilmeth Rd.		
Impact Fee Class:	M6D (2/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,355		
Service Area(s):	C, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	42,840	cy	\$ 8.00	\$ 342,720
208	8" Lime Stabilization (with Lime @ 32#/sy)	31,238	sy	\$ 5.00	\$ 156,188
308	8" Concrete Pavement	29,453	sy	\$ 36.00	\$ 1,060,290
408	4" Topsoil	16,958	sy	\$ 2.80	\$ 47,481
508	6" Curb & Gutter	16,065	lf	\$ 4.00	\$ 64,260
608	Allotment for Turn Lanes and Median Openings	3,854	sy	\$ 36.00	\$ 138,743
Paving Construction Cost Subtotal:					\$ 1,809,682
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	90,484	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	90,484	
√ Pavement Markings/Markers		3%	\$	54,290	
√ Roadway Drainage	Standard Internal System	25%	\$	452,420	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	54,290	
√ Sewer	Incidental Adjustments	3%	\$	54,290	
√ Establish Turf / Erosion Control		4%	\$	72,387	
√ Illumination	Standard Illumination System	6%	\$	108,581	
Other:					
Allowance Subtotal:					\$ 977,228
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,786,910
Mobilization:					5% \$ 139,345
Construction Contingency:					15% \$ 418,036
Construction Cost TOTAL:					\$ 3,205,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,205,000
Engineering/Survey/Testing:		20%	\$ 641,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 641,000
Impact Fee Project Cost TOTAL:			\$ 4,487,000

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

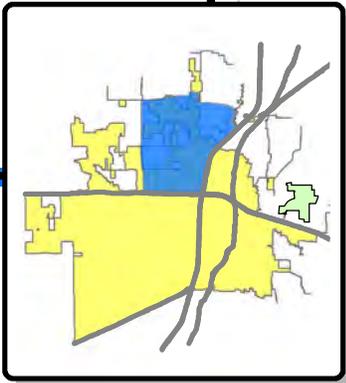
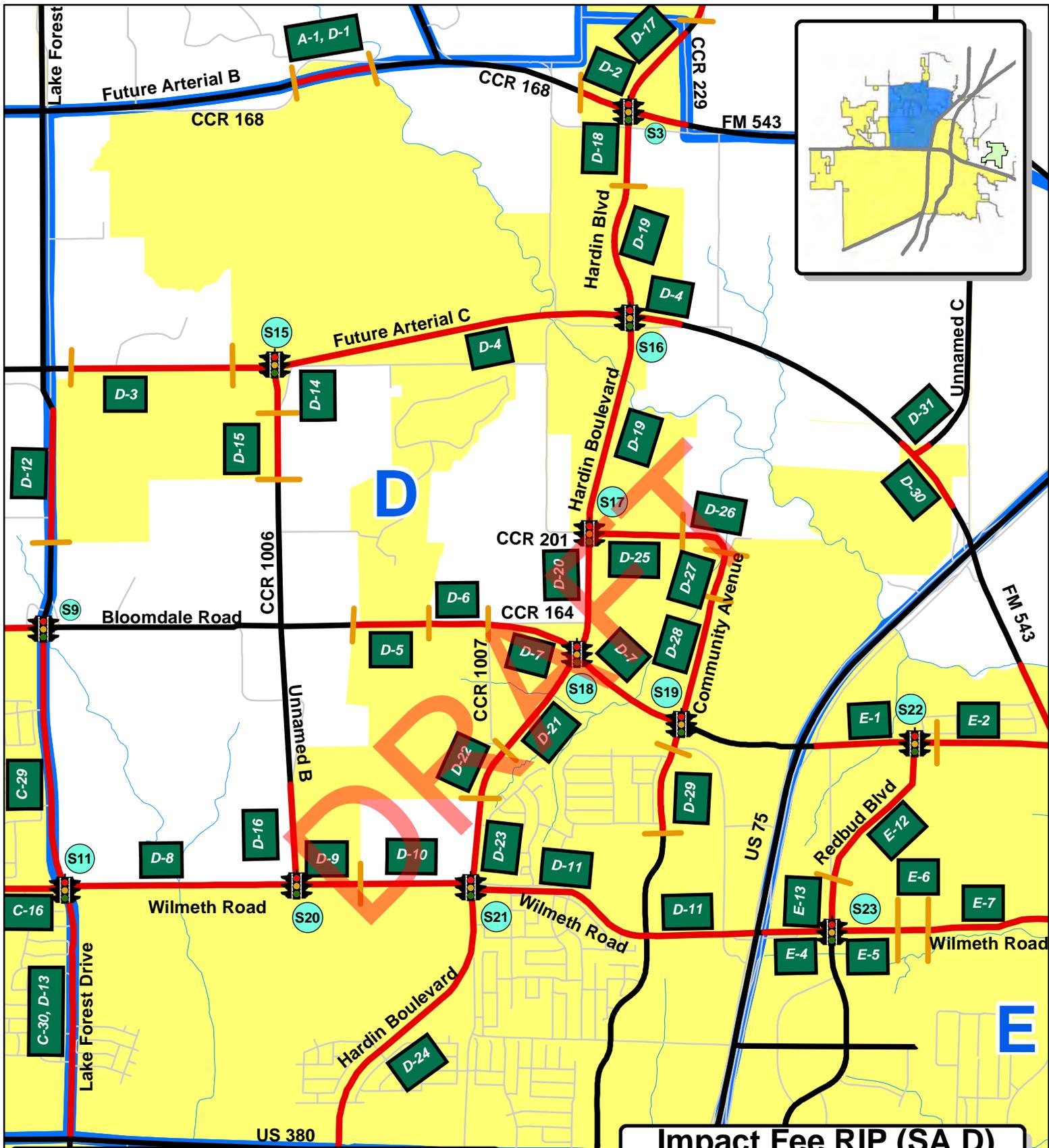
updated: 7/18/2013

Project Information:		Description:	Project No. C-30, D-13
Name:	Lake Forest Dr. (3)	<p>This project consists of the construction of two additional through lanes within the existing median. From 2003 - 2008, the City contributed \$499,840 for the construction of the original two lanes.</p>	
Limits:	Wilmeth Rd. to US 380		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,205		
Service Area(s):	C, D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	18,507	cy	\$ 8.00	\$ 148,053
210	8" Lime Stabilization (with Lime @ 32#/sy)	17,350	sy	\$ 5.00	\$ 86,750
310	8" Concrete Pavement	14,458	sy	\$ 36.00	\$ 520,500
410	4" Topsoil	2,313	sy	\$ 2.80	\$ 6,477
510	6" Curb & Gutter	10,410	lf	\$ 4.00	\$ 41,640
610	Allotment for Turn Lanes and Median Openings	3,746	sy	\$ 36.00	\$ 134,857
Paving Construction Cost Subtotal:					\$ 938,277
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	46,914	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	46,914	
√ Pavement Markings/Markers		3%	\$	28,148	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	37,531	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 159,507
Paving and Allowance Subtotal:					\$ 1,097,785
Mobilization:					5% \$ 54,889
Construction Contingency:					15% \$ 164,668
Construction Cost TOTAL:					\$ 1,263,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,263,000
Engineering/Survey/Testing:		20%	\$ 252,600
2003 - 2008 City contribution	'07-'08 Impact Fee Project C-21, D-15 and C-22, D-16		\$ 499,840
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 2,015,440

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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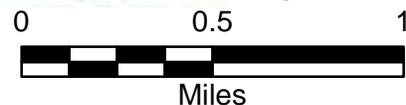
Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Railroad
- Service Area Boundary
- McKinney City Limits
- Lakes

DRAFT

Impact Fee RIP (SA D)

Appendix A
 2012-2013 Roadway
 Impact Fee Update



July 2013

Kimley-Horn and Associates, Inc.

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area D

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
A-1, D-1	M6D	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	\$ 2,983,750	50%	\$ 1,491,875
D-2	M6D	Future Arterial B (CCR 168) (3)	W. City Limits to CCR 229	\$ 2,836,500	100%	\$ 2,836,500
D-3	P6D	Future Arterial C (1)	420' E. of Lake Forest Dr. to 3,715' E. of Lake Forest Dr.	\$ 4,729,050	50%	\$ 2,364,525
D-4	P6D	Future Arterial C (2)	3,715' E. of Lake Forest Dr. to CCR 202	\$ 19,647,800	100%	\$ 19,647,800
D-5	M6D	Bloomdale Rd. (7)	1,485' E. of CCR 1006 to 1,215 W. of CCR 1007	\$ 1,859,200	100%	\$ 1,859,200
D-6	M6D	Bloomdale Rd. (8)	1,215 W. of CCR 1007 to CCR 1007	\$ 1,453,200	50%	\$ 726,600
D-7	M6D	Bloomdale Rd. (9)	CCR 1007 to Community Ave.	\$ 7,694,200	100%	\$ 7,694,200
D-8	M6D	Wilmeth Rd. (6)	Lake Forest Dr. to CCR 943 (Unnamed B)	\$ 7,413,650	50%	\$ 3,706,825
D-9	M6D	Wilmeth Rd. (7)	CCR 943 (Unnamed B) to 2,260 W. of Hardin Blvd.	\$ 1,566,600	100%	\$ 1,566,600
D-10	M6D	Wilmeth Rd. (8)	2,260 W. of Hardin Blvd. to Hardin Blvd.	\$ 2,700,600	50%	\$ 1,350,300
D-11	M6D (1/3)	Wilmeth Rd. (9)	Hardin Blvd. to US 75 SBFR	\$ 2,727,220	100%	\$ 2,727,220
D-12	M6D	Lake Forest Dr. (1)	820' S. of Geren Trl. to 510' S. of Baxter Well	\$ 1,851,500	50%	\$ 925,750
C-30, D-13	M6D (1/3)	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	\$ 2,015,440	50%	\$ 1,007,720
D-14	M6D	Future Unnamed B (1)	Future Arterial C to 945' S. of Future Arterial C	\$ 1,193,500	100%	\$ 1,193,500
D-15	M6D	Future Unnamed B (2) / CCR 1006	945' S. of Future Arterial C to 2,305' S. of Future Arterial C	\$ 1,625,400	50%	\$ 812,700
D-16	M6D	Future Unnamed B (3) / CCR 943	2,045' N. of Wilmeth Rd. to Wilmeth Rd.	\$ 2,444,400	50%	\$ 1,222,200
D-17	M6D	Hardin Blvd. (3)	CCR 229 to FM 543	\$ 2,910,900	100%	\$ 2,910,900
D-18	M6D	Hardin Blvd. (4)	FM 543 to 1,230' S. of FM 543	\$ 1,554,650	50%	\$ 777,325
D-19	M6D	Hardin Blvd. (5)	1,230' S. of FM 543 to CCR 201	\$ 15,504,650	100%	\$ 15,504,650
D-20	M6D	Hardin Blvd. (6)	CCR 201 to CCR 164 (Future Bloomdale Rd.)	\$ 2,261,450	50%	\$ 1,130,725
D-21	M6D	Hardin Blvd. (7)	CCR 164 (Bloomdale Rd.) to Holly Ridge Way	\$ 4,558,550	100%	\$ 4,558,550
D-22	M6D (2/3)	Hardin Blvd. (8)	Holly Ridge Way to 1,770' N. of Wilmeth Rd.	\$ 964,600	100%	\$ 964,600
D-23	M6D (1/3)	Hardin Blvd. (9)	1,770' N. of Wilmeth Rd. to Wilmeth Rd.	\$ 529,200	50%	\$ 264,600
D-24	M6D (1/3)	Hardin Blvd. (10)	Wilmeth Rd. to US 380	\$ 4,204,201	100%	\$ 4,204,201
D-25	M4U	Community Ave. (1)	Hardin Blvd. to 1,915' E. of Hardin Blvd.	\$ 1,260,000	100%	\$ 1,260,000
D-26	M4U	Community Ave. (2)	1,915' E. of Hardin Blvd. to N. City Limits/Creek	\$ 1,103,200	50%	\$ 551,600
D-27	M4U	Community Ave. (3)	N. City Limits/Creek to 2,645' N. of Bloomdale Rd.	\$ 628,600	100%	\$ 628,600
D-28	M4U (1/2)	Community Ave. (4)	2,645' N. of Bloomdale Rd. to 90' S. of James Pitts Dr.	\$ 1,094,800	100%	\$ 1,094,800
D-29	M4U (1/2)	Community Ave. (5)	90' S. of James Pitts Dr. to 230' S. of Brinlee Branch Ln.	\$ 600,600	100%	\$ 600,600
D-30	P6D	Future Arterial C (3)	E. City Limits to W. City Limits	\$ 2,346,700	100%	\$ 2,346,700
D-31	M6D	Future Unnamed C	N. City Limits to Future Arterial C (3)	\$ 525,450	100%	\$ 525,450
S-3		Signal Installation	Hardin Blvd. & Future Arterial B	\$ 200,000	100%	\$ 200,000
S-11		Signal Installation	Lake Forest Dr. & Wilmeth Rd.	\$ 200,000	25%	\$ 50,000
S-15		Signal Installation	Unnamed B & Future Arterial C	\$ 215,000	100%	\$ 215,000
S-16		Signal Installation	Hardin Blvd. & Future Arterial C	\$ 215,000	100%	\$ 215,000
S-17		Signal Installation	Hardin Blvd. & Community Ave.	\$ 200,000	75%	\$ 150,000
S-18		Signal Installation	Hardin Blvd. & Bloomdale Rd.	\$ 200,000	100%	\$ 200,000
S-19		Signal Installation	Community Ave. & Bloomdale Rd.	\$ 200,000	100%	\$ 200,000
S-20		Signal Installation	Unnamed B & Wilmeth Rd.	\$ 200,000	75%	\$ 150,000
S-21		Signal Installation	Hardin Blvd. & Wilmeth Rd.	\$ 200,000	75%	\$ 150,000
TOTAL				\$ 106,619,561		\$ 89,986,816

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Future Arterial B (CCR 168) (2)	This project consists of the construction of a new six-lane divided major arterial that roughly follows the alignment of CCR 168, a two-lane asphalt facility.	A-1, D-1
Limits:	Existing CCR 168 to E. City Limits (Creek)		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,570		
Service Area(s):	A, D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	17,444	cy	\$ 8.00	\$ 139,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	13,607	sy	\$ 5.00	\$ 68,033
307	8" Concrete Pavement	12,909	sy	\$ 36.00	\$ 464,720
407	4" Topsoil	6,629	sy	\$ 2.80	\$ 18,561
507	6" Curb & Gutter	6,280	lf	\$ 4.00	\$ 25,120
607	Allotment for Turn Lanes and Median Openings	1,130	sy	\$ 36.00	\$ 40,677
Paving Construction Cost Subtotal:					\$ 756,667
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW	None Anticipated	3%	\$	22,700	
√ Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	22,700	
√ Roadway Drainage		25%	\$	189,167	
√ Special Drainage Structures			\$	561,000	
√ Water	Minor Stream Crossing		\$	22,700	
√ Sewer	Incidental Adjustments	3%	\$	22,700	
√ Establish Turf / Erosion Control	Incidental Adjustments	4%	\$	30,267	
√ Illumination	Standard Illumination System	6%	\$	45,400	
Other:					
Allowance Subtotal:					\$ 916,634
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,673,301
Mobilization:					\$ 83,665
Construction Contingency:					\$ 250,995
Construction Cost TOTAL:					\$ 1,925,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,925,000
Engineering/Survey/Testing:		20%	\$ 385,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 673,750
Impact Fee Project Cost TOTAL:			\$ 2,983,750

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Future Arterial B (CCR 168) (3)	This project consists of the construction of a new six-lane divided major arterial.	D-2
Limits:	W. City Limits to CCR 229		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,245		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	24,944	cy	\$ 8.00	\$ 199,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	19,457	sy	\$ 5.00	\$ 97,283
307	8" Concrete Pavement	18,459	sy	\$ 36.00	\$ 664,520
407	4" Topsoil	9,479	sy	\$ 2.80	\$ 26,541
507	6" Curb & Gutter	8,980	lf	\$ 4.00	\$ 35,920
607	Allotment for Turn Lanes and Median Openings	1,616	sy	\$ 36.00	\$ 58,166
Paving Construction Cost Subtotal:					\$ 1,081,986
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	32,460	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	32,460	
√ Roadway Drainage	Standard Internal System	25%	\$	270,496	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	32,460	
√ Sewer	Incidental Adjustments	3%	\$	32,460	
√ Establish Turf / Erosion Control		4%	\$	43,279	
√ Illumination	Standard Illumination System	6%	\$	64,919	
Other:					
Allowance Subtotal:					\$ 508,533
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,590,519
Mobilization:					5% \$ 79,526
Construction Contingency:					15% \$ 238,578
Construction Cost TOTAL:					\$ 1,830,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,830,000
Engineering/Survey/Testing:		20%	\$ 366,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 640,500
Impact Fee Project Cost TOTAL:			\$ 2,836,500

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. D-3
Name:	Future Arterial C (1)	This project consists of the construction of a new six-lane divided principal arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	
Limits:	420' E. of Lake Forest Dr. to 3,715' E. of Lake Forest Dr.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	3,295		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	40,272	cy	\$ 8.00	\$ 322,178
209	8" Lime Stabilization (with Lime @ 32#/sy)	28,557	sy	\$ 5.00	\$ 142,783
309	10" Concrete Pavement	27,092	sy	\$ 42.00	\$ 1,137,873
409	4" Topsoil	17,573	sy	\$ 2.80	\$ 49,205
509	6" Curb & Gutter	13,180	lf	\$ 4.00	\$ 52,720
609	Allotment for Turn Lanes and Median Openings	2,371	sy	\$ 42.00	\$ 99,599
Paving Construction Cost Subtotal:					\$ 1,804,359
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	54,131	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	54,131	
√ Roadway Drainage	Standard Internal System	25%	\$	451,090	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	54,131	
√ Sewer	Incidental Adjustments	3%	\$	54,131	
√ Establish Turf / Erosion Control		4%	\$	72,174	
√ Illumination	Standard Illumination System	6%	\$	108,262	
Other:					
Allowance Subtotal:					\$ 848,049
Paving and Allowance Subtotal:					\$ 2,652,407
Mobilization:					5% \$ 132,620
Construction Contingency:					15% \$ 397,861
Construction Cost TOTAL:					\$ 3,051,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,051,000
Engineering/Survey/Testing:		20%	\$ 610,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,067,850
Impact Fee Project Cost TOTAL:			\$ 4,729,050

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	D-4
Name:	Future Arterial C (2)	This project consists of the construction of a new six-lane divided principal arterial.		
Limits:	3,715' E. of Lake Forest Dr. to CCR 202			
Impact Fee Class:	P6D			
Thoroughfare Class:	Principal Arterial			
Length (lf):	9,325			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	113,972	cy	\$ 8.00	\$ 911,778
209	8" Lime Stabilization (with Lime @ 32#/sy)	80,817	sy	\$ 5.00	\$ 404,083
309	10" Concrete Pavement	76,672	sy	\$ 42.00	\$ 3,220,233
409	4" Topsoil	49,733	sy	\$ 2.80	\$ 139,253
509	6" Curb & Gutter	37,300	lf	\$ 4.00	\$ 149,200
609	Allotment for Turn Lanes and Median Openings	6,711	sy	\$ 42.00	\$ 281,869
Paving Construction Cost Subtotal:					\$ 5,106,417
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	153,193	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	153,193	
√ Roadway Drainage	Standard Internal System	25%	\$	1,276,604	
√ Special Drainage Structures	Crosses 2,790' of Flood Plain		\$	3,515,400	
√ Water	Incidental Adjustments	3%	\$	153,193	
√ Sewer	Incidental Adjustments	3%	\$	153,193	
√ Establish Turf / Erosion Control		4%	\$	204,257	
√ Illumination	Standard Illumination System	6%	\$	306,385	
Other:					
Allowance Subtotal:					\$ 5,915,416
Paving and Allowance Subtotal:					\$ 11,021,833
Mobilization:					\$ 551,092
Construction Contingency:					\$ 1,653,275
Construction Cost TOTAL:					\$ 12,676,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 12,676,000
Engineering/Survey/Testing:		20%	\$ 2,535,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 4,436,600
Impact Fee Project Cost TOTAL:			\$ 19,647,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	D-5
Name:	Bloomdale Rd. (7)	This project consists of the reconstruction of an existing two-lane gravel/dirt (CCR 164) into a six-lane divided major arterial.		
Limits:	1,485' E. of CCR 1006 to 1,215 W. of CCR 1007			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	1,555			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	17,278	cy	\$ 8.00	\$ 138,222
207	8" Lime Stabilization (with Lime @ 32#/sy)	13,477	sy	\$ 5.00	\$ 67,383
307	8" Concrete Pavement	12,786	sy	\$ 36.00	\$ 460,280
407	4" Topsoil	6,566	sy	\$ 2.80	\$ 18,384
507	6" Curb & Gutter	6,220	lf	\$ 4.00	\$ 24,880
607	Allotment for Turn Lanes and Median Openings	1,119	sy	\$ 36.00	\$ 40,289
Paving Construction Cost Subtotal:					\$ 749,438
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	37,472	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	37,472	
√ Pavement Markings/Markers		3%	\$	22,483	
√ Roadway Drainage	Standard Internal System	25%	\$	187,359	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	22,483	
√ Sewer	Incidental Adjustments	3%	\$	22,483	
√ Establish Turf / Erosion Control		4%	\$	29,978	
√ Illumination	Standard Illumination System	6%	\$	44,966	
Other:					
Allowance Subtotal:					\$ 404,696
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,154,134
Mobilization:					5% \$ 57,707
Construction Contingency:					15% \$ 173,120
Construction Cost TOTAL:					\$ 1,328,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,328,000
Engineering/Survey/Testing:		20%	\$ 265,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 265,600
Impact Fee Project Cost TOTAL:			\$ 1,859,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. D-6
Name:	Bloomdale Rd. (8)	This project consists of the reconstruction of an existing two-lane gravel/dirt (CCR 164) into a six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,215 W. of CCR 1007 to CCR 1007		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,215		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	13,500	cy	\$ 8.00	\$ 108,000
207	8" Lime Stabilization (with Lime @ 32#/sy)	10,530	sy	\$ 5.00	\$ 52,650
307	8" Concrete Pavement	9,990	sy	\$ 36.00	\$ 359,640
407	4" Topsoil	5,130	sy	\$ 2.80	\$ 14,364
507	6" Curb & Gutter	4,860	lf	\$ 4.00	\$ 19,440
607	Allotment for Turn Lanes and Median Openings	874	sy	\$ 36.00	\$ 31,480
Paving Construction Cost Subtotal:					\$ 585,574
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	29,279	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	29,279	
√ Pavement Markings/Markers		3%	\$	17,567	
√ Roadway Drainage	Standard Internal System	25%	\$	146,393	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	17,567	
√ Sewer	Incidental Adjustments	3%	\$	17,567	
√ Establish Turf / Erosion Control		4%	\$	23,423	
√ Illumination	Standard Illumination System	6%	\$	35,134	
Other:					
Allowance Subtotal:					\$ 316,210
Paving and Allowance Subtotal:					\$ 901,783
Mobilization:					5% \$ 45,089
Construction Contingency:					15% \$ 135,267
Construction Cost TOTAL:					\$ 1,038,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,038,000
Engineering/Survey/Testing:		20%	\$ 207,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 207,600
Impact Fee Project Cost TOTAL:			\$ 1,453,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Bloomdale Rd. (9)	This project consists of the construction of a new six-lane divided major arterial.	D-7
Limits:	CCR 1007 to Community Ave.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	4,545		
Service Area(s):	D		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	50,500	cy	\$ 8.00	\$ 404,000
207	8" Lime Stabilization (with Lime @ 32#/sy)	39,390	sy	\$ 5.00	\$ 196,950
307	8" Concrete Pavement	37,370	sy	\$ 36.00	\$ 1,345,320
407	4" Topsoil	19,190	sy	\$ 2.80	\$ 53,732
507	6" Curb & Gutter	18,180	lf	\$ 4.00	\$ 72,720
607	Allotment for Turn Lanes and Median Openings	3,271	sy	\$ 36.00	\$ 117,757

Paving Construction Cost Subtotal: \$ 2,190,479

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		3%	\$ 65,714
√ Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 65,714
√ Roadway Drainage	Standard Internal System	25%	\$ 547,620
√ Special Drainage Structures	NRCS Lake Crossing		\$ 1,096,200
√ Water	Incidental Adjustments	3%	\$ 65,714
√ Sewer	Incidental Adjustments	3%	\$ 65,714
√ Establish Turf / Erosion Control		4%	\$ 87,619
√ Illumination	Standard Illumination System	6%	\$ 131,429
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 2,125,725

Paving and Allowance Subtotal: \$ 4,316,204

Mobilization: 5% \$ 215,810

Construction Contingency: 15% \$ 647,431

Construction Cost TOTAL: \$ 4,964,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,964,000
Engineering/Survey/Testing:		20%	\$ 992,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,737,400

Impact Fee Project Cost TOTAL: \$ 7,694,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	D-8
Name:	Wilmeth Rd. (6)	<p>This project consists of the construction of a new six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.</p>		
Limits:	Lake Forest Dr. to CCR 943 (Unnamed B)			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	4,770			
Service Area(s):	D, HALF			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	53,000	cy	\$ 8.00	\$ 424,000
207	8" Lime Stabilization (with Lime @ 32#/sy)	41,340	sy	\$ 5.00	\$ 206,700
307	8" Concrete Pavement	39,220	sy	\$ 36.00	\$ 1,411,920
407	4" Topsoil	20,140	sy	\$ 2.80	\$ 56,392
507	6" Curb & Gutter	19,080	lf	\$ 4.00	\$ 76,320
607	Allotment for Turn Lanes and Median Openings	3,433	sy	\$ 36.00	\$ 123,586
Paving Construction Cost Subtotal:					\$ 2,298,918
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	68,968	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	68,968	
√ Roadway Drainage	Standard Internal System	25%	\$	574,730	
√ Special Drainage Structures	Crosses Jean's Creek		\$	779,000	
√ Water	Incidental Adjustments	3%	\$	68,968	
√ Sewer	Incidental Adjustments	3%	\$	68,968	
√ Establish Turf / Erosion Control		4%	\$	91,957	
√ Illumination	Standard Illumination System	6%	\$	137,935	
Other:					
Allowance Subtotal:					\$ 1,859,492
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 4,158,410
Mobilization:					\$ 207,920
Construction Contingency:					\$ 623,761
Construction Cost TOTAL:					\$ 4,783,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,783,000
Engineering/Survey/Testing:		20%	\$ 956,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,674,050
Impact Fee Project Cost TOTAL:			\$ 7,413,650

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (7)	This project consists of the reconstruction of a two-lane gravel/asphalt facility into a six-lane divided major arterial.	D-9
Limits:	CCR 943 (Unnamed B) to 2,260 W. of Hardin Blvd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,310		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	14,556	cy	\$ 8.00	\$ 116,444
207	8" Lime Stabilization (with Lime @ 32#/sy)	11,353	sy	\$ 5.00	\$ 56,767
307	8" Concrete Pavement	10,771	sy	\$ 36.00	\$ 387,760
407	4" Topsoil	5,531	sy	\$ 2.80	\$ 15,487
507	6" Curb & Gutter	5,240	lf	\$ 4.00	\$ 20,960
607	Allotment for Turn Lanes and Median Openings	943	sy	\$ 36.00	\$ 33,941
Paving Construction Cost Subtotal:					\$ 631,359
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	31,568	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	31,568	
√ Pavement Markings/Markers		3%	\$	18,941	
√ Roadway Drainage	Standard Internal System	25%	\$	157,840	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	18,941	
√ Sewer	Incidental Adjustments	3%	\$	18,941	
√ Establish Turf / Erosion Control		4%	\$	25,254	
√ Illumination	Standard Illumination System	6%	\$	37,882	
Other:					
Allowance Subtotal:					\$ 340,934
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 972,293
Mobilization:					5% \$ 48,615
Construction Contingency:					15% \$ 145,844
Construction Cost TOTAL:					\$ 1,119,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,119,000
Engineering/Survey/Testing:		20%	\$ 223,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 223,800
Impact Fee Project Cost TOTAL:			\$ 1,566,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (8)	This project consists of the reconstruction of a two-lane gravel/asphalt facility into a six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	D-10
Limits:	2,260 W. of Hardin Blvd. to Hardin Blvd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,260		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	25,111	cy	\$ 8.00	\$ 200,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	19,587	sy	\$ 5.00	\$ 97,933
307	8" Concrete Pavement	18,582	sy	\$ 36.00	\$ 668,960
407	4" Topsoil	9,542	sy	\$ 2.80	\$ 26,718
507	6" Curb & Gutter	9,040	lf	\$ 4.00	\$ 36,160
607	Allotment for Turn Lanes and Median Openings	1,627	sy	\$ 36.00	\$ 58,555
Paving Construction Cost Subtotal:					\$ 1,089,215
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	54,461	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	54,461	
√ Pavement Markings/Markers		3%	\$	32,676	
√ Roadway Drainage	Standard Internal System	25%	\$	272,304	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	32,676	
√ Sewer	Incidental Adjustments	3%	\$	32,676	
√ Establish Turf / Erosion Control		4%	\$	43,569	
√ Illumination	Standard Illumination System	6%	\$	65,353	
Other:					
Allowance Subtotal:					\$ 588,176
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,677,391
Mobilization:					5% \$ 83,870
Construction Contingency:					15% \$ 251,609
Construction Cost TOTAL:					\$ 1,929,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,929,000
Engineering/Survey/Testing:		20%	\$ 385,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 385,800
Impact Fee Project Cost TOTAL:			\$ 2,700,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (9)	<p>This project consists of the construction of two additional through lanes within the existing median. From 2003 - 2008, the northern two lanes from Community Ave. to James Pitts was constructed with a City contribution of \$399,911. In addition, the four-lanes between Hardin Blvd. to High Pointe was constructed with a City contribution of \$544,109.</p>	D-11
Limits:	Hardin Blvd. to US 75 SBFR		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	6,125		
Service Area(s):	D		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	21,778	cy	\$ 8.00	\$ 174,222
210	8" Lime Stabilization (with Lime @ 32#/sy)	20,417	sy	\$ 5.00	\$ 102,083
310	8" Concrete Pavement	17,014	sy	\$ 36.00	\$ 612,500
410	4" Topsoil	2,722	sy	\$ 2.80	\$ 7,622
510	6" Curb & Gutter	12,250	lf	\$ 4.00	\$ 49,000
610	Allotment for Turn Lanes and Median Openings	4,408	sy	\$ 36.00	\$ 158,693

Paving Construction Cost Subtotal: \$ 1,104,121

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 55,206
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 55,206
√ Pavement Markings/Markers		3%	\$ 33,124
Roadway Drainage	None Anticipated	0%	-
Special Drainage Structures	None Anticipated	0%	-
Water	None Anticipated	0%	-
Sewer	None Anticipated	0%	-
√ Establish Turf / Erosion Control		4%	\$ 44,165
Illumination	None Anticipated	0%	-
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 187,701

Paving and Allowance Subtotal: \$ 1,291,822

Mobilization: 5% \$ 64,591

Construction Contingency: 15% \$ 193,773

Construction Cost TOTAL: \$ 1,486,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,486,000
Engineering/Survey/Testing:		20%	\$ 297,200
2003 - 2008 City contribution	'07-'08 Impact Fee Project D-12		\$ 944,020
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 2,727,220

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. D-12
Name:	Lake Forest Dr. (1)	<p>This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.</p>	
Limits:	820' S. of Geren Trl. to 510' S. of Baxter Well		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,710		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	15,056	cy	\$ 9.28	\$ 139,716
207	8" Lime Stabilization (with Lime @ 48#/sy)	23,487	sy	\$ 6.00	\$ 140,920
307	4" TY D HMAC Underlayment	23,487	sy	\$ 3.00	\$ 70,460
407	8" Concrete Pavement	22,282	sy	\$ 40.00	\$ 891,289
507	4" Topsoil	11,442	sy	\$ 4.40	\$ 50,346
607	6" Curb & Gutter	10,840	lf	\$ 12.00	\$ 130,080
707	Allotment for Turn Lanes and Median Openings	1,950	sy	\$ 36.00	\$ 70,214
Paving Construction Cost Subtotal:					\$ 1,493,024
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	74,651	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	74,651	
√ Pavement Markings/Markers		3%	\$	44,791	
√ Roadway Drainage	Standard Internal System	25%	\$	373,256	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	44,791	
√ Sewer	Incidental Adjustments	3%	\$	44,791	
√ Establish Turf / Erosion Control		4%	\$	59,721	
√ Illumination	Standard Illumination System	6%	\$	89,581	
Other:					
Allowance Subtotal:					\$ 806,233
Paving and Allowance Subtotal:					\$ 2,299,257
Mobilization:					5% \$ 114,963
Construction Contingency:					15% \$ 344,889
Construction Cost TOTAL:					\$ 2,645,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,645,000
Engineering/Survey/Testing:		20%	\$ 529,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 529,000
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 1,851,500

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. C-30, D-13
Name:	Lake Forest Dr. (3)	This project consists of the construction of two additional through lanes within the existing median. From 2003 - 2008, the City contributed \$499,840 for the construction of the original two lanes.	
Limits:	Wilmeth Rd. to US 380		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,205		
Service Area(s):	C, D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	18,507	cy	\$ 8.00	\$ 148,053
210	8" Lime Stabilization (with Lime @ 32#/sy)	17,350	sy	\$ 5.00	\$ 86,750
310	8" Concrete Pavement	14,458	sy	\$ 36.00	\$ 520,500
410	4" Topsoil	2,313	sy	\$ 2.80	\$ 6,477
510	6" Curb & Gutter	10,410	lf	\$ 4.00	\$ 41,640
610	Allotment for Turn Lanes and Median Openings	3,746	sy	\$ 36.00	\$ 134,857
Paving Construction Cost Subtotal:					\$ 938,277
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	46,914	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	46,914	
√ Pavement Markings/Markers		3%	\$	28,148	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	37,531	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 159,507
Paving and Allowance Subtotal:					\$ 1,097,785
Mobilization:					5% \$ 54,889
Construction Contingency:					15% \$ 164,668
Construction Cost TOTAL:					\$ 1,263,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,263,000
Engineering/Survey/Testing:		20%	\$ 252,600
2003 - 2008 City contribution	'07-'08 Impact Fee Project C-21, D-15 and C-22, D-16		\$ 499,840
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 2,015,440

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Future Unnamed B (1)	This project consists of the reconstruction of an existing two-lane asphalt facility (CCR 1006) into a six-lane divided major arterial. This project is a realignment of existing CCR 1006.	D-14
Limits:	Future Arterial C to 945' S. of Future Arterial C		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	945		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	10,500	cy	\$ 8.00	\$ 84,000
207	8" Lime Stabilization (with Lime @ 32#/sy)	8,190	sy	\$ 5.00	\$ 40,950
307	8" Concrete Pavement	7,770	sy	\$ 36.00	\$ 279,720
407	4" Topsoil	3,990	sy	\$ 2.80	\$ 11,172
507	6" Curb & Gutter	3,780	lf	\$ 4.00	\$ 15,120
607	Allotment for Turn Lanes and Median Openings	680	sy	\$ 36.00	\$ 24,484
Paving Construction Cost Subtotal:					\$ 455,446
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	13,663	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	13,663	
√ Roadway Drainage	Standard Internal System	25%	\$	113,862	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	13,663	
√ Sewer	Incidental Adjustments	3%	\$	13,663	
√ Establish Turf / Erosion Control		4%	\$	18,218	
√ Illumination	Standard Illumination System	6%	\$	27,327	
Other:					
Allowance Subtotal:					\$ 214,060
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 669,506
Mobilization:					5% \$ 33,475
Construction Contingency:					15% \$ 100,426
Construction Cost TOTAL:					\$ 770,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 770,000
Engineering/Survey/Testing:		20%	\$ 154,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 269,500
Impact Fee Project Cost TOTAL:			\$ 1,193,500

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	D-15
Name:	Future Unnamed B (2) / CCR 1006	<p>This project consists of the reconstruction of an existing two-lane asphalt facility (CCR 1006) into a six-lane divided major arterial. Based on the existing city limits, the eastern half of this roadway is not included in the Impact Fee RIP.</p>		
Limits:	945' S. of Future Arterial C to 2,305' S. of Future Arterial C			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	1,360			
Service Area(s):	D, HALF			

Roadway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Unit Price	Item Cost	
107	Unclassified Street Excavation	15,111	cy	\$ 8.00	\$ 120,889	
207	8" Lime Stabilization (with Lime @ 32#/sy)	11,787	sy	\$ 5.00	\$ 58,933	
307	8" Concrete Pavement	11,182	sy	\$ 36.00	\$ 402,560	
407	4" Topsoil	5,742	sy	\$ 2.80	\$ 16,078	
507	6" Curb & Gutter	5,440	lf	\$ 4.00	\$ 21,760	
607	Allotment for Turn Lanes and Median Openings	979	sy	\$ 36.00	\$ 35,236	
Paving Construction Cost Subtotal:					\$ 655,457	
Major Construction Component Allowances**:						
Item Description	Notes	Allowance	Item Cost			
√ Prep ROW		5%	\$	32,773		
√ Traffic Control	Construction Phase Traffic Control	5%	\$	32,773		
√ Pavement Markings/Markers		3%	\$	19,664		
√ Roadway Drainage	Standard Internal System	25%	\$	163,864		
Special Drainage Structures	None Anticipated	0%	\$	-		
√ Water	Incidental Adjustments	3%	\$	19,664		
√ Sewer	Incidental Adjustments	3%	\$	19,664		
√ Establish Turf / Erosion Control		4%	\$	26,218		
√ Illumination	Standard Illumination System	6%	\$	39,327		
Other:						
**Allowances based on % of Paving Construction Cost Subtotal					Allowance Subtotal:	\$ 353,947
Paving and Allowance Subtotal:					\$ 1,009,403	
Mobilization:					5%	\$ 50,470
Construction Contingency:					15%	\$ 151,411
Construction Cost TOTAL:					\$ 1,161,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,161,000
Engineering/Survey/Testing:		20%	\$ 232,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 232,200
Impact Fee Project Cost TOTAL:			\$ 1,625,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Future Unnamed B (3) / CCR 943	This project consists of the reconstruction of an existing two-lane gravel facility (CCR 943) into a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	D-16
Limits:	2,045' N. of Wilmeth Rd. to Wilmeth Rd		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (If):	2,045		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	22,722	cy	\$ 8.00	\$ 181,778
207	8" Lime Stabilization (with Lime @ 32#/sy)	17,723	sy	\$ 5.00	\$ 88,617
307	8" Concrete Pavement	16,814	sy	\$ 36.00	\$ 605,320
407	4" Topsoil	8,634	sy	\$ 2.80	\$ 24,176
507	6" Curb & Gutter	8,180	lf	\$ 4.00	\$ 32,720
607	Allotment for Turn Lanes and Median Openings	1,472	sy	\$ 36.00	\$ 52,984
Paving Construction Cost Subtotal:					\$ 985,595
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	49,280	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	49,280	
√ Pavement Markings/Markers		3%	\$	29,568	
√ Roadway Drainage	Standard Internal System	25%	\$	246,399	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	29,568	
√ Sewer	Incidental Adjustments	3%	\$	29,568	
√ Establish Turf / Erosion Control		4%	\$	39,424	
√ Illumination	Standard Illumination System	6%	\$	59,136	
Other:					
Allowance Subtotal:					\$ 532,221
Paving and Allowance Subtotal:					\$ 1,517,816
Mobilization:					5% \$ 75,891
Construction Contingency:					15% \$ 227,672
Construction Cost TOTAL:					\$ 1,746,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,746,000
Engineering/Survey/Testing:		20%	\$ 349,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 349,200
Impact Fee Project Cost TOTAL:			\$ 2,444,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (3)	This project consists of the construction of a new six-lane divided major arterial.	D-17
Limits:	CCR 229 to FM 543		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,305		
Service Area(s):	D		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	25,611	cy	\$ 8.00	\$ 204,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	19,977	sy	\$ 5.00	\$ 99,883
307	8" Concrete Pavement	18,952	sy	\$ 36.00	\$ 682,280
407	4" Topsoil	9,732	sy	\$ 2.80	\$ 27,250
507	6" Curb & Gutter	9,220	lf	\$ 4.00	\$ 36,880
607	Allotment for Turn Lanes and Median Openings	1,659	sy	\$ 36.00	\$ 59,720

Paving Construction Cost Subtotal: \$ 1,110,903

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		3%	\$ 33,327
√ Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 33,327
√ Roadway Drainage	Standard Internal System	25%	\$ 277,726
√ Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 33,327
√ Sewer	Incidental Adjustments	3%	\$ 33,327
√ Establish Turf / Erosion Control		4%	\$ 44,436
√ Illumination	Standard Illumination System	6%	\$ 66,654
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 522,124

Paving and Allowance Subtotal: \$ 1,633,027

Mobilization: 5% \$ 81,651

Construction Contingency: 15% \$ 244,954

Construction Cost TOTAL: \$ 1,878,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,878,000
Engineering/Survey/Testing:		20%	\$ 375,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 657,300

Impact Fee Project Cost TOTAL: \$ 2,910,900

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (4)	This project consists of the construction of a new six-lane divided major arterial. Based on the existing city limits, the eastern half of this roadway is not included in the Impact Fee RIP.	D-18
Limits:	FM 543 to 1,230' S. of FM 543		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,230		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	13,667	cy	\$ 8.00	\$ 109,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	10,660	sy	\$ 5.00	\$ 53,300
307	8" Concrete Pavement	10,113	sy	\$ 36.00	\$ 364,080
407	4" Topsoil	5,193	sy	\$ 2.80	\$ 14,541
507	6" Curb & Gutter	4,920	lf	\$ 4.00	\$ 19,680
607	Allotment for Turn Lanes and Median Openings	885	sy	\$ 36.00	\$ 31,868
Paving Construction Cost Subtotal:					\$ 592,803
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	17,784	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	17,784	
√ Roadway Drainage	Standard Internal System	25%	\$	148,201	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	17,784	
√ Sewer	Incidental Adjustments	3%	\$	17,784	
√ Establish Turf / Erosion Control		4%	\$	23,712	
√ Illumination	Standard Illumination System	6%	\$	35,568	
Other:					
Allowance Subtotal:					\$ 278,617
Paving and Allowance Subtotal:					\$ 871,420
Mobilization:					\$ 43,571
Construction Contingency:					\$ 130,713
Construction Cost TOTAL:					\$ 1,003,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,003,000
Engineering/Survey/Testing:		20%	\$ 200,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 351,050
Impact Fee Project Cost TOTAL:			\$ 1,554,650

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (5)	This project consists of construction of a new six-lane major arterial.	D-19
Limits:	1,230' S. of FM 543 to CCR 201		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	7,315		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	81,278	cy	\$ 8.00	\$ 650,222
207	8" Lime Stabilization (with Lime @ 32#/sy)	63,397	sy	\$ 5.00	\$ 316,983
307	8" Concrete Pavement	60,146	sy	\$ 36.00	\$ 2,165,240
407	4" Topsoil	30,886	sy	\$ 2.80	\$ 86,480
507	6" Curb & Gutter	29,260	lf	\$ 4.00	\$ 117,040
607	Allotment for Turn Lanes and Median Openings	5,265	sy	\$ 36.00	\$ 189,525
Paving Construction Cost Subtotal:					\$ 3,525,490
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW	None Anticipated	3%	\$	105,765	
√ Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	105,765	
√ Roadway Drainage		25%	\$	881,373	
√ Special Drainage Structures		Crosses 2,790' of Flood Plain	\$	3,515,400	
√ Water	Incidental Adjustments	3%	\$	105,765	
√ Sewer	Incidental Adjustments	3%	\$	105,765	
√ Establish Turf / Erosion Control	Standard Illumination System	4%	\$	141,020	
√ Illumination		6%	\$	211,529	
Other:					
Allowance Subtotal:					\$ 5,172,380
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 8,697,870
Mobilization:					5% \$ 434,894
Construction Contingency:					15% \$ 1,304,681
Construction Cost TOTAL:					\$ 10,003,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 10,003,000
Engineering/Survey/Testing:		20%	\$ 2,000,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 3,501,050
Impact Fee Project Cost TOTAL:			\$ 15,504,650

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.	D-20
Name:	Hardin Blvd. (6)	This project consists of the reconstruction of an existing two-lane gravel/dirt (CCR 164) into a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP		
Limits:	CCR 201 to CCR 164 (Future Bloomdale Rd.)			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	1,790			
Service Area(s):	D, HALF			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	19,889	cy	\$ 8.00	\$ 159,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	15,513	sy	\$ 5.00	\$ 77,567
307	8" Concrete Pavement	14,718	sy	\$ 36.00	\$ 529,840
407	4" Topsoil	7,558	sy	\$ 2.80	\$ 21,162
507	6" Curb & Gutter	7,160	lf	\$ 4.00	\$ 28,640
607	Allotment for Turn Lanes and Median Openings	1,288	sy	\$ 36.00	\$ 46,377
Paving Construction Cost Subtotal:					\$ 862,697
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	25,881	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	25,881	
√ Roadway Drainage	Standard Internal System	25%	\$	215,674	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	25,881	
√ Sewer	Incidental Adjustments	3%	\$	25,881	
√ Establish Turf / Erosion Control		4%	\$	34,508	
√ Illumination	Standard Illumination System	6%	\$	51,762	
Other:					
Allowance Subtotal:					\$ 405,468
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,268,164
Mobilization:					5% \$ 63,408
Construction Contingency:					15% \$ 190,225
Construction Cost TOTAL:					\$ 1,459,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,459,000
Engineering/Survey/Testing:		20%	\$ 291,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 510,650
Impact Fee Project Cost TOTAL:			\$ 2,261,450

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (7)	This project consists of construction of a new six-lane major arterial.	D-21
Limits:	CCR 164 (Bloomdale Rd.) to Holly Ridge Way		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,165		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	35,167	cy	\$ 8.00	\$ 281,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	27,430	sy	\$ 5.00	\$ 137,150
307	8" Concrete Pavement	26,023	sy	\$ 36.00	\$ 936,840
407	4" Topsoil	13,363	sy	\$ 2.80	\$ 37,417
507	6" Curb & Gutter	12,660	lf	\$ 4.00	\$ 50,640
607	Allotment for Turn Lanes and Median Openings	2,278	sy	\$ 36.00	\$ 82,002
Paving Construction Cost Subtotal:					\$ 1,525,383
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	45,761	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	45,761	
√ Roadway Drainage	Standard Internal System	25%	\$	381,346	
√ Special Drainage Structures	Crosses minor creek		\$	315,000	
√ Water	Incidental Adjustments	3%	\$	45,761	
√ Sewer	Incidental Adjustments	3%	\$	45,761	
√ Establish Turf / Erosion Control		4%	\$	61,015	
√ Illumination	Standard Illumination System	6%	\$	91,523	
Other:					
Allowance Subtotal:					\$ 1,031,930
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,557,313
Mobilization:					5% \$ 127,866
Construction Contingency:					15% \$ 383,597
Construction Cost TOTAL:					\$ 2,941,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,941,000
Engineering/Survey/Testing:		20%	\$ 588,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,029,350
Impact Fee Project Cost TOTAL:			\$ 4,558,550

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (8)	This project consists of the widening of a two-lane concrete facility into a six-lane divided major arterial.	D-22
Limits:	Holly Ridge Way to 1,770' N. of Wilmeth Rd.		
Impact Fee Class:	M6D (2/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,150		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	9,200	cy	\$ 8.00	\$ 73,600
208	8" Lime Stabilization (with Lime @ 32#/sy)	6,708	sy	\$ 5.00	\$ 33,542
308	8" Concrete Pavement	6,325	sy	\$ 36.00	\$ 227,700
408	4" Topsoil	3,642	sy	\$ 2.80	\$ 10,197
508	6" Curb & Gutter	3,450	lf	\$ 4.00	\$ 13,800
608	Allotment for Turn Lanes and Median Openings	828	sy	\$ 36.00	\$ 29,795
Paving Construction Cost Subtotal:					\$ 388,634
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	19,432	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	19,432	
√ Pavement Markings/Markers		3%	\$	11,659	
√ Roadway Drainage	Standard Internal System	25%	\$	97,158	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	11,659	
√ Sewer	Incidental Adjustments	3%	\$	11,659	
√ Establish Turf / Erosion Control		4%	\$	15,545	
√ Illumination	Standard Illumination System	6%	\$	23,318	
Other:					
Allowance Subtotal:					\$ 209,862
Paving and Allowance Subtotal:					\$ 598,496
Mobilization:					5% \$ 29,925
Construction Contingency:					15% \$ 89,774
Construction Cost TOTAL:					\$ 689,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 689,000
Engineering/Survey/Testing:		20%	\$ 137,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 137,800
Impact Fee Project Cost TOTAL:			\$ 964,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. D-23
Name:	Hardin Blvd. (9)	This project consists of the construction of two additional through lanes within the existing median. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,770' N. of Wilmeth Rd. to Wilmeth Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,815		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	6,453	cy	\$ 8.00	\$ 51,627
210	8" Lime Stabilization (with Lime @ 32#/sy)	6,050	sy	\$ 5.00	\$ 30,250
310	8" Concrete Pavement	5,042	sy	\$ 36.00	\$ 181,500
410	4" Topsoil	807	sy	\$ 2.80	\$ 2,259
510	6" Curb & Gutter	3,630	lf	\$ 4.00	\$ 14,520
610	Allotment for Turn Lanes and Median Openings	1,306	sy	\$ 36.00	\$ 47,025
Paving Construction Cost Subtotal:					\$ 327,180
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	16,359	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	16,359	
√ Pavement Markings/Markers		3%	\$	9,815	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	13,087	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 55,621
Paving and Allowance Subtotal:					\$ 382,801
Mobilization:					5% \$ 19,140
Construction Contingency:					15% \$ 57,420
Construction Cost TOTAL:					\$ 441,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 441,000
Engineering/Survey/Testing:		20%	\$ 88,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 529,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (10)	This project consists of the construction of two additional through lanes within the existing median. Note, this project does not include the western lanes that still need to be constructed that are outside the City Limits. The existing two-lane facility was developer constructed with a City contribution of \$2,319,001 between 2003 - 2008.	D-24
Limits:	Wilmeth Rd. to US 380		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	6,475		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	23,022	cy	\$ 8.00	\$ 184,178
210	8" Lime Stabilization (with Lime @ 32#/sy)	21,583	sy	\$ 5.00	\$ 107,917
310	8" Concrete Pavement	17,986	sy	\$ 36.00	\$ 647,500
410	4" Topsoil	2,878	sy	\$ 2.80	\$ 8,058
510	6" Curb & Gutter	12,950	lf	\$ 4.00	\$ 51,800
610	Allotment for Turn Lanes and Median Openings	4,660	sy	\$ 36.00	\$ 167,761
Paving Construction Cost Subtotal:					\$ 1,167,214
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	58,361	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	58,361	
√ Pavement Markings/Markers		3%	\$	35,016	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	46,689	
Illumination	None Anticipated	0%	\$	-	
Other:					
**Allowances based on % of Paving Construction Cost Subtotal					Allowance Subtotal: \$ 198,426
Paving and Allowance Subtotal:					\$ 1,365,640
Mobilization:					5% \$ 68,282
Construction Contingency:					15% \$ 204,846
Construction Cost TOTAL:					\$ 1,571,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,571,000
Engineering/Survey/Testing:		20%	\$ 314,200
2003 - 2008 City contribution	'07 - '08 Impact Fee Project D-23		\$ 2,319,001
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 4,204,201

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Community Ave. (1)	This project consists of the reconstruction of a two-lane asphalt facility into a four-lane undivided minor arterial.	D-25
Limits:	Hardin Blvd. to 1,915' E. of Hardin Blvd.		
Impact Fee Class:	M4U		
Thoroughfare Class:	Minor Arterial		
Length (lf):	1,915		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	10,213	cy	\$ 8.00	\$ 81,707
202	8" Lime Stabilization (with Lime @ 32#/sy)	10,001	sy	\$ 5.00	\$ 50,003
302	8" Concrete Pavement	9,575	sy	\$ 36.00	\$ 344,700
402	4" Topsoil	5,745	sy	\$ 2.80	\$ 16,086
502	6" Curb & Gutter	3,830	lf	\$ 4.00	\$ 15,320
Paving Construction Cost Subtotal:					\$ 507,815
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	25,391	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	25,391	
√ Pavement Markings/Markers		3%	\$	15,234	
√ Roadway Drainage	Standard Internal System	25%	\$	126,954	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	15,234	
√ Sewer	Incidental Adjustments	3%	\$	15,234	
√ Establish Turf / Erosion Control		4%	\$	20,313	
√ Illumination	Standard Illumination System	6%	\$	30,469	
Other:					
Allowance Subtotal:					\$ 274,220
Paving and Allowance Subtotal:					\$ 782,036
Mobilization:					5% \$ 39,102
Construction Contingency:					15% \$ 117,305
Construction Cost TOTAL:					\$ 900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 900,000
Engineering/Survey/Testing:		20%	\$ 180,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 180,000
Impact Fee Project Cost TOTAL:			\$ 1,260,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. D-26
Name:	Community Ave. (2)	This project consists of the reconstruction of a two-lane asphalt facility into a four-lane undivided minor arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	
Limits:	1,915' E. of Hardin Blvd. to N. City Limits/Creek		
Impact Fee Class:	M4U		
Thoroughfare Class:	Minor Arterial		
Length (lf):	1,065		
Service Area(s):	D, HALF		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,680	cy	\$ 8.00	\$ 45,440
202	8" Lime Stabilization (with Lime @ 32#/sy)	5,562	sy	\$ 5.00	\$ 27,808
302	8" Concrete Pavement	5,325	sy	\$ 36.00	\$ 191,700
402	4" Topsoil	3,195	sy	\$ 2.80	\$ 8,946
502	6" Curb & Gutter	2,130	lf	\$ 4.00	\$ 8,520
Paving Construction Cost Subtotal:					\$ 282,414
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	14,121	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	14,121	
√ Pavement Markings/Markers		3%	\$	8,472	
√ Roadway Drainage	Standard Internal System	25%	\$	70,604	
√ Special Drainage Structures	Minor creek crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	8,472	
√ Sewer	Incidental Adjustments	3%	\$	8,472	
√ Establish Turf / Erosion Control		4%	\$	11,297	
√ Illumination	Standard Illumination System	6%	\$	16,945	
Other:					
Allowance Subtotal:					\$ 402,504
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 684,918
Mobilization:					5% \$ 34,246
Construction Contingency:					15% \$ 102,738
Construction Cost TOTAL:					\$ 788,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 788,000
Engineering/Survey/Testing:		20%	\$ 157,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 157,600
Impact Fee Project Cost TOTAL:			\$ 1,103,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	D-27
Name:	Community Ave. (3)	This project consists of the reconstruction of a two-lane asphalt facility into a four-lane undivided minor arterial.		
Limits:	N. City Limits/Creek to 2,645' N. of Bloomdale Rd.			
Impact Fee Class:	M4U			
Thoroughfare Class:	Minor Arterial			
Length (lf):	955			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,093	cy	\$ 8.00	\$ 40,747
202	8" Lime Stabilization (with Lime @ 32#/sy)	4,987	sy	\$ 5.00	\$ 24,936
302	8" Concrete Pavement	4,775	sy	\$ 36.00	\$ 171,900
402	4" Topsoil	2,865	sy	\$ 2.80	\$ 8,022
502	6" Curb & Gutter	1,910	lf	\$ 4.00	\$ 7,640

Paving Construction Cost Subtotal: \$ 253,245

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 12,662
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 12,662
√ Pavement Markings/Markers		3%	\$ 7,597
√ Roadway Drainage	Standard Internal System	25%	\$ 63,311
Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 7,597
√ Sewer	Incidental Adjustments	3%	\$ 7,597
√ Establish Turf / Erosion Control		4%	\$ 10,130
√ Illumination	Standard Illumination System	6%	\$ 15,195
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 136,752

Paving and Allowance Subtotal: \$ 389,997

Mobilization: 5% \$ 19,500

Construction Contingency: 15% \$ 58,500

Construction Cost TOTAL: \$ 449,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 449,000
Engineering/Survey/Testing:		20%	\$ 89,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 89,800

Impact Fee Project Cost TOTAL: \$ 628,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. D-28
Name:	Community Ave. (4)	This project consists of the widening of an existing two-lane concrete facility into a four-lane undivided minor arterial.	
Limits:	2,645' N. of Bloomdale Rd. to 90' S. of James Pitts Dr.		
Impact Fee Class:	M4U (1/2)		
Thoroughfare Class:	Minor Arterial		
Length (lf):	3,215		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	9,288	cy	\$ 8.00	\$ 74,302
201	8" Lime Stabilization (with Lime @ 32#/sy)	8,931	sy	\$ 5.00	\$ 44,653
301	8" Concrete Pavement	8,216	sy	\$ 36.00	\$ 295,780
401	4" Topsoil	4,823	sy	\$ 2.80	\$ 13,503
501	6" Curb & Gutter	3,215	lf	\$ 4.00	\$ 12,860
Paving Construction Cost Subtotal:					\$ 441,098

