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TECHNICAL REPORT

Roadway, Water, and Wastewater Impact Fee Update Report



2016 Impact Fee Study
City of Arlington, Texas

July 27, 2016

Roadway, Water, and Wastewater Impact Fee Update Report

Prepared for:
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EXECUTIVE SUMMARY

Executive Summary

Shrinking funds available for city infrastructure improvements have prohibited many cities from upgrading its infrastructure to meet increasing demands resulting from new growth. To alleviate this issue, many cities collect “impact fees” from new development to help fund roadway improvements necessitated by such development. These fees provide an objective method for new developments to pay their fair share for impact to the city’s infrastructure. The one-time, up-front charges provide a predictable cost for new development rather than “negotiated” developer exactions.

As codified in Chapter 395 of the Texas Local Government Codes, two rational nexuses must be demonstrated in order to legally support impact fee programs. First, a reasonable connection between the need for additional capital facilities and the growth in demand generated by the new development must be defined. Second, a reasonable connection between the expenditure of the funds collected and the benefits to the new development must be shown.

The purpose of this report is to summarize the methodology used in the development and calculation of water, wastewater, and roadway impact fees for the City of Arlington. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment of impact fees.

LAND USE ASSUMPTIONS

Population and land use assumptions are important elements in the analysis of water, wastewater, and roadway systems. To assist the City of Arlington in determining the need and timing of capital improvements to serve future development, a reasonable estimation of future growth is required. Growth and future development projections were formulated based on assumptions pertaining to the type, location, quantity, and timing of various future land uses within the community. These land use assumptions, which include population projections, will become the basis for the preparation of impact fee capital improvement plans for water, wastewater, and roadway facilities.

- From the 2014 Water Master Plan, approximately 72 percent of the total land within the city limits is developed, with approximately 13 percent of land within the city limits being vacant and available for future development, where infrastructure and topography permit. Approximately 15 percent of the land in Arlington is undevelopable as either right-of-way, utility easement, parks/open space, or other undevelopable land types.
- The existing 2015 population for Arlington is approximately 371,880 persons with an estimated employment of 172,493 jobs.

EXECUTIVE SUMMARY

- An average annual growth rate of 0.45 percent was used to calculate Arlington’s ten-year growth projections. This growth rate is based upon approved data from the 2014 Water Master Plan, the 2015 Comprehensive Plan, historical U.S. Census data, as well as building permit information received from the City since 2006, and was approved by the CIPAC on October 21, 2015.
- The ten-year (2025) population growth projection of Arlington is 388,958 persons, an increase of 17,078 persons. Employment is projected to increase by 17,805 to a total of 190,298 jobs by 2025.

MAXIMUM ALLOWABLE ROADWAY IMPACT FEE

This analysis of roadways serves as the fourth generational update to the initial system adapted in 1989. Since its inception, the system has been updated in 1994, 1998 and 2002. The total cost of roadway capital improvements to serve future development projected to occur between 2015 and 2025 is \$314,158,827 with no debt service included in the cost of these projects. The City has historically not collected the maximum allowable impact fee. By the requirements of Chapter 395, to collect the maximum fee would require a specific finance study. In the alternative, the city must credit the cost of the CIP by 50 percent. With the state mandate of 50% credit to the CIP, the cost of the program is \$157,079,414. The increase in the number of service units due to growth over the next ten year period is 75,074 vehicle-miles. With the 50% state mandated credit to the CIP, the maximum allowable roadway impact ranges from \$253.00 to \$2,286.00 per service unit, excluding service areas D and J, which have no projects and therefore no impact fee.

SERVICE AREA	NET CAPACITY SUPPLIED BY CIP	TOTAL PROJECT COST OF CIP	PROJECTED 10-YR DEMAND (VEH-MI)	COST ATTRIBUTABLE TO NEW DEV.	ACTUAL AVERAGE COST PER SERVICE UNIT	AVG. COST PER SERVICE UNIT @ 50% STATE MANDATE
A	4,412	\$8,296,252	7,777	\$3,944,620	\$506.00	\$253.00
B	3,922	\$19,648,320	11,066	\$7,904,454	\$714.00	\$357.00
C	11,822	\$32,195,345	20,508	\$25,560,574	\$1,246.00	\$623.00
D	(1,204)	\$0	2,895	\$0	\$0.00	\$0.00
E	4,649	\$34,383,450	2,576	\$11,781,115	\$4,572.00	\$2,286.00
F	6,709	\$68,761,839	7,619	\$27,795,101	\$3,648.00	\$1,824.00
G	7,840	\$18,261,953	8,733	\$10,302,080	\$1,178.00	\$589.00
H	5,673	\$42,266,233	6,205	\$23,881,871	\$3,848.00	\$1,924.00
I	18,142	\$90,345,436	3,452	\$11,356,439	\$3,288.00	\$1,644.00
J	0	\$0	4,243	\$0	\$0.00	\$0.00
Totals	61,967	314,158,827	75,074	\$122,526,254		

EXECUTIVE SUMMARY

MAXIMUM ALLOWABLE WATER IMPACT FEE

The cost of water capital improvements to serve development projected to occur between 2015 and 2025 is \$18,631,587. The increase in the number of service units due to growth over the next ten years is projected as 6,162 service units. The maximum allowable water impact fee with the state mandated 50% credit is \$1,512 per service unit. The maximum allowable water impact fee calculation is summarized as follows:

Total Eligible Capital Improvement Costs	= \$18,631,587
Growth in Service Units	= 6,162
Maximum Water Impact Fee	= Total Eligible Costs / Growth in Service Units
	= \$18,631,587 / 6,162
	= \$3,024.00 per Service Unit
Maximum Allowable Water Impact Fee	= Maximum Impact Fee – Credit (50%)
	= \$3,024.00 – \$1,512.00
	= \$1,512.00 per Service Unit

MAXIMUM ALLOWABLE WASTEWATER IMPACT FEE

The cost of wastewater system capital improvements to serve development projected to occur between 2015 and 2025 is \$5,142,708. The increase in the number of service units due to growth over the next ten years is projected as 6,162 service units. The maximum allowable wastewater impact fee with the state mandated 50% credit is \$417.50 per service unit. The maximum allowable wastewater impact fee calculation is summarized as follows:

Total Capital Improvement Costs	= \$5,142,708
Growth in Service Units	= 6,162
Maximum Wastewater Impact Fee	= Total Eligible Costs/Growth in Service Units
	= \$5,142,708 / 6,162
	= \$835.00 per Service Unit
Maximum Allowable Wastewater Impact Fee	= Maximum Impact Fee – Credit (50%)
	= \$835.00 – \$417.50
	= \$417.50 per Service Unit

Chapter 1 Background

Chapter 395 of the Texas Local Government Code requires an impact fee analysis before impact fees can be created and assessed. Chapter 395 defines an impact fee as “a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development.” In September 2001, Chapter 395 was amended creating the current procedure for implementing impact fees. Chapter 395 identifies the following items as impact fee eligible costs:

- Construction contract price
- Surveying and engineering fees
- Land acquisition costs
- Fees paid to the consultant preparing or updating the capital improvements plan (CIP)
- Projected interest charges and other finance costs for projects identified in the CIP

Chapter 395 also identifies items that impact fees cannot be used to pay for, such as:

- Construction, acquisition, or expansion of public facilities or assets other than those identified on the capital improvements plan
- Repair, operation, or maintenance of existing or new capital improvements
- Upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards
- Upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development
- Administrative and operating costs of the political subdivision
- Principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed above

As a funding mechanism for capital improvements, impact fees allow cities to recover the costs associated with new or facility expansion in order to serve future development. Legislatively, roadway impact fees may consider arterial and collector status roads on the City’s official Thoroughfare Development Plan. Statutory requirements mandate that impact fees be based on a specific list of improvements identified in a capital improvements program and only the cost attributed (and necessitated) by new growth over a ten-year period may be considered. As projects in the program are completed, planned costs are updated with actual costs to more accurately

BACKGROUND

reflect the capital expenditure of the program. Additionally, new capital improvement projects may be added to the system.

In September 2015, the City of Arlington, Texas authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis update on the City's water, wastewater, and roadway systems. This analysis of roadways, water, and wastewater systems serves as the fourth generational update to the initial system adapted in 1989. Since its inception, the system has been updated in 1994, 1998 and 2002. The purpose of this report is to address the methodology used in the development and calculation of water, wastewater and roadway impact fees for the City of Arlington. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment of impact fees.

As part of the impact fee update, FNI conducted workshops with the city's appointed Capital Improvements Program Advisory Committee (CIPAC) and City Council. The CIPAC's role includes recommending a growth rate for impact fee calculations, reviewing and recommending land use assumptions and Impact Fee Capital Improvements Plans (CIP), and recommending an impact fee collection rate to the City Council.

Land use assumptions serve as the basis from which demands over the ten-year planning period are developed. This analysis is based on data contained in the "Land Use Assumption for the 2015 Impact Fee Update" report in **Appendix H**, which was presented to the Impact Fee CIPAC in January, 2016.

Initially authorized by the Texas Legislature in 1987, roadway impact fees have undergone several technical and administrative changes, most notably since 2001. These include:

- Expansion of the service area structure for roadway facilities from three to six miles;
- A credit for the portion of ad valorem tax revenues generated by improvements over the program period, or the credit equal to 50% of the total projected cost of implementing the capital improvements plan;
- A city's share of costs on the federal or Texas highway system, including matching funds and costs related to utility line relocation, the establishment of curbs and gutters, sidewalks, drainage appurtenances, and rights-of-way;
- Increase in the time period of update of impact fee land use assumptions and capital improvements plan from a three to a five year period;
- Changes in compliance requirements related to annual reporting;
- For system updates, consolidation of the land use assumptions, capital improvements plan, and impact fee hearings; and

BACKGROUND

- The exemption of schools districts and federal housing from paying impact fees.

Table 1-1 provides a glossary for all abbreviations within the report.

Table 1-1: Abbreviations

ABBREVIATION	FULL NOMENCLATURE
AWWA	American Water Works Association
CIP	Impact Fee Capital Improvements Plan
CIPAC	Capital Improvements Program Advisory Committee
CRWS	Central Regional Wastewater System
DCRWS	Denton Creek Regional Wastewater System
DU	Dwelling Units
ESRI	Environmental Science Research Institute
ETJ	Extra-Territorial Jurisdiction
FNI	Freese and Nichols, Inc.
gpcd	Gallons per capita per day
gped	Gallons per employee per day
gpm	Gallons per minute
GFA	Gross Floor Area
ITE	Institute of Transportation Engineers
LOS	Level-of-Service
MGD	Million Gallons per Day
NCTCOG	North Central Texas Council of Governments
psi	Pounds per square inch
sf	Square feet
TCEQ	Texas Commission on Environmental Quality
TSZ	Traffic Survey Zone
veh-miles	Vehicle-Miles
TDP	Thoroughfare Development Plan

Chapter 2 Land Use Assumptions

Population and land use assumptions are important elements in the analysis of water, wastewater, and roadway systems. To assist the City of Arlington in determining the need and timing of capital improvements to serve future development, a reasonable estimation of future growth is required. Growth and future development projections were formulated based on assumptions pertaining to the type, location, quantity, and timing of various future land uses within the community. These land use assumptions, which include population projections, will become the basis for the preparation of impact fee capital improvement plans for water, wastewater, and roadway facilities.

SERVICE AREAS

The service areas for impact fees must be defined to ensure that facility improvements are located in close proximity to the areas generating need. Roadway service areas must be located within city limits and are limited to a six-mile maximum. The impact fee service areas for water and wastewater differ slightly and can include extra-territorial jurisdiction (ETJ) or other defined service area.

Figures 2-1 and **2-2** illustrate the Impact Fee study service areas for water and wastewater respectively. The water service area includes the existing city limits, a portion of Tarrant County in the southwestern portion of the City, and the City of Dalworthington Gardens. The wastewater service area includes the existing city limits as well as portions of the cities of Mansfield, Kennedale, Dalworthington Gardens, and Pantego.

Originally, Arlington's service areas for roads were established based on a three-mile limit in the City's initial impact fee program in 1989. As a result of changes in legislation, consideration for consolidation of roadway service areas to a six-mile structure was undertaken to allow for more flexibility in the use of program funds for impact fee projects. Ten service areas (A through J) have been created as a result of zonal restructuring and fall within the six-mile mandated limits. Service area consolidation basically consisted of combining previous service areas under the three-mile structure to reduce administration in the tracking of previous funds, balances, and expenditures. The revised service areas for roadways are illustrated in **Figure 2-3**.

FIGURE 2-1 CITY OF ARLINGTON EXISTING WATER SERVICE AREA

LEGEND

-  Water Service Area
-  Arlington City Limit
-  Other City Limit
-  Lake
-  Creek
-  Highway
-  Road
-  Railroad

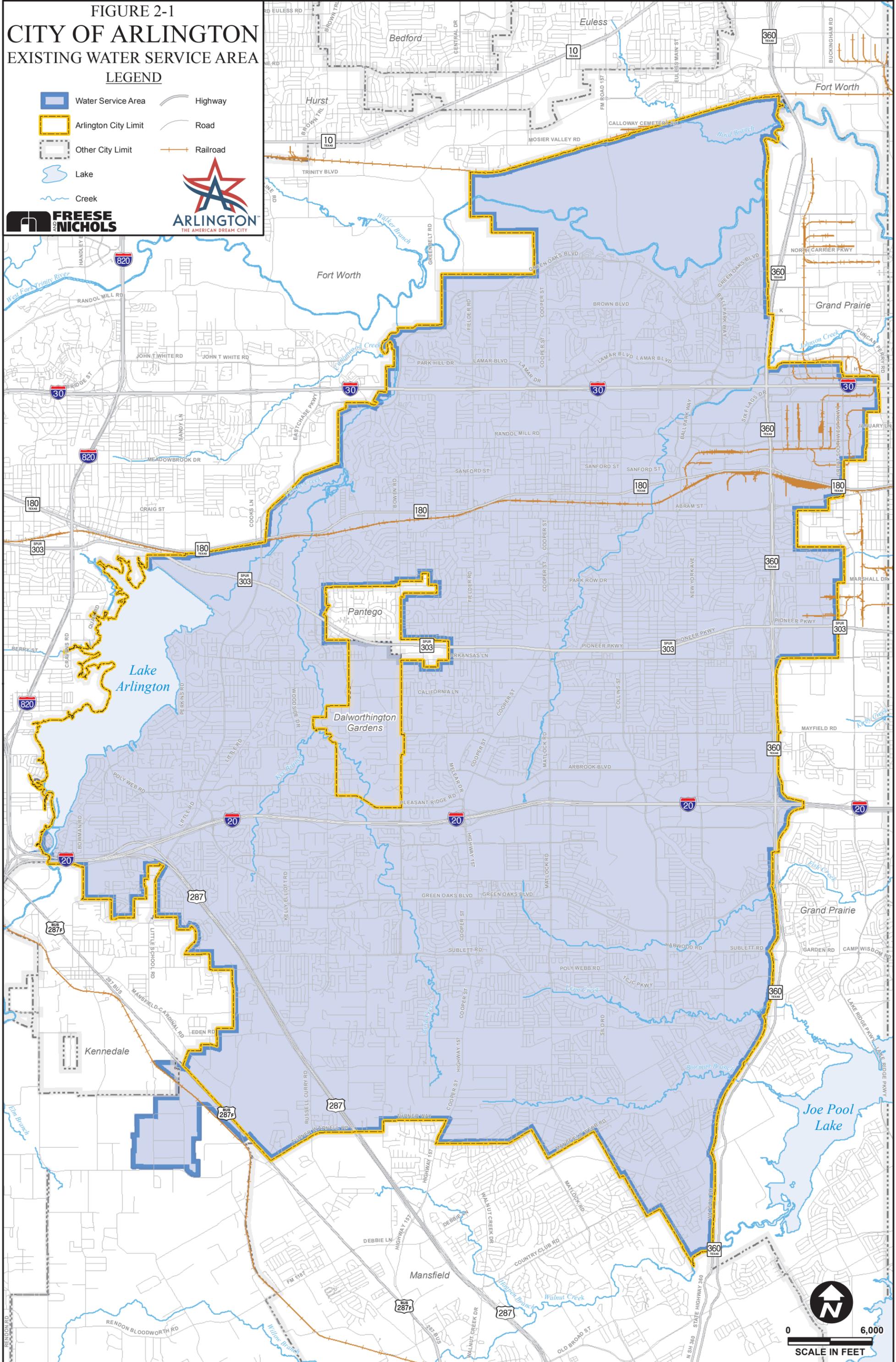
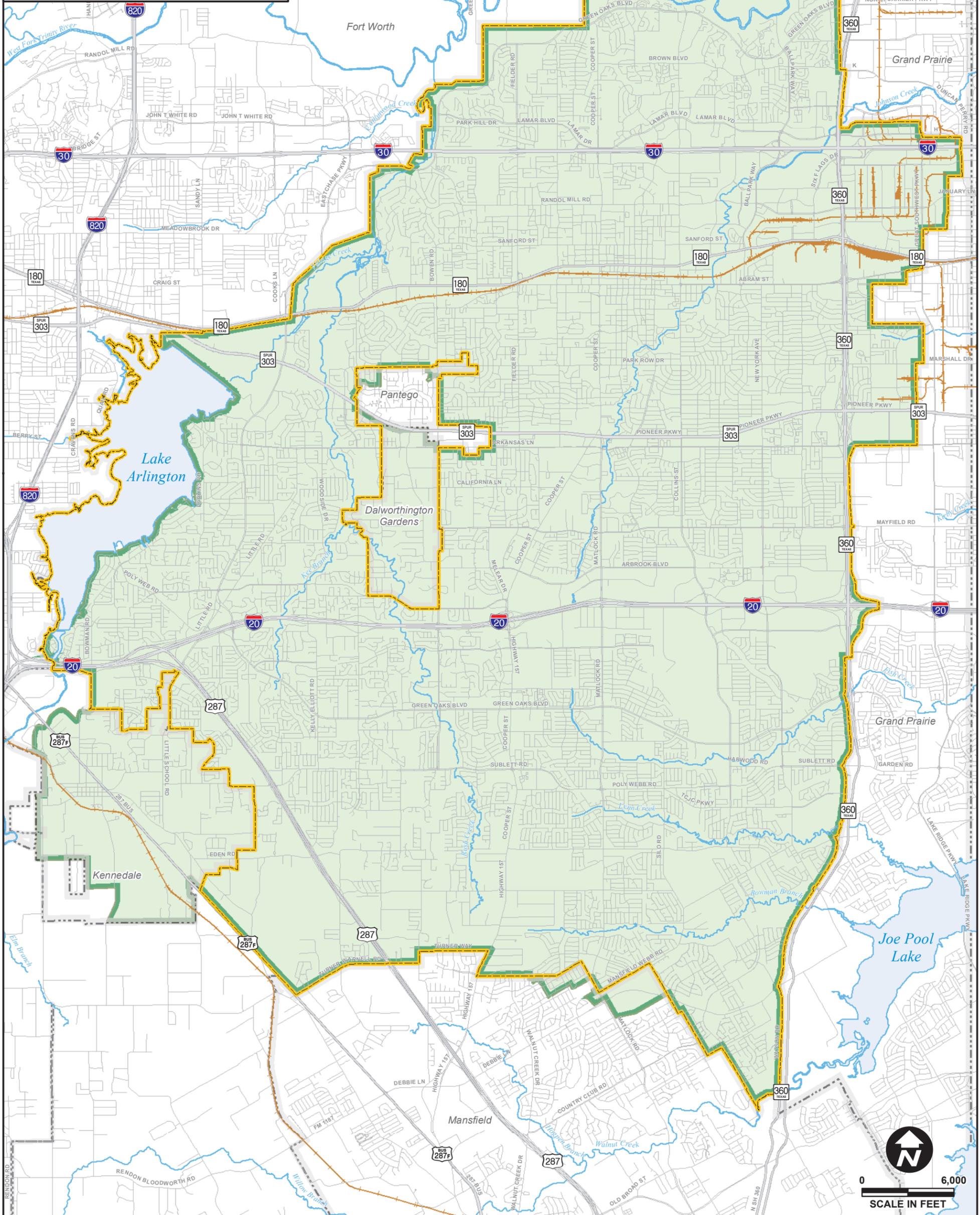


FIGURE 2-2 CITY OF ARLINGTON EXISTING WASTEWATER SERVICE AREA LEGEND

-  Wastewater Service Area
-  Arlington City Limit
-  Other City Limit
-  Lake
-  Creek
-  Highway
-  Road
-  Railroad



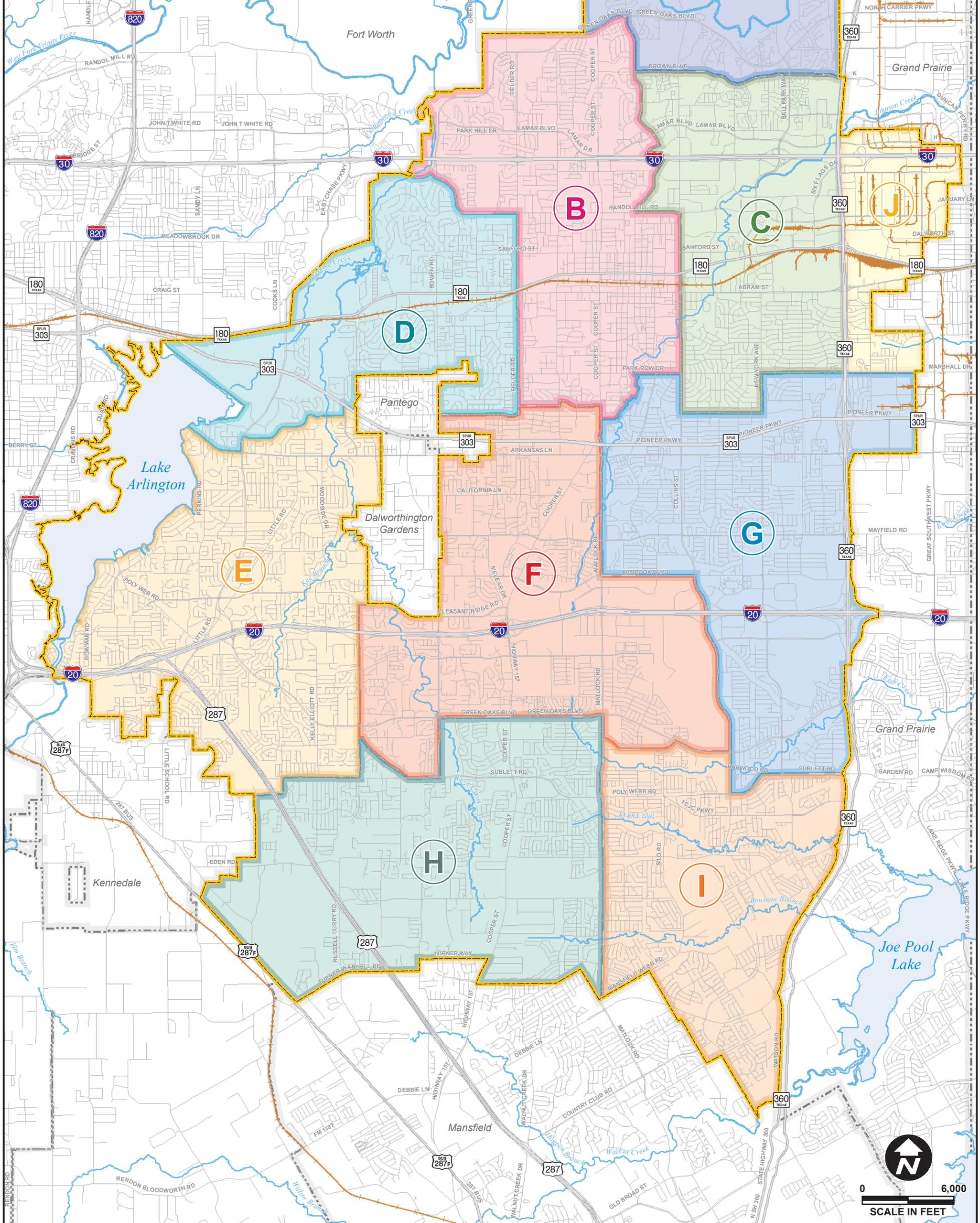



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 SCALE IN FEET

FIGURE 2-3 CITY OF ARLINGTON ROADWAY SERVICE AREAS LEGEND

- Arlington City Limit
- Other City Limit
- Lake
- Creek
- Highway
- Road
- Railroad

ROADWAY SERVICE AREAS			
	A		F
	B		G
	C		H
	D		I
	E		J



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 SCALE IN FEET

LAND USE ASSUMPTIONS

BASE YEAR DATA

Using the City’s historical growth trends and data, the 2015 base year population estimate for the City of Arlington and future growth rate were derived. This “benchmark” information provides a starting basis of data for the ten-year growth assumptions. A full description of this analysis is provided in the 2015 Land Use Assumption Report located in **Appendix H**.

Growth Summary

Data from the 2014 Water Master Plan, Arlington’s Annual Growth Profile, and City permit data were reviewed and yielded relatively consistent results. All showed a generally slowing growth due to the maturing of the city, but also a varying compound annual growth rate over the same period. **Table 2-1** shows the various sources used to derive past growth rates.

Table 2-1: City of Arlington Historic Compound Annual Growth Rates

GROWTH	CAGR
Community Development and Planning Growth Rates*	
2 Year Growth Rate (2013-2014)	0.44%
5 Year Growth Rate (2010-2014)	0.35%
10 Year Growth (2006-2014)	0.27%
Average	0.35%
Single-Family Building Permit Growth Rates**	
2 Year Growth Rate (2011-2013)	0.24%
5 Year Growth Rate (2008-2013)	0.30%
Average	0.27%
Other City Planning Document Projections	
Water Master Plan (10 Year)	0.66%

*Source: City of Arlington Annual Growth Profile

**Source: Permit Data Received from City of Arlington

2015 Population

Based on an analysis of growth rates, average rates of growth for the 10-year forecast varied between 0.27% and 0.66%. A 0.45% compound annual growth rate was determined to be an appropriate assumption for the 10-year study period with an estimated 2015 population of

LAND USE ASSUMPTIONS

371,880. This growth rate is believed to account for periods of stable growth expected to occur in the future. This rate was presented to and recommended by the Capital Improvements Program Advisory Committee (CIPAC) on October 21, 2015. **Table 2-2** summarizes the base year population.

2015 Employment

2015 base employment data was calculated using data from the North Central Texas Council of Government (NCTCOG). Their data provided a breakdown of employment by traffic survey zones (TSZ) for 2009, 2019, and 2030. To be consistent, an interpolation was calculated to derive the 2015 employment estimates. Also, because the TSZs do not follow city limits in some locations, adjustments were made based on existing land uses and the percentage of each TSZ located within city limits. Employment for each TSZ was broken down into basic, retail, and service uses as defined by the North American Industry Classification (NAIC) code. **Table 2-2** summarizes the base year employment.

Table 2-2: Summary of Base Year (2015) Population and Employment

2015 SUMMARY POPULATION & EMPLOYMENT	
Housing Units	146,409
Population	371,880
Total Employment	172,493
<i>Basic Employment</i>	<i>34,063</i>
<i>Retail Employment</i>	<i>54,029</i>
<i>Service Employment</i>	<i>84,401</i>

Source: Freese and Nichols, Inc., NCTCOG

TEN-YEAR GROWTH ASSUMPTIONS

Projected growth has been characterized in two forms: population and non-residential acreage. The following assumptions were made as a basis from which ten-year projections could be initiated.

- Future land use will occur based on similar trends of the past and consistent with the Future Development Areas Map and text in the Comprehensive Plan,
- The City will be able to finance the necessary improvements to accommodate continued growth, and

LAND USE ASSUMPTIONS

- Densities will be as projected in the Future Development Areas Map and details included in the City's Comprehensive Plan.

The ten-year projections are based upon the growth rate which was discussed earlier (0.45%) and considers past trends of the City.

2025 Population

The City is expected to experience steady growth throughout the city as well as concentrated growth due to planned development in North Arlington. Over the past decade, the City has experienced small yet steady growth and this is expected to continue into the next decade. Additionally, the planned construction of the Viridian and Arlington Commons Developments in North Arlington are resulting in faster growth in those areas. This can be seen in the concentrated growth in the north sector of the city with very little growth in the core of the community, shown in **Table 2-3**. A compound annual growth rate of 0.45 percent was selected which results in a projected 2025 population of 388,958. The number of dwelling units associated with this increase corresponds to 6,725 and will raise the housing stock to 153,134 units. This conversion of dwelling units is based on the Census' average of 2.54 persons per household.

Table 2-3: City of Arlington Projected Population

TEN-YEAR POPULATION PROJECTION CITY OF ARLINGTON, TEXAS				
Roadway Service Areas	2015 Population	2025 Population	Pop. Added	Pct. Change
A	17,056	25,801	8,745	51.3%
B	39,740	44,099	4,359	11.0%
C	38,108	38,133	25	0.1%
D	26,092	26,150	58	0.2%
E	50,415	50,744	329	0.7%
F	41,073	41,197	124	0.3%
G	65,517	66,879	1,362	2.1%
H	44,294	45,288	994	2.2%
I	41,092	42,174	1,082	2.6%
J	8,493	8,493	0	0.0%
City Total	371,880	388,958	17,078	

Source: Freese and Nichols, Inc.

LAND USE ASSUMPTIONS

2025 Employment

Employment projections for the year 2025 was based on data provided by NCTCOG. For assumption purposes, an interpolation of these numbers was calculated to derive the 2025 employment estimates per TSZ and are shown on Figure A-2 of the Land Use Assumption Report (**Appendix H**). **Table 2-4** shows the total employment for the base year, projected employment for 2025, the net growth, and percent change. This increase corresponds to an annual growth rate of 0.99 percent citywide. This higher growth rate of employment compared to the population can be attributed to the increased development intensity due to increased demand in Arlington as an employment center in the region.

Table 2-4: City of Arlington Employment Projection

TEN-YEAR EMPLOYMENT PROJECTION CITY OF ARLINGTON, TEXAS				
Roadway Service Area	Total Employment		Emp. Added	Pct. Change
	2015	2025		
A	2,136	2,296	160	7.5%
B	39,722	42,010	2,288	5.8%
C	36,896	42,749	5,853	15.9%
D	8,806	9,707	901	10.2%
E	6,370	6,987	617	9.7%
F	9,276	11,321	2,045	22.0%
G	19,666	21,880	2,214	11.3%
H	28,476	30,000	1,524	5.4%
I	3,188	3,905	717	22.5%
J	17,957	19,443	1,486	8.3%
City Total	172,493	190,298	17,805	10.32%

Source: Freese and Nichols, Inc.

LAND USE ASSUMPTIONS

SUMMARY

- From the 2014 Water Master Plan, approximately 72 percent of the total land within the city limits is developed, with approximately 13 percent of land within the city limits being vacant and available for future development, where infrastructure and topography permit. Approximately 15 percent of the land in Arlington is undevelopable as either right-of-way, utility easement, parks/open space, or other undevelopable land types.
- The existing 2015 population for Arlington is approximately 371,880 persons with an estimated employment of 172,493 jobs.
- An average annual growth rate of 0.45 percent was used to calculate the Arlington ten-year growth projections. This growth rate is based upon approved data from the 2014 Water Master Plan, the 2015 Comprehensive Plan, historical U.S. Census data, as well as building permit information received from the City since 2006 and was approved by the CIPAC on October 21, 2015.
- The ten-year (2025) population growth projection of Arlington is 388,958 persons, an increase of 17,078 persons. Employment is projected to increase by 17,805 to a total of 190,298 jobs by 2025.
- The ultimate population of Arlington is expected to be approximately 423,000 persons, per the Comprehensive Plan.
- A summary of the 2015 and 2025 demographics broken down by roadway service areas can be found on the next page.

LAND USE ASSUMPTIONS

	2015	2025	Total Increase	Percent Total Growth	Annual Growth Rate
Population					
Arlington Total	371,880	388,958	17,078	4.59%	0.45%
Service Area A	17,056	25,801	8,745	51.27%	4.23%
Service Area B	39,740	44,099	4,359	10.97%	1.05%
Service Area C	38,108	38,133	25	0.07%	0.01%
Service Area D	26,092	26,150	58	0.22%	0.02%
Service Area E	50,415	50,744	329	0.65%	0.07%
Service Area F	41,073	41,197	124	0.30%	0.03%
Service Area G	65,517	66,879	1,362	2.08%	0.21%
Service Area H	44,294	45,288	994	2.24%	0.22%
Service Area I	41,092	42,174	1,082	2.63%	0.26%
Service Area J	8,493	8,493	0	0.00%	0.00%
Employment					
Arlington Total	172,493	190,298	17,805	10.32%	0.99%
Service Area A	2,136	2,296	160	7.49%	0.72%
Basic	228	253	25	10.96%	1.05%
Retail	549	655	106	19.31%	1.78%
Service	1,359	1,388	29	2.13%	0.21%
Service Area B	39,722	42,010	2,288	5.76%	0.56%
Basic	3,176	3,320	144	4.53%	0.44%
Retail	10,254	10,996	742	7.24%	0.70%
Service	26,292	27,694	1,402	5.33%	0.52%
Service Area C	36,896	42,749	5,853	15.86%	1.48%
Basic	9,346	10,024	678	7.25%	0.70%
Retail	9,807	12,115	2,308	23.53%	2.14%
Service	17,743	20,610	2,867	16.16%	1.51%
Service Area D	8,806	9,707	901	10.23%	0.98%
Basic	1,479	1,643	164	11.09%	1.06%
Retail	2,822	3,050	228	8.08%	0.78%
Service	4,505	5,014	509	11.30%	1.08%
Service Area E	6,370	6,987	617	9.69%	0.93%
Basic	160	164	4	2.50%	0.25%
Retail	2,454	2,766	312	12.71%	1.20%
Service	3,756	4,057	301	8.01%	0.77%
Service Area F	9,276	11,321	2,045	22.05%	2.01%
Basic	1,768	2,052	284	16.06%	1.50%
Retail	3,410	4,344	934	27.39%	2.45%
Service	4,098	4,925	827	20.18%	1.86%
Service Area G	19,666	21,880	2,214	11.26%	1.07%
Basic	3,075	3,490	415	13.50%	1.27%
Retail	7,462	8,259	797	10.68%	1.02%
Service	9,129	10,131	1,002	10.98%	1.05%
Service Area H	28,476	30,000	1,524	5.35%	0.52%
Basic	5,697	5,858	161	2.83%	0.28%
Retail	13,443	14,071	628	4.67%	0.46%
Service	9,336	10,071	735	7.87%	0.76%
Service Area I	3,188	3,905	717	22.49%	2.05%
Basic	320	360	40	12.50%	1.18%
Retail	672	987	315	46.88%	3.92%
Service	2,196	2,558	362	16.48%	1.54%
Service Area J	17,957	19,443	1,486	8.28%	0.80%
Basic	8,814	9,073	259	2.94%	0.29%
Retail	3,156	3,362	206	6.53%	0.63%
Service	5,987	7,008	1,021	17.05%	1.59%

Chapter 3 Roadway Impact Fee Analysis

Chapter 395 of the Texas Local Government Code prescribes the process which Texas cities must follow in the update of impact fees. Statutory requirements mandate that impact fees be updated (at least) every five years. This analysis of roadways serves as the fourth generational update to the initial system adapted in 1989. Since its inception, the system has been updated in 1994, 1998 and 2002.

Land use assumptions serve as the basis from which travel demands over the ten-year planning period are developed. This analysis is based on data contained in the “Land Use Assumption for the 2015 Impact Fee Update” report, which was presented to the Impact Fee Capital Improvements Program Advisory Committee (CIPAC) in January 2016.

As a funding mechanism for roadway improvements, impact fees allow cities to recover the costs associated with new or facility expansion in order to serve future development. Legislatively, roadway impact fees may consider arterial and collector status roads on the City’s official Thoroughfare Plan. Statutory requirements mandate that impact fees be based on a specific list of improvements identified in the program and only the cost attributed (and necessitated) by new growth over a ten-year period may be considered. As projects in the program are completed, planned costs are updated with actual costs to more accurately reflect the capital expenditure of the program. Additionally, new capital improvement projects may be added to the system.

Initially authorized by the Texas Legislature in 1987, impact fees have undergone several technical and administrative changes, most notably since 2001. These include:

- Expansion of the service area structure for roadway facilities from three to six miles;
- A credit for the portion of ad valorem tax revenues generated by improvements over the program period, or the credit equal to 50% of the total projected cost of implementing the capital improvements plan;
- A city's share of costs on the federal or Texas highway system, including matching funds and costs related to utility line relocation, the establishment of curbs and gutters, sidewalks, drainage appurtenances, and rights-of-way;
- Increase in the time period of update of impact fee land use assumptions and capital improvements plan from a three to a five-year period;
- Changes in compliance requirements related to annual reporting;
- Consolidation of the land use assumptions and capital improvements plan hearings; and
- The exemption of schools districts and federal housing from paying impact fees.

ROADWAY IMPACT FEE ANALYSIS

METHODOLOGY

To update roadway impact fees for the City of Arlington, a series of work tasks were undertaken. These tasks are described below.

1. Meetings were held with the City of Arlington Staff and the Capital Improvement Program Advisory Committee (CIPAC) to discuss the methodology to be used in the update.
2. Roadway service areas were restructured (consolidated) to allow for more flexibility of fund expenditures.
3. Vehicle-miles of travel in the PM peak hour were retained as the service unit measure for roadway impact fee calculations.
4. A roadway conditions inventory was conducted to update lane geometries, roadway classifications and segment lengths, as necessary, of facilities in the impact fee program. Using updated traffic volumes provided by the City, service area deficiencies were identified within the network.
5. Projected growth (service units) by service area over the ten-year planning period was determined using the 2015 Land Use Assumptions Report in conjunction with the revised Land Use Equivalency Table. Projected growth between the years 2015 and 2025 of population and employment are detailed in the land use assumptions report.
6. The previous roadway impact fee capital improvements program (IFCIP) was reviewed to ensure excess capacity remained in the program as well as to incorporate revised growth figures for each service area. Potential project additions were identified by City Staff based on growth needs and the city's anticipated future bond program.
7. Roadway cost data of construction, engineering, and right-of-way for impact fee projects were updated and compiled by service area based on data provided by the City. For recently completed projects, actual costs were incorporated into the system database.
8. The cost of capacity provided, maximum cost per service unit, and cost attributable to new development was calculated for each service area.
9. The Land Use Equivalency Table (service unit generation for specific land use categories) was updated to incorporate new trip rate and trip length data. Trip rate data was obtained from *Trip Generation, Ninth Edition* by the Institute of Transportation Engineers (ITE). Trip length statistics of the city were obtained from the North Central Texas Council of Governments (NCTCOG) travel demand model.
10. A report was prepared to document the procedures and findings of the analysis.

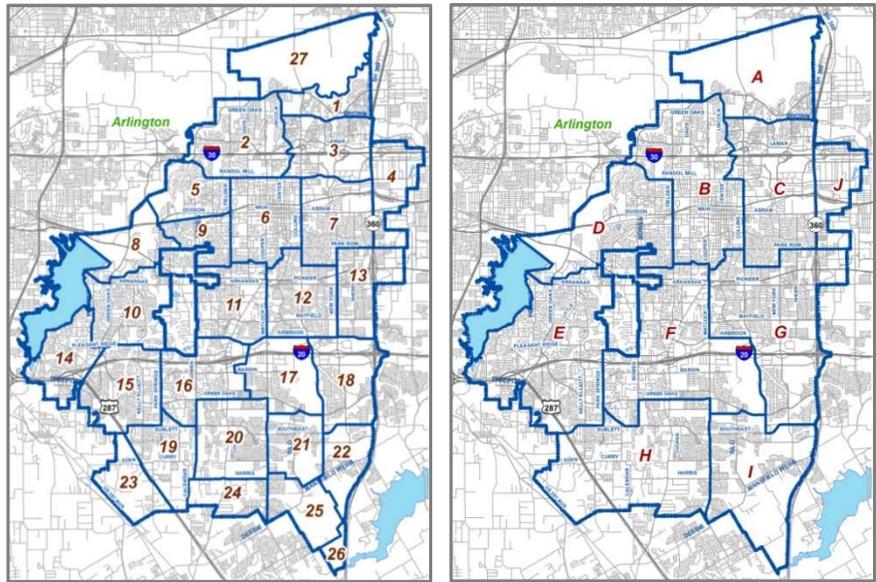
ROADWAY IMPACT FEE ANALYSIS

SERVICE AREAS

Chapter 395 requires that service areas be defined for roadway impact fees to ensure that facility improvements are located in close proximity to areas generating needs. Legislative requirements stipulate that roadway service areas be limited to a six-mile maximum and must be located within the current city limits. Transportation service areas are different from water and wastewater systems, which can include the city limits and its extra-territorial jurisdiction (ETJ) or other defined service area. This is primarily because roadway systems are "open" to both local and regional (non-city) use as opposed to a defined level of utilization from residents within a water and wastewater system. The result is that new development can only be assessed an impact fee based on the cost of necessary capital improvements within that service area.

Initially, Arlington's service areas for roads were structured under a three-mile limit. As a result of changes in legislation and opportunities for system flexibility, service areas were increased to six miles and the previous boundaries were aggregated into a larger zonal structure.

ROADWAY SERVICE AREAS	
2016 Zones	Previous Zones
A	1, 27
B	2, 6
C	3, 7
D	5, 8, 9
E	10, 14, 15
F	11, 16, 17
G	12, 13, 18
H	19, 20, 23, 24
I	21, 22, 25, 26
J	4



Ten service areas (A through J) were created as result of zonal restructuring and fall within the 6-mile mandated limits. The revised service areas for roadways are illustrated in **Figure 3-1**.