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 22,055
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 22,055
√ Pavement Markings/Markers		3%	\$ 13,233
√ Roadway Drainage	Standard Internal System	25%	\$ 110,275
Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 13,233
√ Sewer	Incidental Adjustments	3%	\$ 13,233
√ Establish Turf / Erosion Control		4%	\$ 17,644
√ Illumination	Standard Illumination System	6%	\$ 26,466
Other:			
Allowance Subtotal:			\$ 238,193
Paving and Allowance Subtotal:			\$ 679,291
Mobilization:			5% \$ 33,965
Construction Contingency:			15% \$ 101,894
Construction Cost TOTAL:			\$ 782,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 782,000
Engineering/Survey/Testing:		20%	\$ 156,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 156,400
Impact Fee Project Cost TOTAL:			\$ 1,094,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. D-29
Name:	Community Ave. (5)	This project consists of the widening of an existing two-lane concrete facility into a four-lane undivided minor arterial.	
Limits:	90' S. of James Potts Dr. to 230' S. of Brinlee Branch Ln.		
Impact Fee Class:	M4U (1/2)		
Thoroughfare Class:	Minor Arterial		
Length (lf):	1,765		
Service Area(s):	D		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	5,099	cy	\$ 8.00	\$ 40,791
201	8" Lime Stabilization (with Lime @ 32#/sy)	4,903	sy	\$ 5.00	\$ 24,514
301	8" Concrete Pavement	4,511	sy	\$ 36.00	\$ 162,380
401	4" Topsoil	2,648	sy	\$ 2.80	\$ 7,413
501	6" Curb & Gutter	1,765	lf	\$ 4.00	\$ 7,060

Paving Construction Cost Subtotal: \$ 242,158

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 12,108
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 12,108
√ Pavement Markings/Markers		3%	\$ 7,265
√ Roadway Drainage	Standard Internal System	25%	\$ 60,540
Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 7,265
√ Sewer	Incidental Adjustments	3%	\$ 7,265
√ Establish Turf / Erosion Control		4%	\$ 9,686
√ Illumination	Standard Illumination System	6%	\$ 14,529
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 130,765

Paving and Allowance Subtotal: \$ 372,923

Mobilization: 5% \$ 18,646

Construction Contingency: 15% \$ 55,938

Construction Cost TOTAL: \$ 429,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 429,000
Engineering/Survey/Testing:		20%	\$ 85,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 85,800
Impact Fee Project Cost TOTAL:			\$ 600,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. D-30
Name:	Future Arterial C (3)	This project consists of the construction of a new six-lane divided principal arterial.	
Limits:	E. City Limits to W. City Limits		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	1,635		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	19,983	cy	\$ 8.00	\$ 159,867
209	8" Lime Stabilization (with Lime @ 32#/sy)	14,170	sy	\$ 5.00	\$ 70,850
309	10" Concrete Pavement	13,443	sy	\$ 42.00	\$ 564,620
409	4" Topsoil	8,720	sy	\$ 2.80	\$ 24,416
509	6" Curb & Gutter	6,540	lf	\$ 4.00	\$ 26,160
609	Allotment for Turn Lanes and Median Openings	1,177	sy	\$ 42.00	\$ 49,422
Paving Construction Cost Subtotal:					\$ 895,334
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	26,860	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	26,860	
√ Roadway Drainage	Standard Internal System	25%	\$	223,834	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	26,860	
√ Sewer	Incidental Adjustments	3%	\$	26,860	
√ Establish Turf / Erosion Control		4%	\$	35,813	
√ Illumination	Standard Illumination System	6%	\$	53,720	
Other:					
Allowance Subtotal:					\$ 420,807
Paving and Allowance Subtotal:					\$ 1,316,141
Mobilization:					\$ 65,807
Construction Contingency:					\$ 197,421
Construction Cost TOTAL:					\$ 1,514,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,514,000
Engineering/Survey/Testing:		20%	\$ 302,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 529,900
Impact Fee Project Cost TOTAL:			\$ 2,346,700

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

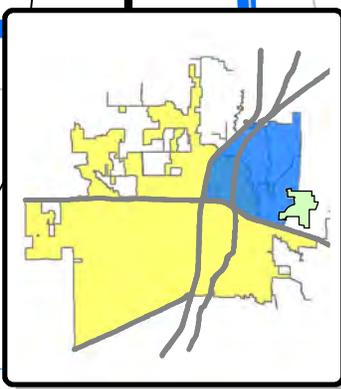
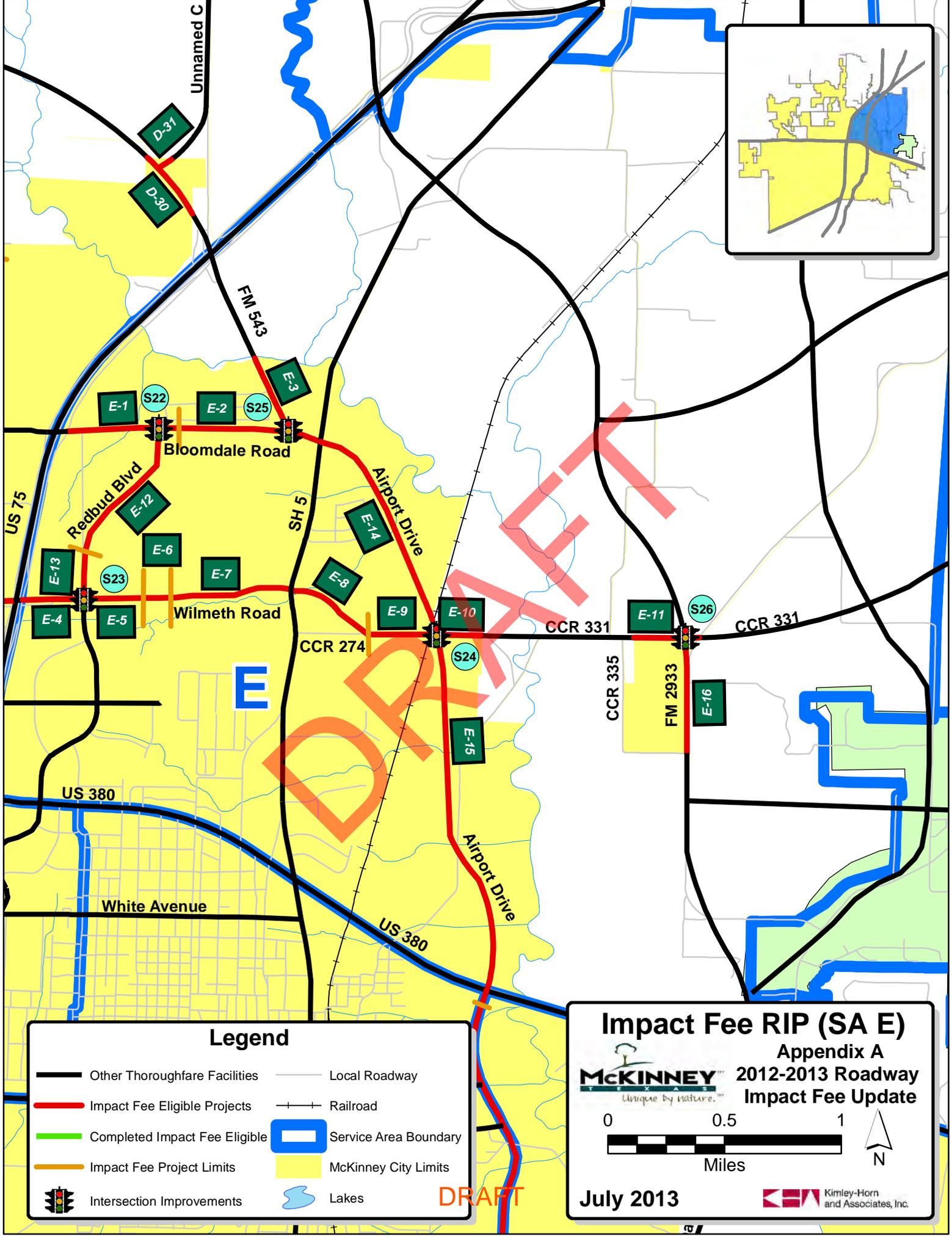
Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. D-31
Name:	Future Unnamed C	This project consists of the construction of a new six-lane divided major arterial.	
Limits:	N. City Limits to Future Arterial C (3)		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	415		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	4,611	cy	\$ 8.00	\$ 36,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	3,597	sy	\$ 5.00	\$ 17,983
307	8" Concrete Pavement	3,412	sy	\$ 36.00	\$ 122,840
407	4" Topsoil	1,752	sy	\$ 2.80	\$ 4,906
507	6" Curb & Gutter	1,660	lf	\$ 4.00	\$ 6,640
607	Allotment for Turn Lanes and Median Openings	299	sy	\$ 36.00	\$ 10,752
Paving Construction Cost Subtotal:					\$ 200,011
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	6,000	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	6,000	
√ Roadway Drainage	Standard Internal System	25%	\$	50,003	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	6,000	
√ Sewer	Incidental Adjustments	3%	\$	6,000	
√ Establish Turf / Erosion Control		4%	\$	8,000	
√ Illumination	Standard Illumination System	6%	\$	12,001	
Other:					
Allowance Subtotal:					\$ 94,005
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 294,016
Mobilization:					5% \$ 14,701
Construction Contingency:					15% \$ 44,102
Construction Cost TOTAL:					\$ 339,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 339,000
Engineering/Survey/Testing:		20%	\$ 67,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 118,650
Impact Fee Project Cost TOTAL:			\$ 525,450

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Legend

Other Thoroughfare Facilities	Local Roadway
Impact Fee Eligible Projects	Railroad
Completed Impact Fee Eligible	Service Area Boundary
Impact Fee Project Limits	McKinney City Limits
Intersection Improvements	Lakes

Impact Fee RIP (SA E)

Appendix A

2012-2013 Roadway Impact Fee Update

July 2013

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Kimley-Horn and Associates, Inc.

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area E

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
E-1	M6D (1/3)	Bloomdale Rd. (10)	US 75 NBFR to 275' E. of Shawnee Dr.	\$ 734,400	100%	\$ 734,400
E-2	M6D (2/3)	Bloomdale Rd. (11)	275' E. of Shawnee Dr. to FM 543	\$ 2,100,000	100%	\$ 2,100,000
E-3	M6D	FM 543 (1)	Honey Creek to SH 5	\$ 2,450,700	100%	\$ 2,450,700
E-4	M6D (1/3)	Wilmeth Rd. (10)	US 75 NBFR to Redbud Blvd.	\$ 400,800	100%	\$ 400,800
E-5	M6D (1/3) ^{OUTSIDE}	Wilmeth Rd. (11)	Redbud Blvd. to 1,340 E. of Redbud Blvd.	\$ 387,600	100%	\$ 387,600
E-6	M6D (1/3)	Wilmeth Rd. (12)	1,340 E. of Redbud Blvd. to 2,005 E. of Redbud Blvd.	\$ 194,400	100%	\$ 194,400
E-7	M6D (2/3)	Wilmeth Rd. (13)	2,005 E. of Redbud Blvd. to SH 5	\$ 2,279,200	100%	\$ 2,279,200
E-8	M6D	Wilmeth Rd. (14)	SH 5 to McIntyre Rd. (CCR 274)	\$ 3,079,850	100%	\$ 3,079,850
E-9	M6D	Wilmeth Rd. (15)	1,610' E. of SH 5 to RR tracks	\$ 5,644,800	100%	\$ 5,644,800
E-10	M6D	Wilmeth Rd. (16)	RR tracks to 1,230' E. of the RR tracks (E. City Limits)	\$ 7,523,600	50%	\$ 3,761,800
E-11	M6D	Wilmeth Rd. (17)/ CCR 331	265' E. of CCR 335 to FM 2933	\$ 1,751,400	50%	\$ 875,700
E-12	M4D	Redbud Blvd. (1)	Bloomdale Rd. to 1,075' N. of Wilmeth Rd.	\$ 3,174,400	100%	\$ 3,174,400
E-13	M4D (1/2)	Redbud Blvd. (2)	1,075' N. of Wilmeth Rd. to Wilmeth Rd.	\$ 448,000	100%	\$ 448,000
E-14	M6D	Airport Dr. (1)	SH 5 to RR tracks (E. City Limits)	\$ 13,150,200	100%	\$ 13,150,200
E-15	M6D	Airport Dr. (2)	McIntyre Rd. (Future Wilmeth Rd.) to US 380	\$ 15,261,300	100%	\$ 15,261,300
E-16	M6D	FM 2933	CCR 331 to CCR 335	\$ 1,873,175	50%	\$ 936,588
S-22		Signal Installation	Redbud Blvd. & Bloomdale Rd.	\$ 200,000	100%	\$ 200,000
S-23		Signal Installation	Redbud Blvd. & Wilmeth Rd.	\$ 200,000	100%	\$ 200,000
S-24		Signal Installation	Airport Dr. & Wilmeth Rd.	\$ 200,000	75%	\$ 150,000
S-25		Signal Installation	FM 543 & Bloomdale Rd.	\$ 200,000	100%	\$ 200,000
S-26		Signal Installation	FM 2933 & Wilmeth Rd.	\$ 200,000	50%	\$ 100,000
TOTAL				\$ 61,453,825		\$ 55,729,738

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Bloomdale Rd. (10)	This project consists of the construction of two additional through lanes within the existing median.	E-1
Limits:	US 75 NBFR to 275' E. of Shawnee Dr.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,520		
Service Area(s):	E		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	8,960	cy	\$ 8.00	\$ 71,680
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,400	sy	\$ 5.00	\$ 42,000
310	8" Concrete Pavement	7,000	sy	\$ 36.00	\$ 252,000
410	4" Topsoil	1,120	sy	\$ 2.80	\$ 3,136
510	6" Curb & Gutter	5,040	lf	\$ 4.00	\$ 20,160
610	Allotment for Turn Lanes and Median Openings	1,814	sy	\$ 36.00	\$ 65,291
Paving Construction Cost Subtotal:					\$ 454,267
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	22,713	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	22,713	
√ Pavement Markings/Markers		3%	\$	13,628	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	18,171	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 77,225
Paving and Allowance Subtotal:					\$ 531,492
Mobilization:					5% \$ 26,575
Construction Contingency:					15% \$ 79,724
Construction Cost TOTAL:					\$ 612,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 612,000
Engineering/Survey/Testing:		20%	\$ 122,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 734,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Bloomdale Rd. (11)	This project consists of the widening of an existing two-lane concrete facility to a six-lane divided major arterial.	E-2
Limits:	275' E. of Shawnee Dr. to FM 543		
Impact Fee Class:	M6D (2/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,505		
Service Area(s):	E		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	20,040	cy	\$ 8.00	\$ 160,320
208	8" Lime Stabilization (with Lime @ 32#/sy)	14,613	sy	\$ 5.00	\$ 73,063
308	8" Concrete Pavement	13,778	sy	\$ 36.00	\$ 495,990
408	4" Topsoil	7,933	sy	\$ 2.80	\$ 22,211
508	6" Curb & Gutter	7,515	lf	\$ 4.00	\$ 30,060
608	Allotment for Turn Lanes and Median Openings	1,803	sy	\$ 36.00	\$ 64,902
Paving Construction Cost Subtotal:					\$ 846,546
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	42,327	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	42,327	
√ Pavement Markings/Markers		3%	\$	25,396	
√ Roadway Drainage	Standard Internal System	25%	\$	211,636	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	25,396	
√ Sewer	Incidental Adjustments	3%	\$	25,396	
√ Establish Turf / Erosion Control		4%	\$	33,862	
√ Illumination	Standard Illumination System	6%	\$	50,793	
Other:					
Allowance Subtotal:					\$ 457,135
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,303,680
Mobilization:					5% \$ 65,184
Construction Contingency:					15% \$ 195,552
Construction Cost TOTAL:					\$ 1,500,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,500,000
Engineering/Survey/Testing:		20%	\$ 300,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 300,000
Impact Fee Project Cost TOTAL:			\$ 2,100,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	E-3
Name:	FM 543 (1)	This project consists of the reconstruction of an existing two-lane asphalt facility to a six-lane divided major arterial.		
Limits:	Honey Creek to SH 5			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	2,585			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	14,361	cy	\$ 9.28	\$ 133,271
207	8" Lime Stabilization (with Lime @ 48#/sy)	22,403	sy	\$ 6.00	\$ 134,420
307	4" TY D HMAC Underlayment	22,403	sy	\$ 3.00	\$ 67,210
407	8" Concrete Pavement	21,254	sy	\$ 40.00	\$ 850,178
507	4" Topsoil	10,914	sy	\$ 4.40	\$ 48,024
607	6" Curb & Gutter	10,340	lf	\$ 12.00	\$ 124,080
707	Allotment for Turn Lanes and Median Openings	1,860	sy	\$ 36.00	\$ 66,975
Paving Construction Cost Subtotal:					\$ 1,424,157
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	71,208	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	71,208	
√ Pavement Markings/Markers		3%	\$	42,725	
√ Roadway Drainage	Standard Internal System	25%	\$	356,039	
√ Special Drainage Structures	Bridge for Honey Creek		\$	851,000	
√ Water	Incidental Adjustments	3%	\$	42,725	
√ Sewer	Incidental Adjustments	3%	\$	42,725	
√ Establish Turf / Erosion Control		4%	\$	56,966	
√ Illumination	Standard Illumination System	6%	\$	85,449	
Other:					
Allowance Subtotal:					\$ 1,620,045
Paving and Allowance Subtotal:					\$ 3,044,202
Mobilization:					5% \$ 152,210
Construction Contingency:					15% \$ 456,630
Construction Cost TOTAL:					\$ 3,501,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,501,000
Engineering/Survey/Testing:		20%	\$ 700,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 700,200
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 2,450,700

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	E-4
Name:	Wilmeth Rd. (10)	This project consists of the construction of two additional through lanes within the existing median. Does not include cost of bridge being built over US 75.		
Limits:	US 75 NBFR to Redbud Blvd.			
Impact Fee Class:	M6D (1/3)			
Thoroughfare Class:	Major Arterial			
Length (lf):	1,375			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	4,889	cy	\$ 8.00	\$ 39,111
210	8" Lime Stabilization (with Lime @ 32#/sy)	4,583	sy	\$ 5.00	\$ 22,917
310	8" Concrete Pavement	3,819	sy	\$ 36.00	\$ 137,500
410	4" Topsoil	611	sy	\$ 2.80	\$ 1,711
510	6" Curb & Gutter	2,750	lf	\$ 4.00	\$ 11,000
610	Allotment for Turn Lanes and Median Openings	990	sy	\$ 36.00	\$ 35,625
Paving Construction Cost Subtotal:					\$ 247,864
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	12,393	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	12,393	
√ Pavement Markings/Markers		3%	\$	7,436	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	9,915	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 42,137
Paving and Allowance Subtotal:					\$ 290,001
Mobilization:					5% \$ 14,500
Construction Contingency:					15% \$ 43,500
Construction Cost TOTAL:					\$ 334,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 334,000
Engineering/Survey/Testing:		20%	\$ 66,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 400,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (11)	The four-lane divided roadway was constructed by the City in conjunction with the neighboring developer. The remaining two lanes will be constructed on the outside.	E-5
Limits:	Redbud Blvd. to 1,340 E. of Redbud Blvd.		
Impact Fee Class:	M6D (1/3) OUTSIDE		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,340		
Service Area(s):	E		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
115	Unclassified Street Excavation	2,084	cy	\$ 8.00	\$ 16,676
215	8" Lime Stabilization (with Lime @ 32#/sy)	4,020	sy	\$ 5.00	\$ 20,100
315	8" Concrete Pavement	3,722	sy	\$ 36.00	\$ 134,000
415	4" Topsoil	2,829	sy	\$ 2.80	\$ 7,921
515	6" Curb & Gutter	2,680	lf	\$ 4.00	\$ 10,720
Paving Construction Cost Subtotal:					\$ 189,416
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	9,471	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	9,471	
√ Pavement Markings/Markers		3%	\$	5,682	
√ Roadway Drainage	Adjusting Drainage	25%	\$	47,354	
Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	3%	\$	5,682	
√ Sewer	Minor Adjustments	3%	\$	5,682	
√ Establish Turf / Erosion Control		4%	\$	7,577	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 90,920
Paving and Allowance Subtotal:					\$ 280,336
Mobilization:					5% \$ 14,017
Construction Contingency:					15% \$ 42,050
Construction Cost TOTAL:					\$ 323,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 323,000
Engineering/Survey/Testing:		20%	\$ 64,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 387,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.	E-6
Name:	Wilmeth Rd. (12)	This project consists of the construction of two additional through lanes within the existing median.		
Limits:	1,340 E. of Redbud Blvd. to 2,005 E. of Redbud Blvd.			
Impact Fee Class:	M6D (1/3)			
Thoroughfare Class:	Major Arterial			
Length (lf):	665			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	2,364	cy	\$ 8.00	\$ 18,916
210	8" Lime Stabilization (with Lime @ 32#/sy)	2,217	sy	\$ 5.00	\$ 11,083
310	8" Concrete Pavement	1,847	sy	\$ 36.00	\$ 66,500
410	4" Topsoil	296	sy	\$ 2.80	\$ 828
510	6" Curb & Gutter	1,330	lf	\$ 4.00	\$ 5,320
610	Allotment for Turn Lanes and Median Openings	479	sy	\$ 36.00	\$ 17,230
Paving Construction Cost Subtotal:					\$ 119,876
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	5,994	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	5,994	
√ Pavement Markings/Markers		3%	\$	3,596	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	4,795	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 20,379
Paving and Allowance Subtotal:					\$ 140,255
Mobilization:					5% \$ 7,013
Construction Contingency:					15% \$ 21,038
Construction Cost TOTAL:					\$ 162,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 162,000
Engineering/Survey/Testing:		20%	\$ 32,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 194,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	E-7
Name:	Wilmeth Rd. (13)	This project consists of the widening of an existing two-lane concrete facility into a six-lane divided major arterial.		
Limits:	2,005 E. of Redbud Blvd.to SH 5			
Impact Fee Class:	M6D (2/3)			
Thoroughfare Class:	Major Arterial			
Length (lf):	2,720			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	21,760	cy	\$ 8.00	\$ 174,080
208	8" Lime Stabilization (with Lime @ 32#/sy)	15,867	sy	\$ 5.00	\$ 79,333
308	8" Concrete Pavement	14,960	sy	\$ 36.00	\$ 538,560
408	4" Topsoil	8,613	sy	\$ 2.80	\$ 24,117
508	6" Curb & Gutter	8,160	lf	\$ 4.00	\$ 32,640
608	Allotment for Turn Lanes and Median Openings	1,958	sy	\$ 36.00	\$ 70,473
Paving Construction Cost Subtotal:					\$ 919,203
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	45,960	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	45,960	
√ Pavement Markings/Markers		3%	\$	27,576	
√ Roadway Drainage	Standard Internal System	25%	\$	229,801	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	27,576	
√ Sewer	Incidental Adjustments	3%	\$	27,576	
√ Establish Turf / Erosion Control		4%	\$	36,768	
√ Illumination	Standard Illumination System	6%	\$	55,152	
Other:					
Allowance Subtotal:					\$ 496,370
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,415,573
Mobilization:					5% \$ 70,779
Construction Contingency:					15% \$ 212,336
Construction Cost TOTAL:					\$ 1,628,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,628,000
Engineering/Survey/Testing:		20%	\$ 325,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 325,600
Impact Fee Project Cost TOTAL:			\$ 2,279,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.	E-8
Name:	Wilmeth Rd. (14)	This project consists of the construction of a new six-lane divided major arterial that will connect Wilmeth Rd. to McIntyre Rd.		
Limits:	SH 5 to McIntyre Rd. (CCR 274)			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	2,085			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	23,167	cy	\$ 8.00	\$ 185,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	18,070	sy	\$ 5.00	\$ 90,350
307	8" Concrete Pavement	17,143	sy	\$ 36.00	\$ 617,160
407	4" Topsoil	8,803	sy	\$ 2.80	\$ 24,649
507	6" Curb & Gutter	8,340	lf	\$ 4.00	\$ 33,360
607	Allotment for Turn Lanes and Median Openings	1,501	sy	\$ 36.00	\$ 54,020
Paving Construction Cost Subtotal:					\$ 1,004,873
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	30,146	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	30,146	
√ Roadway Drainage	Standard Internal System	25%	\$	251,218	
√ Special Drainage Structures	Minor Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	30,146	
√ Sewer	Incidental Adjustments	3%	\$	30,146	
√ Establish Turf / Erosion Control		4%	\$	40,195	
√ Illumination	Standard Illumination System	6%	\$	60,292	
Other:					
Allowance Subtotal:					\$ 722,290
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,727,163
Mobilization:					5% \$ 86,358
Construction Contingency:					15% \$ 259,075
Construction Cost TOTAL:					\$ 1,987,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,987,000
Engineering/Survey/Testing:		20%	\$ 397,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 695,450
Impact Fee Project Cost TOTAL:			\$ 3,079,850

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	E-9
Name:	Wilmeth Rd. (15)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial.		
Limits:	1,610' E. of SH 5 to RR tracks			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	1,355			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	15,056	cy	\$ 8.00	\$ 120,444
207	8" Lime Stabilization (with Lime @ 32#/sy)	11,743	sy	\$ 5.00	\$ 58,717
307	8" Concrete Pavement	11,141	sy	\$ 36.00	\$ 401,080
407	4" Topsoil	5,721	sy	\$ 2.80	\$ 16,019
507	6" Curb & Gutter	5,420	lf	\$ 4.00	\$ 21,680
607	Allotment for Turn Lanes and Median Openings	975	sy	\$ 36.00	\$ 35,107
Paving Construction Cost Subtotal:					\$ 653,047
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	32,652	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	32,652	
√ Pavement Markings/Markers		3%	\$	19,591	
√ Roadway Drainage	Standard Internal System	25%	\$	163,262	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	19,591	
√ Sewer	Incidental Adjustments	3%	\$	19,591	
√ Establish Turf / Erosion Control		4%	\$	26,122	
√ Illumination	Standard Illumination System	6%	\$	39,183	
Other:	Railroad Crossing (Grade Separated)	\$2,500,000	\$	2,500,000	
Allowance Subtotal:					\$ 2,852,645
Paving and Allowance Subtotal:					\$ 3,505,692
Mobilization:					5% \$ 175,285
Construction Contingency:					15% \$ 525,854
Construction Cost TOTAL:					\$ 4,032,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,032,000
Engineering/Survey/Testing:		20%	\$ 806,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 806,400
Impact Fee Project Cost TOTAL:			\$ 5,644,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	E-10
Name:	Wilmeth Rd. (16)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.		
Limits:	RR tracks to 1,230' E. of the RR tracks (E. City Limits)			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	1,230			
Service Area(s):	E, Half			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	13,667	cy	\$ 8.00	\$ 109,333
207	8" Lime Stabilization (with Lime @ 32#/sy)	10,660	sy	\$ 5.00	\$ 53,300
307	8" Concrete Pavement	10,113	sy	\$ 36.00	\$ 364,080
407	4" Topsoil	5,193	sy	\$ 2.80	\$ 14,541
507	6" Curb & Gutter	4,920	lf	\$ 4.00	\$ 19,680
607	Allotment for Turn Lanes and Median Openings	885	sy	\$ 36.00	\$ 31,868

Paving Construction Cost Subtotal: \$ 592,803

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 29,640
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 29,640
√ Pavement Markings/Markers		3%	\$ 17,784
√ Roadway Drainage	Standard Internal System	25%	\$ 148,201
√ Special Drainage Structures	Trinity River Floodplain		\$ 1,260,000
√ Water	Incidental Adjustments	3%	\$ 17,784
√ Sewer	Incidental Adjustments	3%	\$ 17,784
√ Establish Turf / Erosion Control		4%	\$ 23,712
√ Illumination	Standard Illumination System	6%	\$ 35,568
Other:	Railroad Crossing (Grade Separated)		\$ 2,500,000

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 4,080,114

Paving and Allowance Subtotal: \$ 4,672,916

Mobilization: 5% \$ 233,646

Construction Contingency: 15% \$ 700,937

Construction Cost TOTAL: \$ 5,374,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,374,000
Engineering/Survey/Testing:		20%	\$ 1,074,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 1,074,800

Impact Fee Project Cost TOTAL: \$ 7,523,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Wilmeth Rd. (17)/ CCR 331	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	E-11
Limits:	265' E. of CCR 335 to FM 2933		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,465		
Service Area(s):	E, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	16,278	cy	\$ 8.00	\$ 130,222
207	8" Lime Stabilization (with Lime @ 32#/sy)	12,697	sy	\$ 5.00	\$ 63,483
307	8" Concrete Pavement	12,046	sy	\$ 36.00	\$ 433,640
407	4" Topsoil	6,186	sy	\$ 2.80	\$ 17,320
507	6" Curb & Gutter	5,860	lf	\$ 4.00	\$ 23,440
607	Allotment for Turn Lanes and Median Openings	1,054	sy	\$ 36.00	\$ 37,957
Paving Construction Cost Subtotal:					\$ 706,062
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	35,303	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	35,303	
√ Pavement Markings/Markers		3%	\$	21,182	
√ Roadway Drainage	Standard Internal System	25%	\$	176,515	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	21,182	
√ Sewer	Incidental Adjustments	3%	\$	21,182	
√ Establish Turf / Erosion Control		4%	\$	28,242	
√ Illumination	Standard Illumination System	6%	\$	42,364	
Other:					
Allowance Subtotal:					\$ 381,273
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,087,335
Mobilization:					5% \$ 54,367
Construction Contingency:					15% \$ 163,100
Construction Cost TOTAL:					\$ 1,251,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,251,000
Engineering/Survey/Testing:		20%	\$ 250,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 250,200
Impact Fee Project Cost TOTAL:			\$ 1,751,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. E-12
Name:	Redbud Blvd. (1)	This project consists of the construction of a new four-lane divided minor arterial connecting Redbud Blvd. to Bloomdale Rd.	
Limits:	Bloomdale Rd. to 1,075' N. of Wilmeth Rd.		
Impact Fee Class:	M4D		
Thoroughfare Class:	Minor Arterial		
Length (lf):	3,435		
Service Area(s):	E		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	29,007	cy	\$ 8.00	\$ 232,053
206	8" Lime Stabilization (with Lime @ 32#/sy)	20,610	sy	\$ 5.00	\$ 103,050
306	8" Concrete Pavement	19,083	sy	\$ 36.00	\$ 687,000
406	4" Topsoil	16,030	sy	\$ 2.80	\$ 44,884
506	6" Curb & Gutter	13,740	lf	\$ 4.00	\$ 54,960
606	Allotment for Turn Lanes and Median Openings	2,472	sy	\$ 36.00	\$ 88,998
Paving Construction Cost Subtotal:					\$ 1,210,945
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	36,328	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	36,328	
√ Roadway Drainage	Standard Internal System	25%	\$	302,736	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	36,328	
√ Sewer	Incidental Adjustments	3%	\$	36,328	
√ Establish Turf / Erosion Control		4%	\$	48,438	
√ Illumination	Standard Illumination System	6%	\$	72,657	
Other:					
Allowance Subtotal:					\$ 569,144
Paving and Allowance Subtotal:					\$ 1,780,089
Mobilization:					5% \$ 89,004
Construction Contingency:					15% \$ 267,013
Construction Cost TOTAL:					\$ 2,048,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,048,000
Engineering/Survey/Testing:		20%	\$ 409,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 716,800
Impact Fee Project Cost TOTAL:			\$ 3,174,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Redbud Blvd. (2)	This project consists of the widening of an existing two-lane concrete facility into a four-lane divided minor arterial.	E-13
Limits:	1,075' N. of Wilmeth Rd. to Wilmeth Rd.		
Impact Fee Class:	M4D (1/2)		
Thoroughfare Class:	Minor Arterial		
Length (lf):	1,075		
Service Area(s):	E		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
112	Unclassified Street Excavation	3,344	cy	\$ 8.00	\$ 26,756
212	8" Lime Stabilization (with Lime @ 32#/sy)	3,225	sy	\$ 5.00	\$ 16,125
312	8" Concrete Pavement	2,986	sy	\$ 36.00	\$ 107,500
412	4" Topsoil	2,747	sy	\$ 2.80	\$ 7,692
512	6" Curb & Gutter	2,150	lf	\$ 4.00	\$ 8,600
612	Allotment for Turn Lanes and Median Openings	387	sy	\$ 36.00	\$ 13,926

Paving Construction Cost Subtotal: \$ 180,599

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 9,030
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 9,030
√ Pavement Markings/Markers		3%	\$ 5,418
√ Roadway Drainage	Standard Internal System	25%	\$ 45,150
√ Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 5,418
√ Sewer	Incidental Adjustments	3%	\$ 5,418
√ Establish Turf / Erosion Control		4%	\$ 7,224
√ Illumination	Standard Illumination System	6%	\$ 10,836
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 97,523

Paving and Allowance Subtotal: \$ 278,122

Mobilization: 5% \$ 13,906

Construction Contingency: 15% \$ 41,718

Construction Cost TOTAL: \$ 320,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 320,000
Engineering/Survey/Testing:		20%	\$ 64,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 64,000

Impact Fee Project Cost TOTAL: \$ 448,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (1)	This project consists of the construction of a new six-lane divided major arterial.	E-14
Limits:	SH 5 to RR tracks (E. City Limits)		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	4,945		
Service Area(s):	E		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	54,944	cy	\$ 8.00	\$ 439,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	42,857	sy	\$ 5.00	\$ 214,283
307	8" Concrete Pavement	40,659	sy	\$ 36.00	\$ 1,463,720
407	4" Topsoil	20,879	sy	\$ 2.80	\$ 58,461
507	6" Curb & Gutter	19,780	lf	\$ 4.00	\$ 79,120
607	Allotment for Turn Lanes and Median Openings	3,559	sy	\$ 36.00	\$ 128,120

Paving Construction Cost Subtotal: \$ 2,383,260

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		3%	\$ 71,498
√ Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 71,498
√ Roadway Drainage	Standard Internal System	25%	\$ 595,815
√ Special Drainage Structures	Two Minor Creek Crossings		\$ 1,373,400
√ Water	Incidental Adjustments	3%	\$ 71,498
√ Sewer	Incidental Adjustments	3%	\$ 71,498
√ Establish Turf / Erosion Control		4%	\$ 95,330
√ Illumination	Standard Illumination System	6%	\$ 142,996
Other:	RR Bridge - Half in Service Area E	\$2,500,000	\$ 2,500,000

**Allowances based on % of Paving Construction Cost Subtotal

Allowance Subtotal: \$ 4,993,532

Paving and Allowance Subtotal: \$ 7,376,793

Mobilization: 5% \$ 368,840

Construction Contingency: 15% \$ 1,106,519

Construction Cost TOTAL: \$ 8,484,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 8,484,000
Engineering/Survey/Testing:		20%	\$ 1,696,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 2,969,400

Impact Fee Project Cost TOTAL: \$ 13,150,200

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	E-15
Name:	Airport Dr. (2)	This project consists of the construction of a new six-lane divided major arterial.		
Limits:	McIntyre Rd. (Future Wilmeth Rd.) to US 380			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	8,365			
Service Area(s):	E			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	92,944	cy	\$ 8.00	\$ 743,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	72,497	sy	\$ 5.00	\$ 362,483
307	8" Concrete Pavement	68,779	sy	\$ 36.00	\$ 2,476,040
407	4" Topsoil	35,319	sy	\$ 2.80	\$ 98,893
507	6" Curb & Gutter	33,460	lf	\$ 4.00	\$ 133,840
607	Allotment for Turn Lanes and Median Openings	6,020	sy	\$ 36.00	\$ 216,730
Paving Construction Cost Subtotal:					\$ 4,031,541
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW	None Anticipated	3%	\$	120,946	
√ Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	120,946	
√ Roadway Drainage		25%	\$	1,007,885	
√ Special Drainage Structures		Three Minor Creek Crossings (major fill)		\$	2,635,000
√ Water	Incidental Adjustments	3%	\$	120,946	
√ Sewer	Incidental Adjustments	3%	\$	120,946	
√ Establish Turf / Erosion Control	Standard Illumination System	4%	\$	161,262	
√ Illumination		6%	\$	241,892	
Other:					
Allowance Subtotal:					\$ 4,529,824
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 8,561,366
Mobilization:					5% \$ 428,068
Construction Contingency:					15% \$ 1,284,205
Construction Cost TOTAL:					\$ 9,846,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 9,846,000
Engineering/Survey/Testing:		20%	\$ 1,969,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 3,446,100
Impact Fee Project Cost TOTAL:			\$ 15,261,300

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

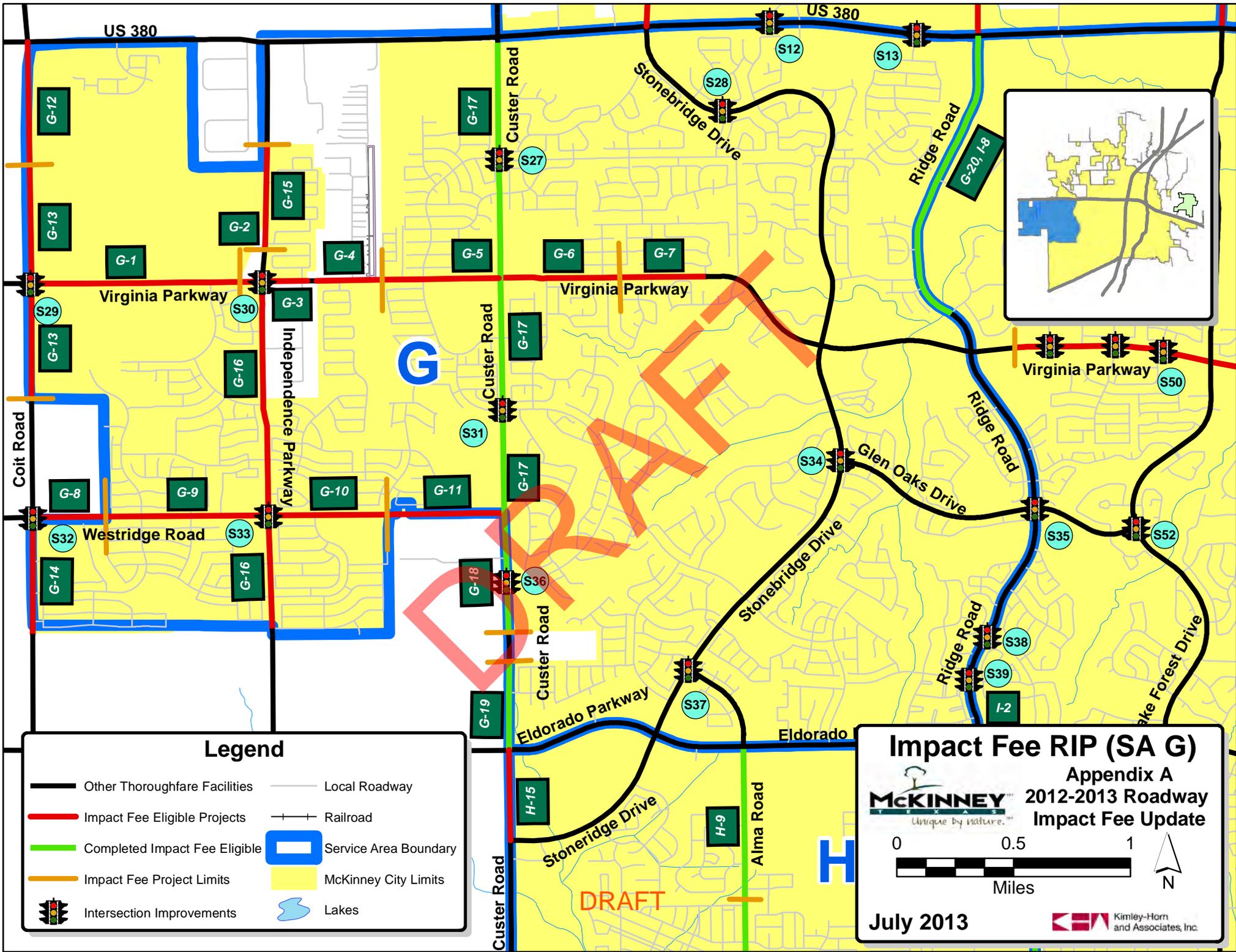
updated: 7/18/2013

Project Information:		Description:	Project No.	E-16
Name:	FM 2933	This project consists of the reconstruction of an existing two-lane asphalt facility to a six-lane divided major arterial. Based on the existing city limits, the eastern half of this roadway is not included in the Impact Fee RIP.		
Limits:	CCR 331 to CCR 335			
Impact Fee Class:	M6D			
Thoroughfare Class:	Major Arterial			
Length (lf):	2,595			
Service Area(s):	E, Half			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	14,417	cy	\$ 9.28	\$ 133,787
207	8" Lime Stabilization (with Lime @ 48#/sy)	22,490	sy	\$ 6.00	\$ 134,940
307	4" TY D HMAC Underlayment	22,490	sy	\$ 3.00	\$ 67,470
407	8" Concrete Pavement	21,337	sy	\$ 40.00	\$ 853,467
507	4" Topsoil	10,957	sy	\$ 4.40	\$ 48,209
607	6" Curb & Gutter	10,380	lf	\$ 12.00	\$ 124,560
707	Allotment for Turn Lanes and Median Openings	1,868	sy	\$ 36.00	\$ 67,234
Paving Construction Cost Subtotal:					\$ 1,429,667
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	42,890	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	42,890	
√ Roadway Drainage	Standard Internal System	25%	\$	357,417	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	42,890	
√ Sewer	Incidental Adjustments	3%	\$	42,890	
√ Establish Turf / Erosion Control		4%	\$	57,187	
√ Illumination	Standard Illumination System	6%	\$	85,780	
Other:					
Allowance Subtotal:					\$ 671,943
Paving and Allowance Subtotal:					\$ 2,101,610
Mobilization:					5% \$ 105,081
Construction Contingency:					15% \$ 315,242
Construction Cost TOTAL:					\$ 2,417,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,417,000
Engineering/Survey/Testing:		20%	\$ 483,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 845,950
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 1,873,175

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The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.



DRAFT

G

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Legend

Other Thoroughfare Facilities	Local Roadway
Impact Fee Eligible Projects	Railroad
Completed Impact Fee Eligible	Service Area Boundary
Impact Fee Project Limits	McKinney City Limits
Intersection Improvements	Lakes

Impact Fee RIP (SA G)
Appendix A
McKINNEY™ 2012-2013 Roadway
Impact Fee Update
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Miles

July 2013

Kimley-Horn and Associates, Inc.

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area G

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
G-1	M6D	Virginia Pkwy. (1)	Coit Rd. to 500' W. of Independence Pkwy.	\$ 5,658,800	100%	\$ 5,658,800
G-2	M6D	Virginia Pkwy. (2)	500' W. of Independence Pkwy. to Independence Pkwy.	\$ 597,800	50%	\$ 298,900
G-3	M6D	Virginia Pkwy. (3)	Independence Pkwy. to 325' E. of Forkhorn Dr.	\$ 1,219,400	50%	\$ 609,700
G-4	M6D (1/3)	Virginia Pkwy. (4)	325' E. of Forkhorn Dr. to 935' W. of Virginia Hills	\$ 675,596	50%	\$ 337,798
G-5	M6D (1/3)	Virginia Pkwy. (5)	935' W. of Virginia Hills to Custer Rd.	\$ 1,205,863	100%	\$ 1,205,863
G-6	M6D (1/3)	Virginia Pkwy. (6)	Custer Dr. to 410' E. of Danbury Dr.	\$ 804,000	100%	\$ 804,000
G-7	M6D (1/6)	Virginia Pkwy. (7)	410' E. of Danbury Dr. to Virginia Parklands Blvd.	\$ 232,800	100%	\$ 232,800
G-8	M6D	Westridge Blvd. (1)	Coit Rd. to 1,650' E. of Coit Rd.	\$ 1,972,600	50%	\$ 986,300
G-9	M6D (1/3)	Westridge Blvd. (2)	1,650' E. of Coit Rd. to Independence Pkwy.	\$ 1,070,400	100%	\$ 1,070,400
G-10	M6D (1/3)	Westridge Blvd. (3)	Independence Pkwy. to Memory Ln.	\$ 782,400	100%	\$ 782,400
G-11	M6D (1/3)	Westridge Blvd. (4)	Memory Ln. to Custer Rd.	\$ 771,600	50%	\$ 385,800
G-12	M6D (1/3)	Coit Rd. (1)	US 380 to 2,780' S. of US 380	\$ 810,000	50%	\$ 405,000
G-13	M6D	Coit Rd. (2)	2,685 N. of Virginia to 2,610 S. of Virginia	\$ 6,328,000	50%	\$ 3,164,000
G-14	M6D (1/3)	Coit Rd. (3)	Westridge Rd. to 270' S. of Calgary Dr.	\$ 768,000	50%	\$ 384,000
G-15	M6D	Independence Pkwy. (1)	3,100' N. of Virginia Pkwy. to 720' N. of Virginia Pkwy.	\$ 3,007,000	100%	\$ 3,007,000
G-16	M6D (1/3)	Independence Pkwy. (2)	Virginia Pkwy. to George Washington Dr. (S. City Limits)	\$ 2,314,250	100%	\$ 2,314,250
G-17	P6D	Custer Rd. (5)	US 380 to Westridge Rd.	\$ 2,653,673	100%	\$ 2,653,673
G-18	P6D	Custer Rd. (6)	Westridge Rd. to 1,110' S. of Cotton Ridge Rd. S	\$ 669,350	50%	\$ 334,675
G-19	P6D	Custer Rd. (7)	705' N. of Fountainview Dr. to Eldorado Pkwy.	\$ 498,266	50%	\$ 249,133
G-20, I-8	G4D	Ridge Rd. (6)	US 380 to Creekside Dr.	\$ 550,813	50%	\$ 275,407
S-12		Signal Installation	Tremont Blvd. & US 380	\$ 215,000	50%	\$ 107,500
S-13		Signal Installation	Forest Ridge Dr. & US 380	\$ 215,000	50%	\$ 107,500
S-27		Signal Installation	Custer Rd. & Bristol Dr.	\$ 215,000	100%	\$ 215,000
S-28		Signal Installation	Stonebridge Dr. & LaCima Dr.	\$ 185,000	100%	\$ 185,000
S-29		Signal Installation	Coit Rd. & Virginia Pkwy.	\$ 200,000	50%	\$ 100,000
S-30		Signal Installation	Independence Pkwy. & Virginia Pkwy.	\$ 200,000	50%	\$ 100,000
S-31		Signal Installation	Custer Rd. & Cotton Ridge Rd. North	\$ 215,000	100%	\$ 215,000
S-32		Signal Installation	Coit Rd. & Westridge Rd.	\$ 200,000	25%	\$ 50,000
S-33		Signal Installation	Independence Pkwy. & Westridge Rd.	\$ 200,000	100%	\$ 200,000
S-34		Signal Installation	Glen Oaks Dr. & Stonebridge Dr.	\$ 185,000	100%	\$ 185,000
S-35		Signal Installation	Ridge Rd. & Glen Oaks Dr.	\$ 185,000	50%	\$ 92,500
S-36		Signal Installation	Custer Rd. & Cotton Ridge Rd. South	\$ 215,000	50%	\$ 107,500
S-37		Signal Installation	Stonebridge Dr. & Alma Dr.	\$ 185,000	100%	\$ 185,000
S-38		Signal Installation	Ridge Rd. & Rush Creek Rd.	\$ 185,000	50%	\$ 92,500
S-39		Signal Installation	Ridge Rd. & Berkshire Rd.	\$ 185,000	50%	\$ 92,500
TOTAL				\$ 35,575,612		\$ 27,194,899

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Virginia Pkwy. (1)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial.	G-1
Limits:	Coit Rd. to 500' W. of Independence Pkwy.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	4,735		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	52,611	cy	\$ 8.00	\$ 420,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	41,037	sy	\$ 5.00	\$ 205,183
307	8" Concrete Pavement	38,932	sy	\$ 36.00	\$ 1,401,560
407	4" Topsoil	19,992	sy	\$ 2.80	\$ 55,978
507	6" Curb & Gutter	18,940	lf	\$ 4.00	\$ 75,760
607	Allotment for Turn Lanes and Median Openings	3,408	sy	\$ 36.00	\$ 122,680
Paving Construction Cost Subtotal:					\$ 2,282,050
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	114,102	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	114,102	
√ Pavement Markings/Markers		3%	\$	68,461	
√ Roadway Drainage	Standard Internal System	25%	\$	570,512	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	68,461	
√ Sewer	Incidental Adjustments	3%	\$	68,461	
√ Establish Turf / Erosion Control		4%	\$	91,282	
√ Illumination	Standard Illumination System	6%	\$	136,923	
Other:					
Allowance Subtotal:					\$ 1,232,307
Paving and Allowance Subtotal:					\$ 3,514,357
Mobilization:					5% \$ 175,718
Construction Contingency:					15% \$ 527,154
Construction Cost TOTAL:					\$ 4,042,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,042,000
Engineering/Survey/Testing:		20%	\$ 808,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 808,400
Impact Fee Project Cost TOTAL:			\$ 5,658,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. G-2
Name:	Virginia Pkwy. (2)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	
Limits:	500' W. of Independence Pkwy. to Independence Pkwy.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	500		
Service Area(s):	G, Half		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	5,556	cy	\$ 8.00	\$ 44,444
207	8" Lime Stabilization (with Lime @ 32#/sy)	4,333	sy	\$ 5.00	\$ 21,667
307	8" Concrete Pavement	4,111	sy	\$ 36.00	\$ 148,000
407	4" Topsoil	2,111	sy	\$ 2.80	\$ 5,911
507	6" Curb & Gutter	2,000	lf	\$ 4.00	\$ 8,000
607	Allotment for Turn Lanes and Median Openings	360	sy	\$ 36.00	\$ 12,955

Paving Construction Cost Subtotal: \$ 240,977

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 12,049
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 12,049
√ Pavement Markings/Markers		3%	\$ 7,229
√ Roadway Drainage	Standard Internal System	25%	\$ 60,244
√ Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 7,229
√ Sewer	Incidental Adjustments	3%	\$ 7,229
√ Establish Turf / Erosion Control		4%	\$ 9,639
√ Illumination	Standard Illumination System	6%	\$ 14,459
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 130,127

Paving and Allowance Subtotal: \$ 371,104

Mobilization: 5% \$ 18,555

Construction Contingency: 15% \$ 55,666

Construction Cost TOTAL: \$ 427,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 427,000
Engineering/Survey/Testing:		20%	\$ 85,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 85,400
Impact Fee Project Cost TOTAL:			\$ 597,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-3
Name:	Virginia Pkwy. (3)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial. Based on the existing city limits, the southern half of this roadway is not included in the Impact Fee RIP.	
Limits:	Independence Pkwy. to 325' E. of Forkhorn Dr.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,020		
Service Area(s):	G, Half		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
107	Unclassified Street Excavation	11,333	cy	\$ 90,667
207	8" Lime Stabilization (with Lime @ 32#/sy)	8,840	sy	\$ 44,200
307	8" Concrete Pavement	8,387	sy	\$ 301,920
407	4" Topsoil	4,307	sy	\$ 12,059
507	6" Curb & Gutter	4,080	lf	\$ 16,320
607	Allotment for Turn Lanes and Median Openings	734	sy	\$ 26,427
Paving Construction Cost Subtotal:				\$ 491,593
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Prep ROW		5%	\$ 24,580	
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 24,580	
√ Pavement Markings/Markers		3%	\$ 14,748	
√ Roadway Drainage	Standard Internal System	25%	\$ 122,898	
Special Drainage Structures	None Anticipated	0%	\$ -	
√ Water	Incidental Adjustments	3%	\$ 14,748	
√ Sewer	Incidental Adjustments	3%	\$ 14,748	
√ Establish Turf / Erosion Control		4%	\$ 19,664	
√ Illumination	Standard Illumination System	6%	\$ 29,496	
Other:				
		Allowance Subtotal:	\$ 265,460	
Paving and Allowance Subtotal:				\$ 757,053
Mobilization:				5% \$ 37,853
Construction Contingency:				15% \$ 113,558
Construction Cost TOTAL:				\$ 871,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 871,000
Engineering/Survey/Testing:		20%	\$ 174,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 174,200
Impact Fee Project Cost TOTAL:			\$ 1,219,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-4
Name:	Virginia Pkwy. (4)	<p>This project consists of the construction of two additional through lanes within the existing median. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP. The City contributed \$244,796 between 2008 - 2012.</p>	
Limits:	325' E. of Forkhorn Dr. to 935' W. of Virginia Hills		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,480		
Service Area(s):	G, Half		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	5,262	cy	\$ 8.00	\$ 42,098
210	8" Lime Stabilization (with Lime @ 32#/sy)	4,933	sy	\$ 5.00	\$ 24,667
310	8" Concrete Pavement	4,111	sy	\$ 36.00	\$ 148,000
410	4" Topsoil	658	sy	\$ 2.80	\$ 1,842
510	6" Curb & Gutter	2,960	lf	\$ 4.00	\$ 11,840
610	Allotment for Turn Lanes and Median Openings	1,065	sy	\$ 36.00	\$ 38,345

Paving Construction Cost Subtotal: \$ 266,792

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 13,340
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 13,340
√ Pavement Markings/Markers		3%	\$ 8,004
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	0%	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Establish Turf / Erosion Control		4%	\$ 10,672
Illumination	None Anticipated	0%	\$ -
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 45,355

Paving and Allowance Subtotal: \$ 312,146

Mobilization: 5% \$ 15,607

Construction Contingency: 15% \$ 46,822

Construction Cost TOTAL: \$ 359,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 359,000
Engineering/Survey/Testing:		20%	\$ 71,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 244,796
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -

Impact Fee Project Cost TOTAL: \$ 675,596

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-5
Name:	Virginia Pkwy. (5)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$436,663 in between 2008 - 2012.	
Limits:	935' W. of Virginia Hills to Custer Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,640		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,387	cy	\$ 8.00	\$ 75,093
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,800	sy	\$ 5.00	\$ 44,000
310	8" Concrete Pavement	7,333	sy	\$ 36.00	\$ 264,000
410	4" Topsoil	1,173	sy	\$ 2.80	\$ 3,285
510	6" Curb & Gutter	5,280	lf	\$ 4.00	\$ 21,120
610	Allotment for Turn Lanes and Median Openings	1,900	sy	\$ 36.00	\$ 68,400
Paving Construction Cost Subtotal:					\$ 475,899
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	23,795	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,795	
√ Pavement Markings/Markers		3%	\$	14,277	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	19,036	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 80,903
Paving and Allowance Subtotal:					\$ 556,801
Mobilization:					5% \$ 27,840
Construction Contingency:					15% \$ 83,520
Construction Cost TOTAL:					\$ 641,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 641,000
Engineering/Survey/Testing:		20%	\$ 128,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 436,663
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,205,863