ROADWAY IMPACT FEE ANALYSIS

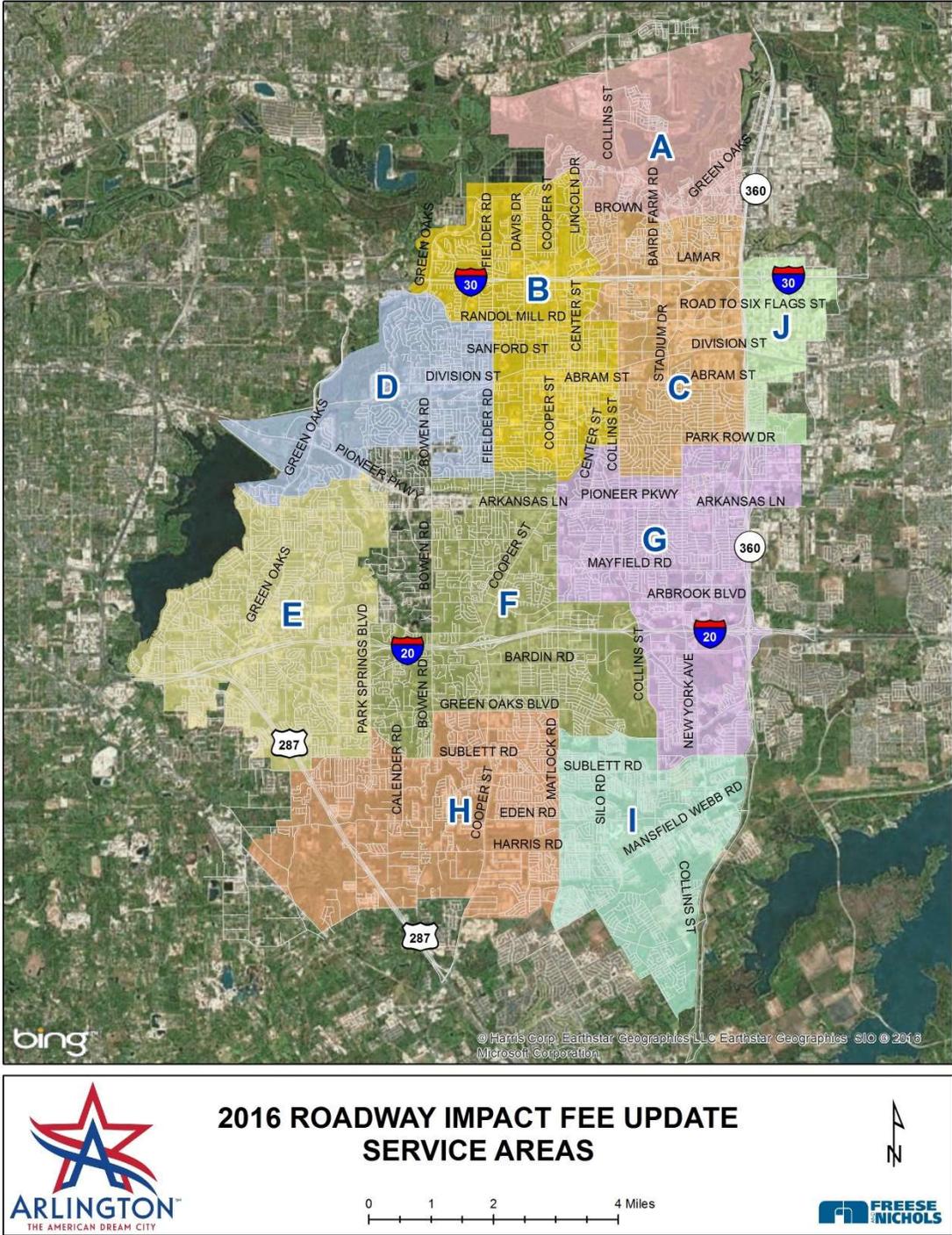


Figure 3-1: Roadway Service Areas

ROADWAY IMPACT FEE ANALYSIS

ROADWAY IMPACT FEE SERVICE UNITS

Service units establish a relationship between roadway projects and demand placed on the street system by development, as well as provide the ability to calculate and assess impact fees for specific development proposals. As defined in Chapter 395, "Service unit means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development in accordance with generally accepted engineering or planning standards for a particular category of capital improvements or facility expansions."

To determine the roadway impact fee for a particular development, the service unit must accurately identify the impact that the development will have on the major roadway system (i.e., arterial and collector roads) serving the development. This impact is a combination of the number of new trips generated by the development, the particular peaking characteristics of the land-use(s) within the development, and the length of each new trip on the transportation system.

The service unit must also reflect the capacity, which is provided by the roadway system, and the demand placed on the system during the time in which peak, or design, conditions are present on the system. Transportation facilities are designed and constructed to accommodate volumes expected to occur during the peak hours (design hours). These volumes typically occur during the peak hours as motorists travel to and from work.

The vehicle-mile during the PM peak hour serves as the service unit for impact fees in Arlington. This service unit establishes a more precise measure of capacity, utilization and intensity of land development through the use of published trip generation data. It also recognizes legislative requirements with regards to trip length.

Service Units

Service units create a link between supply (roadway projects) and demand (development). Both can be expressed as a combination of the number of vehicles traveling during the peak hour and the distance traveled by these vehicles in miles.

Service Unit Supply

For roadway capital project improvements, the number of service units provided during the peak hour is simply the product of the capacity of the roadway in one hour and the length of the product. For example:

Given a four lane divided roadway project with a 600 vehicle per hour per lane capacity and a length of two miles, the number of service units provided is:

$$600 \text{ vehicles per hour per lane} \times 4 \text{ lanes} \times 2 \text{ miles} = 4,800 \text{ vehicles-miles}$$

ROADWAY IMPACT FEE ANALYSIS

Service Unit Demand

The demand placed on the system can be expressed in a similar manner. For example, a development generating 100 vehicle trips in the PM peak hour with an average trip length of two miles would generate:

$$100 \text{ vehicle-trips} \times 2 \text{ miles/trip} = 200 \text{ vehicle-miles}$$

Similarly, demand placed on the existing roadway network is calculated in the same manner with a known traffic volume (peak hour roadway counts collected annually by the City of Arlington) on a street and a given segment length.

SERVICE UNITS FOR NEW DEVELOPMENT

An important objective in the development of the impact fee system is the development of a specific service unit equivalency for individual developments. The vehicle-miles generated by a new development are a function of the trip generation and average trip length characteristics of that development. The following describes the process used to develop the vehicle-equivalency table, which relates land use types and sizes to the resulting vehicle-miles of demand created by that development.

Trip Generation

Trip generation information for the PM peak hour was based on data published in the Ninth Edition of *Trip Generation* by the Institute of Transportation Engineers (ITE). *Trip Generation* is a reference publication that contains travel characteristics of over 100 land uses across the nation and is based on empirical data gathered from over 3,200 studies that were reported to the Institute by public agencies, developers and consulting firms.

Pass-by and Diverted Trips Adjustments

The actual "traffic impact" of a specific site for impact fee purposes is based on the amount of traffic added to the street system. To accurately estimate new trips generated by a new development, adjustments must be made to trip generation rates and equations to account for pass-by and diverted trips. The added traffic is adjusted so that each development is assigned only for a portion of trips associated with that particular development, reducing the possibility of over-counting by counting only primary trips generated.

Pass-by trips are those trips that are already on a particular route for a different purpose and simply stop at a particular development on that route. For example, a stop at a convenience store on the way home from the office is a pass-by trip for the convenience store. A pass-by trip does not create

ROADWAY IMPACT FEE ANALYSIS

an additional burden on the street system and therefore should not be counted in the assessment of impact fees of a convenience store.

A diverted trip is a similar situation, except that a diversion is made from the regular route to make an interim stop. For example, a trip from work to home using Cooper Street would be a diverted trip if the travel path were changed to Collins Road for the purpose of stopping at a retail site. On a system-wide basis, this trip places a slightly additional burden on the street system but in many cases, this burden is minimal.

Trip generation rates were reduced by the percentages presented in **Table 3-1** in an effort to isolate the primary trip purpose. Adjustments were based on studies conducted by ITE and other published studies.

ROADWAY IMPACT FEE ANALYSIS

Table 3-1: Trip Reduction Estimates (PM Peak Hour)

ITE CODE	LAND USE CATEGORY	UNITS	PERCENT OF PASS-BY TRIPS	PERCENT OF DIVERTED TRIPS
Residential				
210	Single-family detached housing	DU	0%	0%
220	Apartment	DU	0%	0%
230	Residential Condominium / Townhouse	DU	0%	0%
240	Mobile Home Park	DU	0%	0%
251	Senior Adult Housing - Detached	DU	0%	0%
Office				
710	General Office	1000 sq. ft.	0%	0%
714	Corporate Headquarters Bldg	1000 sq. ft.	0%	0%
715	Single Tenant Office Building	1000 sq. ft.	0%	0%
720	Medical-Dental Office	1000 sq. ft.	0%	0%
732	U.S. Post Office	1000 sq. ft.	0%	0%
750	Office Park	1000 sq. ft.	0%	0%
760	Research and Development Center	1000 sq. ft.	0%	0%
770	Business Park	1000 sq. ft.	0%	0%
Retail / Commercial				
812	Building Materials and Lumber Store	1000 sq. ft.	25%	0%
813	Free standing Discount Superstore	1000 sq. ft.	28%	0%
814	Specialty Retail Center	1000 sq. ft.	0%	0%
815	Free standing Discount Store	1000 sq. ft.	17%	35%
816	Hardware/Paint Store	1000 sq. ft.	26%	28%
817	Garden Center	1000 sq. ft.	0%	0%
818	Nursery (Wholesale)	1000 sq. ft.	25%	0%
820	Shopping Center	1000 sq. ft.	34%	26%
841	Automobile Sales	1000 sq. ft.	40%	0%
843	Auto Parts Sales	1000 sq. ft.	43%	13%
848	Tire Store	1000 sq. ft.	28%	10%
849	Tire Superstore	1000 sq. ft.	28%	10%
850	Super market	1000 sq. ft.	36%	38%
853	Convenience Market with Gasoline Pumps	1000 sq. ft.	63%	26%
857	Discount Club	1000 sq. ft.	0%	0%
862	Home Improvement Superstore	1000 sq. ft.	48%	24%
863	Electronic Superstore	1000 sq. ft.	40%	33%
864	Toy Superstore	1000 sq. ft.	0%	0%
876	Apparel Store	1000 sq. ft.	0%	0%
879	Arts and Crafts Store	1000 sq. ft.	0%	0%
881	Pharmacy with drive thru	1000 sq. ft.	49%	13%
890	Furniture Store	1000 sq. ft.	53%	31%
912	Bank with Drive Thru	1000 sq. ft.	47%	26%
931	Quality Restaurant	1000 sq. ft.	44%	27%
932	Restaurant	1000 sq. ft.	43%	26%
934	Fast food with drive thru	1000 sq. ft.	50%	23%
942	Automotive Care Center	1000 sq. ft.	0%	0%
945	Gas/Service Station with Convenience Market	1000 sq. ft.	56%	31%
Industrial				
110	General Light Industrial	1000 sq. ft.	0%	0%
130	Industrial Park	1000 sq. ft.	0%	0%
140	Manufacturing	1000 sq. ft.	0%	0%
150	Warehousing	1000 sq. ft.	0%	0%
151	Mini Warehouse (Self Storage)	1000 sq. ft.	0%	0%
Institutional				
522	Middle/Jr high school	1000 sq. ft.	0%	0%
530	High School	1000 sq. ft.	0%	0%
534	Private School (K-8)	Students	0%	0%
540	Jr. / Community College	Students	0%	0%
560	Church	1000 sq. ft.	0%	0%
565	Day Care Center	Students	76%	0%

ROADWAY IMPACT FEE ANALYSIS

Trip Length

Trip lengths (in miles) are used in conjunction with site trip generation to estimate vehicle-miles of travel. Trip length data was based on a combination of travel statistics generated from the North Central Texas Council of Governments (NCTCOG) Travel Demand Model and information generated in NCTCOG's 2012 Workplace Survey. **Table 3-2** summarizes the derived average trip lengths for major land use categories. These trip lengths represent the average distance that a vehicle will travel between an origin and destination of which either the origin or destination contains the land-use category identified below. Where specific land uses were considered to exhibit different trip length characteristics than those identified in the Workplace Survey, previous studies and engineering judgment were used to estimate the average trip length.

Origin and Destination Adjustments

Trip lengths were adjusted to "localize" trip activity to the local network by removing a percentage of travel occurring on the federal system. Modeled network statistics from NCTCOG indicate that 50% of travel generated from within the city use non-federal facilities. Localization calculations are detailed in **Appendix G**.

Additionally, the assessment of an individual development's impact fee is based on the premise that each vehicle-trip has an origin and a destination and that the development end should pay for one-half of the cost necessary to complete each trip. To prevent the potential of double charging, trip lengths were divided by two to reflect half of the vehicle trip associated with development. **Table 3-2** illustrates the adjusted trip length.

Finally, as the service area structure was based on a six-mile boundary, those land uses that exhibited trip lengths greater than six miles would be capped to this threshold.

ROADWAY IMPACT FEE ANALYSIS

Table 3-2: Trip Lengths and Adjustments

LAND USE CATEGORY	TRIP LENGTH ¹	LOCALIZED TRIP LENGTH (50%) ²	AVERAGE TRIP LENGTH ³
Residential	9.95	4.98	2.49
Office	10.11	5.05	2.53
Commercial/Retail	6.90	3.45	1.72
Industrial	11.15	5.57	2.79
Institutional	6.96	3.48	1.74

Source: Combination of NCTCOG 2012 Workplace Survey, previous studies, and engineering judgment.

¹ Weighted average trip length of all land uses in category in miles.

² Trip lengths are localized to account for only travel on local roadways rather than including travel on federal facilities.

³ Each trip has an origin and destination, therefore average trip length is 1/2 trip length or a maximum of 6 miles, due to service area boundaries.

Since the 2002 update, the average trip length for major land use categories increased. This increase is indicative of the continued rise in travel distances for home-base work trips within the Metroplex. The *adjusted trip length* for all uses decreased primarily as a result of an increased proportion of travel on federal facilities.

Service Unit Equivalency Table

The result of combining the trip generation and trip length information is an equivalency table which establishes the service unit rate for various land uses. These service unit rates are based on an appropriate development unit for each land use. For example, a dwelling unit is the basis for residential uses, while 1,000 gross square feet of floor area is the basis for office, commercial, and retail uses.

Arlington's equivalency table has been refined to reflect the major land use categories of residential, office, commercial, industrial and institutional uses. Sub-classes of land use are included and comprise the general categories identified. Rates were established for the major categories using a weighted average methodology consisting of: 1) the relative weight of individual land uses within the broad category, and 2) the relative weight based on the number of ITE studies presented in *Trip Generation*. The updated equivalency table is illustrated in **Table 3-3**.

ROADWAY IMPACT FEE ANALYSIS

Table 3-3: Land Use Vehicle-Mile Equivalency

LAND USE CATEGORY	DEVELOPMENT UNIT	2002 TOTAL SERVICE UNITS (VEH-MI/DEV UNIT)	2015 TOTAL SERVICE UNITS (VEH-MI/DEV UNIT)
Residential	DU	2.68	2.06
Office	1,000 sq. ft.	5.01	4.81
Commercial/Retail	1,000 sq. ft.	5.57	5.04
Industrial	1,000 sq. ft.	1.89	1.93
Institutional	1,000 sq. ft.	0.82	0.96

Source: Trip Generation, 9th Edition, Institute of Transportation Engineers; 2012 NCTCOG Workplace Survey; Freese and Nichols, Inc.

Service units for respective land uses were affected primarily as a result of the increase in the proportion of travel on federal facilities. Also contributing to the change in service units was updated trip generation data. While most land uses generally remained similar, there were several uses within the commercial and institutional categories that varied slightly (both increased or decreased) from previous data and hence, resulted in marginal increases in these categories.

EXISTING CONDITIONS ANALYSIS

An inventory of the collector and arterial roadway facilities was conducted to determine capacity provided by the existing roadway system, the demand currently placed on the system, and the potential existence of deficiencies on the system. Data for the inventory was obtained from the Thoroughfare Development Plan (TDP), field reconnaissance, and peak hour traffic volume count data.

The roadways were divided into segments based on changes in lane configuration, major intersections, or area development that may influence roadway characteristics. For individual segment assessment, lane capacities were assigned to each segment based on roadway functional class and type of cross-section as shown in **Table 3-4**. Roadway hourly volume capacities are based on general carrying capacity values and reflect level-of-service “D” operation, which is typically identified as the minimum acceptable traffic operational condition by cities.

ROADWAY IMPACT FEE ANALYSIS

Table 3-4: Roadway Facility Vehicle Lane Capacities

ROADWAY FACILITY	DESIGNATION	HOURLY VEHICLE CAPACITY PER LANE-MILE OF ROADWAY FACILITY
Divided Arterial/Collector	D	675
Undivided Arterial/Collector	U	550
Special Arterial/Collector*	S	625
One-Way Roadway	OW	500

*Roadway with continuous two-way left turn lane

Existing Volumes

Current directional PM peak hour volumes were obtained from traffic counts conducted annually by the City of Arlington. These traffic counts were collected on major roadways throughout the city. For segments not counted, existing volumes were used or estimates were developed based on data from adjoining roadway counts.

This data was compiled for roadway segments throughout the city and entered into the database for use in calculations. A summary of volumes by roadway segment is included in the **Appendix B** as part of the existing capital improvements database.

Vehicle-Miles of Existing Capacity (Supply)

An analysis of the total capacity for each service area was performed. For each roadway segment, the existing vehicle-miles of capacity supplied were calculated using the following:

$$\text{Vehicle-Miles of Capacity} = \text{Link capacity per peak hour per lane} \times \text{No. of Lanes} \times \text{Length of segment (miles)}$$

A summary of the current capacity available on the roadway system is shown in **Table 3-5**. It is important to note that the roadway capacity depicted in **Table 3-5** is system-wide for all roadways and not restricted to those roadways proposed in the impact fee capital improvements plan. For a detailed listing of vehicle-miles of capacity by roadway segment, refer to **Appendix B**.

Vehicle-Miles of Existing Demand

The level of current usage in terms of vehicle-miles was calculated for each roadway segment. The vehicle-miles of existing demand were calculated by the following equation:

$$\text{Vehicle-Miles of Demand} = \text{PM peak hour volume} \times \text{Length of segment (miles)}$$

ROADWAY IMPACT FEE ANALYSIS

Table 3-5 also lists total vehicle-miles of demand. **Appendix B** includes a detailed listing of vehicle-miles of demand by directional roadway segment.

Vehicle-Miles of Existing Excess Capacity or Deficiencies

For each roadway segment, the existing vehicle-miles of excess capacity and/or deficiencies were calculated. Each direction was evaluated to determine if vehicle demands exceeded the available capacity. If demand exceeded capacity in one or both directions, the deficiency is deducted from the supply associated with the impact fee capital improvement plan. A summary of peak hour excess capacity and deficiencies is also shown in **Table 3-5**. A detailed listing of existing excess capacity and deficiencies by roadway segment is also located in the **Appendix B**.

Table 3-5: Peak Hour Vehicle-Miles of Existing Capacity, Demand, Excess Capacity and Deficiencies

SERVICE AREA	CAPACITY	DEMAND	EXCESS CAPACITY	EXISTING DEFICIENCIES
A	26,943	17,860	9,083	0
B	100,363	55,274	46,111	1,022
C	79,888	35,298	45,150	560
D	44,911	28,692	17,422	1,204
E	64,936	31,049	35,242	1,355
F	89,622	60,969	34,356	5,702
G	94,723	59,458	37,491	2,226
H	58,630	37,379	23,260	2,009
I	35,113	21,590	15,128	1,604
J	23,613	9,752	13,861	0
Total	618,742	357,320	277,104	15,682

Analysis of the 2002 IFCIP Program

The existing conditions analysis was also used for the purposes of testing projects for excess capacity on the previous 2002 IFCIP program. If insufficient excess capacity exists on individual IFCIP projects, then such projects are required to be removed. Projects with minimal excess capacity remaining, which is generally less than 50 vehicle-miles per direction, were also removed.

ROADWAY IMPACT FEE ANALYSIS

The analysis revealed five project segments with deficiencies. These projects included:

- Service Area “A/C”; Brown (Ballpark Way-Frazer), minimal excess capacity remaining,
- Service Area “G”; Collins (Pioneer-Mayfield), one direction (132 veh-miles),
- Service Area “G”; New York (IH 20-Green Oaks), one direction (1137 veh-miles),
- Service Area “G”; New York (Green Oaks-Sublett), one direction (316 veh-miles),
- Service Area “H”; Matlock (Harris-S City Limits), one direction (197 veh-miles).

Additional projects from the 1989 IFCIP were identified with deficiencies, but were removed due to the extent of time the projects have been in the impact fee program.

PROJECTED CONDITIONS ANALYSIS

Chapter 395 requires a description of all capital improvements or facility expansions and their costs necessitated by and attributable to new development within the service area. This section describes the projected growth, vehicle-miles of new demand, capital improvements program, vehicle-miles of new capacity supplied, and costs of the roadway improvements.

The projected growth for the roadway service area is represented by the increase in the number of new vehicle-miles generated over the 10-year planning period. The basis for the calculation of new demand is the population and employment projections that were prepared as part of the Arlington Land Use Assumptions Report for Impact Fees (**Appendix H**). Estimates of population and employment were prepared for the years 2015 and 2025.

Population data was provided in terms of the number of dwelling units and persons. Employment data was broken into three classes of employees that include basic, retail, and service, as provided by NCTCOG, and comprise a variety of employment groupings. Basic employment generally encompasses the industrial and manufacturing uses; retail employment includes commercial and retail uses; and service employment generally encompasses government and office uses. A summary of the projected growth in vehicle-miles is shown in **Table 3-6**.

Projected Vehicle-Miles of New Demand

Projected vehicle-miles of demand were calculated based on the net growth expected to occur over the 10-year planning period and the service unit generation for each of the population and employment data components (basic, service and retail). Separate calculations were performed for each data component and were then aggregated for each service area. Vehicle-miles of demand for population growth were based on dwelling units (residential), and vehicle-miles of demand for employment were based on the number of employees and estimates of square footage per employee

ROADWAY IMPACT FEE ANALYSIS

(industrial, office and retail uses). **Table 3-6** lists the 10-year projected vehicle-miles of demand by service area for Arlington. **Appendix C** details the derivation of the projected demand calculations.

In 2002, the ten-year VMT was 83,769. In the 1993 and 1997 updates, the ten-year VMT was 58,345 and 70,135, respectively. This ten-year VMT of 75,074 for 2015 correlates with a lowering of VMT growth as the City of Arlington approaches build-out and growth slows.

Table 3-6: 10-Year Projected Service Units of Growth

SERVICE AREA	PROJECTED 10-YEAR GROWTH (VEHICLE-MILES)
A	7,777
B	11,066
C	20,508
D	2,895
E	2,576
F	7,619
G	8,733
H	6,205
I	3,452
J	4,243
TOTAL	75,074

Capital Improvements Plan

The impact fee capital improvements plan is aimed at facilitating long-term growth in Arlington. Considerations in the development of the impact fee CIP include: community growth (land use assumptions), the Future Development Areas Map/Comprehensive Plan, financial considerations, project achievability, the Thoroughfare Development Plan, and City Staff input.

Eligible Projects

Legislative mandate stipulates that the impact fee CIP contain only those roadways which are included on the City's official Thoroughfare Plan that are classified as *arterial* or *collector* status facilities. A review of the Thoroughfare Development Plan (adopted February 2014) identified projects which were eligible for consideration by impact fees. Impact fee legislation also allows for the recoupment of costs for previously constructed facilities. Only costs incurred by the City may be considered for impact fees. Roadways constructed with private funding cannot be included for

ROADWAY IMPACT FEE ANALYSIS

impact fee consideration. Additionally, state facilities are eligible for inclusion to the impact fee system; however, only costs incurred by the City may be eligible for consideration.

As part of the existing conditions analysis, the previous 2002 IFCIP program projects were tested for remaining excess capacity. If insufficient excess capacity exists on individual ICFIP projects, then such projects are required to be removed. Additionally, projects were evaluated for changes in the TDP that affect a project's eligibility and the length of time the project has been in the impact fee program. All projects that have been in the program longer than 25 years were removed to account for the reasonable life of a road. The projects removed from the IFCIP are listed in **Table 3-7**.

ROADWAY IMPACT FEE ANALYSIS

Table 3-7: IFCIP Project Removals; 2016 Update

2015 SVC AREA	SHARED SVC AREA	CIP ORIGIN	ROADWAY	FROM	TO	LENGTH (mi)	NO. OF LANES	TYPE
A		89R	BALLPARK WAY	BROWN BLVD	GREEN OAKS BLVD	0.23	4	D
A	C	89R	BROWN BLVD	BALLPARK WAY	SH 360	0.57	4	U
A	C	2002R	BROWN BLVD.	BALLPARK WAY	FRAZEE CT	0.37	4	U
A		89R	GREEN OAKS BLVD	LINCOLN DR	COLLINS ST	0.64	4	D
A		89R	GREEN OAKS BLVD	COLLINS ST	E OF FURRS ST	0.38	4	D
A		89R	GREEN OAKS BLVD	LEGACY POINT	SHADOW RIDGE	0.42	4	D
B		89R	COOPER ST	GREEN OAKS BLVD	WASHINGTON ST	0.72	5	S
B		89R	DAVIS DR	GREEN OAKS BLVD	ROCKY CANYON	0.61	4	D
B		89R	FIELDER RD	GREEN OAKS BLVD	GOLIAD DR	0.68	4	D
B		89R	GREEN OAKS BLVD	FIELDER RD	DAVIS DR	0.53	4	D
B		89R	GREEN OAKS BLVD	DAVIS DR	COOPER ST	0.57	4	D
B		89N	LAMAR BLVD	GREEN OAKS BLVD	MOSSY OAKS	0.19	4	D
B		89N	CENTER/MESQUITE	RANDOL MILL RD	SANFORD ST	0.49	6	D
B		89N	CENTER/MESQUITE	SANFORD ST	MITCHELL ST	1.02	6	D
B		89N	CENTER/MESQUITE	MITCHELL ST	CENTER ST. S	0.35	6	D
B		89N	CENTER ST S	MESQUITE ST	PARK ROW DR	0.22	7	S
B	C	89N	COLLINS ST	ABRAMS	MITCHELL	0.46	7	S
B	C	89N	COLLINS ST	MITCHELL ST	PARK ROW DR	0.49	7	S
C		89N	BAIRD FARM RD	RANDY SNOW	WET'N WILD WAY	0.79	4	U
C		89N	BALLPARK WAY	CONV CENTER DR	IH 30	0.23	6	D
C		89R	BALLPARK WAY	BROWN BLVD	AVENUE J	0.45	4	D
C		89R	BALLPARK WAY	LAMAR BLVD	WET'N WILD WAY	0.11	6	D
C	A	89R	BROWN BLVD	BALLPARK WAY	SH 360	0.57	4	U
C	A	2002R	BROWN BLVD.	BALLPARK WAY	FRAZEE CT	0.37	4	U
C		89N	LAMAR BLVD	BALLPARK WAY	SH 360	0.68	6	D
C	B	89N	COLLINS ST	ABRAMS	MITCHELL	0.46	7	S
C	B	89N	COLLINS ST	MITCHELL	PARK ROW DR	0.49	7	S
C		89N	STADIUM DR	RANDOL MILL RD	DIVISION ST	0.76	4	D
D		89N	GREEN OAKS BLVD	RANDOL MILL RD	CITY LIMITS	0.23	6	D
D		89N	RANDOLL MILL	WESTWOOD	WILMA	0.80	4	U
D		97R	ARKANSAS LN	GREEN OAKS BLVD	LAKE ARLINGTON	0.72	4	U
D	E	89N	GREEN OAKS BLVD	ARKANSAS LN	WOODLAND P. B.	0.19	2	D
D		89N	GREEN OAKS BLVD	WOODLAND P. B.	PIONEER PKWY	0.91	2	D
E		89R	ARKANSAS LN	GREEN OAKS BLVD	WOODSIDE DR	0.76	4	D
E		89R	ARKANSAS LN	WOODSIDE DR	PARK SPRINGS BL	0.62	4	D
E		89R	ARKANSAS LN	PARK SPRINGS BL	DAL GARDENS CL	0.23	4	D
E	D	89N	GREEN OAKS BLVD	ARKANSAS LN	WOODLAND P.B.	0.19	2	D
E		89N	GREEN OAKS BLVD	ARKANSAS LN	PLEASANT RIDGE	1.76	6	D
E		89N	GREEN OAKS BLVD	PLEASANT RIDGE	LITTLE RD	0.18	6	D
E		89N	GREEN OAKS BLVD	LITTLE RD	IH 20 SFR	0.30	6	D
E		89R	GREEN OAKS BLVD	IH 20 SFR	BARDIN RD	0.57	4	D

ROADWAY IMPACT FEE ANALYSIS

Table 3-7: IFCIP Project Removals; 2016 Update (continued)

2015 SVC AREA	SHARED SVC AREA	CIP ORIGIN	ROADWAY	FROM	TO	LENGTH (mi)	NO. OF LANES	TYPE
E		89R	GREEN OAKS BLVD	BARDIN RD	KELLY ELLIOTT	0.95	4	D
E		89R	GREEN OAKS BLVD	KELLY ELLIOTT	PARK SPRINGS BLVD	0.45	4	D
E		89R	PERKINS RD	ARKANSAS LN	WATERVIEW DR	0.83	4	U
E		93R	PERKINS RD	WATERVIEW DR	PLEASANT RIDGE	0.98	4	U
E		89R	PLEASANT RIDGE	GREEN OAKS BLVD	PERKINS RD	0.19	5	S
E		89R	PLEASANT RIDGE	PERKINS RD	POLY WEBB RD	0.53	4	D
E		89N	POLY WEBB RD	PLEASANT RIDGE	LITTLE RD	0.76	4	U
E		89R	BARDIN RD	WILLOW RIDGE	KELLY ELLIOTT	0.30	4	D
E		89R	KELLY ELLIOTT	PLEASANT RIDGE	IH 20	0.34	4	U
E		89R	KELLY ELLIOTT	IH 20	GREEN OAKS BLVD	1.14	4	U
E	F	89R	PARK SPRINGS	IH 20	GREEN OAKS BLVD	1.02	4	D
E	H	89N	PARK SPRINGS	COLLARD RD	SUBLETT RD	0.47	4	D
E	H	89N	SUBLETT RD	SH 287	PARK SPRINGS BLVD	0.98	4	D
F	G	89R	MATLOCK RD	ARKANSAS LN	MAYFIELD RD	0.95	4	D
F	G	89R	MATLOCK RD	MAYFIELD RD	ARBROOK BLVD	0.38	4	D
F		89R	MAYFIELD RD	HARVARD ST	MATLOCK RD	1.67	4	D
F		89R	SPROCKET DR	CALIFORNIA LN	MAYFIELD RD	0.38	2	U
F		89N	BOWEN RD	PLEASANT RIDGE	IH 20	0.15	4	D
F		89N	BOWEN RD	IH 20	GREEN OAKS BLVD	0.95	4	D
F		89R	GREEN OAKS BLVD	RUSH CREEK DR	BOWEN RD	0.28	4	D
F	H	89R	GREEN OAKS BLVD	BOWEN RD	COOPER ST	0.80	4	D
F	H	89R	GREEN OAKS BLVD	COOPER ST	FISH CREEK	0.68	4	D
F	H	89N	GREEN OAKS BLVD	FISH CREEK	MATLOCK RD	0.38	4	D
F		89N	GREEN OAKS BLVD	MATLOCK RD	NATHAN LOWE	0.91	4	D
F	I	89N	GREEN OAKS BLVD	NATHAN LOWE	COLLINS ST	0.61	4	D
F	E	89R	PARK SPRINGS	IH 20	GREEN OAKS BLVD	1.02	4	D
F		89N	PLEASANT RIDGE	BOWEN RD	MELEAR RD	0.80	4	D
F	H	89N	SUBLETT RD	CALENDER RD	BOWEN RD	0.38	4	D
F		97N	BARDIN RD	WESTWAY	COLLINS ST	0.78	4	D
F	G	89R	COLLINS ST	ARBROOK BLVD	IH 20 NFR	0.25	4	D
F	G	89N	COLLINS ST	IH 20 NFR	IH 20 SFR	0.19	6	D
F	G	89N	COLLINS ST	IH 20 SFR	GREEN OAKS BLVD	1.55	4	D
F		89N	MATLOCK RD	BARDIN RD	GREEN OAKS BLVD	0.64	4	D
F	H	89N	MATLOCK RD	GREEN OAKS BLVD	NATHAN LOWE	0.38	4	D
G		93N	COLLINS ST	PIONEER PKWY	MAYFIELD RD	1.10	6	D
G		89R	COLLINS ST	MAYFIELD RD	ARBROOK BLVD	0.57	4	D
G	F	89R	COLLINS ST	ARBROOK BLVD	IH 20 NFR	0.25	4	D
G	F	89N	COLLINS ST	IH 20 NFR	IH 20 SFR	0.19	6	D
G	F	89N	COLLINS ST	IH 20 SFR	GREEN OAKS BLVD	1.55	4	D
G	I	89N	COLLINS ST	GREEN OAKS BLVD	HARWOOD RD	0.24	4	D
G	F	89R	MATLOCK RD	ARKANSAS LN	MAYFIELD RD	0.95	4	D
G	F	89R	MATLOCK RD	MAYFIELD RD	ARBROOK BLVD	0.38	4	D

ROADWAY IMPACT FEE ANALYSIS

Table 3-7: IFCIP Project Removals; 2016 Update (continued)

2015 SVC AREA	SHARED SVC AREA	CIP ORIGIN	ROADWAY	FROM	TO	LENGTH (mi)	NO. OF LANES	TYPE
G		89N	MAYFIELD RD	COLLINS ST	NEW YORK AVE	0.95	4	D
G		89N	MAYFIELD RD	NEW YORK AVE	SH 360	1.02	4	D
G		93R	NEW YORK AVE	IH 20	GREEN OAKS BLVD	1.62	4	D
G		93N	NEW YORK AVE	GREEN OAKS BLVD	SUBLETT RD	0.45	4	D
G		89R	SHERRY ST	PIONEER PKWY	ARKANSAS LN	0.38	4	U
G		89R	SUSAN ST	PARK ROW DR	PIONEER PKWY	0.57	4	U
G		89N	GREEN OAKS BLVD	COLLINS ST	NEW YORK AVE	0.61	4	D
G		89N	GREEN OAKS BLVD	NEW YORK AVE	SH 360	0.83	4	D
G	I	89N	SUBLETT RD	COLLINS ST	NEW YORK AVE	0.68	4	D
G	I	89N	SUBLETT RD	NEW YORK AVE	SH 360	0.68	4	D
H	E	89N	PARK SPRINGS	COLLARD RD	SUBLETT RD	0.47	4	D
H	E	89N	SUBLETT RD	US 287	PARK SPRINGS BLVD	0.98	4	D
H		89N	SUBLETT RD	PARK SPRINGS BLVD	CALENDER RD	0.53	4	D
H	F	89N	SUBLETT RD	CALENDER RD	BOWEN RD	0.38	4	D
H		89N	SUBLETT RD	BOWEN RD	COOPER ST	0.85	4	D
H		89N	SUBLETT RD	COOPER ST	MATLOCK RD	1.14	4	D
H		89R	HARRIS	RUSSELL CURRY	LEDBETTER RD	0.57	4	U
H		89R	HARRIS	LEDBETTER RD	CALENDER RD	0.53	2	U
H		89N	HARRIS	CALENDER RD	COOPER ST	0.98	4	U
H		89N	HARRIS	COOPER ST	MATLOCK RD	1.14	4	U
H		97N	EDEN RD	US 287	WEST CITY LIMITS	0.92	4	U
H	F	89R	GREEN OAKS BLVD	BOWEN RD	COOPER ST	0.80	4	D
H	F	89R	GREEN OAKS BLVD	COOPER ST	FISH CREEK	0.68	4	D
H	F	89N	GREEN OAKS BLVD	FISH CREEK	MATLOCK RD	0.38	4	D
H	F	89N	MATLOCK RD	GREEN OAKS BLVD	NATHAN LOWE	0.38	4	D
H	I	89N	MATLOCK RD	NATHAN LOWE	SUBLETT RD	0.57	4	D
H	I	89N	MATLOCK RD	SUBLETT RD	WARNELL-WALSH	1.17	4	D
H	I	89N	MATLOCK RD	WARNELL-WALSH	HARRIS	0.19	4	D
H	I	97N	MATLOCK RD	HARRIS	S. CITY LIMITS	1.26	4	D
I	G	89N	COLLINS ST	GREEN OAKS BLVD	HARWOOD RD	0.24	4	D
I	F	89N	GREEN OAKS BLVD	NATHAN LOWE	COLLINS ST	0.61	4	D
I	H	89N	MATLOCK RD	NATHAN LOWE	SUBLETT RD	0.57	4	D
I	H	89N	MATLOCK RD	SUBLETT RD	WARNELL-WALSH	1.17	4	D
I	H	89N	MATLOCK RD	WARNELL-WALSH	HARRIS	0.19	4	D
I	H	97N	MATLOCK RD	HARRIS	S. CITY LIMITS	1.26	4	D
I		89N	SUBLETT RD	MATLOCK RD	COLLINS ST	1.44	4	D
I	G	89N	SUBLETT RD	COLLINS ST	NEW YORK AVE	0.68	4	D
I	G	89N	SUBLETT RD	NEW YORK AVE	SH 360	0.68	4	D
I		89N	NEW YORK AVE	SUBLETT	LYNN CREEK	0.91	4	U
I		89N	NEW YORK AVE	LYNN CREEK	WEBB-LYNN RD	0.10	4	U

ROADWAY IMPACT FEE ANALYSIS

Eligible Costs

In general, those costs associated with the design, right-of-way acquisition, and construction and financing of all items necessary to implement the roadway projects identified in the capital improvements plan are eligible. It is important to note that upon completion of the capital improvements identified in the CIP, the city must recalculate the impact fee using the *actual* costs and make refunds if the actual cost is less than the impact fee paid by greater than 10 percent. To prevent this situation, conservative estimates of project cost are considered.

Chapter 395.012 identifies roadway costs eligible for impact fee recovery. The law states that:

“An impact fee may be imposed only to pay the cost of constructing capital improvements for facility expansions, including and limited to the construction contract price, surveying and engineering fees, land acquisition costs, including land purchases, court awards and costs, attorney fees, and expert witness fees; and fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.”

“Projected interest charges and other finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan.”

The following details the individual cost components of the impact fee CIP.

Construction: Construction costs include those costs which are normally associated with construction, including: paving, dirt work (including sub-grade preparation, embankment fill and excavation), clearing and grubbing, retaining walls or other slope protection measures, and general drainage items which are necessary in order to build the roadway and allow the roadway to fulfill its vehicle carrying capability. Individual items may include; bridges, culverts, inlets and storm sewers, junction boxes, man holes, curbs and/or gutters, and channel linings and other erosion protection appurtenances. Other items included in cost estimates may include: sidewalks, traffic control devices at select locations (initial cost only), and minimal sodding/landscaping.

Engineering: These are the costs associated with the design and surveying necessary to construct the roadway. Because the law specifically references fees, it has generally been understood that in-house City design and surveying cannot be included. Only those services

ROADWAY IMPACT FEE ANALYSIS

that are contracted out can be included and it may be necessary to use outside design and surveying firms to perform the work. For planned projects, a percentage based on typical engineering contracts was used to estimate these fees.

Right-of-Way: Any land acquisition cost estimated to be necessary to construct a roadway can be included in the cost estimate. For planning purposes, only the additional amount of land needed to bring a roadway right-of-way to thoroughfare standard was considered. For example, if a 120' right-of-way for an arterial road was needed and 80' of right-of-way currently existed, only 40' would be considered in the acquisition cost.

The cost for right-of-way may vary based on location of project and will be based on data from the most current County Appraisal District data.

Debt Service: Predicted interest charges and finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principle and interest on bonds, notes, or other obligations issued by the city to finance capital improvements identified in the impact fee capital improvements plans. They cannot be used to reimburse bond funds for other facilities.

Previous Assessments: The cost for any previous assessments collected by the City on projects identified on the impact fee CIP must be removed from system consideration.

Study Updates: The fees paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision can be included in the impact fees.

Only the cost necessitated by new development will be considered for impact fee consideration. For example, if only 60% of the capacity provided by the impact fee CIP is needed over the ten-year window, then only 60% of the cost associated with those facilities will be considered.

Staff Input and Project Achievability

City Staff contributed to the identification of potential projects based on historic and projected growth, and known/anticipated development activity within the City. An initial project list was compiled and reviewed with Staff prior to presentation to the CIPAC. City Staff identified several projects that were recently completed or are anticipated to be funded and built by an upcoming bond program.

The proposed impact fee capital improvements plan was presented to the CIPAC for discussion and consideration on January 20, 2016.

ROADWAY IMPACT FEE ANALYSIS

Capital Improvements Plan

Using the 2002 impact fee program capital improvements plan as the base for this update, several projects were added to the capital improvement projects. These project additions are listed below in **Table 3-8**.