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Virginia Pkwy. (6)	This project consists of the construction of two additional through lanes within the existing median.	G-6
Limits:	Custer Dr. to 410' E. of Danbury Dr.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,760		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,813	cy	\$ 8.00	\$ 78,507
210	8" Lime Stabilization (with Lime @ 32#/sy)	9,200	sy	\$ 5.00	\$ 46,000
310	8" Concrete Pavement	7,667	sy	\$ 36.00	\$ 276,000
410	4" Topsoil	1,227	sy	\$ 2.80	\$ 3,435
510	6" Curb & Gutter	5,520	lf	\$ 4.00	\$ 22,080
610	Allotment for Turn Lanes and Median Openings	1,986	sy	\$ 36.00	\$ 71,509
Paving Construction Cost Subtotal:					\$ 497,530
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	24,877	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	24,877	
√ Pavement Markings/Markers		3%	\$	14,926	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	19,901	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 84,580
Paving and Allowance Subtotal:					\$ 582,111
Mobilization:					5% \$ 29,106
Construction Contingency:					15% \$ 87,317
Construction Cost TOTAL:					\$ 670,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 670,000
Engineering/Survey/Testing:		20%	\$ 134,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 804,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-7
Name:	Virginia Pkwy. (7)	This project consists of the construction of one additional through lanes within the existing median.	
Limits:	410' E. of Danbury Dr. to Virginia Parklands Blvd.		
Impact Fee Class:	M6D (1/6)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,915		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
116	Unclassified Street Excavation	2,979	cy	\$ 8.00	\$ 23,831
216	8" Lime Stabilization (with Lime @ 32#/sy)	2,873	sy	\$ 5.00	\$ 14,363
316	8" Concrete Pavement	2,660	sy	\$ 36.00	\$ 95,750
416	4" Topsoil	851	sy	\$ 2.80	\$ 2,383
516	6" Curb & Gutter	1,915	lf	\$ 4.00	\$ 7,660
Paving Construction Cost Subtotal:					\$ 143,987
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	7,199	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	7,199	
√ Pavement Markings/Markers		3%	\$	4,320	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	5,759	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 24,478
Paving and Allowance Subtotal:					\$ 168,464
Mobilization:					5% \$ 8,423
Construction Contingency:					15% \$ 25,270
Construction Cost TOTAL:					\$ 194,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 194,000
Engineering/Survey/Testing:		20%	\$ 38,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 232,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-8
Name:	Westridge Blvd. (1)	This project consists of construction of a new six-lane divided major arterial. Based on the existing city limits, the northern half of this roadway is not included in the Impact Fee RIP.	
Limits:	Coit Rd. to 1,650' E. of Coit Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,650		
Service Area(s):	G, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	18,333	cy	\$ 8.00	\$ 146,667
207	8" Lime Stabilization (with Lime @ 32#/sy)	14,300	sy	\$ 5.00	\$ 71,500
307	8" Concrete Pavement	13,567	sy	\$ 36.00	\$ 488,400
407	4" Topsoil	6,967	sy	\$ 2.80	\$ 19,507
507	6" Curb & Gutter	6,600	lf	\$ 4.00	\$ 26,400
607	Allotment for Turn Lanes and Median Openings	1,188	sy	\$ 36.00	\$ 42,750
Paving Construction Cost Subtotal:					\$ 795,223
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	39,761	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	39,761	
√ Pavement Markings/Markers		3%	\$	23,857	
√ Roadway Drainage	Standard Internal System	25%	\$	198,806	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	23,857	
√ Sewer	Incidental Adjustments	3%	\$	23,857	
√ Establish Turf / Erosion Control		4%	\$	31,809	
√ Illumination	Standard Illumination System	6%	\$	47,713	
Other:					
Allowance Subtotal:					\$ 429,421
Paving and Allowance Subtotal:					\$ 1,224,644
Mobilization:					5% \$ 61,232
Construction Contingency:					15% \$ 183,697
Construction Cost TOTAL:					\$ 1,409,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,409,000
Engineering/Survey/Testing:		20%	\$ 281,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 281,800
Impact Fee Project Cost TOTAL:			\$ 1,972,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. G-9
Name:	Westridge Blvd. (2)	This project consists of the construction of two additional through lanes within the existing median.	
Limits:	1,650' E. of Coit Rd. to Independence Pkwy.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,675		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	13,067	cy	\$ 8.00	\$ 104,533
210	8" Lime Stabilization (with Lime @ 32#/sy)	12,250	sy	\$ 5.00	\$ 61,250
310	8" Concrete Pavement	10,208	sy	\$ 36.00	\$ 367,500
410	4" Topsoil	1,633	sy	\$ 2.80	\$ 4,573
510	6" Curb & Gutter	7,350	lf	\$ 4.00	\$ 29,400
610	Allotment for Turn Lanes and Median Openings	2,645	sy	\$ 36.00	\$ 95,216
Paving Construction Cost Subtotal:					\$ 662,473
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	33,124	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	33,124	
√ Pavement Markings/Markers		3%	\$	19,874	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	26,499	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 112,620
Paving and Allowance Subtotal:					\$ 775,093
Mobilization:					5% \$ 38,755
Construction Contingency:					15% \$ 116,264
Construction Cost TOTAL:					\$ 892,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 892,000
Engineering/Survey/Testing:		20%	\$ 178,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,070,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Westridge Blvd. (3)	This project consists of the construction of two additional through lanes within the existing median.	G-10
Limits:	Independence Pkwy. to Memory Ln.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,685		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,547	cy	\$ 8.00	\$ 76,373
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,950	sy	\$ 5.00	\$ 44,750
310	8" Concrete Pavement	7,458	sy	\$ 36.00	\$ 268,500
410	4" Topsoil	1,193	sy	\$ 2.80	\$ 3,341
510	6" Curb & Gutter	5,370	lf	\$ 4.00	\$ 21,480
610	Allotment for Turn Lanes and Median Openings	1,932	sy	\$ 36.00	\$ 69,566
Paving Construction Cost Subtotal:					\$ 484,011
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	24,201	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	24,201	
√ Pavement Markings/Markers		3%	\$	14,520	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	19,360	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 82,282
Paving and Allowance Subtotal:					\$ 566,292
Mobilization:					5% \$ 28,315
Construction Contingency:					15% \$ 84,944
Construction Cost TOTAL:					\$ 652,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 652,000
Engineering/Survey/Testing:		20%	\$ 130,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 782,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. G-11
Name:	Westridge Blvd. (4)	This project consists of widening the existing two-lane concrete facility into a six-lane divided major arterial. Based on the existing city limits, the southern half of this roadway is not included in the Impact Fee RIP. Note, the costing only includes one additional median lane.	
Limits:	Memory Ln. to Custer Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,650		
Service Area(s):	G, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,422	cy	\$ 8.00	\$ 75,378
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,833	sy	\$ 5.00	\$ 44,167
310	8" Concrete Pavement	7,361	sy	\$ 36.00	\$ 265,000
410	4" Topsoil	1,178	sy	\$ 2.80	\$ 3,298
510	6" Curb & Gutter	5,300	lf	\$ 4.00	\$ 21,200
610	Allotment for Turn Lanes and Median Openings	1,907	sy	\$ 36.00	\$ 68,659
Paving Construction Cost Subtotal:					\$ 477,701
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	23,885	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,885	
√ Pavement Markings/Markers		3%	\$	14,331	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	19,108	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 81,209
Paving and Allowance Subtotal:					\$ 558,911
Mobilization:					5% \$ 27,946
Construction Contingency:					15% \$ 83,837
Construction Cost TOTAL:					\$ 643,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 643,000
Engineering/Survey/Testing:		20%	\$ 128,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 771,600

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. G-12
Name:	Coit Rd. (1)	This project consists of widening the existing two-lane concrete facility into a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP. Note, the costing only includes one additional median lane.	
Limits:	US 380 to 2,780' S. of US 380		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,780		
Service Area(s):	G, Half		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,884	cy	\$ 8.00	\$ 79,076
210	8" Lime Stabilization (with Lime @ 32#/sy)	9,267	sy	\$ 5.00	\$ 46,333
310	8" Concrete Pavement	7,722	sy	\$ 36.00	\$ 278,000
410	4" Topsoil	1,236	sy	\$ 2.80	\$ 3,460
510	6" Curb & Gutter	5,560	lf	\$ 4.00	\$ 22,240
610	Allotment for Turn Lanes and Median Openings	2,001	sy	\$ 36.00	\$ 72,027
Paving Construction Cost Subtotal:					\$ 501,136
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	25,057	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	25,057	
√ Pavement Markings/Markers		3%	\$	15,034	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	20,045	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 85,193
Paving and Allowance Subtotal:					\$ 586,329
Mobilization:					5% \$ 29,316
Construction Contingency:					15% \$ 87,949
Construction Cost TOTAL:					\$ 675,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 675,000
Engineering/Survey/Testing:		20%	\$ 135,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 810,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-13
Name:	Coit Rd. (2)	This project consists of the reconstruction of an existing two-lane gravel facility into a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP.	
Limits:	2,685 N. of Virginia to 2,610 S. of Virginia		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,295		
Service Area(s):	G, Half		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
107	Unclassified Street Excavation	58,833	cy	\$ 470,667
207	8" Lime Stabilization (with Lime @ 32#/sy)	45,890	sy	\$ 229,450
307	8" Concrete Pavement	43,537	sy	\$ 1,567,320
407	4" Topsoil	22,357	sy	\$ 62,599
507	6" Curb & Gutter	21,180	lf	\$ 84,720
607	Allotment for Turn Lanes and Median Openings	3,811	sy	\$ 137,189
Paving Construction Cost Subtotal:				\$ 2,551,944
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Prep ROW		5%	\$ 127,597	
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 127,597	
√ Pavement Markings/Markers		3%	\$ 76,558	
√ Roadway Drainage	Standard Internal System	25%	\$ 637,986	
Special Drainage Structures	None Anticipated	0%	\$ -	
√ Water	Incidental Adjustments	3%	\$ 76,558	
√ Sewer	Incidental Adjustments	3%	\$ 76,558	
√ Establish Turf / Erosion Control		4%	\$ 102,078	
√ Illumination	Standard Illumination System	6%	\$ 153,117	
Other:				
			Allowance Subtotal:	\$ 1,378,050
Paving and Allowance Subtotal:				\$ 3,929,994
Mobilization:				5% \$ 196,500
Construction Contingency:				15% \$ 589,499
Construction Cost TOTAL:				\$ 4,520,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,520,000
Engineering/Survey/Testing:		20%	\$ 904,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 904,000
Impact Fee Project Cost TOTAL:			\$ 6,328,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. G-14
Name:	Coit Rd. (3)	<p>This project consists of widening the existing two-lane concrete facility into a six-lane divided major arterial. Based on the existing city limits, the western half of this roadway is not included in the Impact Fee RIP. Note, the costing only includes one additional median lane.</p>	
Limits:	Westridge Rd. to 270' S. of Calgary Dr.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,635		
Service Area(s):	G, Half		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,369	cy	\$ 8.00	\$ 74,951
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,783	sy	\$ 5.00	\$ 43,917
310	8" Concrete Pavement	7,319	sy	\$ 36.00	\$ 263,500
410	4" Topsoil	1,171	sy	\$ 2.80	\$ 3,279
510	6" Curb & Gutter	5,270	lf	\$ 4.00	\$ 21,080
610	Allotment for Turn Lanes and Median Openings	1,896	sy	\$ 36.00	\$ 68,270

Paving Construction Cost Subtotal: \$ 474,997

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 23,750
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 23,750
√ Pavement Markings/Markers		3%	\$ 14,250
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	0%	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Establish Turf / Erosion Control		4%	\$ 19,000
Illumination	None Anticipated	0%	\$ -
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 80,750

Paving and Allowance Subtotal: \$ 555,747

Mobilization: 5% \$ 27,787

Construction Contingency: 15% \$ 83,362

Construction Cost TOTAL: \$ 640,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 640,000
Engineering/Survey/Testing:		20%	\$ 128,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -

Impact Fee Project Cost TOTAL: \$ 768,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. G-15
Name:	Independence Pkwy. (1)	This project consists of the construction of a new six-lane divided major arterial.	
Limits:	3,100' N. of Virginia Pkwy. to 720' N. of Virginia Pkwy.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,380		
Service Area(s):	G		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	26,444	cy	\$ 8.00	\$ 211,556
207	8" Lime Stabilization (with Lime @ 32#/sy)	20,627	sy	\$ 5.00	\$ 103,133
307	8" Concrete Pavement	19,569	sy	\$ 36.00	\$ 704,480
407	4" Topsoil	10,049	sy	\$ 2.80	\$ 28,137
507	6" Curb & Gutter	9,520	lf	\$ 4.00	\$ 38,080
607	Allotment for Turn Lanes and Median Openings	1,713	sy	\$ 36.00	\$ 61,664

Paving Construction Cost Subtotal: \$ 1,147,049

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		3%	\$ 34,411
√ Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 34,411
√ Roadway Drainage	Standard Internal System	25%	\$ 286,762
√ Special Drainage Structures	None Anticipated	0%	\$ -
√ Water	Incidental Adjustments	3%	\$ 34,411
√ Sewer	Incidental Adjustments	3%	\$ 34,411
√ Establish Turf / Erosion Control		4%	\$ 45,882
√ Illumination	Standard Illumination System	6%	\$ 68,823
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 539,113

Paving and Allowance Subtotal: \$ 1,686,163

Mobilization: 5% \$ 84,308

Construction Contingency: 15% \$ 252,924

Construction Cost TOTAL: \$ 1,940,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,940,000
Engineering/Survey/Testing:		20%	\$ 388,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 679,000
Impact Fee Project Cost TOTAL:			\$ 3,007,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. G-16
Name:	Independence Pkwy. (2)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$29,450 in 2009.	
Limits:	Virginia Pkwy. to George Washington Dr. (S. City Limits)		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	7,850		
Service Area(s):	G		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	27,911	cy	\$ 8.00	\$ 223,289
210	8" Lime Stabilization (with Lime @ 32#/sy)	26,167	sy	\$ 5.00	\$ 130,833
310	8" Concrete Pavement	21,806	sy	\$ 36.00	\$ 785,000
410	4" Topsoil	3,489	sy	\$ 2.80	\$ 9,769
510	6" Curb & Gutter	15,700	lf	\$ 4.00	\$ 62,800
610	Allotment for Turn Lanes and Median Openings	5,650	sy	\$ 36.00	\$ 203,386
Paving Construction Cost Subtotal:					\$ 1,415,077

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 70,754
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 70,754
√ Pavement Markings/Markers		3%	\$ 42,452
Roadway Drainage	None Anticipated	0%	-
Special Drainage Structures	None Anticipated	0%	-
Water	None Anticipated	0%	-
Sewer	None Anticipated	0%	-
√ Establish Turf / Erosion Control		4%	\$ 56,603
Illumination	None Anticipated	0%	-
Other:			
		Allowance Subtotal:	\$ 240,563
		Paving and Allowance Subtotal:	\$ 1,655,641
		Mobilization: 5%	\$ 82,782
		Construction Contingency: 15%	\$ 248,346
		Construction Cost TOTAL:	\$ 1,904,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,904,000
Engineering/Survey/Testing:		20%	\$ 380,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	'09 Impact Fee Project G-18		\$ 29,450
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 2,314,250

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Custer Rd. (5)	This completed project consisted of the construction of a six-lane divided principal arterial. From 2008 - 2012, the City contributed \$2,653,673 for the construction of the existing six-lanes.	G-17
Limits:	US 380 to Westridge Rd.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	10,625		
Service Area(s):	G		

Impact Fee Project Cost Summary			
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 2,653,673
Impact Fee Project Cost TOTAL:			\$ 2,653,673

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Custer Rd. (6)	This completed project consisted of the construction of a six-lane divided principal arterial. From 2008 - 2012, the City contributed \$669,350 for the construction of the existing six-lanes.	G-18
Limits:	Westridge Rd. to 1,110' S. of Cotton Ridge Rd. S		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	2,680		
Service Area(s):	G		

Impact Fee Project Cost Summary			
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 669,350
Impact Fee Project Cost TOTAL:			\$ 669,350

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Custer Rd. (7)	This completed project consisted of the construction of a six-lane divided principal arterial. From 2008 - 2012, the City contributed \$498,266 for the construction of the existing six-lanes.	G-19
Limits:	705' N. of Fountainview Dr. to Eldorado Pkwy.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	1,995		
Service Area(s):	G		

Impact Fee Project Cost Summary			
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 498,266
Impact Fee Project Cost TOTAL:			\$ 498,266

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

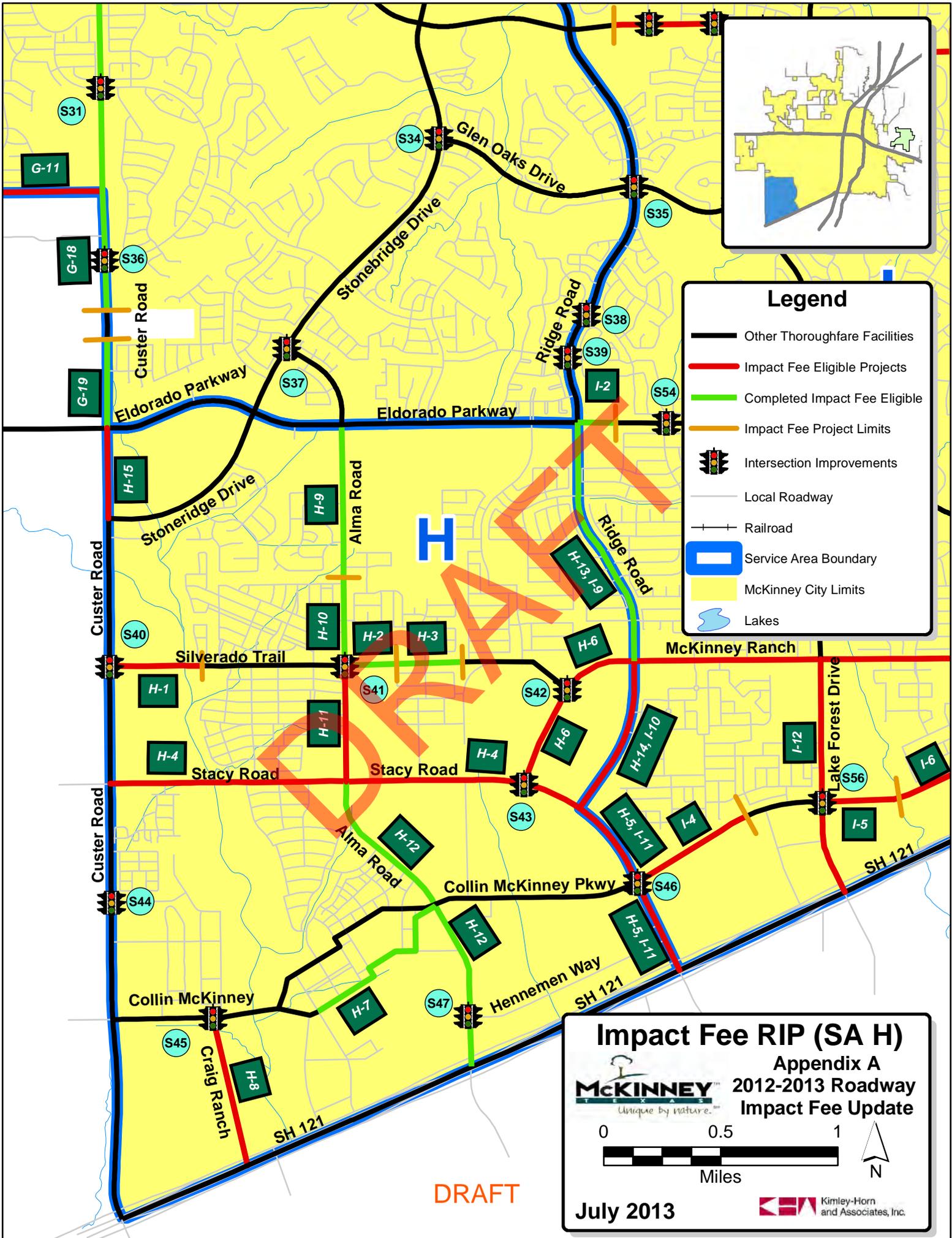
Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (6)	This existing four-lane divided greenway arterial was constructed with cost participation from the City. The City's eligible contribution was \$550,813 in 2010.	G-20, I-8
Limits:	US 380 to Creekside Dr.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	6,880		
Service Area(s):	G,I		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	'10 Impact Fee Project G-22, I-8		\$ 550,813
Impact Fee Project Cost TOTAL:			\$ 550,813

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Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Railroad
- Service Area Boundary
- McKinney City Limits
- Lakes

Impact Fee RIP (SA H)

Appendix A

2012-2013 Roadway Impact Fee Update

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Miles

July 2013

Kimley-Horn and Associates, Inc.

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area H

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
H-1	M4D	Silverado Trl. (1)	Custer Rd. to 100' W. of Amon Carter Dr.	\$ 2,709,400	100%	\$ 2,709,400
H-2	M4D	Silverado Trl. (2)	Alma Rd. to Alfalfa Dr.	\$ 143,311	100%	\$ 143,311
H-3	M4D	Silverado Trl. (3)	Alfalfa Dr. to 145' W. of Ironstone Ln.	\$ 99,386	100%	\$ 99,386
H-4	P6D (1/3)	Stacy Rd. (1)	Custer Rd. to Ridge Rd.	\$ 3,710,457	100%	\$ 3,710,457
H-5, I-11	P6D (1/3)	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	\$ 5,622,280	50%	\$ 2,811,140
H-6	M6D (1/3)	McKinney Ranch Pkwy. (1)	Stacy Rd. to Ridge Rd.	\$ 1,186,800	100%	\$ 1,186,800
H-7	G4D	Collin McKinney Pkwy. (1)	Weiskopf Ave. to Alma (Couplet)	\$ 1,676,564	100%	\$ 1,676,564
H-8	M6D	Craig Ranch Pkwy.	Collin McKinney Pkwy. To SH 121	\$ 4,778,650	100%	\$ 4,778,650
H-9	G4D	Alma Rd. (1)	Eldorado to 805' S. of Beaver Ck.	\$ 191,558	100%	\$ 191,558
H-10	G4D	Alma Rd. (2)	805' S. of Beaver Ck. to Silverado Trl.	\$ 181,098	100%	\$ 181,098
H-11	M6D (1/3)	Alma Rd. (3)	Silverado Trl. to Stacy Rd.	\$ 990,389	100%	\$ 990,389
H-12	M6D	Alma Rd. (4)	Stacy Rd. to SH 121	\$ 588,973	100%	\$ 588,973
H-13, I-9	G4D	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	\$ 187,500	50%	\$ 93,750
H-14, I-10	M6D (1/3)	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	\$ 1,108,000	50%	\$ 554,000
H-15	P6D	Custer Rd. (8)	Eldorado Pkwy. To Stonebridge Dr.	\$ 509,505	50%	\$ 254,753
S-40		Signal Installation	Custer Rd. & Silverado Trl.	\$ 215,000	50%	\$ 107,500
S-41		Signal Installation	Alma Rd. & Silverado Trl.	\$ 200,000	100%	\$ 200,000
S-42		Signal Installation	McKinney Ranch Pkwy. & Silverado Trl.	\$ 200,000	100%	\$ 200,000
S-43		Signal Installation	McKinney Ranch Pkwy. & Stacy Rd.	\$ 215,000	100%	\$ 215,000
S-44		Signal Installation	Custer Rd. & Paradise Dr.	\$ 215,000	50%	\$ 107,500
S-45		Signal Installation	Collin McKinney Pkwy. & Craig Ranch Pkwy.	\$ 200,000	100%	\$ 200,000
S-46		Signal Installation	Collin McKinney Pkwy. & Stacy Rd.	\$ 215,000	50%	\$ 107,500
S-47		Signal Installation	Alma Rd. & Hennemen Way	\$ 215,000	100%	\$ 215,000
TOTAL				\$ 25,358,871		\$ 21,322,729

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Silverado Trl. (1)	This project consists of the construction of a new four-lane divided minor arterial including a new bridge over Rowlett Creek.	H-1
Limits:	Custer Rd. to 100' W. of Amon Carter Dr.		
Impact Fee Class:	M4D		
Thoroughfare Class:	Minor Arterial		
Length (lf):	2,090		
Service Area(s):	H		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	17,649	cy	\$ 8.00	\$ 141,191
206	8" Lime Stabilization (with Lime @ 32#/sy)	12,540	sy	\$ 5.00	\$ 62,700
306	8" Concrete Pavement	11,611	sy	\$ 36.00	\$ 418,000
406	4" Topsoil	9,753	sy	\$ 2.80	\$ 27,309
506	6" Curb & Gutter	8,360	lf	\$ 4.00	\$ 33,440
606	Allotment for Turn Lanes and Median Openings	1,504	sy	\$ 36.00	\$ 54,150
Paving Construction Cost Subtotal:					\$ 736,790
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	22,104	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	22,104	
√ Roadway Drainage	Standard Internal System	25%	\$	184,198	
√ Special Drainage Structures	Bridge over Rowlett Creek		\$	436,800	
√ Water	Incidental Adjustments	3%	\$	22,104	
√ Sewer	Incidental Adjustments	3%	\$	22,104	
√ Establish Turf / Erosion Control		4%	\$	29,472	
√ Illumination	Standard Illumination System	6%	\$	44,207	
Other:					
Allowance Subtotal:					\$ 783,092
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,519,882
Mobilization:					5% \$ 75,994
Construction Contingency:					15% \$ 227,982
Construction Cost TOTAL:					\$ 1,748,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,748,000
Engineering/Survey/Testing:		20%	\$ 349,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 611,800
Impact Fee Project Cost TOTAL:			\$ 2,709,400

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	H-2
Name:	Silverado Trl. (2)	This completed project consists of the construction of a four-lane divided minor arterial. The City contributed \$143,311 of eligible funds in 2012.		
Limits:	Alma Rd. to Alfalfa Dr.			
Impact Fee Class:	M4D			
Thoroughfare Class:	Minor Arterial			
Length (lf):	1,170			
Service Area(s):	H			

Impact Fee Project Cost Summary			
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 143,311
Impact Fee Project Cost TOTAL:			\$ 143,311

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Silverado Trl. (3)	This completed project consists of the construction of a four-lane divided minor arterial. The City contributed \$99,386 between 2003 - 2008 for the construction of the original two lanes.	H-3
Limits:	Alfalfa Dr. to 145' W. of Ironstone Ln.		
Impact Fee Class:	M4D		
Thoroughfare Class:	Minor Arterial		
Length (lf):	1,490		
Service Area(s):	H		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-5		\$ 99,386
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 99,386

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.	H-4
Name:	Stacy Rd. (1)	This project consists of the construction of two additional through lanes within the existing median. The City contributed approximately \$228,057 between 2003 - 2008 for the construction of the original four-lane section.		
Limits:	Custer Rd. to Ridge Rd.			
Impact Fee Class:	P6D (1/3)			
Thoroughfare Class:	Principal Arterial			
Length (lf):	10,715			
Service Area(s):	H			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
113	Unclassified Street Excavation	38,098	cy	\$ 8.00	\$ 304,782
213	8" Lime Stabilization (with Lime @ 32#/sy)	35,717	sy	\$ 5.00	\$ 178,583
313	10" Concrete Pavement	29,764	sy	\$ 42.00	\$ 1,250,083
413	4" Topsoil	4,762	sy	\$ 2.80	\$ 13,334
513	6" Curb & Gutter	21,430	lf	\$ 4.00	\$ 85,720
613	Allotment for Turn Lanes and Median Openings	7,712	sy	\$ 42.00	\$ 323,885
Paving Construction Cost Subtotal:					\$ 2,156,388
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	107,819	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	107,819	
√ Pavement Markings/Markers		3%	\$	64,692	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	86,256	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 366,586
Paving and Allowance Subtotal:					\$ 2,522,974
Mobilization:					5% \$ 126,149
Construction Contingency:					15% \$ 378,446
Construction Cost TOTAL:					\$ 2,902,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,902,000
Engineering/Survey/Testing:		20%	\$ 580,400
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-8		\$ 228,057
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 3,710,457

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Stacy Rd. (2)	This project consists of the construction of two additional through lanes within the existing median. The City contributed approximately \$4,146,280 between 2003-2008 for the construction of the original four-lane section.	H-5, I-11
Limits:	Ridge Rd. to SH 121 (S. City Limits)		
Impact Fee Class:	P6D (1/3)		
Thoroughfare Class:	Principal Arterial		
Length (lf):	4,350		
Service Area(s):	H, I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
113	Unclassified Street Excavation	15,467	cy	\$ 8.00	\$ 123,733
213	8" Lime Stabilization (with Lime @ 32#/sy)	14,500	sy	\$ 5.00	\$ 72,500
313	10" Concrete Pavement	12,083	sy	\$ 42.00	\$ 507,500
413	4" Topsoil	1,933	sy	\$ 2.80	\$ 5,413
513	6" Curb & Gutter	8,700	lf	\$ 4.00	\$ 34,800
613	Allotment for Turn Lanes and Median Openings	3,131	sy	\$ 42.00	\$ 131,489
Paving Construction Cost Subtotal:					\$ 875,435
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	43,772	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	43,772	
√ Pavement Markings/Markers		3%	\$	26,263	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	35,017	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 148,824
Paving and Allowance Subtotal:					\$ 1,024,259
Mobilization:					5% \$ 51,213
Construction Contingency:					15% \$ 153,639
Construction Cost TOTAL:					\$ 1,230,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,230,000
Engineering/Survey/Testing:		20%	\$ 246,000
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-10, I-10		\$ 4,146,280
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 5,622,280

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	McKinney Ranch Pkwy. (1)	This project consists of the construction of two additional through lanes within the existing median.	H-6
Limits:	Stacy Rd. to Ridge Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	4,075		
Service Area(s):	H		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	14,489	cy	\$ 8.00	\$ 115,911
210	8" Lime Stabilization (with Lime @ 32#/sy)	13,583	sy	\$ 5.00	\$ 67,917
310	8" Concrete Pavement	11,319	sy	\$ 36.00	\$ 407,500
410	4" Topsoil	1,811	sy	\$ 2.80	\$ 5,071
510	6" Curb & Gutter	8,150	lf	\$ 4.00	\$ 32,600
610	Allotment for Turn Lanes and Median Openings	2,933	sy	\$ 36.00	\$ 105,580

Paving Construction Cost Subtotal: \$ 734,578

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 36,729
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 36,729
√ Pavement Markings/Markers		3%	\$ 22,037
Roadway Drainage	None Anticipated	0%	-
Special Drainage Structures	None Anticipated	0%	-
Water	None Anticipated	0%	-
Sewer	None Anticipated	0%	-
√ Establish Turf / Erosion Control		4%	\$ 29,383
Illumination	None Anticipated	0%	-
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 124,878

Paving and Allowance Subtotal: \$ 859,457

Mobilization: 5% \$ 42,973

Construction Contingency: 15% \$ 128,919

Construction Cost TOTAL: \$ 989,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 989,000
Engineering/Survey/Testing:		20%	\$ 197,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,186,800

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.	H-7
Name:	Collin McKinney Pkwy. (1)	This existing couplet was constructed by a developer with cost participation from the City. Developer constructed all of the northern half of the couplet and approximately 20% of the southern half of the couplet. The City's contribution was \$1,676,564 between 2003 - 2008.		
Limits:	Weiskopf Ave. to Alma (Couplet)			
Impact Fee Class:	G4D			
Thoroughfare Class:	Greenway Arterial			
Length (lf):	4,160			
Service Area(s):	H			

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-11		\$ 1,676,564
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 1,676,564

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Craig Ranch Pkwy.	This project consists of the construction of a new six-lane divided major arterial.	H-8
Limits:	Collin McKinney Pkwy. To SH 121		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,430		
Service Area(s):	H		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	38,111	cy	\$ 8.00	\$ 304,889
207	8" Lime Stabilization (with Lime @ 32#/sy)	29,727	sy	\$ 5.00	\$ 148,633
307	8" Concrete Pavement	28,202	sy	\$ 36.00	\$ 1,015,280
407	4" Topsoil	14,482	sy	\$ 2.80	\$ 40,550
507	6" Curb & Gutter	13,720	lf	\$ 4.00	\$ 54,880
607	Allotment for Turn Lanes and Median Openings	2,469	sy	\$ 36.00	\$ 88,868
Paving Construction Cost Subtotal:					\$ 1,653,101
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	49,593	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	49,593	
√ Roadway Drainage	Standard Internal System	25%	\$	413,275	
√ Special Drainage Structures	Minor Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	49,593	
√ Sewer	Incidental Adjustments	3%	\$	49,593	
√ Establish Turf / Erosion Control		4%	\$	66,124	
√ Illumination	Standard Illumination System	6%	\$	99,186	
Other:					
Allowance Subtotal:					\$ 1,026,957
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,680,058
Mobilization:					5% \$ 134,003
Construction Contingency:					15% \$ 402,009
Construction Cost TOTAL:					\$ 3,083,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,083,000
Engineering/Survey/Testing:		20%	\$ 616,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,079,050
Impact Fee Project Cost TOTAL:			\$ 4,778,650

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Alma Rd. (1)	The existing four-lane divided greenway arterial was constructed by a developer with cost participation from the City. The City's contribution was \$191,558 between 2003 - 2008.	H-9
Limits:	Eldorado to 805' S. of Beaver Ck.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	3,460		
Service Area(s):	H		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-13		\$ 191,558
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 191,558

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Alma Rd. (2)	This completed project consists of the construction of four-lane divided greenway arterial. The City's contribution was \$181,098 between 2008 - 2012.	H-10
Limits:	805' S. of Beaver Ck. to Silverado Trl.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	2,005		
Service Area(s):	H		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	'08-'12 Impact Fee Project H-10		\$ 181,098
Impact Fee Project Cost TOTAL:			\$ 181,098

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Alma Rd. (3)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$234,389 between 2008 - 2012.	H-11
Limits:	Silverado Trl. to Stacy Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,595		
Service Area(s):	H		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,227	cy	\$ 8.00	\$ 73,813
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,650	sy	\$ 5.00	\$ 43,250
310	8" Concrete Pavement	7,208	sy	\$ 36.00	\$ 259,500
410	4" Topsoil	1,153	sy	\$ 2.80	\$ 3,229
510	6" Curb & Gutter	5,190	lf	\$ 4.00	\$ 20,760
610	Allotment for Turn Lanes and Median Openings	1,868	sy	\$ 36.00	\$ 67,234
Paving Construction Cost Subtotal:					\$ 467,787
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	23,389	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,389	
√ Pavement Markings/Markers		3%	\$	14,034	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	18,711	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 79,524
Paving and Allowance Subtotal:					\$ 547,311
Mobilization:					5% \$ 27,366
Construction Contingency:					15% \$ 82,097
Construction Cost TOTAL:					\$ 630,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 630,000
Engineering/Survey/Testing:		20%	\$ 126,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 234,389
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 990,389

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Alma Rd. (4)	This existing six-lane divided major arterial was constructed by a developer with cost participation from the City. The City's contribution was \$588,973 between 2003 - 2008.	H-12
Limits:	Stacy Rd. to SH 121		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	7,440		
Service Area(s):	H		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'03-'08 Impact Fee Project H-16		\$ 588,973
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 588,973

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The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (7)	This existing four-lane divided greenway arterial was constructed by a developer with cost participation from the City. The City's contribution between 2003-2008 was \$187,500.	H-13, I-9
Limits:	Eldorado Pkwy. to McKinney Ranch Pkwy.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	5,705		
Service Area(s):	H,I		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-17, I-13		\$ 187,500
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 187,500

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. H-14, I-10
Name:	Ridge Rd. (8)	This project consists of the construction of two additional through lanes within the existing median.	
Limits:	McKinney Ranch Pkwy. to Stacy Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,645		
Service Area(s):	H,I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	12,960	cy	\$ 8.00	\$ 103,680
210	8" Lime Stabilization (with Lime @ 32#/sy)	12,150	sy	\$ 5.00	\$ 60,750
310	8" Concrete Pavement	10,125	sy	\$ 36.00	\$ 364,500
410	4" Topsoil	1,620	sy	\$ 2.80	\$ 4,536
510	6" Curb & Gutter	7,290	lf	\$ 4.00	\$ 29,160
610	Allotment for Turn Lanes and Median Openings	2,623	sy	\$ 36.00	\$ 94,439
Paving Construction Cost Subtotal:					\$ 657,065
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	32,853	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	32,853	
√ Pavement Markings/Markers		3%	\$	19,712	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	26,283	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 111,701
Paving and Allowance Subtotal:					\$ 768,766
Mobilization:					5% \$ 38,438
Construction Contingency:					15% \$ 115,315
Construction Cost TOTAL:					\$ 923,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 923,000
Engineering/Survey/Testing:		20%	\$ 184,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,108,000

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 The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

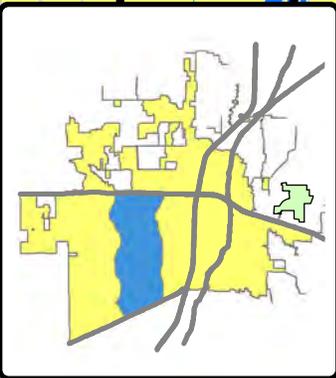
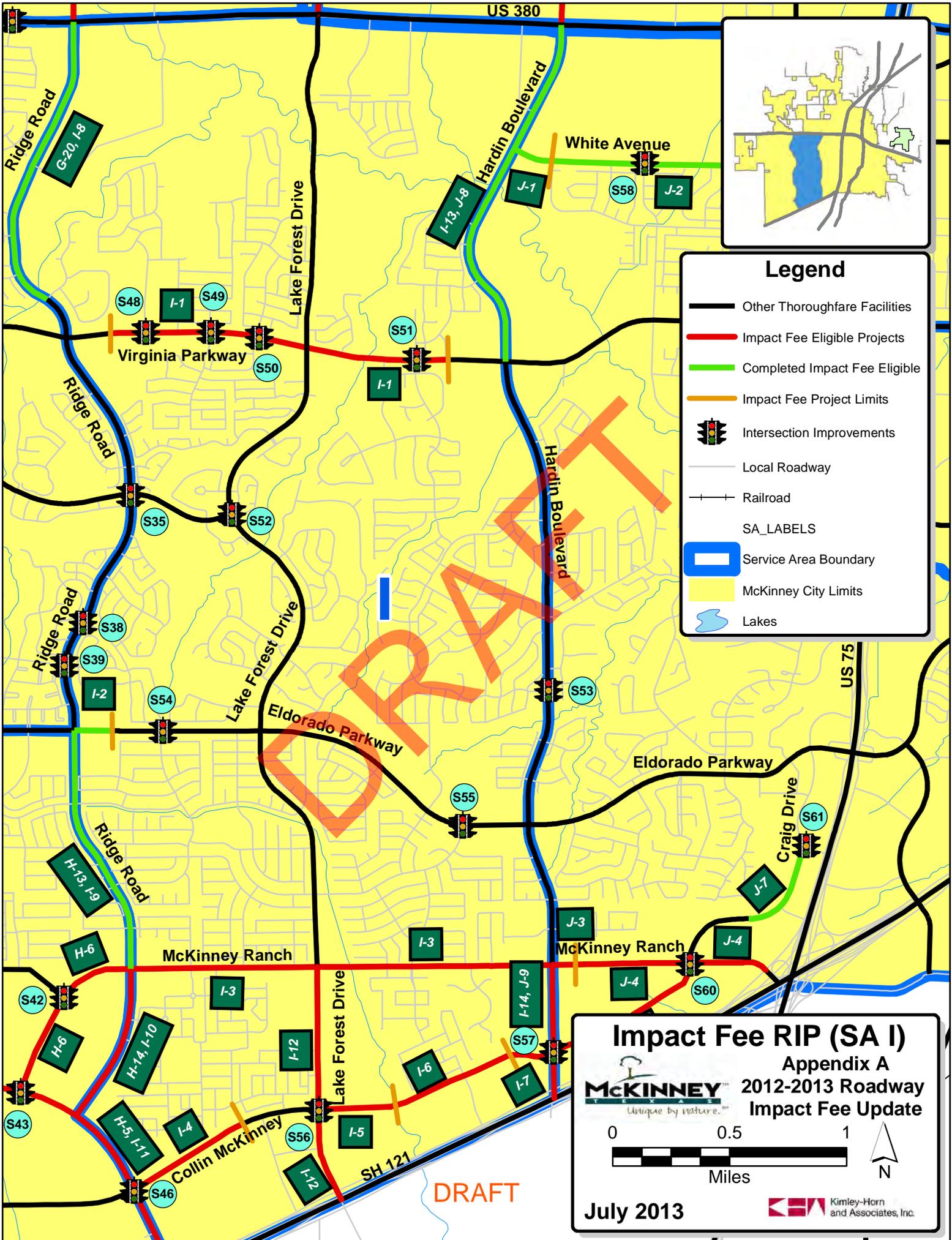
Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Custer Rd. (8)	This completed project consisted of the construction of a six-lane divided principal arterial. From 2008 - 2012, the City contributed \$509,505 for the construction of the existing six-lanes.	H-15
Limits:	Eldorado Pkwy. To Stonebridge Dr.		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	2,040		
Service Area(s):	H		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ 509,505
Impact Fee Project Cost TOTAL:			\$ 509,505

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 The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

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Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Railroad
- SA_LABELS
- Service Area Boundary
- McKinney City Limits
- Lakes

Impact Fee RIP (SA I)

Appendix A

2012-2013 Roadway Impact Fee Update

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Miles

July 2013

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area I

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
I-1	M6D (1/3)	Virginia Pkwy. (8)	1,035' E. of Ridge Rd. to 1,355' W. of Hardin Blvd.	\$ 2,308,000	100%	\$ 2,308,000
I-2	G4D	Eldorado Pkwy. (1)	Ridge Rd. to 850' E. of Ridge Rd.	\$ 213,745	100%	\$ 213,745
I-3	M6D (1/3)	McKinney Ranch Pkwy. (2)	Ridge Rd. to Hardin Blvd.	\$ 10,004,688	100%	\$ 10,004,688
I-4	G4D	Collin McKinney Pkwy. (2)	Stacy Rd. to Village Park	\$ 2,973,000	100%	\$ 2,973,000
I-5	G4D	Collin McKinney Pkwy. (3)	Lake Forest Dr. to Cottonwood Creek	\$ 1,694,000	100%	\$ 1,694,000
I-6	G4D (1/2)	Collin McKinney Pkwy. (4)	Cottonwood Creek to 1,110' E. of Tina	\$ 1,903,419	100%	\$ 1,903,419
I-7	G4D	Collin McKinney Pkwy. (5)	1,110' E. of Tina to Hardin Blvd.	\$ 1,051,000	100%	\$ 1,051,000
G-20, I-8	G4D	Ridge Rd. (6)	US 380 to Creekside Dr.	\$ 550,813	50%	\$ 275,407
H-13, I-9	G4D	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	\$ 187,500	50%	\$ 93,750
H-14, I-10	M6D (1/3)	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	\$ 1,108,000	50%	\$ 554,000
H-5, I-11	P6D (1/3)	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	\$ 5,622,280	50%	\$ 2,811,140
I-12	M6D (1/3)	Lake Forest Dr. (4)	McKinney Ranch Pkwy. to SH 121	\$ 1,628,000	100%	\$ 1,628,000
I-13, J-8	G4D	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	\$ 8,352,097	50%	\$ 4,176,049
I-14, J-9	M6D (1/3)	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	\$ 914,000	50%	\$ 457,000
S-35		Signal Installation	Ridge Rd. & Glen Oaks Dr.	\$ 185,000	50%	\$ 92,500
S-38		Signal Installation	Ridge Rd. & Rush Creek Rd.	\$ 185,000	50%	\$ 92,500
S-39		Signal Installation	Ridge Rd. & Berkshire Rd.	\$ 185,000	50%	\$ 92,500
S-46		Signal Installation	Collin McKinney Pkwy. & Stacy Rd.	\$ 215,000	50%	\$ 107,500
S-48		Signal Installation	Virginia Pkwy. & Joplin Dr.	\$ 215,000	100%	\$ 215,000
S-49		Signal Installation	Virginia Pkwy. & Crutcher Crossing	\$ 215,000	100%	\$ 215,000
S-50		Signal Installation	Virginia Pkwy. & Village Dr.	\$ 215,000	100%	\$ 215,000
S-51		Signal Installation	Virginia Pkwy. & Mallard Lakes Dr.	\$ 215,000	100%	\$ 215,000
S-52		Signal Installation	Lake Forest Dr. & Glen Oaks Dr.	\$ 185,000	100%	\$ 185,000
S-53		Signal Installation	Hardin Blvd. & Maverick Trl.	\$ 185,000	50%	\$ 92,500
S-54		Signal Installation	Eldorado Pkwy. & Woodson Dr.	\$ 185,000	100%	\$ 185,000
S-55		Signal Installation	Eldorado Pkwy. & Highlands Dr.	\$ 185,000	100%	\$ 185,000
S-56		Signal Installation	Lake Forest Dr. & Collin McKinney Pkwy.	\$ 200,000	100%	\$ 200,000
S-57		Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.	\$ 200,000	50%	\$ 100,000
TOTAL				\$ 41,280,542		\$ 32,335,697

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Virginia Pkwy. (8)	This project consists of the construction of two additional through lanes within the existing median.	I-1
Limits:	1,035' E. of Ridge Rd. to 1,355' W. of Hardin Blvd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	7,595		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	27,004	cy	\$ 8.00	\$ 216,036
210	8" Lime Stabilization (with Lime @ 32#/sy)	25,317	sy	\$ 5.00	\$ 126,583
310	8" Concrete Pavement	21,097	sy	\$ 36.00	\$ 759,500
410	4" Topsoil	3,376	sy	\$ 2.80	\$ 9,452
510	6" Curb & Gutter	15,190	lf	\$ 4.00	\$ 60,760
610	Allotment for Turn Lanes and Median Openings	5,466	sy	\$ 36.00	\$ 196,780
Paving Construction Cost Subtotal:					\$ 1,369,110
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	68,455	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	68,455	
√ Pavement Markings/Markers		3%	\$	41,073	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	54,764	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 232,749
Paving and Allowance Subtotal:					\$ 1,601,859
Mobilization:					5% \$ 80,093
Construction Contingency:					15% \$ 240,279
Construction Cost TOTAL:					\$ 1,923,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,923,000
Engineering/Survey/Testing:		20%	\$ 384,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 2,308,000

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 The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Eldorado Pkwy. (1)	This existing four-lane divided greenway arterial was constructed by a developer with cost participation from the City. The City's contribution between 2003-2008 was \$213,745.	I-2
Limits:	Ridge Rd. to 850' E. of Ridge Rd.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	850		
Service Area(s):	I		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project I-4		\$ 213,745
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 213,745

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 The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. I-3
Name:	McKinney Ranch Pkwy. (2)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$7,111,488 between 2003-2008 for the construction of the original four-lane section.	
Limits:	Ridge Rd. to Hardin Blvd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	9,525		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	33,867	cy	\$ 8.00	\$ 270,933
210	8" Lime Stabilization (with Lime @ 32#/sy)	31,750	sy	\$ 5.00	\$ 158,750
310	8" Concrete Pavement	26,458	sy	\$ 36.00	\$ 952,500
410	4" Topsoil	4,233	sy	\$ 2.80	\$ 11,853
510	6" Curb & Gutter	19,050	lf	\$ 4.00	\$ 76,200
610	Allotment for Turn Lanes and Median Openings	6,855	sy	\$ 36.00	\$ 246,784
Paving Construction Cost Subtotal:					\$ 1,717,021
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	85,851	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	85,851	
√ Pavement Markings/Markers		3%	\$	51,511	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated -	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	68,681	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 291,894
Paving and Allowance Subtotal:					\$ 2,008,914
Mobilization:					5% \$ 100,446
Construction Contingency:					15% \$ 301,337
Construction Cost TOTAL:					\$ 2,411,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,411,000
Engineering/Survey/Testing:		20%	\$ 482,200
2003 - 2008 City contribution	'07-'08 Impact Fee Project I-5		\$ 7,111,488
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 10,004,688

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Collin McKinney Pkwy. (2)	This project consists of the construction of a new four-lane divided greenway arterial.	I-4
Limits:	Stacy Rd. to Village Park		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	2,860		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	31,778	cy	\$ 8.00	\$ 254,222
204	8" Lime Stabilization (with Lime @ 32#/sy)	17,160	sy	\$ 5.00	\$ 85,800
304	8" Concrete Pavement	15,889	sy	\$ 36.00	\$ 572,000
404	4" Topsoil	19,702	sy	\$ 2.80	\$ 55,166
504	6" Curb & Gutter	11,440	lf	\$ 4.00	\$ 45,760
604	Allotment for Turn Lanes and Median Openings	2,058	sy	\$ 36.00	\$ 74,100
Paving Construction Cost Subtotal:					\$ 1,087,048
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	32,611	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	32,611	
√ Roadway Drainage	Standard Internal System	25%	\$	271,762	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	32,611	
√ Sewer	Incidental Adjustments	3%	\$	32,611	
√ Establish Turf / Erosion Control		4%	\$	43,482	
√ Illumination	Standard Illumination System	6%	\$	65,223	
Other:					
Allowance Subtotal:					\$ 510,913
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,597,961
Mobilization:					5% \$ 79,898
Construction Contingency:					15% \$ 239,694
Construction Cost TOTAL:					\$ 1,918,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,918,000
Engineering/Survey/Testing:		20%	\$ 383,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 671,300
Impact Fee Project Cost TOTAL:			\$ 2,973,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. I-5
Name:	Collin McKinney Pkwy. (3)	This project consists of the construction of a new four-lane divided greenway arterial. (Cottonwood Creek Bridge not included in this section)	
Limits:	Lake Forest Dr. to Cottonwood Creek		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	1,630		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	18,111	cy	\$ 8.00	\$ 144,889
204	8" Lime Stabilization (with Lime @ 32#/sy)	9,780	sy	\$ 5.00	\$ 48,900
304	8" Concrete Pavement	9,056	sy	\$ 36.00	\$ 326,000
404	4" Topsoil	11,229	sy	\$ 2.80	\$ 31,441
504	6" Curb & Gutter	6,520	lf	\$ 4.00	\$ 26,080
604	Allotment for Turn Lanes and Median Openings	1,173	sy	\$ 36.00	\$ 42,232
Paving Construction Cost Subtotal:					\$ 619,542
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	18,586	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	18,586	
√ Roadway Drainage	Standard Internal System	25%	\$	154,885	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	18,586	
√ Sewer	Incidental Adjustments	3%	\$	18,586	
√ Establish Turf / Erosion Control		4%	\$	24,782	
√ Illumination	Standard Illumination System	6%	\$	37,172	
Other:					
Allowance Subtotal:					\$ 291,185
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 910,726
Mobilization:					5% \$ 45,536
Construction Contingency:					15% \$ 136,609
Construction Cost TOTAL:					\$ 1,093,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,093,000
Engineering/Survey/Testing:		20%	\$ 218,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 382,550
Impact Fee Project Cost TOTAL:			\$ 1,694,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Collin McKinney Pkwy. (4)	The project consists of the widening of an existing two-lane concrete facility into a four-lane divided greenway arterial. This includes the two additional bridge lanes over Cottonwood Creek. The City contributed \$250,019 between 2003-2008 for the construction of the original two-lane section.	I-6
Limits:	Cottonwood Creek to 1,110' E. of Tina		
Impact Fee Class:	G4D (1/2)		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	2,910		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	9,053	cy	\$ 8.00	\$ 72,427
205	8" Lime Stabilization (with Lime @ 32#/sy)	8,730	sy	\$ 5.00	\$ 43,650
305	8" Concrete Pavement	8,083	sy	\$ 36.00	\$ 291,000
405	4" Topsoil	3,072	sy	\$ 2.80	\$ 8,601
505	6" Curb & Gutter	5,820	lf	\$ 4.00	\$ 23,280
605	Allotment for Turn Lanes and Median Openings	1,047	sy	\$ 36.00	\$ 37,698
Paving Construction Cost Subtotal:					\$ 476,655
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	23,833	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,833	
√ Pavement Markings/Markers		3%	\$	14,300	
√ Roadway Drainage	Standard Internal System	25%	\$	119,164	
√ Special Drainage Structures	Cottonwood Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	14,300	
√ Sewer	Incidental Adjustments	3%	\$	14,300	
√ Establish Turf / Erosion Control		4%	\$	19,066	
√ Illumination	Standard Illumination System	6%	\$	28,599	
Other:					
Allowance Subtotal:					\$ 507,394
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 984,049
Mobilization:					5% \$ 49,202
Construction Contingency:					15% \$ 147,607
Construction Cost TOTAL:					\$ 1,181,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,181,000
Engineering/Survey/Testing:		20%	\$ 236,200
2003 - 2008 City contribution	'07-'08 Impact Fee Project I-8		\$ 250,019
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 236,200
Impact Fee Project Cost TOTAL:			\$ 1,903,419

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Collin McKinney Pkwy. (5)	This project consists of the construction of a new four-lane divided greenway arterial.	I-7
Limits:	1,110' E. of Tina to Hardin Blvd.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	1,010		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	11,222	cy	\$ 8.00	\$ 89,778
204	8" Lime Stabilization (with Lime @ 32#/sy)	6,060	sy	\$ 5.00	\$ 30,300
304	8" Concrete Pavement	5,611	sy	\$ 36.00	\$ 202,000
404	4" Topsoil	6,958	sy	\$ 2.80	\$ 19,482
504	6" Curb & Gutter	4,040	lf	\$ 4.00	\$ 16,160
604	Allotment for Turn Lanes and Median Openings	727	sy	\$ 36.00	\$ 26,168
Paving Construction Cost Subtotal:					\$ 383,888
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	11,517	
Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	11,517	
√ Roadway Drainage	Standard Internal System	25%	\$	95,972	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	11,517	
√ Sewer	Incidental Adjustments	3%	\$	11,517	
√ Establish Turf / Erosion Control		4%	\$	15,356	
√ Illumination	Standard Illumination System	6%	\$	23,033	
Other:					
Allowance Subtotal:					\$ 180,427
Paving and Allowance Subtotal:					\$ 564,315
Mobilization:					\$ 28,216
Construction Contingency:					\$ 84,647
Construction Cost TOTAL:					\$ 678,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 678,000
Engineering/Survey/Testing:		20%	\$ 135,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 237,300
Impact Fee Project Cost TOTAL:			\$ 1,051,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (6)	This existing four-lane divided greenway arterial was constructed with cost participation from the City. The City's eligible contribution was \$550,813 in 2010.	G-20, I-8
Limits:	US 380 to Creekside Dr.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	6,880		
Service Area(s):	G,I		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	2010 Impact Fee Project G-22, I-8		\$ 550,813
Impact Fee Project Cost TOTAL:			\$ 550,813

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (7)	This existing four-lane divided greenway arterial was constructed by a developer with cost participation from the City. The City's contribution between 2003-2008 was \$187,500.	H-13, I-9
Limits:	Eldorado Pkwy. to McKinney Ranch Pkwy.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	5,705		
Service Area(s):	H,I		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-17, I-13		\$ 187,500
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 187,500

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Ridge Rd. (8)	This project consists of the construction of two additional through lanes within the existing median.	H-14, I-10
Limits:	McKinney Ranch Pkwy. to Stacy Rd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,645		
Service Area(s):	H,I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	12,960	cy	\$ 8.00	\$ 103,680
210	8" Lime Stabilization (with Lime @ 32#/sy)	12,150	sy	\$ 5.00	\$ 60,750
310	8" Concrete Pavement	10,125	sy	\$ 36.00	\$ 364,500
410	4" Topsoil	1,620	sy	\$ 2.80	\$ 4,536
510	6" Curb & Gutter	7,290	lf	\$ 4.00	\$ 29,160
610	Allotment for Turn Lanes and Median Openings	2,623	sy	\$ 36.00	\$ 94,439
Paving Construction Cost Subtotal:					\$ 657,065
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	32,853	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	32,853	
√ Pavement Markings/Markers		3%	\$	19,712	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	26,283	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 111,701
Paving and Allowance Subtotal:					\$ 768,766
Mobilization:					5% \$ 38,438
Construction Contingency:					15% \$ 115,315
Construction Cost TOTAL:					\$ 923,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 923,000
Engineering/Survey/Testing:		20%	\$ 184,600
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,108,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Stacy Rd. (2)	This project consists of the construction of two additional through lanes within the existing median. The City contributed approximately \$4,146,280 between 2003-2008 for the construction of the original four-lane section.	H-5, I-11
Limits:	Ridge Rd. to SH 121 (S. City Limits)		
Impact Fee Class:	P6D (1/3)		
Thoroughfare Class:	Principal Arterial		
Length (lf):	4,350		
Service Area(s):	H, I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
113	Unclassified Street Excavation	15,467	cy	\$ 8.00	\$ 123,733
213	8" Lime Stabilization (with Lime @ 32#/sy)	14,500	sy	\$ 5.00	\$ 72,500
313	10" Concrete Pavement	12,083	sy	\$ 42.00	\$ 507,500
413	4" Topsoil	1,933	sy	\$ 2.80	\$ 5,413
513	6" Curb & Gutter	8,700	lf	\$ 4.00	\$ 34,800
613	Allotment for Turn Lanes and Median Openings	3,131	sy	\$ 42.00	\$ 131,489
Paving Construction Cost Subtotal:					\$ 875,435
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	43,772	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	43,772	
√ Pavement Markings/Markers		3%	\$	26,263	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	35,017	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 148,824
Paving and Allowance Subtotal:					\$ 1,024,259
Mobilization:					5% \$ 51,213
Construction Contingency:					15% \$ 153,639
Construction Cost TOTAL:					\$ 1,230,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,230,000
Engineering/Survey/Testing:		20%	\$ 246,000
2003 - 2008 City contribution	'07-'08 Impact Fee Project H-10, I-10		\$ 4,146,280
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 5,622,280

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Lake Forest Dr. (4)	This project consists of the construction of two additional through lanes within the existing median.	I-12
Limits:	McKinney Ranch Pkwy. to SH 121		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	5,360		
Service Area(s):	I		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	19,058	cy	\$ 8.00	\$ 152,462
210	8" Lime Stabilization (with Lime @ 32#/sy)	17,867	sy	\$ 5.00	\$ 89,333
310	8" Concrete Pavement	14,889	sy	\$ 36.00	\$ 536,000
410	4" Topsoil	2,382	sy	\$ 2.80	\$ 6,670
510	6" Curb & Gutter	10,720	lf	\$ 4.00	\$ 42,880
610	Allotment for Turn Lanes and Median Openings	3,858	sy	\$ 36.00	\$ 138,873
Paving Construction Cost Subtotal:					\$ 966,219
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	48,311	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	48,311	
√ Pavement Markings/Markers		3%	\$	28,987	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	38,649	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 164,257
Paving and Allowance Subtotal:					\$ 1,130,476
Mobilization:					5% \$ 56,524
Construction Contingency:					15% \$ 169,571
Construction Cost TOTAL:					\$ 1,357,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,357,000
Engineering/Survey/Testing:		20%	\$ 271,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,628,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (11)	This existing four-lane divided greenway arterial was constructed with cost participation from the City. The City's contribution was \$8,352,097 in 2010.	I-13, J-8
Limits:	US 380 to Virginia Pkwy.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	8,340		
Service Area(s):	I, J		

Impact Fee Project Cost Summary			
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	2010 Impact Fee Project I-13, J-7		\$ 8,352,097
Impact Fee Project Cost TOTAL:			\$ 8,352,097

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (12)	This project consists of the construction of two additional through lanes within the existing median.	I-14, J-9
Limits:	McKinney Ranch Pkwy. to SH 121		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,010		
Service Area(s):	I, J		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	10,702	cy	\$ 8.00	\$ 85,618
210	8" Lime Stabilization (with Lime @ 32#/sy)	10,033	sy	\$ 5.00	\$ 50,167
310	8" Concrete Pavement	8,361	sy	\$ 36.00	\$ 301,000
410	4" Topsoil	1,338	sy	\$ 2.80	\$ 3,746
510	6" Curb & Gutter	6,020	lf	\$ 4.00	\$ 24,080
610	Allotment for Turn Lanes and Median Openings	2,166	sy	\$ 36.00	\$ 77,986

Paving Construction Cost Subtotal: \$ 542,597

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 27,130
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 27,130
√ Pavement Markings/Markers		3%	\$ 16,278
Roadway Drainage	None Anticipated	0%	-
Special Drainage Structures	None Anticipated	0%	-
Water	None Anticipated	0%	-
Sewer	None Anticipated	0%	-
√ Establish Turf / Erosion Control		4%	\$ 21,704
Illumination	None Anticipated	0%	-
Other:			

**Allowances based on % of Paving Construction Cost Subtotal

Allowance Subtotal: \$ 92,241

Paving and Allowance Subtotal: \$ 634,838

Mobilization: 5% \$ 31,742

Construction Contingency: 15% \$ 95,226

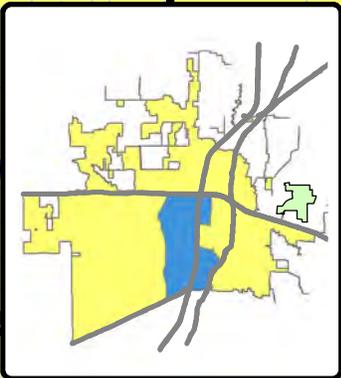
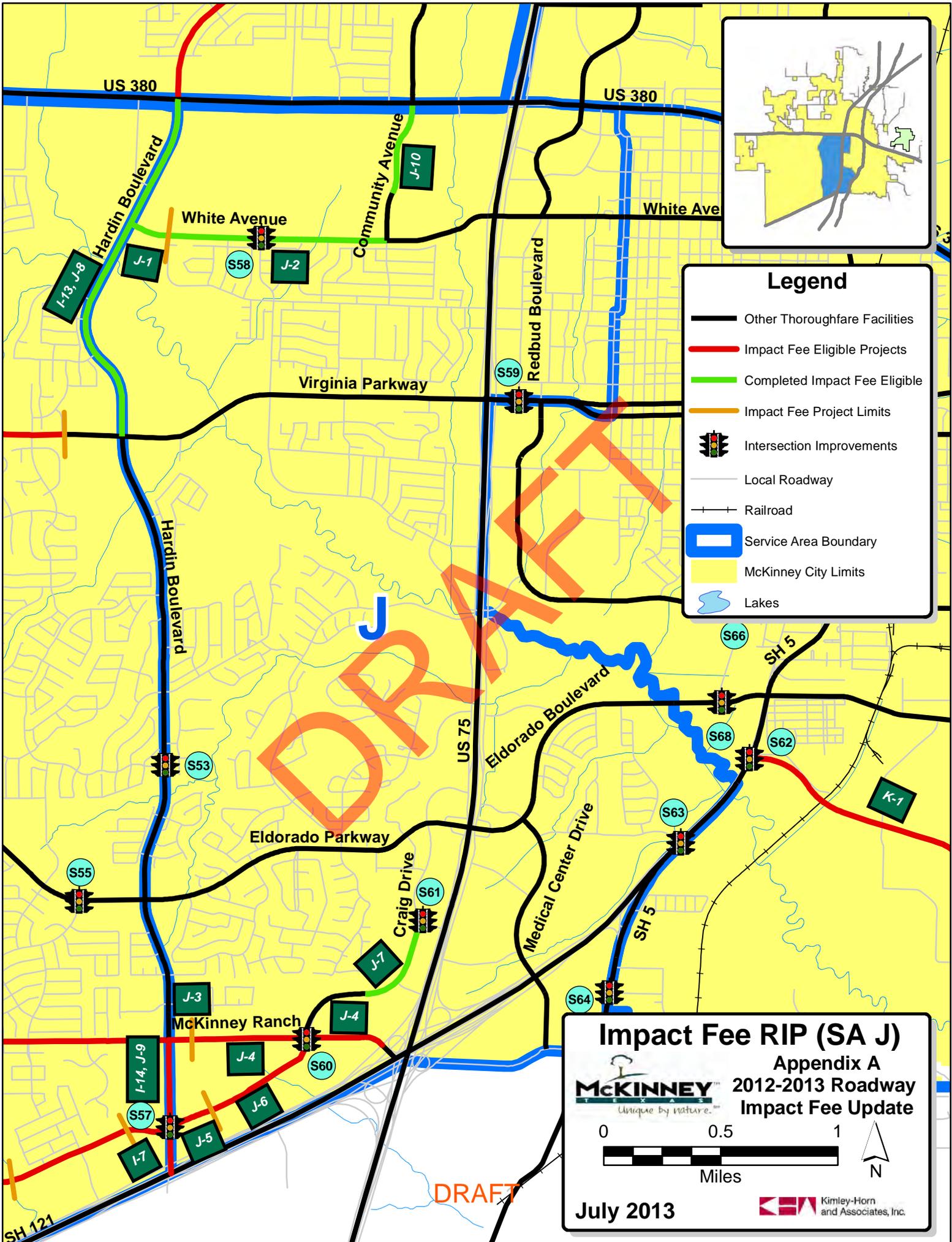
Construction Cost TOTAL: \$ 762,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 762,000
Engineering/Survey/Testing:		20%	\$ 152,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 914,000

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Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Railroad
- Service Area Boundary
- McKinney City Limits
- Lakes

Impact Fee RIP (SA J)

Appendix A

2012-2013 Roadway Impact Fee Update

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July 2013

Kimley-Horn and Associates, Inc.