Table 3-8: IFCIP Project Additions; 2016 Update

2015 SVC AREA	SHARED SVC AREA	CIP ORIGIN*	ROADWAY	FROM	TO	LENGTH (mi)	NO. OF LANES	TYPE
B	C	15R	IH 30 BRIDGE	CENTER ST		0.33	6	D
B		15R	IH 30 FRONTAGE	CENTER ST	COOPER ST	0.72	2	OW
C		15R	IH 30 BRIDGE	COLLINS		0.47	2	D
C		15R	IH 30 BRIDGE	BAIRD FARM (AT&T WAY)		0.14	7	D
C		15R	IH 30 FRONTAGE	CENTER ST	BALLPARK WAY	1.45	2	OW
C		15R	COLLINS ST	ROAD TO SIX FLAGS		0.10	6	D
C		15N	DIVISION	SH 360		0.38	6	D
C		15N	LAMAR BLVD	COLLINS ST	BALLPARK WAY	1.31	2	D
C		15N	STADIUM DR	DIVISION	ABRAM	0.44	2	D
E		15R	BOWMAN SPRINGS	IH 20	CITY LIMITS	0.45	5	S
E		15R	PLEASANT RIDGE	KELLY ELLIOTT	PARK SPRINGS BLVD	0.67	4	D
E		15N	PLEASANT RIDGE	IH 20	ENCHANTED BAY	0.42	4	D
E		15N	PLEASANT RIDGE	ENCHANTED BAY	PLUMWOOD	0.82	4	D
F		15R	PLEASANT RIDGE	PARK SPRINGS	BOWEN RD	1.04	4	D
F	G	15N	COLLINS ST	ARBROOK BLVD	IH 20	0.36	2	D
F	G	15N	COLLINS ST	IH 20	GREEN OAKS BLVD	1.67	2	D
F		15N	CENTER	BARDIN RD	EMBERCREST	0.34	4	D
F		15N	CENTER	EMBERCREST	CRAVEN PARK	0.63	4	U
F		15N	MATLOCK RD	BARDIN RD	GREEN OAKS BLVD	0.74	2	D
F		15R	COOPER ST	MAYFIELD		0.10	1	D
F	H	15R	GREEN OAKS BLVD	COOPER ST		0.10	1	D
G		15N	COLLINS ST	MAYFIELD RD	ARBROOK BLVD	0.54	2	D
G	I	15N	COLLINS ST	GREEN OAKS BLVD	SUBLETT RD	0.52	2	D
H		15N	MATLOCK RD	GREEN OAKS BLVD	TURNER WARNELL	3.13	2	D
H		15N	TURNER WARNELL	RUSSELL CURRY	US 287	0.52	4	D
I		15N	COLLINS	SUBLETT RD	SOUTHEAST PKWY	0.26	2	D
I		15N	MANSFIELD WEBB	SILO	COLLINS	0.76	4	U
I		15N	MANSFIELD WEBB	COLLINS	NEW YORK	0.80	4	U
I		15N	DEBBIE LN	W CITY LIMITS	E CITY LIMITS	1.52	4	D

*N = New Project; R = Recoupment Project

The updated CIP consists of 62 project segments covering all service areas except service areas D and J. Only those segments of projects lying within or along the city limits were included in the roadway impact capital improvements plan.

Project costs were updated based on estimates compiled by City Staff. Project costs were updated for engineering, right-of-way, construction, and traffic signals. Additionally, impact fee study update

ROADWAY IMPACT FEE ANALYSIS

costs were included to the project costs. While debt service is eligible for impact fee recovery, the City opts not to include such costs in an effort to keep the overall cost of the program to a minimum. For recently completed projects, actual costs were input to meet legislative mandates. The cost for the preliminary IFCIP program, which includes the new project additions, the removal of the 1989 projects, and the removal of projects without remaining excess capacity, totals approximately \$314.2 million. **Figure 3-2** and **Table 3-9** illustrate and list the capital improvement projects and their associated total cost for the impact fee system.

ROADWAY IMPACT FEE ANALYSIS

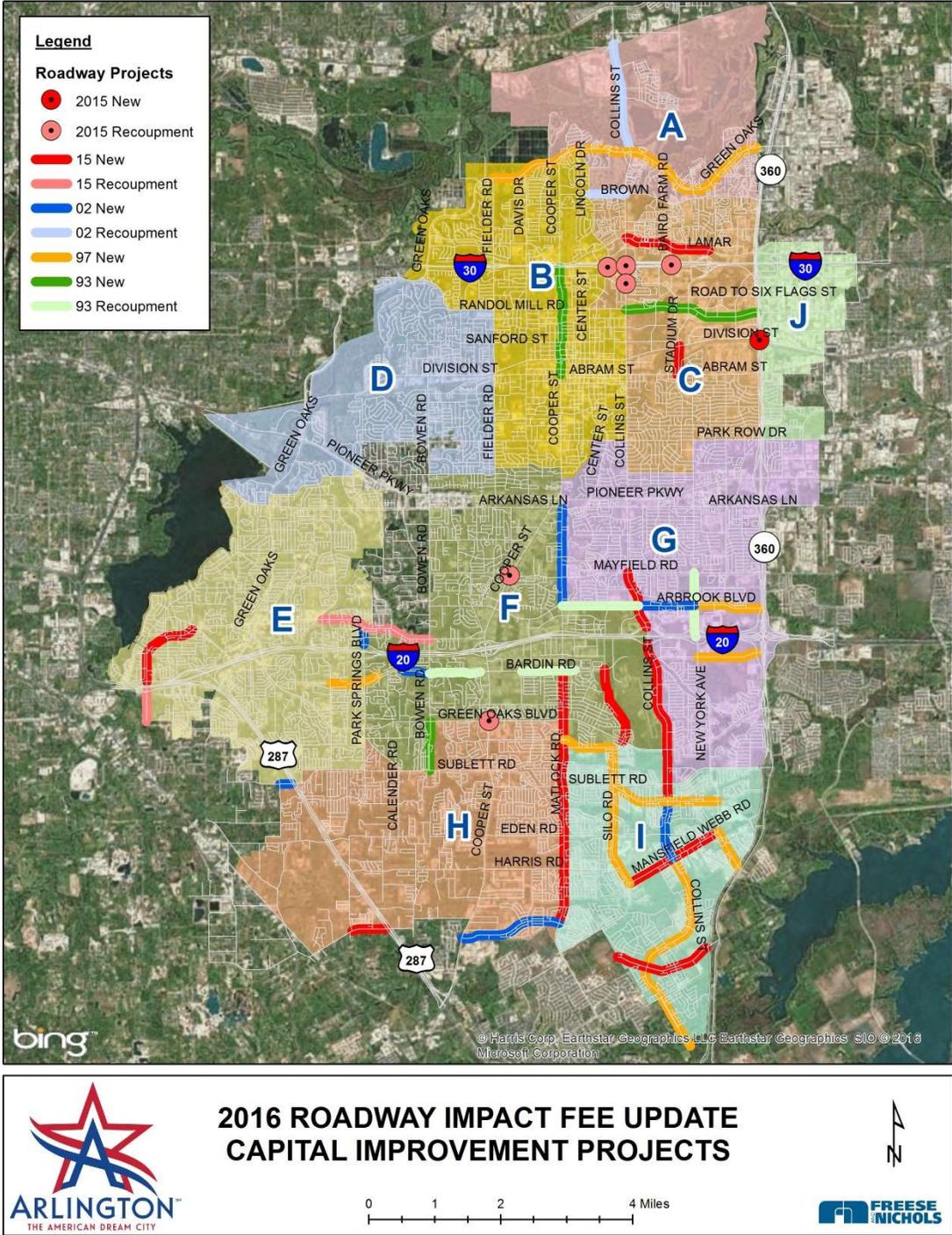


Figure 3-2: Roadway Impact Fee Projects

ROADWAY IMPACT FEE ANALYSIS

Table 3-9: 2016 IFCIP Project Listing

Table 3-9
2016 Arlington Roadway Impact Fee Study Update
Roadway Capital Improvements Plan

2015 Serv Area	Shared Svc Area	CIP Origin	Roadway	From	To	Length (mi)	No. of Lanes	Type	Pct. in Serv. Area	Total Project Cost
A	C	2002R	BROWN BLVD.	COLLINS	LINCOLN	0.53	4	U	50%	\$390,728
A		97N	GREEN OAKS BLVD	E CITY LIMITS	BALLPARK WAY	0.95	2	D	100%	\$1,679,573
A		97N	GREEN OAKS BLVD	BALLPARK WAY	LINCOLN DR	2.27	2	D	100%	\$4,208,993
A		2002R	COLLINS	GREEN OAKS BLVD	CITY LIMITS	1.17	6	D	100%	\$2,000,000
Sub-total SA A						4.92				\$8,279,294
B		97N	GREEN OAKS BLVD	LINCOLN	FIELDER	1.48	2	D	100%	\$1,211,360
B	C	15R	IH 30 BRIDGE	CENTER ST		0.33	6	D	50%	\$1,257,103
B		15R	IH 30 FRONTAGE	CENTER ST	COOPER ST	0.72	2	OW	100%	\$1,676,138
B		93N	COOPER ST	IH 30	RANDOL MILL RD	0.61	6	D	100%	\$5,346,892
B		93N	COOPER ST	RANDOL MILL RD	CEDAR	0.35	6	D	100%	\$3,658,400
B		93N	COOPER ST	CEDAR	ABRAMS	0.64	6	D	100%	\$6,480,608
Sub-total SA B						4.13				\$19,630,501
C	B	15R	IH 30 BRIDGE	CENTER ST		0.33	6	D	50%	\$1,257,103
C		15R	IH 30 BRIDGE	CENTER ST		0.47	2	D	100%	\$1,257,103
C		15R	IH 30 BRIDGE	BAIRD FARM (AT&T WAY)		0.14	7	D	100%	\$1,257,103
C		15R	IH 30 FRONTAGE	CENTER ST	BALLPARK WAY	1.45	2	OW	100%	\$3,561,792
C		15R	COLLINS ST	ROAD TO SIX FLAGS		0.10	6	D	100%	\$776,721
C		15N	DIVISION	SH 360		0.38	6	D	100%	\$4,919,000
C	A	2002R	BROWN BLVD.	COLLINS	LINCOLN	0.53	4	U	50%	\$390,728
C		15N	LAMAR BLVD	COLLINS ST	BALLPARK WAY	1.31	2	D	100%	\$4,151,493
C		93N	RANDOL MILL RD	COLLINS ST	BALLPARK WAY	0.83	6	D	100%	\$6,826,770
C		93N	RANDOL MILL RD	BALLPARK WAY	SH 360	0.91	6	D	100%	\$3,459,698
C		15N	STADIUM DR	DIVISION	ABRAM	0.44	2	D	100%	\$4,310,620
Sub-total SA C						6.89				\$32,168,131
D			NO PROJECTS IN SERVICE AREA D			0.00	0	D	100%	\$0
Sub-total SA D						0.00				\$0
E		15R	BOWMAN SPRINGS	IH 20	CITY LIMITS	0.45	5	S	100%	\$2,307,212
E		15R	PLEASANT RIDGE	KELLY ELLIOTT	PARK SPRINGS BLVD	0.67	4	D	100%	\$4,662,507
E		15N	PLEASANT RIDGE	IH 20	ENCHANTED BAY	0.42	4	D	100%	\$5,180,000
E		15N	PLEASANT RIDGE	ENCHANTED BAY	PLUMWOOD	0.82	4	D	100%	\$8,340,000
E		97N	BARDIN RD	KELLY ELLIOTT	PARK SPRINGS BLVD	0.53	4	D	100%	\$9,681,436
E	F	2002N	PARK SPRINGS	PLEASANT RIDGE	IH-20	0.28	4	D	50%	\$1,008,556
E	H	2002N	SUBLETT RD	US 287	JOPLIN (West City Limits)	0.19	4	D	50%	\$3,190,000
Sub-total SA E						3.36				\$34,369,711

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Table 3-9
2016 Arlington Roadway Impact Fee Study Update
Roadway Capital Improvements Plan

2015 Serv Area	Shared Svc Area	CIP Origin	Roadway	From	To	Length (mi)	No. of Lanes	Type	Pct. in Serv. Area	Total Project Cost
F	G	2002N	MATLOCK RD	ARKANSAS LN	MAYFIELD	1.05	2	D	50%	\$2,232,070
F	G	2002N	MATLOCK RD	MAYFIELD	ARBROOK	0.38	2	D	50%	\$369,818
F		15R	PLEASANT RIDGE	PARK SPRINGS	BOWEN RD	1.04	4	D	100%	\$6,599,221
F	G	15N	COLLINS ST	ARBROOK BLVD	IH 20	0.36	2	D	50%	\$620,000
F	G	15N	COLLINS ST	IH 20	GREEN OAKS BLVD	1.67	2	D	50%	\$3,335,000
F		15N	CENTER	BARDIN RD	EMBERCREST	0.34	4	D	100%	\$8,110,000
F		15N	CENTER	EMBERCREST	CRAVEN PARK	0.63	4	U	100%	\$8,870,000
F		15N	MATLOCK RD	BARDIN RD	GREEN OAKS BLVD	0.74	2	D	100%	\$14,720,000
F		15R	COOPER ST	MAYFIELD		0.10	1	D	100%	\$416,312
F	H	15R	GREEN OAKS BLVD	COOPER ST		0.10	1	D	50%	\$693,705
F		97N	BARDIN RD	PARK SPRINGS BLVD	WILLOW RIDGE	0.30	4	D	100%	\$4,126,330
F		93R	BARDIN RD	MANSFIELD	BOWEN	0.61	4	D	100%	\$1,327,019
F		2002N	BARDIN RD	BOWEN	RUSH CREEK	0.34	4	D	100%	\$10,694,239
F	H	93N	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4	D	50%	\$2,938,958
F	E	2002N	PARK SPRINGS	PLEASANT RIDGE	IH-20	0.28	4	D	50%	\$1,008,556
F	G	93R	ARBROOK RD	MATLOCK RD	COLLINS	1.14	4	D	50%	\$540,618
F		93R	BARDIN RD	GREEN HOLLOW DR	E. OF MATLOCK	1.14	4	D	100%	\$391,417
F	I	97N	CRAVENS PARK	MATLOCK RD	SILO RD	0.75	4	U	50%	\$1,738,244
Sub-total SA F						11.72				\$68,731,507
G	F	93R	ARBROOK BLVD	MATLOCK RD	COLLINS ST	1.14	4	D	50%	\$540,618
G		2002N	ARBROOK BLVD	COLLINS	NEW YORK	0.83	4	D	100%	\$2,151,976
G		97N	ARBROOK BLVD	NEW YORK	SH 360	1.09	4	D	100%	\$2,553,413
G		15N	COLLINS ST	MAYFIELD RD	ARBROOK BLVD	0.54	2	D	100%	\$1,900,000
G	F	15N	COLLINS ST	ARBROOK BLVD	IH 20	0.36	2	D	50%	\$620,000
G	F	15N	COLLINS ST	IH 20	GREEN OAKS BLVD	1.67	2	D	50%	\$3,335,000
G	I	15N	COLLINS ST	GREEN OAKS BLVD	SUBLETT RD	0.52	2	D	50%	\$1,083,200
G	F	2002N	MATLOCK RD	ARKANSAS LN	MAYFIELD	1.05	2	D	50%	\$2,232,070
G	F	2002N	MATLOCK RD	MAYFIELD	ARBROOK	0.38	2	D	50%	\$369,818
G		93R	NEW YORK AVE	MAYFIELD	ARBROOK	0.47	4	D	100%	\$1,083,894
G		93R	NEW YORK AVE	ARBROOK BLVD	IH 20	0.10	4	D	100%	\$119,842
G		97N	BARDIN RD	NEW YORK AVE	SH 360	1.02	4	D	100%	\$2,246,725
Sub-total SA G						9.17				\$18,236,556
H	F	15R	GREEN OAKS BLVD	COOPER ST		0.10	1	D	50%	\$693,705
H		15N	MATLOCK RD	GREEN OAKS BLVD	TURNER WARNELL	3.13	2	D	100%	\$15,212,650
H		15N	TURNER WARNELL	RUSSELL CURRY	US 287	0.52	4	D	100%	\$5,977,000
H	E	2002N	SUBLETT RD	US 287	JOPLIN (W. City Limits)	0.19	4	D	50%	\$3,190,000
H	F	93N	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4	D	50%	\$2,938,958
H		2002N	TURNER WARNELL	COOPER ST	MATLOCK RD	1.54	4	D	100%	\$14,235,570
Sub-total SA H						6.23				\$42,247,883

ROADWAY IMPACT FEE ANALYSIS

Table 3-9
2016 Arlington Roadway Impact Fee Study Update
Roadway Capital Improvements Plan

2015 Serv Area	Shared Svc Area	CIP Origin	Roadway	From	To	Length (mi)	No. of Lanes	Type	Pct. in Serv. Area	Total Project Cost
I		2002N	COLLINS	SOUTHEAST PKWY	MANSFIELD WEBB	0.90	2	D	100%	\$5,529,228
I		2002N	COLLINS	SOUTHEAST PKWY	MANSFIELD WEBB	0.90	2	D	100%	\$6,028,400
I		97N	COLLINS	MANSFIELD-WEBB	WEBB FERRELL	0.47	2	D	100%	\$3,126,996
I		97N	COLLINS	MANSFIELD-WEBB	WEBB FERRELL	0.47	2	D	100%	\$5,999,050
I		97N	COLLINS	WEBB FERRELL	RAGLAND	1.65	2	D	100%	\$2,523,305
I		97N	COLLINS	WEBB FERRELL	RAGLAND	1.65	2	D	100%	\$11,163,950
I		97N	COLLINS	RAGLAND	SH 360	1.14	4	D	100%	\$8,141,806
I	G	15N	COLLINS	GREEN OAKS BLVD	SUBLETT RD	0.52	2	D	50%	\$1,083,200
I		15N	COLLINS	SUBLETT RD	SOUTHEAST PKWY	0.26	2	D	100%	\$1,163,200
I		15N	MANSFIELD WEBB	SILO	COLLINS	0.76	4	U	100%	\$5,700,000
I		15N	MANSFIELD WEBB	COLLINS	NEW YORK	0.80	4	U	100%	\$6,510,000
I		15N	DEBBIE LN	W CITY LIMITS	E CITY LIMITS	1.52	4	D	100%	\$10,490,600
I	F	97N	CRAVENS PARK	MATLOCK RD	SILO RD	0.75	4	U	50%	\$1,738,244
I		97N	SILO RD	NATHAN LOWE	LYNN CREEK	0.96	4	U	100%	\$4,039,595
I		97N	SILO RD	LYNN CREEK	HARRIS	0.91	4	U	100%	\$3,306,502
I		97N	SILO RD	HARRIS	MANSFIELD WEBB	0.23	4	U	100%	\$725,818
I		97N	SOUTHEAST PKWY	SUBLETT	COLLINS	0.76	4	U	100%	\$3,028,246
I		97N	SOUTHEAST PKWY	COLLINS	NEW YORK	0.76	4	U	100%	\$2,909,493
I		97N	NEW YORK AVE	WEBB-LYNN RD	SH 360	0.45	4	U	100%	\$7,087,611
Sub-total SA I						15.87				\$90,295,244
J		NO PROJECTS IN SERVICE AREA J				0.00	0	D	100%	\$0
Sub-total SA J						0.00				\$0
Totals:						62.29				313,958,827
Totals:										
Engineering Cost										\$33,720,258
Right-of-Way Cost										\$53,627,168
Construction Cost										\$219,876,801
Signal Cost										\$6,734,600
Finance Cost										\$0
TOTAL NET COST										\$313,958,827
Future Impact Fee Update Cost **										\$200,000
TOTAL IMPLEMENTATION COST										\$314,158,827

Notes:

- ** Cost for (2) 5 year updates
- D- Divided Roadway
- U- Undivided Roadway
- S- Special Roadway (with two way left turn lane)
- OW- One Way Roadway
- R - Recoupment project
- N - New Project

ROADWAY IMPACT FEE ANALYSIS

Projected Vehicle-Miles Capacity Available for New Growth

The vehicle-miles of new capacity supply were calculated similar to the vehicle-miles of existing capacity supplied. The equation used was:

$$\text{Vehicle-Miles of New Capacity} = \text{Link capacity per peak hour per lane} \times \text{No. of Lanes} \times \text{Length of segment (miles)}$$

Vehicle-miles of new supply provided by the CIP are listed in **Table 3-10**. While the project has not been built, there are existing system deficiencies (by service area shown in Appendix B) that have been removed from the total supply to properly account for new “net” availability. **Table 3-10** depicts net availability of supply by the CIP. **Appendix D** details capacity calculations provided by the CIP program.

Table 3-10: Vehicle-Miles of New Capacity Supplied

SERVICE AREA	VEH-MILES OF NEW CAPACITY SUPPLIED	VEH-MILES OF EXISTING UTILIZATION	EXISTING VEH-MILES OF DEFICIENCIES	VEH-MILES OF NET CAPACITY SUPPLIED
A	9,279	4,867	0	4,412
B	9,750	4,806	1,022	3,922
C	14,891	2,509	560	11,822
D	0	0	1,204	-1,204
E	7,518	1,513	1,355	4,649
F	16,597	4,186	5,702	6,709
G	13,897	3,831	2,226	7,840
H	10,041	2,358	2,009	5,673
I	27,464	7,718	1,604	18,142
J	0	0	0	0
Total	109,437	31,789	15,682	61,967

Cost of Roadway Improvements

The total cost, including study update costs, and cost of net capacity supplied to implement the roadway improvements plan projects by service area are shown in **Table 3-11**. If traffic exists on proposed CIP project roadways or there are any deficiencies present in each respective service area, the total system cost is adjusted to reflect the net capacity being made available by the impact fee program. In other words, only the unused portion of the CIP and its associated costs are considered eligible. A detailed listing by project segment in each service area can be found in **Appendix E**. **Appendix F** details system costs by service area.

ROADWAY IMPACT FEE ANALYSIS

Table 3-11: Cost of Net Capacity Supplied by IFCIP

SERVICE AREA	ACTUAL TOTAL COST OF PROPOSED IFCIP PROJECTS	COST OF NET CAPACITY SUPPLIED
A	\$8,296,252	\$3,944,620
B	\$19,648,320	\$7,904,454
C	\$32,195,345	\$25,560,574
D	\$0	\$0
E	\$34,383,450	\$21,265,320
F	\$68,761,839	\$27,795,101
G	\$18,261,953	\$10,302,080
H	\$42,266,233	\$23,881,871
I	\$90,345,436	\$59,679,590
J	\$0	\$0
Total	\$314,158,827	\$177,886,320

CALCULATION OF IMPACT FEES

This section discusses the cost attributable to new development followed by the calculation of the cost per service unit and the calculation of roadway impact fees. The roadway impact fee will vary by the particular land use, service area, and size of the development. Examples are included to better illustrate the method by which the roadway impact fees are calculated.

Cost Attributable to New Development

The cost attributable to new development within this cost of net capacity is calculated by comparing the projected vehicle-miles of demand to the net capacity supplied by the IFCIP. If the demand is higher than the net IFCIP capacity provided, then the full cost of the net capacity is considered to be attributable to new development. If there is more net capacity than required to meet the project demand, then the cost attributable to new development is the proportional amount of the cost of net capacity based on the ratio of projected demand to net capacity supplied by the IFCIP.

For this update, all of Arlington's roadway service areas are projected to have a demand by new development that consumes the full net capacity supplied by the IFCIP, except in service areas E and I. This is shown in **Table 3-12**.

ROADWAY IMPACT FEE ANALYSIS

Table 3-12: Summary of Roadway Improvements Plan Cost Analysis

SERVICE AREA	COST OF NET CAPACITY SUPPLIED	NET CAPACITY SUPPLIED BY CIP (VEH-MI)	PROJECTED 10-YR DEMAND (VEH-MI)	PCT. OF CIP ATTRIBUTABLE TO NEW DEV. (10-YR)	COST ATTRIBUTABLE TO NEW DEV.
A	\$3,944,620	4,412	7,777	100.0	\$3,944,620
B	\$7,904,454	3,922	11,066	100.0	\$7,904,454
C	\$25,560,574	11,822	20,508	100.0	\$25,560,574
D	\$0	(1,204)	2,895	100.0	\$0
E	\$21,265,320	4,649	2,576	55.4	\$11,781,115
F	\$27,795,101	6,709	7,619	100.0	\$27,795,101
G	\$10,302,080	7,840	8,733	100.0	\$10,302,080
H	\$23,881,871	5,673	6,205	100.0	\$23,881,871
I	\$59,679,590	18,142	3,452	19.0	\$11,356,439
J	\$0	0	4,243	100.0	\$0
Total	\$177,886,320	61,967	75,074	100.0	\$122,526,255

Cost per Service Unit

The cost per service unit is calculated by dividing the cost of the CIP necessitated and attributable to new demand (net cost) by the projected service units of growth over the 10-year planning period.

Generally, the cost per service unit varies by service area because of: the net capacity being provided by the proposed projects, variations in cost of CIP, and the number of service units necessitated by new growth in each impact fee service area. This variation can be seen in the previous calculation of the cost attributable to new development in **Table 3-12**. Where net capacity supplied is greater than demand, the cost per service unit is simply the cost of the net capacity divided by the number of service units provided. In this case, only the portion of the CIP necessitated by new development is used in the calculation. If net capacity supplied is *less* than projected new demand, then the cost per service unit is calculated by dividing the total cost of net supply by the portion of new demand attributable and necessary by development. The result is generally a decrease in the cost per service unit, because such cost is spread over the larger number of service units of growth.

Table 3-13 lists the calculation and results of the cost per service unit calculation by service area. The actual cost per service unit reflects the true burden to the City for the implementation of the roadway capital improvements program. As per state law, a credit for the portion of ad-valorem tax

ROADWAY IMPACT FEE ANALYSIS

revenues generated by improvements over the program period, or a credit equal to 50% of the total projected cost of implementing the capital improvements plan, must be given. Based on this analysis, the maximum collection rate reflects the maximum amount per service unit that can be charged to be in compliance with the state statute. **Appendix F** details the maximum fee per service unit calculation for each service area.

Table 3-13: Cost per Service Unit Summary

	A	B	A/B	A/B * 50%
SERVICE AREA	COST ATTRIBUTABLE TO NEW DEVELOPMENT	PROJECTED 10-YEAR DEMAND (VEH-MI)	ACTUAL COST PER SERVICE UNIT	MAXIMUM ALLOWABLE (50%) COST PER SERVICE UNIT
A	\$3,944,620	7,777	\$506.00	\$253.00
B	\$7,904,454	11,066	\$714.00	\$357.00
C	\$25,560,574	20,508	\$1,246.00	\$623.00
D	\$0	2,895	\$0.00	\$0.00
E	\$11,781,115	2,576	\$4,572.00	\$2,286.00
F	\$27,795,101	7,619	\$3,648.00	\$1,824.00
G	\$10,302,080	8,733	\$1,178.00	\$589.00
H	\$23,881,871	6,205	\$3,848.00	\$1,924.00
I	\$11,356,439	3,452	\$3,288.00	\$1,644.00
J	\$0	4,243	\$0.00	\$0.00
Total	\$122,526,255	75,074		

ROADWAY IMPACT FEE ANALYSIS

Calculation of Roadway Impact Fees

The calculation of roadway impact fees for new development involves a two-step process. *Step One* is the calculation of the total number of service units that will be generated by the development. *Step Two* is the calculation of the impact fee due by the new development.

Step 1: Determine number of service units (vehicle-miles) generated by the development using the equivalency table.

$$\begin{array}{rcccl} \text{No. of Development} & \times & \text{Vehicle-miles} & = & \text{Development's} \\ \text{Units} & & \text{per development unit} & & \text{Vehicle-miles} \end{array}$$

Step 2: Calculate the impact fee based on the fee per service unit for the service area where the development is located.

$$\begin{array}{rcccl} \text{Development's} & \times & \text{Fee per} & = & \text{Impact Fee due} \\ \text{Vehicle-miles} & & \text{vehicle-mile} & & \text{from Development} \end{array}$$

Examples: *The following fees would be assessed to new developments in Arlington if the cost per service unit were \$250.00*

Single-Family Dwelling

$$1 \text{ dwelling unit} \times 2.06 \text{ vehicle-miles/dwelling unit} = 2.06 \text{ vehicle-miles}$$

$$2.06 \text{ vehicle-miles} \times \$250.00/\text{vehicle-mile} = \$515.00$$

20,000 square foot (s.f.) Office Building

$$20 \text{ (1,000 s.f. units)} \times 4.81 \text{ vehicle-miles/1,000 s.f. units} = 96.20 \text{ vehicle-miles}$$

$$96.20 \text{ vehicle-miles} \times \$250.00/\text{vehicle-mile} = \$24,050.00$$

100,000 s.f. Retail Center

$$100 \text{ (1,000 s.f. units)} \times 5.04 \text{ vehicle-miles/1,000 s.f. units} = 504.00 \text{ vehicle-miles}$$

$$504.00 \text{ vehicle-miles} \times \$250.00/\text{vehicle-mile} = \$126,000.00$$

Chapter 4 Water and Wastewater Impact Fee Analysis

Water and Wastewater Impact Fee CIP's were developed for the City of Arlington based on the growth patterns shown in the land use assumptions. The existing eligible and recommended improvements will provide the required capacity and reliability to meet projected water demands and wastewater flows through 2025. The water and wastewater projects required to meet growth in the 10-year period were used in the impact fee analysis and calculation.

CAPITAL IMPROVEMENT PLAN

An impact fee CIP was developed for the City of Arlington to ensure high quality water and wastewater service that promotes residential and commercial development. The recommended improvements will provide the required capacity and reliability to meet projected water demands and wastewater flows through year 2025.

Existing Water and Wastewater Systems

The existing water distribution system currently consists of a network of water lines ranging in size from 1-inch to 48-inches in diameter, two water treatment plants, eight pump stations and 11 elevated storage tanks. The City of Arlington operates the water distribution system on four pressure planes (Lower, Ridge Pointe, Upper, and West).

The existing wastewater collection system conveys flow to the Trinity River Authority (TRA) system and has 35 sub basins, four lift stations and a network of wastewater lines ranging from 2-inches to 78-inches in diameter. The wastewater collection system generally flows toward TRA metering stations located around the City limits. Flow is conveyed out of the system through 18 TRA metering stations.

Water and Wastewater Load Projections

The population and land use data was used to develop future water demands and wastewater flows based on a projected average day per capita use and peaking factors. The design criteria used to project water demands and wastewater flows were developed based on recent historical data. City staff provided recent historical water and wastewater usage data for calculating 10-year demand and flow projections. **Table 4-1** presents the projected water demands, and **Table 4-2** presents the projected wastewater flows for the City of Arlington.

WATER AND WASTEWATER IMPACT FEE ANALYSIS

Table 4-1: Projected Water Demands

YEAR	POPULATION	AVERAGE DAY DEMAND (MGD)	MAXIMUM DAY DEMAND (MGD)	PEAK HOUR DEMAND (MGD)
2015	371,880	65.08	117.14	187.43
2025	388,958	68.07	122.52	196.03

Table 4-2: Projected Wastewater Flows

YEAR	POPULATION	AVERAGE ANNUAL DAILY FLOW (MGD)	PEAK WET WEATHER FLOW (MGD)
2015	371,880	36.74	98.80
2025	388,958	37.73	104.71

Water and Wastewater Model Update

The City’s existing water model was updated by FNI staff to reflect the updated demands for the impact fee period as well as include the recommended CIP projects for the impact fee time period. City staff maintains a current version of the wastewater collection system model and performed the wastewater modeling associated with this study.

Water and Wastewater System Improvements

Proposed water and wastewater system projects were developed for the CIP presented in the 2007 Wastewater Master Plan and the 2012 Water Master Plan. A summary of the costs for each of the eligible projects required for the 10-year growth period used in the impact fee analysis for both the water and wastewater systems are shown in **Tables 4-3** and **4-4**, respectively.

The 2015 percent utilization is the portion of a project’s capacity required to serve existing development. It is not included in the impact fee analysis. The 2025 percent utilization is the portion of the project’s capacity that will be required to serve the City of Arlington in 2025. The 2015-2025 percent utilization is the portion of the project’s capacity required to serve development projected to occur from 2015 to 2025. The portion of a project’s total cost that is used to serve development projected to occur from 2015 through 2025 is calculated as the total actual cost multiplied by the 2015-2025 percent utilization. Only this portion of the cost is used in the impact fee analysis.

WATER AND WASTEWATER IMPACT FEE ANALYSIS

The proposed 10-year water system impact fee eligible projects are shown on **Figure 4-1**. Projects W1 through W20 have been constructed or completed, and projects W21 through W27 are proposed water system projects to be constructed over the next 10 years. The proposed 10-year wastewater system impact fee eligible projects are shown on **Figure 4-2**. Projects S1 through S20 have been constructed or completed, and projects S21 through S23 are proposed wastewater system projects to be constructed over the next 10 years.

WATER AND WASTEWATER IMPACT FEE ANALYSIS

Table 4-3
Cost Allocation for Water Impact Fee Calculation, Proposed Water Distribution System Improvements, 2015-2025

Proj. No.	Description of Project	Percent Utilization			Capital Cost	Costs Based on 2015 Dollars		
		2015*	2025	2015-2025		Current Development (2015-2025)	Beyond 2025	
		EXISTING						
W1	Elm - Mesquite - Truman	35%	50%	15%	\$1,573,430	\$550,701	\$236,015	\$786,715
W2	Cowboys (Collins to Pennant)	30%	60%	30%	\$2,051,154	\$615,346	\$615,346	\$820,461
W3	Arkansas 2.0 MG Elevated Storage Tank	80%	95%	15%	\$3,957,332	\$3,165,865	\$593,600	\$197,867
W4	Grants - Lexington	80%	90%	10%	\$722,261	\$577,808	\$72,226	\$72,226
W5	Collins (Arkansas to Mayfield)	45%	55%	10%	\$1,755,126	\$789,807	\$175,513	\$789,807
W6	Bardin - Center- Arbrook - Collins	35%	50%	15%	\$3,664,034	\$1,282,412	\$549,605	\$1,832,017
W7	High Country (Lindbrook to Sierras)	35%	45%	10%	\$91,946	\$32,181	\$9,195	\$50,570
W8	Nathan Lowe - Gravens Park	35%	55%	20%	\$4,335,510	\$1,517,429	\$867,102	\$1,950,980
W9	Summit at Sublett Developer Participation	10%	20%	10%	\$51,157	\$5,116	\$5,116	\$40,925
W10	Collins (Southeast to Loretta Day)	40%	50%	10%	\$673,421	\$269,368	\$67,342	\$336,710
W11	Golf Club - Eden	50%	75%	25%	\$1,220,412	\$610,206	\$305,103	\$305,103
W12	John F. Kubala Water Treatment Plant Expansion 2	30%	45%	15%	\$37,596,410	\$11,278,923	\$5,639,461	\$20,678,025
W13	Harris (Cooper to Matlock)	70%	80%	10%	\$796,860	\$557,802	\$79,686	\$159,372
W14	Tierra Verde 1.0 MG Elevated Storage Tank	45%	70%	25%	\$3,583,800	\$1,612,710	\$895,950	\$1,075,140
W15	Deer Creek 3A Developer Participation	10%	20%	10%	\$69,412	\$6,941	\$6,941	\$55,529
W16	Willowstone Developer Participation	15%	20%	5%	\$91,908	\$13,786	\$4,595	\$73,526
W17	Harris Crossing Developer Participation	10%	15%	5%	\$47,070	\$4,707	\$2,354	\$40,010
W18	SH360 (Southwind to Debbie)	5%	10%	5%	\$410,097	\$20,505	\$20,505	\$369,087
W19	2014 Water Master Plan Study	20%	100%	80%	\$685,056	\$137,011	\$548,045	\$0
W20	2015 Impact Fee Study (Water Portion)	10%	100%	90%	\$71,129	\$7,113	\$64,016	\$0
		PROPOSED						
W21	Highway 287 16-inch Water Main Improvements	25%	55%	30%	\$1,130,800	\$282,700	\$339,240	\$508,860
W22	Harris Road 42-inch Water Main Improvements	0%	40%	40%	\$6,294,000	\$0	\$2,517,600	\$3,776,400
W23	New York Avenue Water Main Improvements	65%	85%	20%	\$3,702,800	\$2,406,820	\$740,560	\$555,420
W24	East Abram Street 20-inch Water Main Improvements	70%	80%	10%	\$2,958,500	\$2,070,950	\$295,850	\$591,700
W25	Ballpark Way and Brookhollow Plaza Drive Water Main Improvements	70%	85%	15%	\$3,741,000	\$2,618,700	\$561,150	\$561,150
W26	New York Avenue 1.5 MG Elevated Storage Tank	65%	80%	15%	\$4,300,800	\$2,795,520	\$645,120	\$860,160
W27	Pierce-Burch WTP Dual Pressure Plane Pump Station	0%	25%	25%	\$11,097,408	\$0	\$2,774,352	\$8,323,056
Total Water Capital Improvements Cost					\$96,672,832	\$33,230,427	\$18,631,587	\$44,810,818

* Utilization in 2015 on Proposed Projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

WATER AND WASTEWATER IMPACT FEE ANALYSIS

Table 4-4
Cost Allocation for Wastewater Impact Fee Calculation, Proposed Wastewater Distribution System Improvements, 2015-2025

Proj. No.	Description of Project	Percent Utilization		Capital Cost	Costs Based on 2015 Dollars		
		2015*	2015-2025		Current Development	10-Year (2015-2025)	Beyond 2025
EXISTING							
S1	Green Oaks - Lake Country - Stonebrook	35%	25%	\$2,242,920	\$785,022	\$560,730	\$897,168
S2	Randol Mill Park (Park Hill to I30)	35%	25%	\$669,247	\$234,236	\$167,312	\$267,699
S3	Copeland (I30 to SH360)	15%	35%	\$784,481	\$117,672	\$274,568	\$392,241
S4	Randol Mill (Collins to Cedarland Plaza)	5%	25%	\$686,823	\$34,341	\$171,706	\$480,776
S5	Johnson Creek (Collins to AT&T)	10%	25%	\$499,404	\$49,940	\$124,851	\$324,613
S6	Sanford (Oak to Collins)	10%	30%	\$1,249,948	\$124,995	\$374,984	\$749,969
S7	Woodland West (Division to Bowen)	5%	25%	\$1,919,337	\$95,967	\$479,834	\$1,343,536
S8	Johnson Creek (Valley View to Meadow Oaks)	20%	25%	\$1,086,981	\$214,954	\$274,188	\$597,839
S9	Greenway (Sherry to Watson)	25%	25%	\$795,280	\$199,951	\$197,689	\$397,640
S10	Johnson Creek (From Inwood)	20%	30%	\$216,709	\$43,342	\$65,013	\$108,355
S11	Southridge (Tucker to Inwood)	20%	30%	\$218,657	\$43,731	\$65,597	\$109,329
S12	Johnson Creek (Matlock to Pioneer)	25%	20%	\$2,300,910	\$575,228	\$460,182	\$1,265,501
S13	Arbrook - Swafford - Johnson Creek	25%	20%	\$1,187,323	\$296,831	\$237,465	\$653,028
S14	Rush Creek (Woodsid to Bridlegate)	5%	45%	\$659,960	\$32,998	\$296,982	\$329,980
S15	Willow Bend (Bardin to I20)	20%	25%	\$1,335,133	\$261,290	\$339,520	\$734,323
S16	Fish Creek (Yaupon to Engleside)	15%	25%	\$1,049,794	\$153,922	\$265,995	\$629,877
S17	Twin Hills Developer Participation	5%	30%	\$31,539	\$1,577	\$9,462	\$20,500
S18	SH360 (Southwind to Debbie)	5%	10%	\$487,521	\$24,376	\$48,752	\$414,393
S19	2009 Wastewater Master Plan Study	90%	100%	\$1,065,250	\$958,725	\$106,525	\$0
S20	2015 Impact Fee Study (Wastewater Portion)	10%	90%	\$71,129	\$7,113	\$64,016	\$0
PROPOSED							
S21	Randol Mill Road 18-inch Sanitary Sewer Improvements	75%	20%	\$1,003,170	\$755,223	\$197,789	\$50,159
S22	Green Oaks Boulevard 24-inch Sanitary Sewer Improvements	15%	10%	\$1,970,850	\$295,628	\$197,085	\$1,478,138
S23	Parliament Drive 18-inch Sanitary Sewer Improvements	20%	10%	\$1,624,630	\$324,926	\$162,463	\$1,137,241
Total Wastewater Capital Improvements Cost				\$23,156,997	\$5,631,987	\$5,142,708	\$12,382,301

* Utilization in 2015 on Proposed Projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

WATER AND WASTEWATER IMPACT FEE ANALYSIS

IMPACT FEE CALCULATION

The maximum allowable impact fee calculation is the eligible cost divided by the growth in service units. The Water and Wastewater Improvements section provided the cost of the eligible projects. The following Service Units section will provide the growth in service units over the impact fee period. From these two values, the maximum allowable fee is calculated for the water and wastewater systems.

Service Units

The maximum impact fee may not exceed the amount determined by dividing the cost of capital improvements required by the total number of service units attributed to new development during the impact fee eligibility period. A water service unit is defined as a service equivalent to a water connection for a single-family residence. The City of Arlington does not directly meter wastewater flows and bills for wastewater services based on the customer's water consumption; therefore, a wastewater service unit is defined as the wastewater service provided to a customer with a water connection for a single-family residence. **Table 4-5** shows a summary of the current water meters for the City of Arlington. These meters were used in the calculation of the existing number of service units.

Table 4-5: Existing Water Meters

METER SIZE	METER COUNT
5/8"	81,829
3/4"	1,604
1"	1,380
1-1/2"	792
2"	1,148
3"	126
4"	79
6"	82
8"	8
10"	1
TOTAL	87,049

Source: Arlington Water Utilities

WATER AND WASTEWATER IMPACT FEE ANALYSIS

The service associated with public, commercial, and industrial connections is converted into service units based upon the capacity of the meter used to provide service. The number of service units required to represent each meter size is based on the maximum rated capacity of the meters as shown from *AWWA Manual M6 Water Meters – Selection, Installation, Testing, and Maintenance, 5th Edition* Standards C700, C701, C702 and C703. The service unit equivalent for each meter size used by the City is listed in **Table 4-6**. The meter types listed here are for Class I turbine meters.

Table 4-6: Service Unit Equivalency Table

METER SIZE	MAXIMUM FLOW RATE (GPM)	RATIO TO 5/8" METER
5/8"	20	1.00
3/4"	30	1.50
1"	50	2.50
1-1/2"	100	5.00
2"	160	8.00
3"	350	17.50
4"	600	30.00
6"	1,250	62.50
8"	1,800	90.00
10"	2,900	145.00

Typically, in Arlington, single-family residences are served with 5/8" water meters. Larger meters represent public, commercial and industrial water use. The City provided data that included the meter size of each active water meter as of March 2016. The growth in meters was projected using the 10-year growth in population and employment. The growth in SUEs was determined by subtracting the 2025 SUEs from the existing SUEs and results in a growth of 6,162 SUEs over the 10-year period. **Table 4-7** shows the water and wastewater service units for 2015 and the projected service units for 2025.

WATER AND WASTEWATER IMPACT FEE ANALYSIS

Table 4-7: Projected Service Units

METER SIZE	EXISTING METERS	EXISTING SUES	2025 METERS	2025 SUES	10-YEAR GROWTH IN SUES
5/8"	81,829	81,829	85,612	85,612	3,783
3/4"	1,604	2,406	1,725	2,588	182
1"	1,380	3,450	1,483	3,708	258
1 1/2"	792	3,960	857	4,285	325
2"	1,148	9,184	1,247	9,976	792
3"	126	2,205	138	2,415	210
4"	79	2,370	86	2,580	210
6"	82	5,125	87	5,438	313
8"	8	720	9	810	90
10"	1	145	1	145	0
Total	87,049	111,394	91,245	117,556	6,162

Maximum Impact Fee Calculation

Chapter 395 of the Texas Local Government Code states that the maximum impact fee may not exceed the amount determined by dividing the cost of capital improvements required by the total number of service units attributed to new development during the impact fee eligibility period less a credit to account for water and wastewater revenues and property taxes used to finance capital improvement plans. The total projected costs include the projected capital improvement costs to serve 10-year development and the consultant cost for preparing and updating the Capital Improvements Plan.

The total eligible cost associated with the existing and proposed water system improvements with financing costs to meet projected growth over the next ten years is \$18,631,587. No debt service was included in these project costs. The increase in the number of service units due to growth over the next ten years is projected as 6,162 service units. The state mandated 50% credit lowers the maximum water impact fee from \$3,024 per service unit to \$1,512 per service unit.

Total Eligible Capital Improvement Costs	= \$18,631,587
Growth in Service Units	= 6,162

WATER AND WASTEWATER IMPACT FEE ANALYSIS

$$\begin{aligned} \text{Maximum Water Impact Fee} &= \text{Total Eligible Costs} / \text{Growth in Service Units} \\ &= \$18,631,587 / 6,162 \\ &= \$3,024.00 \text{ per Service Unit} \end{aligned}$$

$$\begin{aligned} \text{Maximum Allowable Water Impact Fee} &= \text{Maximum Impact Fee} - \text{Credit (50\%)} \\ &= \$3,024.00 - \$1,512.00 \\ &= \mathbf{\$1,512.00 \text{ per Service Unit}} \end{aligned}$$

The total eligible cost associated with the existing and proposed wastewater system improvements to meet projected growth over the next ten years is \$5,142,708. No debt service was included in these project costs. The increase in the number of service units due to growth over the next ten years is projected as 6,162 service units. The state mandated 50% credit lowers the maximum wastewater impact fee from \$835.00 per service unit to \$417.50 per service unit.

$$\begin{aligned} \text{Total Eligible Capital Improvement Costs} &= \$5,142,708 \\ \text{Growth in Service Units} &= 6,162 \end{aligned}$$

$$\begin{aligned} \text{Maximum Wastewater Impact Fee} &= \text{Total Eligible Costs} / \text{Growth in Service Units} \\ &= \$5,142,708 / 6,162 \\ &= \$835.00 \text{ per Service Unit} \end{aligned}$$

$$\begin{aligned} \text{Maximum Allowable Wastewater Impact Fee} &= \text{Maximum Impact Fee} - \text{Credit (50\%)} \\ &= \$835.00 - \$417.50 \\ &= \mathbf{\$417.50 \text{ per Service Unit}} \end{aligned}$$

Chapter 5 Conclusion

Chapter 395 of the Texas Local Government Code authorizes the assessment and collection of impact fees in Texas for transportation, water, and wastewater related capital improvements. This study was conducted to fulfill the requirements of Chapter 395 in updating transportation, water, and wastewater impact fees for the City of Arlington.

ROADWAY IMPACT FEE

The previous 27 3-mile roadway service areas were consolidated to 10 6-mile service areas. During the initial implementation of impact fees in Arlington, the law required maximum 3-mile service areas, but this was revised to 6-miles. This service area structure was configured so that no point is greater than the six-mile maximum set forth by law. The six-mile limit ensures that roadway improvements are in close proximity to the development paying the fees that it serves.

Vehicle-miles of travel in the PM peak hour was retained as the service unit for calculating and assessing impact fees. Vehicle-miles establish a relationship between the intensity of land development and the demand on the roadway system through the use of published trip generation data and average trip length. The PM peak hour is used as the time period for assessment because typically the greatest demand for roadway capacity occurs during this hour. Additionally, roadways are sized to meet this demand and roadway capacity can more accurately be defined on an hourly basis.

The service units (vehicle-miles) for new development are a function of trip generation and the average trip length for specific land uses. Trip generation information was based on data published by the Institute of Transportation Engineers. Where appropriate, trip generation rates were adjusted to reflect the primary trip purpose. This ensures that new development is assigned for the portion of trips associated with that specific development. Average trip length data was based on information compiled by NCTCOG with modifications made to localize it to the City of Arlington.

The result of combining trip generation and trip length information is an equivalency table that establishes a service unit rate for various land uses. Rates were established for land uses within the categories of residential, office, commercial/retail, industrial and institutional uses.

An analysis of existing conditions revealed that the current roadway system provides 618,742 vehicle-miles of capacity. The existing demand placed on the system was determined to be 357,320 vehicle-miles. Evaluation of the existing roadway system found 15,682 vehicle-miles of

CONCLUSION

deficiencies on the existing roadway network which were netted out of the new capacity supplied by the capital improvements program.

Projected growth, in terms of vehicle-miles over the 10-year planning period, was based on population and employment data that was prepared in the Arlington Land Use Assumptions for Impact Fees Report. Based on this growth, the projected vehicle-miles of demand was calculated to be 75,074.

Arlington City Staff identified the roadway impact fee capital improvements program for the 10-year planning period. Projects eligible for this CIP include arterial and collector streets that have been designated on the officially adopted Thoroughfare Development Plan of the City. Developer funded roadways are not eligible for inclusion in calculating impact fees. Projects totaling \$314.2 million were identified for impact fee consideration based on need, projected growth, project affordability and achievability, financial considerations, jurisdictional issues, the Thoroughfare Development Plan, and staff recommendation. The total cost attributable to new growth is \$122.5 million. The recommended CIP program will provide a total of 61,967 vehicle-miles of new net capacity.

The *actual* cost per service unit varies by service area and was calculated to be as follows:

Table 5-1: Roadway Impact Fee Summary

SERVICE AREA	ACTUAL COST PER SERVICE UNIT	MAXIMUM ALLOWABLE (50%) COST PER SERVICE UNIT
A	\$506.00	\$253.00
B	\$714.00	\$357.00
C	\$1,246.00	\$623.00
D	\$0.00	\$0.00
E	\$4,572.00	\$2,286.00
F	\$3,648.00	\$1,824.00
G	\$1,178.00	\$589.00
H	\$3,848.00	\$1,924.00
I	\$3,288.00	\$1,644.00
J	\$0.00	\$0.00

CONCLUSION

This calculation of the actual cost per service unit was based on the total cost of net capacity supplied by the CIP and the demand attributable to new development over the 10-year planning period. State legislation requires that a credit for the portion of ad-valorem tax revenues generated by improvements over the program period, or a credit equal to 50% of the total projected cost of implementing a roadway impact fee capital improvements program, be given, also shown in the table.

The determination of fees due from new development is based upon the size of development, its associated service unit generation (equivalency table) and the cost per service unit derived or adopted for each service area.

WATER AND WASTEWATER IMPACT FEE

The population and land use data developed in the Arlington Land Use Assumptions for Impact Fees Report was used to develop future water demands and wastewater flows based on a projected average day per capita use and peaking factors. The City's existing water model was updated by FNI staff to reflect the updated demands for the impact fee period, as well as include the recommended CIP projects for the impact fee time period. The City's existing wastewater model was updated by city staff to reflect updated wastewater loads for the impact fee period, as well as include the recommended CIP projects for the impact fee time period.

Proposed water and wastewater system projects were developed for the CIP presented in the 2007 Wastewater Master Plan and the 2012 Water Master Plan. Existing and 10-year percent utilizations were determined for each project using the models, resulting in a net 10-year percent utilization, or the portion of each project's capacity required to serve development projected to occur over the next ten years. The portion of each project's total cost that is used to serve development over the next ten years was calculated as the total actual cost multiplied by the net 10-year percent utilization. FNI calculated a total impact fee eligible cost of \$18,631,587 for water projects and \$5,142,708 for wastewater projects. No debt service was included in these project costs.

The maximum allowable impact fee calculation was done by taking the eligible cost divided by the growth in service units. A water service unit is defined as a service equivalent to a water connection for a single-family residence, which is a 5/8" meter. The growth in meters was projected using the 10-year growth in population and employment. The growth in SUEs was determined by subtracting the 2025 SUEs from the existing SUEs and results in a growth of 6,162 SUEs over the 10-year period.

Chapter 395 of the Texas Local Government Code states that the maximum impact fee may not exceed the amount determined by dividing the cost of the capital improvements required by the total number of service units attributed to new development during the impact fee eligibility period

CONCLUSION

less a credit to account for water and wastewater revenues and property taxes used to finance capital improvement plans. The total impact fee eligible cost for water projects divided by the growth in service units over the next ten years results in a maximum water impact fee of \$3,024. The total impact fee eligible cost for wastewater projects divided by the growth in service units over the next ten years results in a maximum wastewater impact fee of \$835.00. The state mandated 50% credit lowers the maximum water and wastewater impact fee to \$1,512 and \$417.50, respectively.

The maximum allowable water and wastewater impact fee calculations are summarized below.

Table 5-2: Water and Wastewater Impact Fee Summary

	Total Impact Fee Eligible Cost	Growth in Service Units 2015-2025	Maximum Impact Fee (Cost/Service Unit)	Maximum Allowable (50%) Cost per Service Unit
Water	\$18,631,587	6,162	\$3,024.00	\$1,512.00
Wastewater	\$5,142,708	6,162	\$835.00	\$417.50

Appendices

APPENDIX A: ROADWAY IMPACT FEE DEFINITIONS

APPENDICES

ROADWAY IMPACT FEE DEFINITIONS

Average Trip Length - the average actual travel distance between two points. The average trip length by specific land use varies.

Diverted Trip - similar to pass-by trip, but a diversion is made from the regular route to make an interim stop.

Impact Fee - a charge or assessment imposed by a city against new development to generate revenue for funding or recouping roadway improvements necessitated and attributable to new development.

Maximum Fee Per Service Unit - the highest impact fee that may be collected by the City per vehicle-mile of supply. Calculated by dividing the costs of the capital improvements by the total number of vehicle-miles of demand expected in the 10-year planning period.

Pass-by Trip - a trip made as an intermediate stop on the way from an origin to a primary trip destination. For example, a stop at a convenience store on the way to office from home.

PM Peak Hour - the hour when the highest volume of traffic typically occurs. Data collection revealed the peak hour of travel to be between 5:00 and 6:00 pm.

PM Peak Hour Traffic Counts - the number of vehicles passing a certain point during the peak hours of travel. Traffic counts are conducted during the PM peak hour because the greatest demand for roadway capacity occurs during this hour.

Primary Trip - a trip made for the specific purpose of visiting a destination; for example, from home to office.

Roadway Demand - the demand placed on the roadway network as a result of development. Determined by multiplying the trip generation of a specific land use by the average trip length.

APPENDICES

Roadway Supply (or Capacity) - the number of service units provided by a segment of roadway over a period of time. Determined by multiplying the lane capacity by the roadway length.

Service Area - the area within the city boundaries to be served by capital improvements. Criteria for developing the service area structure include: 1) restricted to six-mile limit by legislation (to ensure proximity of roadway improvements to development), 2) conforms to census or forecast model boundaries, 3) projects on CIP as boundaries, 4) effort to match roadway supply with projected demand, and 5) city limit boundaries.

Service Unit - a measure of use or generation attributable to new development for roadway improvements. Also used to measure supply provided by existing and proposed roadway improvements.

Trip - a single, one-direction vehicle movement from an origin to a destination.

Trip Generation - the total trip ends for a land use over a given period of time or the total of all trips entering and exiting a site during that designated time. Used in the development of 10-year traffic demand projections and the equivalency table. Based primarily on data prepared by the Institute of Transportation Engineers (ITE).

Vehicle - for impact fee purposes, any motorized appurtenance that carries passengers and/or goods on the roadway system during peak periods of travel.

Vehicle-mile - a unit used to express both supply and demand provided by, and placed on, the roadway system. A combination of a number of vehicles traveling during a given time period and the distance which those vehicles travel in miles.

APPENDIX B: EXISTING CAPITAL IMPROVEMENTS

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Definitions

LANES	The total number of lanes in both directions available for travel.
TYPE	The type of roadway (used in determining capacity): D = divided roadway U = undivided roadway S = special roadway (roadway with continuous left turn) OW = one way roadway
PK-HR VOLUME	The existing volume of cars on the roadway segment traveling during the afternoon (P.M.) peak hour of travel. A and B indicate the two directions of travel. Direction A is a northbound or eastbound and direction B is southbound or westbound. If only one half of the roadway is located within the service area (see % in service area), the opposing direction will have no volume in the service area.
% IN SERVICE AREA	If the roadway is located on the boundary of the service area (with the city limits running along the centerline of the roadway), then half of the roadway is inventoried in the service area and the other half is not. This value is either 50% or 100%.
VEH-MI SUPPLY TOTAL	The number of total service units (vehicle-miles) supplied within the service area, based on the length and established capacity of the roadway type.
VEH-MI TOTAL DEMAND PK-HR	The total service unit (vehicle-mile) demand created by existing traffic on the roadway segment in the afternoon peak hour.
EXCESS CAPACITY PK-HR VEH-MI	The number of service units supplied but unused by existing traffic in the afternoon peak hour.
EXISTING DEFICIENCIES PK-HR VEH-MI	The number of service units of demand in excess of the service units supplied.

NOTE: Excess capacity and existing deficiencies are calculated separately for each direction. It is possible to have excess capacity in one direction and an existing deficiency in the other. When both directions have excess capacity or deficiencies, the total for both directions are presented.

APPENDICES

Arlington 2016 Roadway Impact Fee Study Update Existing Capital Improvements Analysis

Serv Area	Shared Svc Area	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. in Serv. Area	Peak Hour Volume			VMT Supply Pk Hr Total	VMT Demand Pk Hr Total	Excess VMT Capacity	Exist. VMT Deficiency
										A	B	Total				
A		ASCENSION BLVD	BROWN BLVD	GREEN OAKS BLVD	0.29	4	U	500	100	299	217	516	580	150	430	0
A		BALLPARK WAY	BROWN BLVD	GREEN OAKS BLVD	0.23	4	D	650	100	635	744	1379	598	317	281	0
A	C	BROWN BLVD	LINCOLN DR	COLLINS ST	0.54	4	U	500	50	0	187	187	540	101	439	0
A	C	BROWN BLVD	COLLINS ST	BAIRD FARM RD	0.68	4	U	500	50	0	920	920	680	626	54	0
A	C	BROWN BLVD	BAIRD FARM RD	ASCENSION BLVD	0.15	4	U	500	50	0	920	920	150	138	12	0
A	C	BROWN BLVD	ASCENSION BLVD	BALLPARK WAY	0.53	4	U	500	50	0	920	920	530	488	42	0
A	C	BROWN BLVD	BALLPARK WAY	SH 360	0.57	4	U	500	50	0	920	920	570	524	46	0
A		BURNEY RD	GREEN OAKS BLVD	CITY LIMITS	0.61	2	U	500	100	61	401	462	610	282	328	0
A		COLLINS (FM 157)	TRINITY RIVER	GREEN OAKS BLVD	0.11	6	D	650	100	1541	1326	2867	417	307	111	0
A		COLLINS (FM 157)	TRINITY RIVER	CITY LIMIT	1.60	6	D	650	100	1541	1326	2867	6240	4587	1653	0
A		COLLINS (FM 157)	GREEN OAKS BLVD	BROWN BLVD	0.65	6	D	650	100	1541	1326	2867	2535	1864	671	0
A	B	GREEN OAKS BLVD	ROSE-BROWN-MAY	LINCOLN DR	0.54	6	D	650	50	0	1437	1437	1053	776	277	0
A	B	GREEN OAKS BLVD	LINCOLN DR	COLLINS ST	0.74	6	D	650	100	873	1473	2346	2886	1736	1150	0
A	B	GREEN OAKS BLVD	COLLINS ST	FURRS ST	0.23	6	D	650	100	714	1739	2453	897	564	333	0
A	B	GREEN OAKS BLVD	FURRS ST	ASCENSION BLVD	0.69	6	D	650	100	714	1739	2453	2691	1693	998	0
A	B	GREEN OAKS BLVD	ASCENSION BLVD	SHADOW RIDGE	0.69	6	D	650	100	714	1739	2453	2691	1693	998	0
A	B	GREEN OAKS BLVD	BURNEY RD	CITY LIMITS	0.75	6	D	650	100	876	1646	2522	2925	1892	1034	0
A	B	LINCOLN DR	GREEN OAKS BLVD	BROWN BLVD	0.70	2	U	500	50	178	0	178	350	125	225	0
Sub-Total A					10.30								26,943	17,860	9,083	0
B		ABRAM ST	FIELDER RD	DAVIS ST	0.49	5	S	625	100	386	386	772	1225	378	847	0
B		ABRAM ST	DAVIS	COOPER ST	0.52	5	S	625	100	330	330	660	1300	343	957	0
B		ABRAM ST	COOPER ST	COLLINS ST	1.00	5	S	625	100	532	531	1063	2500	1063	1437	0
B		BORDER ST	CENTER ST	COLLINS ST	0.57	4	U	500	100	240	240	480	1140	274	866	0
B		UTABLVD	DAVIS RD	CENTER ST	0.96	4	U	500	100	240	240	480	1920	461	1459	0
B	C	CENTER ST	N MESQUITE	RD TO 6-FLAGS	0.36	4	U	500	50	629	629	1258	720	453	267	0
B	C	CENTER ST	RD TO 6-FLAGS	IH 30	0.15	4	D	650	100	804	856	1660	390	249	141	0
B	C	CENTER ST	N MESQUITE	RANDOL MILL RD	0.21	3	OW	650	100	0	866	866	410	182	228	0
B	C	CENTER ST	RANDOL MILL RD	SANFORD ST	0.50	3	OW	650	100	0	866	866	975	433	542	0
B	C	CENTER ST	SANFORD	DIVISION ST	0.26	3	OW	650	100	0	866	866	507	225	282	0
B	C	CENTER ST	DIVISION ST	MAIN ST	0.13	3	OW	650	100	0	866	866	254	113	141	0
B	C	CENTER ST	MAIN ST	SOUTH ST	0.05	3	OW	650	100	0	984	984	98	49	48	0
B	C	CENTER ST	SOUTH ST	MITCHELL ST	0.46	3	OW	650	100	0	984	984	897	453	444	0
B	C	CENTER ST	MITCHELL ST	S MESQUITE	0.37	3	OW	650	100	0	984	984	722	364	357	0
B	C	CENTER ST	S MESQUITE	PARK ROW DR	0.21	6	U	500	100	481	812	1293	630	272	358	0
B	C	MESQUITE	RANDOL MILL RD	SANFORD ST	0.50	3	OW	650	100	711	0	711	975	356	620	0
B	C	MESQUITE	SANFORD	DIVISION ST	0.26	3	OW	650	100	711	0	711	507	185	322	0
B	C	MESQUITE	DIVISION ST	MAIN ST	0.13	3	OW	650	100	711	0	711	254	92	161	0
B	C	MESQUITE	MAIN ST	SOUTH ST	0.05	3	OW	650	100	432	0	432	98	22	76	0
B	C	MESQUITE	SOUTH ST	MITCHELL ST	0.46	3	OW	650	100	432	0	432	897	199	698	0
B	C	MESQUITE	MITCHELL ST	CENTER ST	0.37	3	OW	650	100	432	0	432	722	160	562	0
B	C	COLLINS ST (FM 157)	RANDOL MILL RD	ROGERS	0.27	6	S	625	50	0	1141	1141	422	308	114	0
B	C	COLLINS ST (FM 157)	ROGERS	DIVISION ST	0.49	4	D	650	50	0	1141	1141	637	559	78	0
B	C	COLLINS ST (FM 157)	DIVISION ST	ABRAM ST	0.23	5	S	625	50	0	1141	1141	288	262	25	0
B	C	COLLINS ST	ABRAM ST	MITCHELL ST	0.51	7	S	625	50	0	1101	1101	956	562	395	0
B	C	COLLINS ST	MITCHELL ST	PARK ROW DR	0.50	7	S	625	50	0	1101	1101	938	551	387	0
B	C	COOPER ST	GREEN OAKS BLVD	WASHINGTON ST	0.73	5	S	625	100	514	514	1028	1825	750	1075	0
B	C	COOPER ST	WASHINGTON ST	IH 30	0.87	5	S	625	100	514	514	1028	2175	894	1281	0
B	C	COOPER ST	RD TO 6-FLAGS	IH 30	0.15	6	D	650	100	1502	1198	2700	585	405	180	0
B	C	COOPER ST	RANDOL MILL RD	RD TO 6-FLAGS	0.51	6	D	650	100	1502	1198	2700	1989	1377	612	0
B	C	COOPER ST	RANDOL MILL RD	DIVISION ST	0.76	6	D	650	100	1502	1198	2700	2964	2052	912	0
B	C	COOPER ST	DIVISION ST	ABRAM ST	0.24	6	D	650	100	1444	1443	2887	936	693	243	0
B	C	COOPER ST (FM 157)	ABRAM ST	MITCHELL ST	0.58	6	U	500	100	1444	1443	2887	1740	1674	66	0
B	C	COOPER ST (FM 157)	MITCHELL ST	PARK ROW DR	0.42	6	D	650	100	1444	1443	2887	1638	1213	425	0
B	C	COOPER ST (FM 157)	PARK ROW DR	INWOOD DR	0.40	7	S	625	100	1885	1884	3769	1500	1508	0	8
B	F	COOPER ST (FM 157)	INWOOD RD	LOVERS LN	0.14	7	S	625	50	1885	0	1885	263	264	0	1
B	F	DAVIS DR	GREEN OAKS BLVD	ROCKY CANYON	0.69	4	D	650	100	226	306	532	1794	367	1427	0
B	F	DAVIS DR	ROCKY CANYON	LAMAR BLVD	0.37	4	D	650	100	226	306	532	962	197	765	0
B	F	DAVIS DR	LAMAR BLVD	IH 30	0.35	4	U	500	100	471	471	942	700	330	370	0
B	F	DAVIS DR	IH 30	RANDOL MILL RD	0.66	4	U	500	100	716	715	1431	1320	944	376	0
B	F	DAVIS DR	RANDOL MILL RD	SANFORD ST	0.51	2	U	500	100	716	715	1431	510	730	0	220
B	F	DAVIS DR	SANFORD	DIVISION ST	0.28	3	U	500	100	716	715	1431	420	401	19	0
B	F	DAVIS DR	DIVISION ST	MAIN ST	0.13	3	U	500	100	716	715	1431	195	186	9	0
B	F	DAVIS DR	MAIN ST	PARK ROW DR	1.10	2	U	500	100	380	560	940	1100	1034	131	66
B	F	DAVIS DR	PARK ROW DR	INWOOD DR	0.35	2	U	500	100	130	123	253	350	89	261	0
B	F	DAVIS DR	INWOOD RD	LOVERS LN	0.08	2	U	500	50	0	592	592	40	47	0	7
B	F	DIVISION (SH 180)	FIELDER RD	DAVIS DR	0.55	5	S	625	100	656	655	1311	1375	721	654	0
B	F	DIVISION (SH 180)	DAVIS	COOPER ST	0.52	5	S	625	100	699	699	1398	1300	727	573	0
B	F	DIVISION (SH 180)	COOPER ST	CENTER ST	0.44	5	S	625	100	816	816	1632	1100	718	382	0
B	F	DIVISION (SH 180)	CENTER ST	COLLINS ST	0.56	5	S	625	100	920	920	1840	1400	1030	370	0
B	F	FIELDER RD	GREEN OAKS BLVD	GOLIAD DR	0.75	4	D	650	100	388	738	1126	1950	845	1106	0
B	F	FIELDER RD	GOLIAD ST	LAMAR BLVD	0.24	4	D	650	100	388	738	1126	624	270	354	0
B	F	FIELDER RD	LAMAR BLVD	IH 30	0.31	5	S	625	100	572	571	1143	775	354	421	0
B	F	FIELDER RD	IH 30	RANDOL MILL RD	0.63	5	S	625	100	1289	1289	2578	1575	1624	0	49
B	D	FIELDER RD	RANDOL MILL RD	DIVISION ST	0.94	4	U	500	50	1548	0	1548	940	1455	0	515
B	D	FIELDER RD	DIVISION ST	PARK ROW DR	1.05	4	U	500	50	1110	0	1110	1050	1166	0	116
B	D	FIELDER RD	PARK ROW DR	LOVERS LN	0.41	4	U	500	50	1098	0	1098	410	450	0	40
B	D	GIBBINS RD	RANDOL MILL RD	RD TO 6-FLAGS	0.50	2	U	500	100	152	152	304	500	152	348	0
B	D	GREENBELT RD	GREEN OAKS BLVD	CITY LIMITS	0.21	2	U	500	100	20	20	40	210	8	202	0

APPENDICES

Arlington 2016 Roadway Impact Fee Study Update Existing Capital Improvements Analysis

Serv Area	Shared Svc Area	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. in Serv. Area	Peak Hour Volume			VMT Supply Pk Hr Total	VMT Demand Pk Hr Total	Excess VMT Capacity	Exist. VMT Deficiency
										A	B	Total				
B	A	GREEN OAKS BLVD	LINCOLN DR	ROSE-BROWN-MAY P	0.54	6 D		650	50	873	0	873	1053	471	582	0
B		GREEN OAKS BLVD	ROSE-BROWN-MAY P	DAVIS DR	0.46	6 D		650	100	873	1437	2310	1794	1063	731	0
B		GREEN OAKS BLVD	DAVIS DR	FIELDER RD	0.48	6 D		650	100	873	1437	2310	1872	1109	763	0
B		GREEN OAKS BLVD	FIELDER RD	LAMAR BLVD	1.53	6 D		650	100	873	1437	2310	5967	3534	2433	0
B		GREEN OAKS BLVD	LAMAR BLVD	IH 30	0.47	6 D		650	100	873	1437	2310	1833	1086	747	0
B		GREEN OAKS BLVD	IH 30	RANDOLL MILL RD	0.20	6 D		650	100	930	1634	2564	780	513	267	0
B		MEADOWBROOK BLVD	RANDOL MILL RD	CITY LIMITS	0.26	6 D		650	50	930	1634	2564	1014	667	347	0
B		LAMAR BLVD	GREEN OAKS BLVD	MOSSY OAKS	0.35	4 D		650	100	107	208	315	910	110	800	0
B		LAMAR BLVD	MOSSY OAKS	FIELDER RD	0.63	4 D		650	100	107	208	315	1638	198	1440	0
B		LAMAR BLVD	FIELDER RD	DAVIS DR	0.50	4 D		650	100	382	383	765	1300	383	918	0
B		LAMAR BLVD	DAVIS DR	COOPER ST	0.62	4 D		650	100	843	866	1709	1612	1060	552	0
B		LAMAR BLVD	COOPER ST	LINCOLN DR	0.76	4 D		650	100	344	450	794	1976	603	1373	0
B	A	LINCOLN DR	GREEN OAKS BLVD	BROWN BLVD	0.71	2 U		500	50	0	256	256	355	182	173	0
B	C	LINCOLN DR	BROWN BLVD	LAMAR BLVD	0.89	2 U		500	50	0	256	256	445	228	217	0
B	C	LINCOLN DR	LAMAR BLVD	RYAN PLAZA	0.17	2 U		500	50	0	256	256	85	44	41	0
B		MAIN ST	DAVIS	MESQUITE	1.04	2 U		500	100	398	289	686	1040	714	326	0
B	D	MEADOWBROOK BLVD	RANDOL MILL RD	CITY LIMITS	0.26	6 D		650	50	0	1634	1634	507	425	82	0
B		MITCHELL ST	FIELDER RD	DAVIS DR	0.48	4 U		500	100	288	287	575	960	276	684	0
B		MITCHELL ST	DAVIS DR	COOPER ST	0.56	4 U		500	100	288	287	575	1120	322	798	0
B		MITCHELL ST	COOPER ST	CENTER ST	0.50	4 U		500	100	288	287	575	1000	288	713	0
B		MITCHELL ST	CENTER ST	COLLINS ST	0.54	2 U		500	100	151	151	302	540	163	377	0
B		PARK ROW DR	FIELDER RD	DAVIS DR	0.50	4 U		500	100	667	667	1334	1000	667	333	0
B		PARK ROW DR	DAVIS DR	COOPER ST	0.50	4 U		500	100	576	576	1152	1000	576	424	0
B		PARK ROW DR	COOPER ST	E OF PECAN	0.41	5 S		625	100	753	753	1506	1025	617	408	0
B		PARK ROW DR	E OF PECAN	COLLINS ST	0.59	4 U		500	50	0	751	751	590	443	147	0
B	G	PECAN ST	ABRAM ST	MITCHELL ST	0.56	4 U		500	100	560	256	816	1120	457	663	0
B		PECAN ST	MITCHELL ST	PARK ROW DR	0.44	3 S		625	100	560	256	816	550	359	191	0
B		RANDOL MILL RD	CENTER ST	COOPER ST	0.40	4 U		500	100	626	626	1252	800	501	299	0
B		RANDOL MILL RD	COOPER ST	DAVIS DR	0.56	4 U		500	100	772	772	1544	1120	865	255	0
B		RANDOL MILL RD	DAVIS DR	FIELDER RD	0.49	4 U		500	100	626	626	1252	980	613	367	0
B	C	RANDOL MILL RD	CENTER ST	COLLINS ST	0.55	4 U		500	50	0	653	653	550	359	191	0
B	D	RANDOL MILL RD	FIELDER RD	GREEN OAKS BLVD	1.35	4 U		500	50	0	569	569	1350	768	582	0
B		RD TO 6-FLAGS	DAVIS DR	COOPER ST	0.50	4 U		500	100	337	337	674	1000	337	663	0
B		RD TO 6-FLAGS	COOPER ST	CENTER ST	0.71	5 S		625	100	718	717	1435	1775	1019	756	0
B		SANFORD ST	FIELDER RD	DAVIS DR	0.49	2 U		500	100	142	142	284	490	139	351	0
B		SANFORD ST	DAVIS DR	COOPER ST	0.52	2 U		500	100	116	116	232	520	121	399	0
B		SANFORD ST	COOPER ST	CENTER ST	0.44	2 U		500	100	163	163	326	440	143	297	0
B		SANFORD ST	CENTER ST	COLLINS ST	0.55	2 U		500	100	163	163	326	550	179	371	0
B		TUCKER BLVD	FIELDER RD	DAVIS DR	0.51	2 U		500	100	51	51	102	510	52	458	0
B		WASHINGTON DR	COOPER ST	LINCOLN DR	0.60	2 U		500	100	354	278	632	600	379	221	0
Sub-Total B					49.06								100,363	55,274	46,111	1,022
C		ABRAM ST	COLLINS ST	OVERHILL DR	0.46	4 U		500	100	1338	1338	2676	920	1231	0	311
C		ABRAM ST	OVERHILL DR	SH 360	1.58	4 D		650	100	882	774	1656	4108	2616	1492	0
C		ASCENSION BLVD	BROWN BLVD	LAMAR BLVD	0.74	4 U		500	100	327	216	543	1480	402	1078	0
C		AVENUE J	BALLPARK WAY	CORPORATE	0.34	4 D		650	100	762	879	1641	884	558	326	0
C		AVENUE J	CORPORATE	SH 360	0.25	4 D		650	100	636	486	1122	650	281	370	0
C		BAIRD FARM RD	BROWN BLVD	RANDY SNOW	0.09	3 S		625	100	281	630	911	113	82	31	0
C		BAIRD FARM RD	RANDY SNOW	LAMAR BLVD	0.56	3 S		625	100	281	630	911	700	510	193	3
C		BAIRD FARM RD	LAMAR BLVD	WET N WILD WAY	0.23	3 U		500	100	281	630	911	345	210	135	0
C		BALLPARK WAY	BROWN BLVD	AVENUE J	0.51	4 D		650	100	635	744	1379	1326	703	623	0
C		BALLPARK WAY	AVENUE J	LAMAR BLVD	0.33	4 D		650	100	635	744	1379	858	455	403	0
C		BALLPARK WAY	LAMAR BLVD	IH 30	0.16	5 D		650	100	635	744	1379	520	221	299	0
C		BALLPARK WAY	CONV CENTER DR	IH 30	0.35	6 D		650	100	768	687	1455	1365	509	856	0
C		BALLPARK WAY	CONV CENTER DR	RANDOL MILL RD	0.44	6 D		650	100	768	687	1455	1716	640	1076	0
C	A	BROWN BLVD	LINCOLN DR	COLLINS ST	0.54	4 U		500	50	187	0	187	540	101	439	0
C	A	BROWN BLVD	COLLINS ST	BAIRD FARM RD	0.73	4 U		500	50	920	0	920	730	672	58	0
C	A	BROWN BLVD	BAIRD FARM RD	ASCENSION BLVD	0.13	4 U		500	50	920	0	920	130	120	10	0
C	A	BROWN BLVD	ASCENSION BLVD	BALLPARK WAY	0.56	4 U		500	50	920	0	920	560	515	45	0
C	A	BROWN BLVD	BALLPARK WAY	SH 360	0.65	4 U		500	50	920	0	920	650	598	52	0
C		BROWNING DR	ABRAM ST	LOVERS LN	1.56	4 U		500	100	228	228	456	3120	711	2409	0
C		CARTER DR	MITCHELL ST	PARK ROW DR	0.34	2 U		500	100	69	69	138	340	47	293	0
C	B	CENTER ST	RANDOL MILL RD	RD TO 6-FLAGS	0.57	4 U		500	50	629	0	629	570	359	211	0
C		COLLINS (FM 157)	BROWN BLVD	LAMAR BLVD	0.67	5 S		625	100	1541	1326	2867	1675	1921	0	246
C		COLLINS (FM 157)	LAMAR BLVD	COPELAND	0.45	6 D		650	100	1541	1326	2867	1755	1290	465	0
C		COLLINS (FM 157)	COPELAND	RANDOL MILL RD	0.64	5 S		625	100	1101	1100	2201	1600	1409	191	0
C	B	COLLINS ST (FM 157)	RANDOL MILL RD	DIVISION ST	0.75	5 S		625	50	1141	0	1141	938	856	82	0
C	B	COLLINS ST (FM 157)	DIVISION ST	ABRAM ST	0.23	5 S		625	50	1141	0	1141	288	262	25	0
C	B	COLLINS ST	ABRAM ST	PARK ROW DR	1.00	7 S		625	50	1101	0	1101	1875	1101	774	0
C	G	COLLINS ST	PARK ROW DR	LOVERS LN	0.49	7 S		625	50	1101	0	1101	919	539	379	0
C		CONVENTION CENTER	COPELAND	BALLPARK WAY	0.21	4 U		500	100	159	42	201	420	42	378	0
C		COPELAND RD	COLLINS ST	AT&T WAY	0.69	3 OW		650	100	298	0	298	1346	206	1140	0
C		COPELAND RD	AT&T WAY	CONV CENTER DR	0.30	4 D		650	100	298	298	596	780	179	601	0
C		COPELAND RD	CONV CENTER DR	SIX FLAGS DR	0.99	4 U		500	100	298	298	596	1980	590	1390	0
C		DIVISION ST	COLLINS ST	SIX FLAGS DR	1.70	5 U		500	100	777	777	1554	4250	2642	1608	0
C		DIVISION ST	SIX FLAGS DR	SH 360	0.36	6 D		650	100	484	484	968	1404	348	1056	0
C		LAMAR BLVD	LINCOLN DR	COLLINS ST	0.34	4 D		650	100	344	450	794	884	270	614	0
C		LAMAR BLVD	COLLINS ST	BAIRD FARM RD	0.71	6 D		650	100	285	332	617	2769	438	2331	0
C		LAMAR BLVD	BAIRD FARM RD	BALLPARK WAY	0.59	6 D		650	100	285	332	617	2301	364	1937	0
C		LAMAR BLVD	BALLPARK WAY	SH 360	0.70	6 D		650	100	285	332	617	2730	432	2298	0

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Arlington 2016 Roadway Impact Fee Study Update Existing Capital Improvements Analysis

Serv Area	Shared Svc Area	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. in Serv. Area	Peak Hour Volume			VMT Supply Pk Hr Total	VMT Demand Pk Hr Total	Excess VMT Capacity	Exist. VMT Deficiency
										A	B	Total				
C	B	LINCOLN DR	BROWN BLVD	LAMAR BLVD	0.89	2	U	500	50	256	0	256	445	228	217	0
C	B	LINCOLN DR	LAMAR BLVD	RYAN PLAZA	0.17	2	U	500	50	256	0	256	85	44	41	0
C		MESQUITE	CENTER ST	RANDOL MILL RD	0.21	3	OW	650	100	711	0	711	410	149	260	0
C		MITCHELL ST	COLLINS ST	NEW YORK AVE	1.05	2	U	500	100	92	92	184	1050	193	857	0
C		MITCHELL ST	NEW YORK AVE	SHERRY ST	0.54	2	U	500	100	92	92	184	540	99	441	0
C		MITCHELL ST	SHERRY ST	SH 360	0.50	2	U	500	100	80	80	160	500	80	420	0
C		NEW YORK AVE	ABRAM ST	PARK ROW DR	0.99	3	S	625	100	335	335	670	1238	663	574	0
C	G	NEW YORK AVE	PARK ROW DR	LOVERS LN	0.50	4	U	500	50	0	514	514	500	257	243	0
C		PARK ROW DR	COLLINS ST	NEW YORK AVE	1.00	4	U	500	100	816	815	1631	2000	1631	369	0
C	G	PARK ROW DR	NEW YORK AVE	SH 360	1.00	4	U	500	50	0	780	780	1000	780	220	0
C		PENNANT DR	COPELAND RD	RD TO 6-FLAGS	0.25	4	U	500	100	208	208	416	500	104	396	0
C		PENNANT DR	RD TO 6-FLAGS	AT&T WAY	0.20	4	U	500	100	207	210	417	400	83	317	0
C	B	RANDOL MILL RD	CENTER ST	COLLINS ST	0.55	4	U	500	50	653	0	653	550	359	191	0
C		RANDOL MILL RD	COLLINS ST	AT&T WAY	0.46	6	D	650	100	625	738	1363	1794	627	1167	0
C		RANDOL MILL RD	AT&T WAY	STADIUM DR	0.50	6	D	650	100	625	738	1363	1950	682	1269	0
C		RANDOL MILL RD	STADIUM DR	SIX FLAGS DR	0.75	6	D	650	100	490	487	977	2925	733	2192	0
C		RANDOL MILL RD	SIX FLAGS DR	SH 360	0.33	6	D	650	100	490	487	977	1287	322	965	0
C		RD TO 6-FLAGS	CENTER ST	COLLINS ST	0.33	4	U	500	100	529	529	1058	660	349	311	0
C		RD TO 6-FLAGS	COLLINS ST	PENNANT RD	0.49	4	U	500	100	257	257	514	980	252	728	0
C		RD TO 6-FLAGS	STADIUM DR	SH 360	1.01	4	U	500	100	257	257	514	2020	519	1501	0
C		SANFORD ST	COLLINS ST	STADIUM DR	0.80	4	U	500	100	87	105	192	1600	153	1447	0
C		SHERRY ST	ABRAM ST	PARK ROW DR	0.99	2	U	500	100	214	214	428	990	424	566	0
C		SIX FLAGS DR	SH 360	RD TO 6-FLAGS	0.45	4	D	650	100	294	145	439	1170	198	972	0
C		SIX FLAGS DR	RD TO 6-FLAGS	RANDOL MILL RD	0.32	4	U	500	100	294	145	439	640	140	500	0
C		SIX FLAGS DR	RANDOL MILL RD	DIVISION ST	0.31	4	U	500	100	294	145	439	620	136	484	0
C		STADIUM DR E	RANDOL MILL RD	DIVISION ST	0.62	6	D	650	100	768	687	1455	2418	902	1516	0
C		STADIUM DR E	DIVISION ST	ABRAM ST	0.44	4	U	500	100	375	374	749	880	330	550	0
C		SUSAN DR	MITCHELL ST	PARK ROW DR	0.36	4	U	500	100	271	223	494	720	178	542	0
C		WASHINGTON DR	LINCOLN DR	COLLINS ST	0.48	2	U	500	100	258	268	526	480	253	227	0
Sub-Total C													79,888	35,298	45,150	560
					38.43											
D		ABRAM ST	FIELDER RD	BOWEN	1.07	4	U	500	100	400	400	800	2134	854	1280	0
D	E	ARKANSAS LN	LAKE ARLINGTON	GREEN OAKS BLVD	0.82	4	U	500	50	0	57	57	820	47	773	0
D		BOWEN RD	WESTWOOD	SANFORD ST	0.54	2	U	500	100	489	489	978	540	528	12	0
D		BOWEN RD	SANFORD ST	DIVISION ST	0.50	4	U	500	100	489	489	978	1000	489	511	0
D		BOWEN RD	DIVISION ST	MP RR	0.12	4	U	500	100	774	804	1578	240	189	51	0
D		BOWEN RD	MP RR	PANTEGO CITY LIMIT	0.81	4	U	500	100	774	804	1578	1620	1278	342	0
D		BOWEN RD	PANTEGO CITY LIMIT	TUCKER BLVD	0.16	4	U	500	100	1341	1342	2683	320	429	0	109
D		DIVISION (SH 180)	FIELDER RD	BOWEN RD	1.01	5	S	625	100	755	754	1509	2525	1524	1001	0
D		DIVISION (SH 180)	BOWEN RD	FOREST EDGE DR	0.90	5	S	625	100	755	754	1509	2250	1358	892	0
D		DIVISION (SH 180)	FOREST EDGE DR	CITY LIMIT	0.99	4	U	500	100	755	754	1509	1980	1494	486	0
D		DOTTIE LYNN PKWY	CITY LIMIT	CITY LIMIT	0.53	6	D	650	100	908	1681	2589	2067	1372	695	0
D	B	FIELDER RD	RANDOL MILL RD	DIVISION ST	0.95	4	U	500	50	0	1548	1548	950	1471	0	521
D	B	FIELDER RD	DIVISION ST	PARK ROW DR	1.00	4	U	500	50	0	1109	1109	1000	1109	0	109
D	B	FIELDER RD	PARK ROW DR	LOVERS LN	0.41	4	U	500	50	0	1098	1098	410	450	0	40
D	F	FIELDER RD	LOVERS LN	TUCKER ST	0.09	4	U	500	50	0	1098	1098	90	99	0	9
D	E	GREEN OAKS BLVD	ARKANSAS LN	WOODLAND PARK	0.19	6	D	650	50	938	0	938	371	178	192	0
D		GREEN OAKS BLVD	WOODLAND PARK	PIONEER PKWY	0.97	6	D	650	100	938	1916	2854	3783	2768	1015	0
D		GREEN OAKS BLVD	PIONEER PKWY	CITY LIMIT	0.55	6	D	650	100	908	1681	2589	2145	1424	721	0
D	B	MEADOWBROOK BLVD	RANDOL MILL RD	CITY LIMITS	0.26	6	D	650	50	930	0	930	507	242	265	0
D		NORWOOD DR	BOWEN RD	LYNNWOOD	0.80	2	U	500	100	242	242	484	800	387	413	0
D		NORWOOD DR	LYNNWOOD	PARK ROW DR	0.32	2	U	500	100	242	242	484	320	155	165	0
D		OAKWOOD LN	RANDOL MILL RD	DIVISION ST	1.00	4	U	500	100	321	320	641	2000	641	1359	0
D		PARK ROW DR	SHADY VALLEY DR	PANTEGO CITY LIMIT	1.09	4	U	500	100	562	562	1124	2180	1225	955	0
D		PARK ROW DR	PANTEGO CITY LIMIT	FIELDER RD	0.51	4	U	500	100	490	489	979	1020	499	521	0
D	E	PARK SPRINGS	WOODLAND PARK	PIONEER PKWY	0.14	4	D	650	50	0	360	360	182	50	132	0
D		PARK SPRINGS	PIONEER PKWY	SHADY VALLEY DR	0.34	4	U	500	100	562	562	1124	680	382	298	0
D	E	PIONEER (SPUR 303)	PANTEGO CITY LIMIT	PARK SPRINGS	0.18	6	D	650	50	0	1300	1300	351	234	117	0
D		PIONEER (SPUR 303)	PARK SPRINGS	GREEN OAKS BLVD	0.89	6	D	650	100	1608	860	2468	3471	2197	1274	0
D		PIONEER (SPUR 303)	GREEN OAKS BLVD	CITY LIMIT	1.35	4	D	650	100	1608	860	2468	3510	3332	594	416
D	B	RANDOL MILL RD	FIELDER RD	OAKWOOD LN	0.50	4	U	500	50	569	0	569	500	285	216	0
D	B	RANDOL MILL RD	OAKWOOD LN	WESTWOOD DR	0.18	4	U	500	50	569	0	569	180	102	78	0
D	B	RANDOL MILL RD	WESTWOOD DR	GREEN OAKS BLVD	0.67	4	U	500	50	569	0	569	670	381	289	0
D		SANFORD ST	BOWEN RD	OAKWOOD LN	0.51	2	U	500	100	220	219	439	510	224	286	0
D		SANFORD ST	OAKWOOD LN	FIELDER RD	0.51	2	U	500	100	259	289	548	510	279	231	0
D		WESTWOOD	RANDOL MILL RD	BOWEN RD	0.43	4	U	500	100	463	449	912	860	392	468	0
D		WESTWOOD	BOWEN RD	CROWLEY	0.38	4	U	500	100	152	152	304	760	116	644	0
D		WESTWOOD	CROWLEY	FINDLAY DR	0.35	2	U	500	100	152	152	304	350	106	244	0
D	E	WOODLAND PARK	GREEN OAKS BLVD	WOODSIDE DR	0.78	2	U	500	50	0	52	52	390	41	349	0
D	E	WOODLAND PARK	WOODSIDE DR	PARK SPRINGS	0.61	2	U	500	50	0	98	98	305	60	245	0
D		WOODSIDE DR	WOODLAND PARK	GREEN OAKS BLVD	0.61	2	U	500	100	242	250	492	610	300	310	0
Sub-Total D													44,911	28,692	17,422	1,204
					24.02											