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area J

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
J-1	M4D	White Ave. (1)	Hardin Blvd. to Bois D'Arc	\$ 981,328	100%	\$ 981,328
J-2	M4D	White Ave. (2)	Bois D'Arc to Community Ave.	\$ 213,991	100%	\$ 213,991
J-3	M6D (1/3)	McKinney Ranch Pkwy. (3)	Hardin Blvd. to 515' E. of Hardin Blvd.	\$ 450,000	100%	\$ 450,000
J-4	M6D	McKinney Ranch Pkwy. (4)	515' E. of Hardin Blvd. to US 75 SBFR	\$ 5,589,000	100%	\$ 5,589,000
J-5	G4D	Collin McKinney Pkwy. (6)	Hardin Blvd. to 1,010' E. of Hardin Blvd.	\$ 1,452,350	100%	\$ 1,452,350
J-6	M4U	Collin McKinney Pkwy. (7)	1,010' E. of Hardin Blvd. to McKinney Ranch Pkwy.	\$ 2,416,450	100%	\$ 2,416,450
J-7	M4U	Collin McKinney Pkwy. (8)	720' W. of Test Dr. to Craig Dr.	\$ 41,575	100%	\$ 41,575
I-13, J-8	G4D	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	\$ 8,352,097	50%	\$ 4,176,049
I-14, J-9	M6D (1/3)	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	\$ 914,000	50%	\$ 457,000
J-10	M4U	Community Ave. (6)	US 380 to 2,120' S. of US 380	\$ 350,000	100%	\$ 350,000
S-53		Signal Installation	Hardin Blvd. & Maverick Trl.	\$ 185,000	50%	\$ 92,500
S-57		Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.	\$ 200,000	50%	\$ 100,000
S-58		Signal Installation	White Ave. & Jordan Rd.	\$ 185,000	100%	\$ 185,000
S-59		Signal Installation	Virginia St. & Redbud Blvd.	\$ 175,000	50%	\$ 87,500
S-60		Signal Installation	Collin McKinney Pkwy. & McKinney Ranch Pkwy.	\$ 200,000	100%	\$ 200,000
S-61		Signal Installation	Collin McKinney Pkwy. & Craig Dr.	\$ 185,000	100%	\$ 185,000
S-63		Signal Installation	SH 5 & Stewart Rd.	\$ 215,000	50%	\$ 107,500
S-64		Signal Installation	SH 5 & Enterprise Dr.	\$ 215,000	50%	\$ 107,500
TOTAL				\$ 21,890,791		\$ 17,192,743

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	White Ave. (1)	This existing four-lane divided minor arterial was constructed by a developer with cost participation from the city. The City's contribution was \$981,328 in 2010.	J-1
Limits:	Hardin Blvd. to Bois D'Arc		
Impact Fee Class:	M4D		
Thoroughfare Class:	Minor Arterial		
Length (lf):	915		
Service Area(s):	J		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	2010 Impact Fee Project J-1		\$ 981,328
Impact Fee Project Cost TOTAL:			\$ 981,328

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	White Ave. (2)	This existing four-lane divided minor arterial was constructed by a developer with cost participation from the city. The City's contribution was \$213,991 in 2010.	J-2
Limits:	Bois D'Arc to Community Ave.		
Impact Fee Class:	M4D		
Thoroughfare Class:	Minor Arterial		
Length (lf):	4,930		
Service Area(s):	J		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	2010 Impact Fee Project J-2		\$ 213,991
Impact Fee Project Cost TOTAL:			\$ 213,991

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. J-3
Name:	McKinney Ranch Pkwy. (3)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$300,000 between 2003 - 2008 for the construction for the original four-land section.	
Limits:	Hardin Blvd. to 515' E. of Hardin Blvd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	515		
Service Area(s):	J		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	1,831	cy	\$ 8.00	\$ 14,649
210	8" Lime Stabilization (with Lime @ 32#/sy)	1,717	sy	\$ 5.00	\$ 8,583
310	8" Concrete Pavement	1,431	sy	\$ 36.00	\$ 51,500
410	4" Topsoil	229	sy	\$ 2.80	\$ 641
510	6" Curb & Gutter	1,030	lf	\$ 4.00	\$ 4,120
610	Allotment for Turn Lanes and Median Openings	371	sy	\$ 36.00	\$ 13,343
Paving Construction Cost Subtotal:					\$ 92,836
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	4,642	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	4,642	
√ Pavement Markings/Markers		3%	\$	2,785	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	3,713	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 15,782
Paving and Allowance Subtotal:					\$ 108,618
Mobilization:					5% \$ 5,431
Construction Contingency:					15% \$ 16,293
Construction Cost TOTAL:					\$ 125,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 125,000
Engineering/Survey/Testing:		20%	\$ 25,000
2003 - 2008 City contribution	'07-'08 Impact Fee Project J-5		\$ 300,000
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 450,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. J-4
Name:	McKinney Ranch Pkwy. (4)	This project consists of the reconstruction of an existing two-lane asphalt facility into a six-lane divided major arterial.	
Limits:	515' E. of Hardin Blvd. to US 75 SBFR		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	4,340		
Service Area(s):	J		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	48,222	cy	\$ 8.00	\$ 385,778
207	8" Lime Stabilization (with Lime @ 32#/sy)	37,613	sy	\$ 5.00	\$ 188,067
307	8" Concrete Pavement	35,684	sy	\$ 36.00	\$ 1,284,640
407	4" Topsoil	18,324	sy	\$ 2.80	\$ 51,308
507	6" Curb & Gutter	17,360	lf	\$ 4.00	\$ 69,440
607	Allotment for Turn Lanes and Median Openings	3,123	sy	\$ 36.00	\$ 112,445
Paving Construction Cost Subtotal:					\$ 2,091,678
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	104,584	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	104,584	
√ Pavement Markings/Markers		3%	\$	62,750	
√ Roadway Drainage	Standard Internal System	25%	\$	522,920	
√ Special Drainage Structures	Minor Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	62,750	
√ Sewer	Incidental Adjustments	3%	\$	62,750	
√ Establish Turf / Erosion Control		4%	\$	83,667	
√ Illumination	Standard Illumination System	6%	\$	125,501	
Other:					
Allowance Subtotal:					\$ 1,379,506
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 3,471,185
Mobilization:					5% \$ 173,559
Construction Contingency:					15% \$ 520,678
Construction Cost TOTAL:					\$ 3,992,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,992,000
Engineering/Survey/Testing:		20%	\$ 798,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 798,400
Impact Fee Project Cost TOTAL:			\$ 5,589,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Collin McKinney Pkwy. (6)	The project consists of the construction of a new four-lane divided greenway arterial.	J-5
Limits:	Hardin Blvd. to 1,010' E. of Hardin Blvd.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	1,010		
Service Area(s):	J		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	11,222	cy	\$ 8.00	\$ 89,778
204	8" Lime Stabilization (with Lime @ 32#/sy)	6,060	sy	\$ 5.00	\$ 30,300
304	8" Concrete Pavement	5,611	sy	\$ 36.00	\$ 202,000
404	4" Topsoil	6,958	sy	\$ 2.80	\$ 19,482
504	6" Curb & Gutter	4,040	lf	\$ 4.00	\$ 16,160
604	Allotment for Turn Lanes and Median Openings	727	sy	\$ 36.00	\$ 26,168
Paving Construction Cost Subtotal:					\$ 383,888
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	11,517	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	11,517	
√ Roadway Drainage	Standard Internal System	25%	\$	95,972	
√ Special Drainage Structures	Minor Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	11,517	
√ Sewer	Incidental Adjustments	3%	\$	11,517	
√ Establish Turf / Erosion Control		4%	\$	15,356	
√ Illumination	Standard Illumination System	6%	\$	23,033	
Other:					
Allowance Subtotal:					\$ 430,427
Paving and Allowance Subtotal:					\$ 814,315
Mobilization:					\$ 40,716
Construction Contingency:					\$ 122,147
Construction Cost TOTAL:					\$ 937,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 937,000
Engineering/Survey/Testing:		20%	\$ 187,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 327,950
Impact Fee Project Cost TOTAL:			\$ 1,452,350

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Collin McKinney Pkwy. (7)	<p>The project consists of the construction of a new four-lane undivided minor arterial.</p>	J-6
Limits:	1,010' E. of Hardin Blvd. to McKinney Ranch Pkwy.		
Impact Fee Class:	M4U		
Thoroughfare Class:	Minor Arterial		
Length (lf):	2,835		
Service Area(s):	J		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	15,120	cy	\$ 8.00	\$ 120,960
202	8" Lime Stabilization (with Lime @ 32#/sy)	14,805	sy	\$ 5.00	\$ 74,025
302	8" Concrete Pavement	14,175	sy	\$ 36.00	\$ 510,300
402	4" Topsoil	8,505	sy	\$ 2.80	\$ 23,814
502	6" Curb & Gutter	5,670	lf	\$ 4.00	\$ 22,680
Paving Construction Cost Subtotal:					\$ 751,779
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	22,553	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	22,553	
√ Roadway Drainage	Standard Internal System	25%	\$	187,945	
√ Special Drainage Structures	Minor Creek Crossing		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	22,553	
√ Sewer	Incidental Adjustments	3%	\$	22,553	
√ Establish Turf / Erosion Control		4%	\$	30,071	
√ Illumination	Standard Illumination System	6%	\$	45,107	
Other:					
Allowance Subtotal:					\$ 603,336
Paving and Allowance Subtotal:					\$ 1,355,115
Mobilization:					\$ 67,756
Construction Contingency:					\$ 203,267
Construction Cost TOTAL:					\$ 1,559,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,559,000
Engineering/Survey/Testing:		20%	\$ 311,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 545,650
Impact Fee Project Cost TOTAL:			\$ 2,416,450

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Collin McKinney Pkwy. (8)	This existing four-lane divided minor arterial was constructed by a developer with cost participation from the city. The City's contribution was \$41,575 between 2003 - 2008.	J-7
Limits:	720' W. of Test Dr. to Craig Dr.		
Impact Fee Class:	M4U		
Thoroughfare Class:	Minor Arterial		
Length (lf):	3,085		
Service Area(s):	J		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project J-9		\$ 41,575
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 41,575

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Hardin Blvd. (11)	This existing four-lane divided greenway arterial was constructed with cost participation from the City. The City's contribution was \$8,352,097 in 2010.	I-13, J-8
Limits:	US 380 to Virginia Pkwy.		
Impact Fee Class:	G4D		
Thoroughfare Class:	Greenway Arterial		
Length (lf):	8,340		
Service Area(s):	I, J		

Impact Fee Project Cost Summary			
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution	2010 Impact Fee Project I-13, J-7		\$ 8,352,097
Impact Fee Project Cost TOTAL:			\$ 8,352,097

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No. I-14, J-9
Name:	Hardin Blvd. (12)	This project consists of the construction of two additional through lanes within the existing median.	
Limits:	McKinney Ranch Pkwy. to SH 121		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,010		
Service Area(s):	I, J		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	10,702	cy	\$ 8.00	\$ 85,618
210	8" Lime Stabilization (with Lime @ 32#/sy)	10,033	sy	\$ 5.00	\$ 50,167
310	8" Concrete Pavement	8,361	sy	\$ 36.00	\$ 301,000
410	4" Topsoil	1,338	sy	\$ 2.80	\$ 3,746
510	6" Curb & Gutter	6,020	lf	\$ 4.00	\$ 24,080
610	Allotment for Turn Lanes and Median Openings	2,166	sy	\$ 36.00	\$ 77,986
Paving Construction Cost Subtotal:					\$ 542,597
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	27,130	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	27,130	
√ Pavement Markings/Markers		3%	\$	16,278	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	21,704	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 92,241
Paving and Allowance Subtotal:					\$ 634,838
Mobilization:					5% \$ 31,742
Construction Contingency:					15% \$ 95,226
Construction Cost TOTAL:					\$ 762,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 762,000
Engineering/Survey/Testing:		20%	\$ 152,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 914,000

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

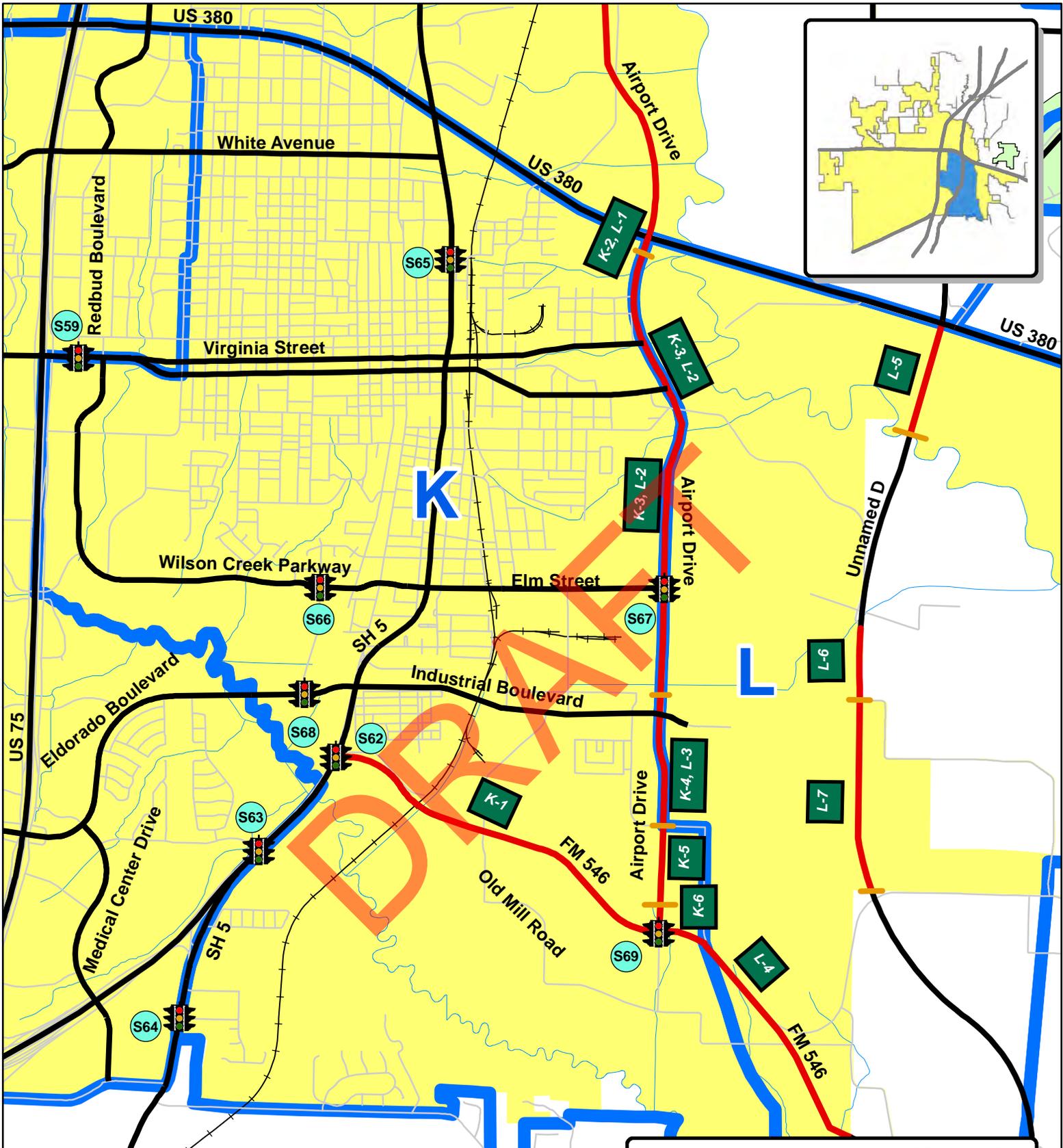
Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Community Ave. (6)	This existing minor arterial was constructed with cost participation from the City. The City's contribution was \$350,000 between 2003 - 2008.	J-10
Limits:	US 380 to 2,120' S. of US 380		
Impact Fee Class:	M4U		
Thoroughfare Class:	Minor Arterial		
Length (lf):	2,120		
Service Area(s):	J		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
2003 - 2008 City contribution	'07-'08 Impact Fee Project J-15		\$ 350,000
2008 - 2012 City contribution			\$ -
Impact Fee Project Cost TOTAL:			\$ 350,000

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Legend

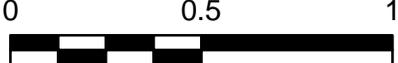
	Other Thoroughfare Facilities		Local Roadway
	Impact Fee Eligible Projects		Railroad
	Completed Impact Fee Eligible		Service Area Boundary
	Impact Fee Project Limits		McKinney City Limits
	Intersection Improvements		Lakes

Impact Fee RIP (SA K)

Appendix A

2012-2013 Roadway Impact Fee Update





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July 2013



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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area K

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
K-1	P6D	FM 546 (1)	SH 5 to Existing FM 546	\$ 10,652,727	100%	\$ 10,652,727
K-2, L-1	M6D (1/3)	Airport Dr. (3)	US 380 to 355' S. of US 380	\$ 190,706	50%	\$ 95,353
K-3, L-2	M6D (1/3)	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	\$ 3,732,544	50%	\$ 1,866,272
K-4, L-3	M6D (1/3)	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	\$ 1,359,687	50%	\$ 679,844
K-5	M6D (1/3)	Airport Dr. (6) / Country Ln.	FM 546 to 2,110' N. of CCR 326	\$ 601,087	100%	\$ 601,087
K-6	M6D	Airport Dr. (7)	2,110' N. of CCR 326 to Old Mill Rd.	\$ 1,036,000	100%	\$ 1,036,000
S-59		Signal Installation	Redbud Blvd. & Virginia St.	\$ 175,000	50%	\$ 87,500
S-62		Signal Installation	SH 5 & Old Mill Rd.	\$ 215,000	100%	\$ 215,000
S-63		Signal Installation	SH 5 & Stewart Rd.	\$ 215,000	50%	\$ 107,500
S-64		Signal Installation	SH 5 & Enterprise Dr.	\$ 215,000	50%	\$ 107,500
S-65		Signal Installation	SH 5 & Smith St.	\$ 215,000	100%	\$ 215,000
S-66		Signal Installation	Wilson Creek Pkwy. & College St.	\$ 185,000	100%	\$ 185,000
S-67		Signal Installation	Airport Dr. & Elm St.	\$ 200,000	50%	\$ 100,000
S-68		Signal Installation	Eldorado Blvd. & College St.	\$ 185,000	100%	\$ 185,000
S-69		Signal Installation	Airport Dr. & FM 546	\$ 215,000	100%	\$ 215,000
TOTAL				\$ 19,392,751		\$ 16,348,782

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	FM 546 (1)	The project consists of the construction of a new six-lane divided principal arterial. The construction cost estimate was provided by the City.	K-1
Limits:	SH 5 to Existing FM 546		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	8,645		
Service Area(s):	K		

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 21,305,453
Engineering/Survey/Testing:			
2003 - 2008 City contribution			
2008 - 2012 City contribution			
ROW/Easement Acquisition:			
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 10,652,727

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (3)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$86,306 for the construction of the original four-lane section between 2003-2008.	K-2, L-1
Limits:	US 380 to 355' S. of US 380		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	355		
Service Area(s):	K,L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	1,262	cy	\$ 8.00	\$ 10,098
210	8" Lime Stabilization (with Lime @ 32#/sy)	1,183	sy	\$ 5.00	\$ 5,917
310	8" Concrete Pavement	986	sy	\$ 36.00	\$ 35,500
410	4" Topsoil	158	sy	\$ 2.80	\$ 442
510	6" Curb & Gutter	710	lf	\$ 4.00	\$ 2,840
610	Allotment for Turn Lanes and Median Openings	255	sy	\$ 36.00	\$ 9,198
Paving Construction Cost Subtotal:					\$ 63,994
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	3,200	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	3,200	
√ Pavement Markings/Markers		3%	\$	1,920	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	2,560	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 10,879
Paving and Allowance Subtotal:					\$ 74,873
Mobilization:					5% \$ 3,744
Construction Contingency:					15% \$ 11,231
Construction Cost TOTAL:					\$ 87,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 87,000
Engineering/Survey/Testing:		20%	\$ 17,400
2003 - 2008 City contribution	'07-'08 Impact Fee Project K-11, L-1		\$ 86,306
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 190,706

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (4)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$1,052,944 for the construction of the original two-lane section between 2003 - 2008.	K-3, L-2
Limits:	355' S. of US 380 to 385' N. of Industrial Blvd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	9,205		
Service Area(s):	K,L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	32,729	cy	\$ 8.00	\$ 261,831
210	8" Lime Stabilization (with Lime @ 32#/sy)	30,683	sy	\$ 5.00	\$ 153,417
310	8" Concrete Pavement	25,569	sy	\$ 36.00	\$ 920,500
410	4" Topsoil	4,091	sy	\$ 2.80	\$ 11,455
510	6" Curb & Gutter	18,410	lf	\$ 4.00	\$ 73,640
610	Allotment for Turn Lanes and Median Openings	6,625	sy	\$ 36.00	\$ 238,493
Paving Construction Cost Subtotal:					\$ 1,659,336
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	82,967	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	82,967	
√ Pavement Markings/Markers		3%	\$	49,780	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	66,373	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 282,087
Paving and Allowance Subtotal:					\$ 1,941,423
Mobilization:					5% \$ 97,071
Construction Contingency:					15% \$ 291,213
Construction Cost TOTAL:					\$ 2,233,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,233,000
Engineering/Survey/Testing:		20%	\$ 446,600
2003 - 2008 City contribution	'07-'08 Impact Fee Project K-12, L-2		\$ 1,052,944
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 3,732,544

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (5) / Country Ln.	This project consists of the construction of two additional through lanes within the existing median. The City contributed approximately \$586,887 for the construction of the original four-lane section between 2003 - 2008.	K-4, L-3
Limits:	385' N. of Industrial Blvd. to FM 546		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,655		
Service Area(s):	K,L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	9,440	cy	\$ 8.00	\$ 75,520
210	8" Lime Stabilization (with Lime @ 32#/sy)	8,850	sy	\$ 5.00	\$ 44,250
310	8" Concrete Pavement	7,375	sy	\$ 36.00	\$ 265,500
410	4" Topsoil	1,180	sy	\$ 2.80	\$ 3,304
510	6" Curb & Gutter	5,310	lf	\$ 4.00	\$ 21,240
610	Allotment for Turn Lanes and Median Openings	1,911	sy	\$ 36.00	\$ 68,789
Paving Construction Cost Subtotal:					\$ 478,603
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	23,930	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,930	
√ Pavement Markings/Markers		3%	\$	14,358	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	19,144	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 81,362
Paving and Allowance Subtotal:					\$ 559,965
Mobilization:					5% \$ 27,998
Construction Contingency:					15% \$ 83,995
Construction Cost TOTAL:					\$ 644,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 644,000
Engineering/Survey/Testing:		20%	\$ 128,800
2003 - 2008 City contribution	'07-'08 Impact Fee Project K-13, L-3		\$ 586,887
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 1,359,687

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (6) / Country Ln.	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$137,887 for the construction of the original four-lane section between 2003 - 2008.	K-5
Limits:	FM 546 to 2,110' N. of CCR 326		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,590		
Service Area(s):	K		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	5,653	cy	\$ 8.00	\$ 45,227
210	8" Lime Stabilization (with Lime @ 32#/sy)	5,300	sy	\$ 5.00	\$ 26,500
310	8" Concrete Pavement	4,417	sy	\$ 36.00	\$ 159,000
410	4" Topsoil	707	sy	\$ 2.80	\$ 1,979
510	6" Curb & Gutter	3,180	lf	\$ 4.00	\$ 12,720
610	Allotment for Turn Lanes and Median Openings	1,144	sy	\$ 36.00	\$ 41,195
Paving Construction Cost Subtotal:					\$ 286,621
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	14,331	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	14,331	
√ Pavement Markings/Markers		3%	\$	8,599	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	11,465	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 48,726
Paving and Allowance Subtotal:					\$ 335,346
Mobilization:					5% \$ 16,767
Construction Contingency:					15% \$ 50,302
Construction Cost TOTAL:					\$ 386,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 386,000
Engineering/Survey/Testing:		20%	\$ 77,200
2003 - 2008 City contribution	'07-'08 Impact Fee Project K-14		\$ 137,887
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 601,087

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (7)	This project consists of the reconstruction of a two-lane asphalt facility (Country Ln.) to a six-lane divided major arterial.	K-6
Limits:	2,110' N. of CCR 326 to Old Mill Rd.		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	530		
Service Area(s):	K		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	5,889	cy	\$ 8.00	\$ 47,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	4,593	sy	\$ 5.00	\$ 22,967
307	8" Concrete Pavement	4,358	sy	\$ 36.00	\$ 156,880
407	4" Topsoil	2,238	sy	\$ 2.80	\$ 6,266
507	6" Curb & Gutter	2,120	lf	\$ 4.00	\$ 8,480
607	Allotment for Turn Lanes and Median Openings	381	sy	\$ 36.00	\$ 13,732

Paving Construction Cost Subtotal: \$ 255,435

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 12,772
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 12,772
√ Pavement Markings/Markers		3%	\$ 7,663
√ Roadway Drainage	Standard Internal System	25%	\$ 63,859
√ Special Drainage Structures	Minor Creek Crossing		\$ 250,000
√ Water	Incidental Adjustments	3%	\$ 7,663
√ Sewer	Incidental Adjustments	3%	\$ 7,663
√ Establish Turf / Erosion Control		4%	\$ 10,217
√ Illumination	Standard Illumination System	6%	\$ 15,326
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 387,935

Paving and Allowance Subtotal: \$ 643,370

Mobilization: 5% \$ 32,169

Construction Contingency: 15% \$ 96,506

Construction Cost TOTAL: \$ 740,000

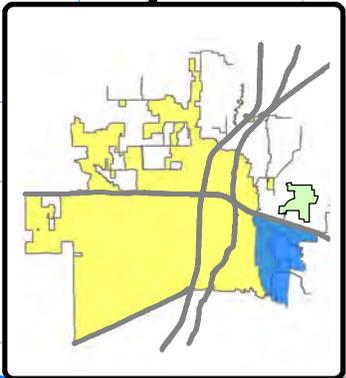
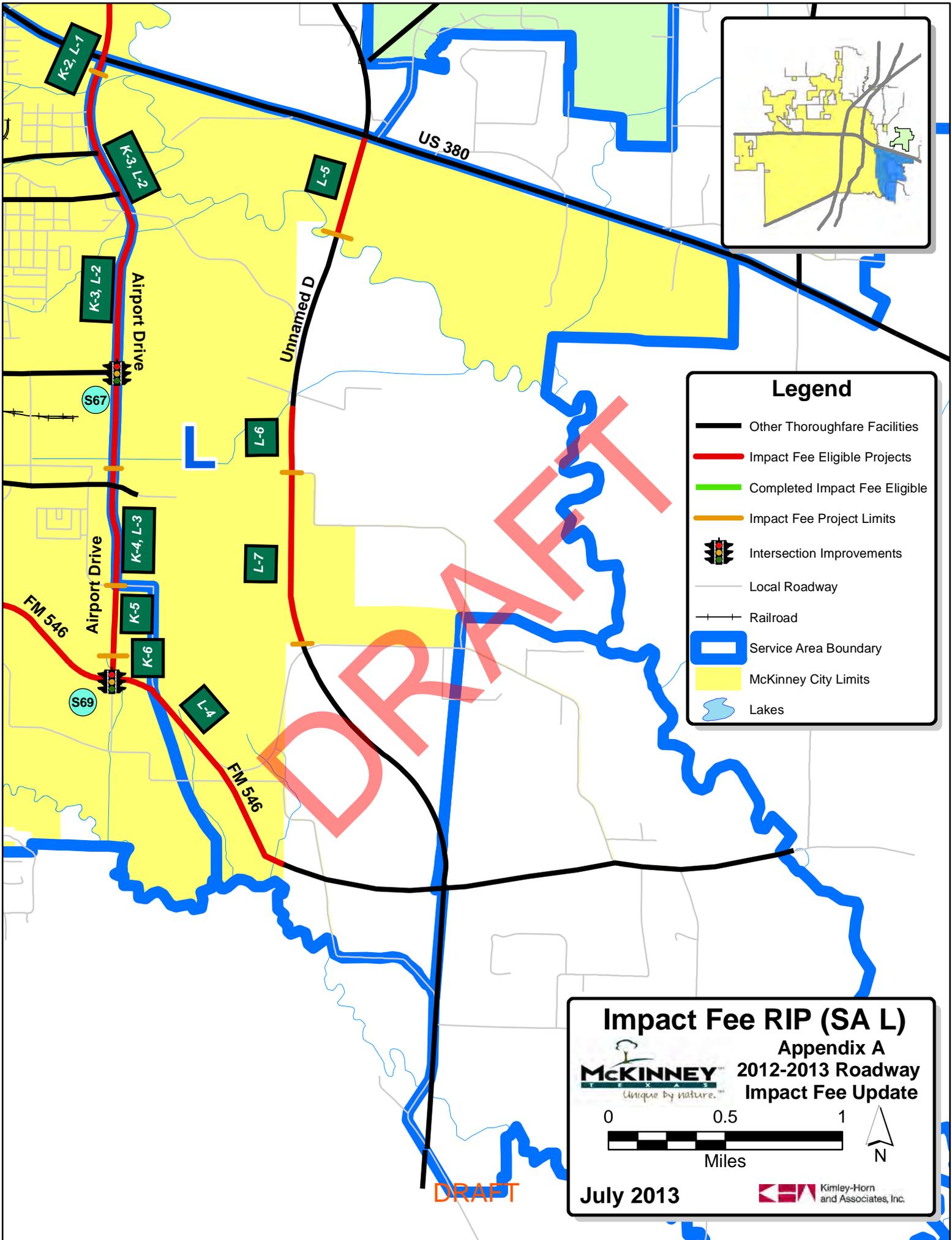
Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 740,000
Engineering/Survey/Testing:		20%	\$ 148,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 148,000

Impact Fee Project Cost TOTAL: \$ 1,036,000

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Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Railroad
- Service Area Boundary
- McKinney City Limits
- Lakes

Impact Fee RIP (SA L)

Appendix A

2012-2013 Roadway Impact Fee Update

0 0.5 1
Miles

July 2013

Unnamed D

US 380

Airport Drive

K-3, L-2

K-3, L-2

S67

K-4, L-3

K-5

K-6

S69

FM 546

K-4, L-3

K-5

K-6

FM 546

L-4

L-6

L-7

L-5

DRAFT

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

Roadway Improvement Plan for Roadway Impact Fees

Appendix A - Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area L

#	Class	Project	Limits	Total Cost	Percent in Service Area	Cost in Service Area
K-2, L-1	M6D (1/3)	Airport Dr. (3)	US 380 to 355' S. of US 380	\$ 190,706	50%	\$ 95,353
K-3, L-2	M6D (1/3)	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	\$ 3,732,544	50%	\$ 1,866,272
K-4, L-3	M6D (1/3)	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	\$ 1,359,687	50%	\$ 679,844
L-4	P6D	FM 546 (2)	Existing FM 546 to E. City Limits	\$ 4,473,300	100%	\$ 4,473,300
L-5	M6D	Unnamed D (1)	US 380 to Trinity River (S. City Limits)	\$ 5,558,300	100%	\$ 5,558,300
L-6	M6D	Unnamed D (2)	CCR 722 to CCR 722 Bend	\$ 1,727,600	50%	\$ 863,800
L-7	M6D	Unnamed D (3)	CCR 722 Bend to FM 546	\$ 4,913,500	100%	\$ 4,913,500
S-67		Signal Installation	Airport Dr. & Wilson Creek Pkwy.	\$ 200,000	50%	\$ 100,000
TOTAL				\$ 22,155,637		\$ 18,550,369

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Airport Dr. (3)	This project consists of the construction of two additional through lanes within the existing median. The City contributed \$86,306 for the construction of the original four-lane section between 2003-2008.	K-2, L-1
Limits:	US 380 to 355' S. of US 380		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	355		
Service Area(s):	K,L		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	1,262	cy	\$ 8.00	\$ 10,098
210	8" Lime Stabilization (with Lime @ 32#/sy)	1,183	sy	\$ 5.00	\$ 5,917
310	8" Concrete Pavement	986	sy	\$ 36.00	\$ 35,500
410	4" Topsoil	158	sy	\$ 2.80	\$ 442
510	6" Curb & Gutter	710	lf	\$ 4.00	\$ 2,840
610	Allotment for Turn Lanes and Median Openings	255	sy	\$ 36.00	\$ 9,198

Paving Construction Cost Subtotal: \$ 63,994

Major Construction Component Allowances:**

Item Description	Notes	Allowance	Item Cost
√ Prep ROW		5%	\$ 3,200
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 3,200
√ Pavement Markings/Markers		3%	\$ 1,920
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	0%	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Establish Turf / Erosion Control		4%	\$ 2,560
Illumination	None Anticipated	0%	\$ -
Other:			

Allowances based on % of Paving Construction Cost Subtotal **Allowance Subtotal: \$ 10,879

Paving and Allowance Subtotal: \$ 74,873

Mobilization: 5% \$ 3,744

Construction Contingency: 15% \$ 11,231

Construction Cost TOTAL: \$ 87,000

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 87,000
Engineering/Survey/Testing:		20%	\$ 17,400
2003 - 2008 City contribution	'07-'08 Impact Fee Project K-11, L-1		\$ 86,306
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
Impact Fee Project Cost TOTAL:			\$ 190,706

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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No. K-3, L-2
Name:	Airport Dr. (4)	<p>This project consists of the construction of two additional through lanes within the existing median. The City contributed \$1,052,944 for the construction of the original two-lane section between 2003 - 2008.</p>	
Limits:	355' S. of US 380 to 385' N. of Industrial Blvd.		
Impact Fee Class:	M6D (1/3)		
Thoroughfare Class:	Major Arterial		
Length (lf):	9,205		
Service Area(s):	K,L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	32,729	cy	\$ 8.00	\$ 261,831
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610	Allotment for Turn Lanes and Median Openings	6,625	sy	\$ 36.00	\$ 238,493
Paving Construction Cost Subtotal:					\$ 1,659,336
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	82,967	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	82,967	
√ Pavement Markings/Markers		3%	\$	49,780	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	66,373	
Illumination	None Anticipated	0%	\$	-	
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Allowance Subtotal:					\$ 282,087
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Mobilization:					5% \$ 97,071
Construction Contingency:					15% \$ 291,213
Construction Cost TOTAL:					\$ 2,233,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,233,000
Engineering/Survey/Testing:		20%	\$ 446,600
2003 - 2008 City contribution	'07-'08 Impact Fee Project K-12, L-2		\$ 1,052,944
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

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Name:	Airport Dr. (5) / Country Ln.	This project consists of the construction of two additional through lanes within the existing median. The City contributed approximately \$586,887 for the construction of the original four-lane section between 2003 - 2008.	K-4, L-3
Limits:	385' N. of Industrial Blvd. to FM 546		
Impact Fee Class:	M6D (1/3)		
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Length (lf):	2,655		
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√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,930	
√ Pavement Markings/Markers		3%	\$	14,358	
Roadway Drainage	None Anticipated	0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		4%	\$	19,144	
Illumination	None Anticipated	0%	\$	-	
Other:					
Allowance Subtotal:					\$ 81,362
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2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	FM 546 (2)	This project consists of a new six-lane divided principal arterial.	L-4
Limits:	Existing FM 546 to E. City Limits		
Impact Fee Class:	P6D		
Thoroughfare Class:	Principal Arterial		
Length (lf):	5,010		
Service Area(s):	L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	30,617	cy	\$ 9.28	\$ 284,123
209	8" Lime Stabilization (with Lime @ 48#/sy)	43,420	sy	\$ 6.00	\$ 260,520
309	4" TY D HMAC Underlayment	43,420	sy	\$ 3.00	\$ 130,260
409	10" Concrete Pavement	41,193	sy	\$ 50.00	\$ 2,059,667
509	4" Topsoil	26,720	sy	\$ 4.40	\$ 117,568
609	6" Curb & Gutter	20,040	lf	\$ 12.00	\$ 240,480
709	Allotment for Turn Lanes and Median Openings	3,606	sy	\$ 42.00	\$ 151,439
Paving Construction Cost Subtotal:					\$ 3,244,056
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	97,322	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	97,322	
√ Roadway Drainage	Standard Internal System	25%	\$	811,014	
√ Special Drainage Structures	Two Creek Crossings		\$	250,000	
√ Water	Incidental Adjustments	3%	\$	97,322	
√ Sewer	Incidental Adjustments	3%	\$	97,322	
√ Establish Turf / Erosion Control		4%	\$	129,762	
√ Illumination	Standard Illumination System	6%	\$	194,643	
Other:					
Allowance Subtotal:					\$ 1,774,706
Paving and Allowance Subtotal:					\$ 5,018,762
Mobilization:					5% \$ 250,938
Construction Contingency:					15% \$ 752,814
Construction Cost TOTAL:					\$ 5,772,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,772,000
Engineering/Survey/Testing:		20%	\$ 1,154,400
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 2,020,200
Impact Fee Project Cost TOTAL (50% City Contribution)			\$ 4,473,300

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Unnamed D (1)	This project consists of the construction of a new six-lane divided major arterial.	L-5
Limits:	US 380 to Trinity River (S. City Limits)		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	2,330		
Service Area(s):	L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	25,889	cy	\$ 8.00	\$ 207,111
207	8" Lime Stabilization (with Lime @ 32#/sy)	20,193	sy	\$ 5.00	\$ 100,967
307	8" Concrete Pavement	19,158	sy	\$ 36.00	\$ 689,680
407	4" Topsoil	9,838	sy	\$ 2.80	\$ 27,546
507	6" Curb & Gutter	9,320	lf	\$ 4.00	\$ 37,280
607	Allotment for Turn Lanes and Median Openings	1,677	sy	\$ 36.00	\$ 60,368
Paving Construction Cost Subtotal:					\$ 1,122,952
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	33,689	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	33,689	
√ Roadway Drainage	Standard Internal System	25%	\$	280,738	
√ Special Drainage Structures	Major Flood Plain Crossing and Fill		\$	1,467,000	
√ Water	Incidental Adjustments	3%	\$	33,689	
√ Sewer	Incidental Adjustments	3%	\$	33,689	
√ Establish Turf / Erosion Control		4%	\$	44,918	
√ Illumination	Standard Illumination System	6%	\$	67,377	
Other:					
Allowance Subtotal:					\$ 1,994,787
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 3,117,739
Mobilization:					5% \$ 155,887
Construction Contingency:					15% \$ 467,661
Construction Cost TOTAL:					\$ 3,586,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,586,000
Engineering/Survey/Testing:		20%	\$ 717,200
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,255,100
Impact Fee Project Cost TOTAL:			\$ 5,558,300

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
 updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Unnamed D (2)	This project consists of the reconstruction of CCR 722 to a six-lane divided major arterial.	L-6
Limits:	CCR 722 to CCR 722 Bend		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	1,445		
Service Area(s):	L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	16,056	cy	\$ 8.00	\$ 128,444
207	8" Lime Stabilization (with Lime @ 32#/sy)	12,523	sy	\$ 5.00	\$ 62,617
307	8" Concrete Pavement	11,881	sy	\$ 36.00	\$ 427,720
407	4" Topsoil	6,101	sy	\$ 2.80	\$ 17,083
507	6" Curb & Gutter	5,780	lf	\$ 4.00	\$ 23,120
607	Allotment for Turn Lanes and Median Openings	1,040	sy	\$ 36.00	\$ 37,439
Paving Construction Cost Subtotal:					\$ 696,423
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		5%	\$	34,821	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	34,821	
√ Pavement Markings/Markers		3%	\$	20,893	
√ Roadway Drainage	Standard Internal System	25%	\$	174,106	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	20,893	
√ Sewer	Incidental Adjustments	3%	\$	20,893	
√ Establish Turf / Erosion Control		4%	\$	27,857	
√ Illumination	Standard Illumination System	6%	\$	41,785	
Other:					
Allowance Subtotal:					\$ 376,068
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 1,072,491
Mobilization:					5% \$ 53,625
Construction Contingency:					15% \$ 160,874
Construction Cost TOTAL:					\$ 1,234,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,234,000
Engineering/Survey/Testing:		20%	\$ 246,800
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	Existing Alignment	20%	\$ 246,800
Impact Fee Project Cost TOTAL:			\$ 1,727,600

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
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City of McKinney
2012 - 2013 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/18/2013

Project Information:		Description:	Project No.
Name:	Unnamed D (3)	This project consists of the construction of a new six-lane divided major arterial.	L-7
Limits:	CCR 722 Bend to FM 546		
Impact Fee Class:	M6D		
Thoroughfare Class:	Major Arterial		
Length (lf):	3,890		
Service Area(s):	L		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	43,222	cy	\$ 8.00	\$ 345,778
207	8" Lime Stabilization (with Lime @ 32#/sy)	33,713	sy	\$ 5.00	\$ 168,567
307	8" Concrete Pavement	31,984	sy	\$ 36.00	\$ 1,151,440
407	4" Topsoil	16,424	sy	\$ 2.80	\$ 45,988
507	6" Curb & Gutter	15,560	lf	\$ 4.00	\$ 62,240
607	Allotment for Turn Lanes and Median Openings	2,800	sy	\$ 36.00	\$ 100,786
Paving Construction Cost Subtotal:					\$ 1,874,799
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		3%	\$	56,244	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	56,244	
√ Roadway Drainage	Standard Internal System	25%	\$	468,700	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Incidental Adjustments	3%	\$	56,244	
√ Sewer	Incidental Adjustments	3%	\$	56,244	
√ Establish Turf / Erosion Control		4%	\$	74,992	
√ Illumination	Standard Illumination System	6%	\$	112,488	
Other:					
Allowance Subtotal:					\$ 881,156
**Allowances based on % of Paving Construction Cost Subtotal					
Paving and Allowance Subtotal:					\$ 2,755,955
Mobilization:					\$ 137,798
Construction Contingency:					\$ 413,393
Construction Cost TOTAL:					\$ 3,170,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,170,000
Engineering/Survey/Testing:		20%	\$ 634,000
2003 - 2008 City contribution			\$ -
2008 - 2012 City contribution			\$ -
ROW/Easement Acquisition:	New Roadway Alignment	35%	\$ 1,109,500
Impact Fee Project Cost TOTAL:			\$ 4,913,500

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of McKinney.
The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.



Appendix B – RIP Service Units of Supply

DRAFT

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

7/18/2013

Service Area A

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-1, D-1	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	1,570	6	M6D	20	50%	700	624	3,297,000	3	621	\$ 2,983,750	\$ 1,491,875
SUBTOTAL									624		3	621	\$ 2,983,750	\$ 1,491,875

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA A \$ 1,501,490

DRAFT

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area B

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
B-1	Hardin Blvd. (1)	CCR 204 to CCR 206	355	6	M6D	20	50%	700	141	746,000	1	141	\$ 425,600	\$ 212,800
B-2	Hardin Blvd. (2)	1,665' N. of CCR 228 to CCR 226	2,390	6	M6D	20	50%	700	951	5,019,000	5	946	\$ 2,856,000	\$ 1,428,000
S-2	Signal Installation	Hardin Blvd. & Fannin Rd.					50%						\$ 200,000	\$ 100,000
SUBTOTAL									1,092		5	1,087	\$ 3,481,600	\$ 1,740,800

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA B \$ 1,750,415

DRAFT

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area C

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
C-1	Future Arterial B (CCR 168) (1)	Ridge Rd. to 1,510' W. of Ridge Rd.	1,510	6	M6D	20	50%	700	601	3,171,000	3	598	\$ 1,804,600	\$ 902,300
C-2	FM 1461 (1)	145' E. of Existing Custer Rd. to Future Custer Rd.	700	6	P6D	324	50%	780	310	1,638,000	21	289	\$ 562,100	\$ 281,050
C-3	FM 1461 (2)	Future Custer Rd. to 1,175' E. of Future Custer Rd.	1,175	6	P6D	324	100%	780	1,041	5,499,000	72	969	\$ 943,600	\$ 943,600
C-4	FM 1461 (3)	1,175' E. of Future Custer Rd. to 2,015' E. of Future Custer Rd.	840	6	P6D	324	50%	780	372	1,965,600	26	347	\$ 674,800	\$ 337,400
C-5	FM 1461 (4)	2,195' W. of Ridge Rd. to 1,210 E. of Ridge Rd.	3,405	6	P6D	324	50%	780	1,509	7,967,700	104	1,405	\$ 2,733,500	\$ 1,366,750
C-6	Bloomdale Rd. (1)	Custer Rd. to 1,250' E. of Custer Rd.	1,250	6	M6D	20	100%	700	994	5,250,000	5	990	\$ 1,493,800	\$ 1,493,800
C-7	Bloomdale Rd. (2)	1,250' E. of Custer Rd. to 275' E. of CCR 124	2,145	6	M6D	20	50%	700	853	4,504,500	4	849	\$ 2,563,400	\$ 1,281,700
C-8	Bloomdale Rd. (3)	275' E. of CCR 124 to 3,195' E. of Stonebridge Dr.	5,080	6	M6D	20	100%	700	4,041	21,336,000	19	4,022	\$ 6,070,400	\$ 6,070,400
C-9	Bloomdale Rd. (4)	3,195' E. of Stonebridge Dr. to 645' W. of Ridge Rd.	1,590	6	M6D	20	50%	700	632	3,339,000	3	629	\$ 2,303,000	\$ 1,151,500
C-10	Bloomdale Rd. (5)	645' W. of Ridge Rd. to Ridge Rd.	645	6	M6D	20	100%	700	513	2,709,000	2	511	\$ 771,400	\$ 771,400
C-11	Bloomdale Rd. (6)	1,895' E. of Ridge Rd. to Lake Forest Dr.	3,290	6	M6D (1/3)	20	50%	700	1,309	6,909,000	6	1,302	\$ 957,600	\$ 478,800
C-12	Wilmeth Rd. (1)	1,825' E. of Custer Rd (Wilson Creek). to Future Stonebridge Dr.	3,610	6	M6D	0	100%	700	2,872	15,162,000	0	2,872	\$ 4,781,750	\$ 4,781,750
C-13	Wilmeth Rd. (2)	Future Stonebridge Dr. to 1,045' W. of Ridge Rd.	3,925	6	M6D	229	50%	700	1,561	8,242,500	85	1,476	\$ 5,093,200	\$ 2,546,600
C-14	Wilmeth Rd. (3)	1,275' W. of Ridge Knoll to Ridge Knoll	1,275	6	M6D	229	50%	700	507	2,677,500	28	479	\$ 1,524,600	\$ 762,300
C-15	Wilmeth Rd. (4)	Ridgeknoll to 265' W. of Sunnyside Dr.	1,295	6	M6D (1/3)	229	50%	700	515	2,719,500	28	487	\$ 490,398	\$ 245,199
C-16	Wilmeth Rd. (5)	265' W. of Sunnyside Dr. to Lake Forest Dr.	1,690	6	M6D (1/3)	229	100%	700	1,344	7,098,000	73	1,271	\$ 900,960	\$ 900,960
C-17	Custer Rd. (1)	1,290' N. of FM 1461 to FM 1461	1,290	6	P6D	175	50%	780	572	3,018,600	21	550	\$ 1,036,000	\$ 518,000
C-18	Custer Rd. (2)	FM 1461 to 2,615' N of Bloomdale Rd.	2,760	6	P6D	0	100%	780	2,446	12,916,800	0	2,446	\$ 2,342,050	\$ 2,342,050
C-19	Custer Rd. (3)	2,615' N. of Bloomdale Rd. to Bloomdale Rd.	2,615	6	P6D	570	50%	780	1,159	6,119,100	141	1,018	\$ 2,099,300	\$ 1,049,650
C-20	Custer Rd. (4)	Bloomdale Rd. to S. City Limits (Creek)	3,625	6	P6D	570	50%	780	1,607	8,482,500	196	1,411	\$ 2,909,900	\$ 1,454,950
C-21	Stonebridge Dr. (1)	1,600' S. of FM 1461 to Wilmeth Rd.	8,000	6	M6D	0	100%	700	6,364	33,600,000	0	6,364	\$ 10,102,900	\$ 10,102,900
C-22	Stonebridge Dr. (2)	Wilmeth Rd. to 775' S. of Wilmeth Rd.	775	6	M6D	0	50%	700	308	1,627,500	0	308	\$ 979,600	\$ 489,800
C-23	Stonebridge Dr. (3)	775' S. of Wilmeth Rd. to US 380	5,075	6	M6D	0	100%	700	4,037	21,315,000	0	4,037	\$ 10,205,200	\$ 10,205,200
C-24	Ridge Rd. (1)	CCR 168 to 1,505' S. of CCR 168	1,505	6	M6D	20	50%	700	599	3,160,500	3	596	\$ 1,799,000	\$ 899,500
C-25	Ridge Rd. (2)	FM 1461 to Baxter Well	3,095	6	M6D	0	100%	700	2,462	12,999,000	0	2,462	\$ 3,909,100	\$ 3,909,100
C-26	Ridge Rd. (3)	Baxter Well to 1,330' S. of Bloomdale Rd.	3,570	6	M6D	20	50%	700	1,420	7,497,000	7	1,413	\$ 4,267,200	\$ 2,133,600
C-27	Ridge Rd. (4)	1,330' S. of Bloomdale Rd. to 2,135' S. of Bloomdale Rd.	805	6	M6D	20	50%	700	320	1,690,500	2	319	\$ 963,200	\$ 481,600
C-28	Ridge Rd. (5)	Wilson Creek to US 380	850	6	M6D	0	100%	700	676	3,570,000	0	676	\$ 2,022,750	\$ 2,022,750
C-29	Lake Forest Dr. (2)	Bloomdale Rd. to Wilmeth Rd.	5,355	6	M6D (2/3)	391	50%	700	2,130	11,245,500	198	1,932	\$ 4,487,000	\$ 2,243,500
C-30, D-13	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	5,205	6	M6D (1/3)	865	50%	700	2,070	10,930,500	426	1,644	\$ 2,015,440	\$ 1,007,720
S-1	Signal Installation	Future Arterial (CCR 168) & Ridge Rd.					25%						\$ 200,000	\$ 50,000
S-4	Signal Installation	Custer Rd. & FM 1461					75%						\$ 215,000	\$ 161,250
S-5	Signal Installation	Ridge Rd. & FM 1461					50%						\$ 215,000	\$ 107,500
S-6	Signal Installation	Custer Rd. & Bloomdale Rd.					50%						\$ 215,000	\$ 107,500
S-7	Signal Installation	Stonebridge Dr. & Bloomdale Rd.					100%						\$ 200,000	\$ 200,000
S-8	Signal Installation	Ridge Rd. & Bloomdale Rd.					25%						\$ 200,000	\$ 100,000
S-9	Signal Installation	Lake Forest Dr. & Bloomdale Rd.					50%						\$ 200,000	\$ 50,000
S-10	Signal Installation	Stonebridge Dr. & Wilmeth Rd.					75%						\$ 200,000	\$ 150,000
S-11	Signal Installation	Lake Forest Dr. & Wilmeth Rd.					50%						\$ 200,000	\$ 100,000
S-12	Signal Installation	Tremont Blvd. & US 380					50%						\$ 215,000	\$ 107,500
S-13	Signal Installation	Forest Ridge Dr. & US 380					50%						\$ 215,000	\$ 107,500
S-14	Signal Installation	Wilmeth Rd. & Ridge Knoll					50%						\$ 215,000	\$ 107,500
SUBTOTAL									45,144		1,475	43,670	\$ 85,297,748	\$ 64,524,579

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615
TOTAL COST IN SERVICE AREA C \$ 64,534,194

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area D

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-1, D-1	Future Arterial B (CCR 168) (2)	Existing CCR 168 to E. City Limits (Creek)	1,570	6	M6D	20	50%	700	624	3,297,000	3	621	\$ 2,983,750	\$ 1,491,875
D-2	Future Arterial B (CCR 168) (3)	W. City Limits to CCR 229	2,245	6	M6D	0	100%	700	1,786	9,429,000	0	1,786	\$ 2,836,500	\$ 2,836,500
D-3	Future Arterial C (1)	420' E. of Lake Forest Dr. to 3,715' E. of Lake Forest Dr.	3,295	6	P6D	0	50%	780	1,460	7,710,000	0	1,460	\$ 4,729,050	\$ 2,364,525
D-4	Future Arterial C (2)	3,715' E. of Lake Forest Dr. to CCR 202	9,325	6	P6D	0	100%	780	8,265	43,641,000	0	8,265	\$ 19,647,800	\$ 19,647,800
D-5	Bloomdale Rd. (7)	1,485' E. of CCR 1006 to 1,215 W. of CCR 1007	1,555	6	M6D	20	100%	700	1,237	6,531,000	6	1,231	\$ 1,859,200	\$ 1,859,200
D-6	Bloomdale Rd. (8)	1,215 W. of CCR 1007 to CCR 1007	1,215	6	M6D	20	50%	700	483	2,552,000	2	481	\$ 1,453,200	\$ 726,600
D-7	Bloomdale Rd. (9)	CCR 1007 to Community Ave.	4,545	6	M6D	0	100%	700	3,615	19,089,000	0	3,615	\$ 7,694,200	\$ 7,694,200
D-8	Wilmeth Rd. (6)	Lake Forest Dr. to CCR 943 (Unnamed B)	4,770	6	M6D	0	50%	700	1,897	10,017,000	0	1,897	\$ 7,413,650	\$ 3,706,825
D-9	Wilmeth Rd. (7)	CCR 943 (Unnamed B) to 2,260 W. of Hardin Blvd.	1,310	6	M6D	648	100%	700	1,042	5,502,000	161	881	\$ 1,566,600	\$ 1,566,600
D-10	Wilmeth Rd. (8)	2,260 W. of Hardin Blvd. to Hardin Blvd.	2,260	6	M6D	648	50%	700	899	4,746,000	139	760	\$ 2,700,600	\$ 1,350,300
D-11	Wilmeth Rd. (9)	Hardin Blvd. to US 75 SBFR	6,125	6	M6D (1/3)	803	100%	700	4,872	25,725,000	932	3,941	\$ 2,727,220	\$ 2,727,220
D-12	Lake Forest Dr. (1)	820' S. of Geren Trl. to 510' S. of Baxter Well	2,710	6	M6D	324	50%	700	1,078	5,691,000	83	995	\$ 1,851,500	\$ 925,750
C-30, D-13	Lake Forest Dr. (3)	Wilmeth Rd. to US 380	5,205	6	M6D (1/3)	865	50%	700	2,070	10,931,000	426	1,644	\$ 2,015,440	\$ 1,007,720
D-14	Future Unnamed B (1)	Future Arterial C to 945' S. of Future Arterial C	945	6	M6D	20	100%	700	752	3,969,000	4	748	\$ 1,193,500	\$ 1,193,500
D-15	Future Unnamed B (2) / CCR 1006	945' S. of Future Arterial C to 2,305' S. of Future Arterial C	1,360	6	M6D	20	50%	700	541	2,856,000	3	538	\$ 1,625,400	\$ 812,700
D-16	Future Unnamed B (3) / CCR 943	2,045' N. of Wilmeth Rd. to Wilmeth Rd.	2,045	6	M6D	20	50%	700	813	4,295,000	4	809	\$ 2,444,400	\$ 1,222,200
D-17	Hardin Blvd. (3)	CCR 229 to FM 543	2,305	6	M6D	20	100%	700	1,834	9,681,000	9	1,825	\$ 2,910,900	\$ 2,910,900
D-18	Hardin Blvd. (4)	FM 543 to 1,230' S. of FM 543	1,230	6	M6D	0	50%	700	489	2,583,000	0	489	\$ 1,554,650	\$ 777,325
D-19	Hardin Blvd. (5)	1,230' S. of FM 543 to CCR 201	7,315	6	M6D	0	100%	700	5,819	30,723,000	0	5,819	\$ 15,504,650	\$ 15,504,650
D-20	Hardin Blvd. (6)	CCR 201 to CCR 164 (Future Bloomdale Rd.)	1,790	6	M6D	0	50%	700	712	3,759,000	0	712	\$ 2,261,450	\$ 1,130,725
D-21	Hardin Blvd. (7)	CCR 164 (Bloomdale Rd.) to Holly Ridge Way	3,165	6	M6D	0	100%	700	2,518	13,293,000	0	2,518	\$ 4,558,550	\$ 4,558,550
D-22	Hardin Blvd. (8)	Holly Ridge Way to 1,770' N. of Wilmeth Rd.	1,150	6	M6D (2/3)	36	100%	700	915	4,830,000	8	907	\$ 964,600	\$ 964,600
D-23	Hardin Blvd. (9)	1,770' N. of Wilmeth Rd. to Wilmeth Rd.	1,815	6	M6D (1/3)	36	50%	700	722	3,812,000	6	716	\$ 529,200	\$ 264,600
D-24	Hardin Blvd. (10)	Wilmeth Rd. to US 380	6,475	6	M6D (1/3)	407	100%	700	5,151	27,195,000	499	4,651	\$ 4,204,201	\$ 4,204,201
D-25	Community Ave. (1)	Hardin Blvd. to 1,915' E. of Hardin Blvd.	1,915	4	M4U	20	100%	525	762	4,022,000	7	754	\$ 1,260,000	\$ 1,260,000
D-26	Community Ave. (2)	1,915' E. of Hardin Blvd. to N. City Limits/Creek	1,065	4	M4U	20	50%	525	212	1,118,000	2	210	\$ 1,103,200	\$ 551,600
D-27	Community Ave. (3)	N. City Limits/Creek to 2,645' N. of Bloomdale Rd.	955	4	M4U	537	100%	525	380	2,006,000	97	283	\$ 628,600	\$ 628,600
D-28	Community Ave. (4)	2,645' N. of Bloomdale Rd. to 90' S. of James Pitts Dr.	3,215	4	M4U (1/2)	537	100%	525	1,279	6,752,000	327	952	\$ 1,094,800	\$ 1,094,800
D-29	Community Ave. (5)	90' S. of James Pitts Dr. to 230' S. of Brinlee Branch Ln.	1,765	4	M4U (1/2)	537	100%	525	702	3,707,000	180	522	\$ 600,600	\$ 600,600
D-30	Future Arterial C (3)	E. City Limits to W. City Limits	1,635	6	P6D	0	100%	780	1,449	7,652,000	0	1,449	\$ 2,346,700	\$ 2,346,700
D-31	Future Unnamed C	N. City Limits to Future Arterial C (3)	415	6	M6D	0	100%	700	330	1,743,000	0	330	\$ 525,450	\$ 525,450
S-3	Signal Installation	Hardin Blvd. & Future Arterial B					100%						\$ 200,000	\$ 200,000
S-11	Signal Installation	Lake Forest Dr. & Wilmeth Rd.					25%						\$ 200,000	\$ 50,000
S-15	Signal Installation	Unnamed B & Future Arterial C					100%						\$ 215,000	\$ 215,000
S-16	Signal Installation	Hardin Blvd. & Future Arterial C					100%						\$ 215,000	\$ 215,000
S-17	Signal Installation	Hardin Blvd. & Community Ave.					75%						\$ 200,000	\$ 150,000
S-18	Signal Installation	Hardin Blvd. & Bloomdale Rd.					100%						\$ 200,000	\$ 200,000
S-19	Signal Installation	Community Ave. & Bloomdale Rd.					100%						\$ 200,000	\$ 200,000
S-20	Signal Installation	Unnamed B & Wilmeth Rd.					75%						\$ 200,000	\$ 150,000
S-21	Signal Installation	Hardin Blvd. & Wilmeth Rd.					75%						\$ 200,000	\$ 150,000
SUBTOTAL									54,707		2,896	51,811	\$ 106,619,561	\$ 89,986,816

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA D \$ 89,996,431

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area E

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
E-1	Bloomdale Rd. (10)	US 75 NBFR to 275' E. of Shawnee Dr.	2,520	6	M6D (1/3)	137	100%	700	2,005	10,584,000	65	1,939	\$ 734,400	\$ 734,400
E-2	Bloomdale Rd. (11)	275' E. of Shawnee Dr. to FM 543	2,505	6	M6D (2/3)	48	100%	700	1,993	10,521,000	23	1,970	\$ 2,100,000	\$ 2,100,000
E-3	FM 543 (1)	Honey Creek to SH 5	2,585	6	M6D	220	100%	700	2,056	10,857,000	108	1,949	\$ 2,450,700	\$ 2,450,700
E-4	Wilmeth Rd. (10)	US 75 NBFR to Redbud Blvd.	1,375	6	M6D (1/3)	866	100%	700	1,094	5,775,000	226	868	\$ 400,800	\$ 400,800
E-5	Wilmeth Rd. (11)	Redbud Blvd. to 1,340 E. of Redbud Blvd.	1,340	6	M6D (1/3) OUTSIDE	866	100%	700	1,066	5,628,000	220	846	\$ 387,600	\$ 387,600
E-6	Wilmeth Rd. (12)	1,340 E. of Redbud Blvd. to 2,005 E. of Redbud Blvd.	665	6	M6D (1/3) OUTSIDE	866	100%	675	510	2,693,000	109	401	\$ 194,400	\$ 194,400
E-7	Wilmeth Rd. (13)	2,005 E. of Redbud Blvd. to SH 5	2,720	6	M6D (2/3)	639	100%	700	2,164	11,424,000	329	1,834	\$ 2,279,200	\$ 2,279,200
E-8	Wilmeth Rd. (14)	SH 5 to McIntyre Rd. (CCR 274)	2,085	6	M6D	0	100%	700	1,659	8,757,000	0	1,659	\$ 3,079,850	\$ 3,079,850
E-9	Wilmeth Rd. (15)	1,610' E. of SH 5 to RR tracks	1,355	6	M6D	20	100%	700	1,078	5,691,000	5	1,073	\$ 5,644,800	\$ 5,644,800
E-10	Wilmeth Rd. (16)	RR tracks to 1,230' E. of the RR tracks (E. City Limits)	1,230	6	M6D	20	50%	700	489	2,583,000	2	487	\$ 7,523,600	\$ 3,761,800
E-11	Wilmeth Rd. (17)/ CCR 331	265' E. of CCR 335 to FM 2933	1,465	6	M6D	20	50%	700	583	3,077,000	3	580	\$ 1,751,400	\$ 875,700
E-12	Redbud Blvd. (1)	Bloomdale Rd. to 1,075' N. of Wilmeth Rd.	3,435	4	M4D	0	100%	700	1,822	9,618,000	0	1,822	\$ 3,174,400	\$ 3,174,400
E-13	Redbud Blvd. (2)	1,075' N. of Wilmeth Rd. to Wilmeth Rd.	1,075	4	M4D (1/2)	359	100%	700	570	3,010,000	73	497	\$ 448,000	\$ 448,000
E-14	Airport Dr. (1)	SH 5 to RR tracks (E. City Limits)	4,945	6	M6D	0	100%	700	3,934	20,769,000	0	3,934	\$ 13,150,200	\$ 13,150,200
E-15	Airport Dr. (2)	McIntyre Rd. (Future Wilmeth Rd.) to US 380	8,365	6	M6D	0	100%	700	6,654	35,133,000	0	6,654	\$ 15,261,300	\$ 15,261,300
E-16	FM 2933	CCR 331 to CCR 335	2,595	6	M6D	110	50%	700	1,032	5,450,000	27	1,005	\$ 1,873,175	\$ 936,588
S-22	Signal Installation	Redbud Blvd. & Bloomdale Rd.					100%						\$ 200,000	\$ 200,000
S-23	Signal Installation	Redbud Blvd. & Wilmeth Rd.					100%						\$ 200,000	\$ 200,000
S-24	Signal Installation	Airport Dr. & Wilmeth Rd.					75%						\$ 200,000	\$ 150,000
S-25	Signal Installation	FM 543 & Bloomdale Rd.					100%						\$ 200,000	\$ 200,000
S-26	Signal Installation	FM 2933 & Wilmeth Rd.					50%						\$ 200,000	\$ 100,000
SUBTOTAL									28,706		1,190	27,517	\$ 61,453,825	\$ 55,729,738

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615
TOTAL COST IN SERVICE AREA E \$ 55,739,353

DRAFT

City of McKinney - 2012 - 2013 Roadway Impact Fee Update

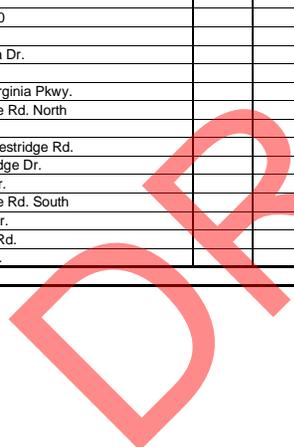
RIP Service Units of Supply

Service Area G

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
G-1	Virginia Pkwy. (1)	Coit Rd. to 500' W. of Independence Pkwy.	4,735	6	M6D	447	100%	700	3,766	19,887,000	401	3,366	\$ 5,658,800	\$ 5,658,800
G-2	Virginia Pkwy. (2)	500' W. of Independence Pkwy. to Independence Pkwy.	500	6	M6D	447	50%	700	199	1,050,000	21	178	\$ 597,800	\$ 298,900
G-3	Virginia Pkwy. (3)	Independence Pkwy. to 325' E. of Forkhorn Dr.	1,020	6	M6D	815	50%	700	406	2,142,000	79	327	\$ 1,219,400	\$ 609,700
G-4	Virginia Pkwy. (4)	325' E. of Forkhorn Dr. to 935' W. of Virginia Hills	1,480	6	M6D (1/3)	815	50%	700	589	3,108,000	114	474	\$ 675,596	\$ 337,798
G-5	Virginia Pkwy. (5)	935' W. of Virginia Hills to Custer Rd.	2,640	6	M6D (1/3)	1,200	100%	700	2,100	11,088,000	600	1,500	\$ 1,205,863	\$ 1,205,863
G-6	Virginia Pkwy. (6)	Custer Dr. to 410' E. of Danbury Dr.	2,760	6	M6D (1/3)	1,200	100%	700	2,195	11,592,000	627	1,568	\$ 804,000	\$ 804,000
G-7	Virginia Pkwy. (7)	410' E. of Danbury Dr. to Virginia Parklands Blvd.	1,915	6	M6D (1/6)	1,200	100%	700	1,523	8,043,000	435	1,088	\$ 232,800	\$ 232,800
G-8	Westridge Blvd. (1)	Coit Rd. to 1,650' E. of Coit Rd.	1,650	6	M6D	240	50%	700	656	3,465,000	38	619	\$ 1,972,600	\$ 986,300
G-9	Westridge Blvd. (2)	1,650' E. of Coit Rd. to Independence Pkwy.	3,675	6	M6D (1/3)	288	100%	700	2,923	15,435,000	200	2,723	\$ 1,070,400	\$ 1,070,400
G-10	Westridge Blvd. (3)	Independence Pkwy. to Memory Ln.	2,685	6	M6D (1/3)	288	100%	700	2,136	11,277,000	146	1,989	\$ 782,400	\$ 782,400
G-11	Westridge Blvd. (4)	Memory Ln. to Custer Rd.	2,650	6	M6D (1/3)	335	50%	700	1,054	5,565,000	84	970	\$ 771,600	\$ 385,800
G-12	Coit Rd. (1)	US 380 to 2,780' S. of US 380	2,780	6	M6D (1/3)	50	50%	700	1,106	5,838,000	13	1,093	\$ 810,000	\$ 405,000
G-13	Coit Rd. (2)	2,685 N. of Virginia to 2,610 S. of Virginia	5,295	6	M6D	20	50%	700	2,106	11,120,000	10	2,096	\$ 6,328,000	\$ 3,164,000
G-14	Coit Rd. (3)	Westridge Rd. to 270' S. of Calgary Dr.	2,635	6	M6D (1/3)	50	50%	700	1,048	5,534,000	12	1,036	\$ 768,000	\$ 384,000
G-15	Independence Pkwy. (1)	3,100' N. of Virginia Pkwy. to 720' N. of Virginia Pkwy.	2,380	6	M6D	0	100%	700	1,893	9,996,000	0	1,893	\$ 3,007,000	\$ 3,007,000
G-16	Independence Pkwy. (2)	Virginia Pkwy. to George Washington Dr. (S. City Limits)	7,850	6	M6D (1/3)	816	100%	700	6,244	32,970,000	1,213	5,031	\$ 2,314,250	\$ 2,314,250
G-17	Custer Rd. (5)	US 380 to Westridge Rd.	10,625	6	P6D	1,130	100%	780	9,418	49,725,000	2,274	7,144	\$ 2,653,673	\$ 2,653,673
G-18	Custer Rd. (6)	Westridge Rd. to 1,110' S. of Cotton Ridge Rd. S	2,680	6	P6D	1,130	50%	780	1,188	6,271,000	287	901	\$ 669,350	\$ 334,675
G-19	Custer Rd. (7)	705' N. of Fountainview Dr. to Eldorado Pkwy.	1,995	6	P6D	1,130	50%	780	884	4,668,000	213	671	\$ 498,266	\$ 249,133
G-20, I-8	Ridge Rd. (6)	US 380 to Creekside Dr.	6,880	4	G4D	793	50%	700	1,824	9,632,000	517	1,308	\$ 550,813	\$ 275,407
S-12	Signal Installation	Tremont Blvd. & US 380					50%						\$ 215,000	\$ 107,500
S-13	Signal Installation	Forest Ridge Dr. & US 380					50%						\$ 215,000	\$ 107,500
S-27	Signal Installation	Custer Rd. & Bristol Dr.					100%						\$ 215,000	\$ 215,000
S-28	Signal Installation	Stonebridge Dr. & LaCima Dr.					100%						\$ 185,000	\$ 185,000
S-29	Signal Installation	Coit Rd. & Virginia Pkwy.					50%						\$ 200,000	\$ 100,000
S-30	Signal Installation	Independence Pkwy. & Virginia Pkwy.					50%						\$ 200,000	\$ 100,000
S-31	Signal Installation	Custer Rd. & Cotton Ridge Rd. North					100%						\$ 215,000	\$ 215,000
S-32	Signal Installation	Coit Rd. & Westridge Rd.					25%						\$ 200,000	\$ 50,000
S-33	Signal Installation	Independence Pkwy. & Westridge Rd.					100%						\$ 200,000	\$ 200,000
S-34	Signal Installation	Glen Oaks Dr. & Stonebridge Dr.					100%						\$ 185,000	\$ 185,000
S-35	Signal Installation	Ridge Rd. & Glen Oaks Dr.					50%						\$ 185,000	\$ 92,500
S-36	Signal Installation	Custer Rd. & Cotton Ridge Rd. South					50%						\$ 215,000	\$ 107,500
S-37	Signal Installation	Stonebridge Dr. & Alma Dr.					100%						\$ 185,000	\$ 185,000
S-38	Signal Installation	Ridge Rd. & Rush Creek Rd.					50%						\$ 185,000	\$ 92,500
S-39	Signal Installation	Ridge Rd. & Berkshire Rd.					50%						\$ 185,000	\$ 92,500
SUBTOTAL									43,259		7,286	35,973	\$ 35,575,612	\$ 27,194,899

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615
TOTAL COST IN SERVICE AREA G \$ 27,204,514



City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area H

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
H-1	Silverado Trl. (1)	Custer Rd. to 100' W. of Amon Carter Dr.	2,090	4	M4D	0	100%	700	1,108	5,852,000	0	1,108	\$ 2,709,400	\$ 2,709,400
H-2	Silverado Trl. (2)	Alma Rd. to Alfalfa Dr.	1,170	4	M4D	320	100%	700	620	3,276,000	71	550	\$ 143,311	\$ 143,311
H-3	Silverado Trl. (3)	Alfalfa Dr. to 145' W. of Ironstone Ln.	1,490	4	M4D	320	100%	700	790	4,172,000	90	700	\$ 99,386	\$ 99,386
H-4	Stacy Rd. (1)	Custer Rd. to Ridge Rd.	10,715	6	P6D (1/3)	1,415	100%	780	9,497	50,146,000	2,872	6,626	\$ 3,710,457	\$ 3,710,457
H-5, I-11	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	4,350	6	P6D (1/3)	2,027	50%	780	1,928	10,179,000	835	1,093	\$ 5,622,280	\$ 2,811,140
H-6	McKinney Ranch Pkwy. (1)	Stacy Rd. to Ridge Rd.	4,075	6	M6D (1/3)	774	100%	700	3,241	17,115,000	597	2,644	\$ 1,186,800	\$ 1,186,800
H-7	Collin McKinney Pkwy. (1)	Weiskopf Ave. to Alma (Couplet)	4,160	4	G4D	116	100%	700	2,206	11,648,000	91	2,115	\$ 1,676,564	\$ 1,676,564
H-8	Craig Ranch Pkwy.	Collin McKinney Pkwy. To SH 121	3,430	6	M6D	0	100%	700	2,728	14,406,000	0	2,728	\$ 4,778,650	\$ 4,778,650
H-9	Alma Rd. (1)	Eldorado to 805' S. of Beaver Ck.	3,460	4	G4D	1,055	100%	700	1,835	9,688,000	691	1,144	\$ 191,558	\$ 191,558
H-10	Alma Rd. (2)	805' S. of Beaver Ck. to Silverado Trl.	2,005	4	G4D	1,055	100%	700	1,063	5,614,000	401	663	\$ 181,098	\$ 181,098
H-11	Alma Rd. (3)	Silverado Trl. to Stacy Rd.	2,595	6	M6D (1/3)	1,172	100%	700	2,064	10,899,000	576	1,488	\$ 990,389	\$ 990,389
H-12	Alma Rd. (4)	Stacy Rd. to SH 121	7,440	6	M6D	1,071	100%	700	5,918	31,248,000	1,509	4,409	\$ 588,973	\$ 588,973
H-13, I-9	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	5,705	4	G4D	1,240	50%	700	1,513	7,987,000	670	843	\$ 187,500	\$ 93,750
H-14, I-10	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	3,645	6	M6D (1/3)	1,165	50%	700	1,450	7,655,000	402	1,048	\$ 1,108,000	\$ 554,000
H-15	Custer Rd. (8)	Eldorado Pkwy. To Stonebridge Dr.	2,040	6	P6D	2,628	50%	780	904	4,774,000	508	396	\$ 509,505	\$ 254,753
S-40	Signal Installation	Custer Rd. & Silverado Trl.					50%						\$ 215,000	\$ 107,500
S-41	Signal Installation	Alma Rd. & Silverado Trl.					100%						\$ 200,000	\$ 200,000
S-42	Signal Installation	McKinney Ranch Pkwy. & Silverado Trl.					100%						\$ 200,000	\$ 200,000
S-43	Signal Installation	McKinney Ranch Pkwy. & Stacy Rd.					100%						\$ 215,000	\$ 215,000
S-44	Signal Installation	Custer Rd. & Paradise Dr.					50%						\$ 215,000	\$ 107,500
S-45	Signal Installation	Collin McKinney Pkwy. & Craig Ranch Pkwy.					100%						\$ 200,000	\$ 200,000
S-46	Signal Installation	Collin McKinney Pkwy. & Stacy Rd.					50%						\$ 215,000	\$ 107,500
S-47	Signal Installation	Alma Rd. & Hennemen Way					100%						\$ 215,000	\$ 215,000
SUBTOTAL									36,867		9,313	27,554	\$ 25,358,871	\$ 21,322,729

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615
TOTAL COST IN SERVICE AREA H \$ 21,332,344

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area I

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
I-1	Virginia Pkwy. (8)	1,035' E. of Ridge Rd. to 1,355' W. of Hardin Blvd.	7,595	6	M6D (1/3)	2,206	100%	700	6,041	31,899,000	3,173	2,868	\$ 2,308,000	\$ 2,308,000
I-2	Eldorado Pkwy. (1)	Ridge Rd. to 850' E. of Ridge Rd.	850	4	G4D	2,113	100%	700	451	2,380,000	340	111	\$ 213,745	\$ 213,745
I-3	McKinney Ranch Pkwy. (2)	Ridge Rd. to Hardin Blvd.	9,525	6	M6D (1/3)	707	100%	700	7,577	40,005,000	1,275	6,301	\$ 10,004,688	\$ 10,004,688
I-4	Collin McKinney Pkwy. (2)	Stacy Rd. to Village Park	2,860	4	G4D	0	100%	700	1,517	8,008,000	0	1,517	\$ 2,973,000	\$ 2,973,000
I-5	Collin McKinney Pkwy. (3)	Lake Forest Dr. to Cottonwood Creek	1,630	4	G4D	0	100%	700	864	4,564,000	0	864	\$ 1,694,000	\$ 1,694,000
I-6	Collin McKinney Pkwy. (4)	Cottonwood Creek to 1,110' E. of Tina	2,910	4	G4D (1/2)	28	100%	700	1,543	8,148,000	15	1,528	\$ 1,903,419	\$ 1,903,419
I-7	Collin McKinney Pkwy. (5)	1,110' E. of Tina to Hardin Blvd.	1,010	4	G4D	0	100%	700	536	2,828,000	0	536	\$ 1,051,000	\$ 1,051,000
G-20, I-8	Ridge Rd. (6)	US 380 to Creekside Dr.	6,880	4	G4D	793	50%	700	1,824	9,632,000	517	1,308	\$ 550,813	\$ 275,407
H-13, I-9	Ridge Rd. (7)	Eldorado Pkwy. to McKinney Ranch Pkwy.	5,705	4	G4D	1,240	50%	700	1,513	7,987,000	670	843	\$ 187,500	\$ 93,750
H-14, I-10	Ridge Rd. (8)	McKinney Ranch Pkwy. to Stacy Rd.	3,645	6	M6D (1/3)	1,165	50%	700	1,450	7,655,000	402	1,048	\$ 1,108,000	\$ 554,000
H-5, I-11	Stacy Rd. (2)	Ridge Rd. to SH 121 (S. City Limits)	4,350	6	P6D (1/3)	2,027	50%	780	1,928	10,179,000	835	1,093	\$ 5,622,280	\$ 2,811,140
I-12	Lake Forest Dr. (4)	McKinney Ranch Pkwy. to SH 121	5,360	6	M6D (1/3)	2,333	100%	700	4,264	22,512,000	2,368	1,895	\$ 1,628,000	\$ 1,628,000
I-13, J-8	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	8,340	4	G4D	1,267	50%	700	2,211	11,676,000	1,001	1,211	\$ 8,352,097	\$ 4,176,049
I-14, J-9	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	3,010	6	M6D (1/3)	1,165	50%	700	1,197	6,321,000	332	865	\$ 914,000	\$ 457,000
S-35	Signal Installation	Ridge Rd. & Glen Oaks Dr.					50%						\$ 185,000	\$ 92,500
S-38	Signal Installation	Ridge Rd. & Rush Creek Rd.					50%						\$ 185,000	\$ 92,500
S-39	Signal Installation	Ridge Rd. & Berkshire Rd.					50%						\$ 185,000	\$ 92,500
S-46	Signal Installation	Collin McKinney Pkwy. & Stacy Rd.					50%						\$ 215,000	\$ 107,500
S-48	Signal Installation	Virginia Pkwy. & Joplin Dr.					100%						\$ 215,000	\$ 215,000
S-49	Signal Installation	Virginia Pkwy. & Crutcher Crossing					100%						\$ 215,000	\$ 215,000
S-50	Signal Installation	Virginia Pkwy. & Village Dr.					100%						\$ 215,000	\$ 215,000
S-51	Signal Installation	Virginia Pkwy. & Mallard Lakes Dr.					100%						\$ 215,000	\$ 215,000
S-52	Signal Installation	Lake Forest Dr. & Glen Oaks Dr.					100%						\$ 185,000	\$ 185,000
S-53	Signal Installation	Hardin Blvd. & Maverick Trl.					50%						\$ 185,000	\$ 92,500
S-54	Signal Installation	Eldorado Pkwy. & Woodson Dr.					100%						\$ 185,000	\$ 185,000
S-55	Signal Installation	Eldorado Pkwy. & Highlands Dr.					100%						\$ 185,000	\$ 185,000
S-56	Signal Installation	Lake Forest Dr. & Collin McKinney Pkwy.					100%						\$ 200,000	\$ 200,000
S-57	Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.					50%						\$ 200,000	\$ 100,000
SUBTOTAL									32,915		10,929	21,986	\$ 39,710,542	\$ 32,335,697

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA I \$ 32,345,312

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area J

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
J-1	White Ave. (1)	Hardin Blvd. to Bois D'Arc	915	4	M4D	825	100%	700	485	2,562,000	143	342	\$ 981,328	\$ 981,328
J-2	White Ave. (2)	Bois D'Arc to Community Ave.	4,930	4	M4D	825	100%	700	2,614	13,804,000	770	1,844	\$ 213,991	\$ 213,991
J-3	McKinney Ranch Pkwy. (3)	Hardin Blvd. to 515' E. of Hardin Blvd.	515	6	M6D (1/3)	332	100%	700	410	2,163,000	32	377	\$ 450,000	\$ 450,000
J-4	McKinney Ranch Pkwy. (4)	515' E. of Hardin Blvd. to US 75 SBFR	4,340	6	M6D	332	100%	700	3,452	18,228,000	273	3,179	\$ 5,589,000	\$ 5,589,000
J-5	Collin McKinney Pkwy. (6)	Hardin Blvd. to 1,010' E. of Hardin Blvd.	1,010	4	G4D	0	100%	700	536	2,828,000	0	536	\$ 1,452,350	\$ 1,452,350
J-6	Collin McKinney Pkwy. (7)	1,010' E. of Hardin Blvd. to McKinney Ranch Pkwy.	2,835	4	M4U	0	100%	525	1,128	5,954,000	0	1,128	\$ 2,416,450	\$ 2,416,450
J-7	Collin McKinney Pkwy. (8)	720' W. of Test Dr. to Craig Dr.	3,085	4	M4U	369	100%	625	1,227	6,479,000	216	1,011	\$ 41,575	\$ 41,575
I-13, J-8	Hardin Blvd. (11)	US 380 to Virginia Pkwy.	8,340	4	G4D	891	50%	700	2,211	11,676,000	704	1,508	\$ 8,352,097	\$ 4,176,049
I-14, J-9	Hardin Blvd. (12)	McKinney Ranch Pkwy. to SH 121	3,010	6	M6D (1/3)	1,165	50%	700	1,197	6,321,000	332	865	\$ 914,000	\$ 457,000
J-10	Community Ave. (6)	US 380 to 2,120' S. of US 380	2,120	4	M4U	1,239	100%	525	843	4,452,000	497	346	\$ 350,000	\$ 350,000
S-53	Signal Installation	Hardin Blvd. & Maverick Trl.					50%						\$ 185,000	\$ 92,500
S-57	Signal Installation	Hardin Blvd. & Collin McKinney Pkwy.					50%						\$ 200,000	\$ 100,000
S-58	Signal Installation	White Ave. & Jordan Rd.					100%						\$ 185,000	\$ 185,000
S-59	Signal Installation	Virginia St. & Redbud Blvd.					50%						\$ 175,000	\$ 87,500
S-60	Signal Installation	Collin McKinney Pkwy. & McKinney Ranch Pkwy.					100%						\$ 200,000	\$ 200,000
S-61	Signal Installation	Collin McKinney Pkwy. & Craig Dr.					100%						\$ 185,000	\$ 185,000
S-63	Signal Installation	SH 5 & Stewart Rd.					50%						\$ 215,000	\$ 107,500
S-64	Signal Installation	SH 5 & Enterprise Dr.					50%						\$ 215,000	\$ 107,500
SUBTOTAL								14,103			2,967	11,136	\$ 22,320,791	\$ 17,192,743

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA J \$ 17,202,358

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area K

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
K-1	FM 546 (1)	SH 5 to Existing FM 546	8,645	6	P6D	0	100%	780	7,663	40,459,000	0	7,663	\$ 10,652,727	\$ 10,652,727
K-2, L-1	Airport Dr. (3)	US 380 to 355' S. of US 380	355	6	M6D (1/3)	1,261	50%	700	141	746,000	42	99	\$ 190,706	\$ 95,353
K-3, L-2	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	9,205	6	M6D (1/3)	1,261	50%	700	3,661	19,331,000	1,099	2,562	\$ 3,732,544	\$ 1,866,272
K-4, L-3	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	2,655	6	M6D (1/3)	356	50%	700	1,056	5,576,000	90	966	\$ 1,359,687	\$ 679,844
K-5	Airport Dr. (6) / Country Ln.	FM 546 to 2,110' N. of CCR 326	1,590	6	M6D (1/3)	356	100%	700	1,265	6,678,000	107	1,158	\$ 601,087	\$ 601,087
K-6	Airport Dr. (7)	2,110' N. of CCR 326 to Old Mill Rd.	530	6	M6D	222	100%	700	422	2,226,000	22	399	\$ 1,036,000	\$ 1,036,000
S-59	Signal Installation	Redbud Blvd. & Virginia St.					50%						\$ 175,000	\$ 87,500
S-62	Signal Installation	SH 5 & Old Mill Rd.					100%						\$ 215,000	\$ 215,000
S-63	Signal Installation	SH 5 & Stewart Rd.					50%						\$ 215,000	\$ 107,500
S-64	Signal Installation	SH 5 & Enterprise Dr.					50%						\$ 215,000	\$ 107,500
S-65	Signal Installation	SH 5 & Smith St.					100%						\$ 215,000	\$ 215,000
S-66	Signal Installation	Wilson Creek Pkwy. & College St.					100%						\$ 185,000	\$ 185,000
S-67	Signal Installation	Airport Dr. & Elm St.					50%						\$ 200,000	\$ 100,000
S-68	Signal Installation	Eldorado Blvd. & College St.					100%						\$ 185,000	\$ 185,000
S-69	Signal Installation	Airport Dr. & FM 546					100%						\$ 215,000	\$ 215,000
SUBTOTAL									14,207		1,361	12,847	\$ 19,392,751	\$ 16,348,782

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA K \$ 16,358,397

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City of McKinney - 2012 - 2013 Roadway Impact Fee Update

RIP Service Units of Supply

Service Area L

7/18/2013

Project ID #	ROADWAY	LIMITS	LENGTH (ft)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-FT SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
K-2, L-1	Airport Dr. (3)	US 380 to 355' S. of US 380	355	6	M6D (1/3)	1,261	50%	700	141	746,000	42	99	\$ 190,706	\$ 95,353
K-3, L-2	Airport Dr. (4)	355' S. of US 380 to 385' N. of Industrial Blvd.	9,205	6	M6D (1/3)	1,261	50%	700	3,661	19,331,000	1,099	2,562	\$ 3,732,544	\$ 1,866,272
K-4, L-3	Airport Dr. (5) / Country Ln.	385' N. of Industrial Blvd. to FM 546	2,655	6	M6D (1/3)	356	50%	700	1,056	5,576,000	90	966	\$ 1,359,687	\$ 679,844
L-4	FM 546 (2)	Existing FM 546 to E. City Limits	5,010	6	P6D	0	100%	780	4,441	23,447,000	0	4,441	\$ 4,473,300	\$ 4,473,300
L-5	Unnamed D (1)	US 380 to Trinity River (S. City Limits)	2,330	6	M6D	0	100%	700	1,853	9,786,000	0	1,853	\$ 5,558,300	\$ 5,558,300
L-6	Unnamed D (2)	CCR 722 to CCR 722 Bend	1,445	6	M6D	20	50%	700	575	3,035,000	3	572	\$ 1,727,600	\$ 863,800
L-7	Unnamed D (3)	CCR 722 Bend to FM 546	3,890	6	M6D	0	100%	700	3,094	16,338,000	0	3,094	\$ 4,913,500	\$ 4,913,500
S-67	Signal Installation	Airport Dr. & Wilson Creek Pkwy.					50%						\$ 200,000	\$ 100,000
SUBTOTAL									14,821		1,234	13,588	\$ 22,155,637	\$ 18,550,369

Roadway Impact Fee Update Cost (Per Service Area) \$ 9,615

TOTAL COST IN SERVICE AREA L \$ 18,559,984

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Kimley-Horn
and Associates, Inc.



Appendix C – Existing Facilities Inventory

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

7/18/2013

Service Area A

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Future Arterial B	CCR 165	E. City Limits	1,510	0.29	1	1	2U	10	10	50%	475	475	68	68	1	1	66	66				
SUBTOTAL			1,510	0.29									68		1		66		0			

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

7/18/2013

Service Area B

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
CCR 229	FM 543	CCR 226	2,365	0.45	1	1	2U-R	10	10	50%	150	150	34	34	2	2	31	31		
CCR 227	CCR 226	CCR 204	4,985	0.94	1	1	2U-R	10	10	100%	150	150	142	142	9	9	132	132		
SUBTOTAL			7,350	1.39									175		12		164	0		

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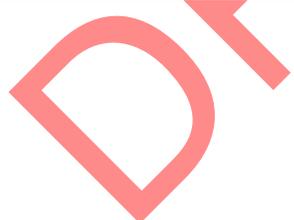
**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

Service Area C

1175

7/18/2013

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI					
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
FM 1461	Custer Rd.	55' E. of Custer Rd.	845	0.16	1	1	2U-A	212	112	50%	475	475	38	38	17	9	21	29						
FM 1461	55' E. of Custer Rd.	1,230' E. of Custer Rd.	1,175	0.22	1	1	2U-A	212	112	100%	475	475	106	106	47	25	59	81						
FM 1461	1,230' E. of Custer Rd.	2,070' E. of Custer Rd.	840	0.16	1	1	2U-A	212	112	50%	475	475	38	38	17	9	21	29						
FM 1461	2,170 W. of CCR 165	1,235' E. of CCR 165	3,405	0.64	1	1	2U-A	212	112	50%	475	475	153	153	68	36	85	117						
Bloomdale Rd.	Custer Rd.	275' E. of CCR 124	3,395	0.64	1	1	2U-A	10	10	50%	475	475	153	153	3	3	149	149						
Bloomdale Rd.	275' E. of CCR 124	2,245' W. of CCR 161 (Ridge Rd.)	5,080	0.96	1	1	2U-A	10	10	100%	475	475	457	457	10	10	447	447						
Bloomdale Rd.	2,245' W. of CCR 161 (Ridge Rd.)	645' W. of CCR 161 (Ridge Rd.)	1,590	0.30	1	1	2U-A	10	10	50%	475	475	72	72	2	2	70	70						
Bloomdale Rd.	645' W. of CCR 161 (Ridge Rd.)	CCR 161 (Ridge Rd.)	645	0.12	1	1	2U-A	10	10	100%	475	475	58	58	1	1	57	57						
Wilmeth Rd.	2,710' W. of Ridge Rd.	1,040' W. of Ridge Rd.	1,670	0.32	1	1	2U-R	95	134	50%	150	150	24	24	15	21	9	3						
Wilmeth Rd.	1,275' W. of Ridgeknoll Ave.	Ridgeknoll Ave.	1,275	0.24	1	1	2U-R	95	134	50%	150	150	18	18	11	16	7	2						
Wilmeth Rd.	Ridgeknoll Ave.	265' W. of Sunnyside Dr.	1,295	0.25	1	1	2U-CG	95	134	50%	475	475	58	58	12	16	47	42						
Wilmeth Rd.	265' W. of Sunnyside Dr.	130' W. of Sunnyside Dr.	135	0.03	1	1	2U-CG	95	134	100%	475	475	12	12	2	3	10	9						
Wilmeth Rd.	130' W. of Sunnyside Dr.	FM 1461 (Lake Forest Dr.)	1,555	0.29	2	2	4D	95	134	100%	700	700	412	412	28	39	384	373						
CCR 168	CCR 165	1,510' E. of CCR 165	1,510	0.29	1	1	2U-A	10	10	50%	475	475	68	68	1	1	66	66						
CCR 165	CCR 168	1,505' S. of CCR 168	1,505	0.29	1	1	2U-A	10	10	50%	475	475	68	68	1	1	66	66						
Ridge Rd. (CCR 163)	Baxter Well	CCR 123	2,241	0.42	1	1	2U-A	10	10	50%	475	475	101	101	2	2	99	99						
Ridge Rd. (CCR 161)	CCR 123	2,135' S. of CCR 123	2,135	0.40	1	1	2U-A	10	10	50%	475	475	96	96	2	2	94	94						
FM 1461 (Lake Forest Dr.)	CCR 164	55' N. of Heatherwood Dr.	1,635	0.31	1	1	2U-CG	221	170	50%	475	475	74	74	34	26	39	47						
FM 1461 (Lake Forest Dr.)	55' N. of Heatherwood Dr.	335' N. of Wilmeth Rd.	3,360	0.64	1	1	2U-CG	221	170	50%	475	475	151	151	70	54	81	97						
FM 1461 (Lake Forest Dr.)	335' N. of Wilmeth Rd.	Wilmeth Rd.	335	0.06	2	2	4D	221	170	50%	700	700	44	44	7	5	37	39						
FM 1461 (Lake Forest Dr.)	Wilmeth Rd.	University Dr.	5,230	0.99	2	2	4D	529	336	50%	700	700	693	693	262	166	431	527						
CUSTER RD.	1,295' N. of FM 1461	FM 1461	1,295	0.25	1	1	2U-A	88	88	50%	475	475	58	58	11	11	48	48						
CUSTER RD.	FM 1461	1,945' S. of FM 1461	1,945	0.37	1	1	2U-A	160	160	100%	475	475	175	175	59	59	116	116						
CUSTER RD.	1,945' S. of FM 1461	Bloomdale Rd.	3,380	0.64	1	1	2U-A	285	285	50%	475	475	152	152	91	91	61	61						
CUSTER RD.	660' N. of US 380	US 380	660	0.13	1	1	2U-A	295	295	50%	475	475	30	30	18	18	11	11						
US 380	Custer Rd.	Lake Forest Drive.	16,405	3.11	2	2	5U	1,300	1,300	50%	625	625	1,942	1,942	2,020	2,020	-78	-78	78	78				
SUBTOTAL			64,541	12.22										5,250		2,649		2,601	155					



**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

7/18/2013

Service Area D

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Bloomdale Rd. (CCR 164)	1,480' E. of CCR 1006	1,210' W. of CCR 1007	1555	0.29	1	1	2U-R	10	10	100%	150	150	44	44	3	3	41	41				
Bloomdale Rd. (CCR 164)	1,210' W. of CCR 1007	CCR 1007	1215	0.23	1	1	2U-R	10	10	50%	150	150	17	17	1	1	16	16				
Bloomdale Rd.	Community Ave	US 75 SBFR	2,345	0.44	3	3	6D	349	132	100%	780	780	1,039	1,039	155	59	884	981				
Bloomdale Rd.	US 75 SBFR	US 75	190	0.04	2	2	4D	349	132	100%	700	700	50	50	13	5	38	46				
Wilmeth Rd.	CCR 943	1,310' E. of CCR 943	1,310	0.25	1	1	2U-A	262	386	100%	475	475	118	118	65	96	53	22				
Wilmeth Rd.	1,310' E. of CR-943	Hardin Blvd.	2,260	0.43	1	1	2U-A	262	386	50%	475	475	102	102	56	83	46	19				
Wilmeth Rd.	Hardin Blvd.	US 75	6,275	1.19	2	2	4D	383	420	100%	700	700	1,664	1,664	455	499	1,209	1,165				
Lake Forest Dr.	865' S. of Future Arterial C	510' S. of Baxter Well	2,710	0.51	1	1	2U-A	212	112	50%	475	475	122	122	54	29	67	93				
Lake Forest Dr.	Wilmeth Rd.	University Dr.	5,230	0.99	2	2	4D	529	336	50%	700	700	693	693	262	166	431	527				
CCR 1006 (Unnamed B)	Future Arterial C	2,300' S. of Future Arterial C	2,300	0.44	1	1	2U-A	10	10	50%	475	475	103	103	2	2	101	101				
CCR 943 (Unnamed B)	2,045' N. of Wilmeth Rd.	Wilmeth Rd.	2,045	0.39	1	1	2U-A	10	10	50%	475	475	92	92	2	2	90	90				
CCR 229	CCR 227	FM 543	2,315	0.44	1	1	2U-R	10	10	50%	150	150	33	33	2	2	31	31				
Hardin Blvd.	CCR 201	735' S. of CCR 201	735	0.14	1	1	2U-R	10	10	50%	150	150	10	10	1	1	10	10				
CCR 201	Hardin Blvd.	1065' W. of Community Ave.	1,915	0.36	1	1	2U-A	10	10	100%	475	475			4	4						
CCR 201	1065' W. of Community Ave.	Community Ave.	1,065	0.20	1	1	2U-A	10	10	50%	475	475	48	48	1	1	47	47				
Hardin Blvd.	Hollyridge Way	710' N. of Fairtimber Way	955	0.18	1	1	2U-CG	21	15	100%	475	475	86	86	4	3	82	83				
Hardin Blvd.	710' N. of Fairtimber Way	595' N. of Fairtimber Way	110	0.02	2	2	4D	21	15	100%	700	700	29	29	0	0	29	29				
Hardin Blvd.	595' N. of Fairtimber Way	540' N. of Fairtimber Way	55	0.01	1	1	2U-CG	21	15	100%	475	475	5	5	0	0	5	5				
Hardin Blvd.	540' N. of Fairtimber Way	285' N. of Wilmeth Rd.	1,485	0.28	1	1	2U-CG	21	15	50%	475	475	67	67	3	2	64	65				
Hardin Blvd.	285' N. of Wilmeth Rd.	Wilmeth Rd.	285	0.05	2	2	4D	21	15	50%	700	700	38	38	1	0	37	37				
Hardin Blvd.	Wilmeth Rd.	University Dr.	6,565	1.24	2	2	4D	212	195	100%	700	700	1,741	1,741	264	242	1,477	1,498				
Community Ave.	CCR 201	955' S. of CCR 201	955	0.18	1	1	2U-A	10	10	100%	475	475	86	86	2	2	84	84				
Community Ave.	955' S. of CR 201	90' S. of James Pitts Dr.	3,215	0.61	1	1	2U-CG	248	289	100%	475	475	289	289	151	176	138	113				
Community Ave.	90' S. of James Pitts Dr.	230' S. of Brinlee Branch Ln.	1,765	0.33	1	1	2U-CG	248	289	100%	475	475	159	159	83	97	76	62				
Community Ave.	230' S. of Brinlee Branch Ln.	University Dr.	10,200	1.93	2	2	4U	61	832	100%	525	525	2,028	2,028	118	1,607	1,911	421				
US 380	Lake Forest Dr.	US 75	13,135	2.49	3	3	6D	1400	1400	50%	780	780	2,911	2,911	1,741	1,741	1,169	1,169				
CCR 168	1,270' E. of CR 166	545' SW. of CR 862	4,085	0.77	1	1	2U-A	150	150	50%	475	475	184	184	58	58	126	126				
SUBTOTAL			73,505	14.45										11,697	4,877	6,824	0					



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Service Area E

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Bloomdale Rd.	US 75	US 75 NBFR	270	0.05	2	2	4D	349	132	100%	700	700	72	72	18	7	54	65				
Bloomdale Rd.	US 75 NBFR	275' E. of Shawnee Dr.	2520	0.48	2	2	4D	82	55	100%	700	700	668	668	39	26	629	642				
Bloomdale Rd.	275' E. of Shawnee Dr.	FM 543	4,410	0.84	1	1	2U-CG	36	12	100%	475	475	397	397	30	10	367	387				
Wilmeth Rd.	US 75	1,995' E. of Redbud Blvd.	3,440	0.65	2	2	4D	337	529	100%	700	700	912	912	220	345	693	567				
Wilmeth Rd.	1,995' E. of Redbud Blvd.	SH 5	2,720	0.52	1	1	2U-CG	332	307	100%	475	475	245	245	171	158	74	87				
McIntyre Rd.	1,550' W. of Future Airport Dr.	200' W. of Future Airport Dr.	1,355	0.26	1	1	2U-A	10	10	100%	475	475	122	122	3	3	119	119				
McIntyre Rd.	200' W. of Future Airport Dr.	1,030' E. of Future Airport Dr.	1,230	0.23	1	1	2U-A	10	10	50%	475	475	55	55	1	1	54	54				
Wilmeth Rd.	1,465' W. of FM 2933	FM 2933	1,465	0.28	1	1	2U-A	10	10	50%	475	475	66	66	1	1	65	65				
Redbud Blvd.	1,075' N. of Wilmeth Rd.	Wilmeth Rd.	1,075	0.20	1	1	2U-CG	149	210	100%	475	475	97	97	30	43	66	54				
Redbud Blvd.	Wilmeth Rd.	University Dr.	5,250	0.99	2	2	4D	262	288	100%	700	700	1,392	1,392	261	286	1,132	1,106				
FM 543	N. City Limits	Bloomdale Rd.	4,410	0.84	1	1	2U-A	110	110	100%	475	475	397	397	92	92	305	305				
FM 543	Bloomdale Rd.	SH 5	745	0.14	1	1	2U-A	110	110	100%	475	475	67	67	16	16	52	52				
FM 2933	Wilmeth Rd.	CCR 335	2,595	0.49	1	1	2U-A	55	55	100%	475	475	233	233	27	27	206	206				
SH 5	1,870' N. of FM 543	Power House St.	10,135	1.92	1	1	2U-A	1,050	1,050	100%	475	475	912	912	2,015	2,015	-1,104	-1,104	1,104	1,104		
SH 5	Power House St.	US 380	1,805	0.34	2	2	4D	1,050	1,050	100%	700	700	479	479	359	359	120	120				
US 380	US 75	Airport Dr.	12,680	2.40	3	3	6D	1,350	1,350	50%	780	780	2,810	2,810	1,621	1,621	1,189	1,189				
US 380	Airport Dr.	890' E. of Airport Dr.	890	0.17	2	2	4D	1250	1250	50%	700	700	118	118	105	105	13	13				
SUBTOTAL			54,205	10.79										8,301		5,082		3,218	2,207			

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

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Service Area F

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI		
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	
No Thoroughfare Roadways within City Limits Currently Present within Service Area F																				
SUBTOTAL			0	0.00									0		0		0		0	

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

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Service Area G

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Virginia Pkwy.	Coit Rd.	600' W. of Independence Way	4735	0.90	1	1	2U-A	217	230	100%	475	475	426	426	195	206	231	220				
Virginia Pkwy.	600' W. of Independence Way	Independence Way	600	0.11	1	1	2U-A	217	230	50%	475	475	27	27	12	13	15	14				
Virginia Pkwy.	Independence Way	110' E. of Rose Garden Dr.	915	0.17	1	1	2U-A	448	367	50%	475	475	41	41	39	32	2	9				
Virginia Pkwy.	510' W. of Hagen Dr.	Swick Ln.	1,475	0.28	2	2	4D	448	367	50%	700	700	196	196	63	51	133	144				
Virginia Pkwy.	Swick Ln.	410' E. of Danbury Dr.	5,400	1.02	2	2	4D	551	649	100%	700	700	1,432	1,432	564	664	868	768				
Virginia Pkwy.	410' E. of Danbury Dr.	Virginia Parklands Blvd.	1,915	0.36	3	2	5D	551	649	100%	700	700	762	508	200	235	562	272				
Virginia Pkwy.	Virginia Parklands Blvd.	Ridge Rd.	6,660	1.26	3	3	6D	742	907	100%	780	780	2,952	2,952	936	1,144	2,016	1,808				
Westridge Blvd.	Coit Rd.	810' W. of Eden Dr.	1,650	0.31	1	1	2U-CG	94	146	50%	475	475	74	74	15	23	60	51				
Westridge Blvd.	810' W. of Eden Dr.	Memory Ln.	6,360	1.20	2	2	4D	122	166	100%	700	700	1,686	1,686	147	200	1,539	1,486				
Westridge Blvd.	Memory Ln.	215' E. of Memory Ln.	215	0.04	1	1	2U-CG	149	186	50%	475	475	10	10	3	4	7	6				
Westridge Blvd.	540' E. of Memory Ln.	Custer Rd.	2,110	0.40	1	1	2U-CG	149	186	50%	475	475	95	95	30	37	65	58				
Glen Oaks Dr.	Stonebridge Dr.	Ridge Rd.	4,735	0.90	2	2	4D	200	200	100%	700	700	1,255	1,255	179	179	1,076	1,076				
Eldorado Pkwy.	Custer Rd.	Ridge Rd.	10,830	2.05	2	2	4D	783	695	50%	700	700	1,436	1,436	803	713	633	723				
Coit Rd.	University Dr.	2,780' S. of University Dr.	8,075	1.53	1	1	2U-CG	25	25	50%	475	475	363	363	19	19	344	344				
Coit Rd.	2,780' S. of University Dr.	Virginia Pkwy.	2,685	0.51	1	1	2U-A	10	10	50%	475	475	121	121	3	3	118	118				
Coit Rd.	Virginia Pkwy.	2,600' S. of Virginia Pkwy.	2,610	0.49	1	1	2U-R	10	10	50%	150	150	37	37	2	2	35	35				
Coit Rd.	Westridge Blvd.	270' S. of Calgary Dr.	2,440	0.46	1	1	2U-CG	25	25	50%	475	475	110	110	6	6	104	104				
Independence Pkwy.	Virginia Pkwy.	650' S. of Virginia Pkwy.	650	0.12	2	2	4D	524	292	100%	700	700	172	172	65	36	108	136				
Independence Pkwy.	650' S. of Virginia Pkwy.	145' N. of Hidden Haven Dr.	2,000	0.38	2	2	4D	524	292	100%	700	700	530	530	198	111	332	420				
Independence Pkwy.	145' N. of Hidden Haven Dr.	George Washington Dr.	5,210	0.99	2	2	4D	645	332	100%	700	700	1,381	1,381	636	328	745	1,054				
Custer Rd.	University Dr.	Westridge Blvd.	10,625	2.01	3	3	6D	419	711	100%	780	780	4,709	4,709	843	1,431	3,866	3,278				
Custer Rd.	Westridge Blvd.	1,110' S. of Cotton Ridge Rd. S	2,680	0.51	3	3	6D	419	711	50%	780	780	594	594	106	180	488	413				
Custer Rd.	705' N. of Fountainview Dr.	Eldorado Pkwy.	1,995	0.38	3	3	6D	419	711	50%	780	780	442	442	79	134	363	308				
Stonebridge Dr.	University Dr.	Eldorado Pkwy.	21,030	3.98	2	2	4D	672	380	100%	700	700	5,576	5,576	2,677	1,514	2,900	4,063				
Ridge Rd.	University Dr.	Eldorado Pkwy.	17,545	3.32	2	2	4D	491	302	50%	700	700	2,326	2,326	816	502	1,510	1,824				
Alma Dr.	Stonebridge Dr.	Eldorado Pkwy.	2,310	0.44	2	2	4D	259	255	100%	700	700	613	613	113	112	499	501				
US 380	Coit Rd.	1,220' W. of Red Bud Dr.	3,810	0.72	2	2	5U	1300	1300	50%	625	625	451	451	469	469	-18	-18	18	18		
US 380	University Business Dr.	1,110' W. of Custer Rd.	1,465	0.28	2	2	5U	1300	1300	50%	625	625	173	173	180	180	-7	-7	7	7		
US 380	1,110' W. of Custer Rd.	Ridge Rd.	11,865	2.25	3	3	6D	1300	1300	50%	780	780	2,629	2,629	1,461	1,461	1,169	1,169				
SUBTOTAL			139,260	27.39										29,912	9,769	20,144	50					

**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

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Service Area H

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Eldorado Pkwy.	Custer Rd.	Ridge Rd.	10,830	2.05	2	2	4D	783	695	50%	700	700	1,436	1,436	803	713	633	723				
Stonebridge Dr.	Custer Rd.	Eldorado Pkwy.	4,460	0.84	2	2	4D	860	398	100%	700	700	1,183	1,183	726	336	456	846				
Silverado Trl.	100' W. of Amon Carter Dr.	Alma Dr.	3,215	0.61	2	2	4D	76	104	100%	700	700	852	852	46	63	806	789				
Silverado Trl.	Alma Dr.	McKinney Ranch Pkwy.	5,230	0.99	2	2	4D	106	214	100%	700	700	1,387	1,387	105	212	1,282	1,175				
McKinney Ranch Pkwy.	Stacy Rd.	Ridge Rd.	4,075	0.77	2	2	4D	433	341	100%	700	700	1,080	1,080	334	263	746	817				
Stacy Rd.	Custer Rd.	Alma Dr.	5,330	1.01	2	2	4D	839	576	100%	700	700	1,413	1,413	847	581	566	832				
Stacy Rd.	Alma Dr.	Ridge Rd.	5,385	1.02	2	2	4D	519	528	100%	700	700	1,428	1,428	529	539	899	889				
Stacy Rd.	Ridge Rd.	Sam Rayburn Toll	4,350	0.82	2	2	4D	1356	671	50%	700	700	577	577	559	276	18	300				
Collin McKinney Pkwy.	Custer Rd.	Collin McKinney Pkwy. Couplet	3,740	0.71	2	2	4D	72	50	100%	700	700	992	992	51	35	941	956				
Collin McKinney Pkwy. Couplet	Collin McKinney Pkwy.	Millie Way	2,620	0.50	1	1	2U	72	50	100%	475	475	236	236	36	25	200	211				
Collin McKinney Pkwy. Couplet	Collin McKinney Pkwy.	Meyer Way	1,405	0.27	1	1	3U	36	80	100%	525	525	140	140	10	21	130	118				
Collin McKinney Pkwy. Couplet	Meyer Way	Alma Dr.	760	0.14	1	1	2U	36	80	100%	475	475	68	68	5	12	63	57				
Van Tuyl Pkwy. Couplet	Collin McKinney Pkwy.	Weiskopf Ave.	855	0.16	1	1	2U	50	72	100%	475	475	77	77	8	12	69	65				
Van Tuyl Pkwy. Couplet	Weiskopf Ave.	Tinley Ln.	3,040	0.58	1	1	3U	50	72	100%	525	525	302	302	29	41	273	261				
Van Tuyl Pkwy. Couplet	Tinley Ln.	Alma Dr.	480	0.09	1	1	2U	50	72	100%	475	475	43	43	5	7	39	37				
Collin McKinney Pkwy.	Alma Dr.	Stacy Rd.	4,645	0.88	2	2	4D	1606	1,022	100%	700	700	1,232	1,232	1,413	899	-181	333	181			
Custer Rd.	Eldorado Pkwy.	Stonebridge Dr.	2,040	0.39	3	3	6D	1606	1,022	50%	780	780	452	452	310	197	142	255				
Custer Rd.	Stonebridge Dr.	Sam Rayburn Toll	15,855	3.00	2	2	4D	2034	1,126	50%	700	700	2,102	2,102	3,054	1,691	-952	411	952			
Alma Rd.	Eldorado Pkwy.	Silverado Trl.	5,465	1.04	2	2	4D	598	457	100%	700	700	1,449	1,449	619	473	830	976				
Alma Rd.	Silverado Trl.	Stacy Rd.	2,595	0.49	2	2	4D	695	477	100%	700	700	688	688	342	234	346	454				
Alma Rd.	Stacy Rd.	Sam Rayburn Toll	7,440	1.41	3	3	6D	670	401	100%	780	780	3,297	3,297	944	565	2,353	2,732				
Ridge Rd.	Eldorado Pkwy.	McKinney Ranch Pkwy.	5,705	1.08	2	2	4D	841	399	50%	700	700	756	756	454	216	302	541				
Ridge Rd.	McKinney Ranch Pkwy.	Stacy Rd.	6,545	1.24	2	2	4D	909	256	50%	700	700	868	868	563	159	304	709				
SUBTOTAL			90,775	20.09										19,439	6,521	12,918	1,133					