APPENDICES

Arlington 2016 Roadway Impact Fee Study Update Existing Capital Improvements Analysis

Serv Area	Shared Svc Area	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. in Serv. Area	Peak Hour Volume			VMT Supply Pk Hr Total	VMT Demand Pk Hr Total	Excess VMT Capacity	Exist. VMT Deficiency
										A	B	Total				
E	D	ARKANSAS LN	LAKE ARLINGTON	GREEN OAKS BLVD	0.82	4	U	500	50	57	0	57	820	47	773	0
E		ARKANSAS LN	GREEN OAKS BLVD	WOODSIDE DR	0.77	4	D	650	100	558	956	1514	2002	1166	836	0
E		ARKANSAS LN	WOODSIDE DR	PARK SPRINGS BL	0.65	4	D	650	100	558	956	1514	1690	984	706	0
E		ARKANSAS LN	PARK SPRINGS BL	DAL GARDENS CITYL	0.30	4	D	650	100	606	751	1357	780	407	373	0
E		BOWMAN SPRINGS	CITY LIMITS	I-20	0.53	5	S	625	100	219	148	367	1325	195	1130	0
E		BOWMAN SPRINGS	I-20	ARBROOK BLVD	0.49	2	U	500	100	219	148	367	490	180	310	0
E	D	GREEN OAKS BLVD	ARKANSAS LN	WOODLAND PARK	0.19	6	D	650	50	0	1916	1916	371	364	6	0
E		GREEN OAKS BLVD	ARKANSAS LN	PLEASANT RIDGE	1.88	6	D	650	100	954	2498	3452	7332	6490	1872	1030
E		GREEN OAKS BLVD	PLEASANT RIDGE	LITTLE RD	0.18	6	D	650	100	954	2498	3452	702	621	179	99
E		LITTLE RD	PLEASANT RIDGE	MAYFIELD RD	0.71	3	S	625	100	290	290	580	888	412	476	0
E		LITTLE RD	MAYFIELD RD	ARKANSAS LN	1.28	3	S	625	100	290	290	580	1600	742	858	0
E		LITTLE RD	PLEASANT RIDGE	GREEN OAKS BLVD	0.22	3	S	625	100	290	290	580	275	128	147	0
E		LITTLE RD	GREEN OAKS	SH 287 SFR	0.94	6	D	650	100	1132	1750	2882	3666	2709	957	0
E		MAYFIELD RD	GREEN OAKS	LITTLE RD	0.27	4	U	500	100	155	155	310	540	84	456	0
E		MAYFIELD RD	LITTLE RD	WOODSIDE DR	0.73	2	U	500	100	155	155	310	730	226	504	0
E	D	PARK SPRINGS BLVD	WOODLAND PARK	PIONEER PKWY	0.14	4	D	650	50	288	0	288	182	40	142	0
E		PARK SPRINGS BLVD	WOODLAND PARK	ARKANSAS LN	0.53	4	D	650	100	288	360	648	1378	343	1035	0
E		PERKINS RD	ARKANSAS LN	WATERVIEW DR	0.81	4	U	500	100	275	275	550	1620	446	1175	0
E		PERKINS RD	WATERVIEW DR	PLEASANT RIDGE	1.10	4	U	500	100	350	350	700	2200	770	1430	0
E	D	PIONEER (SPUR 303)	PANTEGO CITY LIMIT	PARK SPRINGS	0.18	6	D	650	50	1208	0	1208	351	217	134	0
E		PLEASANT RIDGE	PERKINS RD	POLY WEBB RD	0.58	4	D	650	100	223	216	439	1508	255	1253	0
E		PLEASANT RIDGE	PERKINS RD	GREEN OAKS BLVD	0.24	5	S	625	100	223	216	439	600	105	495	0
E		PLEASANT RIDGE	GREEN OAKS BLVD	LITTLE RD	0.17	4	D	650	100	578	376	954	442	162	280	0
E		PLEASANT RIDGE	LITTLE RD	WOODSIDE DR	0.94	4	D	650	100	578	376	954	2444	897	1547	0
E		PLEASANT RIDGE	WOODSIDE DR	PARK SPRINGS	0.67	4	D	650	100	578	376	954	1742	639	1103	0
E	F	PLEASANT RIDGE	PARK SPRINGS BLVD	KELLY PERKINS	0.13	4	D	650	50	0	376	376	169	49	120	0
E	D	WOODLAND PARK	GREEN OAKS BLVD	WOODSIDE DR	0.78	2	U	500	50	53	0	53	390	41	349	0
E	D	WOODLAND PARK	WOODSIDE DR	PARK SPRINGS	0.61	2	U	500	50	98	0	98	305	60	245	0
E		WOODSIDE DR	WOODLAND PARK	ARKANSAS LN	0.37	2	U	500	100	342	342	684	370	253	117	0
E		WOODSIDE DR	ARKANSAS LN	MAYFIELD RD	1.25	2	U	500	100	342	342	684	1250	855	395	0
E		WOODSIDE DR	MAYFIELD RD	PLEASANT RIDGE	0.59	2	U	500	100	342	342	684	590	404	186	0
E		POLY WEBB RD	PLEASANT RIDGE	LITTLE RD	0.87	4	U	500	100	201	201	402	1740	350	1390	0
E		POLY WEBB RD	PLEASANT RIDGE	SHOREWOOD DR	0.56	2	U	500	100	201	201	402	560	225	335	0
E		SHOREWOOD DR	BOWMAN RD	POLY WEBB RD	0.49	4	D	650	100	133	133	266	1274	130	1144	0
E		SHOREWOOD DR	POLY WEBB RD	E YACHT CLUB	0.41	2	U	500	100	133	133	266	410	109	301	0
E		SHOREWOOD DR	E YACHT CLUB	PERKINS RD	0.63	2	U	500	100	133	133	266	630	168	462	0
E		TREEPOINT	LITTLE RD	PENNSYLVANIA	0.62	3	S	625	100	135	135	270	775	167	608	0
E		TREEPOINT	PENNSYLVANIA	CITY LIMIT	0.76	3	S	625	100	135	135	270	950	205	745	0
E		TREEPOINT	CITY LIMITS	KATHERINE ST	0.62	2	U	500	100	135	135	270	620	167	453	0
E		BARDIN RD	GREEN OAKS BLVD	KELLY ELLIOTT	0.79	4	D	650	100	81	114	195	2054	154	1900	0
E		GREEN OAKS BLVD	LITTLE RD	IH 20 SFR	0.29	6	D	650	100	954	2498	3452	1131	1001	289	159
E		GREEN OAKS BLVD	IH 20	BARDIN RD	0.61	4	D	650	100	706	1410	2116	1586	1291	362	67
E		GREEN OAKS BLVD	BARDIN RD	KELLY ELLIOTT	1.00	4	D	650	100	750	444	1194	2600	1194	1406	0
E		GREEN OAKS BLVD	KELLY ELLIOTT	PARK SPRINGS	0.52	4	D	650	100	658	650	1308	1352	680	672	0
E		HAWKINS CEMETERY	US 287	IH 20	0.81	2	U	500	100	57	74	131	810	106	704	0
E		KELLY ELLIOTT	PLEASANT RIDGE	IH 20	0.44	4	U	500	100	467	467	934	880	411	469	0
E		KELLY ELLIOTT	IH 20	GREEN OAKS BLVD	1.23	4	U	500	100	467	467	934	2460	1149	1311	0
E		KELLY ELLIOTT	GREEN OAKS BLVD	SUBLETT RD	0.67	2	U	500	100	497	497	994	670	666	4	0
E		MEDIAN WAY	US 287	TREEPOINT	0.26	2	U	500	100	30	130	160	260	42	218	0
E	D	PARK SPRINGS	PIONEER	WOODLAND PARK	0.14	4	D	650	50	288	0	288	182	40	142	0
E		PARK SPRINGS	WOODLAND PARK	ARKANSAS LN	0.53	4	D	650	100	288	360	648	1378	343	1035	0
E	F	PARK SPRINGS	PLEASANT RIDGE	IH 20 FR	0.37	4	D	650	50	0	400	400	481	148	333	0
E	F	PARK SPRINGS	IH 20	GREEN OAKS BLVD	1.17	4	D	650	50	0	969	969	1521	1134	387	0
E	F	PARK SPRINGS	GREEN OAKS BLVD	COLLARD RD	0.15	4	U	500	50	0	346	346	150	52	98	0
E	H	PARK SPRINGS	COLLARD RD	SUBLETT RD	0.48	4	D	650	50	0	346	346	624	166	458	0
E	H	SUBLETT	US 287	JOPLIN	0.19	2	U	500	50	0	385	385	95	73	22	0
E	X	SUBLETT	JOPLIN	CITY LIMIT	0.32	2	U	500	50	0	385	385	160	123	37	0
E	H	SUBLETT RD	KEN AVE	KELLY ELLIOTT	0.14	4	D	650	50	0	724	724	182	101	81	0
E	H	SUBLETT RD	KELLY ELLIOTT	PARK SPRINGS	0.50	4	D	650	50	0	724	724	650	362	288	0
Sub-Total E					34.62								64,936	31,049	35,242	1,355
F		ARBROOK BLVD	BOWEN RD	MELEAR ST	0.64	2	U	500	100	226	226	452	640	289	351	0
F		ARBROOK BLVD	MELEAR DR	COOPER ST	0.35	4	D	650	100	226	226	452	910	158	752	0
F		ARBROOK BLVD	COOPER ST	SCOTT LEGACY	0.56	4	D	650	100	862	845	1707	1456	956	500	0
F		ARBROOK BLVD	SCOTT LEGACY	MATLOCK RD	0.55	4	D	650	100	862	845	1707	1430	939	491	0
F	G	ARBROOK BLVD	MATLOCK RD	COLLINS ST	1.16	4	D	650	50	862	0	862	1508	1000	508	0
F		ARKANSAS LN	PANTEGO CITY LIM	FIELDER RD	0.35	4	D	650	100	545	719	1264	910	442	468	0
F		ARKANSAS LN	FIELDER RD	DAVIS DR	0.51	4	D	650	100	830	760	1590	1326	811	515	0
F		ARKANSAS LN	DAVIS DR	COOPER ST	0.35	4	D	650	100	830	760	1590	910	557	354	0
F		ARKANSAS LN	COOPER ST	MATLOCK RD	0.17	4	D	650	100	830	760	1590	442	270	172	0
F		BARDIN RD	RUSH CREEK	WILLOW RIDGE	0.44	2	D	650	100	44	34	78	572	34	538	0
F		BARDIN RD	BOWEN RD	COOPER ST	0.90	4	D	650	100	404	522	926	2340	833	1507	0
F		BARDIN RD	COOPER ST	AMERICANA DR	0.22	4	D	650	100	404	522	926	572	204	368	0
F		BARDIN RD	AMERICANA DR	GREEN HOLLOW DR	0.32	4	D	650	100	404	522	926	832	296	536	0
F		BARDIN RD	GREEN HOLLOW DR	E. OF MATLOCK	1.23	4	D	650	100	404	522	926	3198	1139	2059	0
F		BOWEN RD	PANTEGO CITY LIM	DAL GARDENS CITYL	0.79	5	S	625	100	1048	1047	2095	1975	1655	320	0
F		BOWEN RD	DAL GARDENS CITYL	LARBROOK BLVD	0.21	5	S	625	100	1024	1024	2048	525	430	95	0
F		BOWEN RD	ARBROOK BLVD	PLEASANT RIDGE	0.50	5	S	625	100	1980	1578	3558	1250	1779	0	529
F		BOWEN RD	PLEASANT RIDGE	IH 20	0.22	4	D	650	100	1980	1578	3558	572	783	0	211

APPENDICES

Arlington 2016 Roadway Impact Fee Study Update Existing Capital Improvements Analysis

Serv Area	Shared Svc Area	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. in Serv. Area	Peak Hour Volume			VMT Supply Pk Hr Total	VMT Demand Pk Hr Total	Excess VMT Capacity	Exist. VMT Deficiency
										A	B	Total				
F		BOWEN RD	IH 20	GREEN OAKS BLVD	1.03	4 D		650	100	1235	1649	2884	2678	2971	67	359
F	H	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4 D		650	50	0	958	958	975	719	257	0
F	H	CALENDER RD	SUBLETT RD	PARK SPRINGS	0.64	2 U		500	50	46	0	46	320	29	291	0
F		CALIFORNIA LN	DAL GARDENS CITY	FIELDER RD	1.02	4 U		500	100	208	208	416	2040	424	1616	0
F		CALIFORNIA LN	FIELDER RD	COOPER ST	0.53	4 U		500	100	208	208	416	1060	220	840	0
F	G	COLLINS ST	ARBROOK BLVD	IH 20 NFR	0.36	4 D		650	50	0	939	939	468	338	130	0
F	G	COLLINS ST	IH 20 NFR	IH 20 SFR	0.26	4 D		650	50	0	939	939	338	244	94	0
F	G	COLLINS ST	IH 20 SFR	BARDIN RD	0.27	4 D		650	50	0	837	837	351	226	125	0
F	G	COLLINS ST	BARDIN RD	GREEN OAKS BLVD	1.40	4 D		650	50	0	837	837	1820	1172	648	0
F	B	COOPER ST (FM 157)	INWOOD RD	LOVERS LN	0.14	7 S		625	50	0	1884	1884	263	264	0	1
F	G	COOPER ST (FM 157)	LOVERS LN	MATLOCK RD	0.27	7 S		625	50	0	1884	1884	506	509	0	2
F		COOPER ST (FM 157)	MATLOCK RD	CALIFORNIA	0.84	6 D		650	100	1689	2738	4427	3276	3718	220	662
F		COOPER ST (FM 157)	CALIFORNIA	MAYFIELD RD	0.63	6 D		650	100	2082	2938	5020	2457	3163	0	706
F		COOPER ST (FM 157)	ARBROOK BLVD	ARBROOK BLVD	0.55	6 D		650	100	2082	2938	5020	2145	2761	0	616
F		COOPER ST (FM 157)	ARBROOK BLVD	I-20	0.64	6 D		650	100	2082	2938	5020	2496	3213	0	717
F		COOPER ST (FM 157)	I-20	BARDIN	0.35	6 D		650	100	2205	2558	4763	1365	1667	0	302
F		COOPER ST (FM 157)	BARDIN	WIMBLETON	0.50	6 D		650	100	2534	638	3172	1950	1586	656	292
F		COOPER ST (FM 157)	WIMBLETON	GREEN OAKS BLVD	0.25	6 D		650	100	2534	638	3172	975	793	328	146
F	I	CRAVENS PARK	MATLOCK RD	GREEN OAKS BLVD	0.71	2 U		500	50	0	350	350	355	249	107	0
F		CRAVENS PARK	GREEN OAKS BLVD	N. OF ENGLSIDE	0.20	2 U		500	100	276	350	626	200	125	75	0
F	B	DAVS DR	INWOOD RD	LOVERS LN	0.06	2 U		500	50	485	0	485	30	29	1	0
F		DAVS DR	LOVERS LN	PIONEER PKWY	0.43	2 U		500	100	388	473	861	430	370	60	0
F		DAVS DR	PIONEER PKWY	ARKANSAS LN	0.17	2 U		500	100	383	459	842	170	143	27	0
F	D	FIELDER RD	LOVERS LN	TUCKER BLVD	0.09	4 U		500	50	1098	0	1098	90	99	0	9
F		FIELDER RD	TUCKER BLVD	ARKANSAS LN	0.51	4 U		500	100	1098	1098	2196	1020	1120	0	100
F		FIELDER RD	ARKANSAS LN	MAYFIELD RD	1.00	2 U		500	100	488	487	975	1000	975	25	0
F		FIELDER RD	MAYFIELD RD	ARBROOK ST	0.55	4 U		500	100	488	487	975	1100	536	564	0
F		GREEN OAKS BLVD	PARK SPRINGS	BOWEN RD	1.02	4 D		650	100	658	650	1308	2652	1334	1318	0
F	H	GREEN OAKS BLVD	BOWEN RD	COOPER ST	0.88	4 D		650	50	0	672	672	1144	591	553	0
F	H	GREEN OAKS BLVD	COOPER ST	PETRA	0.65	4 D		650	50	0	689	689	845	448	397	0
F	H	GREEN OAKS BLVD	PETRA	MATLOCK RD	0.49	4 D		650	50	0	689	689	637	338	299	0
F		GREEN OAKS BLVD	MATLOCK RD	CRAVENS PARK	0.98	4 D		650	100	600	700	1300	2548	1274	1274	0
F	I	GREEN OAKS BLVD	CRAVENS PARK	COLLINS ST	0.70	4 D		650	50	0	700	700	910	490	420	0
F	G	MATLOCK RD	COOPER ST	PIONEER PKWY	0.10	4 D		650	50	0	1043	1043	130	104	26	0
F	G	MATLOCK RD	PIONEER PKWY	ARKANSAS LN	0.14	4 D		650	50	0	1043	1043	182	146	36	0
F	G	MATLOCK RD	ARKANSAS LN	MAYFIELD RD	1.04	4 D		650	50	0	1043	1043	1352	1085	267	0
F	G	MATLOCK RD	MAYFIELD RD	ARBROOK BLVD	0.43	6 D		650	50	0	1043	1043	839	448	390	0
F		MATLOCK RD	ARBROOK BLVD	IH 20 NFR	0.38	6 D		650	100	1147	1043	2190	1482	832	650	0
F		MATLOCK RD	IH 20 NFR	IH 20 SFR	0.10	4 D		650	100	1691	1194	2885	260	289	11	39
F		MATLOCK RD	IH 20 SFR	BARDIN RD	0.50	4 D		650	100	2235	1344	3579	1300	1790	0	490
F		MATLOCK RD	BARDIN RD	GREEN OAKS BLVD	0.73	4 D		650	100	768	1778	2546	1898	1859	388	349
F	H	MATLOCK RD	GREEN OAKS BLVD	CRAVENS PARK	0.44	4 D		650	50	0	1692	1692	572	744	0	172
F		MAYFIELD RD	BOWEN RD	FIELDER RD	0.98	4 D		650	100	294	145	439	2548	430	2118	0
F		MAYFIELD DR	FIELDER RD	COOPER ST	0.24	4 D		650	100	294	145	439	624	105	519	0
F		MAYFIELD RD	COOPER ST	MATLOCK RD	0.80	4 D		650	100	294	145	439	2080	351	1729	0
F		MEDLIN	COOPER ST	CALIFORNIA	0.46	2 U		500	100	108	111	219	460	101	359	0
F		MEDLIN	CALIFORNIA	ARKANSAS LN	0.49	2 U		500	100	198	230	428	490	210	280	0
F	E	PARK SPRINGS	PLEASANT RIDGE	IH 20 FR	0.38	4 D		650	50	474	0	474	494	180	314	0
F	E	PARK SPRINGS	IH 20	GREEN OAKS BLVD	1.17	4 D		650	50	549	0	549	1521	642	879	0
F	E	PARK SPRINGS	GREEN OAKS BLVD	COLLARD RD	0.15	4 U		500	50	258	0	258	150	39	111	0
F		PIONEER PKWY	CITY LIMIT	MATLOCK RD	1.36	6 D		650	100	1417	1580	2997	5304	4076	1228	0
F	E	PLEASANT RIDGE	PARK SPRINGS BLVD	KELLY PERKINS	0.13	4 D		650	50	578	0	578	169	75	94	0
F		PLEASANT RIDGE	KELLY PERKINS	BOWEN RD	0.91	4 D		650	100	451	459	910	2366	828	1538	0
F		PLEASANT RIDGE	BOWEN RD	MELEAR RD	0.82	4 D		650	100	425	664	1089	2132	893	1239	0
F		PLEASANT RIDGE	MELEAR RD	COOPER ST	0.05	4 D		650	100	425	664	1089	130	54	76	0
F		SPROCKET DR	CALIFORNIA LN	MAYFIELD RD	0.50	2 U		500	100	84	97	181	500	91	410	0
F	H	SUBLETT RD	CALENDER RD	BOWEN RD	0.46	4 D		650	50	0	814	814	598	374	224	0
F		WIMBLETON DR	BOWEN RD	COOPER ST	0.95	2 U		500	100	123	124	247	950	235	715	0
F		WIMBLETON DR	COOPER ST	SPORTS CENTER	0.49	2 U		500	100	123	124	247	490	121	369	0
F		WIMBLETON DR	SPORT CENTER	PETRA	0.14	2 U		500	100	123	124	247	140	35	105	0
F		WIMBLETON DR	PETRA	MATLOCK RD	0.48	2 U		500	100	123	124	247	480	119	361	0
Sub-Total F													89,622	60,969	34,356	5,702
G	F	ARBROOK BLVD	MATLOCK RD	COLLINS ST	1.16	4 D		650	50	0	845	845	1508	980	528	0
G		ARBROOK BLVD	COLLINS ST	NEW YORK AVE	0.85	4 D		650	100	862	845	1707	2210	1451	759	0
G		ARBROOK BLVD	NEW YORK AVE	SH 360	1.02	4 D		650	100	136	136	272	2652	277	2375	0
G		ARKANSAS LN	MATLOCK RD	COLLINS ST	0.99	4 D		650	100	830	760	1590	2574	1574	1000	0
G		ARKANSAS LN	COLLINS ST	NEW YORK AVE	1.00	4 D		650	100	828	992	1821	2600	1821	779	0
G		ARKANSAS LN	NEW YORK AVE	SH 360	0.95	4 D		650	100	993	1190	2184	2470	2075	395	0
G		ARKANSAS LN	SH 360	CITY LIMITS	0.86	4 D		650	100	390	723	1113	2236	957	1279	0
G		BARDIN RD	COLLINS ST	NEW YORK AVE	0.69	4 D		650	100	193	213	406	1794	280	1514	0
G		BARDIN RD	NEW YORK AVE	CITY LIMITS	1.18	4 D		650	100	193	213	406	3068	479	2589	0
G		CENTER ST	PARK ROW DR	PIONEER PKWY	0.94	4 D		650	100	440	682	1122	2444	1055	1389	0
G		CENTER ST	PIONEER PKWY	ARKANSAS LN	0.13	7 S		625	100	440	682	1122	488	146	342	0
G		CENTER ST	ARKANSAS LN	MAYFIELD RD	1.11	4 U		500	100	508	507	1015	2220	1127	1093	0
G		CENTER ST	MAYFIELD RD	ARBROOK BLVD	0.59	4 U		500	100	387	386	773	1180	456	724	0
G	C	COLLINS ST	PARK ROW DR	LOVERS LN	0.49	7 S		625	50	1101	0	1101	919	539	379	0
G		COLLINS ST	LOVERS LN	PIONEER PKWY	0.40	7 S		625	100	1101	1101	2202	1500	881	619	0
G		COLLINS ST	PIONEER PKWY	ARKANSAS LN	0.12	7 S		625	100	1377	2070	3447	450	414	60	23

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Arlington 2016 Roadway Impact Fee Study Update Existing Capital Improvements Analysis

Serv Area	Shared Svc Area	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. in Serv. Area	Peak Hour Volume			VMT Supply Pk Hr Total	VMT Demand Pk Hr Total	Excess VMT Capacity	Exist. VMT Deficiency
										A	B	Total				
G		COLLINS ST	ARKANSAS LN	MAYFIELD RD	1.00	6	D	650	100	1377	2070	3447	3900	3447	573	120
G		COLLINS ST	MAYFIELD RD	ARBROOK BLVD	0.54	4	D	650	100	1128	1619	2747	1404	1483	93	172
G	F	COLLINS ST	ARBROOK BLVD	IH 20 NFR	0.36	4	D	650	50	1182	0	1182	468	426	42	0
G	F	COLLINS ST	IH 20 NFR	IH 20 SFR	0.26	4	D	650	50	1182	0	1182	338	307	31	0
G	F	COLLINS ST	IH 20 SFR	BARDIN RD	0.27	4	D	650	50	1129	0	1129	351	305	46	0
G	F	COLLINS ST	BARDIN RD	GREEN OAKS BLVD	1.40	4	D	650	50	1129	0	1129	1820	1581	239	0
G	I	COLLINS ST	GREEN OAKS BLVD	HARWOOD RD	0.29	4	D	650	50	605	0	605	377	175	202	0
G	I	COLLINS ST	HARWOOD RD	SUBLETT RD	0.24	4	D	650	50	605	0	605	312	145	167	0
G	F	COOPER ST (FM 157)	LOVERS LN	MATLOCK RD	0.25	7	S	625	50	1885	0	1885	469	471	0	3
G		FORUM DR	PIONEER PKWY	ARKANSAS LN	0.42	4	D	650	100	122	150	272	1092	114	978	0
G		GREEN OAKS BLVD	COLLINS ST	NEW YORK AVE	0.68	4	D	650	100	359	933	1292	1768	879	889	0
G		GREEN OAKS BLVD	NEW YORK AVE	SH 360	0.90	4	D	650	100	702	1331	2033	2340	1830	538	28
G	F	MATLOCK RD	COOPER ST	PIONEER PKWY	0.10	4	D	650	50	1147	0	1147	130	115	15	0
G	F	MATLOCK RD	PIONEER PKWY	ARKANSAS LN	0.14	4	D	650	50	1147	0	1147	182	161	21	0
G	F	MATLOCK RD	ARKANSAS LN	MAYFIELD RD	1.04	4	D	650	50	1147	0	1147	1352	1193	159	0
G	F	MATLOCK RD	MAYFIELD RD	ARBROOK BLVD	0.43	4	D	650	50	1147	0	1147	559	493	66	0
G		MAYFIELD RD	MATLOCK RD	COLLINS ST	1.01	4	D	650	100	354	353	707	2626	714	1912	0
G		MAYFIELD RD	COLLINS ST	NEW YORK AVE	1.00	4	D	650	100	354	353	707	2600	707	1893	0
G		MAYFIELD RD	NEW YORK AVE	SH 360	1.05	4	D	650	100	1713	502	2215	2730	2326	838	434
G	C	NEW YORK AVE	PARK ROW DR	LOVERS LN	0.50	4	U	500	50	514	0	514	500	257	243	0
G		NEW YORK AVE	LOVERS LN	PIONEER PKWY	0.24	4	U	500	100	514	514	1028	480	247	233	0
G		NEW YORK AVE	PIONEER PKWY	ARKANSAS LN	0.27	4	U	500	100	514	514	1028	540	278	262	0
G		NEW YORK AVE	ARKANSAS LN	MAYFIELD RD	1.00	4	D	650	100	712	864	1576	2600	1576	1024	0
G		NEW YORK AVE	MAYFIELD RD	ARBROOK	0.50	4	D	650	100	712	864	1576	1300	788	512	0
G		NEW YORK AVE	ARBROOK BLVD	IH 20	0.46	4	D	650	100	712	864	1576	1196	725	471	0
G		NEW YORK AVE	IH 20	GREEN OAKS BLVD	1.60	4	D	650	100	971	2002	2973	4160	4757	526	1123
G		NEW YORK AVE	GREEN OAKS BLVD	SUBLETT RD	0.46	4	D	650	100	971	2002	2973	1196	1368	151	323
G		PIONEER (SPUR 303)	MATLOCK RD	COLLINS ST	0.99	6	D	650	100	1786	1855	3641	3861	3605	256	0
G		PIONEER (SPUR 303)	COLLINS ST	NEW YORK AVE	1.02	6	D	650	100	1418	1438	2856	3978	2913	1065	0
G		PIONEER (SPUR 303)	NEW YORK AVE	SH 360	0.93	6	D	650	100	1654	1538	3192	3627	2969	658	0
G		PIONEER (SPUR 303)	SH 360	CITY LIMITS	1.02	6	D	650	100	1222	1351	2573	3978	2624	1354	0
G	B	PARK ROW DR	E OF PECAN	COLLINS ST	0.59	4	U	500	50	751	0	751	590	443	147	0
G	C	PARK ROW DR	NEW YORK AVE	SH 360	1.07	4	U	500	50	780	0	780	1070	835	235	0
G	J	PARK ROW DR	SH 360	CITY LIMITS	0.84	4	U	500	50	653	0	653	840	549	291	0
G		TIMBERLAKE DR	PARK ROW DR	PIONEER PKWY	0.58	2	U	500	100	101	188	289	580	167	413	0
G		TIMBERVIEW LN	FALL CREEK	COLLINS ST	0.81	2	U	500	100	133	184	316	810	256	554	0
G		TIMBERVIEW LN	COLLINS ST	NEW YORK AVE	1.01	2	U	500	100	132	183	314	1010	317	693	0
G		TIMBERVIEW	NEW YORK AVE	SH 360	1.00	2	U	500	100	74	103	177	1000	177	823	0
G		SHERRY ST	PARK ROW DR	PIONEER PKWY	0.60	2	U	500	100	277	277	554	600	332	268	0
G		SHERRY ST	PIONEER PKWY	ARKANSAS LN	0.42	4	U	500	100	277	277	554	840	233	607	0
G		SHERRY ST	ARKANSAS LN	TIMBERVIEW	0.40	2	U	500	100	277	277	554	400	222	178	0
G		SHERRY ST	TIMBERVIEW LN	MAYFIELD RD	0.61	2	U	500	100	277	277	554	610	338	272	0
G		SHERRY ST	SHARPSHIRE LN	ARBROOK BLVD	0.26	2	U	500	100	277	277	554	260	144	116	0
G		SHERRY ST	GREEN OAKS BLVD	CREEK CROSSING	0.47	2	U	500	100	277	277	554	470	260	210	0
G		SUSAN DR	PARK ROW DR	PIONEER PKWY	0.58	4	U	500	100	271	223	494	1160	287	873	0
G	I	SUBLETT RD	COLLINS ST	NEW YORK	0.72	4	D	650	50	0	946	946	936	681	255	0
G	I	SUBLETT RD	NEW YORK	SH 360	0.77	4	D	650	50	0	946	946	1001	728	273	0
Sub-Total G													94,723	59,458	37,491	2,226
H	F	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4	D	650	50	524	0	524	975	393	582	0
H	F	CALENDER RD	SUBLETT RD	PARK SPRINGS	0.70	2	U	500	50	0	115	115	350	81	269	0
H		CALENDER RD	SUBLETT RD	CURRY RD	1.00	2	U	500	100	317	317	634	1000	634	366	0
H		CALENDER RD	R. CURRY RD	T.O. HARRIS	0.62	2	U	500	100	317	317	634	620	393	227	0
H		CALENDER RD	T.O. HARRIS	S. BOWEN	0.42	2	U	500	100	202	201	403	420	169	251	0
H		CALENDER RD	BOWEN RD	TURNER WAY	0.33	2	U	500	100	202	201	403	330	133	197	0
H		CALENDER RD	TURNER WARNELL	TURNER WAY	0.15	2	U	500	100	202	201	403	150	60	90	0
H		COOPER ST (FM 157)	GREEN OAKS BLVD	SUBLETT RD	0.75	6	D	650	100	2147	2262	4409	2925	3307	0	382
H		COOPER ST (FM 157)	SUBLETT RD	EDEN RD	1.00	6	D	650	100	2188	1919	4107	3900	4107	31	238
H		COOPER ST (FM 157)	EDEN RD	T. O. HARRIS	0.52	6	D	650	100	2188	1919	4107	2028	2136	16	124
H		COOPER ST (FM 157)	T.O. HARRIS	TURNER WARNELL	1.65	6	D	650	100	2188	1919	4107	6435	6777	51	393
H		EDEN RD	CITY LIMIT	US 287	0.96	2	U	500	100	380	380	760	960	730	230	0
H		EDEN RD	US 287	R. CURRY RD	0.32	2	U	500	100	173	172	345	320	110	210	0
H		EDEN RD	BOWEN RD	FOREST PARK DR	0.66	2	U	500	100	8	8	16	660	11	649	0
H		EDEN RD	MATLOCK RD	COOPER ST	1.19	2	U	500	100	231	231	462	1190	550	640	0
H		GENTLE SPRINGS	US 287	PARK SPRINGS	0.88	2	U	500	100	281	129	409	880	360	520	0
H		GERTIE BARRETT	HUDSON CEMETERY	CITY LIMIT	0.00	2	U	500	100	316	268	584	0	0	0	0
H		GOLF CLUB	EDEN RD	MANSFLD-CARDINAL	0.74	2	U	500	100	102	102	204	740	151	589	0
H	F	GREEN OAKS BLVD	BOWEN RD	COOPER ST	0.88	4	D	650	50	198	0	198	1144	174	970	0
H	F	GREEN OAKS BLVD	COOPER ST	PETRA	0.65	4	D	650	50	569	0	569	845	370	475	0
H	F	GREEN OAKS BLVD	PETRA	MATLOCK RD	0.49	4	D	650	50	569	0	569	637	279	358	0
H		HARDISTY	COOPER ST	BOWEN RD	0.99	2	U	500	100	107	158	265	990	263	727	0
H		JOPLIN	J.R. HAWKINS	SUBLETT RD	0.79	2	U	500	100	117	97	214	790	169	621	0
H		KELLYELLIOTT	SUBLETT RD	US 287	0.98	2	U	500	100	127	64	191	980	187	793	0
H		MANSFIELD CARDINAL	CITY LIMIT	MANSFIELD HWY	1.26	2	U	500	100	97	79	175	1260	221	1039	0
H	F	MATLOCK RD	GREEN OAKS BLVD	CRAVENS PARK	0.44	4	D	650	50	1288	0	1288	572	567	5	0
H	I	MATLOCK RD	CRAVENS PARK	SUBLETT RD	0.59	4	D	650	50	0	1692	1692	767	988	0	231
H	I	MATLOCK RD	SUBLETT RD	HARRIS	1.25	4	D	650	50	0	1488	1488	1625	1960	0	235
H	I	MATLOCK RD	HARRIS	LONESOME DOVE	0.58	4	D	650	50	0	1456	1456	754	844	0	0

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										A	B	Total				
H	I	MATLOCK RD	LONESOME DOVE	CITY LIMIT	0.73	4	D	650	50	0	1438	1438	949	1050	0	101
H		NATHAN LOWE	GREEN OAKS BLVD	COOPER ST	0.93	2	U	500	100	60	60	120	930	112	818	0
H		NATHAN LOWE RD	COOPER ST	MATLOCK RD	1.15	2	U	500	100	60	60	120	1150	138	1012	0
H	E	PARK SPRINGS	COLLARD	SUBLETT RD	0.48	4	D	650	50	258	0	258	624	124	500	0
H		PARK SPRINGS	SUBLETT RD	S. OF REDSTONE	0.59	4	D	650	100	114	190	304	1534	179	1355	0
H		R. CURRY RD	TURNER WARNELL	US 287	0.96	2	U	500	100	94	94	188	960	180	780	0
H		R. CURRY RD	US 287	EDEN RD	0.41	2	U	500	100	94	94	188	410	77	333	0
H		CURRY RD	EDEN RD	CALENDER RD	0.86	2	U	500	100	282	281	563	860	484	376	0
H		RED STONE DR	PARK SPRINGS	CALENDER	0.58	2	U	500	100	45	45	90	580	52	528	0
H		RED STONE DR	CALENDER	SANDSTONE	0.29	2	U	500	100	45	45	90	290	26	264	0
H	E	SUBLETT RD	US 287	JOPLIN	0.19	2	U	500	50	385	0	385	95	73	22	0
H	E	SUBLETT RD	SH 287	KELLY ELLIOTT	0.67	4	D	650	50	592	0	592	871	397	474	0
H	E	SUBLETT RD	KELLY ELLIOTT	PARK SPRINGS	0.50	4	D	650	50	592	0	592	650	296	354	0
H		SUBLETT RD	PARK SPRINGS	CALENDER	0.52	4	D	650	100	626	814	1440	1352	749	603	0
H	F	SUBLETT RD	CALENDER	BOWEN RD	0.46	4	D	650	50	626	0	626	598	288	310	0
H		SUBLETT RD	BOWEN RD	COOPER ST	0.92	4	D	650	100	790	708	1498	2392	1378	1014	0
H		SUBLETT RD	COOPER ST	MATLOCK RD	1.20	4	D	650	100	639	814	1453	3120	1743	1377	0
H		T.O. HARRIS	RUSSELL CURRY	E OF LEDBETTER RD	0.80	2	U	500	100	232	232	464	800	371	429	0
H		T.O. HARRIS	CALENDER RD	BOWEN RD	0.31	2	U	500	100	232	232	464	310	144	166	0
H		T.O. HARRIS	BOWEN RD	COOPER ST	0.75	2	U	500	100	232	232	464	750	348	402	0
H		T.O. HARRIS	COOPER ST	MATLOCK RD	1.21	2	U	500	100	232	232	464	1210	561	649	0
H		TURNER-WARNELL	US 287	R. CURRY RD	0.57	2	U	500	100	332	148	479	570	273	297	0
H		TURNER WARNELL	R. CURRY RD	CITY LIMIT	0.68	2	U	500	100	311	128	439	680	298	382	0
H		TURNER WARNELL	US 287	CALENDER	0.37	2	U	500	100	201	164	365	370	135	235	0
H		TURNER WARNELL	COOPER ST	MATLOCK RD	1.54	2	U	500	100	570	570	1140	1538	1753	0	215
H		TURNER WAY	CALENDER	COOPER ST	0.79	2	U	500	100	73	73	146	790	115	675	0
Sub-Total H					40.00								58,630	37,379	23,260	2,009
I		BRATCHER DR	COLLINS ST	CITY LIMIT	0.36	2	U	500	100	20	20	40	360	14	346	0
I	G	COLLINS ST	GREEN OAKS BLVD	SUBLETT RD	0.53	4	D	650	50	0	1071	1071	689	568	121	0
I		COLLINS ST	SUBLETT RD	SOUTHEAST PKWY	0.26	4	D	650	100	284	328	612	676	159	517	0
I		COLLINS ST	SOUTHEAST PKWY	EDEN RD	0.50	4	U	500	100	284	328	612	1000	306	694	0
I		COLLINS ST	EDEN RD	RAGLAND	2.98	2	U	500	100	284	328	612	2980	1824	1156	0
I		COLLINS ST	RAGLAND	CITY LIMIT	0.53	2	U	500	100	284	328	612	530	324	206	0
I	F	CRAVENS PARK	MATLOCK RD	GREEN OAKS	0.94	2	U	500	50	276	0	276	470	259	211	0
I	F	GREEN OAKS BLVD	CRAVENS PARK	COLLINS ST	0.70	4	D	650	50	600	0	600	910	420	490	0
I		HOLLAND	RAGLAND	CITY LIMITS	0.87	2	U	500	100	38	64	102	870	89	781	0
I		MANSFIELD WEBB	MATLOCK RD	SILO RD	1.61	2	U	500	100	943	943	1886	1610	3036	0	1426
I		MANSFIELD WEBB	SILO	WEBB-FERRELL	0.50	2	U	500	100	471	471	942	500	471	29	0
I		MANSFIELD WEBB	WEBB-FERRELL	COLLINS (EXT)	0.26	2	U	500	50	471	471	942	260	245	15	0
I		MANSFIELD WEBB	NEW YORK	COLLINS ST	0.80	2	U	500	100	471	471	942	800	754	46	0
I	H	MATLOCK RD	CRAVENS PARK	SUBLETT RD	0.59	4	D	650	50	1288	0	1288	767	760	7	0
I	H	MATLOCK RD	SUBLETT RD	EDEN RD	0.75	4	D	650	50	1230	0	1230	975	923	53	0
I	H	MATLOCK RD	EDEN RD	T. O. HARRIS	0.50	4	D	650	50	1208	0	1208	650	604	46	0
I	H	MATLOCK RD	T.O. HARRIS	CITY LIMIT	1.31	4	D	650	50	1064	0	1064	1703	1394	309	0
I		MOSSBERG DR	BALLWEG	COLLINS ST	0.67	2	U	500	100	100	100	200	670	134	536	0
I		NEW YORK AVE	SUBLETT RD	SOUTHEAST PKWY	0.54	5	S	625	100	749	749	1498	1350	809	541	0
I		NEW YORK AVE	SOUTHEAST PKWY	MANSFIELD-WEBB	0.46	5	S	625	100	749	749	1498	1150	689	461	0
I		NEW YORK AVE	MANSFIELD-WEBB	SH 360	0.65	2	U	500	100	449	449	899	650	584	66	0
I		RAGLAND	COLLINS ST	DEBBIE LN	0.93	2	U	500	100	196	196	392	930	365	565	0
I		SILO RD	CRAVENS PARK	SUBLETT RD	0.58	2	U	500	100	464	463	927	580	538	42	0
I		SILO RD	SUBLETT RD	EDEN RD	0.75	2	U	500	100	619	618	1237	750	928	0	178
I		SILO RD	EDEN RD	MANSFIELD WEBB	0.81	2	U	500	100	266	266	532	810	431	379	0
I		SOUTHEAST PKWY	SUBLETT RD	COLLINS ST	0.80	4	U	500	100	298	298	596	1600	477	1123	0
I		SOUTHEAST PKWY	COLLINS ST	NEW YORK AVE	0.76	4	U	500	100	150	150	300	1520	228	1292	0
I		SOUTHEAST PKWY	NEW YORK AVE	SH 360	0.71	4	D	650	100	150	150	300	1846	213	1633	0
I		SUBLETT RD	MATLOCK RD	SILO RD	0.77	4	D	650	100	789	967	1756	2002	1352	650	0
I		SUBLETT RD	SILO	COLLINS ST	0.83	4	D	650	100	693	946	1639	2158	1360	798	0
I	G	SUBLETT RD	COLLINS ST	NEW YORK	0.72	4	D	650	50	693	0	693	936	499	437	0
I	G	SUBLETT RD	NEW YORK	SH 360	0.77	4	D	650	50	693	0	693	1001	534	467	0
I		WEBB LYNN RD	NEW YORK AVE	CITY LIMITS	0.50	2	U	500	100	82	81	163	500	82	419	0
I		WEBB-FERRELL	MANSFIELD WEBB	COLLINS ST	0.91	2	U	500	100	120	120	240	910	218	692	0
Sub-Total I					26.15								35,113	21,590	15,128	1,604