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Existing Roadway Facilities Inventory**

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Service Area I

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Virginia Pkwy.	Ridge Rd.	1,035' E. of Ridge Rd.	1,035	0.20	3	3	6D	904	1,302	100%	780	780	459	459	177	255	281	203		
Virginia Pkwy.	1,035' E. of Ridge Rd.	Bellegrove Dr.	7,595	1.44	2	2	4D	904	1,302	100%	700	700	2,014	2,014	1,300	1,873	713	141		
Virginia Pkwy.	Bellegrove Dr.	Hardin Blvd.	1,355	0.26	2	2	4D	874	1,312	100%	700	700	359	359	224	337	135	23		
Glen Oaks Dr.	Ridge Rd.	Lake Forest Dr.	2,445	0.46	2	2	4D	200	200	100%	700	700	648	648	93	93	556	556		
Eldorado Pkwy.	Ridge Rd.	Hardin Blvd.	10,910	2.07	2	2	4D	997	1,116	100%	700	700	2,893	2,893	2,060	2,306	833	587		
McKinney Ranch Pkwy.	Ridge Rd.	Hardin Blvd.	9,525	1.80	2	2	4D	361	346	100%	700	700	2,526	2,526	651	624	1,874	1,901		
Collin McKinney Pkwy.	Village Park Dr.	Lake Forest Dr.	1,775	0.34	2	2	4D	44	115	100%	700	700	471	471	15	39	456	432		
Collin McKinney Pkwy.	930' W. of Avalon Dr.	1,110' E. of Tina Dr.	2,915	0.55	1	1	2U-CG	15	13	100%	475	475	262	262	8	7	254	255		
Ridge Rd.	University Dr.	Eldorado Pkwy.	17,545	3.32	2	2	4D	491	302	50%	700	700	2,326	2,326	816	502	1,510	1,824		
Ridge Rd.	Eldorado Pkwy.	McKinney Ranch Pkwy.	5,705	1.08	2	2	4D	841	399	50%	700	700	756	756	454	216	302	541		
Ridge Rd.	McKinney Ranch Pkwy.	Stacy Rd.	6,545	1.24	2	2	4D	909	256	50%	700	700	868	868	563	159	304	709		
Stacy Rd.	Ridge Rd.	Sam Rayburn Toll	4,350	0.82	2	2	4D	1356	671	50%	700	700	577	577	559	276	18	300		
Lake Forest Dr.	University Dr.	McKinney Ranch Pkwy.	23,580	4.47	2	2	4D	880	587	100%	700	700	6,252	6,252	3,930	2,621	2,322	3,631		
Lake Forest Dr.	McKinney Ranch Pkwy.	Sam Rayburn Toll	5,360	1.02	2	2	4D	1,595	738	100%	700	700	1,421	1,421	1,619	749	-198	672	198	
Hardin Blvd.	University Dr.	McKinney Ranch Pkwy.	22,285	4.22	2	2	4D	709	558	50%	700	700	2,954	2,954	1,496	1,178	1,458	1,777		
Hardin Blvd.	McKinney Ranch Pkwy.	Sam Rayburn Toll	3,010	0.57	2	2	4D	795	370	50%	700	700	399	399	227	105	172	294		
US 380	Ridge Rd.	Hardin Blvd.	11,250	2.13	3	3	6D	1300	1300	50%	780	780	2,493	2,493	1,385	1,385	1,108	1,108		
SUBTOTAL			137,185	25.98										27,678		10,260		14,954	198	

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
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7/18/2013

Service Area J

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
White Ave.	Hardin Blvd.	US 75 SBFR	6,250	1.18	2	2	4D	394	431	100%	700	700	1,657	1,657	466	510	1,191	1,147				
White Ave.	US 75 SBFR	Graves St.	3,080	0.58	1	1	2U-CG	294	380	100%	475	475	277	277	172	222	106	55				
Virginia Pkwy.	Hardin Blvd.	US 75	8,470	1.60	2	2	4D	877	1,098	100%	700	700	2,246	2,246	1,407	1,761	839	484				
Virginia St.	US 75	Virginia/Louisiana Split	1,805	0.34	2	2	4D	534	662	50%	700	700	239	239	91	113	148	126				
Virginia St.	Virginia/Louisiana Split	Graves St.	1,030	0.20	1	1	2U-CG	663		100%	475	475	93	93	129	0	-37	93	37			
Louisiana St.	Virginia/Louisiana Split	Graves St.	1,090	0.21	1	1	2U-CG	506		50%	475	475	49	49	52	0	-3	49	3			
Eldorado Pkwy.	Hardin Blvd.	Wilson Creek	14,165	2.68	2	2	4D	1,134	1,211	100%	700	700	3,756	3,756	3,042	3,249	714	507				
McKinney Ranch Pkwy.	Hardin Blvd.	SH 121 SBFR	4,855	0.92	1	1	2U-A	153	179	100%	475	475	437	437	141	165	296	272				
Collin McKinney Pkwy.	McKinney Ranch Pkwy.	Craig Dr.	4,975	0.94	2	2	4U	235	134	100%	525	525	989	989	221	126	768	863				
Community Ave.	University Dr.	425' S. of University Dr.	425	0.08	2	2	5U	439	800	100%	625	625	101	101	35	64	65	36				
Community Ave.	425' S. of University Dr.	White Ave.	2,800	0.53	2	2	4U	439	800	100%	525	525	557	557	233	424	324	133				
Redbud Blvd.	University Dr.	620' N. of White Ave.	2,525	0.48	2	2	4D	306	526	100%	700	700	670	670	146	252	523	418				
Redbud Blvd.	620' N. of White Ave.	White Ave.	620	0.12	2	2	4U	306	526	100%	525	525	123	123	36	62	87	62				
Medical Center Dr.	Eldorado Pkwy.	255' S. of SH 121 EB	4,375	0.83	2	2	4D	361	241	100%	700	700	1,160	1,160	299	200	861	960				
Medical Center Dr.	255' S. of SH 121 EB	Frisco Rd.	1,300	0.25	1	1	2U-CG	361	241	100%	475	475	117	117	89	59	28	58				
US 380	Hardin Blvd.	Graves St.	9,975	1.89	3	3	6D	1,900	1,900	50%	780	780	2,210	2,210	1,795	1,795	416	416				
SH 5	745' S. of Old Mill Rd.	215' N. of Plateau Dr.	4,885	0.93	2	2	4D	1,300	1,300	50%	700	700	648	648	601	601	46	46				
SH 5	215' N. of Plateau Dr.	S. City Limits	2,230	0.42	1	1	2U-A	485	485	50%	475	475	100	100	102	102	-2	-2	2	2		
SUBTOTAL			74,855	14.18										15,429		7,212		5,723	44			

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

7/18/2013

Service Area L

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Airport Dr.	University Dr.	Industrial Blvd.	9,950	1.88	2	2	4D	786	475	50%	700	700	1,319	1,319	741	448	579	872		
Airport Dr.	Industrial Blvd.	FM 546	2,270	0.43	2	2	4D	201	155	50%	700	700	301	301	43	33	258	268		
US 380	Airport Dr.	FM 1827	6,450	1.22	2	2	4D	1200	1200	50%	700	700	855	855	733	733	122	122		
US 380	FM 1827	1,485' E. of CR 337	8,430	1.60	2	2	5U	1400	1400	50%	625	625	998	998	1,118	1,118	-120	-120	120	120
SUBTOTAL			27,100	5.13									3,473		2,331		1,142	239		

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**City of McKinney - 2012 - 2013 Roadway Impact Fee Update
Existing Roadway Facilities Inventory**

7/18/2013

Service Area M

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		TYPE	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI		
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	
No Thoroughfare Roadways within City Limits Currently Present within Service Area M																				
SUBTOTAL			0	0.00									0		0		0		0	

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Kimley-Horn
and Associates, Inc.



**Appendix D – Plan for Awarding the
Roadway Impact Fee Credit Summary**
(as prepared by J. Stowe & Co.)

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SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area B

Recoverable Impact Fee CIP Costs	\$ 1,742,400	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	-	Page 2 of Appendix E - Service Area B
Financing Costs	238,845	See Detail Below
Existing Fund Balance	-	Page 1 of Appendix E - Service Area B
Interest Earnings	(92,965)	Page 4 of Appendix E - Service Area B
Pre Credit Recoverable Cost for Impact Fee	\$ 1,888,280	Sum of Above
Credit for Ad Valorem Revenues	(947)	Page 6 of Appendix E - Service Area B
Maximum Recoverable Cost for Impact Fee	\$ 1,887,333	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area B column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$871,200 - Page 5 of Appendix E - Service Area B). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 1,110,045	(Page 2 of Appendix E - Service Area B)
Existing Annual Debt Service	-	(Page 2 of Appendix E - Service Area B)
Principal Component	(871,200)	(Page 2 of Appendix E - Service Area B)
Financing Costs	<u>\$ 238,845</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area B.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area B.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area B.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area C

Recoverable Impact Fee CIP Costs	\$ 21,584,815	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(92,997)	Page 2 of Appendix E - Service Area C
Financing Costs	2,965,721	See Detail Below
Existing Fund Balance	(511,016)	Page 1 of Appendix E - Service Area C
Interest Earnings	(1,160,669)	Page 4 of Appendix E - Service Area C
Pre Credit Recoverable Cost for Impact Fee	\$ 22,785,855	Sum of Above
Credit for Ad Valorem Revenues	(81,540)	Page 6 of Appendix E - Service Area C
Maximum Recoverable Cost for Impact Fee	\$ 22,704,315	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area C column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$10,672,821- Page 5 of Appendix E - Service Area C). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 13,598,837	(Page 2 of Appendix E - Service Area C)
Existing Annual Debt Service	185,882	(Page 2 of Appendix E - Service Area C)
Principal Component	(10,818,997)	(Page 2 of Appendix E - Service Area C)
Financing Costs	<u>\$ 2,965,721</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area C.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area C.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area C.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area D

Recoverable Impact Fee CIP Costs	\$ 33,155,376	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(503,220)	Page 2 of Appendix E - Service Area D
Financing Costs	4,574,469	See Detail Below
Existing Fund Balance	(784,214)	Page 1 of Appendix E - Service Area D
Interest Earnings	(1,731,486)	Page 4 of Appendix E - Service Area D
Pre Credit Recoverable Cost for Impact Fee	\$ 34,710,925	Sum of Above
Credit for Ad Valorem Revenues	(177,073)	Page 6 of Appendix E - Service Area D
Maximum Recoverable Cost for Impact Fee	\$ 34,533,852	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area D column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$15,930,591 - Page 5 of Appendix E - Service Area D). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 20,290,198	(Page 2 of Appendix E - Service Area D)
Existing Annual Debt Service	1,005,836	(Page 2 of Appendix E - Service Area D)
Principal Component	(16,721,565)	(Page 2 of Appendix E - Service Area D)
Financing Costs	<u>\$ 4,574,469</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area D.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area D.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area D.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area E

Recoverable Impact Fee CIP Costs	\$ 15,234,420	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	-	Page 2 of Appendix E - Service Area E
Financing Costs	2,084,546	See Detail Below
Existing Fund Balance	(85,229)	Page 1 of Appendix E - Service Area E
Interest Earnings	(815,812)	Page 4 of Appendix E - Service Area E
Pre Credit Recoverable Cost for Impact Fee	\$ 16,417,925	Sum of Above
Credit for Ad Valorem Revenues	(29,449)	Page 6 of Appendix E - Service Area E
Maximum Recoverable Cost for Impact Fee	\$ 16,388,476	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area E column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$7,617,210) - Page 5 of Appendix E - Service Area E). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 9,701,756	(Page 2 of Appendix E - Service Area E)
Existing Annual Debt Service	-	(Page 2 of Appendix E - Service Area E)
Principal Component	(7,617,210)	(Page 2 of Appendix E - Service Area E)
Financing Costs	<u>\$ 2,084,546</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area E.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area E.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area E.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area G

Recoverable Impact Fee CIP Costs	\$ 22,591,085	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(587,605)	Page 2 of Appendix E - Service Area G
Financing Costs	3,777,391	See Detail Below
Existing Fund Balance	(168,403)	Page 1 of Appendix E - Service Area G
Interest Earnings	(1,112,282)	Page 4 of Appendix E - Service Area G
Pre Credit Recoverable Cost for Impact Fee	\$ 24,500,186	Sum of Above
Credit for Ad Valorem Revenues	(279,004)	Page 6 of Appendix E - Service Area G
Maximum Recoverable Cost for Impact Fee	\$ 24,221,182	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area G column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$ 9,592,607 - Page 5 of Appendix E - Service Area G). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 12,217,746	(Page 2 of Appendix E - Service Area G)
Existing Annual Debt Service	3,970,518	(Page 2 of Appendix E - Service Area G)
Principal Component	(12,410,873)	(Page 2 of Appendix E - Service Area G)
Financing Costs	<u>\$ 3,777,391</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area G.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area G.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area G.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area H

Recoverable Impact Fee CIP Costs	\$ 15,287,977	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(1,480,339)	Page 2 of Appendix E - Service Area H
Financing Costs	2,312,920	See Detail Below
Existing Fund Balance	(155,834)	Page 1 of Appendix E - Service Area H
Interest Earnings	(613,109)	Page 4 of Appendix E - Service Area H
Pre Credit Recoverable Cost for Impact Fee	\$ 15,351,614	Sum of Above
Credit for Ad Valorem Revenues	(231,567)	Page 6 of Appendix E - Service Area H
Maximum Recoverable Cost for Impact Fee	\$ 15,120,047	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area H column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$5,578,232 - Page 5 of Appendix E - Service Area H). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 7,104,785	(Page 2 of Appendix E - Service Area H)
Existing Annual Debt Service	3,437,541	(Page 2 of Appendix E - Service Area H)
Principal Component	(8,229,406)	(Page 2 of Appendix E - Service Area H)
Financing Costs	<u>\$ 2,312,920</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area H.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area H.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area H.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area I

Recoverable Impact Fee CIP Costs	\$ 21,410,896	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(3,015,847)	Page 2 of Appendix E - Service Area I
Financing Costs	3,711,605	See Detail Below
Existing Fund Balance	(1,812,501)	Page 1 of Appendix E - Service Area I
Interest Earnings	(793,773)	Page 4 of Appendix E - Service Area I
Pre Credit Recoverable Cost for Impact Fee	\$ 19,500,380	Sum of Above
Credit for Ad Valorem Revenues	(274,133)	Page 6 of Appendix E - Service Area I
Maximum Recoverable Cost for Impact Fee	\$ 19,226,247	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area I column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$6,007,741 - Page 5 of Appendix E - Service Area I). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 7,651,835	(Page 2 of Appendix E - Service Area I)
Existing Annual Debt Service	8,447,079	(Page 2 of Appendix E - Service Area I)
Principal Component	(12,387,309)	(Page 2 of Appendix E - Service Area I)
Financing Costs	<u>\$ 3,711,605</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area I.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area I.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area I.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area J

Recoverable Impact Fee CIP Costs	\$ 13,529,643	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(940,339)	Page 2 of Appendix E - Service Area J
Financing Costs	2,718,278	See Detail Below
Existing Fund Balance	(710,292)	Page 1 of Appendix E - Service Area J
Interest Earnings	(605,002)	Page 4 of Appendix E - Service Area J
Pre Credit Recoverable Cost for Impact Fee	\$ 13,992,287	Sum of Above
Credit for Ad Valorem Revenues	(104,037)	Page 6 of Appendix E - Service Area J
Maximum Recoverable Cost for Impact Fee	\$ 13,888,250	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area J column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$4,380,571- Page 5 of Appendix E - Service Area J). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 5,579,370	(Page 2 of Appendix E - Service Area J)
Existing Annual Debt Service	5,347,640	(Page 2 of Appendix E - Service Area J)
Principal Component	(8,208,732)	(Page 2 of Appendix E - Service Area J)
Financing Costs	<u>\$ 2,718,278</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area J.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area J.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area J.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area K

Recoverable Impact Fee CIP Costs	\$ 10,426,241	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(248,062)	Page 2 of Appendix E - Service Area K
Financing Costs	1,445,258	See Detail Below
Existing Fund Balance	(354,289)	Page 1 of Appendix E - Service Area K
Interest Earnings	(537,659)	Page 4 of Appendix E - Service Area K
Pre Credit Recoverable Cost for Impact Fee	\$ 10,731,489	Sum of Above
Credit for Ad Valorem Revenues	(26,696)	Page 6 of Appendix E - Service Area K
Maximum Recoverable Cost for Impact Fee	\$ 10,704,793	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area K column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments. 2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$4,894,135- Page 5 of Appendix E - Service Area K). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 6,233,476	(Page 2 of Appendix E - Service Area K)
Existing Annual Debt Service	495,826	(Page 2 of Appendix E - Service Area K)
Principal Component	(5,284,045)	(Page 2 of Appendix E - Service Area K)
Financing Costs	\$ 1,445,258	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area K.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area K.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area K.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area L

Recoverable Impact Fee CIP Costs	\$ 835,769	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(15,112)	Page 2 of Appendix E - Service Area L
Financing Costs	115,494	See Detail Below
Existing Fund Balance	-	Page 1 of Appendix E - Service Area L
Interest Earnings	(42,501)	Page 4 of Appendix E - Service Area L
Pre Credit Recoverable Cost for Impact Fee	\$ 893,650	Sum of Above
Credit for Ad Valorem Revenues	(157)	Page 6 of Appendix E - Service Area L
Maximum Recoverable Cost for Impact Fee	\$ 893,493	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees.

Reference is Service Area L column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs assuming City's five-year historical weighted average cost of outstanding GO/CO debt and constant annual debt service payments.

2003-2008 project costs assume a debt issue in 2003 and 2008-2012 project costs assume a debt issue in 2008.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (\$398,452 - Page 5 of Appendix E - Service Area L). Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 507,494	(Page 2 of Appendix E - Service Area L)
Existing Annual Debt Service	30,205	(Page 2 of Appendix E - Service Area L)
Principal Component	(422,205)	(Page 2 of Appendix E - Service Area L)
Financing Costs	\$ 115,494	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Some projects that are included in the 2013 Impact Fee Update were also included in the 2008 Impact Fee Update and the 2003 Impact Fee Update.

To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Appendix E - Service Area L.

Interest Earnings:

Represents the interest earned on cash flows. Assumes a .90% annual interest rate based on the City's current annual return as of 2013. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues.

Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Appendix E - Service Area L.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Principal Paid on Existing Debt Funded Project Costs, Existing Fund Balance, and Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 6 of Appendix E - Service Area L.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues.

This is the maximum cost that can be recovered through impact fees.



Kimley-Horn
and Associates, Inc.



**Appendix E – Plan for Awarding the
Roadway Impact Fee Credit Supporting Exhibits**
(as prepared by J. Stowe & Co.)

DRAFT

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area B

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	219
Existing Fund Balance ⁽³⁾	\$ -
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ -
Non-debt Funded New Project Cost ⁽⁵⁾	871,200
New Project Cost Funded Through New Debt ⁽⁶⁾	871,200
Total Recoverable Project Cost ⁽⁷⁾	\$ 1,742,400

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 87,120	2.30%	20
2	87,120	2.31%	20
3	87,120	2.32%	20
4	87,120	2.35%	20
5	87,120	2.38%	20
6	87,120	2.45%	20
7	87,120	2.50%	20
8	87,120	2.53%	20
9	87,120	2.55%	20
10	87,120	2.59%	20
Total	\$ 871,200		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 130,680
2	174,240
3	174,240
4	174,240
5	174,240
6	174,240
7	174,240
8	174,240
9	174,240
10	217,800
Total	\$ 1,742,400

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area B

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 5,483	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,483
2	5,483	5,487	-	-	-	-	-	-	-	-	10,970
3	5,483	5,487	5,491	-	-	-	-	-	-	-	16,462
4	5,483	5,487	5,491	5,507	-	-	-	-	-	-	21,969
5	5,483	5,487	5,491	5,507	5,526	-	-	-	-	-	27,495
6	5,483	5,487	5,491	5,507	5,526	5,560	-	-	-	-	33,055
7	5,483	5,487	5,491	5,507	5,526	5,560	5,590	-	-	-	38,645
8	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	-	-	44,247
9	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	-	49,864
10	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
11	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
12	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
13	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
14	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
15	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
16	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
17	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
18	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
19	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
20	5,483	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	55,502
21	-	5,487	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	50,019
22	-	-	5,491	5,507	5,526	5,560	5,590	5,602	5,617	5,638	44,532
23	-	-	-	5,507	5,526	5,560	5,590	5,602	5,617	5,638	39,041
24	-	-	-	-	5,526	5,560	5,590	5,602	5,617	5,638	33,534
25	-	-	-	-	-	5,560	5,590	5,602	5,617	5,638	28,008
26	-	-	-	-	-	-	5,590	5,602	5,617	5,638	22,448
27	-	-	-	-	-	-	-	5,602	5,617	5,638	16,857
28	-	-	-	-	-	-	-	-	5,617	5,638	11,255
29	-	-	-	-	-	-	-	-	-	5,638	5,638
	\$ 109,669	\$ 109,735	\$ 109,826	\$ 110,142	\$ 110,522	\$ 111,200	\$ 111,806	\$ 112,040	\$ 112,338	\$ 112,767	\$ 1,110,045

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 5,483	\$ 130,680	\$ (87,120)	\$ -	\$ (2)	\$ 49,041
2	10,970	174,240	(87,120)	-	(10)	98,080
3	16,462	174,240	(87,120)	-	(22)	103,560
4	21,969	174,240	(87,120)	-	(39)	109,049
5	27,495	174,240	(87,120)	-	(61)	114,583
6	33,055	174,240	(87,120)	-	(88)	120,086
7	38,645	174,240	(87,120)	-	(120)	125,645
8	44,247	174,240	(87,120)	-	(157)	131,210
9	49,864	174,240	(87,120)	-	(199)	136,784
10	55,502	217,800	(87,120)	-	(247)	185,936
11	55,502	-	NA	-	-	55,502
12	55,502	-	NA	-	-	55,502
13	55,502	-	NA	-	-	55,502
14	55,502	-	NA	-	-	55,502
15	55,502	-	NA	-	-	55,502
16	55,502	-	NA	-	-	55,502
17	55,502	-	NA	-	-	55,502
18	55,502	-	NA	-	-	55,502
19	55,502	-	NA	-	-	55,502
20	55,502	-	NA	-	-	55,502
21	50,019	-	NA	-	-	50,019
22	44,532	-	NA	-	-	44,532
23	39,041	-	NA	-	-	39,041
24	33,534	-	NA	-	-	33,534
25	28,008	-	NA	-	-	28,008
26	22,448	-	NA	-	-	22,448
27	16,857	-	NA	-	-	16,857
28	11,255	-	NA	-	-	11,255
29	5,638	-	NA	-	-	5,638
	\$ 1,110,045	\$ 1,742,400	\$ (871,200)	\$ -	\$ (947)	\$ 1,980,298

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

Year	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ -	\$ -	\$ -
2004	-	-	-
2005	-	-	-
2006	-	-	-
2007	-	-	-
2008	-	-	-
2009	-	-	-
2010	-	-	-
2011	-	-	-
2012	-	-	-
	\$ -	\$ -	\$ -

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	-
-Less Principal PTD	-
Outstanding Debt Principal	-
New Project Costs Debt Principal ⁽⁵⁾	871,200
Principal Component	\$ 871,200

(1) Appendix E - Service Area B, Page 2
 (2) Appendix E - Service Area B, page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area B, page 6
 (5) Appendix E - Service Area B, page 2

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	219	283	\$ 49,041	\$ 63,309
2	28	1.2794	1.0000	219	280	98,080	125,486
3	27	1.2680	1.0000	219	278	103,560	131,314
4	26	1.2567	1.0000	219	275	109,049	137,042
5	25	1.2455	1.0000	219	273	114,553	142,674
6	24	1.2344	1.0000	219	271	120,086	148,232
7	23	1.2234	1.0000	219	268	125,645	153,709
8	22	1.2125	1.0000	219	266	131,210	159,085
9	21	1.2016	1.0000	219	263	136,784	164,365
10	20	1.1909	1.0000	219	261	185,936	221,434
11	19	1.1803	1.0000	-	-	55,502	65,509
12	18	1.1698	1.0000	-	-	55,502	64,925
13	17	1.1593	1.0000	-	-	55,502	64,346
14	16	1.1490	1.0000	-	-	55,502	63,772
15	15	1.1387	1.0000	-	-	55,502	63,203
16	14	1.1286	1.0000	-	-	55,502	62,639
17	13	1.1185	1.0000	-	-	55,502	62,080
18	12	1.1085	1.0000	-	-	55,502	61,527
19	11	1.0987	1.0000	-	-	55,502	60,978
20	10	1.0889	1.0000	-	-	55,502	60,434
21	9	1.0791	1.0000	-	-	50,019	53,977
22	8	1.0695	1.0000	-	-	44,532	47,628
23	7	1.0600	1.0000	-	-	39,041	41,382
24	6	1.0505	1.0000	-	-	33,534	35,228
25	5	1.0412	1.0000	-	-	28,008	29,160
26	4	1.0319	1.0000	-	-	22,448	23,163
27	3	1.0227	1.0000	-	-	16,857	17,239
28	2	1.0135	1.0000	-	-	11,255	11,408
29	1	1.0045	1.0000	-	-	5,638	5,664
					2,719		2,340,910

Total Escalated Expense for Entire Period	\$ 2,340,910
Less Future Value of Initial Fund Balance	-
Net Escalated Expense for Entire Period	\$ 2,340,910
Total Escalated Service Units	2,719
Impact Fee for Service Area C	\$ 861

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 861	219	\$ 188,733	\$ 49,041	\$ 139,692	629	140,321
2	861	219	188,733	98,080	90,653	1,671	232,645
3	861	219	188,733	103,560	85,174	2,477	320,296
4	861	219	188,733	109,049	79,684	3,241	403,221
5	861	219	188,733	114,553	74,180	3,963	481,363
6	861	219	188,733	120,086	68,647	4,641	554,651
7	861	219	188,733	125,645	63,089	5,276	623,016
8	861	219	188,733	131,210	57,524	5,866	686,406
9	861	219	188,733	136,784	51,949	6,411	744,766
10	861	219	188,733	185,936	2,798	6,715	754,279
11	-	-	-	55,502	(55,502)	6,539	705,316
12	-	-	-	55,502	(55,502)	6,098	655,911
13	-	-	-	55,502	(55,502)	5,653	606,063
14	-	-	-	55,502	(55,502)	5,205	555,765
15	-	-	-	55,502	(55,502)	4,752	505,015
16	-	-	-	55,502	(55,502)	4,295	453,808
17	-	-	-	55,502	(55,502)	3,835	402,141
18	-	-	-	55,502	(55,502)	3,370	350,008
19	-	-	-	55,502	(55,502)	2,900	297,406
20	-	-	-	55,502	(55,502)	2,427	244,331
21	-	-	-	50,019	(50,019)	1,974	196,286
22	-	-	-	44,532	(44,532)	1,566	153,320
23	-	-	-	39,041	(39,041)	1,204	115,483
24	-	-	-	33,534	(33,534)	888	82,838
25	-	-	-	28,008	(28,008)	620	55,450
26	-	-	-	22,448	(22,448)	398	33,401
27	-	-	-	16,857	(16,857)	225	16,768
28	-	-	-	11,255	(11,255)	100	5,613
29	-	-	-	5,638	(5,638)	25	0
			1,887,333	1,980,298		92,965	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>	<u>Impact Fee Recoverable Cost⁽²⁾</u>	<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
				<u>Existing</u>	<u>Proposed</u>		
Hardin Blvd. (1)	B-1	\$ 212,800	\$ 211,826	\$ -	\$ 105,913	\$ 105,913	\$ 211,826
Hardin Blvd. (2)	B-2	1,428,000	1,421,461	-	710,731	710,731	1,421,461
Signal Installation	S-2	100,000	99,542	-	49,771	49,771	99,542
2013 Transportation Impact Fee Study		9,615	9,571	-	4,785	4,785	9,571
Total		\$ 1,750,415	\$ 1,742,400	\$ -	\$ 871,200	\$ 871,200	\$ 1,742,400

(1) 2012-2013 Roadway Impact Fee Study As Assigned to Service Area, Appendix B

(2) Table 7, Line 11 of Report

(3) Per discussions with City staff and City files

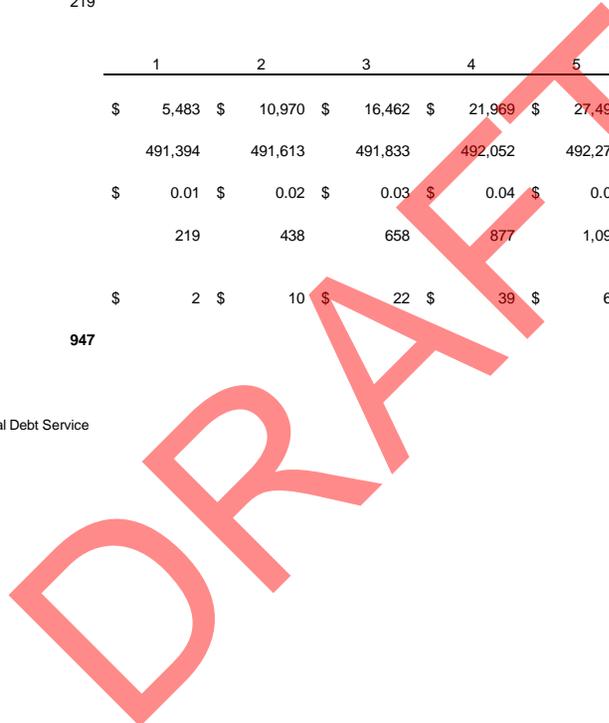
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City of McKinney 2012-2013 Roadway Impact Fee Update
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 Appendix E - Impact Fee Calculation Assumptions
 Service Area B

2013 Vehicle Miles (All Service Areas) ⁽¹⁾	491,175
Ten Year Growth in Vehicle Miles (Service Area B) ⁽¹⁾	2,192
Annual Growth in Vehicle Miles	$\frac{2,192}{10 \text{ years}} = 219$

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees ⁽²⁾	\$ 5,483	\$ 10,970	\$ 16,462	\$ 21,969	\$ 27,495	\$ 33,055	\$ 38,645	\$ 44,247	\$ 49,864	\$ 55,502	\$ 303,691
2013 Vehicle Miles plus Service Area B Growth	491,394	491,613	491,833	492,052	492,271	492,490	492,709	492,929	493,148	493,367	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.01	\$ 0.02	\$ 0.03	\$ 0.04	\$ 0.06	\$ 0.07	\$ 0.08	\$ 0.09	\$ 0.10	\$ 0.11	
Annual Growth in Service Area B Vehicle Miles (Cumulative)	219	438	658	877	1,096	1,315	1,534	1,754	1,973	2,192	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 2	\$ 10	\$ 22	\$ 39	\$ 61	\$ 88	\$ 120	\$ 157	\$ 199	\$ 247	\$ 947
Credit Amount	\$ 947										

(1) Table 7 of the 10-Year Growth Report
 (2) Appendix E - Service Area B, page 7 - New Annual Debt Service plus Existing Annual Debt Service



City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area C

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	1,513
Existing Fund Balance ⁽³⁾	\$ 511,016
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 239,173
Non-debt Funded New Project Cost ⁽⁵⁾	10,672,821
New Project Cost Funded Through New Debt ⁽⁶⁾	10,672,821
Total Recoverable Project Cost ⁽⁷⁾	\$ 21,584,815

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 1,067,282	2.30%	20
2	1,067,282	2.31%	20
3	1,067,282	2.32%	20
4	1,067,282	2.35%	20
5	1,067,282	2.38%	20
6	1,067,282	2.45%	20
7	1,067,282	2.50%	20
8	1,067,282	2.53%	20
9	1,067,282	2.55%	20
10	1,067,282	2.59%	20
Total	\$ 10,672,821		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 1,600,923
2	2,134,564
3	2,134,564
4	2,134,564
5	2,134,564
6	2,134,564
7	2,134,564
8	2,134,564
9	2,134,564
10	2,668,205
Total	\$ 21,345,642

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area C

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 67,176	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 67,176
2	67,176	67,217	-	-	-	-	-	-	-	-	134,393
3	67,176	67,217	67,273	-	-	-	-	-	-	-	201,666
4	67,176	67,217	67,273	67,466	-	-	-	-	-	-	269,131
5	67,176	67,217	67,273	67,466	67,698	-	-	-	-	-	336,830
6	67,176	67,217	67,273	67,466	67,698	68,114	-	-	-	-	404,944
7	67,176	67,217	67,273	67,466	67,698	68,114	68,485	-	-	-	473,429
8	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	-	-	542,057
9	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	-	610,868
10	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
11	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
12	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
13	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
14	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
15	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
16	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
17	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
18	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
19	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
20	67,176	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	679,942
21	-	67,217	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	612,766
22	-	-	67,273	67,466	67,698	68,114	68,485	68,628	68,811	69,074	545,549
23	-	-	-	67,466	67,698	68,114	68,485	68,628	68,811	69,074	478,276
24	-	-	-	-	67,698	68,114	68,485	68,628	68,811	69,074	410,811
25	-	-	-	-	-	68,114	68,485	68,628	68,811	69,074	343,112
26	-	-	-	-	-	-	68,485	68,628	68,811	69,074	274,998
27	-	-	-	-	-	-	-	68,628	68,811	69,074	206,513
28	-	-	-	-	-	-	-	-	68,811	69,074	137,885
29	-	-	-	-	-	-	-	-	-	69,074	69,074
	\$ 1,343,527	\$ 1,344,333	\$ 1,345,451	\$ 1,349,313	\$ 1,353,968	\$ 1,362,283	\$ 1,369,699	\$ 1,372,570	\$ 1,376,215	\$ 1,381,479	\$ 13,598,837

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽⁴⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 67,176	\$ 1,600,923	\$ (1,067,282)	\$ 18,588	\$ (263)	\$ 619,142
2	134,393	2,134,564	(1,067,282)	18,588	(937)	1,219,326
3	201,666	2,134,564	(1,067,282)	18,588	(2,017)	1,285,519
4	269,131	2,134,564	(1,067,282)	18,588	(3,503)	1,351,499
5	336,830	2,134,564	(1,067,282)	18,588	(5,392)	1,417,307
6	404,944	2,134,564	(1,067,282)	18,588	(7,688)	1,483,126
7	473,429	2,134,564	(1,067,282)	18,588	(10,388)	1,548,911
8	542,057	2,134,564	(1,067,282)	18,588	(13,487)	1,614,440
9	610,868	2,134,564	(1,067,282)	18,588	(16,984)	1,679,754
10	679,942	2,668,205	(1,067,282)	18,588	(20,880)	2,278,574
11	679,942	-	-	-	-	679,942
12	679,942	-	-	-	-	679,942
13	679,942	-	-	-	-	679,942
14	679,942	-	-	-	-	679,942
15	679,942	-	-	-	-	679,942
16	679,942	-	-	-	-	679,942
17	679,942	-	-	-	-	679,942
18	679,942	-	-	-	-	679,942
19	679,942	-	-	-	-	679,942
20	679,942	-	-	-	-	679,942
21	612,766	-	-	-	-	612,766
22	545,549	-	-	-	-	545,549
23	478,276	-	-	-	-	478,276
24	410,811	-	-	-	-	410,811
25	343,112	-	-	-	-	343,112
26	274,998	-	-	-	-	274,998
27	206,513	-	-	-	-	206,513
28	137,885	-	-	-	-	137,885
29	69,074	-	-	-	-	69,074
	\$ 13,598,837	\$ 21,345,642	\$ (10,672,821)	\$ 185,882	\$ (81,540)	\$ 24,376,000

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	7,524	-	7,524
2004	7,872	-	7,872
2005	8,236	-	8,236
2006	8,617	-	8,617
2007	9,015	-	9,015
2008	9,433	-	9,433
2009	9,869	-	9,869
2010	10,325	-	10,325
2011	10,803	-	10,803
2012	11,303	-	11,303
	\$ 92,997	\$ -	\$ 92,997

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	239,173
-Less Principal PTD	92,997
Outstanding Debt Principal	146,177
New Project Costs Debt Principal ⁽⁵⁾	10,672,821
Principal Component	\$ 10,818,997

(1) Appendix E - Service Area C, Page 2
 (2) Appendix E - Service Area C, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area C, Page 6
 (5) Appendix E - Service Area C, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update
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 Appendix E - Impact Fee Calculation Assumptions
 Service Area C

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	1,513	1,954	\$ 619,142	\$ 799,269
2	28	1.2794	1.0000	1,513	1,936	1,219,326	1,560,024
3	27	1.2680	1.0000	1,513	1,919	1,285,519	1,630,041
4	26	1.2567	1.0000	1,513	1,902	1,351,499	1,698,418
5	25	1.2455	1.0000	1,513	1,885	1,417,307	1,765,233
6	24	1.2344	1.0000	1,513	1,868	1,483,126	1,830,732
7	23	1.2234	1.0000	1,513	1,851	1,548,911	1,894,882
8	22	1.2125	1.0000	1,513	1,835	1,614,440	1,957,431
9	21	1.2016	1.0000	1,513	1,819	1,679,754	2,018,454
10	20	1.1909	1.0000	1,513	1,802	2,278,574	2,713,596
11	19	1.1803	1.0000	-	-	679,942	802,533
12	18	1.1698	1.0000	-	-	679,942	795,374
13	17	1.1593	1.0000	-	-	679,942	788,280
14	16	1.1490	1.0000	-	-	679,942	781,249
15	15	1.1387	1.0000	-	-	679,942	774,280
16	14	1.1286	1.0000	-	-	679,942	767,374
17	13	1.1185	1.0000	-	-	679,942	760,529
18	12	1.1085	1.0000	-	-	679,942	753,745
19	11	1.0987	1.0000	-	-	679,942	747,022
20	10	1.0889	1.0000	-	-	679,942	740,359
21	9	1.0791	1.0000	-	-	612,766	661,262
22	8	1.0695	1.0000	-	-	545,549	583,474
23	7	1.0600	1.0000	-	-	478,276	506,962
24	6	1.0505	1.0000	-	-	410,811	431,566
25	5	1.0412	1.0000	-	-	343,112	357,232
26	4	1.0319	1.0000	-	-	274,998	283,761
27	3	1.0227	1.0000	-	-	206,513	211,193
28	2	1.0135	1.0000	-	-	137,885	139,752
29	1	1.0045	1.0000	-	-	69,074	69,385
					18,771	24,376,000	28,823,413

Total Escalated Expense for Entire Period	\$ 28,823,413
Less Future Value of Initial Fund Balance	662,641
Net Escalated Expense for Entire Period	\$ 28,160,772
Total Escalated Service Units	18,771
Impact Fee for Service Area C	\$ 1,500

City of McKinney 2012-2013 Roadway Impact Fee Update
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 Appendix E - Impact Fee Calculation Assumptions
 Service Area C

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 511,016
1	\$ 1,500	1,513	\$ 2,270,431	\$ 619,142	\$ 1,651,289	12,030	2,174,335
2	1,500	1,513	2,270,431	1,219,326	1,051,105	24,299	3,249,739
3	1,500	1,513	2,270,431	1,285,519	984,913	33,680	4,268,332
4	1,500	1,513	2,270,431	1,351,499	918,933	42,550	5,229,815
5	1,500	1,513	2,270,431	1,417,307	853,124	50,907	6,133,847
6	1,500	1,513	2,270,431	1,483,126	787,305	58,747	6,979,900
7	1,500	1,513	2,270,431	1,548,911	721,520	66,066	7,767,486
8	1,500	1,513	2,270,431	1,614,440	655,991	72,859	8,496,337
9	1,500	1,513	2,270,431	1,679,754	590,678	79,125	9,166,139
10	1,500	1,513	2,270,431	2,278,574	(8,142)	82,459	9,240,456
11	-	-	-	679,942	(679,942)	80,104	8,640,618
12	-	-	-	679,942	(679,942)	74,706	8,035,382
13	-	-	-	679,942	(679,942)	69,259	7,424,699
14	-	-	-	679,942	(679,942)	63,763	6,808,520
15	-	-	-	679,942	(679,942)	58,217	6,186,795
16	-	-	-	679,942	(679,942)	52,621	5,559,475
17	-	-	-	679,942	(679,942)	46,976	4,926,508
18	-	-	-	679,942	(679,942)	41,279	4,287,845
19	-	-	-	679,942	(679,942)	35,531	3,643,434
20	-	-	-	679,942	(679,942)	29,731	2,993,224
21	-	-	-	612,766	(612,766)	24,182	2,404,640
22	-	-	-	545,549	(545,549)	19,187	1,878,278
23	-	-	-	478,276	(478,276)	14,752	1,414,753
24	-	-	-	410,811	(410,811)	10,884	1,014,827
25	-	-	-	343,112	(343,112)	7,589	679,304
26	-	-	-	274,998	(274,998)	4,876	409,182
27	-	-	-	206,513	(206,513)	2,753	205,422
28	-	-	-	137,885	(137,885)	1,228	68,766
29	-	-	-	69,074	(69,074)	308	0
			22,704,315	24,376,000		1,160,669	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

Impact Fee Project Name ⁽¹⁾	Impact Fee Project No. ⁽¹⁾	Cost in		Impact Fee		Debt Funded ⁽³⁾		Non-Debt	Impact Fee		
		Service Area ⁽¹⁾		Recoverable Cost ⁽²⁾		Existing	Proposed	Funded ⁽³⁾	Recoverable Cost		
Future Arterial B (CCR 168) (1)	C-1	\$	902,300	\$	301,793	\$	-	\$	150,897	\$	301,793
FM 1461 (1)	C-2		281,050		94,003		-		47,002		94,003
FM 1461 (2)	C-3		943,600		315,607		-		157,803		315,607
FM 1461 (3)	C-4		337,400		112,851		-		56,425		112,851
FM 1461 (4)	C-5		1,366,750		457,138		-		228,569		457,138
Bloomdale Rd. (1)	C-6		1,493,800		499,633		-		249,816		499,633
Bloomdale Rd. (2)	C-7		1,281,700		428,691		-		214,346		428,691
Bloomdale Rd. (3)	C-8		6,070,400		2,030,373		-		1,015,186		2,030,373
Bloomdale Rd. (4)	C-9		1,151,500		385,143		-		192,572		385,143
Bloomdale Rd. (5)	C-10		771,400		258,011		-		129,005		258,011
Bloomdale Rd. (6)	C-11		478,800		160,145		-		80,072		160,145
Wilmeth Rd. (1)	C-12		4,781,750		1,599,357		-		799,678		1,599,357
Wilmeth Rd. (2)	C-13		2,546,600		851,764		-		425,882		851,764
Wilmeth Rd. (3)	C-14		762,300		254,967		-		127,484		254,967
Wilmeth Rd. (4)	C-15		245,199		82,012		18,797		31,608		82,012
Wilmeth Rd. (5)	C-16		900,960		301,345		136,785		82,280		301,345
Custer Rd. (1)	C-17		518,000		173,256		-		86,628		173,256
Custer Rd. (2)	C-18		2,342,050		783,348		-		391,674		783,348
Custer Rd. (3)	C-19		1,049,650		351,077		-		175,539		351,077
Custer Rd. (4)	C-20		1,454,950		486,639		-		243,319		486,639
Stonebridge Dr. (1)	C-21		10,102,900		3,379,127		-		1,689,563		3,379,127
Stonebridge Dr. (2)	C-22		489,800		163,824		-		81,912		163,824
Stonebridge Dr. (3)	C-23		10,205,200		3,413,343		-		1,706,672		3,413,343
Ridge Rd. (1)	C-24		899,500		300,857		-		150,428		300,857
Ridge Rd. (2)	C-25		3,909,100		1,307,481		-		653,740		1,307,481
Ridge Rd. (3)	C-26		2,133,600		713,627		-		356,814		713,627
Ridge Rd. (4)	C-27		481,600		161,081		-		80,541		161,081
Ridge Rd. (5)	C-28		2,022,750		676,551		-		338,276		676,551
Lake Forest Dr. (2)	C-29		2,243,500		750,386		-		375,193		750,386
Lake Forest Dr. (3)	C-30, D-13		1,007,720		337,053		83,591		126,731		337,053
Signal Installation	S-1		50,000		16,724		-		8,362		16,724
Signal Installation	S-4		161,250		53,933		-		26,967		53,933
Signal Installation	S-5		107,500		35,956		-		17,978		35,956
Signal Installation	S-6		107,500		35,956		-		17,978		35,956
Signal Installation	S-7		200,000		66,894		-		33,447		66,894
Signal Installation	S-8		100,000		33,447		-		16,724		33,447
Signal Installation	S-9		50,000		16,724		-		8,362		16,724
Signal Installation	S-10		150,000		50,171		-		25,085		50,171
Signal Installation	S-11		100,000		33,447		-		16,724		33,447
Signal Installation	S-12		107,500		35,956		-		17,978		35,956
Signal Installation	S-13		107,500		35,956		-		17,978		35,956
Signal Installation	S-14		107,500		35,956		-		17,978		35,956
2013 Transportation Impact Fee Study			9,615		3,216		-		1,608		3,216
Total		\$	64,534,194	\$	21,584,815	\$	239,173	\$	10,672,821	\$	21,584,815

(1) 2012-2013 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Table 7, Line 11 of Report

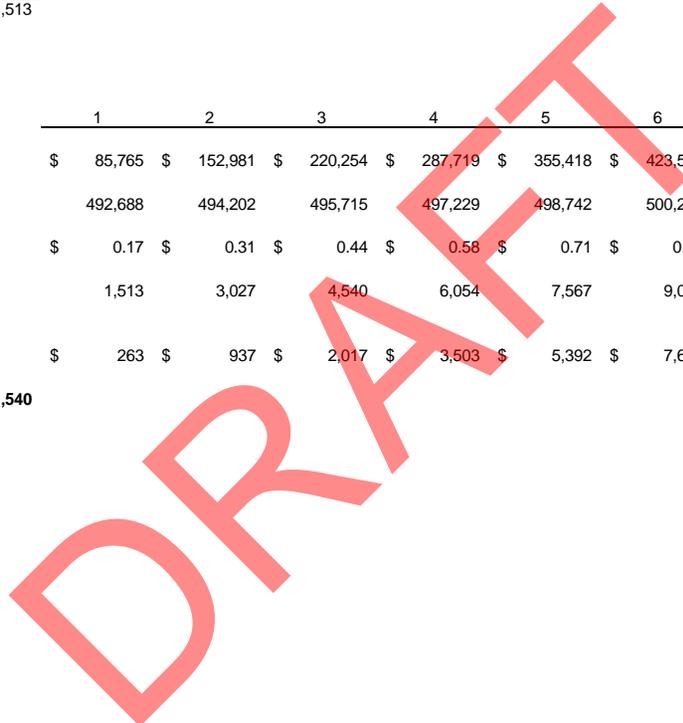
(3) Based on Contributions by Project and Planned Future Debt Financing

City of McKinney 2012-2013 Roadway Impact Fee Update
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 Appendix E - Impact Fee Calculation Assumptions
 Service Area C

2013 Vehicle Miles (All Service Areas) ⁽¹⁾	491,175
Ten Year Growth in Vehicle Miles (Service Area C) ⁽¹⁾	15,134
	10 years
Annual Growth in Vehicle Miles	1,513

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 85,765	\$ 152,981	\$ 220,254	\$ 287,719	\$ 355,418	\$ 423,532	\$ 492,017	\$ 560,645	\$ 629,456	\$ 698,530	\$ 3,906,317
2013 Vehicle Miles plus Service Area C Growth	492,688	494,202	495,715	497,229	498,742	500,255	501,769	503,282	504,796	506,309	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.17	\$ 0.31	\$ 0.44	\$ 0.58	\$ 0.71	\$ 0.85	\$ 0.98	\$ 1.11	\$ 1.25	\$ 1.38	
Annual Growth in Service Area C Vehicle Miles (Cumulative)	1,513	3,027	4,540	6,054	7,567	9,080	10,594	12,107	13,621	15,134	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 263	\$ 937	\$ 2,017	\$ 3,503	\$ 5,392	\$ 7,688	\$ 10,388	\$ 13,487	\$ 16,984	\$ 20,880	\$ 81,540
Credit Amount	\$ 81,540										

(1) Table 7 of the 10-Year Growth Report



City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area D

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	2,019
Existing Fund Balance ⁽³⁾	\$ 784,214
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 1,294,194
Non-debt Funded New Project Cost ⁽⁵⁾	15,930,591
New Project Cost Funded Through New Debt ⁽⁶⁾	15,930,591
Total Recoverable Project Cost ⁽⁷⁾	\$ 33,155,376

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 1,593,059	2.30%	20
2	1,593,059	2.31%	20
3	1,593,059	2.32%	20
4	1,593,059	2.35%	20
5	1,593,059	2.38%	20
6	1,593,059	2.45%	20
7	1,593,059	2.50%	20
8	1,593,059	2.53%	20
9	1,593,059	2.55%	20
10	1,593,059	2.59%	20
Total	\$ 15,930,591		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 2,389,589
2	3,186,118
3	3,186,118
4	3,186,118
5	3,186,118
6	3,186,118
7	3,186,118
8	3,186,118
9	3,186,118
10	3,982,648
Total	\$ 31,861,182

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
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 Service Area D

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 100,270	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100,270
2	100,270	100,330	-	-	-	-	-	-	-	-	200,599
3	100,270	100,330	100,413	-	-	-	-	-	-	-	301,012
4	100,270	100,330	100,413	100,701	-	-	-	-	-	-	401,714
5	100,270	100,330	100,413	100,701	101,049	-	-	-	-	-	502,762
6	100,270	100,330	100,413	100,701	101,049	101,669	-	-	-	-	604,432
7	100,270	100,330	100,413	100,701	101,049	101,669	102,223	-	-	-	706,655
8	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	-	-	809,092
9	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	-	911,801
10	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
11	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
12	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
13	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
14	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
15	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
16	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
17	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
18	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
19	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
20	100,270	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	1,014,510
21	-	100,330	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	914,240
22	-	-	100,413	100,701	101,049	101,669	102,223	102,437	102,709	102,709	813,911
23	-	-	-	100,701	101,049	101,669	102,223	102,437	102,709	102,709	713,498
24	-	-	-	-	101,049	101,669	102,223	102,437	102,709	102,709	612,796
25	-	-	-	-	-	101,669	102,223	102,437	102,709	102,709	511,747
26	-	-	-	-	-	-	102,223	102,437	102,709	102,709	410,078
27	-	-	-	-	-	-	-	102,437	102,709	102,709	307,855
28	-	-	-	-	-	-	-	-	102,709	102,709	205,418
29	-	-	-	-	-	-	-	-	-	102,709	102,709
	\$ 2,005,391	\$ 2,006,594	\$ 2,008,263	\$ 2,014,027	\$ 2,020,976	\$ 2,033,387	\$ 2,044,455	\$ 2,048,741	\$ 2,054,183	\$ 2,054,183	\$ 20,290,198

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 100,270	\$ 2,389,589	\$ (1,593,059)	\$ 100,584	\$ (822)	\$ 996,561
2	200,599	3,186,118	(1,593,059)	100,584	(2,456)	1,891,786
3	301,012	3,186,118	(1,593,059)	100,584	(4,891)	1,989,764
4	401,714	3,186,118	(1,593,059)	100,584	(8,124)	2,087,232
5	502,762	3,186,118	(1,593,059)	100,584	(12,149)	2,184,256
6	604,432	3,186,118	(1,593,059)	100,584	(16,967)	2,281,108
7	706,655	3,186,118	(1,593,059)	100,584	(22,574)	2,377,723
8	809,092	3,186,118	(1,593,059)	100,584	(28,959)	2,475,777
9	911,801	3,186,118	(1,593,059)	100,584	(36,112)	2,569,332
10	1,014,510	3,982,648	(1,593,059)	100,584	(44,020)	3,460,862
11	1,014,510	-	-	-	-	1,014,510
12	1,014,510	-	-	-	-	1,014,510
13	1,014,510	-	-	-	-	1,014,510
14	1,014,510	-	-	-	-	1,014,510
15	1,014,510	-	-	-	-	1,014,510
16	1,014,510	-	-	-	-	1,014,510
17	1,014,510	-	-	-	-	1,014,510
18	1,014,510	-	-	-	-	1,014,510
19	1,014,510	-	-	-	-	1,014,510
20	1,014,510	-	-	-	-	1,014,510
21	914,240	-	-	-	-	914,240
22	813,911	-	-	-	-	813,911
23	713,498	-	-	-	-	713,498
24	612,796	-	-	-	-	612,796
25	511,747	-	-	-	-	511,747
26	410,078	-	-	-	-	410,078
27	307,855	-	-	-	-	307,855
28	205,418	-	-	-	-	205,418
29	102,709	-	-	-	-	102,709
	\$ 20,290,198	\$ 31,861,182	\$ (15,930,591)	\$ 1,005,836	\$ (177,073)	\$ 37,049,552

III. Summary of Principal Paid to Date for Existing Debt⁽³⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	40,712	\$ -	\$ 40,712
2004	42,595	-	42,595
2005	44,566	-	44,566
2006	46,627	-	46,627
2007	48,784	-	48,784
2008	51,041	-	51,041
2009	53,402	-	53,402
2010	55,873	-	55,873
2011	58,458	-	58,458
2012	61,162	-	61,162
	\$ 503,220	\$ -	\$ 503,220

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	1,294,194
-Less Principal PTD	503,220
Outstanding Debt Principal	790,974
New Project Costs Debt Principal ⁽⁵⁾	15,930,591
Principal Component	\$ 16,721,565

(1) Appendix E - Service Area D, Page 2

(2) Appendix E - Service Area D, Page 1

(3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.

(4) For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.

(5) Appendix E - Service Area D, Page 6

(5) Appendix E - Service Area D, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area D

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	2,019	2,606	\$ 996,561	\$ 1,286,490
2	28	1.2794	1.0000	2,019	2,583	1,891,786	2,420,380
3	27	1.2680	1.0000	2,019	2,560	1,989,764	2,523,026
4	26	1.2567	1.0000	2,019	2,537	2,087,232	2,623,010
5	25	1.2455	1.0000	2,019	2,514	2,184,256	2,720,455
6	24	1.2344	1.0000	2,019	2,492	2,281,108	2,815,740
7	23	1.2234	1.0000	2,019	2,470	2,377,723	2,908,820
8	22	1.2125	1.0000	2,019	2,448	2,473,777	2,999,335
9	21	1.2016	1.0000	2,019	2,426	2,569,332	3,087,404
10	20	1.1909	1.0000	2,019	2,404	3,460,662	4,121,367
11	19	1.1803	1.0000	-	-	1,014,510	1,197,422
12	18	1.1698	1.0000	-	-	1,014,510	1,186,741
13	17	1.1593	1.0000	-	-	1,014,510	1,176,156
14	16	1.1490	1.0000	-	-	1,014,510	1,165,665
15	15	1.1387	1.0000	-	-	1,014,510	1,155,268
16	14	1.1286	1.0000	-	-	1,014,510	1,144,963
17	13	1.1185	1.0000	-	-	1,014,510	1,134,750
18	12	1.1085	1.0000	-	-	1,014,510	1,124,628
19	11	1.0987	1.0000	-	-	1,014,510	1,114,597
20	10	1.0889	1.0000	-	-	1,014,510	1,104,655
21	9	1.0791	1.0000	-	-	914,240	986,597
22	8	1.0695	1.0000	-	-	813,911	870,492
23	7	1.0600	1.0000	-	-	713,498	756,292
24	6	1.0505	1.0000	-	-	612,796	643,757
25	5	1.0412	1.0000	-	-	511,747	532,807
26	4	1.0319	1.0000	-	-	410,078	423,146
27	3	1.0227	1.0000	-	-	307,855	314,832
28	2	1.0135	1.0000	-	-	205,418	208,200
29	1	1.0045	1.0000	-	-	102,709	103,171
					25,038		43,850,165

Total Escalated Expense for Entire Period	\$ 43,850,165
Less Future Value of Initial Fund Balance	1,016,900
Net Escalated Expense for Entire Period	\$ 42,833,264
Total Escalated Service Units	25,038
Impact Fee for Service Area C	\$ 1,711

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area D

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 784,214
1	\$ 1,711	2,019	\$ 3,453,385	\$ 996,561	\$ 2,456,825	18,114	3,259,152
2	1,711	2,019	3,453,385	1,891,786	1,561,599	36,360	4,857,111
3	1,711	2,019	3,453,385	1,989,764	1,463,621	50,300	6,371,032
4	1,711	2,019	3,453,385	2,087,232	1,366,153	63,487	7,800,672
5	1,711	2,019	3,453,385	2,184,256	1,269,129	75,917	9,145,718
6	1,711	2,019	3,453,385	2,281,108	1,172,278	87,587	10,405,582
7	1,711	2,019	3,453,385	2,377,723	1,075,662	98,491	11,579,736
8	1,711	2,019	3,453,385	2,473,777	979,608	108,626	12,667,970
9	1,711	2,019	3,453,385	2,569,332	884,053	117,990	13,670,013
10	1,711	2,019	3,453,385	3,460,662	(7,277)	122,997	13,785,734
11	-	-	-	1,014,510	(1,014,510)	119,506	12,890,730
12	-	-	-	1,014,510	(1,014,510)	111,451	11,987,672
13	-	-	-	1,014,510	(1,014,510)	103,324	11,076,486
14	-	-	-	1,014,510	(1,014,510)	95,123	10,157,099
15	-	-	-	1,014,510	(1,014,510)	86,849	9,229,437
16	-	-	-	1,014,510	(1,014,510)	78,500	8,293,427
17	-	-	-	1,014,510	(1,014,510)	70,076	7,348,993
18	-	-	-	1,014,510	(1,014,510)	61,576	6,396,059
19	-	-	-	1,014,510	(1,014,510)	52,999	5,434,548
20	-	-	-	1,014,510	(1,014,510)	44,346	4,464,384
21	-	-	-	914,240	(914,240)	36,065	3,586,209
22	-	-	-	813,911	(813,911)	28,613	2,800,911
23	-	-	-	713,498	(713,498)	21,997	2,109,411
24	-	-	-	612,796	(612,796)	16,227	1,512,842
25	-	-	-	511,747	(511,747)	11,313	1,012,407
26	-	-	-	410,078	(410,078)	7,266	609,595
27	-	-	-	307,855	(307,855)	4,101	305,841
28	-	-	-	205,418	(205,418)	1,828	102,251
29	-	-	-	102,709	(102,709)	458	0
			34,533,852	37,049,552		1,731,486	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

Impact Fee Project Name ⁽¹⁾	Impact Fee Project No. ⁽¹⁾	Cost in		Impact Fee		Debt Funded ⁽³⁾		Non-Debt	Impact Fee
		Service Area ⁽¹⁾		Recoverable Cost ⁽²⁾		Existing	Proposed	Funded ⁽³⁾	Recoverable Cost
Future Arterial B (CCR 168) (2)	A-1, D-1	\$ 1,491,875	\$	549,618	\$ -	\$ 274,809	\$ 274,809	\$	549,618
Future Arterial B (CCR 168) (3)	D-2	2,836,500		1,044,988	-	522,494	522,494		1,044,988
Future Arterial C (1)	D-3	2,364,525		871,109	-	435,555	435,555		871,109
Future Arterial C (2)	D-4	19,647,800		7,238,400	-	3,619,200	3,619,200		7,238,400
Bloomdale Rd. (7)	D-5	1,859,200		684,944	-	342,472	342,472		684,944
Bloomdale Rd. (8)	D-6	726,600		267,685	-	133,843	133,843		267,685
Bloomdale Rd. (9)	D-7	7,694,200		2,834,602	-	1,417,301	1,417,301		2,834,602
Wilmeth Rd. (6)	D-8	3,706,825		1,365,623	-	682,811	682,811		1,365,623
Wilmeth Rd. (7)	D-9	1,566,600		577,147	-	288,574	288,574		577,147
Wilmeth Rd. (8)	D-10	1,350,300		497,461	-	248,730	248,730		497,461
Wilmeth Rd. (9)	D-11	2,727,220		1,004,729	347,784	328,472	328,472		1,004,729
Lake Forest Dr. (1)	D-12	925,750		341,053	-	170,527	170,527		341,053
Lake Forest Dr. (3)	C-30, D-13	1,007,720		371,252	92,072	139,590	139,590		371,252
Future Unnamed B (1)	D-14	1,193,500		439,695	-	219,847	219,847		439,695
Future Unnamed B (2) / CR 1006	D-15	812,700		299,405	-	149,702	149,702		299,405
Future Unnamed B (3) / CR 943	D-16	1,222,200		450,268	-	225,134	225,134		450,268
Hardin Blvd. (3)	D-17	2,910,900		1,072,398	-	536,199	536,199		1,072,398
Hardin Blvd. (4)	D-18	777,325		286,372	-	143,186	143,186		286,372
Hardin Blvd. (5)	D-19	15,504,650		5,712,032	-	2,856,016	2,856,016		5,712,032
Hardin Blvd. (6)	D-20	1,130,725		416,568	-	208,284	208,284		416,568
Hardin Blvd. (7)	D-21	4,558,550		1,679,405	-	839,702	839,702		1,679,405
Hardin Blvd. (8)	D-22	964,600		355,366	-	177,683	177,683		355,366
Hardin Blvd. (9)	D-23	264,600		97,481	-	48,740	48,740		97,481
Hardin Blvd. (10)	D-24	4,204,201		1,548,860	854,338	347,261	347,261		1,548,860
Community Ave. (1)	D-25	1,260,000		464,194	-	232,097	232,097		464,194
Community Ave. (2)	D-26	551,600		203,214	-	101,607	101,607		203,214
Community Ave. (3)	D-27	628,600		231,581	-	115,791	115,791		231,581
Community Ave. (4)	D-28	1,094,800		403,333	-	201,666	201,666		403,333
Community Ave. (5)	D-29	600,600		221,266	-	110,633	110,633		221,266
Future Arterial C (3)	D-30	2,346,700		864,542	-	432,271	432,271		864,542
Future Unnamed C	D-31	525,450		193,580	-	96,790	96,790		193,580
Signal Installation	S-3	200,000		73,682	-	36,841	36,841		73,682
Signal Installation	S-11	50,000		18,420	-	9,210	9,210		18,420
Signal Installation	S-15	215,000		79,208	-	39,604	39,604		79,208
Signal Installation	S-16	215,000		79,208	-	39,604	39,604		79,208
Signal Installation	S-17	150,000		55,261	-	27,631	27,631		55,261
Signal Installation	S-18	200,000		73,682	-	36,841	36,841		73,682
Signal Installation	S-19	200,000		73,682	-	36,841	36,841		73,682
Signal Installation	S-20	150,000		55,261	-	27,631	27,631		55,261
Signal Installation	S-21	150,000		55,261	-	27,631	27,631		55,261
2013 Transportation Impact Fee Study		9,615		3,542	-	1,771	1,771		3,542
Total		\$ 89,996,431	\$	33,155,376	\$ 1,294,194	\$ 15,930,591	\$ 15,930,591	\$	33,155,376

(1) 2012-2013 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Table 7, Line 11 of Report

(3) Per discussions with City staff and City files

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area D

2013 Vehicle Miles (All Service Areas)⁽¹⁾ 491,175
 Ten Year Growth in Vehicle Miles (Service Area D) ⁽¹⁾ 20,187
 Annual Growth in Vehicle Miles $\frac{20,187}{10 \text{ years}}$ 2,019

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 200,853	\$ 301,183	\$ 401,596	\$ 502,297	\$ 603,346	\$ 705,015	\$ 807,238	\$ 909,675	\$ 1,012,384	\$ 1,115,094	\$ 6,558,682
2013 Vehicle Miles plus Service Area D Growth	493,194	495,212	497,231	499,250	501,269	503,287	505,306	507,325	509,343	511,362	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.41	\$ 0.61	\$ 0.81	\$ 1.01	\$ 1.20	\$ 1.40	\$ 1.60	\$ 1.79	\$ 1.99	\$ 2.18	
Annual Growth in Service Area D Vehicle Miles (Cumulative)	2,019	4,037	6,056	8,075	10,094	12,112	14,131	16,150	18,168	20,187	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 822	\$ 2,456	\$ 4,891	\$ 8,124	\$ 12,149	\$ 16,967	\$ 22,574	\$ 28,958	\$ 36,112	\$ 44,020	\$ 177,073
Credit Amount	\$ 177,073										

(1) Table 7 of the 10-Year Growth Report

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area E

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	787
Existing Fund Balance ⁽³⁾	\$ 85,229
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ -
Non-debt Funded New Project Cost ⁽⁵⁾	7,617,210
New Project Cost Funded Through New Debt ⁽⁶⁾	7,617,210
Total Recoverable Project Cost ⁽⁷⁾	\$ 15,234,420

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 761,721	2.30%	20
2	761,721	2.31%	20
3	761,721	2.32%	20
4	761,721	2.35%	20
5	761,721	2.38%	20
6	761,721	2.45%	20
7	761,721	2.50%	20
8	761,721	2.53%	20
9	761,721	2.55%	20
10	761,721	2.59%	20
Total	\$ 7,617,210		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 1,142,581
2	1,523,442
3	1,523,442
4	1,523,442
5	1,523,442
6	1,523,442
7	1,523,442
8	1,523,442
9	1,523,442
10	1,904,302
Total	\$ 15,234,420

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area E

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 47,944	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,944
2	47,944	47,973	-	-	-	-	-	-	-	-	95,917
3	47,944	47,973	48,013	-	-	-	-	-	-	-	143,929
4	47,944	47,973	48,013	48,150	-	-	-	-	-	-	192,079
5	47,944	47,973	48,013	48,150	48,316	-	-	-	-	-	240,396
6	47,944	47,973	48,013	48,150	48,316	48,613	-	-	-	-	289,009
7	47,944	47,973	48,013	48,150	48,316	48,613	48,878	-	-	-	337,887
8	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	-	-	386,867
9	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	-	435,977
10	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
11	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
12	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
13	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
14	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
15	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
16	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
17	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
18	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
19	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
20	47,944	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	485,088
21	-	47,973	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	437,144
22	-	-	48,013	48,150	48,316	48,613	48,878	48,980	49,110	49,110	389,171
23	-	-	-	48,150	48,316	48,613	48,878	48,980	49,110	49,110	341,159
24	-	-	-	-	48,316	48,613	48,878	48,980	49,110	49,110	293,008
25	-	-	-	-	-	48,613	48,878	48,980	49,110	49,110	244,692
26	-	-	-	-	-	-	48,878	48,980	49,110	49,110	196,079
27	-	-	-	-	-	-	-	48,980	49,110	49,110	147,201
28	-	-	-	-	-	-	-	-	49,110	49,110	98,221
29	-	-	-	-	-	-	-	-	-	49,110	49,110
	\$ 958,877	\$ 959,453	\$ 960,250	\$ 963,007	\$ 966,329	\$ 972,264	\$ 977,556	\$ 979,605	\$ 982,207	\$ 982,207	\$ 9,701,756

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽⁴⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 47,944	\$ 1,142,581	\$ (761,721)	\$ -	\$ (77)	\$ 428,728
2	95,917	1,523,442	(761,721)	-	(306)	857,331
3	143,929	1,523,442	(761,721)	-	(689)	904,961
4	192,079	1,523,442	(761,721)	-	(1,223)	952,577
5	240,396	1,523,442	(761,721)	-	(1,911)	1,000,206
6	289,009	1,523,442	(761,721)	-	(2,752)	1,047,978
7	337,887	1,523,442	(761,721)	-	(3,748)	1,095,860
8	386,867	1,523,442	(761,721)	-	(4,896)	1,143,692
9	435,977	1,523,442	(761,721)	-	(6,198)	1,191,501
10	485,088	1,904,302	(761,721)	-	(7,650)	1,620,019
11	485,088	-	-	-	-	485,088
12	485,088	-	-	-	-	485,088
13	485,088	-	-	-	-	485,088
14	485,088	-	-	-	-	485,088
15	485,088	-	-	-	-	485,088
16	485,088	-	-	-	-	485,088
17	485,088	-	-	-	-	485,088
18	485,088	-	-	-	-	485,088
19	485,088	-	-	-	-	485,088
20	485,088	-	-	-	-	485,088
21	437,144	-	-	-	-	437,144
22	389,171	-	-	-	-	389,171
23	341,159	-	-	-	-	341,159
24	293,008	-	-	-	-	293,008
25	244,692	-	-	-	-	244,692
26	196,079	-	-	-	-	196,079
27	147,201	-	-	-	-	147,201
28	98,221	-	-	-	-	98,221
29	49,110	-	-	-	-	49,110
	\$ 9,701,756	\$ 15,234,420	\$ (7,617,210)	\$ -	\$ (29,449)	\$ 17,289,517

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ -	\$ -	\$ -
2004	-	-	-
2005	-	-	-
2006	-	-	-
2007	-	-	-
2008	-	-	-
2009	-	-	-
2010	-	-	-
2011	-	-	-
2012	-	-	-
	\$ -	\$ -	\$ -

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	-
-Less Principal PTD	-
Outstanding Debt Principal	-
New Project Costs Debt Principal ⁽⁵⁾	7,617,210
Principal Component	\$ 7,617,210

(1) Appendix E - Service Area E, Page 2
 (2) Appendix E - Service Area E, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area E, Page 6
 (5) Appendix E - Service Area E, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area E

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 85,229
1	\$ 2,082	787	\$ 1,638,848	\$ 428,728	\$ 1,210,120	6,213	1,301,562
2	2,082	787	1,638,848	857,331	781,516	15,231	2,098,309
3	2,082	787	1,638,848	904,961	733,886	22,187	2,854,382
4	2,082	787	1,638,848	952,577	686,270	28,778	3,569,430
5	2,082	787	1,638,848	1,000,206	638,641	34,999	4,243,070
6	2,082	787	1,638,848	1,047,978	590,870	40,847	4,874,787
7	2,082	787	1,638,848	1,095,860	542,987	46,317	5,464,091
8	2,082	787	1,638,848	1,143,692	495,156	51,405	6,010,651
9	2,082	787	1,638,848	1,191,501	447,347	56,109	6,514,107
10	2,082	787	1,638,848	1,620,019	18,828	58,712	6,591,647
11	-	-	-	485,088	(485,088)	57,142	6,163,701
12	-	-	-	485,088	(485,088)	53,290	5,731,904
13	-	-	-	485,088	(485,088)	49,404	5,296,220
14	-	-	-	485,088	(485,088)	45,483	4,856,615
15	-	-	-	485,088	(485,088)	41,527	4,413,054
16	-	-	-	485,088	(485,088)	37,535	3,965,501
17	-	-	-	485,088	(485,088)	33,507	3,513,920
18	-	-	-	485,088	(485,088)	29,442	3,058,275
19	-	-	-	485,088	(485,088)	25,342	2,598,528
20	-	-	-	485,088	(485,088)	21,204	2,134,644
21	-	-	-	437,144	(437,144)	17,245	1,714,745
22	-	-	-	389,171	(389,171)	13,681	1,339,255
23	-	-	-	341,159	(341,159)	10,518	1,008,615
24	-	-	-	293,008	(293,008)	7,759	723,365
25	-	-	-	244,692	(244,692)	5,409	484,082
26	-	-	-	196,079	(196,079)	3,474	291,478
27	-	-	-	147,201	(147,201)	1,961	146,238
28	-	-	-	98,221	(98,221)	874	48,891
29	-	-	-	49,110	(49,110)	219	0
			16,388,476	17,289,517		815,812	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area E

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>		<u>Impact Fee Recoverable Cost⁽²⁾</u>		<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
						<u>Existing</u>	<u>Proposed</u>		
Bloomdale Rd. (10)	E-1	\$ 734,400	\$	200,723	\$ -	\$ 100,361	\$ 100,361	\$	200,723
Bloomdale Rd. (11)	E-2	2,100,000		573,962	-	286,981	286,981		573,962
FM 543 (1)	E-3	2,450,700		669,814	-	334,907	334,907		669,814
Wilmeth Rd. (10)	E-4	400,800		109,545	-	54,772	54,772		109,545
Wilmeth Rd. (11)	E-5	387,600		105,937	-	52,969	52,969		105,937
Wilmeth Rd. (12)	E-6	194,400		53,133	-	26,566	26,566		53,133
Wilmeth Rd. (13)	E-7	2,279,200		622,940	-	311,470	311,470		622,940
Wilmeth Rd. (14)	E-8	3,079,850		841,770	-	420,885	420,885		841,770
Wilmeth Rd. (15)	E-9	5,644,800		1,542,810	-	771,405	771,405		1,542,810
Wilmeth Rd. (16)	E-10	3,761,800		1,028,158	-	514,079	514,079		1,028,158
Wilmeth Rd. (17)/ CCR 331	E-11	875,700		239,342	-	119,671	119,671		239,342
Redbud Blvd. (1)	E-12	3,174,400		867,612	-	433,806	433,806		867,612
Redbud Blvd. (2)	E-13	448,000		122,445	-	61,223	61,223		122,445
Airport Dr. (1)	E-14	13,150,200		3,594,151	-	1,797,076	1,797,076		3,594,151
Airport Dr. (2)	E-15	15,261,300		4,171,147	-	2,085,574	2,085,574		4,171,147
FM 2933	E-16	936,588		255,984	-	127,992	127,992		255,984
Signal Installation	S-22	200,000		54,663	-	27,332	27,332		54,663
Signal Installation	S-23	200,000		54,663	-	27,332	27,332		54,663
Signal Installation	S-24	150,000		40,997	-	20,499	20,499		40,997
Signal Installation	S-25	200,000		54,663	-	27,332	27,332		54,663
Signal Installation	S-26	100,000		27,332	-	13,666	13,666		27,332
2013 Transportation Impact Fee Study		9,615		2,628	-	1,314	1,314		2,628
Total		\$ 55,739,353	\$	15,234,420	\$ -	\$ 7,617,210	\$ 7,617,210	\$	15,234,420

(1) 2012-2013 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Table 7, Line 11 of Report

(3) Per discussions with City staff and City files

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area E

2013 Vehicle Miles (All Service Areas)⁽¹⁾ 491,175
 Ten Year Growth in Vehicle Miles (Service Area E) ⁽¹⁾ 7,870
 Annual Growth in Vehicle Miles $\frac{7,870}{10 \text{ years}}$ 787

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 47,944	\$ 95,917	\$ 143,929	\$ 192,079	\$ 240,396	\$ 289,009	\$ 337,887	\$ 386,867	\$ 435,977	\$ 485,088	\$ 2,655,093
2013 Vehicle Miles plus Service Area E Growth	491,962	492,749	493,536	494,323	495,110	495,897	496,684	497,471	498,258	499,045	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.10	\$ 0.19	\$ 0.29	\$ 0.39	\$ 0.49	\$ 0.58	\$ 0.68	\$ 0.78	\$ 0.88	\$ 0.97	
Annual Growth in Service Area E Vehicle Miles (Cumulative)	787	1,574	2,361	3,148	3,935	4,722	5,509	6,296	7,083	7,870	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 77	\$ 306	\$ 689	\$ 1,223	\$ 1,911	\$ 2,752	\$ 3,748	\$ 4,896	\$ 6,198	\$ 7,650	\$ 29,449
Credit Amount	\$ 29,449										

(1) Table 7 of the 10-Year Growth Report

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area G

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	3,817
Existing Fund Balance ⁽³⁾	\$ 168,403
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 3,405,870
Non-debt Funded New Project Cost ⁽⁵⁾	9,592,607
New Project Cost Funded Through New Debt ⁽⁶⁾	9,592,607
Total Recoverable Project Cost ⁽⁷⁾	\$ 22,591,085

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 959,261	2.30%	20
2	959,261	2.31%	20
3	959,261	2.32%	20
4	959,261	2.35%	20
5	959,261	2.38%	20
6	959,261	2.45%	20
7	959,261	2.50%	20
8	959,261	2.53%	20
9	959,261	2.55%	20
10	959,261	2.59%	20
Total	\$ 9,592,607		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 1,438,891
2	1,918,521
3	1,918,521
4	1,918,521
5	1,918,521
6	1,918,521
7	1,918,521
8	1,918,521
9	1,918,521
10	2,398,152
Total	\$ 19,185,215

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area G

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 60,377	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,377
2	60,377	60,414	-	-	-	-	-	-	-	-	120,791
3	60,377	60,414	60,464	-	-	-	-	-	-	-	181,255
4	60,377	60,414	60,464	60,637	-	-	-	-	-	-	241,892
5	60,377	60,414	60,464	60,637	60,847	-	-	-	-	-	302,738
6	60,377	60,414	60,464	60,637	60,847	61,220	-	-	-	-	363,959
7	60,377	60,414	60,464	60,637	60,847	61,220	61,553	-	-	-	425,512
8	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	-	-	487,195
9	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	-	549,041
10	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
11	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
12	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
13	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
14	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
15	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
16	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
17	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
18	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
19	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
20	60,377	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	610,887
21	-	60,414	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	550,510
22	-	-	60,464	60,637	60,847	61,220	61,553	61,682	61,846	61,846	490,096
23	-	-	-	60,637	60,847	61,220	61,553	61,682	61,846	61,846	429,633
24	-	-	-	-	60,847	61,220	61,553	61,682	61,846	61,846	368,995
25	-	-	-	-	-	61,220	61,553	61,682	61,846	61,846	308,149
26	-	-	-	-	-	-	61,553	61,682	61,846	61,846	246,929
27	-	-	-	-	-	-	-	61,682	61,846	61,846	185,375
28	-	-	-	-	-	-	-	-	61,846	61,846	123,693
29	-	-	-	-	-	-	-	-	-	61,846	61,846
	\$ 1,207,546	\$ 1,208,271	\$ 1,209,276	\$ 1,212,746	\$ 1,216,931	\$ 1,224,404	\$ 1,231,069	\$ 1,233,650	\$ 1,236,926	\$ 1,236,926	\$ 12,217,746

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽⁴⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 60,377	\$ 1,438,891	\$ (959,261)	\$ 264,701	\$ (2,507)	\$ 802,202
2	120,791	1,918,521	(959,261)	264,701	(5,899)	1,338,853
3	181,255	1,918,521	(959,261)	264,701	(10,159)	1,395,057
4	241,892	1,918,521	(959,261)	264,701	(15,272)	1,450,582
5	302,738	1,918,521	(959,261)	264,701	(21,223)	1,505,478
6	363,959	1,918,521	(959,261)	264,701	(28,005)	1,559,915
7	425,512	1,918,521	(959,261)	264,701	(35,607)	1,613,867
8	487,195	1,918,521	(959,261)	264,701	(44,007)	1,667,150
9	549,041	1,918,521	(959,261)	264,701	(53,191)	1,719,812
10	610,887	2,398,152	(959,261)	264,701	(63,134)	2,251,346
11	610,887	-	-	264,701	-	875,588
12	610,887	-	-	264,701	-	875,588
13	610,887	-	-	264,701	-	875,588
14	610,887	-	-	264,701	-	875,588
15	610,887	-	-	264,701	-	875,588
16	610,887	-	-	-	-	610,887
17	610,887	-	-	-	-	610,887
18	610,887	-	-	-	-	610,887
19	610,887	-	-	-	-	610,887
20	610,887	-	-	-	-	610,887
21	550,510	-	-	-	-	550,510
22	490,096	-	-	-	-	490,096
23	429,633	-	-	-	-	429,633
24	368,995	-	-	-	-	368,995
25	308,149	-	-	-	-	308,149
26	246,929	-	-	-	-	246,929
27	185,375	-	-	-	-	185,375
28	123,693	-	-	-	-	123,693
29	61,846	-	-	-	-	61,846
	\$ 12,217,746	\$ 19,185,215	\$ (9,592,607)	\$ 3,970,518	\$ (279,004)	\$ 25,501,867

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ -	\$ -	\$ -
2004	-	-	-
2005	-	-	-
2006	-	-	-
2007	-	-	-
2008	-	107,139	107,139
2009	-	112,095	112,095
2010	-	117,281	117,281
2011	-	122,707	122,707
2012	-	128,383	128,383
	\$ -	\$ 587,605	\$ 587,605

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	3,405,870
-Less Principal PTD	587,605
Outstanding Debt Principal	2,818,265
New Project Costs Debt Principal ⁽⁵⁾	9,592,607
Principal Component	\$ 12,410,873

(1) Appendix E - Service Area G, Page 2
 (2) Appendix E - Service Area G, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area G, Page 6
 (5) Appendix E - Service Area G, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area G

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	3,817	4,927	\$ 802,202	\$ 1,035,587
2	28	1.2794	1.0000	3,817	4,883	1,338,853	1,712,949
3	27	1.2680	1.0000	3,817	4,840	1,395,057	1,768,937
4	26	1.2567	1.0000	3,817	4,797	1,450,582	1,822,936
5	25	1.2455	1.0000	3,817	4,754	1,505,478	1,875,048
6	24	1.2344	1.0000	3,817	4,711	1,559,915	1,925,519
7	23	1.2234	1.0000	3,817	4,669	1,613,867	1,974,346
8	22	1.2125	1.0000	3,817	4,628	1,667,150	2,021,339
9	21	1.2016	1.0000	3,817	4,586	1,719,812	2,066,590
10	20	1.1909	1.0000	3,817	4,545	2,251,346	2,681,170
11	19	1.1803	1.0000	-	-	875,588	1,033,454
12	18	1.1698	1.0000	-	-	875,588	1,024,235
13	17	1.1593	1.0000	-	-	875,588	1,015,100
14	16	1.1490	1.0000	-	-	875,588	1,006,045
15	15	1.1387	1.0000	-	-	875,588	997,071
16	14	1.1286	1.0000	-	-	610,887	689,440
17	13	1.1185	1.0000	-	-	610,887	683,290
18	12	1.1085	1.0000	-	-	610,887	677,195
19	11	1.0987	1.0000	-	-	610,887	671,155
20	10	1.0889	1.0000	-	-	610,887	665,168
21	9	1.0791	1.0000	-	-	550,510	594,079
22	8	1.0695	1.0000	-	-	490,096	524,167
23	7	1.0600	1.0000	-	-	429,633	455,401
24	6	1.0505	1.0000	-	-	368,995	387,638
25	5	1.0412	1.0000	-	-	308,149	320,830
26	4	1.0319	1.0000	-	-	246,929	254,797
27	3	1.0227	1.0000	-	-	185,375	189,576
28	2	1.0135	1.0000	-	-	123,693	125,368
29	1	1.0045	1.0000	-	-	61,846	62,125
					47,341		30,260,553

Total Escalated Expense for Entire Period	\$ 30,260,553
Less Future Value of Initial Fund Balance	218,370
Net Escalated Expense for Entire Period	\$ 30,042,183
Total Escalated Service Units	47,341
Impact Fee for Service Area C	\$ 635

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area G

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 168,403
1	\$ 635	3,817	\$ 2,422,118	\$ 802,202	\$ 1,619,916	8,805	1,797,124
2	635	3,817	2,422,118	1,338,853	1,083,265	21,049	2,901,438
3	635	3,817	2,422,118	1,395,057	1,027,061	30,735	3,959,234
4	635	3,817	2,422,118	1,450,582	971,536	40,005	4,970,775
5	635	3,817	2,422,118	1,505,478	916,640	48,862	5,936,277
6	635	3,817	2,422,118	1,559,915	862,203	57,306	6,855,786
7	635	3,817	2,422,118	1,613,867	808,252	65,339	7,729,377
8	635	3,817	2,422,118	1,667,150	754,968	72,962	8,557,307
9	635	3,817	2,422,118	1,719,812	702,306	80,176	9,339,789
10	635	3,817	2,422,118	2,251,346	170,772	84,827	9,595,388
11	-	-	-	875,588	(875,588)	82,418	8,802,218
12	-	-	-	875,588	(875,588)	75,280	8,001,910
13	-	-	-	875,588	(875,588)	68,077	7,194,398
14	-	-	-	875,588	(875,588)	60,809	6,379,619
15	-	-	-	875,588	(875,588)	53,476	5,557,507
16	-	-	-	610,887	(610,887)	47,269	4,993,888
17	-	-	-	610,887	(610,887)	42,196	4,425,197
18	-	-	-	610,887	(610,887)	37,078	3,851,388
19	-	-	-	610,887	(610,887)	31,913	3,272,414
20	-	-	-	610,887	(610,887)	26,703	2,688,229
21	-	-	-	550,510	(550,510)	21,717	2,159,436
22	-	-	-	490,096	(490,096)	17,229	1,686,569
23	-	-	-	429,633	(429,633)	13,246	1,270,182
24	-	-	-	368,995	(368,995)	9,771	910,958
25	-	-	-	308,149	(308,149)	6,812	609,621
26	-	-	-	246,929	(246,929)	4,375	367,068
27	-	-	-	185,375	(185,375)	2,469	184,162
28	-	-	-	123,693	(123,693)	1,101	61,570
29	-	-	-	61,846	(61,846)	276	0
			24,221,182	25,501,867		1,112,282	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area G

Impact Fee Project Name ⁽¹⁾	Impact Fee Project No. ⁽¹⁾	Cost in		Impact Fee		Debt Funded ⁽³⁾		Non-Debt Funded ⁽³⁾	Impact Fee Recoverable Cost
		Service Area ⁽¹⁾		Recoverable Cost ⁽²⁾		Existing	Proposed		
Virginia Pkwy. (1)	G-1	\$ 5,658,800	\$	4,699,162	\$ -	\$ 2,349,581	\$ 2,349,581	\$	4,699,162
Virginia Pkwy. (2)	G-2	298,900		248,212	-	124,106	124,106		248,212
Virginia Pkwy. (3)	G-3	609,700		506,305	-	253,153	253,153		506,305
Virginia Pkwy. (4)	G-4	337,798		280,513	101,641	89,436	89,436		280,513
Virginia Pkwy. (5)	G-5	1,205,863		1,001,369	362,612	319,378	319,378		1,001,369
Virginia Pkwy. (6)	G-6	804,000		667,655	-	333,828	333,828		667,655
Virginia Pkwy. (7)	G-7	232,800		193,321	-	96,661	96,661		193,321
Westridge Blvd. (1)	G-8	986,300		819,040	-	409,520	409,520		819,040
Westridge Blvd. (2)	G-9	1,070,400		888,878	-	444,439	444,439		888,878
Westridge Blvd. (3)	G-10	782,400		649,718	-	324,859	324,859		649,718
Westridge Blvd. (4)	G-11	385,800		320,375	-	160,187	160,187		320,375
Coit Rd. (1)	G-12	405,000		336,319	-	168,159	168,159		336,319
Coit Rd. (2)	G-13	3,164,000		2,627,439	-	1,313,719	1,313,719		2,627,439
Coit Rd. (3)	G-14	384,000		318,880	-	159,440	159,440		318,880
Independence Pkwy. (1)	G-15	3,007,000		2,497,063	-	1,248,532	1,248,532		2,497,063
Independence Pkwy. (2)	G-16	2,314,250		1,921,792	24,456	948,668	948,668		1,921,792
Custer Rd. (5)	G-17	2,653,673		2,203,655	2,203,655	0	0		2,203,655
Custer Rd. (6)	G-18	334,675		277,920	277,920	0	0		277,920
Custer Rd. (7)	G-19	249,133		206,884	206,884	0	0		206,884
Ridge Rd. (6)	G-20, I-8	275,407		228,702	228,702	-	-		228,702
Signal Installation	S-12	107,500		89,270	-	44,635	44,635		89,270
Signal Installation	S-13	107,500		89,270	-	44,635	44,635		89,270
Signal Installation	S-27	215,000		178,540	-	89,270	89,270		178,540
Signal Installation	S-28	185,000		153,627	-	76,814	76,814		153,627
Signal Installation	S-29	100,000		83,042	-	41,521	41,521		83,042
Signal Installation	S-30	100,000		83,042	-	41,521	41,521		83,042
Signal Installation	S-31	215,000		178,540	-	89,270	89,270		178,540
Signal Installation	S-32	50,000		41,521	-	20,760	20,760		41,521
Signal Installation	S-33	200,000		166,083	-	83,042	83,042		166,083
Signal Installation	S-34	185,000		153,627	-	76,814	76,814		153,627
Signal Installation	S-35	92,500		76,814	-	38,407	38,407		76,814
Signal Installation	S-36	107,500		89,270	-	44,635	44,635		89,270
Signal Installation	S-37	185,000		153,627	-	76,814	76,814		153,627
Signal Installation	S-38	92,500		76,814	-	38,407	38,407		76,814
Signal Installation	S-39	92,500		76,814	-	38,407	38,407		76,814
2013 Transportation Impact Fee Study		9,615		7,984	-	3,992	3,992		7,984
Total		\$ 27,204,514	\$	22,591,085	\$ 3,405,870	\$ 9,592,607	\$ 9,592,607	\$	22,591,085

(1) 2012-2013 Roadway Impact Fee Study, Appendix A

(2) Table 7, Line 11 of Report

(3) Per discussions with City staff and City files

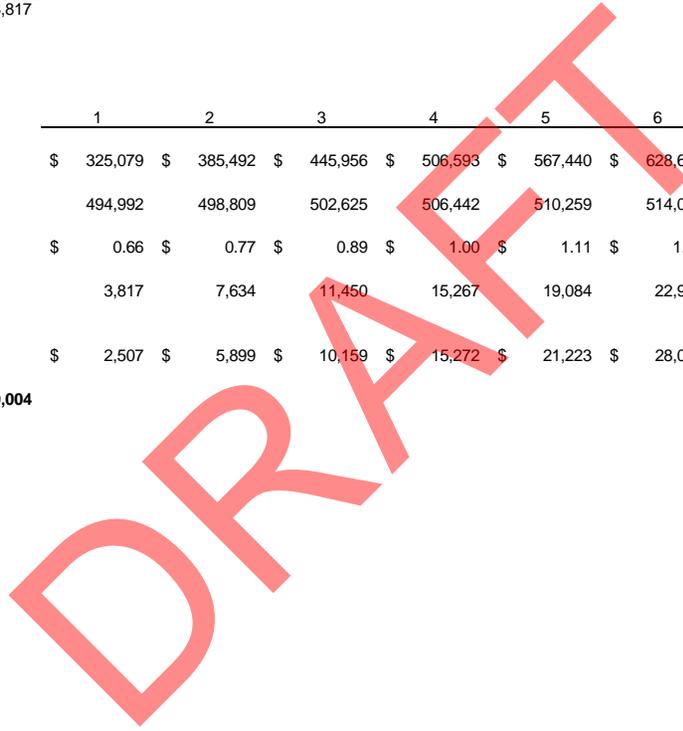
City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area G

2013 Vehicle Miles (All Service Areas) ⁽¹⁾	491,175
Ten Year Growth in Vehicle Miles (Service Area G) ⁽¹⁾	38,168
	10_years
Annual Growth in Vehicle Miles	3,817

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 325,079	\$ 385,492	\$ 445,956	\$ 506,593	\$ 567,440	\$ 628,660	\$ 690,213	\$ 751,896	\$ 813,742	\$ 875,588	\$ 5,990,659
2013 Vehicle Miles plus Service Area G Growth	494,992	498,809	502,625	506,442	510,259	514,076	517,893	521,709	525,526	529,343	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.66	\$ 0.77	\$ 0.89	\$ 1.00	\$ 1.11	\$ 1.22	\$ 1.33	\$ 1.44	\$ 1.55	\$ 1.65	
Annual Growth in Service Area G Vehicle Miles (Cumulative)	3,817	7,634	11,450	15,267	19,084	22,901	26,718	30,534	34,351	38,168	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 2,507	\$ 5,899	\$ 10,159	\$ 15,272	\$ 21,223	\$ 28,005	\$ 35,607	\$ 44,007	\$ 53,191	\$ 63,134	\$ 279,004
Credit Amount	\$ 279,004										

(1) Table 7 of the 10-Year Growth Report



City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area H

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	3,844
Existing Fund Balance ⁽³⁾	\$ 155,834
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 4,131,513
Non-debt Funded New Project Cost ⁽⁵⁾	5,578,232
New Project Cost Funded Through New Debt ⁽⁶⁾	5,578,232
Total Recoverable Project Cost ⁽⁷⁾	\$ 15,287,977

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 557,823	2.30%	20
2	557,823	2.31%	20
3	557,823	2.32%	20
4	557,823	2.35%	20
5	557,823	2.38%	20
6	557,823	2.45%	20
7	557,823	2.50%	20
8	557,823	2.53%	20
9	557,823	2.55%	20
10	557,823	2.59%	20
Total	\$ 5,578,232		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 836,735
2	1,115,646
3	1,115,646
4	1,115,646
5	1,115,646
6	1,115,646
7	1,115,646
8	1,115,646
9	1,115,646
10	1,394,558
Total	\$ 11,156,463

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
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 Service Area H

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 35,110	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,110
2	35,110	35,131	-	-	-	-	-	-	-	-	70,242
3	35,110	35,131	35,161	-	-	-	-	-	-	-	105,402
4	35,110	35,131	35,161	35,261	-	-	-	-	-	-	140,663
5	35,110	35,131	35,161	35,261	35,383	-	-	-	-	-	176,047
6	35,110	35,131	35,161	35,261	35,383	35,600	-	-	-	-	211,647
7	35,110	35,131	35,161	35,261	35,383	35,600	35,794	-	-	-	247,441
8	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	-	-	283,310
9	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	-	319,275
10	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
11	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
12	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
13	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
14	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
15	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
16	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
17	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
18	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
19	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
20	35,110	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	355,239
21	-	35,131	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	320,129
22	-	-	35,161	35,261	35,383	35,600	35,794	35,869	35,964	35,964	284,998
23	-	-	-	35,261	35,383	35,600	35,794	35,869	35,964	35,964	249,837
24	-	-	-	-	35,383	35,600	35,794	35,869	35,964	35,964	214,576
25	-	-	-	-	-	35,600	35,794	35,869	35,964	35,964	179,193
26	-	-	-	-	-	-	35,794	35,869	35,964	35,964	143,592
27	-	-	-	-	-	-	-	35,869	35,964	35,964	107,798
28	-	-	-	-	-	-	-	-	35,964	35,964	71,929
29	-	-	-	-	-	-	-	-	-	35,964	35,964
	\$ 702,205	\$ 702,626	\$ 703,210	\$ 705,229	\$ 707,662	\$ 712,008	\$ 715,883	\$ 717,384	\$ 719,290	\$ 719,290	\$ 7,104,785

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 35,110	\$ 836,735	\$ (557,823)	\$ 321,098	\$ (2,766)	\$ 632,353
2	70,241.5	1,115,646	(557,823)	321,098	(6,031)	943,132
3	105,402.0	1,115,646	(557,823)	321,098	(9,783)	974,539
4	140,663.5	1,115,646	(557,823)	321,098	(14,016)	1,005,568
5	176,046.6	1,115,646	(557,823)	321,098	(18,720)	1,036,247
6	211,646.9	1,115,646	(557,823)	321,098	(23,893)	1,066,675
7	247,441.1	1,115,646	(557,823)	321,098	(29,527)	1,096,835
8	283,310.3	1,115,646	(557,823)	321,098	(35,610)	1,126,621
9	319,274.8	1,115,646	(557,823)	321,098	(42,135)	1,156,061
10	355,239.3	1,394,558	(557,823)	321,098	(49,087)	1,463,985
11	355,239.3	-	-	45,313	-	400,552
12	355,239.3	-	-	45,313	-	400,552
13	355,239.3	-	-	45,313	-	400,552
14	355,239.3	-	-	45,313	-	400,552
15	355,239.3	-	-	45,313	-	400,552
16	355,239.3	-	-	-	-	355,239
17	355,239.3	-	-	-	-	355,239
18	355,239.3	-	-	-	-	355,239
19	355,239.3	-	-	-	-	355,239
20	355,239.3	-	-	-	-	355,239
21	320,129.0	-	-	-	-	320,129
22	284,997.7	-	-	-	-	284,998
23	249,837.2	-	-	-	-	249,837
24	214,575.8	-	-	-	-	214,576
25	179,192.7	-	-	-	-	179,193
26	143,592.3	-	-	-	-	143,592
27	107,798.2	-	-	-	-	107,798
28	71,929.0	-	-	-	-	71,929
29	35,964.5	-	-	-	-	35,964
	\$ 7,104,785	\$ 11,156,463	\$ (5,578,232)	\$ 3,437,541	\$ (231,567)	\$ 15,888,990

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ 111,625	\$ -	\$ 111,625
2004	116,789	-	116,789
2005	122,192	-	122,192
2006	127,844	-	127,844
2007	133,759	-	133,759
2008	139,947	18,341	158,287
2009	146,421	19,189	165,610
2010	153,195	20,077	173,272
2011	160,282	21,006	181,287
2012	167,697	21,977	189,674
	\$ 1,379,750	\$ 100,590	\$ 1,480,339

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	\$ 4,131,513
-Less Principal PTD	1,480,339
Outstanding Debt Principal	2,651,174
New Project Costs Debt Principal ⁽⁵⁾	5,578,232
Principal Component	\$ 8,229,406

(1) Appendix E - Service Area H, Page 2
 (2) Appendix E - Service Area H, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area H, Page 6
 (5) Appendix E - Service Area H, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area H

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	3,844	4,962	\$ 632,353	\$ 816,324
2	28	1.2794	1.0000	3,844	4,918	943,132	1,206,657
3	27	1.2680	1.0000	3,844	4,874	974,539	1,235,719
4	26	1.2567	1.0000	3,844	4,830	1,005,568	1,263,691
5	25	1.2455	1.0000	3,844	4,787	1,036,247	1,290,629
6	24	1.2344	1.0000	3,844	4,745	1,066,675	1,316,676
7	23	1.2234	1.0000	3,844	4,702	1,096,835	1,341,828
8	22	1.2125	1.0000	3,844	4,660	1,126,621	1,365,973
9	21	1.2016	1.0000	3,844	4,619	1,156,061	1,389,165
10	20	1.1909	1.0000	3,844	4,578	1,463,985	1,743,487
11	19	1.1803	1.0000	-	-	400,552	472,770
12	18	1.1698	1.0000	-	-	400,552	468,553
13	17	1.1593	1.0000	-	-	400,552	464,374
14	16	1.1490	1.0000	-	-	400,552	460,232
15	15	1.1387	1.0000	-	-	400,552	456,127
16	14	1.1286	1.0000	-	-	355,239	400,918
17	13	1.1185	1.0000	-	-	355,239	397,342
18	12	1.1085	1.0000	-	-	355,239	393,798
19	11	1.0987	1.0000	-	-	355,239	390,286
20	10	1.0889	1.0000	-	-	355,239	386,804
21	9	1.0791	1.0000	-	-	320,129	345,465
22	8	1.0695	1.0000	-	-	284,998	304,810
23	7	1.0600	1.0000	-	-	249,837	264,822
24	6	1.0505	1.0000	-	-	214,576	225,417
25	5	1.0412	1.0000	-	-	179,193	186,567
26	4	1.0319	1.0000	-	-	143,592	148,168
27	3	1.0227	1.0000	-	-	107,798	110,241
28	2	1.0135	1.0000	-	-	71,929	72,903
29	1	1.0045	1.0000	-	-	35,964	36,126
					47,676		18,955,873

Total Escalated Expense for Entire Period	\$ 18,955,873
Less Future Value of Initial Fund Balance	202,072
Net Escalated Expense for Entire Period	\$ 18,753,801
Total Escalated Service Units	47,676
Impact Fee for Service Area C	\$ 393

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area H

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 155,834
1	\$ 393	3,844	\$ 1,512,005	\$ 632,353	\$ 879,651	5,361	1,040,846
2	393	3,844	\$ 1,512,005	943,132	568,873	11,928	1,621,647
3	393	3,844	\$ 1,512,005	974,539	537,465	17,013	2,176,126
4	393	3,844	\$ 1,512,005	1,005,568	506,436	21,864	2,704,426
5	393	3,844	\$ 1,512,005	1,036,247	475,758	26,481	3,206,664
6	393	3,844	\$ 1,512,005	1,066,675	445,330	30,864	3,682,858
7	393	3,844	\$ 1,512,005	1,096,835	415,170	35,014	4,133,042
8	393	3,844	\$ 1,512,005	1,126,621	385,384	38,932	4,557,358
9	393	3,844	\$ 1,512,005	1,156,061	355,944	42,618	4,955,920
10	393	3,844	\$ 1,512,005	1,463,985	48,020	44,819	5,048,759
11	-	-	-	400,552	(400,552)	43,636	4,691,843
12	-	-	-	400,552	(400,552)	40,424	4,331,715
13	-	-	-	400,552	(400,552)	37,183	3,968,345
14	-	-	-	400,552	(400,552)	33,913	3,601,705
15	-	-	-	400,552	(400,552)	30,613	3,231,766
16	-	-	-	355,239	(355,239)	27,487	2,904,014
17	-	-	-	355,239	(355,239)	24,538	2,573,312
18	-	-	-	355,239	(355,239)	21,561	2,239,634
19	-	-	-	355,239	(355,239)	18,558	1,902,953
20	-	-	-	355,239	(355,239)	15,528	1,563,242
21	-	-	-	320,129	(320,129)	12,629	1,255,741
22	-	-	-	284,998	(284,998)	10,019	980,763
23	-	-	-	249,837	(249,837)	7,703	738,628
24	-	-	-	214,576	(214,576)	5,682	529,734
25	-	-	-	179,193	(179,193)	3,961	354,503
26	-	-	-	143,592	(143,592)	2,544	213,455
27	-	-	-	107,798	(107,798)	1,436	107,093
28	-	-	-	71,929	(71,929)	640	35,804
29	-	-	-	35,964	(35,964)	160	0
			15,120,047	15,888,990		613,109	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area H

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>	<u>Impact Fee Recoverable Cost⁽²⁾</u>	<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
				<u>Existing</u>	<u>Proposed</u>		
Silverado Tri. (1)	H-1	\$ 2,709,400	\$ 1,941,711	\$ -	\$ 970,855	\$ 970,855	\$ 1,941,711
Silverado Tri. (2)	H-2	143,311	102,705	102,705	-	-	102,705
Silverado Tri. (3)	H-3	99,386	71,226	71,226	-	-	71,226
Stacy Rd. (1)	H-4	3,710,457	2,659,126	163,439	1,247,843	1,247,843	2,659,126
Stacy Rd. (2)	H-5, I-11	2,811,140	2,014,624	1,485,731	264,446	264,446	2,014,624
McKinney Ranch Pkwy. (1)	H-6	1,186,800	850,529	-	425,264	425,264	850,529
Collin McKinney Pkwy (1)	H-7	1,676,564	1,201,522	1,201,522	-	-	1,201,522
Exchange Blvd.	H-8	4,778,650	3,424,654	-	1,712,327	1,712,327	3,424,654
Alma Rd (1)	H-9	191,558	137,281	137,281	-	-	137,281
Alma Rd (2)	H-10	181,098	129,785	129,785	-	-	129,785
Alma Rd (3)	H-11	990,389	709,769	167,977	270,896	270,896	709,769
Alma Rd (4)	H-12	588,973	422,092	422,092	-	-	422,092
Ridge Rd. (7)	H-13, I-9	93,750	67,187	67,187	-	-	67,187
Ridge Rd. (8)	H-14, I-10	554,000	397,028	-	198,514	198,514	397,028
Custer Rd. (8)	H-15	254,753	182,570	182,570	-	-	182,570
Signal Installation	S-40	107,500	77,041	-	38,520	38,520	77,041
Signal Installation	S-41	200,000	143,331	-	71,666	71,666	143,331
Signal Installation	S-42	200,000	143,331	-	71,666	71,666	143,331
Signal Installation	S-43	215,000	154,081	-	77,041	77,041	154,081
Signal Installation	S-44	107,500	77,041	-	38,520	38,520	77,041
Signal Installation	S-45	200,000	143,331	-	71,666	71,666	143,331
Signal Installation	S-46	107,500	77,041	-	38,520	38,520	77,041
Signal Installation	S-47	215,000	154,081	-	77,041	77,041	154,081
2013 Transportation Impact Fee Study		9,615	6,891	-	3,445	3,445	6,891
Total		\$ 21,332,344	\$ 15,287,977	\$ 4,131,513	\$ 5,578,232	\$ 5,578,232	\$ 15,287,977

(1) 2012-2013 Roadway Impact Fee Study, Appendix A
(2) Table 7, Line 11 of Report
(3) Per discussions with City staff and City files

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area H

2013 Vehicle Miles (All Service Areas) ⁽¹⁾	491,175
Ten Year Growth in Vehicle Miles (Service Area H) ⁽¹⁾	38,438
	10_years
Annual Growth in Vehicle Miles	3,844

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 356,208	\$ 391,339	\$ 426,500	\$ 461,761	\$ 497,144	\$ 532,744	\$ 568,539	\$ 604,408	\$ 640,372	\$ 676,337	\$ 5,155,351
2013 Vehicle Miles plus Service Area H Growth	495,019	498,863	502,706	506,550	510,394	514,238	518,082	521,925	525,769	529,613	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.72	\$ 0.78	\$ 0.85	\$ 0.91	\$ 0.97	\$ 1.04	\$ 1.10	\$ 1.16	\$ 1.22	\$ 1.28	
Annual Growth in Service Area H Vehicle Miles (Cumulative)	3,844	7,688	11,531	15,375	19,219	23,063	26,907	30,750	34,594	38,438	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 2,766	\$ 6,031	\$ 9,783	\$ 14,016	\$ 18,720	\$ 23,893	\$ 29,527	\$ 35,610	\$ 42,135	\$ 49,087	\$ 231,567
Credit Amount	\$ 231,567										

(1) Table 7 of the 10-Year Growth Report

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area I

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	2,547
Existing Fund Balance ⁽³⁾	\$ 1,812,501
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 9,395,415
Non-debt Funded New Project Cost ⁽⁵⁾	6,007,741
New Project Cost Funded Through New Debt ⁽⁶⁾	6,007,741
Total Recoverable Project Cost ⁽⁷⁾	\$ 21,410,896

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 600,774	2.30%	20
2	600,774	2.31%	20
3	600,774	2.32%	20
4	600,774	2.35%	20
5	600,774	2.38%	20
6	600,774	2.45%	20
7	600,774	2.50%	20
8	600,774	2.53%	20
9	600,774	2.55%	20
10	600,774	2.59%	20
Total	\$ 6,007,741		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 901,161
2	1,201,548
3	1,201,548
4	1,201,548
5	1,201,548
6	1,201,548
7	1,201,548
8	1,201,548
9	1,201,548
10	1,501,935
Total	\$ 12,015,481

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area I

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 37,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,814
2	37,814	37,836	-	-	-	-	-	-	-	-	75,650
3	37,814	37,836	37,868	-	-	-	-	-	-	-	113,518
4	37,814	37,836	37,868	37,976	-	-	-	-	-	-	151,494
5	37,814	37,836	37,868	37,976	38,107	-	-	-	-	-	189,602
6	37,814	37,836	37,868	37,976	38,107	38,342	-	-	-	-	227,943
7	37,814	37,836	37,868	37,976	38,107	38,342	38,550	-	-	-	266,493
8	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	-	-	305,124
9	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	-	343,858
10	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
11	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
12	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
13	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
14	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
15	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
16	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
17	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
18	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
19	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
20	37,814	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	382,592
21	-	37,836	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	344,778
22	-	-	37,868	37,976	38,107	38,342	38,550	38,631	38,734	38,734	306,942
23	-	-	-	37,976	38,107	38,342	38,550	38,631	38,734	38,734	269,074
24	-	-	-	-	38,107	38,342	38,550	38,631	38,734	38,734	231,098
25	-	-	-	-	-	38,342	38,550	38,631	38,734	38,734	192,990
26	-	-	-	-	-	-	38,550	38,631	38,734	38,734	154,649
27	-	-	-	-	-	-	-	38,631	38,734	38,734	116,098
28	-	-	-	-	-	-	-	-	38,734	38,734	77,467
29	-	-	-	-	-	-	-	-	-	38,734	38,734
	\$ 756,273	\$ 756,726	\$ 757,355	\$ 759,529	\$ 762,150	\$ 766,830	\$ 771,005	\$ 772,621	\$ 774,673	\$ 774,673	\$ 7,651,835

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 37,814	\$ 901,161	\$ (600,774)	\$ 730,203	\$ (3,962)	\$ 1,064,442
2	75,650	1,201,548	(600,774)	730,203	(8,272)	1,398,355
3	113,518	1,201,548	(600,774)	730,203	(12,924)	1,431,571
4	151,494	1,201,548	(600,774)	730,203	(17,917)	1,464,555
5	189,602	1,201,548	(600,774)	730,203	(23,246)	1,497,333
6	227,943	1,201,548	(600,774)	730,203	(28,911)	1,530,009
7	266,493	1,201,548	(600,774)	730,203	(34,912)	1,562,559
8	305,124	1,201,548	(600,774)	730,203	(41,239)	1,594,863
9	343,858	1,201,548	(600,774)	730,203	(47,891)	1,626,944
10	382,592	1,501,935	(600,774)	730,203	(54,860)	1,959,097
11	382,592	-	-	229,009	-	611,601
12	382,592	-	-	229,009	-	611,601
13	382,592	-	-	229,009	-	611,601
14	382,592	-	-	229,009	-	611,601
15	382,592	-	-	229,009	-	611,601
16	382,592	-	-	-	-	382,592
17	382,592	-	-	-	-	382,592
18	382,592	-	-	-	-	382,592
19	382,592	-	-	-	-	382,592
20	382,592	-	-	-	-	382,592
21	344,778	-	-	-	-	344,778
22	306,942	-	-	-	-	306,942
23	269,074	-	-	-	-	269,074
24	231,098	-	-	-	-	231,098
25	192,990	-	-	-	-	192,990
26	154,649	-	-	-	-	154,649
27	116,098	-	-	-	-	116,098
28	77,467	-	-	-	-	77,467
29	38,734	-	-	-	-	38,734
	\$ 7,651,835	\$ 12,015,481	\$ (6,007,741)	\$ 8,447,079	\$ (274,133)	\$ 21,832,522

III. Summary of Principal Paid to Date for Existing Debt⁽³⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ 202,860	\$ -	\$ 202,860
2004	212,245	-	212,245
2005	222,064	-	222,064
2006	232,337	-	232,337
2007	243,085	-	243,085
2008	254,331	92,692	347,023
2009	266,097	96,981	363,077
2010	278,407	101,467	379,874
2011	291,286	106,161	397,448
2012	304,762	111,072	415,834
	\$ 2,507,473	\$ 508,374	\$ 3,015,847

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	9,395,415
-Less Principal PTD	3,015,847
Outstanding Debt Principal	6,379,568
New Project Costs Debt Principal ⁽⁵⁾	6,007,741
Principal Component	\$ 12,387,309

(1) Appendix E - Service Area I, Page 2
 (2) Appendix E - Service Area I, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area I, Page 6
 (5) Appendix E - Service Area I, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area I

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	2,547	3,288	\$ 1,064,442	\$ 1,374,120
2	28	1.2794	1.0000	2,547	3,259	1,398,355	1,789,077
3	27	1.2680	1.0000	2,547	3,230	1,431,571	1,815,236
4	26	1.2567	1.0000	2,547	3,201	1,464,555	1,840,495
5	25	1.2455	1.0000	2,547	3,172	1,497,333	1,864,904
6	24	1.2344	1.0000	2,547	3,144	1,530,009	1,888,603
7	23	1.2234	1.0000	2,547	3,116	1,562,559	1,911,578
8	22	1.2125	1.0000	2,547	3,088	1,594,863	1,933,694
9	21	1.2016	1.0000	2,547	3,061	1,626,944	1,954,996
10	20	1.1909	1.0000	2,547	3,033	1,959,097	2,333,125
11	19	1.1803	1.0000	-	-	611,601	721,870
12	18	1.1698	1.0000	-	-	611,601	715,431
13	17	1.1593	1.0000	-	-	611,601	709,050
14	16	1.1490	1.0000	-	-	611,601	702,725
15	15	1.1387	1.0000	-	-	611,601	696,457
16	14	1.1286	1.0000	-	-	382,592	431,788
17	13	1.1185	1.0000	-	-	382,592	427,937
18	12	1.1085	1.0000	-	-	382,592	424,120
19	11	1.0987	1.0000	-	-	382,592	420,337
20	10	1.0889	1.0000	-	-	382,592	416,587
21	9	1.0791	1.0000	-	-	344,778	372,065
22	8	1.0695	1.0000	-	-	306,942	328,280
23	7	1.0600	1.0000	-	-	269,074	285,213
24	6	1.0505	1.0000	-	-	231,098	242,773
25	5	1.0412	1.0000	-	-	192,990	200,932
26	4	1.0319	1.0000	-	-	154,649	159,577
27	3	1.0227	1.0000	-	-	116,098	118,729
28	2	1.0135	1.0000	-	-	77,467	78,516
29	1	1.0045	1.0000	-	-	38,734	38,908
					31,591		26,197,125