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										A	B	Total				
J		ABRAM ST	SH 360	CITY LIMIT	0.26	4	D	650	100	833	481	1314	676	342	334	0
J		AVENUE E	SH 360	GREAT SW PKWY	0.99	4	D	650	100	625	559	1184	2574	1172	1402	0
J		AVENUE E	GREAT SW PKWY	CITY LIMITS	0.52	4	D	650	100	844	905	1749	1352	909	443	0
J		AVENUE H	SH 360	GREAT SW PKWY	1.01	4	D	650	100	127	138	265	2626	268	2358	0
J		DALWORTH ST	109TH	CITY LIMITS	0.44	2	U	500	100	187	194	381	440	168	272	0
J		DIVISION (SH 180)	SH 360	CITY LIMITS	1.00	5	S	625	100	509	1116	1625	2500	1625	875	0
J		GALLERIA DR	SH 360	109TH	0.46	2	U	500	100	73	73	146	460	67	393	0
J		GREAT SW PKWY	AVE H	AVE E	0.38	4	D	650	100	736	687	1423	988	541	447	0
J		GREAT SW PKWY	AVE E	RANDOL MILL RD	0.53	4	D	650	100	885	730	1615	1378	856	522	0
J		GREAT SW PKWY	RANDOL MILL RD	DIVISION ST	0.64	4	D	650	100	576	534	1110	1664	710	954	0
J		GREAT SW PKWY	DIVISION ST	ABRAM ST	0.11	4	D	650	100	346	889	1235	286	136	150	0
J		MITCHELL	SH 360	SUSAN	0.31	2	U	500	100	153	408	561	310	174	136	0
J	G	PARK ROW DR	SH 360	CITY LIMITS	0.84	4	U	500	50	0	654	654	840	549	291	0
J		RANDOL MILL RD	SH 360	109TH	0.48	6	D	650	100	732	895	1627	1872	781	1091	0
J		RANDOL MILL RD	109TH	GREAT SW PKWY	0.49	6	D	650	100	222	243	465	1911	228	1683	0
J		RANDOL MILL RD	GREAT SW PKWY	CITY LIMITS	0.37	4	U	500	100	108	133	241	740	89	651	0
J		SUSAN ST	MITCHELL	PARK ROW DR	0.36	2	U	500	100	271	223	494	360	178	182	0
J		TIMBERLAKE DR	PARK ROW DR	CITY LIMITS	0.65	2	U	500	100	202	375	577	650	375	275	0
J		109TH	AVE E	RANDOL MILL RD	0.53	2	U	500	100	56	36	92	530	49	481	0
J		109TH	RANDOL MILL RD	DIVISION ST	0.56	4	D	650	100	455	500	955	1456	535	921	0
Sub-Total J					10.93								23,613	9,752	13,861	0
Total					320.24								618,742	357,320	277,104	15,682

APPENDIX C: CALCULATION OF VEHICLE-MILES OF NEW
DEMAND

APPENDICES

Vehicle-Mile Trip Generation by Service Area, Arlington Impact Fee Update 2016 Based on Dec. 21, 2015 Land Use Assumptions Report

Service Area	Added Dwelling Units	Vehicle-Miles per DU	Total Vehicle-Miles
A	3,443	2.06	7,101
B	1,716	2.06	3,539
C	10	2.06	21
D	23	2.06	47
E	130	2.06	268
F	49	2.06	101
G	536	2.06	1,105
H	391	2.06	806
I	426	2.06	879
J	0	2.06	0

SF Res	2.06
Basic Employ	1.93
Service Employ	4.81
Retail Employ	5.04

Estimated Basic Employment Growth Vehicle-Mile Generation

Service Area	Added Employees	Square Feet per emp.	Total Square Feet	Vehicle-Miles Per 1000/SF	Total Vehicle-Miles
A	25	1,500	37,500	1.93	72
B	144	1,500	216,000	1.93	417
C	678	1,500	1,017,000	1.93	1,963
D	164	1,500	246,000	1.93	475
E	4	1,500	6,000	1.93	12
F	284	1,500	426,000	1.93	822
G	415	1,500	622,500	1.93	1,201
H	161	1,500	241,500	1.93	466
I	40	1,500	60,000	1.93	116
J	259	1,500	388,500	1.93	750

Estimated Service Employment Growth Vehicle-Mile Generation

Service Area	Added Employees	Square Feet per emp.	Total Square Feet	Vehicle-Miles Per 1000/SF	Total Vehicle-Miles
A	29	500	14,500	4.81	70
B	1,402	500	701,000	4.81	3,371
C	2,867	500	1,433,500	4.81	6,893
D	509	500	254,500	4.81	1,224
E	301	500	150,500	4.81	724
F	827	500	413,500	4.81	1,988
G	1,002	500	501,000	4.81	2,409
H	735	500	367,500	4.81	1,767
I	362	500	181,000	4.81	870
J	1,021	500	510,500	4.81	2,455

Estimated Retail Employment Growth Vehicle-Mile Generation

Service Area	Added Employees	Square Feet per emp.	Total Square Feet	Vehicle-Miles Per 1000/SF	Total Vehicle-Miles
A	106	1,000	106,000	5.04	534
B	742	1,000	742,000	5.04	3,739
C	2,308	1,000	2,308,000	5.04	11,632
D	228	1,000	228,000	5.04	1,149
E	312	1,000	312,000	5.04	1,572
F	934	1,000	934,000	5.04	4,707
G	797	1,000	797,000	5.04	4,017
H	628	1,000	628,000	5.04	3,165
I	315	1,000	315,000	5.04	1,588
J	206	1,000	206,000	5.04	1,038

Vehicle-mile Generation Summary

Service Area	Residential Growth Vehicle-Miles	Basic Growth Vehicle-Miles	Service Growth Vehicle-Miles	Retail Growth Vehicle-Miles	Total Growth Vehicle-Miles
A	7,101	72	70	534	7,777
B	3,539	417	3,371	3,739	11,066
C	21	1,963	6,893	11,632	20,508
D	47	475	1,224	1,149	2,895
E	268	12	724	1,572	2,576
F	101	822	1,988	4,707	7,619
G	1,105	1,201	2,409	4,017	8,733
H	806	466	1,767	3,165	6,205
I	879	116	870	1,588	3,452
J	0	750	2,455	1,038	4,243
Totals	13,868	6,294	21,771	33,141	75,074

APPENDIX D: ROADWAY IMPROVEMENT PLAN PROJECTS

APPENDICES

Definitions

LANES	The total number of lanes in both directions available for travel.
TYPE	The type of roadway (used in determining capacity): D = divided roadway U = undivided roadway S = special roadway (roadway with continuous left turn) OW = one way roadway
PK-HR VOLUME	The existing volumes of cars on the roadway segment traveling during the afternoon (P.M.) peak hour of travel.
% IN SERVICE AREA	If the roadway is located on the boundary of the service area (with the city limits running along the centerline of the roadway), then half of the roadway is inventoried in the service area and the other half is not. This value is either 50% or 100%.
VEH-MI SUPPLY TOTAL	The number of total service units (vehicle-miles) supplied within the service area, based on the length and established capacity of the roadway type.
VEH-MI TOTAL DEMAND PK-HR	The total service unit (vehicle-mile) demand created by existing traffic on the roadway segment in the afternoon peak hour.
EXCESS CAPACITY PK-HR VEH-MI	The number of service units supplied but unused by existing traffic in the afternoon peak hour.

APPENDICES

2016 Arlington Roadway Impact Fee Study Update Roadway Capital Improvements Plan

2015 Serv Area	Shared Svc Area	CP Origin	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Capacity	Pct. In Serv. Area	2015 Peak Hour Volume			VMT Supply Pk H Total	VMT Demand Pk H Total	Excess VMT Capacity	CPVMT Deficiency	
											A	B	Total					
A	C	2002R	BROWN BLVD.	COLLINS	LINCOLN	0.53	4	U	500	50%	0	187	187	530	99	431	0	
A	97N	GREEN OAKS BLVD	E CITY LIMITS	BALLPARK WAY		0.95	2	D	650	100%	0	439	439	1235	417	818	0	
A	97N	GREEN OAKS BLVD	BALLPARK WAY	LINCOLN DR		2.27	2	D	650	100%	0	439	439	2951	997	1954	0	
A	2002R	COLLINS	GREEN OAKS BLVD	CITY LIMITS		1.17	6	D	650	100%	1541	1326	2867	4563	3354	1209	0	
Sub-total SA A						4.92								9,279	4,867	4,412	0	
B		97N	GREEN OAKS BLVD	LINCOLN	FIELDER	1.48	2	D	650	100%	0	137	137	1924	203	1721	0	
B	C	15R	IH 30 BRIDGE	CENTER ST		0.35	6	D	650	50%	0	856	856	644	283	362	0	
B		15R	IH 30 FRONTAGE	CENTER ST	COOPER ST	0.72	2	OW	650	100%	0	0	0	942	0	942	0	
B		93N	COOPER ST	IH 30	RANDOL MILL RD	0.61	6	D	650	100%	1502	1198	2700	2379	1647	732	0	
B		93N	COOPER ST	RANDOL MILL RD	CEDAR	0.35	6	D	650	100%	1502	1198	2700	1365	945	420	0	
B		93N	COOPER ST	CEDAR	ABRAMS	0.64	6	D	650	100%	1502	1198	2700	2496	1728	768	0	
Sub-total SA B						4.13								9,750	4,806	4,945	0	
C	B	15R	IH 30 BRIDGE	CENTER ST		0.33	6	D	650	50%	804	0	804	644	266	379	0	
C		15R	IH 30 BRIDGE	COLLINS		0.47	2	D	650	100%	0	0	0	616	0	616	0	
C		15R	IH 30 BRIDGE	BARD FARM (AT&T WAY)		0.14	7	D	650	100%	281	630	911	616	123	493	0	
C		15R	IH 30 FRONTAGE	CENTER ST	BALLPARK WAY	1.45	2	OW	650	100%	0	0	0	1890	0	1890	0	
C		15R	COLLINS ST	ROAD TO SIX FLAGS		0.10	6	D	650	100%	0	0	0	60	0	60	0	
C		15N	DIVISION	SH 360		0.38	6	D	650	100%	0	0	0	1474	0	1474	0	
C	A	2002R	BROWN BLVD.	COLLINS	LINCOLN	0.53	4	U	500	50%	187	0	187	530	99	431	0	
C		15N	LAMAR BLVD	COLLINS ST	BALLPARK WAY	1.31	2	D	650	100%	0	0	0	1703	0	1703	0	
C		93N	RANDOL MILL RD	COLLINS ST	BALLPARK WAY	0.83	6	D	650	100%	625	738	1363	3237	1131	2106	0	
C		93N	RANDOL MILL RD	BALLPARK WAY		0.91	6	D	650	100%	490	487	977	3549	889	2660	0	
C		15N	STADIUM DR	DIVISION	ABRAM	0.44	2	D	650	100%	0	0	0	572	0	572	0	
Sub-total SA C						6.89								14,891	2,509	12,382	0	
D		NO PROJECTS IN SERVICE AREA				0.00	0	D	650	100%	0	0	0	0	0	0	0	0
Sub-total SA D						0.00								0	0	0	0	
E		15R	BOWMAN SPRINGS	IH 20	CITY LIMITS	0.45	5	S	625	100%	219	0	219	563	99	464	0	
E		15R	PLEASANT RIDGE	KELLY ELLIOTT	PARK SPRINGS BLVD	0.67	4	D	650	100%	534	540	1074	1742	720	1022	0	
E		15N	PLEASANT RIDGE	IH 20	ENCHANTED BAY	0.42	4	D	650	100%	179	178	357	1092	150	942	0	
E		15N	PLEASANT RIDGE	ENCHANTED BAY	PLUMWOOD	0.82	4	D	650	100%	223	216	439	2132	360	1772	0	
E		97N	BARDIN RD	KELLY ELLIOTT	PARK SPRINGS BLVD	0.53	4	D	650	100%	0	0	0	1378	0	1378	0	
E	F	2002N	PARK SPRINGS	PLEASANT RIDGE	IH-20	0.28	4	D	650	50%	0	400	400	364	112	252	0	
E	H	2002N	SUBLETT RD	US 287	JOPLIN (West City Limits)	0.19	4	D	650	50%	0	385	385	247	73	174	0	
Sub-total SA E						3.36								7,518	1,513	6,004	0	
F	G	2002N	MATLOCK RD	ARKANSAS LN	MAYFIELD	1.05	2	D	650	50%	0	0	0	683	0	682	0	
F	G	2002N	MATLOCK RD	MAYFIELD	ARBROOK	0.38	2	D	650	50%	0	0	0	247	0	247	0	
F		15R	PLEASANT RIDGE	PARK SPRINGS	BOWEN RD	1.04	4	D	650	100%	451	0	451	1352	469	883	0	
F	G	15N	COLLINS ST	ARBROOK BLVD	IH 20	0.36	2	D	650	50%	0	0	0	234	0	234	0	
F	G	15N	COLLINS ST	IH 20	GREEN OAKS BLVD	1.67	2	D	650	50%	0	0	0	1086	0	1085	0	
F		15N	CENTER	BARDIN RD	EMBERCREST	0.34	4	D	650	100%	0	0	0	884	0	884	0	
F		15N	CENTER	EMBERCREST	GRAVEN PARK	0.63	4	U	500	100%	0	0	0	1260	0	1260	0	
F		15N	MATLOCK RD	BARDIN RD	GREEN OAKS BLVD	0.74	2	D	650	100%	0	0	0	962	0	962	0	
F		15R	COOPER ST	MAYFIELD		0.10	1	D	650	100%	0	0	0	30	0	30	0	
F	H	15R	GREEN OAKS BLVD	COOPER ST		0.10	1	D	650	50%	0	0	0	75	0	75	0	
F		97N	BARDIN RD	PARK SPRINGS BLVD	WILLOW RIDGE	0.30	4	D	650	100%	0	0	0	780	0	780	0	
F		93R	BARDIN RD	MANSFIELD	BOWEN	0.61	4	D	650	100%	404	522	926	1586	565	1021	0	
F		2002N	BARDIN RD	BOWEN	RUSH CREEK	0.34	4	D	650	100%	0	0	0	884	0	884	0	
F	H	93N	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4	D	650	50%	0	958	958	975	719	257	0	
F	E	2002N	PARK SPRINGS	PLEASANT RIDGE	IH-20	0.28	4	D	650	50%	474	0	474	364	133	231	0	
F	G	93R	ARBROOK RD	MATLOCK RD	COLLINS	1.14	4	D	650	50%	862	0	862	1482	983	499	0	
F		93R	BARDIN RD	GREEN HOLLOW DR	E. OF MATLOCK	1.14	4	D	650	100%	404	522	926	2964	1056	1908	0	
E	I	97N	CRAVENS PARK	MATLOCK RD	SILLO RD	0.75	4	U	500	50%	0	350	350	750	263	488	0	
Sub-total SA F						11.72								16,597	4,186	12,411	0	
G	F	93R	ARBROOK BLVD	MATLOCK RD	COLLINS ST	1.14	4	D	650	50%	0	845	845	1482	963	519	0	
G		2002N	ARBROOK BLVD	COLLINS	NEW YORK	0.83	4	D	650	100%	862	845	1707	2158	1417	741	0	
G		97N	ARBROOK BLVD	NEW YORK	SH 360	1.09	4	D	650	100%	136	136	272	2834	296	2538	0	
G		15N	COLLINS ST	MAYFIELD RD	ARBROOK BLVD	0.54	2	D	650	100%	0	0	0	702	0	702	0	
G	F	15N	COLLINS ST	ARBROOK BLVD	IH 20	0.36	2	D	650	50%	0	0	0	234	0	234	0	
G	F	15N	COLLINS ST	IH 20	GREEN OAKS BLVD	1.67	2	D	650	50%	0	0	0	1086	0	1085	0	
G	I	15N	COLLINS ST	GREEN OAKS BLVD	SUBLETT RD	0.52	2	D	650	50%	0	0	0	338	0	338	0	
G	F	2002N	MATLOCK RD	ARKANSAS LN	MAYFIELD	1.05	2	D	650	50%	0	0	0	683	0	682	0	
G	F	2002N	MATLOCK RD	MAYFIELD	ARBROOK	0.38	2	D	650	50%	0	0	0	247	0	247	0	
G		93R	NEW YORK AVE	MAYFIELD	ARBROOK	0.47	4	D	650	100%	712	864	1576	1222	741	481	0	
G		93R	NEW YORK AVE	ARBROOK BLVD	IH 20	0.10	4	D	650	100%	0	0	0	260	0	260	0	
G		97N	BARDIN RD	NEW YORK AVE	SH 360	1.02	4	D	650	100%	193	213	406	2652	414	2238	0	
Sub-total SA G						9.17								13,897	3,831	10,066	0	

APPENDICES

2016 Arlington Roadway Impact Fee Study Update Roadway Capital Improvements Plan

2015 Serv Area	Shared Svc Area	CP Origin	Roadway	From	To	Length (mi)	No. of Lanes	Lane Type	Lane Capacity	Pct. In Serv. Area	2015 Peak Hour Volume			VMT Supply Pk H Total	VMT Demand Pk H Total	Excess VMT Capacity	CPVMT Deficiency	
											A	B	Total					
H	F	15R	GREEN OAKS BLVD	COOPER ST		0.10	1	D	650	50%	0	0	0	75	0	75	0	
H		15N	MATLOCK RD	GREEN OAKS BLVD	TURNER WARNELL	3.13	2	D	650	100%	0	0	0	4069	0	4069	0	
H		15N	TURNER WARNELL	RUSSELL CURRY	US 287	0.52	4	D	650	100%	0	267	267	676	139	537	0	
H	E	2002N	SUBLETT RD	US 287	JOPLIN (W. City Limits)	0.19	4	D	650	50%	385	0	385	247	73	174	0	
H	F	93N	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4	D	650	50%	524	0	524	975	393	582	0	
H		2002N	TURNER WARNELL	COOPER ST	MATLOCK RD	1.54	4	D	650	100%	570	570	1140	3999	1753	2245	0	
Sub-total SA H						6.23								10,041	2,358	7,682	0	
I		2002N	COLLINS	SOUTHEAST PKWY	MANSFIELD WEBB	0.90	2	D	650	100%	284	328	612	1175	553	622	0	
I		2002N	COLLINS	SOUTHEAST PKWY	MANSFIELD WEBB	0.90	2	D	650	100%	0	0	0	1175	0	1175	0	
I		97N	COLLINS	MANSFIELD-WEBB	WEBB FERRELL	0.47	2	D	650	100%	284	328	612	611	288	323	0	
I		97N	COLLINS	MANSFIELD-WEBB	WEBB FERRELL	0.47	2	D	650	100%	0	0	0	611	0	611	0	
I		97N	COLLINS	WEBB FERRELL	RAGLAND	1.65	2	D	650	100%	284	328	612	2145	1010	1135	0	
I		97N	COLLINS	WEBB FERRELL	RAGLAND	1.65	2	D	650	100%	0	0	0	2145	0	2145	0	
I		97N	COLLINS	RAGLAND	SH 360	1.14	4	D	650	100%	284	328	612	2964	698	2266	0	
I	G	15N	COLLINS	GREEN OAKS BLVD	SUBLETT RD	0.52	2	D	650	50%	0	0	0	338	0	338	0	
I		15N	COLLINS	SUBLETT RD	SOUTHEAST PKWY	0.26	2	D	650	100%	0	0	0	338	0	338	0	
I		15N	MANSFIELD WEBB	SILO	COLLINS	0.76	4	U	500	100%	471	471	942	1520	716	804	0	
I		15N	MANSFIELD WEBB	COLLINS	NEW YORK	0.80	4	U	500	100%	471	471	942	1600	754	846	0	
I		15N	DEBBIE LN	W CITY LIMITS	E CITY LIMITS	1.52	4	D	650	100%	0	0	0	3952	0	3952	0	
I	F	97N	CRAVENS PARK	MATLOCK RD	SILO RD	0.75	4	U	500	50%	276	0	276	750	207	543	0	
I		97N	SILO RD	NATHAN LOWE	LYNN CREEK	0.96	4	U	500	100%	463	464	927	1920	890	1030	0	
I		97N	SILO RD	LYNN CREEK	HARRIS	0.91	4	U	500	100%	618	619	1237	1820	1126	694	0	
I		97N	SILO RD	HARRIS	MANSFIELD WEBB	0.23	4	U	500	100%	266	266	532	460	122	338	0	
I		97N	SOUTHEAST PKWY	SUBLETT	COLLINS	0.76	4	U	500	100%	298	298	596	1520	453	1067	0	
I		97N	SOUTHEAST PKWY	COLLINS	NEW YORK	0.76	4	U	500	100%	150	150	300	1520	228	1292	0	
I		97N	NEW YORK AVE	WEBB-LYNN RD	SH 360	0.45	4	U	500	100%	749	749	1498	900	674	226	0	
Sub-total SA I						15.87								27,464	7,718	19,746	0	
J		NO PROJECTS IN SERVICE AREA J				0.00	0	D	650	100%	0	0	0	0	0	0	0	0
Sub-total SA J						0.00								0	0	0	0	
Totals:						62.29								109,437	31,789	77,648	0	

APPENDIX E: ROADWAY IMPROVEMENT PLAN COST
ANALYSIS

APPENDICES

Definitions

LANES	The total number of lanes in both directions available for travel.
TYPE	The type of roadway (used in determining capacity): D = divided roadway U = undivided roadway S = special roadway (roadway with continuous left turn) OW = one way roadway
% IN SERVICE AREA	If the roadway is located on the boundary of the service area (with the city limits running along the centerline of the roadway), then half of the roadway is inventoried in the service area and the other half is not. This value is either 50% or 100%.
TOTAL SEGMENT COST	The estimated cost (in dollars) of the entire segment of the proposed improvement.
TOTAL COST IN SERVICE AREA	The estimated cost (in dollars) of the portion of the proposed roadway improvement within the service area.

APPENDICES

2016 Arlington Roadway Impact Fee Study Update Roadway Capital Improvements Plan

2015 Srv Area	Shared Srv Area	CP Srv Area	Origin Srv Area	Roadway	From	To	Length (mi)	No. of Lanes	Type	Pct. In Srv Area	Engineering	ROW	Construction	Signal	Total Project Cost	Study Update Cost	Serv Area Total Cost
A	C	2002R	BROWN BLVD.	COLLINS	COLLINS	LINCOLN	0.53	4 U	50%	\$0	\$0	\$390,728	\$0	\$0	\$969	\$391,697	
A	A	97N	GREEN OAKS BLVD	E CITY LIMITS	BALLPARK WAY	BALLPARK WAY	0.95	2 D	100%	\$81,689	\$51,842	\$1,546,032	\$0	\$0	\$1,676,573	\$1,681,830	
A	A	97N	GREEN OAKS BLVD	BALLPARK WAY	LINCOLN DR	LINCOLN DR	2.27	2 D	100%	\$331,066	\$614,433	\$3,363,484	\$0	\$0	\$4,208,983	\$4,214,386	
A	A	2002R	COLLINS	GREEN OAKS BLVD	CITY LIMITS	CITY LIMITS	1.17	8 D	100%	\$0	\$0	\$2,000,000	\$0	\$0	\$2,000,000	\$2,008,339	
Sub-total SA A																	
B	C	97N	GREEN OAKS BLVD	LINCOLN	FIELDER	FIELDER	1.48	2 D	100%	\$114,601	\$0	\$1,086,759	\$0	\$0	\$1,211,360	\$1,214,876	
B	C	15R	IH-30 BRIDGE	CENTER ST	COOPER ST	COOPER ST	0.35	6 D	50%	\$892,636	\$660,737	\$0	\$0	\$0	\$1,257,103	\$1,256,281	
B	B	15R	IH-30 FRONTAGE	CENTER ST	COOPER ST	COOPER ST	0.72	2 CW	100%	\$926,489	\$747,619	\$0	\$0	\$0	\$1,674,138	\$1,677,859	
B	B	93N	COOPER ST	IH-30	RANDOL MILL RD	RANDOL MILL RD	0.61	6 D	100%	\$35,202	\$2,257,789	\$3,053,901	\$0	\$0	\$5,346,892	\$5,351,240	
B	B	93N	COOPER ST	RANDOL MILL RD	CEDAR	CEDAR	0.35	6 D	100%	\$24,086	\$1,544,811	\$2,089,511	\$0	\$0	\$3,654,400	\$3,660,895	
B	B	93N	COOPER ST	CEDAR	ABRAMS	ABRAMS	0.64	8 D	100%	\$43,653	\$3,537,786	\$2,893,169	\$0	\$0	\$6,484,618	\$6,491,170	
Sub-total SA B																	
C	B	15R	IH-30 BRIDGE	CENTER ST	CENTER ST	CENTER ST	0.33	6 D	50%	\$895,386	\$660,737	\$0	\$0	\$0	\$1,257,103	\$1,256,281	
C	C	15R	IH-30 BRIDGE	COLLINS	BAIRD FARM (A18T WAY)	BAIRD FARM (A18T WAY)	0.47	7 D	100%	\$895,386	\$660,737	\$0	\$0	\$0	\$1,257,103	\$1,256,228	
C	C	15R	IH-30 FRONTAGE	CENTER ST	BALLPARK WAY	BALLPARK WAY	1.45	2 CW	100%	\$1,873,038	\$1,586,754	\$0	\$0	\$0	\$3,459,792	\$3,465,245	
C	C	15R	COLLINS ST	ROAD TO SIX FLAGS	ROAD TO SIX FLAGS	ROAD TO SIX FLAGS	0.10	6 D	100%	\$46,788	\$1,665,037	\$446,886	\$118,000	\$0	\$1,776,721	\$1,776,831	
C	C	15R	DIVISION	SH 360	SH 360	SH 360	0.38	6 D	100%	\$4,819,000	\$0	\$0	\$0	\$0	\$4,819,000	\$4,821,684	
C	A	2002R	BROWN BLVD.	COLLINS	COLLINS	COLLINS	0.53	4 U	50%	\$0	\$0	\$390,728	\$0	\$0	\$969	\$391,697	
C	C	15N	LAMAR BLVD	COLLINS ST	LINCOLN	LINCOLN	1.31	2 D	100%	\$221,294	\$393,941	\$3,251,884	\$294,364	\$0	\$4,151,483	\$4,154,605	
C	C	93N	RANDOL MILL RD	COLLINS ST	BALLPARK WAY	BALLPARK WAY	0.83	6 D	100%	\$0	\$359,286	\$6,488,484	\$0	\$0	\$6,826,770	\$6,832,686	
C	C	93N	RANDOL MILL RD	BALLPARK WAY	SH 360	SH 360	0.91	6 D	100%	\$0	\$35,400	\$3,344,298	\$0	\$0	\$3,459,698	\$3,466,184	
C	C	15N	STADIUM DR	DIVISION	ABRAM	ABRAM	0.44	2 D	100%	\$243,532	\$1,105,736	\$2,456,532	\$0	\$0	\$4,310,822	\$4,311,685	
Sub-total SA C																	
D	D	NO PROJECTS IN SERVICE AREA D															
Sub-total SA D																	
E	E	15R	BOWMAN SPRINGS	IH-20	IH-20	CITY LIMITS	0.45	5 S	100%	\$905,847	\$77,361	\$1,924,004	\$0	\$0	\$2,907,212	\$1,028	
E	E	15R	PLEASANT RIDGE	KELLY ELLIOTT	PARK SPRINGS BLVD	PARK SPRINGS BLVD	0.67	4 D	100%	\$10,602	\$283,736	\$4,143,540	\$133,629	\$0	\$4,662,507	\$3,184	
E	E	15N	PLEASANT RIDGE	IH-20	ENCHANTED BAY	ENCHANTED BAY	0.42	4 D	100%	\$816,000	\$466,000	\$3,936,000	\$80,000	\$0	\$5,180,000	\$1,996	
E	E	15N	PLEASANT RIDGE	ENCHANTED BAY	PLEASANT RIDGE	PLEASANT RIDGE	0.82	4 D	100%	\$1,200,000	\$0	\$6,900,000	\$240,000	\$0	\$8,340,000	\$3,896	
E	E	97N	BARDIN RD	KELLY ELLIOTT	PARK SPRINGS BLVD	PARK SPRINGS BLVD	0.53	4 D	50%	\$411,436	\$5,950,000	\$3,080,000	\$240,000	\$0	\$9,881,436	\$9,883,954	
E	F	2002N	PARK SPRINGS	PLEASANT RIDGE	PLEASANT RIDGE	PLEASANT RIDGE	0.28	4 D	50%	\$38,484	\$119,239	\$828,708	\$22,125	\$0	\$1,006,556	\$665	
E	H	2002N	SUBLETT RD	US 287	US 287	US 287	0.19	4 D	50%	\$190,000	\$1,500,000	\$1,500,000	\$0	\$0	\$3,190,000	\$451	
Sub-total SA E																	
F	G	2002N	MATLOCK RD	ARKANSAS LN	MAYFIELD	MAYFIELD	1.05	2 D	50%	\$26,430	\$45,540	\$1,762,200	\$160,000	\$0	\$2,232,070	\$1,247	
F	G	2002N	MATLOCK RD	MAYFIELD	ARBROOK	ARBROOK	0.38	2 D	50%	\$52,883	\$17,135	\$277,881	\$22,109	\$0	\$369,818	\$451	
F	G	15R	PLEASANT RIDGE	PARK SPRINGS	BOWEN RD	BOWEN RD	1.04	4 D	100%	\$148,049	\$419,443	\$6,037,729	\$0	\$0	\$6,599,221	\$2,471	
F	G	15N	COLLINS ST	ARBROOK BLVD	IH-20	IH-20	0.36	2 D	50%	\$58,600	\$0	\$521,400	\$40,000	\$0	\$620,000	\$428	
F	F	15N	COLLINS ST	BARDIN RD	GREEN OAKS BLVD	GREEN OAKS BLVD	1.67	2 D	100%	\$412,500	\$0	\$2,722,000	\$200,000	\$0	\$3,334,500	\$1,984	
F	F	15N	CENTER	EMBERCREST	EMBERCREST	EMBERCREST	0.34	4 D	100%	\$650,000	\$3,000,000	\$4,300,000	\$160,000	\$0	\$8,110,000	\$8,111,616	
F	F	15N	MATLOCK RD	BARDIN RD	CRAVEN PARK	CRAVEN PARK	0.63	4 U	100%	\$1,287,000	\$4,400,000	\$3,800,000	\$80,000	\$0	\$9,870,000	\$2,303	
F	F	15R	COOPER ST	MAYFIELD	GREEN OAKS BLVD	GREEN OAKS BLVD	0.74	2 D	100%	\$21,445	\$77,685	\$1,263,000	\$320,19	\$0	\$1,472,000	\$1,758	
F	F	15R	GREEN OAKS BLVD	COOPER ST	COOPER ST	COOPER ST	0.10	1 D	100%	\$63,389	\$0	\$626,696	\$3,650	\$0	\$693,705	\$85	
F	F	97N	BARDIN RD	PARK SPRINGS BLVD	WILLOW RIDGE	WILLOW RIDGE	0.30	4 D	100%	\$1,763,300	\$2,550,000	\$1,320,000	\$80,000	\$0	\$4,126,300	\$1,425	
F	F	93R	BARDIN RD	MANFIELD	BOWEN	BOWEN	0.61	4 D	100%	\$0	\$1,259,019	\$9,200,000	\$68,000	\$0	\$11,237,019	\$2,898	
F	F	2002N	BARDIN RD	BOWEN	RUSH CREEK	RUSH CREEK	0.34	4 D	100%	\$1,000,000	\$494,239	\$9,200,000	\$0	\$0	\$10,694,239	\$1,616	
F	F	93N	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	SUBLETT RD	0.75	4 D	50%	\$304,184	\$339,931	\$2,294,843	\$0	\$0	\$2,938,958	\$1,782	
F	F	2002N	PARK SPRINGS	PLEASANT RIDGE	PLEASANT RIDGE	PLEASANT RIDGE	0.28	4 D	50%	\$38,484	\$119,239	\$828,708	\$22,125	\$0	\$1,006,556	\$665	
F	F	93R	ARBROOK RD	MATLOCK RD	MATLOCK RD	MATLOCK RD	1.14	4 D	50%	\$0	\$26,311	\$514,307	\$0	\$0	\$540,618	\$2,708	
F	F	93R	BARDIN RD	GREEN HOLLOW DR	E. OF MATLOCK	E. OF MATLOCK	1.14	4 D	50%	\$0	\$68,523	\$322,884	\$0	\$0	\$391,417	\$5,417	
F	I	97N	CRAVENS PARK	MATLOCK RD	SILCO RD	SILCO RD	0.15	4 U	50%	\$173,480	\$1,489,000	\$1,000,000	\$100,000	\$0	\$1,732,480	\$1,371	
Sub-total SA F																	
															\$1172	\$30,332	\$68,761,839

APPENDICES

2016 Arlington Roadway Impact Fee Study Update Roadway Capital Improvements Plan

2015 Serv Area	Shared Svc Area	CP Orig	Roadway	From	To	No. of Lanes	Type	Pct. In Serv Area	Engineering	Roadway Project Costs			Signal	Total Project Cost	Study Update Cost	Serv Area Total Cost	
										ROW	Construction	Signal					
G	F	93R	ARBROOK BLVD	MATLOCK RD	COLLINS ST	1.14	4-D	50%	\$0	\$26,311	\$514,307	\$0	\$540,618	\$2,708	\$543,326		
G	G	2002N	ARBROOK BLVD	COLLINS	NEW YORK	0.83	4-D	100%	\$3,771	\$61,247	\$2,024,138	\$62,820	\$2,151,976	\$3,944	\$2,155,920		
G	G	97N	ARBROOK BLVD	NEW YORK	SH 360	1.09	4-D	100%	\$4,610	\$74,858	\$2,473,945	\$0	\$2,553,413	\$5,179	\$2,558,592		
G	G	15N	COLLINS ST	MAYFIELD RD	ARBROOK BLVD	0.54	2-D	100%	\$175,800	\$0	\$1,564,200	\$160,000	\$1,900,000	\$1,283	\$1,901,283		
G	F	15N	COLLINS ST	ARBROOK BLVD	IH 20	0.36	2-D	50%	\$58,600	\$0	\$521,400	\$40,000	\$620,000	\$428	\$620,428		
G	F	15N	COLLINS ST	ARBROOK BLVD	GREEN OAKS BLVD	1.67	2-D	50%	\$142,500	\$0	\$2,725,500	\$200,000	\$3,335,000	\$1,984	\$3,336,984		
G	F	15N	COLLINS ST	ARBROOK BLVD	SUBLETT RD	0.52	2-D	50%	\$132,000	\$0	\$871,200	\$80,000	\$1,083,200	\$618	\$1,083,818		
G	F	2002N	MATLOCK RD	ARKANSAS LN	MAYFIELD	1.05	2-D	50%	\$264,330	\$45,540	\$1,762,200	\$160,000	\$2,232,070	\$1,247	\$2,233,317		
G	F	2002N	MATLOCK RD	MAYFIELD	ARBROOK	0.38	2-D	50%	\$52,883	\$17,135	\$77,691	\$22,109	\$99,818	\$451	\$97,269		
G	G	93R	NEW YORK AVE	MAYFIELD	ARBROOK	0.47	4-D	100%	\$0	\$13,104	\$870,790	\$0	\$1,083,894	\$2,233	\$1,086,127		
G	G	93R	NEW YORK AVE	ARBROOK BLVD	IH 20	0.10	4-D	100%	\$0	\$87,296	\$32,546	\$0	\$119,842	\$475	\$120,317		
S	S	97N	BARDIN RD	NEW YORK AVE	SH 360	1.02	4-D	100%	\$0	\$0	\$2,246,725	\$0	\$2,246,725	\$4,847	\$2,251,572		
Sub-total SA G									\$1,104,494	\$905,491	\$15,907,642	\$724,929	\$18,236,556	25,397	18,261,953		
H	F	15R	GREEN OAKS BLVD	COOPER ST	TURNER WARNELL	0.10	1-D	50%	\$63,359	\$0	\$826,696	\$3,650	\$693,705	\$137	\$693,842		
H	H	15N	MATLOCK RD	GREEN OAKS BLVD	TURNER WARNELL	3.13	2-D	100%	\$1,806,750	\$602,250	\$11,683,650	\$1,120,000	\$15,212,650	\$7,436	\$15,220,086		
H	E	15N	TURNER WARNELL	RUSSELL CURRY	US 287	0.52	4-D	100%	\$387,000	\$2,666,000	\$2,924,000	\$0	\$5,977,000	\$1,235	\$5,978,235		
H	F	2002N	SUBLETT RD	US 287	JOPLIN (W. City Limits)	0.19	4-D	50%	\$180,000	\$1,600,000	\$1,500,000	\$0	\$3,180,000	\$451	\$3,180,451		
H	F	93N	BOWEN RD	GREEN OAKS BLVD	SUBLETT RD	0.75	4-D	50%	\$304,184	\$339,931	\$2,294,843	\$0	\$2,938,958	\$1,782	\$2,940,740		
H	H	2002N	TURNER WARNELL	COOPER ST	MATLOCK RD	1.54	4-D	100%	\$1,628,570	\$0	\$12,367,000	\$240,000	\$14,235,570	\$7,308	\$14,242,878		
Sub-total SA H									\$4,379,863	\$5,108,181	\$31,396,189	\$1,363,650	\$42,247,883	18,350	\$42,266,233		
I	I	2002N	COLLINS	SOUTHEAST PKWY	MANSFIELD WEBB	0.90	2-D	100%	\$418,048	\$119,273	\$4,991,907	\$0	\$5,529,228	\$2,148	\$5,531,376		
I	I	2002N	COLLINS	SOUTHEAST PKWY	MANSFIELD WEBB	0.90	2-D	100%	\$214,400	\$0	\$5,494,000	\$320,000	\$6,028,400	\$2,148	\$6,030,548		
I	I	97N	COLLINS	MANSFIELD-WEBB	WEBB FERRELL	0.47	2-D	100%	\$234,107	\$66,793	\$2,626,096	\$0	\$3,126,996	\$1,117	\$3,128,113		
I	I	97N	COLLINS	MANSFIELD-WEBB	WEBB FERRELL	0.47	2-D	100%	\$680,050	\$920,750	\$4,336,250	\$160,000	\$5,989,050	\$1,117	\$6,000,167		
I	I	97N	COLLINS	WEBB FERRELL	RAGLAND	1.65	2-D	100%	\$183,941	\$52,480	\$2,296,884	\$0	\$2,523,305	\$3,920	\$2,527,225		
I	I	97N	COLLINS	WEBB FERRELL	RAGLAND	1.65	2-D	100%	\$1,862,950	\$1,524,250	\$8,056,750	\$320,000	\$11,663,950	\$3,920	\$11,667,870		
I	I	97N	COLLINS	WEBB FERRELL	RAGLAND	1.14	4-D	100%	\$860,000	\$1,500,000	\$5,681,806	\$80,000	\$8,141,806	\$5,417	\$8,147,223		
I	G	15N	COLLINS	GREEN OAKS BLVD	SUBLETT RD	0.52	2-D	50%	\$132,000	\$0	\$871,200	\$80,000	\$1,083,200	\$618	\$1,083,818		
I	I	15N	COLLINS	SUBLETT RD	SUBLETT RD	0.26	2-D	100%	\$132,000	\$0	\$871,200	\$160,000	\$1,163,200	\$618	\$1,163,818		
I	I	15N	MANSFIELD WEBB	SILO	COLLINS	0.76	4-U	100%	\$330,000	\$170,000	\$4,800,000	\$200,000	\$5,700,000	\$2,778	\$5,702,778		
I	I	15N	MANSFIELD WEBB	COLLINS	NEW YORK	0.80	4-U	100%	\$330,000	\$920,000	\$4,700,000	\$360,000	\$6,510,000	\$2,924	\$6,512,924		
I	I	15N	DEBBIE LN	W CITY LIMITS	E CITY LIMITS	1.52	4-D	100%	\$1,328,600	\$920,000	\$8,844,000	\$320,000	\$10,490,600	\$7,222	\$10,497,822		
I	F	97N	GRAVENS PARK	MATLOCK RD	SILO RD	0.75	4-U	50%	\$173,490	\$15,754	\$1,448,000	\$100,000	\$1,738,244	\$1,371	\$1,739,615		
I	I	97N	SILO RD	NATHAN LOWE	LYNN CREEK	0.96	4-U	100%	\$440,608	\$36,987	\$3,402,000	\$160,000	\$4,039,595	\$3,509	\$4,043,104		
I	I	97N	SILO RD	LYNN CREEK	HARRIS	0.91	4-U	100%	\$76,909	\$63,880	\$3,165,713	\$0	\$3,306,502	\$3,326	\$3,309,828		
I	I	97N	SILO RD	HARRIS	MANSFIELD WEBB	0.23	4-U	100%	\$16,882	\$14,023	\$94,913	\$0	\$725,818	\$841	\$726,659		
I	I	97N	SOUTHEAST PKWY	SUBLETT	COLLINS	0.76	4-U	100%	\$51,790	\$155,998	\$2,820,458	\$0	\$3,028,246	\$2,778	\$3,031,024		
I	I	97N	SOUTHEAST PKWY	COLLINS	NEW YORK	0.76	4-U	100%	\$49,760	\$149,891	\$2,709,652	\$0	\$2,909,493	\$2,778	\$2,912,271		
I	I	97N	NEW YORK AVE	WEBB-LYNN RD	SH 360	0.45	4-U	100%	\$537,611	\$3,500,000	\$3,100,000	\$0	\$7,087,611	\$1,645	\$7,089,256		
Sub-total SA I									\$7,871,146	\$9,060,069	\$71,104,029	\$2,260,000	\$90,295,244	\$6,192	\$90,345,436		
J	J	NO PROJECTS IN SERVICE AREA J													\$0	\$0	\$0
Sub-total SA J									\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Totals:									\$3,720,258	\$5,162,261	218,341,708	6,734,600	313,956,827	\$200,000	314,156,827		
Totals:									\$33,720,258	\$33,720,258	\$33,720,258	\$33,720,258	\$33,720,258	\$33,720,258	\$33,720,258		
Totals:									\$55,162,261	\$55,162,261	\$55,162,261	\$55,162,261	\$55,162,261	\$55,162,261	\$55,162,261		
Totals:									\$218,341,708	\$218,341,708	\$218,341,708	\$218,341,708	\$218,341,708	\$218,341,708	\$218,341,708		
Totals:									\$6,734,600	\$6,734,600	\$6,734,600	\$6,734,600	\$6,734,600	\$6,734,600	\$6,734,600		
Totals:									\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000		
Totals:									\$90,295,244	\$90,295,244	\$90,295,244	\$90,295,244	\$90,295,244	\$90,295,244	\$90,295,244		
Totals:									\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Totals:									\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Totals:									\$313,956,827	\$313,956,827	\$313,956,827	\$313,956,827	\$313,956,827	\$313,956,827	\$313,956,827		
Totals:									\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000		
Totals:									\$314,156,827	\$314,156,827	\$314,156,827	\$314,156,827	\$314,156,827	\$314,156,827	\$314,156,827		