Total Escalated Expense for Entire Period	\$ 26,197,125
Less Future Value of Initial Fund Balance	2,350,293
Net Escalated Expense for Entire Period	\$ 23,846,831
Total Escalated Service Units	31,591
Impact Fee for Service Area C	\$ 755

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area I

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 1,812,501
1	\$ 755	2,547	\$ 1,922,625	\$ 1,064,442	\$ 858,183	20,174	2,690,858
2	755	2,547	1,922,625	1,398,355	524,269	26,577	3,241,704
3	755	2,547	1,922,625	1,431,571	491,054	31,385	3,764,144
4	755	2,547	1,922,625	1,464,555	458,070	35,939	4,258,152
5	755	2,547	1,922,625	1,497,333	425,291	40,237	4,723,681
6	755	2,547	1,922,625	1,530,009	392,616	44,280	5,160,576
7	755	2,547	1,922,625	1,562,559	360,066	48,065	5,568,707
8	755	2,547	1,922,625	1,594,863	327,762	51,593	5,948,062
9	755	2,547	1,922,625	1,626,944	295,680	54,863	6,298,606
10	755	2,547	1,922,625	1,959,097	(36,472)	56,523	6,318,658
11	-	-	-	611,601	(611,601)	54,116	5,761,172
12	-	-	-	611,601	(611,601)	49,098	5,198,669
13	-	-	-	611,601	(611,601)	44,036	4,631,104
14	-	-	-	611,601	(611,601)	38,928	4,058,431
15	-	-	-	611,601	(611,601)	33,774	3,480,603
16	-	-	-	382,592	(382,592)	29,604	3,127,615
17	-	-	-	382,592	(382,592)	26,427	2,771,450
18	-	-	-	382,592	(382,592)	23,221	2,412,080
19	-	-	-	382,592	(382,592)	19,987	2,049,475
20	-	-	-	382,592	(382,592)	16,724	1,683,607
21	-	-	-	344,778	(344,778)	13,601	1,352,430
22	-	-	-	306,942	(306,942)	10,791	1,056,279
23	-	-	-	269,074	(269,074)	8,296	795,501
24	-	-	-	231,098	(231,098)	6,120	570,523
25	-	-	-	192,990	(192,990)	4,266	381,799
26	-	-	-	154,649	(154,649)	2,740	229,891
27	-	-	-	116,098	(116,098)	1,547	115,339
28	-	-	-	77,467	(77,467)	689	38,561
29	-	-	-	38,734	(38,734)	173	0
			19,226,247	21,832,522		793,773	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area I

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>	<u>Impact Fee Recoverable Cost⁽²⁾</u>	<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
				<u>Existing</u>	<u>Proposed</u>		
Virginia Pkwy. (8)	I-1	\$ 2,308,000	\$ 1,527,775	\$ -	\$ 763,887	\$ 763,887	\$ 1,527,775
Eldorado Pkwy. (1)	I-2	213,745	141,488	141,488	-	-	141,488
McKinney Ranch Pkwy. (2)	I-3	10,004,688	6,622,578	4,707,431	957,573	957,573	6,622,578
Collin McKinney Pkwy. (2)	I-4	2,973,000	1,967,970	-	983,985	983,985	1,967,970
Collin McKinney Pkwy. (3)	I-5	1,694,000	1,121,339	-	560,669	560,669	1,121,339
Collin McKinney Pkwy. (4)	I-6	1,903,419	1,259,963	165,499	547,232	547,232	1,259,963
Collin McKinney Pkwy. (5)	I-7	1,051,000	695,707	-	347,853	347,853	695,707
Ridge Rd. (6)	G-22, I-8	275,407	182,305	182,305	-	-	182,305
Ridge Rd. (7)	H-13, I-9	93,750	62,058	62,058	-	-	62,058
Ridge Rd. (8)	H-14, I-10	554,000	366,719	-	183,359	183,359	366,719
Stacy Rd. (2)	H-5, I-11	2,811,140	1,860,827	1,372,310	244,259	244,259	1,860,827
Lake Forest Dr. (4)	I-12	1,628,000	1,077,650	-	538,825	538,825	1,077,650
Hardin Blvd. (11)	I-13, J-8	4,176,049	2,764,325	2,764,325	-	-	2,764,325
Hardin Blvd. (12)	I-14, J-9	457,000	302,510	-	151,255	151,255	302,510
Signal Installation	S-35	92,500	61,230	-	30,615	30,615	61,230
Signal Installation	S-38	92,500	61,230	-	30,615	30,615	61,230
Signal Installation	S-39	92,500	61,230	-	30,615	30,615	61,230
Signal Installation	S-46	107,500	71,159	-	35,580	35,580	71,159
Signal Installation	S-48	215,000	142,319	-	71,159	71,159	142,319
Signal Installation	S-49	215,000	142,319	-	71,159	71,159	142,319
Signal Installation	S-50	215,000	142,319	-	71,159	71,159	142,319
Signal Installation	S-51	215,000	142,319	-	71,159	71,159	142,319
Signal Installation	S-52	185,000	122,460	-	61,230	61,230	122,460
Signal Installation	S-53	92,500	61,230	-	30,615	30,615	61,230
Signal Installation	S-54	185,000	122,460	-	61,230	61,230	122,460
Signal Installation	S-55	185,000	122,460	-	61,230	61,230	122,460
Signal Installation	S-56	200,000	132,389	-	66,195	66,195	132,389
Signal Installation	S-57	100,000	66,195	-	33,097	33,097	66,195
2013 Transportation Impact Fee Study		9,615	6,365	-	3,182	3,182	6,365
Total		\$ 32,345,312	\$ 21,410,896	\$ 9,395,415	\$ 6,007,741	\$ 6,007,741	\$ 21,410,896

(1) 2012-2013 Roadway Impact Fee Study, Appendix A

(2) Table 7, Line 11 of Report

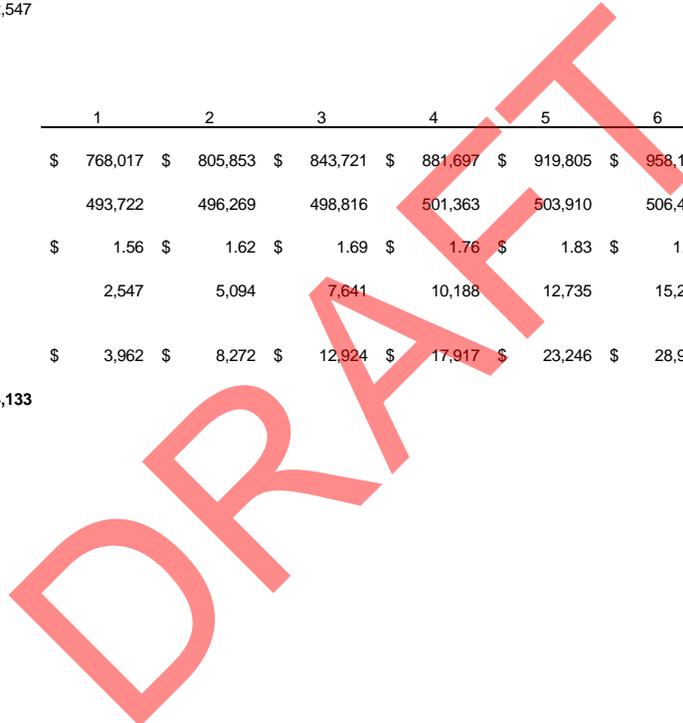
(3) Per discussions with City staff and City files

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area I

2013 Vehicle Miles (All Service Areas) ⁽¹⁾	491,175
Ten Year Growth in Vehicle Miles (Service Area I) ⁽¹⁾	25,470
Annual Growth in Vehicle Miles	$\frac{25,470}{10 \text{ years}} = 2,547$

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 768,017	\$ 805,853	\$ 843,721	\$ 881,697	\$ 919,805	\$ 958,146	\$ 996,697	\$ 1,035,328	\$ 1,074,061	\$ 1,112,795	\$ 9,396,121
2013 Vehicle Miles plus Service Area I Growth	493,722	496,269	498,816	501,363	503,910	506,457	509,004	511,551	514,098	516,645	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 1.56	\$ 1.62	\$ 1.69	\$ 1.76	\$ 1.83	\$ 1.89	\$ 1.96	\$ 2.02	\$ 2.09	\$ 2.15	
Annual Growth in Service Area I Vehicle Miles (Cumulative)	2,547	5,094	7,641	10,188	12,735	15,282	17,829	20,376	22,923	25,470	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 3,962	\$ 8,272	\$ 12,924	\$ 17,917	\$ 23,246	\$ 28,911	\$ 34,912	\$ 41,239	\$ 47,891	\$ 54,860	\$ 274,133
Credit Amount	\$ 274,133										

(1) Table 7 of the 10-Year Growth Report



City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area J

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	1,685
Existing Fund Balance ⁽³⁾	\$ 710,292
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 4,768,500
Non-debt Funded New Project Cost ⁽⁵⁾	4,380,571
New Project Cost Funded Through New Debt ⁽⁶⁾	4,380,571
Total Recoverable Project Cost ⁽⁷⁾	\$ 13,529,643

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 438,057	2.30%	20
2	438,057	2.31%	20
3	438,057	2.32%	20
4	438,057	2.35%	20
5	438,057	2.38%	20
6	438,057	2.45%	20
7	438,057	2.50%	20
8	438,057	2.53%	20
9	438,057	2.55%	20
10	438,057	2.59%	20
Total	\$ 4,380,571		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 657,086
2	876,114
3	876,114
4	876,114
5	876,114
6	876,114
7	876,114
8	876,114
9	876,114
10	1,095,143
Total	\$ 8,761,142

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area J

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 27,572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,572
2	27,572	27,589	-	-	-	-	-	-	-	-	55,160
3	27,572	27,589	27,611	-	-	-	-	-	-	-	82,772
4	27,572	27,589	27,611	27,691	-	-	-	-	-	-	110,463
5	27,572	27,589	27,611	27,691	27,786	-	-	-	-	-	138,249
6	27,572	27,589	27,611	27,691	27,786	27,957	-	-	-	-	166,206
7	27,572	27,589	27,611	27,691	27,786	27,957	28,109	-	-	-	194,315
8	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	-	-	222,483
9	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	-	250,726
10	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
11	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
12	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
13	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
14	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
15	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
16	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
17	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
18	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
19	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
20	27,572	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	278,968
21	-	27,589	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	251,397
22	-	-	27,611	27,691	27,786	27,957	28,109	28,168	28,243	28,243	223,808
23	-	-	-	27,691	27,786	27,957	28,109	28,168	28,243	28,243	196,197
24	-	-	-	-	27,786	27,957	28,109	28,168	28,243	28,243	168,506
25	-	-	-	-	-	27,957	28,109	28,168	28,243	28,243	140,720
26	-	-	-	-	-	-	28,109	28,168	28,243	28,243	112,763
27	-	-	-	-	-	-	-	28,168	28,243	28,243	84,654
28	-	-	-	-	-	-	-	-	28,243	28,243	56,486
29	-	-	-	-	-	-	-	-	-	28,243	28,243
	\$ 551,440	\$ 551,770	\$ 552,229	\$ 553,814	\$ 555,725	\$ 559,138	\$ 562,181	\$ 563,360	\$ 564,856	\$ 564,856	\$ 5,579,370

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽⁴⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 27,572	\$ 657,086	\$ (438,057)	\$ 370,600	\$ (1,361)	\$ 615,840
2	55,160	876,114	(438,057)	370,600	(2,901)	860,917
3	82,772	876,114	(438,057)	370,600	(4,618)	886,811
4	110,463	876,114	(438,057)	370,600	(6,512)	912,609
5	138,249	876,114	(438,057)	370,600	(8,580)	938,326
6	166,206	876,114	(438,057)	370,600	(10,826)	964,037
7	194,315	876,114	(438,057)	370,600	(13,247)	989,725
8	222,483	876,114	(438,057)	370,600	(15,841)	1,015,299
9	250,726	876,114	(438,057)	370,600	(18,608)	1,040,775
10	278,968	1,095,143	(438,057)	370,600	(21,543)	1,285,111
11	278,968	-	-	328,327	-	607,296
12	278,968	-	-	328,327	-	607,296
13	278,968	-	-	328,327	-	607,296
14	278,968	-	-	328,327	-	607,296
15	278,968	-	-	328,327	-	607,296
16	278,968	-	-	-	-	278,968
17	278,968	-	-	-	-	278,968
18	278,968	-	-	-	-	278,968
19	278,968	-	-	-	-	278,968
20	278,968	-	-	-	-	278,968
21	251,397	-	-	-	-	251,397
22	223,808	-	-	-	-	223,808
23	196,197	-	-	-	-	196,197
24	168,506	-	-	-	-	168,506
25	140,720	-	-	-	-	140,720
26	112,763	-	-	-	-	112,763
27	84,654	-	-	-	-	84,654
28	56,486	-	-	-	-	56,486
29	28,243	-	-	-	-	28,243
	\$ 5,579,370	\$ 8,761,142	\$ (4,380,571)	\$ 5,347,640	\$ (104,037)	\$ 15,203,544

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ 17,110	\$ -	\$ 17,110
2004	17,902	-	17,902
2005	18,730	-	18,730
2006	19,596	-	19,596
2007	20,503	-	20,503
2008	21,451	132,892	154,343
2009	22,444	139,040	161,483
2010	23,482	145,472	168,954
2011	24,568	152,202	176,770
2012	25,705	159,243	184,948
	\$ 211,491	\$ 728,848	\$ 940,339

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	\$ 4,768,500
-Less Principal PTD	940,339
Outstanding Debt Principal	3,828,161
New Project Costs Debt Principal ⁽⁵⁾	4,380,571
Principal Component	\$ 8,208,732

(1) Appendix E - Service Area J, Page 2
 (2) Appendix E - Service Area J, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area J, Page 6
 (5) Appendix E - Service Area J, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area J

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	1,685	2,175	\$ 615,840	\$ 795,006
2	28	1.2794	1.0000	1,685	2,156	860,917	1,101,470
3	27	1.2680	1.0000	1,685	2,136	886,811	1,124,479
4	26	1.2567	1.0000	1,685	2,117	912,609	1,146,869
5	25	1.2455	1.0000	1,685	2,099	938,326	1,168,669
6	24	1.2344	1.0000	1,685	2,080	964,037	1,189,983
7	23	1.2234	1.0000	1,685	2,061	989,725	1,210,794
8	22	1.2125	1.0000	1,685	2,043	1,015,299	1,231,001
9	21	1.2016	1.0000	1,685	2,025	1,040,775	1,250,634
10	20	1.1909	1.0000	1,685	2,007	1,285,111	1,530,463
11	19	1.1803	1.0000	-	-	607,296	716,789
12	18	1.1698	1.0000	-	-	607,296	710,395
13	17	1.1593	1.0000	-	-	607,296	704,059
14	16	1.1490	1.0000	-	-	607,296	697,779
15	15	1.1387	1.0000	-	-	607,296	691,555
16	14	1.1286	1.0000	-	-	278,968	314,840
17	13	1.1185	1.0000	-	-	278,968	312,032
18	12	1.1085	1.0000	-	-	278,968	309,249
19	11	1.0987	1.0000	-	-	278,968	306,490
20	10	1.0889	1.0000	-	-	278,968	303,757
21	9	1.0791	1.0000	-	-	251,397	271,293
22	8	1.0695	1.0000	-	-	223,808	239,367
23	7	1.0600	1.0000	-	-	196,197	207,964
24	6	1.0505	1.0000	-	-	168,506	177,019
25	5	1.0412	1.0000	-	-	140,720	146,511
26	4	1.0319	1.0000	-	-	112,763	116,356
27	3	1.0227	1.0000	-	-	84,654	86,572
28	2	1.0135	1.0000	-	-	56,486	57,250
29	1	1.0045	1.0000	-	-	28,243	28,370
					20,898		18,147,014

Total Escalated Expense for Entire Period	\$ 18,147,014
Less Future Value of Initial Fund Balance	921,045
Net Escalated Expense for Entire Period	\$ 17,225,970
Total Escalated Service Units	20,898
Impact Fee for Service Area C	\$ 824

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area J

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 710,292
1	\$ 824	1,685	\$ 1,388,825	\$ 615,840	\$ 772,985	9,871	1,493,148
2	\$ 824	1,685	1,388,825	860,917	527,908	15,814	2,036,871
3	\$ 824	1,685	1,388,825	886,811	502,014	20,591	2,559,475
4	\$ 824	1,685	1,388,825	912,609	476,216	25,178	3,060,870
5	\$ 824	1,685	1,388,825	938,326	450,499	29,575	3,540,944
6	\$ 824	1,685	1,388,825	964,037	424,788	33,780	3,999,512
7	\$ 824	1,685	1,388,825	989,725	399,100	37,792	4,436,403
8	\$ 824	1,685	1,388,825	1,015,299	373,526	41,608	4,851,537
9	\$ 824	1,685	1,388,825	1,040,775	348,050	45,230	5,244,817
10	\$ 824	1,685	1,388,825	1,285,111	103,714	47,670	5,396,201
11	-	-	-	607,296	(607,296)	45,833	4,834,738
12	-	-	-	607,296	(607,296)	40,780	4,268,222
13	-	-	-	607,296	(607,296)	35,681	3,696,607
14	-	-	-	607,296	(607,296)	30,537	3,119,848
15	-	-	-	607,296	(607,296)	25,346	2,537,898
16	-	-	-	278,968	(278,968)	21,586	2,280,515
17	-	-	-	278,968	(278,968)	19,269	2,020,816
18	-	-	-	278,968	(278,968)	16,932	1,758,779
19	-	-	-	278,968	(278,968)	14,574	1,494,384
20	-	-	-	278,968	(278,968)	12,194	1,227,610
21	-	-	-	251,397	(251,397)	9,917	986,131
22	-	-	-	223,808	(223,808)	7,868	770,191
23	-	-	-	196,197	(196,197)	6,049	580,043
24	-	-	-	168,506	(168,506)	4,462	415,999
25	-	-	-	140,720	(140,720)	3,111	278,390
26	-	-	-	112,763	(112,763)	1,998	167,626
27	-	-	-	84,654	(84,654)	1,128	84,100
28	-	-	-	56,486	(56,486)	503	28,117
29	-	-	-	28,243	(28,243)	126	0
			13,888,250	15,203,544		605,002	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area J

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>	<u>Impact Fee Recoverable Cost⁽²⁾</u>	<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
				<u>Existing</u>	<u>Proposed</u>		
White Ave. (1)	J-1	\$ 981,328	\$ 771,814	\$ 771,814	-	-	771,814
White Ave. (2)	J-2	213,991	168,304	168,304	-	-	168,304
McKinney Ranch Pkwy. (3)	J-3	450,000	353,925	235,950	58,987	58,987	353,925
McKinney Ranch Pkwy. (4)	J-4	5,589,000	4,395,745	-	2,197,872	2,197,872	4,395,745
Collin McKinney Pkwy. (6)	J-5	1,452,350	1,142,272	-	571,136	571,136	1,142,272
Collin McKinney Pkwy. (7)	J-6	2,416,450	1,900,536	-	950,268	950,268	1,900,536
Collin McKinney Pkwy. (8)	J-7	41,575	32,699	32,699	-	-	32,699
Hardin Blvd. (11)	I-13, J-8	4,176,049	3,284,459	3,284,459	-	-	3,284,459
Hardin Blvd. (12)	I-14, J-9	457,000	359,430	-	179,715	179,715	359,430
Community Ave. (6)	J-10	350,000	275,275	275,275	-	-	275,275
Signal Installation	S-53	92,500	72,751	-	36,376	36,376	72,751
Signal Installation	S-57	100,000	78,650	-	39,325	39,325	78,650
Signal Installation	S-58	185,000	145,502	-	72,751	72,751	145,502
Signal Installation	S-59	87,500	68,819	-	34,409	34,409	68,819
Signal Installation	S-60	200,000	157,300	-	78,650	78,650	157,300
Signal Installation	S-61	185,000	145,502	-	72,751	72,751	145,502
Signal Installation	S-63	107,500	84,549	-	42,274	42,274	84,549
Signal Installation	S-64	107,500	84,549	-	42,274	42,274	84,549
2013 Transportation Impact Fee Study		9,615	7,562	-	3,781	3,781	7,562
Total		\$ 17,202,358	\$ 13,529,643	\$ 4,768,500	\$ 4,380,571	\$ 4,380,571	\$ 13,529,643

(1) 2012-2013 Roadway Impact Fee Study, Appendix A

(2) Table 7, Line 11 of Report

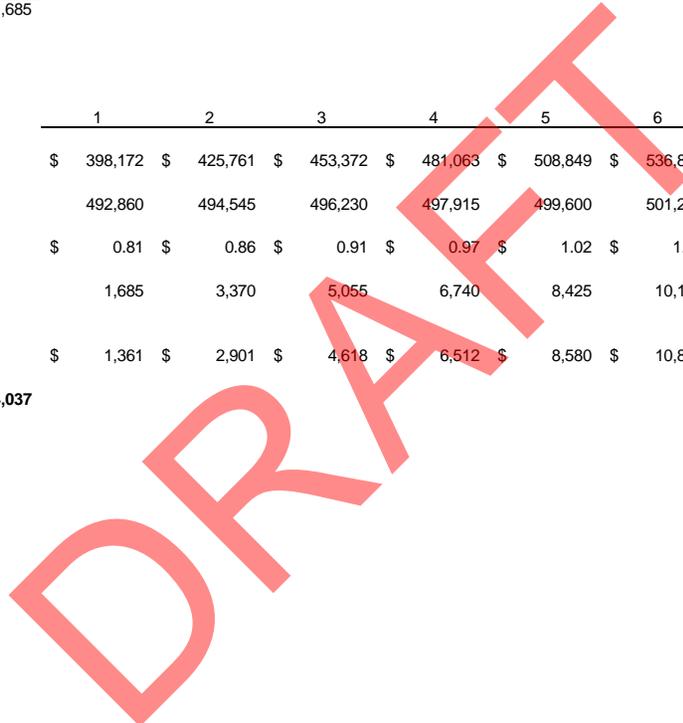
(3) Per discussions with City staff and City files

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area J

2013 Vehicle Miles (All Service Areas) ⁽¹⁾	491,175
Ten Year Growth in Vehicle Miles (Service Area J) ⁽¹⁾	16,849
	_____ 10_years
Annual Growth in Vehicle Miles	1,685

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 398,172	\$ 425,761	\$ 453,372	\$ 481,063	\$ 508,849	\$ 536,806	\$ 564,915	\$ 593,083	\$ 621,326	\$ 649,569	\$ 5,232,917
2013 Vehicle Miles plus Service Area J Growth	492,860	494,545	496,230	497,915	499,600	501,284	502,969	504,654	506,339	508,024	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.81	\$ 0.86	\$ 0.91	\$ 0.97	\$ 1.02	\$ 1.07	\$ 1.12	\$ 1.18	\$ 1.23	\$ 1.28	
Annual Growth in Service Area J Vehicle Miles (Cumulative)	1,685	3,370	5,055	6,740	8,425	10,109	11,794	13,479	15,164	16,849	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 1,361	\$ 2,901	\$ 4,618	\$ 6,512	\$ 8,580	\$ 10,826	\$ 13,247	\$ 15,841	\$ 18,608	\$ 21,543	\$ 104,037
Credit Amount	\$ 104,037										

(1) Table 7 of the 10-Year Growth Report



City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area K

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	906
Existing Fund Balance ⁽³⁾	\$ 354,289
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 637,972
Non-debt Funded New Project Cost ⁽⁵⁾	4,894,135
New Project Cost Funded Through New Debt ⁽⁶⁾	4,894,135
Total Recoverable Project Cost ⁽⁷⁾	\$ 10,426,241

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 489,413	2.30%	20
2	489,413	2.31%	20
3	489,413	2.32%	20
4	489,413	2.35%	20
5	489,413	2.38%	20
6	489,413	2.45%	20
7	489,413	2.50%	20
8	489,413	2.53%	20
9	489,413	2.55%	20
10	489,413	2.59%	20
Total	\$ 4,894,135		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 734,120
2	978,827
3	978,827
4	978,827
5	978,827
6	978,827
7	978,827
8	978,827
9	978,827
10	1,223,534
Total	\$ 9,788,269

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area K

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 30,804	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,804
2	30,804	30,823	-	-	-	-	-	-	-	-	61,627
3	30,804	30,823	30,849	-	-	-	-	-	-	-	92,476
4	30,804	30,823	30,849	30,937	-	-	-	-	-	-	123,413
5	30,804	30,823	30,849	30,937	31,044	-	-	-	-	-	154,457
6	30,804	30,823	30,849	30,937	31,044	31,234	-	-	-	-	185,691
7	30,804	30,823	30,849	30,937	31,044	31,234	31,404	-	-	-	217,096
8	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	-	-	248,566
9	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	-	280,120
10	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
11	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
12	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
13	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
14	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
15	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
16	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
17	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
18	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
19	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
20	30,804	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	311,674
21	-	30,823	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	280,869
22	-	-	30,849	30,937	31,044	31,234	31,404	31,470	31,554	31,554	250,046
23	-	-	-	30,937	31,044	31,234	31,404	31,470	31,554	31,554	219,198
24	-	-	-	-	31,044	31,234	31,404	31,470	31,554	31,554	188,261
25	-	-	-	-	-	31,234	31,404	31,470	31,554	31,554	157,217
26	-	-	-	-	-	-	31,404	31,470	31,554	31,554	125,983
27	-	-	-	-	-	-	-	31,470	31,554	31,554	94,578
28	-	-	-	-	-	-	-	-	31,554	31,554	63,108
29	-	-	-	-	-	-	-	-	-	31,554	31,554
	\$ 616,088	\$ 616,458	\$ 616,971	\$ 618,741	\$ 620,876	\$ 624,689	\$ 628,090	\$ 629,406	\$ 631,078	\$ 631,078	\$ 6,233,476

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽⁴⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 30,804	\$ 734,120	\$ (489,413)	\$ 49,583	\$ (148)	\$ 324,946
2	61,627	978,827	(489,413)	49,583	(409)	600,215
3	92,476	978,827	(489,413)	49,583	(781)	630,691
4	123,413	978,827	(489,413)	49,583	(1,266)	661,143
5	154,457	978,827	(489,413)	49,583	(1,864)	691,589
6	185,691	978,827	(489,413)	49,583	(2,574)	722,113
7	217,096	978,827	(489,413)	49,583	(3,398)	752,694
8	248,566	978,827	(489,413)	49,583	(4,334)	783,228
9	280,120	978,827	(489,413)	49,583	(5,382)	813,734
10	311,674	1,223,534	(489,413)	49,583	(6,540)	1,088,837
11	311,674	-	-	-	-	311,674
12	311,674	-	-	-	-	311,674
13	311,674	-	-	-	-	311,674
14	311,674	-	-	-	-	311,674
15	311,674	-	-	-	-	311,674
16	311,674	-	-	-	-	311,674
17	311,674	-	-	-	-	311,674
18	311,674	-	-	-	-	311,674
19	311,674	-	-	-	-	311,674
20	311,674	-	-	-	-	311,674
21	280,869	-	-	-	-	280,869
22	250,046	-	-	-	-	250,046
23	219,198	-	-	-	-	219,198
24	188,261	-	-	-	-	188,261
25	157,217	-	-	-	-	157,217
26	125,983	-	-	-	-	125,983
27	94,578	-	-	-	-	94,578
28	63,108	-	-	-	-	63,108
29	31,554	-	-	-	-	31,554
	\$ 6,233,476	\$ 9,788,269	\$ (4,894,135)	\$ 495,826	\$ (26,696)	\$ 11,596,741

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ 20,069	\$ -	\$ 20,069
2004	20,997	-	20,997.2
2005	21,969	-	21,968.6
2006	22,985	-	22,984.9
2007	24,048	-	24,048.2
2008	25,161	-	25,160.7
2009	26,325	-	26,324.7
2010	27,543	-	27,542.5
2011	28,817	-	28,816.7
2012	30,150	-	30,149.8
	\$ 248,062	\$ -	\$ 248,062

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	637,972
-Less Principal PTD	248,062
Outstanding Debt Principal	389,910
New Project Costs Debt Principal ⁽⁵⁾	4,894,135
Principal Component	\$ 5,284,045

(1) Appendix E - Service Area K, Page 2
 (2) Appendix E - Service Area K, Page 1
 (3) Existing debt funded project costs assuming City's weighted average cost of outstanding GO/CO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area K, Page 6
 (5) Appendix E - Service Area K, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area K

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	906	1,169	\$ 324,946	\$ 419,482
2	28	1.2794	1.0000	906	1,159	600,215	767,924
3	27	1.2680	1.0000	906	1,148	630,691	799,717
4	26	1.2567	1.0000	906	1,138	661,143	830,853
5	25	1.2455	1.0000	906	1,128	691,589	861,363
6	24	1.2344	1.0000	906	1,118	722,113	891,358
7	23	1.2234	1.0000	906	1,108	752,694	920,818
8	22	1.2125	1.0000	906	1,098	783,228	949,626
9	21	1.2016	1.0000	906	1,088	813,734	977,813
10	20	1.1909	1.0000	906	1,078	1,088,837	1,296,716
11	19	1.1803	1.0000	-	-	311,674	367,867
12	18	1.1698	1.0000	-	-	311,674	364,586
13	17	1.1593	1.0000	-	-	311,674	361,334
14	16	1.1490	1.0000	-	-	311,674	358,111
15	15	1.1387	1.0000	-	-	311,674	354,917
16	14	1.1286	1.0000	-	-	311,674	351,751
17	13	1.1185	1.0000	-	-	311,674	348,614
18	12	1.1085	1.0000	-	-	311,674	345,504
19	11	1.0987	1.0000	-	-	311,674	342,422
20	10	1.0889	1.0000	-	-	311,674	339,368
21	9	1.0791	1.0000	-	-	280,869	303,098
22	8	1.0695	1.0000	-	-	250,046	267,429
23	7	1.0600	1.0000	-	-	219,198	232,345
24	6	1.0505	1.0000	-	-	188,261	197,772
25	5	1.0412	1.0000	-	-	157,217	163,687
26	4	1.0319	1.0000	-	-	125,983	129,997
27	3	1.0227	1.0000	-	-	94,578	96,721
28	2	1.0135	1.0000	-	-	63,108	63,962
29	1	1.0045	1.0000	-	-	31,554	31,696
					11,232		13,736,854

Total Escalated Expense for Entire Period	\$ 13,736,854
Less Future Value of Initial Fund Balance	459,411
Net Escalated Expense for Entire Period	\$ 13,277,443
Total Escalated Service Units	11,232
Impact Fee for Service Area C	\$ 1,182

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area K

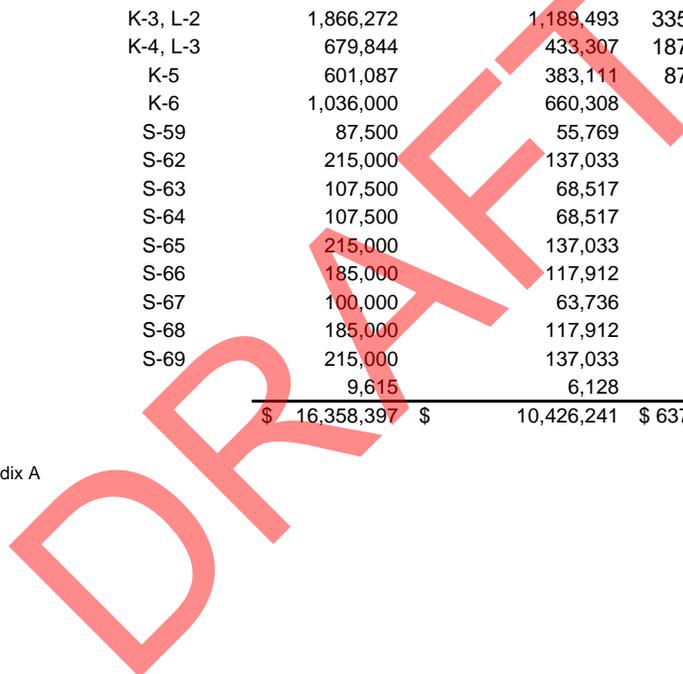
<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 354,289
1	\$ 1,182	906	\$ 1,070,479	\$ 324,946	\$ 745,533	6,544	1,106,366
2	1,182	906	\$ 1,070,479	600,215	470,264	12,073	1,588,704
3	1,182	906	\$ 1,070,479	630,691	439,789	16,277	2,044,770
4	1,182	906	\$ 1,070,479	661,143	409,337	20,245	2,474,352
5	1,182	906	\$ 1,070,479	691,589	378,890	23,974	2,877,216
6	1,182	906	\$ 1,070,479	722,113	348,366	27,463	3,253,045
7	1,182	906	\$ 1,070,479	752,694	317,785	30,707	3,601,538
8	1,182	906	\$ 1,070,479	783,228	287,251	33,706	3,922,496
9	1,182	906	\$ 1,070,479	813,734	256,745	36,458	4,215,698
10	1,182	906	\$ 1,070,479	1,088,837	(18,357)	37,859	4,235,200
11	-	-	-	311,674	(311,674)	36,714	3,960,240
12	-	-	-	311,674	(311,674)	34,240	3,682,806
13	-	-	-	311,674	(311,674)	31,743	3,402,875
14	-	-	-	311,674	(311,674)	29,223	3,120,425
15	-	-	-	311,674	(311,674)	26,681	2,835,432
16	-	-	-	311,674	(311,674)	24,116	2,547,875
17	-	-	-	311,674	(311,674)	21,528	2,257,729
18	-	-	-	311,674	(311,674)	18,917	1,964,972
19	-	-	-	311,674	(311,674)	16,282	1,669,581
20	-	-	-	311,674	(311,674)	13,624	1,371,531
21	-	-	-	280,869	(280,869)	11,080	1,101,741
22	-	-	-	250,046	(250,046)	8,790	860,485
23	-	-	-	219,198	(219,198)	6,758	648,045
24	-	-	-	188,261	(188,261)	4,985	464,769
25	-	-	-	157,217	(157,217)	3,475	311,028
26	-	-	-	125,983	(125,983)	2,232	187,278
27	-	-	-	94,578	(94,578)	1,260	93,959
28	-	-	-	63,108	(63,108)	562	31,413
29	-	-	-	31,554	(31,554)	141	0
			10,704,793	11,596,741		537,659	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area K

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>	<u>Impact Fee Recoverable Cost⁽²⁾</u>	<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
				<u>Existing</u>	<u>Proposed</u>		
FM 546 (1)	K-1	\$ 10,652,727	\$ 6,789,657	\$ -	3,394,828	3,394,828	6,789,657
Airport Dr. (3)	K-2, L-1	95,353	60,774	27,504	16,635	16,635	60,774
Airport Dr. (4)	K-3, L-2	1,866,272	1,189,493	335,554	426,970	426,970	1,189,493
Airport Dr. (5) / Country Ln.	K-4, L-3	679,844	433,307	187,030	123,139	123,139	433,307
Airport Dr. (6) / Country Ln.	K-5	601,087	383,111	87,884	147,613	147,613	383,111
Airport Dr. (7)	K-6	1,036,000	660,308	-	330,154	330,154	660,308
Signal Installation	S-59	87,500	55,769	-	27,885	27,885	55,769
Signal Installation	S-62	215,000	137,033	-	68,517	68,517	137,033
Signal Installation	S-63	107,500	68,517	-	34,258	34,258	68,517
Signal Installation	S-64	107,500	68,517	-	34,258	34,258	68,517
Signal Installation	S-65	215,000	137,033	-	68,517	68,517	137,033
Signal Installation	S-66	185,000	117,912	-	58,956	58,956	117,912
Signal Installation	S-67	100,000	63,736	-	31,868	31,868	63,736
Signal Installation	S-68	185,000	117,912	-	58,956	58,956	117,912
Signal Installation	S-69	215,000	137,033	-	68,517	68,517	137,033
2013 Transportation Impact Fee Study		9,615	6,128	-	3,064	3,064	6,128
Total		\$ 16,358,397	\$ 10,426,241	\$ 637,972	\$ 4,894,135	\$ 4,894,135	\$ 10,426,241

- (1) 2012-2013 Roadway Impact Fee Study, Appendix A
- (2) Table 7, Line 11 of Report
- (3) Per discussions with City staff and City files



City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area K

2013 Vehicle Miles (All Service Areas)⁽¹⁾ 491,175
 Ten Year Growth in Vehicle Miles (Service Area K) ⁽¹⁾ 9,056
 Annual Growth in Vehicle Miles $\frac{9,056}{10 \text{ years}}$ 906

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 80,387	\$ 111,210	\$ 142,058	\$ 172,996	\$ 204,039	\$ 235,274	\$ 266,678	\$ 298,149	\$ 329,703	\$ 361,256	\$ 2,201,750
2013 Vehicle Miles plus Service Area K Growth	492,081	492,986	493,892	494,797	495,703	496,609	497,514	498,420	499,325	500,231	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.16	\$ 0.23	\$ 0.29	\$ 0.35	\$ 0.41	\$ 0.47	\$ 0.54	\$ 0.60	\$ 0.66	\$ 0.72	
Annual Growth in Service Area K Vehicle Miles (Cumulative)	906	1,811	2,717	3,622	4,528	5,434	6,339	7,245	8,150	9,056	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 148	\$ 409	\$ 781	\$ 1,266	\$ 1,864	\$ 2,574	\$ 3,398	\$ 4,334	\$ 5,382	\$ 6,540	\$ 26,696
Credit Amount	\$ 26,696										

(1) Table 7 of the 10-Year Growth Report

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area L

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.90%
Annual Service Unit Growth ⁽²⁾	68
Existing Fund Balance ⁽³⁾	\$ -
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 38,865
Non-debt Funded New Project Cost ⁽⁵⁾	398,452
New Project Cost Funded Through New Debt ⁽⁶⁾	398,452
Total Recoverable Project Cost ⁽⁷⁾	\$ 835,769

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 39,845	2.30%	20
2	39,845	2.31%	20
3	39,845	2.32%	20
4	39,845	2.35%	20
5	39,845	2.38%	20
6	39,845	2.45%	20
7	39,845	2.50%	20
8	39,845	2.53%	20
9	39,845	2.55%	20
10	39,845	2.59%	20
Total	\$ 398,452	2.61%	

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 59,768
2	79,690
3	79,690
4	79,690
5	79,690
6	79,690
7	79,690
8	79,690
9	79,690
10	99,613
Total	\$ 796,904

- (1) City's current annual return as of 2013
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) Per City account balances as of 09/30/12
- (4) Per Conceptual Level Project Cost Projection
- (5) Assumes 50% of new project cost funded through sources other than debt
- (6) Assumes 50% of new project costs funded through new debt issues
- (7) Line 11 of the Max Fee Table Report
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest cost
- (10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area L

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 2,508	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2,508
2	2,508	2,509	-	-	-	-	-	-	-	-	5,017.3
3	2,508	2,509	2,512	-	-	-	-	-	-	-	7,528.9
4	2,508	2,509	2,512	2,519	-	-	-	-	-	-	10,047.6
5	2,508	2,509	2,512	2,519	2,527	-	-	-	-	-	12,575.0
6	2,508	2,509	2,512	2,519	2,527	2,543	-	-	-	-	15,117.9
7	2,508	2,509	2,512	2,519	2,527	2,543	2,557	-	-	-	17,674.7
8	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	-	-	20,236.8
9	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	-	22,805.7
10	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
11	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
12	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
13	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
14	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
15	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
16	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
17	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
18	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
19	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
20	2,508	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	25,374.7
21	-	2,509	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	22,866.8
22	-	-	2,512	2,519	2,527	2,543	2,557	2,562	2,569	2,569	20,357.3
23	-	-	-	2,519	2,527	2,543	2,557	2,562	2,569	2,569	17,845.8
24	-	-	-	-	2,527	2,543	2,557	2,562	2,569	2,569	15,327.1
25	-	-	-	-	-	2,543	2,557	2,562	2,569	2,569	12,799.7
26	-	-	-	-	-	-	2,557	2,562	2,569	2,569	10,256.8
27	-	-	-	-	-	-	-	2,562	2,569	2,569	7,700.0
28	-	-	-	-	-	-	-	-	2,569	2,569	5,137.9
29	-	-	-	-	-	-	-	-	-	2,569	2,568.9
	\$ 50,158	\$ 50,188	\$ 50,230	\$ 50,374	\$ 50,548	\$ 50,859	\$ 51,135	\$ 51,243	\$ 51,379	\$ 51,379	\$ 507,494

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽³⁾	Existing Annual Debt Service ⁽⁴⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 2,508	\$ 59,768	\$ (39,845)	\$ 3,021	(1)	\$ 25,450
2	5,017	79,690	(39,845)	3,021	(2)	47,881
3	7,529	79,690	(39,845)	3,021	(4)	50,390
4	10,048	79,690	(39,845)	3,021	(7)	52,906
5	12,575	79,690	(39,845)	3,021	(11)	55,430
6	15,118	79,690	(39,845)	3,021	(15)	57,969
7	17,675	79,690	(39,845)	3,021	(20)	60,520
8	20,237	79,690	(39,845)	3,021	(26)	63,077
9	22,806	79,690	(39,845)	3,021	(32)	65,639
10	25,375	99,613	(39,845)	3,021	(39)	88,124
11	25,375	-	-	-	-	25,375
12	25,375	-	-	-	-	25,375
13	25,375	-	-	-	-	25,375
14	25,375	-	-	-	-	25,375
15	25,375	-	-	-	-	25,375
16	25,375	-	-	-	-	25,375
17	25,375	-	-	-	-	25,375
18	25,375	-	-	-	-	25,375
19	25,375	-	-	-	-	25,375
20	25,375	-	-	-	-	25,375
21	22,867	-	-	-	-	22,867
22	20,357	-	-	-	-	20,357
23	17,846	-	-	-	-	17,846
24	15,327	-	-	-	-	15,327
25	12,800	-	-	-	-	12,800
26	10,257	-	-	-	-	10,257
27	7,700	-	-	-	-	7,700
28	5,138	-	-	-	-	5,138
29	2,569	-	-	-	-	2,569
	\$ 507,494	\$ 796,904	\$ (398,452)	\$ 30,205	(157)	\$ 935,994

III. Summary of Principal Paid to Date for Existing Debt⁽⁵⁾

	2003-2008 Debt	2008-2012 Debt	Total Principal PTD
2003	\$ 1,223	\$ -	\$ 1,223
2004	1,279	-	1,279
2005	1,338	-	1,338
2006	1,400	-	1,400
2007	1,465	-	1,465
2008	1,533	-	1,533
2009	1,604	-	1,604
2010	1,678	-	1,678
2011	1,755	-	1,755
2012	1,837	-	1,837
	\$ 15,112	\$ -	\$ 15,112

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	38,865
-Less Principal PTD	15,112
Outstanding Debt Principal	23,753
New Project Costs Debt Principal ⁽⁵⁾	398,452
Principal Component	\$ 422,205

(1) Appendix E - Service Area L, Page 2
 (2) Appendix E - Service Area L, Page 1
 (3) Existing debt funded project costs, assuming City's weighted average cost of outstanding GOCO debt and constant annual debt service payments.
 For 2003-2008 project costs, assumes a debt issue in 2003. For 2008-2012 project costs, assumes a debt issue in 2008.
 (4) Appendix E - Service Area L, Page 6
 (5) Appendix E - Service Area L, Page 2

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area L

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	1.2909	1.0000	68	87	\$ 25,450	\$ 32,855
2	28	1.2794	1.0000	68	87	47,881	61,259
3	27	1.2680	1.0000	68	86	50,390	63,895
4	26	1.2567	1.0000	68	85	52,906	66,487
5	25	1.2455	1.0000	68	84	55,430	69,037
6	24	1.2344	1.0000	68	84	57,969	71,555
7	23	1.2234	1.0000	68	83	60,520	74,039
8	22	1.2125	1.0000	68	82	63,077	76,478
9	21	1.2016	1.0000	68	81	65,639	78,875
10	20	1.1909	1.0000	68	81	88,124	104,948
11	19	1.1803	1.0000	-	-	25,375	29,950
12	18	1.1698	1.0000	-	-	25,375	29,682
13	17	1.1593	1.0000	-	-	25,375	29,418
14	16	1.1490	1.0000	-	-	25,375	29,155
15	15	1.1387	1.0000	-	-	25,375	28,895
16	14	1.1286	1.0000	-	-	25,375	28,638
17	13	1.1185	1.0000	-	-	25,375	28,382
18	12	1.1085	1.0000	-	-	25,375	28,129
19	11	1.0987	1.0000	-	-	25,375	27,878
20	10	1.0889	1.0000	-	-	25,375	27,629
21	9	1.0791	1.0000	-	-	22,867	24,677
22	8	1.0695	1.0000	-	-	20,357	21,773
23	7	1.0600	1.0000	-	-	17,846	18,916
24	6	1.0505	1.0000	-	-	15,327	16,101
25	5	1.0412	1.0000	-	-	12,800	13,326
26	4	1.0319	1.0000	-	-	10,257	10,584
27	3	1.0227	1.0000	-	-	7,700	7,875
28	2	1.0135	1.0000	-	-	5,138	5,207
29	1	1.0045	1.0000	-	-	2,569	2,580
					840		1,108,223

Total Escalated Expense for Entire Period	\$ 1,108,223
Less Future Value of Initial Fund Balance	-
Net Escalated Expense for Entire Period	\$ 1,108,223
Total Escalated Service Units	840
Impact Fee for Service Area C	\$ 1,320

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area L

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 1,320	68	\$ 89,349	\$ 25,450	\$ 63,899	288	64,187
2	1,320	68	89,349	47,881	41,468	764	106,419
3	1,320	68	89,349	50,390	38,959	1,133	146,511
4	1,320	68	89,349	52,906	36,443	1,483	184,437
5	1,320	68	89,349	55,430	33,919	1,813	220,169
6	1,320	68	89,349	57,969	31,381	2,123	253,672
7	1,320	68	89,349	60,520	28,829	2,413	284,914
8	1,320	68	89,349	63,077	26,272	2,682	313,869
9	1,320	68	89,349	65,639	23,710	2,932	340,510
10	1,320	68	89,349	88,124	1,225	3,070	344,806
11	-	-	-	25,375	(25,375)	2,989	322,420
12	-	-	-	25,375	(25,375)	2,788	299,833
13	-	-	-	25,375	(25,375)	2,584	277,042
14	-	-	-	25,375	(25,375)	2,379	254,047
15	-	-	-	25,375	(25,375)	2,172	230,845
16	-	-	-	25,375	(25,375)	1,963	207,433
17	-	-	-	25,375	(25,375)	1,753	183,811
18	-	-	-	25,375	(25,375)	1,540	159,977
19	-	-	-	25,375	(25,375)	1,326	135,928
20	-	-	-	25,375	(25,375)	1,109	111,662
21	-	-	-	22,867	(22,867)	902	89,697
22	-	-	-	20,357	(20,357)	716	70,056
23	-	-	-	17,846	(17,846)	550	52,760
24	-	-	-	15,327	(15,327)	406	37,839
25	-	-	-	12,800	(12,800)	283	25,322
26	-	-	-	10,257	(10,257)	182	15,247
27	-	-	-	7,700	(7,700)	103	7,650
28	-	-	-	5,138	(5,138)	46	2,557
29	-	-	-	2,569	(2,569)	11	0
			893,493	935,994		42,501	

City of McKinney 2012-2013 Roadway Impact Fee Update

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area L

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Impact Fee Project No.⁽¹⁾</u>	<u>Cost in Service Area⁽¹⁾</u>	<u>Impact Fee Recoverable Cost⁽²⁾</u>	<u>Debt Funded⁽³⁾</u>		<u>Non-Debt Funded⁽³⁾</u>	<u>Impact Fee Recoverable Cost</u>
				<u>Existing</u>	<u>Proposed</u>		
Airport Dr. (3)	K-2, L-1	\$ 95,353	\$ 4,294	\$ 1,943	1,175	1,175	4,294
Airport Dr. (4)	K-3, L-2	1,866,272	84,040	23,707	30,166	30,166	84,040
Airport Dr. (5) / Country Ln.	K-4, L-3	679,844	30,614	13,214	8,700	8,700	30,614
FM 546 (2)	L-4	4,473,300	201,436	-	100,718	100,718	201,436
Unnamed D (1)	L-5	5,558,300	250,294	-	125,147	125,147	250,294
Unnamed D (2)	L-6	863,800	38,898	-	19,449	19,449	38,898
Unnamed D (3)	L-7	4,913,500	221,258	-	110,629	110,629	221,258
Signal Installation	S-67	100,000	4,503	-	2,252	2,252	4,503
2013 Transportation Impact Fee Study		9,615	433	-	216	216	433
Total		\$ 18,559,984	\$ 835,769	\$ 38,865	\$ 398,452	\$ 398,452	\$ 835,769

(1) 2012-2013 Roadway Impact Fee Study, Appendix A

(2) Table 7, Line 11 of Report

(3) Per discussions with City staff and City files

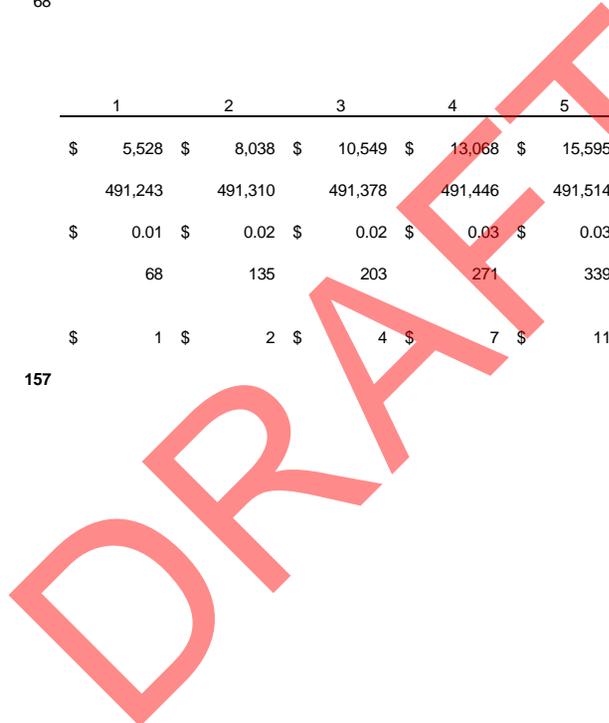
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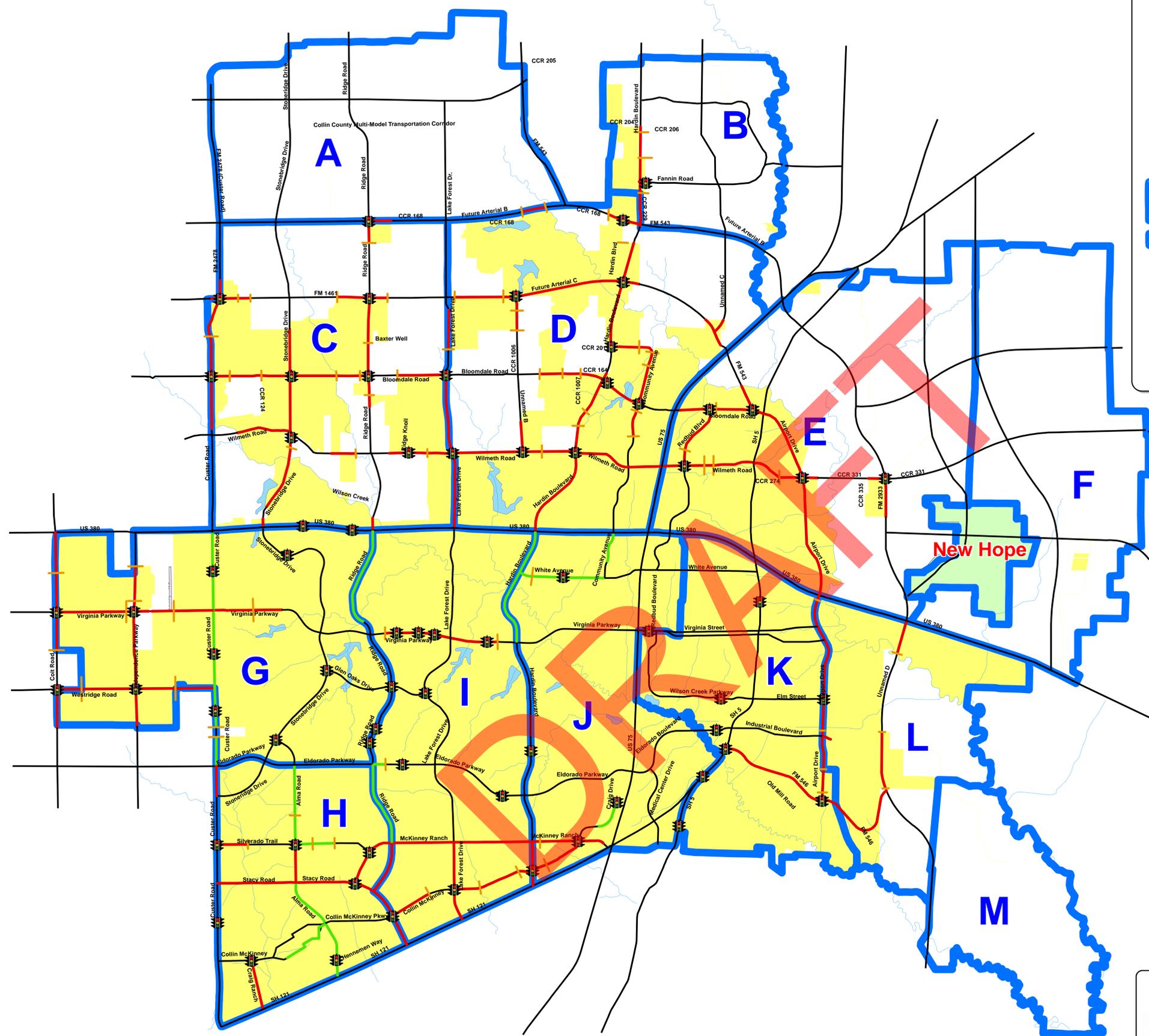
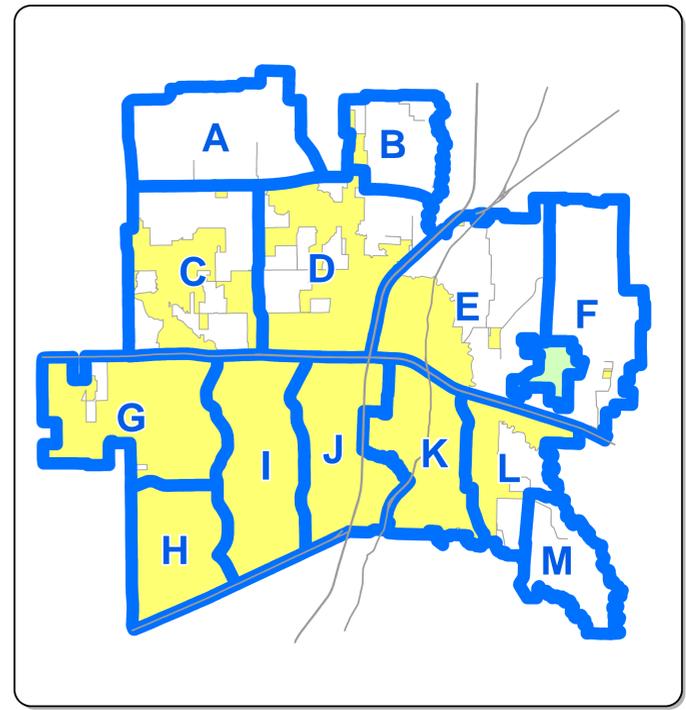
City of McKinney 2012-2013 Roadway Impact Fee Update
 Capital Improvement Plan for Impact Fees
 Appendix E - Impact Fee Calculation Assumptions
 Service Area L

2013 Vehicle Miles (All Service Areas)⁽¹⁾ 491,175
 Ten Year Growth in Vehicle Miles (Service Area L) ⁽¹⁾ 677
 Annual Growth in Vehicle Miles $\frac{10 \text{ years}}{68}$

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 5,528	\$ 8,038	\$ 10,549	\$ 13,068	\$ 15,595	\$ 18,138	\$ 20,695	\$ 23,257	\$ 25,826	\$ 28,395	\$ 169,092
2013 Vehicle Miles plus Service Area L Growth	491,243	491,310	491,378	491,446	491,514	491,581	491,649	491,717	491,784	491,852	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.03	\$ 0.03	\$ 0.04	\$ 0.04	\$ 0.05	\$ 0.05	\$ 0.06	
Annual Growth in Service Area L Vehicle Miles (Cumulative)	68	135	203	271	339	406	474	542	609	677	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 1	\$ 2	\$ 4	\$ 7	\$ 11	\$ 15	\$ 20	\$ 26	\$ 32	\$ 39	\$ 157
Credit Amount	\$ 157										

(1) Table 7 of the 10-Year Growth Report





Legend

- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Impact Fee Project Limits
- Intersection Improvements
- Service Area Boundary
- Lakes
- McKinney City Limits

Impact Fee RIP

Exhibit #2
2012 - 2013 Roadway
Impact Fee Update

0 1 2

 Miles

N

July 2013

Kimley-Horn
and Associates, Inc.