Totals:

- Engineering Cost
- Right-of-Way Cost
- Construction Cost
- Signal Cost
- Finance Cost

TOTAL NET COST \$313,956,827
 Future Impact Fee Update Cost** \$200,000

TOTAL IMPLEMENTATION COST \$314,156,827

Notes:

** Cost for (2) 5 year updates

APPENDIX F: ROADWAY SERVICE AREA ANALYSIS
SUMMARY

APPENDICES

2016 Arlington Roadway Impact Fee Service Area Analysis Summary

	1	2	3	4	5	6	7	8	9	10	11	12
2016 Service Area	Capacity Supplied by CIP (veh-mi)	Existing Utilization	Existing Serv Area Deficiencies	Net Capacity Supplied by CIP	Total Project Cost of CIP	Cost of Net Capacity Supplied	Cost to Meet Existing Utilization	Projected 10yr Demand (veh-miles)	Pct. of CIP Attributable to New Dev. (10-yr)	Cost Attributable to New Dev.	Actual Cost per Service Unit (veh-mi)	Cost per Service Unit @ 50% State Mandate
A	9,279	4,867	0	4,412	\$8,296,252	\$3,944,620	\$4,351,631	7,777	100.0	\$3,944,620	\$506.00	\$253.00
B	9,750	4,806	1,022	3,922	\$19,648,320	\$7,904,454	\$11,743,866	11,066	100.0	\$7,904,454	\$714.00	\$357.00
C	14,891	2,509	560	11,822	\$32,195,345	\$25,560,574	\$6,634,771	20,508	100.0	\$25,560,574	\$1,246.00	\$623.00
D	0	0	1,204	(1,204)	\$0	\$0	\$0	2,885	100.0	\$0	\$0.00	\$0.00
E	7,518	1,513	1,355	4,649	\$34,383,450	\$21,265,320	\$13,118,129	2,576	55.4	\$11,781,115	\$4,572.00	\$2,286.00
F	16,597	4,186	5,702	6,709	\$68,781,839	\$27,795,101	\$40,986,737	7,619	100.0	\$27,795,101	\$3,648.00	\$1,824.00
G	13,897	3,831	2,226	7,840	\$18,281,953	\$10,302,080	\$7,959,873	8,733	100.0	\$10,302,080	\$1,178.00	\$589.00
H	10,041	2,358	2,009	5,673	\$42,286,233	\$23,881,871	\$18,384,362	6,205	100.0	\$23,881,871	\$3,846.00	\$1,924.00
I	27,464	7,718	1,604	18,142	\$90,345,436	\$59,679,590	\$30,665,846	3,452	19.0	\$11,356,439	\$3,288.00	\$1,644.00
J	0	0	0	0	\$0	\$0	\$0	4,243	100.0	\$0	\$0.00	\$0.00
Totals	109,437	31,789	15,682	61,967	314,158,827	\$177,886,320	\$196,272,507	75,074		\$122,526,255		

- TOTAL VEHMI OF CAPACITY SUPPLIED BY CIP (TVMCAP)
- TOTAL VEHMI OF EXISTING DEMAND (VMEXT)
- TOTAL VEHMI OF EXISTING DEFICIENCIES (VMDEF)
- NET AMOUNT OF ROADWAY CAPACITY SUPPLIED (NVWCAP) =

$$NVWCAP = TVMCAP - VMEXT - VMDEF$$
- TOTAL COST OF CIP WITHIN STUDY AREA (TVMCOST)
- COST OF NET CAPACITY SUPPLIED (NCVMCAP) =

$$NCVMCAP = (NVWCAP / TVMCAP) * TVMCOST$$
- COST TO MEET EXISTING NEEDS AND USAGE (EXCOST) =

$$EXCOST = TVMCOST - NVWCAP$$
- TOTAL VEHMI OF NEW DEMAND OVER TEN YEARS (NEWDEMT)
- PERCENT OF CIP ATTRIBUTABLE TO NEW DEVELOPMENT (NPCNT) =

$$\text{IF } NEWDEMT > NVWCAP, NPCNT = 100\%$$

$$\text{IF } NEWDEMT \leq NVWCAP, NPCNT = (NEWDEMT / NVWCAP) * 100$$
- COST OF CIP ATTRIBUTABLE TO NEW DEVELOPMENT (NCVWDEMT) =

$$NCVWDEMT = (NEWDEMT / NVWCAP) * NVWCAP$$
- MAXIMUM COST PER SERVICE UNIT (MAXFEE) =

$$MAXFEE = NCVWDEMT / NEWDEMT$$
- STATE MANDATED MAXIMUM COST PER SERVICE UNIT (50%)

APPENDIX G: ROADWAY TRIP LENGTH LOCALIZATION

APPENDICES

2014 Vehicle Miles of Travel (VMT)

Functional Description	AM	PM	OP	Daily	CLASS	Federal	Local
1 FREEWAYS		875,279.27			Federal	875,279.27	-
2 PRINCIPAL ARTERIALS		343,295.96			Local	-	343,295.96
3 MINOR ARTERIALS		361,662.93			Local	-	361,662.93
4 COLLECTORS		154,889.33			Local	-	154,889.33
6 FREEWAY RAMPS		69,901.09			Federal	69,901.09	-
7 FRONTAGE ROADS		67,575.90			Local	-	67,575.90
8 HOV LANES		12,828.42			Federal	12,828.42	-
Total Roadway Network		1,885,432.90				958,008.78	927,424.12

Pct Local
49.2%

2035 Vehicle Miles of Travel (VMT)

Functional Description	AM	PM	OP	Daily	CLASS	Federal	Local
1 FREEWAYS		1,119,443.05			Federal	1,119,443.05	-
2 PRINCIPAL ARTERIALS		424,063.74			Local	-	424,063.74
3 MINOR ARTERIALS		462,208.66			Local	-	462,208.66
4 COLLECTORS		229,453.23			Local	-	229,453.23
6 FREEWAY RAMPS		104,329.36			Federal	104,329.36	-
7 FRONTAGE ROADS		96,535.19			Local	-	96,535.19
8 HOV LANES		7,660.35			Federal	7,660.35	-
Total Roadway Network		2,443,693.58				1,231,432.76	1,212,260.82

Pct Local
49.6%

Source: NCTCOG Travel Demand Model travel statistics

APPENDIX H: LAND USE ASSUMPTIONS REPORT



Innovative approaches
Practical results
Outstanding service

TECHNICAL REPORT

Land Use Assumptions for Water, Wastewater, and Roadway Impact Fee Study Report



City of Arlington, Texas

December 21, 2015

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1. PURPOSE

Chapter 395 of the Texas Local Government Code prescribes the process by which cities in Texas must formulate impact fees. An initial step in the update process is the establishment of land use assumptions which address growth and development for a ten-year planning period (TLGC Section 395.001(5)) for the years 2015-2025. These land use assumptions, which also include population and employment projections, will become the basis for the preparation of impact fee capital improvement plans for water, wastewater, and roadway facilities.

Statutory requirements mandate that impact fees be updated (at least) every five years. This report, in conjunction with the water, wastewater, and roadway capital improvements plans, forms the initial key components for the update of Arlington's impact fee program.

To assist the City of Arlington in determining the need and timing of capital improvements to serve future development, a reasonable estimation of future growth is required. The purpose of this report is to formulate growth and development projections based upon assumptions pertaining to the type, location, quantity and timing of various future land uses within the community and to establish and document the methodology used for preparing the growth and land use assumptions.

Land Use Assumptions Report Elements

This report contains the following components:

- **Methodology** - Explanation of the general methodology used to prepare the land use assumptions.
- **Data Collection Zones and Service Areas** - Explanation of data collection zones (traffic survey zones), and division of the City into impact fee service areas for roadway, water and wastewater facilities.
- **Base Year Data** – Historical population trends for Arlington and information on population, employment, and land use for Arlington as of 2015 for each capital service area.
- **Ten-Year Growth Assumptions** - Population and employment growth assumptions for ten years by service areas.
- **Summary** - Brief synopsis of the land use assumptions report.

2. METHODOLOGY

Based upon the growth assumptions and the capital improvements needed to support growth, it is possible to develop an impact fee structure which fairly allocates improvement costs to growth areas in relationship to their impact upon the entire infrastructure system. The data in this report has been formulated using reasonable and generally accepted planning principles for the preparation of impact fee systems in Texas.

These land use assumptions and future growth projections take into consideration several factors influencing development patterns, including the following:

- The character, type, density, and quantity of existing development
- Anticipated future land use (City's Future Development Areas Map and text in the Comprehensive Plan)
- Availability of land for future expansion
- Current and historical growth trends of population and development within the City
- Location and configuration of vacant land
- Known or anticipated development projects as defined by City Staff
- Data established from the City's 2014 Water Master Plan

A series of work tasks were undertaken in the development of this report and are described below:

1. A kick-off meeting was held to describe the general methodological approach in the study. Service areas were defined for roadway, water, and wastewater impact fee systems.
2. Current and historic data of population, housing, and employment was collected from the City and other acceptable sources to serve as a basis for future growth.
3. A base year (2015) estimate was developed using City building permit data, U.S. Census and periodic population, household occupancy and household size data, and employment data from the North Central Texas Council of Governments (NCTCOG).
4. A growth rate was determined based upon an analysis of data from recent building permit data, City of Arlington Master Water Plan (adopted 2014), public works data and economic data compiled by the City, past growth trends and anticipated development to occur over the next ten-year planning period. A compound annual growth rate of 0.45% was recommended and is approved by the Capital Improvements Program Advisory Committee (CIPAC) as part of these land use assumptions.
5. Demographics from the City's Master Water Plan and NCTCOG's travel model were obtained to serve as a basis for correlating and allocating projected ten-year growth estimates. Adjustments were also made to conform to the 2015 Arlington Comprehensive Plan.

6. A ten-year projection (2025) was prepared using the approved growth rate and the city models for allocations of population and employment data. Demographic growth was compared to the previous set of land use assumptions for consistency. Adjustments were then made to consider known or anticipated development activity within the ten-year planning period.
7. Base and ten-year demographics were prepared for the respective service areas for water, wastewater, and roads.

3. DATA COLLECTION ZONES & SERVICE AREA MAPS

Data Collection Zones

Data collection zones used for the land use assumptions are based upon small geographic areas known as traffic survey zones (TSZs). These zones, established by the North Central Texas Council of Governments (NCTCOG), cover the Metropolitan Planning Organization's (MPO) planning area and serve as the basis for socio-demographic data used in the regional travel forecast model. Traffic survey zones were originally formulated on the basis of homogeneity and traffic generation potential using major arterials, creeks, railroad lines and other physical boundaries for delineation.

Employment demographics will be compiled by TSZs and then aggregated into larger areas to form the service areas for impact fees. Population demographics will be compiled using the model from the 2014 Water Master Plan, broken down by TSZ, with adjustments made to update the demographics to base year (2015).

Service Areas

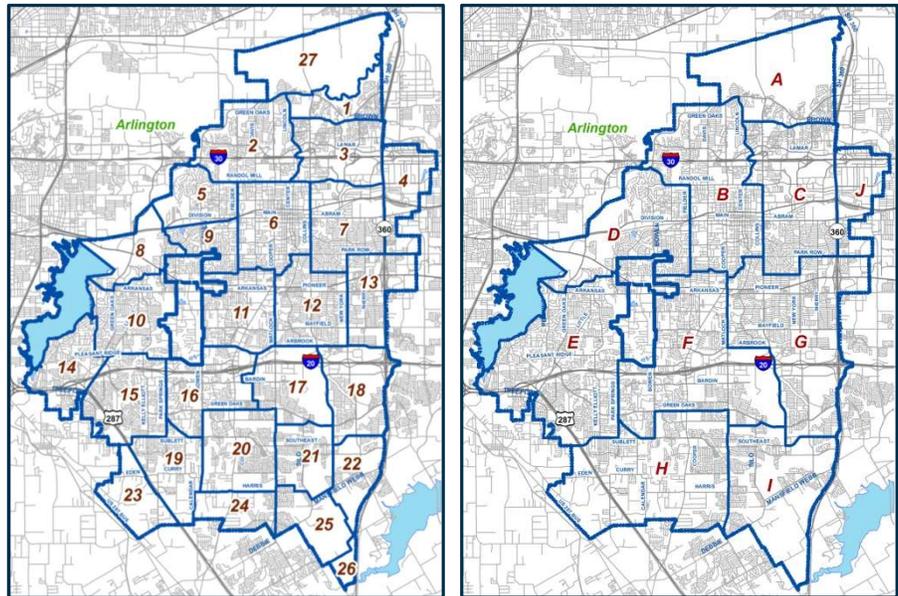
Chapter 395 requires that service areas be defined for impact fees to ensure that facility improvements are located in close proximity to areas generating needs. Legislative requirements stipulate that roadway service areas be limited to a 6-mile maximum and must be located within the current city limits. Transportation service areas are different from water and wastewater systems, which can include the city limits and its extra-territorial jurisdiction (ETJ) or other defined service area. This is primarily because roadway systems are "open" to both local and regional (non-city) use as opposed to a defined level of utilization from residents within a water and wastewater system. The result is that new development can only be assessed an impact fee based on the cost of necessary capital improvements within that service area. An analysis including the ETJ was conducted in order to consider provision of water and wastewater service areas.

Figure 1 illustrates the water service area for the Arlington Impact Fee study. This area includes the existing city limits, a portion of Tarrant County in the southwestern portion of the City, and the City of Dalworthington Gardens. **Figure 2** shows the wastewater service area. The wastewater service area

incorporates the customers within Arlington’s city limits as well as portions of Mansfield, Kennedale, Dalworthington Gardens, and Pantego.

Originally, Arlington’s service areas for roads were established based on a 3-mile limit in the City’s initial impact fee program in 1989. As a result of changes in legislation, consideration for consolidation of roadway service areas to a 6-mile structure was undertaken to allow for more flexibility in the use of program funds for impact fee projects.

Roadway Service Areas	
2015 Zones	Previous Zones
A	1, 27
B	2, 6
C	3, 7
D	5, 8, 9
E	10, 14, 15
F	11, 16, 17
G	12, 13, 18
H	19, 20, 23, 24
I	21, 22, 25, 26
J	4



Ten service areas (A through J) have been created as a result of zonal restructuring and fall within the 6-mile mandated limits. The revised service areas for roadways are illustrated in **Figure 3**.

FIGURE 2 CITY OF ARLINGTON EXISTING WASTEWATER SERVICE AREA LEGEND

-  Wastewater Service Area
-  Arlington City Limit
-  Other City Limit
-  Lake
-  Creek
-  Highway
-  Road
-  Railroad

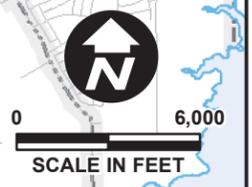
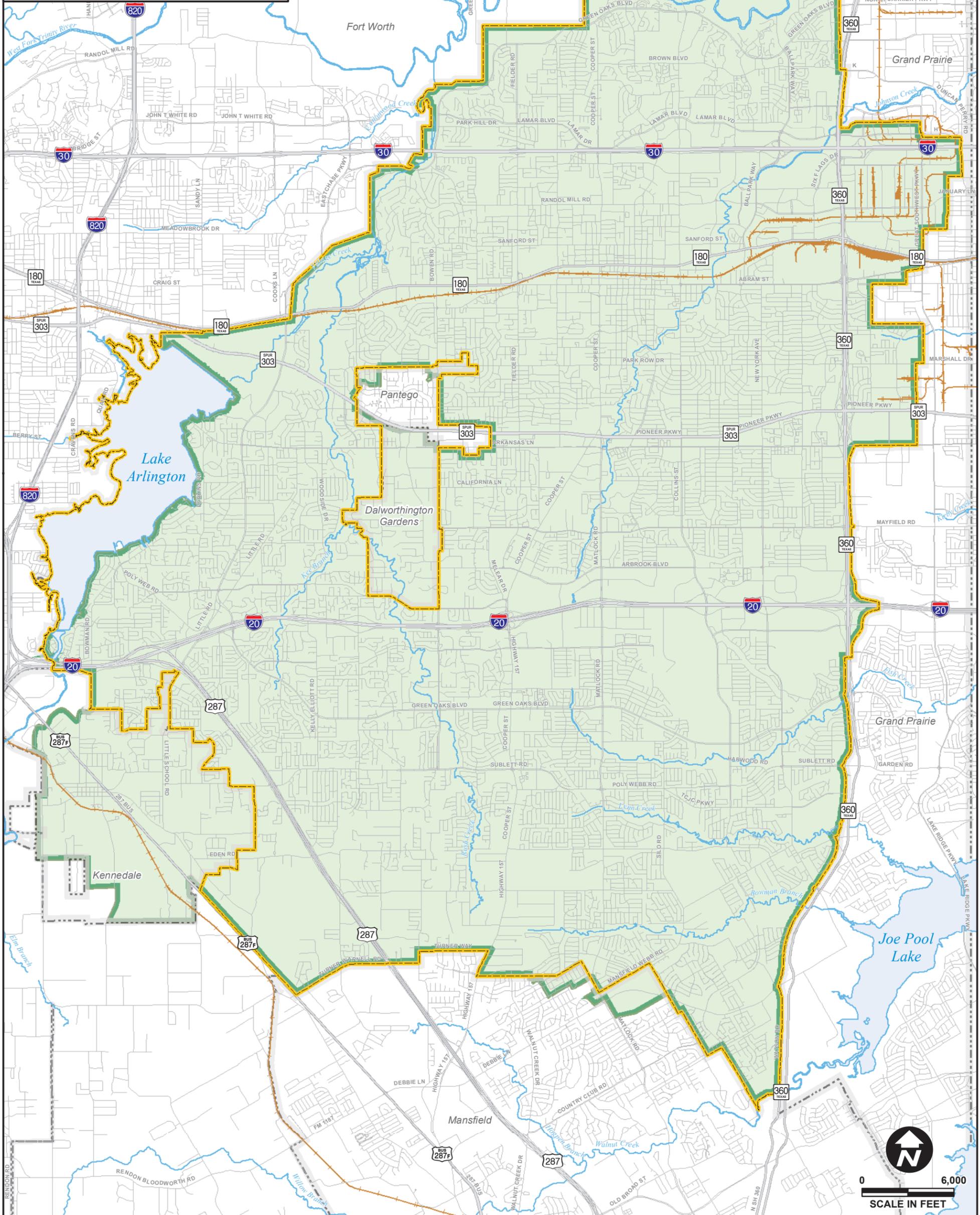
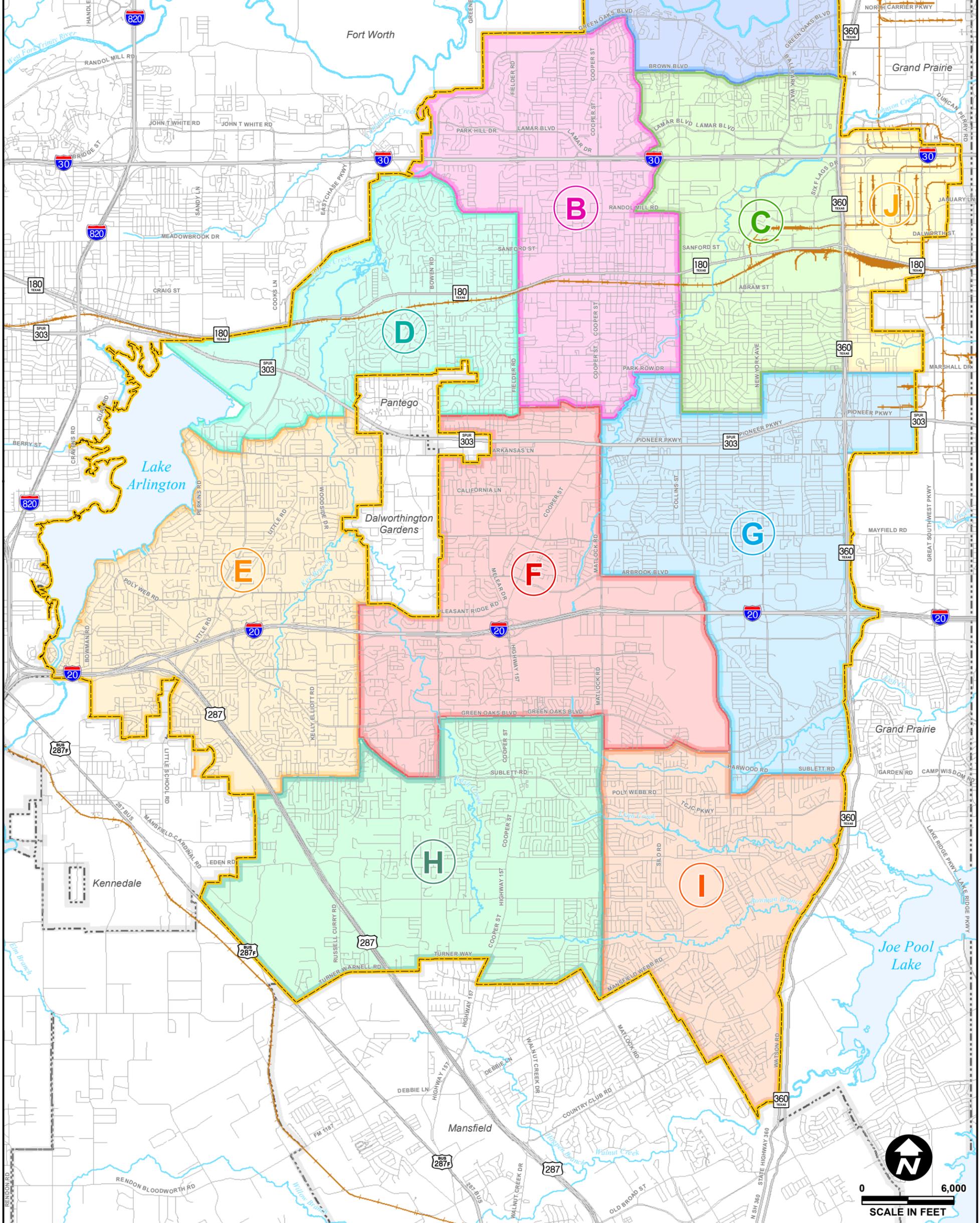


FIGURE 3 CITY OF ARLINGTON ROADWAY SERVICE AREAS LEGEND

ROADWAY SERVICE AREAS			
	A		F
	B		G
	C		H
	D		I
	E		J

- Arlington City Limit
- Other City Limit
- Lake
- Creek
- Highway
- Road
- Railroad



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Data Format

The existing database, as well as the future projections, were formulated according to the following format and categories:

Service Area	Correlates to the proposed roadway, water, and wastewater service areas identified on the attached maps.
Traffic Survey Zone (TSZ)	Geographic areas established by the NCTCOG Traffic Model which are used for data collection purposes and termed TSZs within this report.
Housing Units (2015)	All living units including single-family, duplex, multi-family and group quarters. The number of existing housing units has been shown for the base year (2015).
Housing Units (2025)	Projected housing units by service zone for 2025 (ten-year growth projections).
Population (2015)	Existing population for the base year (2015).
Population (2025)	Projected population by service zone for the year 2025 (ten-year growth projections).
Employment (2015, 2025)	<p>Employment data is aggregated to three employment sectors and include: Basic, Retail and Service. The following details which North American Industry Classification (NAIC) codes fall within each of the three sectors.</p> <ul style="list-style-type: none">▪ <u>Basic</u> (#210000 to #422999) -- Land use activities that produce goods and services such as those that are exported outside the local economy; manufacturing, construction, transportation, wholesale trade, warehousing and other industrial uses.▪ <u>Retail</u> (#440000 to #454390) -- 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, restaurants, etc.▪ <u>Service</u> (#520000 to #928199) -- Land use activities which provide personal and professional services such as financial, insurance, government, and other professional and administrative offices. <p>The NCTCOG prepares employment estimates at the TSZ level and therefore, minimal adjustments are needed.</p>

4. BASE YEAR DATA

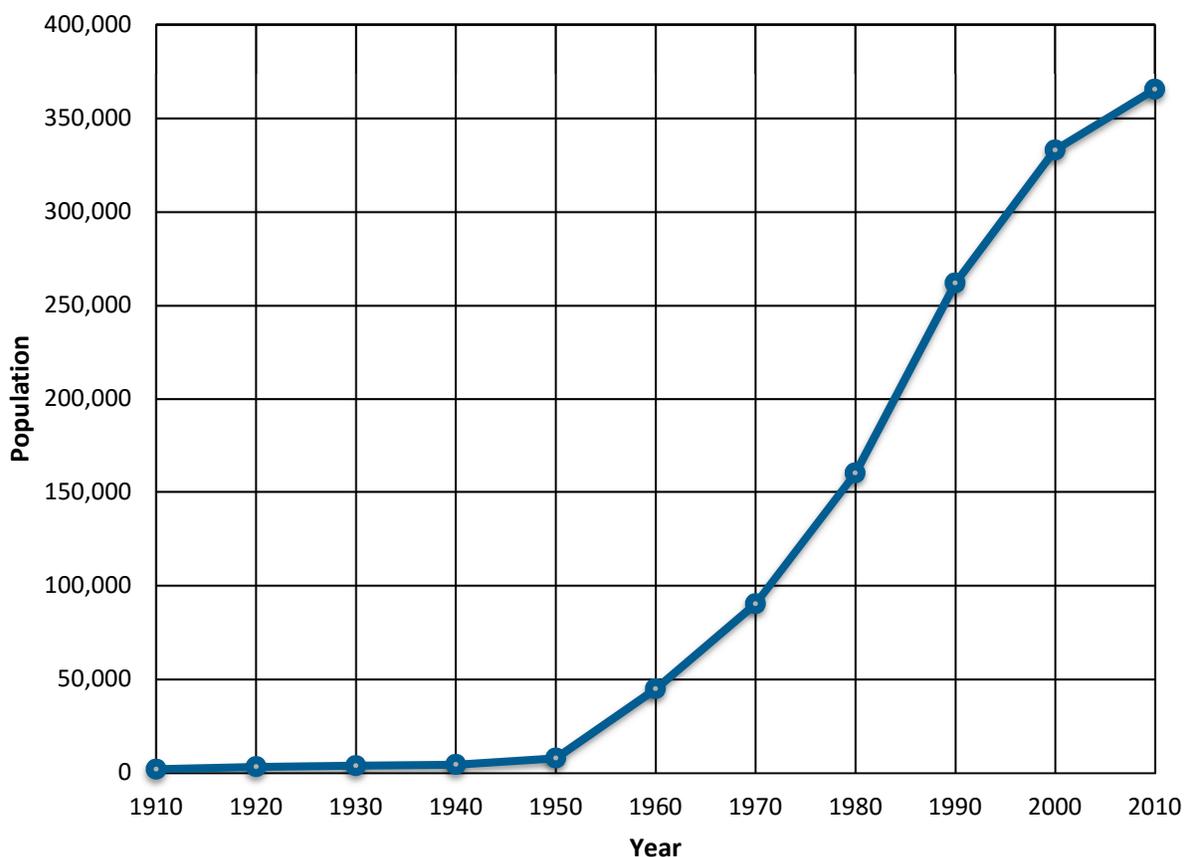
This section documents the City’s historical growth trends and data used to derive the 2015 base year population estimate for the City of Arlington. This “benchmark” information provides a starting basis of data for the ten-year growth assumptions that will be presented within the following section.

Historical Growth

Arlington is centrally located within Tarrant County between the cities of Dallas and Fort Worth. Over the past several decades, the Dallas-Fort Worth metroplex has experienced robust population and employment growth. Additionally, the close proximity to multiple aviation and large commercial developments has made the region an attractive and desirable location in which to live, work and play.

Figure 4 depicts the historic population growth for the City of Arlington.

Figure 4 – City of Arlington Historical Population Growth (U.S. Census)



With modest growth since 1910, rapid population growth began to occur in the 1950s taking the City’s population from less than 8,000 to more than 365,000 in 2010. The City has begun a general leveling off of population now as many portions of the City have matured and the City has become land locked by

other entities. As the City approaches buildout population, future growth will occur on remaining vacant land infill and urban redevelopment. The projected buildout population from the City's 2015 Comprehensive Plan is approximately 423,000.

Existing Land Use

In any evaluation and projection of future land use patterns, a documentation of existing conditions is essential. Analysis of existing land use patterns was prepared based on the 2014 Water Master Plan and Arlington's Comprehensive Plan. This also serves to document the present physical condition of the City with regard to any infrastructure deficiencies that may exist. Major land use categories were tabulated in the Comprehensive Plan for all areas of the City. **Table 1** summarizes existing land uses in the city and **Figure 5** shows Arlington's existing parcels categorized by general land use type. **Figure 6** shows the future land use of the parcels.

Table 1 – Existing Land Use (2014 Water Master Plan)

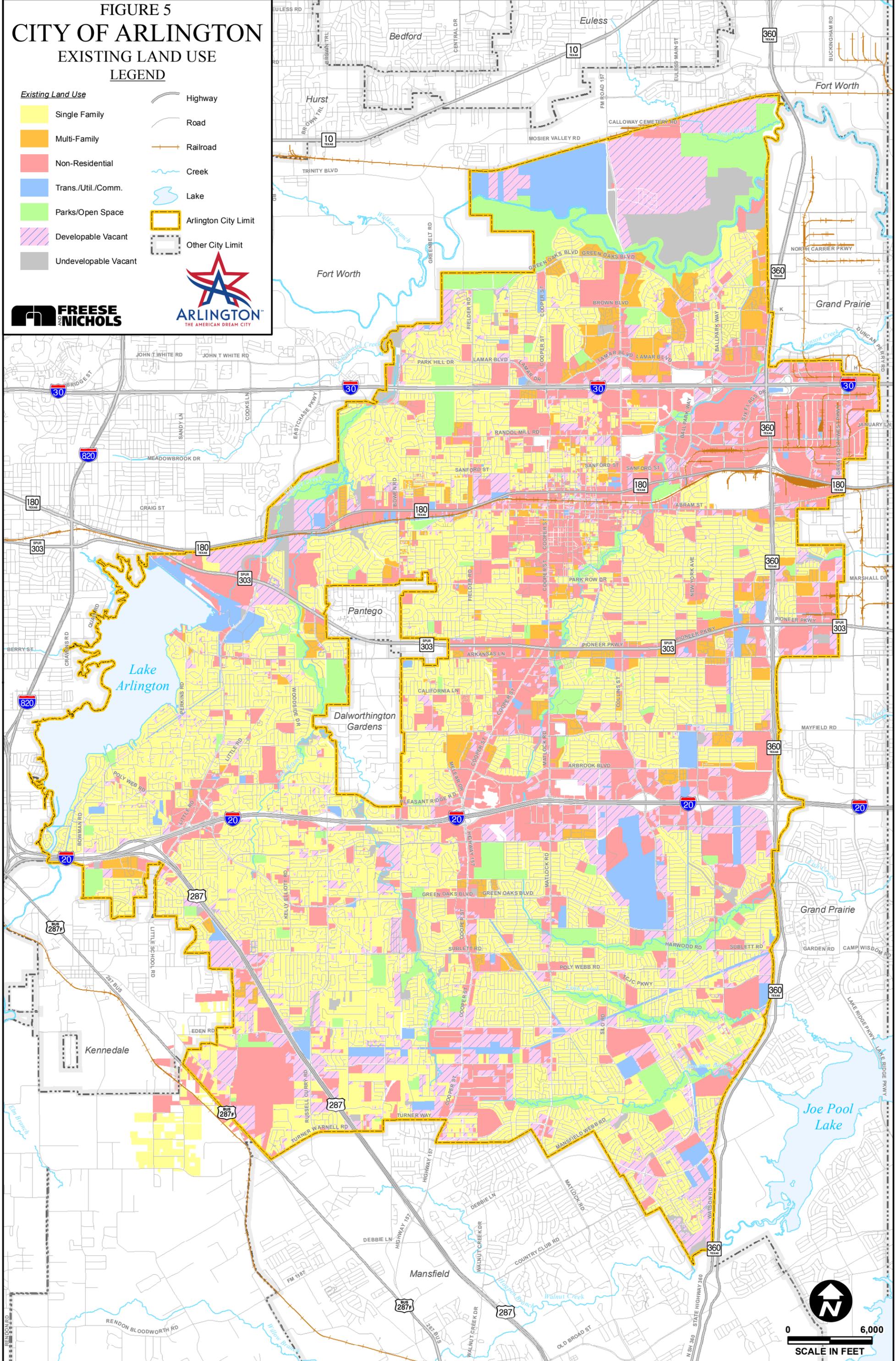
Land Use Type	Area (Acres)	Percent of Total Area
Single Family	22,094	43.45%
Multi-Family	2,373	4.67%
Non-Residential	12,242	24.08%
Trans./Util./Comm.	2,487	4.89%
Parks/Open Space	3,864	7.60%
Developable Vacant	6,332	12.45%
Undevelopable Vacant	1,454	2.86%
Total Parcel Area:	50,847	100.00%

FIGURE 5 CITY OF ARLINGTON EXISTING LAND USE LEGEND

Existing Land Use

- Single Family
- Multi-Family
- Non-Residential
- Trans./Util./Comm.
- Parks/Open Space
- Developable Vacant
- Undevelopable Vacant

- Highway
- Road
- Railroad
- Creek
- Lake
- Arlington City Limit
- Other City Limit

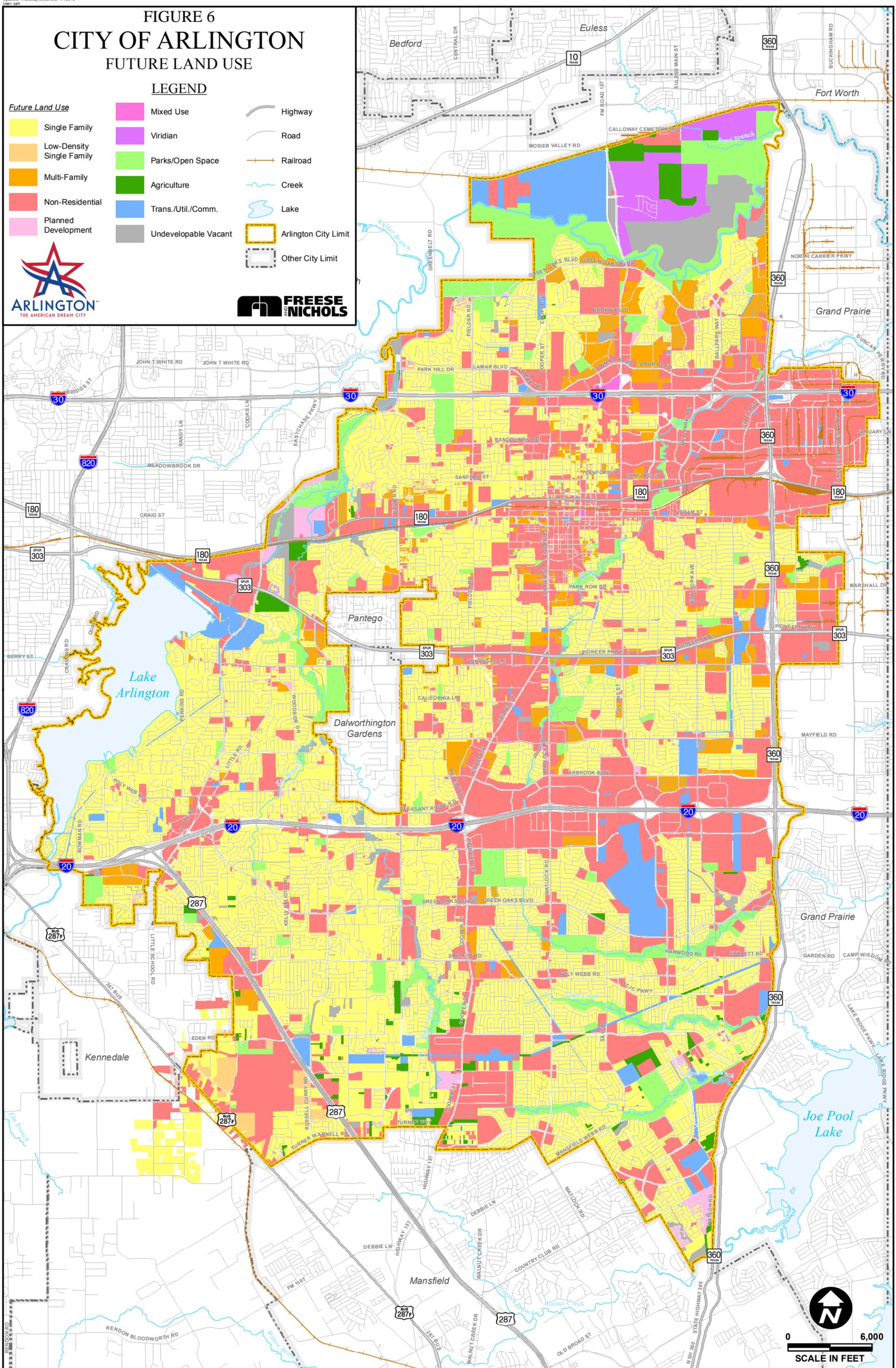


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FIGURE 6 CITY OF ARLINGTON FUTURE LAND USE

LEGEND

- | | | |
|---------------------------|----------------------|----------------------|
| Future Land Use | Mixed Use | Highway |
| Single Family | Viridian | Road |
| Low-Density Single Family | Parks/Open Space | Railroad |
| Multi-Family | Agriculture | Creek |
| Non-Residential | Trans./Util./Comm. | Lake |
| Planned Development | Undevelopable Vacant | Arlington City Limit |
| | | Other City Limit |



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Population Trends

A review of population statistics from a variety of sources was conducted to examine Arlington's growth rate recently. Data from the 2014 Water Master Plan, Arlington's Annual Growth Profile, and City permit data were reviewed to determine potential growth rates.

One method of predicting future growth is looking at past growth. Arlington, as it approaches buildout, has experienced a small amount of growth over the past decade. Past growth trends from the city's 2014 Water Master Plan (**Figure 7**) were examined in conjunction with single family new construction building permit data from the City (**Figure 8**).

Residential building permit data is also an indicator of recent growth trends. The City of Arlington has averaged 2.54 people per household over the past 10 years. Cumulative single-family dwelling units since 2006 are shown on **Figure 9**.

Figure 7 – Historical Population Growth

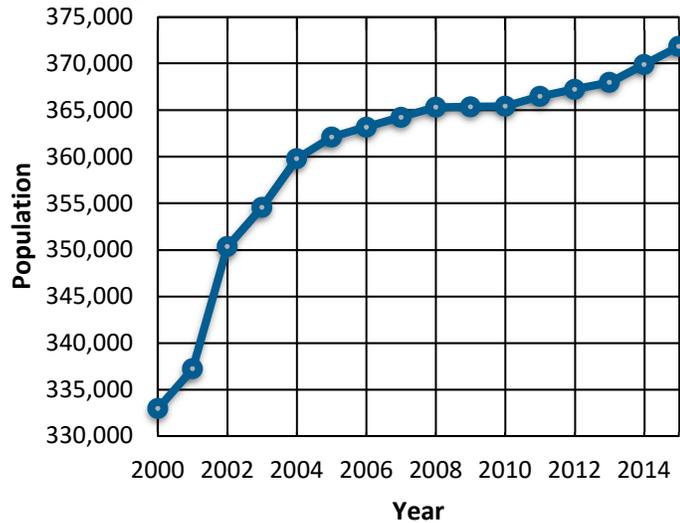


Figure 8 – New Construction Building Permits (Annual Growth Profile)

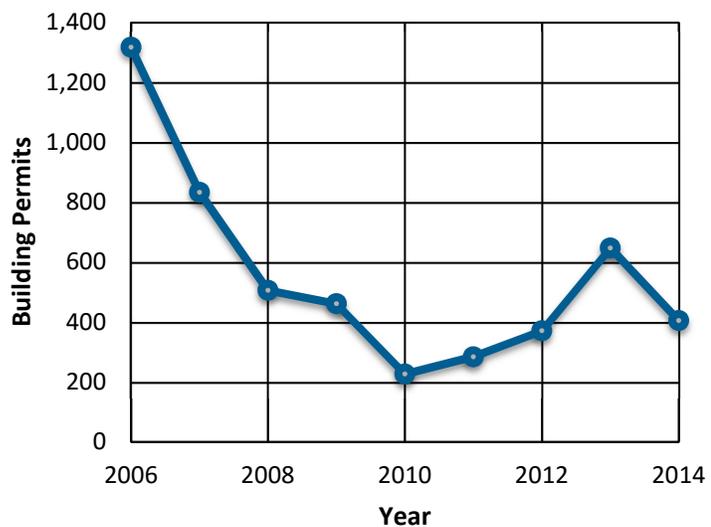
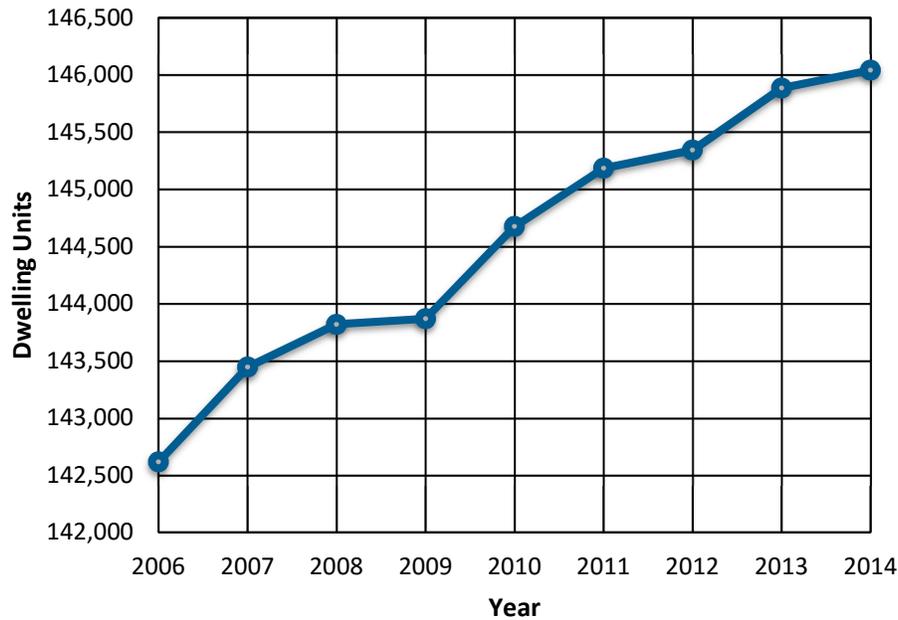


Figure 9 – 2006 to 2014 Cumulative Single Family Dwelling Units (Annual Growth Profile)



Although building permits issued decreased dramatically after 2006, the issuance increased from 2011 to 2013. The development of the Viridian community in the far northern portion of the City indicates that an increase of permits issued will remain steady for the next few years.

The population projections shown in **Table 2**, from the 2014 Water Master Plan, indicate that growth will remain small but still continue in Arlington over the next ten years.

Table 2 – Projected Population (2014 Water Master Plan)

Year	Population	Growth Rate
2013	367,994	-
2014	369,937	0.53%
2015	371,880	0.53%
2016	373,824	0.52%
2017	375,767	0.52%
2018	377,710	0.52%
2019	380,493	0.74%
2020	383,276	0.73%
2021	386,058	0.73%
2022	388,841	0.72%
2023	391,624	0.72%
Buildout	423,084	-

The City provided a population estimate of 369,306 residents in Arlington as of December 31, 2014. To determine the 2015 number, FNI utilized the projected population from the 2014 Water Master Plan as well as looking at the recent growth trends. This resulted in a population of 371,880 persons which will serve as the base residential assumption for the City of Arlington in this report. **Figure A-1** in the appendix shows the 2015 population by TSZ for the City of Arlington.

Growth Summary

Data from the 2014 Water Master Plan, Arlington’s Annual Growth Profile, and City permit data were reviewed and yielded relatively consistent results in that all showed a generally slowing growth, but also a varying compound annual growth rate over the same period. **Table 3** shows the various sources used to derive past growth rates.

Table 3 – City of Arlington Historic Compound Annual Growth Rates

Growth	CAGR
Community Development and Planning Growth Rates*	
2 Year Growth Rate (2013-2014)	0.44%
5 Year Growth Rate (2010-2014)	0.35%
10 Year Growth (2006-2014)	0.27%
Average	0.35%
Single-Family Building Permit Growth Rates**	
2 Year Growth Rate (2011-2013)	0.24%
5 Year Growth Rate (2008-2013)	0.30%
Average	0.27%
Other City Planning Document Projections	
Water Master Plan (10 Year)	0.66%

*Source: City of Arlington Annual Growth Profile

**Source: Permit Data Received from City of Arlington

2015 Population

Based on an analysis of growth rates, average rates of growth for the 10-year forecast varied between 0.27 and 0.66 percent. A 0.45 percent compound annual growth rate was determined to be an appropriate assumption for the 10-year study period with an estimated 2015 population of 371,880. This growth rate is believed to account for periods of stable growth expected to occur in the future. This rate was presented to and recommended by the CIPAC on October 21, 2015.

2015 Employment

2015 base employment data was calculated using data from the North Central Texas Council of Governments (NCTCOG). This information provided a breakout of employment by traffic survey zone (TSZ)

for 2009, 2019, and 2030. For assumption purposes, and to be consistent with the population totals, an interpolation of these numbers was calculated to derive the 2015 employment estimates by TSZ. It is important to note that the TSZs do not follow city limits in some locations, so adjustments were made based on the locations of existing land uses and upon the percentage of each TSZ located within city limits. Employment for each TSZ was broken down into basic, retail, and service uses as defined by the North American Industry Classification (NAIC) code. **Figure A-2** in the appendix shows the 2015 employment by TSZ for the City (see **Table 4**).

Table 4: Summary of Base Year (2015) Population and Employment

2015 Summary Population & Employment	
Housing Units	146,409
Population	371,880
Total Employment	172,493
<i>Basic Employment</i>	<i>34,063</i>
<i>Retail Employment</i>	<i>54,029</i>
<i>Service Employment</i>	<i>84,401</i>
Source: Freese and Nichols, Inc., NCTCOG	

6. TEN-YEAR GROWTH ASSUMPTIONS

Projected growth has been characterized in two forms: population and non-residential acreage. A series of assumptions were made to arrive at reasonable growth rates for population and employment. The following assumptions have been made as a basis from which ten-year projections could be initiated.

- Future land uses will occur based on similar trends of the past and consistent with the Future Development Areas Map and text in the Comprehensive Plan,
- The City will be able to finance the necessary improvements to accommodate continued growth, and
- Densities will be as projected in the Future Development Areas Map and details included in the City's Comprehensive Plan.

The ten-year projections are based upon the growth rate which was discussed earlier (0.45%) and considers past trends of the City.

Population 2025

The City has experienced small yet steady growth over the past decade. The City's 2000 population stood at 332,969 residents. By the end of the decade, the City of Arlington rose to 365,439 in 2010 and a current 2015 estimate of 371,880. This population growth is occurring within the context of the greater Dallas-Fort Worth metroplex, which is one of the largest regions in the nation. With a compound annual growth rate of 0.45 percent, Arlington is anticipated to grow by 17,078 persons during the 10-year planning period and increase total population to 388,958 by the year 2025. The number of dwelling units associated with this increase corresponds to 6,725 and will raise the housing stock to 153,134 units.

An additional factor affecting the overall distribution of population growth within Arlington is the planned construction of the Viridian and Arlington Commons Developments in North Arlington. The master plan for this area shows a mix of uses including single-family residential, multi-family residential, and townhomes. Viridian is currently growing at a rate faster than anywhere else in the City and development will soon break ground for Phase I of the Arlington Commons. Those two areas are the largest near-term developments for the City of Arlington. This can be seen in the concentrated growth in the north sector of the City with very little growth in the core of the community, shown in **Table 5** and **Table 6**. **Figure A-1** in the appendix shows the 2025 population by TSZ for the City of Arlington.

Table 5 – City of Arlington Projected Population and Dwelling Unit Estimations

Ten-Year Population Projection City of Arlington, Texas				
Roadway Service Area	2015		2025	
	Housing Units	Population	Housing Units	Population
A	6,715	17,056	10,158	25,801
B	15,646	39,740	17,362	44,099
C	15,003	38,108	15,013	38,133
D	10,272	26,092	10,295	26,150
E	19,848	50,415	19,978	50,744
F	16,170	41,073	16,219	41,197
G	25,794	65,517	26,330	66,879
H	17,439	44,294	17,830	45,288
I	16,178	41,092	16,604	42,174
J	3,344	8,493	3,344	8,493
City Total	146,409	371,880	153,133	388,958

Source: Freese and Nichols, Inc.

Table 6 – City of Arlington Projected Population and Dwelling Units Added

Added Population (Ten-Year) and Percentage Growth City of Arlington, Texas				
Roadway Service Area				
	Units Added	Pct. Change	Pop. Added	Pct. Change
A	3,443	51.3%	8,745	51.3%
B	1,716	11.0%	4,359	11.0%
C	10	0.1%	25	0.1%
D	23	0.2%	58	0.2%
E	130	0.7%	329	0.7%
F	49	0.3%	124	0.3%
G	536	2.1%	1,362	2.1%
H	391	2.2%	994	2.2%
I	426	2.6%	1,082	2.6%
J	0	0.0%	0	0.0%
City Total	6,724		17,078	

Source: Freese and Nichols, Inc.

Employment 2025

Employment data for the year 2025 was based upon data provided by NCTCOG. For assumption purposes, an interpolation of these numbers was calculated to derive the 2025 employment estimates per TSZ and

are shown on **Figure A-2** in the Appendix. **Table 7** shows the base year 2015 and projected 2025 employment for each service area, broken down into basic, service, and retail employment types. **Table 8** shows the net growth in each service area by employment type and the percent change over the ten-year planning period. This increase corresponds to an annual growth rate of 0.99 percent citywide. This higher growth rate of employment compared to the population can be attributed to the increased development intensity due to increased demand in Arlington as an employment center in the region.

It is important to note that TSZs do not follow city limits. As a result, additional assumptions were made based upon known or anticipated development to occur, projections of future land use needs and percentages of each TSZ located within city limits. The employment numbers on **Figure A-2** of the appendix show the derived employment of each TSZ within Arlington’s municipal boundary.

Table 7 – City of Arlington Projected Employment Estimations

Ten-Year Employment Projections City of Arlington, Texas								
Roadway Service Area	Basic Employment		Retail Employment		Service Employment		Total Employment	
	2015	2025	2015	2025	2015	2025	2015	2025
A	228	253	549	655	1,359	1,388	2,136	2,296
B	3,176	3,320	10,254	10,996	26,292	27,694	39,722	42,010
C	9,346	10,024	9,807	12,115	17,743	20,610	36,896	42,749
D	1,479	1,643	2,822	3,050	4,505	5,014	8,806	9,707
E	160	164	2,454	2,766	3,756	4,057	6,370	6,987
F	1,768	2,052	3,410	4,344	4,098	4,925	9,276	11,321
G	3,075	3,490	7,462	8,259	9,129	10,131	19,666	21,880
H	5,697	5,858	13,443	14,071	9,336	10,071	28,476	30,000
I	320	360	672	987	2,196	2,558	3,188	3,905
J	8,814	9,073	3,156	3,362	5,987	7,008	17,957	19,443
City Total	34,063	36,237	54,029	60,605	84,401	93,456	172,493	190,298

Source: Freese and Nichols, Inc., NCTCOG

Table 8 – City of Arlington Projected Employment Added

Ten-Year Employment Projections City of Arlington, Texas								
Roadway	Basic Employment		Retail Employment		Service Employment		Total Employment	
Service Area	Emp. Added	Pct. Change	Emp. Added	Pct. Change	Emp. Added	Pct. Change	Emp. Added	Pct. Change
A	25	11.0%	106	19.3%	29	2.1%	160	7.5%
B	144	4.5%	742	7.2%	1,402	5.3%	2,288	5.8%
C	678	7.3%	2,308	23.5%	2,867	16.2%	5,853	15.9%
D	164	11.1%	228	8.1%	509	11.3%	901	10.2%
E	4	2.5%	312	12.7%	301	8.0%	617	9.7%
F	284	16.1%	934	27.4%	827	20.2%	2,045	22.0%
G	415	13.5%	797	10.7%	1,002	11.0%	2,214	11.3%
H	161	2.8%	628	4.7%	735	7.9%	1,524	5.4%
I	40	12.5%	315	46.9%	362	16.5%	717	22.5%
J	259	2.9%	206	6.5%	1,021	17.1%	1,486	8.3%
City Total	2,174		6,576		9,055		17,805	

Source: Freese and Nichols, Inc., NCTCOG

7. SUMMARY

- From the 2014 Water Master Plan, approximately 72 percent of the total land within the City limits is developed, with approximately 13 percent of land within the City limits being vacant and available for future development, where infrastructure and topography permit. Approximately 15 percent of the land in Arlington is undevelopable as either right-of-way, utility easements, parks/open space or other undevelopable land types.
- The existing 2015 population for Arlington is approximately 371,880 persons, with an existing estimated employment of 172,493 jobs.
- An average annual growth rate of 0.45 percent was used to calculate the Arlington ten-year growth projections. This growth rate is based upon approved data from the 2014 Water Master Plan, the 2015 Comprehensive Plan, historical U.S. Census data, as well as building permit information received from the City since 2006 and was approved by the CIPAC on October 21, 2015.
- The ten-year (2025) population growth projection of Arlington is 388,958 persons, an increase of 17,078 persons. Employment is projected to increase by 17,805 to a total of 190,298 jobs by 2025.
- The ultimate population of Arlington is expected to be approximately 423,000 persons, per the Comprehensive Plan.
- A summary of the 2015 and 2025 demographics broken down by roadway service areas can be found on the next page.

	2015	2025	Total Increase	Percent Total Growth	Annual Growth Rate
Population					
Arlington Total	371,880	388,958	17,078	4.59%	0.45%
Service Area A	17,056	25,801	8,745	51.27%	4.23%
Service Area B	39,740	44,099	4,359	10.97%	1.05%
Service Area C	38,108	38,133	25	0.07%	0.01%
Service Area D	26,092	26,150	58	0.22%	0.02%
Service Area E	50,415	50,744	329	0.65%	0.07%
Service Area F	41,073	41,197	124	0.30%	0.03%
Service Area G	65,517	66,879	1,362	2.08%	0.21%
Service Area H	44,294	45,288	994	2.24%	0.22%
Service Area I	41,092	42,174	1,082	2.63%	0.26%
Service Area J	8,493	8,493	0	0.00%	0.00%
Employment					
Arlington Total	172,493	190,298	17,805	10.32%	0.99%
Service Area A	2,136	2,296	160	7.49%	0.72%
Basic	228	253	25	10.96%	1.05%
Retail	549	655	106	19.31%	1.78%
Service	1,359	1,388	29	2.13%	0.21%
Service Area B	39,722	42,010	2,288	5.76%	0.56%
Basic	3,176	3,320	144	4.53%	0.44%
Retail	10,254	10,996	742	7.24%	0.70%
Service	26,292	27,694	1,402	5.33%	0.52%
Service Area C	36,896	42,749	5,853	15.86%	1.48%
Basic	9,346	10,024	678	7.25%	0.70%
Retail	9,807	12,115	2,308	23.53%	2.14%
Service	17,743	20,610	2,867	16.16%	1.51%
Service Area D	8,806	9,707	901	10.23%	0.98%
Basic	1,479	1,643	164	11.09%	1.06%
Retail	2,822	3,050	228	8.08%	0.78%
Service	4,505	5,014	509	11.30%	1.08%
Service Area E	6,370	6,987	617	9.69%	0.93%
Basic	160	164	4	2.50%	0.25%
Retail	2,454	2,766	312	12.71%	1.20%
Service	3,756	4,057	301	8.01%	0.77%
Service Area F	9,276	11,321	2,045	22.05%	2.01%
Basic	1,768	2,052	284	16.06%	1.50%
Retail	3,410	4,344	934	27.39%	2.45%
Service	4,098	4,925	827	20.18%	1.86%
Service Area G	19,666	21,880	2,214	11.26%	1.07%
Basic	3,075	3,490	415	13.50%	1.27%
Retail	7,462	8,259	797	10.68%	1.02%
Service	9,129	10,131	1,002	10.98%	1.05%
Service Area H	28,476	30,000	1,524	5.35%	0.52%
Basic	5,697	5,858	161	2.83%	0.28%
Retail	13,443	14,071	628	4.67%	0.46%
Service	9,336	10,071	735	7.87%	0.76%
Service Area I	3,188	3,905	717	22.49%	2.05%
Basic	320	360	40	12.50%	1.18%
Retail	672	987	315	46.88%	3.92%
Service	2,196	2,558	362	16.48%	1.54%
Service Area J	17,957	19,443	1,486	8.28%	0.80%
Basic	8,814	9,073	259	2.94%	0.29%
Retail	3,156	3,362	206	6.53%	0.63%
Service	5,987	7,008	1,021	17.05%	1.59%

Appendix A

Population and Employment by TSZ

**Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
A	40984	0	0	0	0
A	9589	2,462	2,462	4	4
A	9657	687	687	158	158
A	9658	3,355	3,496	51	51
A	9590	2,712	2,760	48	50
A	30198	2,351	2,351	12	12
A	9659	1,911	1,911	4	4
A	9527	1,245	1,245	27	27
A	9523	0	0	17	17
A	9524	2,332	10,888	55	55
Service Area "A" Subtotal		17,056	25,801	377	378
B	40981	0	0	0	0
B	9723	1,949	2,107	22	22
B	9896	830	830	5	5
B	40918	0	0	0	0
B	40982	1,712	1,819	64	64
B	9895	2,371	2,371	50	50
B	9655	1,003	1,003	0	0
B	9725	1,224	1,224	77	77
B	9656	1,667	1,741	25	25
B	9726	2,072	4,440	106	106
B	9728	804	858	0	0
B	9727	0	0	41	51
B	9900	1,443	1,443	145	148
B	10398	3,149	3,149	47	47
B	10392	893	893	0	0
B	10395	522	522	47	47
B	10268	449	449	49	49
B	10264	1,421	1,421	50	50
B	10261	651	651	103	103
B	10263	418	418	51	51
B	40020	0	0	72	72
B	10260	342	342	8	8
B	41026	35	35	38	38
B	10093	698	698	36	36
B	9898	1,029	1,029	4	4
B	10262	1,156	1,702	68	68
B	41025	325	458	47	47
B	10265	110	110	19	19
B	41024	749	812	9	10
B	41027	44	44	32	32
B	10272	74	74	83	83

**Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
B	10270	774	774	27	27
B	40154	18	109	49	49
B	10108	1,412	1,412	47	47
B	10109	2,184	2,184	17	17
B	10104	2,809	2,809	31	31
B	9899	1,546	1,546	141	141
B	10271	1,029	1,737	20	20
B	10273	441	441	35	35
B	10102	395	395	19	19
B	10101	350	405	18	18
B	10097	543	543	37	37
B	9901	1,100	1,100	17	17
Service Area "B" Subtotal		39,740	44,099	1,759	1,770
C	9731	3,318	3,318	48	58
C	9730	1,827	1,827	25	25
C	9729	2,141	2,141	6	6
C	9733	2,800	2,825	39	39
C	30199	3,314	3,314	52	52
C	9906	0	0	196	196
C	9905	0	0	74	74
C	10282	3,053	3,053	24	24
C	10283	2,177	2,177	24	24
C	41022	2,257	2,257	76	76
C	10278	703	703	21	21
C	41023	3,148	3,148	12	12
C	10405	1,999	1,999	2	2
C	10408	2,126	2,126	29	29
C	10281	1,941	1,941	12	12
C	10280	2,005	2,005	16	16
C	10114	0	0	204	204
C	10112	14	14	51	51
C	40152	695	695	269	269
C	41021	12	12	85	85
C	10110	3	3	139	139
C	9902	1,802	1,802	82	82
C	9732	1,546	1,546	38	43
C	9734	1,177	1,177	122	122
C	9903	0	0	127	133
C	9907	0	0	145	145
C	9904	51	51	57	74
Service Area "C" Subtotal		38,108	38,133	1,971	2,013
D	40156	254	254	8	8

**Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
D	40149	1,533	1,533	44	44
D	40157	1,508	1,508	30	30
D	10253	3,363	3,363	20	20
D	10252	15	15	66	66
D	10092	3,941	3,960	62	62
D	10091	3,336	3,355	58	59
D	9893	2,412	2,432	8	8
D	40150	661	661	185	185
D	10248	0	0	28	28
D	40977	1,308	1,308	162	162
D	10380	1,943	1,943	16	16
D	9890	1,671	1,671	106	106
D	10254	673	673	21	21
D	10383	212	212	2	2
D	40158	2,311	2,311	21	21
D	10259	949	949	13	13
Service Area "D" Subtotal		26,092	26,150	849	851
E	40972	0	0	0	0
E	10481	0	0	0	0
E	10237	251	251	0	0
E	30225	1,357	1,357	0	29
E	10551	2,198	2,198	0	1
E	30228	3,444	3,490	39	39
E	10378	455	455	1	1
E	10483	2,904	2,904	20	20
E	10552	4,103	4,166	10	10
E	10670	1,758	1,758	51	51
E	10622	4,616	4,670	21	21
E	10619	3,382	3,382	40	40
E	40978	1,596	1,596	46	46
E	10621	2,556	2,556	32	32
E	10623	1,990	2,056	56	58
E	10379	2,308	2,308	17	17
E	10554	1,441	1,441	10	10
E	10553	606	606	76	78
E	10559	1,160	1,160	1	1
E	10557	1,520	1,520	105	105
E	10555	935	996	20	20
E	10484	2,885	2,912	44	44
E	30202	1,706	1,706	26	26
E	30201	1,927	1,927	5	5
E	40160	497	497	0	0

**Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
E	30226	1,433	1,433	20	20
E	10558	1,032	1,044	5	5
E	10382	1,154	1,154	10	10
E	10381	1,202	1,202	12	12
Service Area "E" Subtotal		50,415	50,744	667	701
F	10671	2,605	2,605	78	78
F	10566	3,331	3,331	45	45
F	10565	0	0	162	162
F	10895	346	346	103	103
F	10563	1,437	1,437	54	54
F	10564	2,792	2,792	88	88
F	10568	0	0	215	246
F	10626	0	0	203	226
F	10625	2,723	2,723	113	113
F	10495	937	937	186	186
F	10629	4,506	4,630	216	305
F	10628	1,961	1,961	9	9
F	10630	2,413	2,413	35	35
F	10493	757	757	114	114
F	10394	434	434	59	59
F	10396	1,749	1,749	37	37
F	10494	587	587	39	39
F	10393	981	981	31	31
F	30220	2,306	2,306	47	103
F	30219	1,133	1,133	19	19
F	10560	70	70	4	4
F	10561	1,141	1,141	7	7
F	10486	636	636	0	0
F	40153	3,532	3,532	9	9
F	10562	1,599	1,599	0	0
F	40979	1,494	1,494	89	89
F	10627	0	0	43	43
F	10384	153	153	0	0
F	41028	430	430	18	18
F	10389	1,019	1,019	23	23
Service Area "F" Subtotal		41,073	41,197	2,047	2,245
G	10567	2,213	2,213	26	26
G	10569	658	658	77	77
G	10571	1,045	1,249	93	104
G	10631	856	856	83	87
G	10632	2,347	2,347	10	10
G	10680	1,407	1,407	13	13

**Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
G	10401	1,441	1,441	7	7
G	41029	860	860	16	16
G	10496	2,289	2,289	53	53
G	10498	2,610	2,610	43	43
G	10681	957	957	2	2
G	10500	3,118	3,118	11	11
G	10497	2,012	2,012	11	11
G	10499	2,023	2,023	17	17
G	10407	830	1,361	29	29
G	10501	2,520	2,520	9	9
G	10409	1,317	1,317	25	25
G	10411	3,533	3,533	54	54
G	10502	2,847	2,847	65	65
G	30212	2,793	3,324	3	3
G	10570	2,595	2,595	13	13
G	10503	5,691	5,691	22	22
G	30211	1,721	1,721	90	90
G	10573	0	0	197	209
G	10414	0	0	125	125
G	10633	1,562	1,562	295	410
G	10413	940	940	8	8
G	10415	1,700	1,776	125	125
G	10682	1,026	1,026	10	10
G	10683	2,473	2,473	48	48
G	10406	0	0	27	27
G	10404	1,350	1,350	21	21
G	10410	2,921	2,921	48	48
G	10412	3,095	3,113	29	29
G	10400	698	698	14	14
G	10402	926	926	19	19
G	10403	1,144	1,144	22	22
Service Area "G" Subtotal		65,517	66,879	1,761	1,902
H	10788	193	193	46	46
H	40976	25	25	25	25
H	41192	287	287	89	89
H	10715	101	101	37	37
H	10762	962	1,022	495	497
H	10790	70	70	19	19
H	10789	6	6	0	0
H	10714	3	3	2	2
H	10717	3,749	3,749	9	12
H	10716	1,213	1,331	74	74

**Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
H	10718	2,225	2,225	10	12
H	10763	1,882	2,082	76	76
H	10765	504	969	63	74
H	30221	1,604	1,604	1	0
H	30222	2,716	2,827	0	0
H	10673	1,132	1,132	31	31
H	10720	1,921	1,921	115	115
H	10767	910	910	91	138
H	10766	5,926	5,966	268	268
H	10721	6,412	6,412	17	17
H	10676	3,280	3,280	41	41
H	10674	3,658	3,658	33	33
H	30217	2,351	2,351	69	69
H	30218	1,919	1,919	14	14
H	10764	483	483	16	16
H	10672	761	761	32	32
Service Area "H" Subtotal		44,294	45,288	1,673	1,737
I	10723	3,808	3,808	26	26
I	30224	4,266	4,266	7	7
I	10798	1,514	2,239	4	22
I	10797	2,217	2,252	43	62
I	30223	3,457	3,457	10	10
I	10769	4,708	4,825	95	120
I	10724	2,524	2,568	134	134
I	10722	1,689	1,689	2	2
I	10677	2,491	2,491	31	31
I	10725	3,195	3,195	45	45
I	10678	1,070	1,070	60	60
I	10679	2,528	2,528	26	26
I	10727	1,464	1,464	140	173
I	10770	2,980	3,141	106	106
I	10730	0	0	0	0
I	10728	1,099	1,099	0	0
I	10726	2,080	2,080	15	15
Service Area "I" Subtotal		41,092	42,174	742	839
J	9908	0	0	106	106
J	9909	0	0	133	133
J	9910	0	0	73	73
J	9912	0	0	153	153
J	9913	0	0	34	34
J	10120	1,549	1,549	16	16
J	10285	4,632	4,632	26	26



Population Traffic Survey Zone Data
By Roadway Service Area
City of Arlington



Roadway Service Area	Traffic Survey Zone	2015 Population	2025 Population	2015 NonResidential Acreage	2025 NonResidential Acreage
J	10284	2,161	2,161	4	4
J	10119	0	0	105	105
J	40151	151	151	17	17
J	10118	0	0	112	112
J	10122	0	0	118	118
J	9911	0	0	125	125
Service Area "J" Subtotal		8,493	8,493	1,020	1,022

**Employment Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Basic Employment	2025 Basic Employment	2015 Retail Employment	2025 Retail Employment	2015 Service Employment	2025 Service Employment
A	40984	13	13	13	13	27	27
A	9589	0	0	21	28	309	315
A	9657	0	0	11	14	154	158
A	9658	87	87	234	234	22	22
A	9590	0	0	66	66	176	176
A	30198	46	46	47	47	436	436
A	9659	68	68	126	126	144	144
A	9527	0	0	17	31	17	31
A	9523	0	25	0	81	0	0
A	9524	14	14	14	15	74	79
Service Area "A" Subtotal		228	253	549	655	1,359	1,388
B	40981	109	115	0	0	154	156
B	9722	0	0	0	0	0	0
B	9723	1	1	9	9	176	176
B	9896	0	0	5	5	123	161
B	40918	0	0	0	0	0	0
B	40982	1	1	8	8	596	626
B	9895	7	7	367	387	78	84
B	9655	109	115	0	0	154	156
B	9725	9	9	379	404	360	484
B	9656	0	0	11	14	154	158
B	9726	100	100	176	176	244	258
B	9728	50	50	88	88	122	129
B	9727	0	0	560	581	5,625	5,943
B	9900	120	120	1,210	1,210	1,900	2,476
B	10398	0	0	317	340	90	90
B	10392	0	0	56	73	96	96
B	10395	0	0	111	127	181	245
B	10268	0	0	260	268	175	185
B	10264	0	0	177	177	280	340
B	10261	0	0	5	5	186	199
B	10263	0	0	69	85	269	324
B	40020	0	0	66	77	2,693	2,699
B	10260	0	0	104	104	94	119
B	41026	52	93	150	215	458	551
B	10093	13	13	111	117	462	505
B	9898	0	0	9	10	64	77
B	10262	0	0	51	53	3,253	3,253
B	41025	100	121	365	384	853	864
B	10265	260	260	395	395	621	658
B	41024	53	53	187	209	132	132
B	41027	242	252	1,275	1,278	2,165	2,165
B	10272	874	874	538	964	1,174	1,231
B	10270	0	0	235	241	336	363
B	40154	713	716	1,784	1,790	886	891
B	10108	132	139	261	261	284	293
B	10109	10	12	111	111	198	235
B	10104	0	0	620	627	609	612
B	9899	43	43	145	168	1,028	1,057
B	10271	0	0	125	132	141	163

**Employment Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Basic Employment	2025 Basic Employment	2015 Retail Employment	2025 Retail Employment	2015 Service Employment	2025 Service Employment
B	10273	0	0	205	205	464	524
B	10102	76	82	208	208	89	111
B	10101	100	100	221	221	2,234	2,234
B	10097	43	78	148	148	698	723
B	9901	19	27	17	17	155	158
Service Area "B" Subtotal		3,127	3,265	11,139	11,892	29,901	31,749
C	9731	206	206	581	581	604	604
C	9730	50	50	88	88	122	129
C	9729	50	50	88	88	122	129
C	9733	18	18	49	49	245	245
C	30199	93	93	94	94	872	872
C	9906	0	0	869	924	0	0
C	9905	0	0	475	475	1,295	1,891
C	10282	2	4	178	191	218	224
C	10283	0	0	44	44	363	379
C	41022	117	117	280	291	352	355
C	10278	0	0	14	14	314	317
C	41023	5	9	271	290	128	129
C	10405	0	0	93	125	98	98
C	10408	0	0	378	378	648	648
C	10281	0	0	164	174	87	87
C	10280	27	49	125	125	139	150
C	10114	1,518	1,518	537	625	727	888
C	10112	23	26	190	198	260	268
C	40152	4,887	4,895	329	348	794	794
C	41021	886	905	881	921	414	479
C	10110	34	557	141	166	506	546
C	9902	206	214	638	643	853	864
C	9732	107	107	506	539	285	336
C	9734	724	724	369	458	1,891	2,483
C	9903	50	50	627	627	980	980
C	9907	245	315	740	849	1,485	1,593
C	9904	38	57	174	1,914	179	912
Service Area "C" Subtotal		9,286	9,964	8,922	11,220	13,981	16,401
D	40156	0	0	48	51	54	73
D	40149	68	68	558	572	231	283
D	40157	273	273	198	198	303	352
D	10253	29	29	360	360	127	172
D	10252	223	260	173	173	162	210
D	10092	2	2	226	226	328	328
D	10091	93	93	162	175	171	177
D	9893	0	0	41	41	110	110
D	40150	67	67	90	93	487	501
D	10248	138	206	152	257	280	372
D	40977	0	0	0	0	551	656
D	10380	14	14	99	110	340	349
D	9890	465	522	428	458	791	837
D	10254	12	12	11	11	283	287
D	10383	0	0	0	0	0	0
D	40158	0	0	203	241	183	183

**Employment Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Basic Employment	2025 Basic Employment	2015 Retail Employment	2025 Retail Employment	2015 Service Employment	2025 Service Employment
D	10259	95	97	73	84	105	124
Service Area "D" Subtotal		1,479	1,643	2,822	3,050	4,505	5,014
E	40972	0	0	0	0	0	0
E	10481	0	0	0	0	0	0
E	10237	0	0	0	0	0	0
E	30225	0	0	0	0	0	0
E	10551	13	13	94	94	135	135
E	30228	0	0	73	73	120	120
E	10378	0	0	0	0	0	0
E	10483	0	0	28	28	257	260
E	10552	8	8	129	139	196	235
E	10670	2	2	122	141	281	281
E	10622	0	0	108	176	166	166
E	10619	0	0	190	215	75	75
E	40978	4	7	325	338	191	207
E	10621	0	0	112	122	117	131
E	10623	70	70	41	41	174	225
E	10379	9	9	59	59	167	183
E	10554	4	4	5	5	92	103
E	10553	13	13	389	465	55	71
E	10559	0	0	4	4	55	63
E	10557	0	0	17	31	669	724
E	10555	10	10	106	112	200	200
E	10484	3	3	110	116	83	101
E	30202	0	0	7	12	139	156
E	30201	0	0	7	12	139	156
E	40160	0	0	73	73	120	120
E	30226	0	0	0	0	0	0
E	10558	0	0	4	4	49	58
E	10382	0	0	150	150	162	162
E	10381	0	0	240	269	44	47
Service Area "E" Subtotal		136	140	2,393	2,679	3,687	3,980
F	10671	1	1	185	318	168	287
F	10566	0	0	509	526	294	339
F	10565	0	0	1,317	1,328	207	236
F	10895	0	0	1,359	1,359	207	236
F	10563	127	128	323	334	180	186
F	10564	163	163	492	549	599	621
F	10568	146	148	342	342	540	607
F	10626	1,950	1,963	1,373	1,389	113	118
F	10625	0	0	940	1,000	240	340
F	10495	678	678	710	710	959	966
F	10629	525	651	1,279	1,293	1,558	1,558
F	10628	0	0	11	11	13	13
F	10630	13	24	134	144	87	106
F	10493	136	136	283	283	237	269
F	10394	573	576	1,351	1,372	961	977
F	10396	0	0	269	282	205	205
F	10494	177	178	84	91	148	148
F	10393	0	0	323	334	178	187

**Employment Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Basic Employment	2025 Basic Employment	2015 Retail Employment	2025 Retail Employment	2015 Service Employment	2025 Service Employment
F	30220	0	0	155	159	257	260
F	30219	0	0	78	79	129	130
F	10560	0	0	0	0	0	0
F	10561	0	0	51	78	58	58
F	10486	24	24	61	86	68	77
F	40153	28	28	112	184	182	182
F	10562	0	0	36	52	114	114
F	40979	932	932	39	44	714	872
F	10627	26	28	417	503	34	53
F	10384	0	0	0	0	0	0
F	41028	154	156	938	956	422	450
F	10389	67	68	333	352	533	552
Service Area "F" Subtotal		5,721	5,882	13,504	14,158	9,405	10,148
G	10567	1	3	51	84	95	102
G	10569	0	0	88	155	165	165
G	10571	103	106	180	188	304	386
G	10631	43	78	171	270	557	581
G	10632	0	0	75	132	87	135
G	10680	0	0	37	66	43	67
G	10401	0	0	263	273	66	80
G	41029	0	0	432	481	86	92
G	10496	255	257	271	283	1,491	1,494
G	10498	0	0	142	199	107	107
G	10681	0	0	37	66	43	67
G	10500	0	0	44	69	166	166
G	10497	1	1	77	83	96	105
G	10499	0	0	61	64	174	183
G	10407	0	0	726	748	363	407
G	10501	0	0	17	20	46	62
G	10409	0	0	9	9	285	294
G	10411	177	318	734	734	376	525
G	10502	0	0	65	106	634	662
G	30212	0	1	37	58	69	70
G	10570	7	7	60	101	106	106
G	10503	0	0	534	541	216	230
G	30211	0	1	37	58	69	70
G	10573	1,107	1,146	0	0	417	431
G	10414	150	171	1,366	1,380	106	114
G	10633	86	155	69	124	447	631
G	10413	89	89	178	188	56	56
G	10415	940	990	205	207	281	289
G	10682	0	0	37	66	43	67
G	10683	0	0	128	175	412	491
G	10406	0	0	677	677	223	316
G	10404	0	0	0	0	454	457
G	10410	27	49	511	511	356	356
G	10412	38	68	32	32	131	172
G	10400	0	0	53	53	153	175
G	10402	50	50	50	50	300	300
G	10403	0	0	8	8	103	117

**Employment Traffic Survey Zone Data
By Roadway Service Area
City of Arlington**

Roadway Service Area	Traffic Survey Zone	2015 Basic Employment	2025 Basic Employment	2015 Retail Employment	2025 Retail Employment	2015 Service Employment	2025 Service Employment
Service Area "G" Subtotal		3,075	3,490	7,462	8,259	9,129	10,131
H	10788	0	0	0	0	0	0
H	40976	0	0	0	0	0	0
H	41192	0	0	153	156	9	16
H	10715	0	0	0	0	0	0
H	10762	352	393	169	224	873	1,011
H	10790	0	0	0	0	0	0
H	10789	0	0	0	0	0	0
H	10714	0	0	0	0	0	0
H	10717	0	0	90	149	140	140
H	10716	200	200	200	200	300	300
H	10718	0	0	90	149	140	140
H	10763	21	37	180	231	756	859
H	10765	269	324	169	224	536	605
H	30221	17	31	0	0	134	240
H	30222	200	228	36	63	84	133
H	10673	0	0	187	187	37	42
H	10720	200	228	36	63	84	133
H	10767	166	223	241	432	249	366
H	10766	54	54	202	202	250	250
H	10721	0	0	23	34	38	64
H	10676	65	65	273	451	84	119
H	10674	65	65	273	451	84	119
H	30217	13	13	273	273	30	30
H	30218	13	13	273	273	30	30
H	10764	133	177	353	394	204	286
H	10672	0	0	187	187	37	42
Service Area "H" Subtotal		1,768	2,052	3,410	4,344	4,098	4,925
I	10723	6	11	39	65	84	88
I	30224	15	15	13	18	2	3
I	10798	0	0	0	0	100	100
I	10797	0	0	0	0	150	150
I	30223	15	15	13	18	2	3
I	10769	0	0	0	0	150	150
I	10724	0	0	156	260	320	410
I	10722	3	6	20	32	42	44
I	10677	106	120	12	15	91	91
I	10725	0	0	156	260	33	33
I	10678	22	40	150	171	110	148
I	10679	0	0	0	0	50	50
I	10727	115	115	26	47	505	608
I	10770	0	0	45	45	336	405
I	10730	0	0	0	0	0	0
I	10728	38	38	9	16	168	203
I	10726	0	0	34	41	54	73
Service Area "I" Subtotal		320	360	672	987	2,196	2,558
J	9908	1,308	1,346	283	332	1,823	1,855
J	9909	1,222	1,233	216	230	555	656
J	9910	1,779	1,779	104	123	283	435
J	9912	1,103	1,151	132	141	733	958

Employment Traffic Survey Zone Data
By Roadway Service Area
City of Arlington

Roadway Service Area	Traffic Survey Zone	2015 Basic Employment	2025 Basic Employment	2015 Retail Employment	2025 Retail Employment	2015 Service Employment	2025 Service Employment
J	9913	458	458	26	26	135	175
J	10120	0	0	3	3	602	721
J	10285	37	42	26	36	234	262
J	10284	0	0	112	169	113	113
J	10119	554	573	140	165	304	323
J	40151	104	182	71	71	110	177
J	10118	189	202	1,491	1,494	28	28
J	10122	380	424	273	273	544	617
J	9911	1,682	1,682	281	297	524	687
Service Area "J" Subtotal		8,814	9,073	3,156	3,362	5,987	7,008