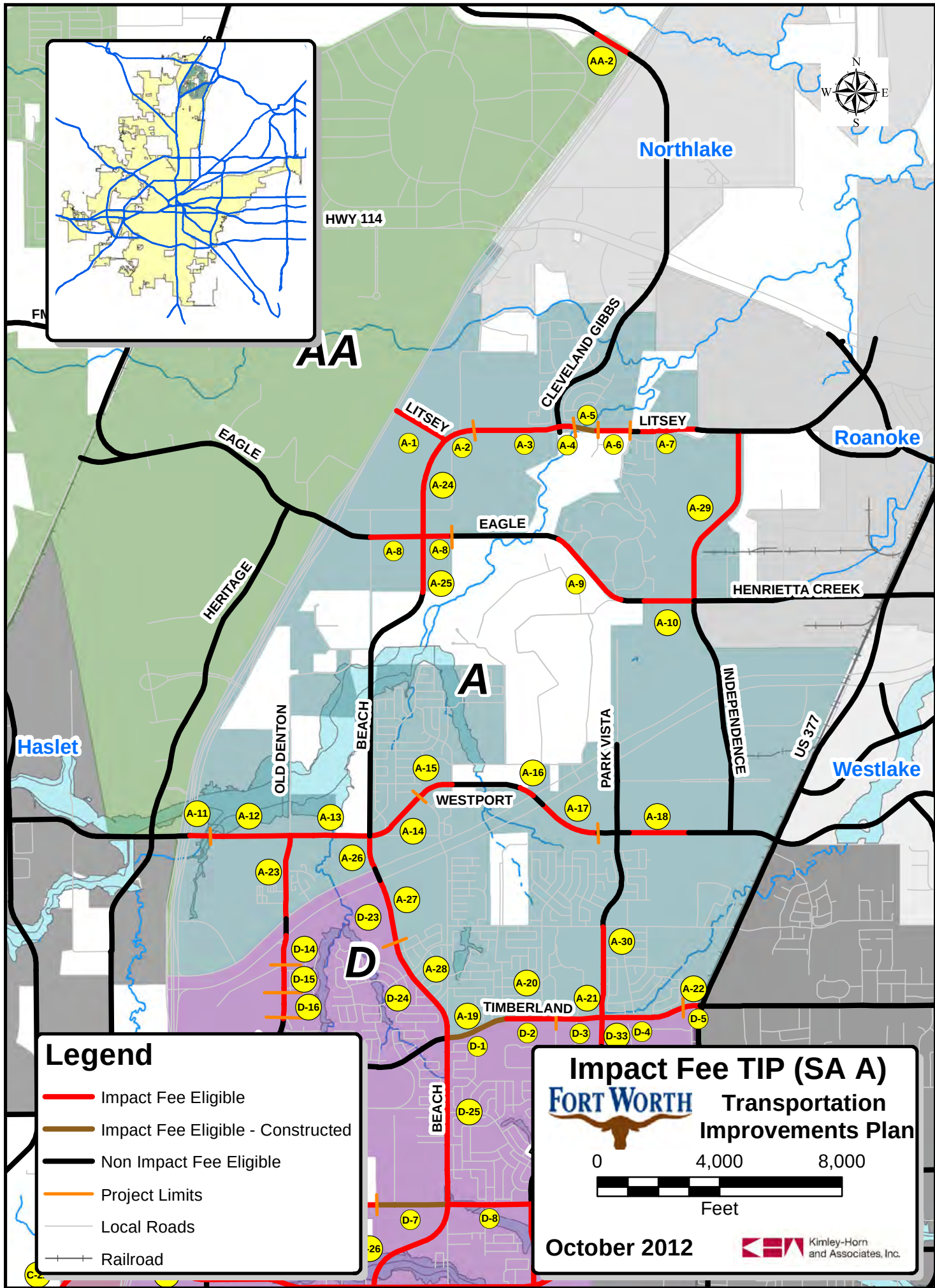
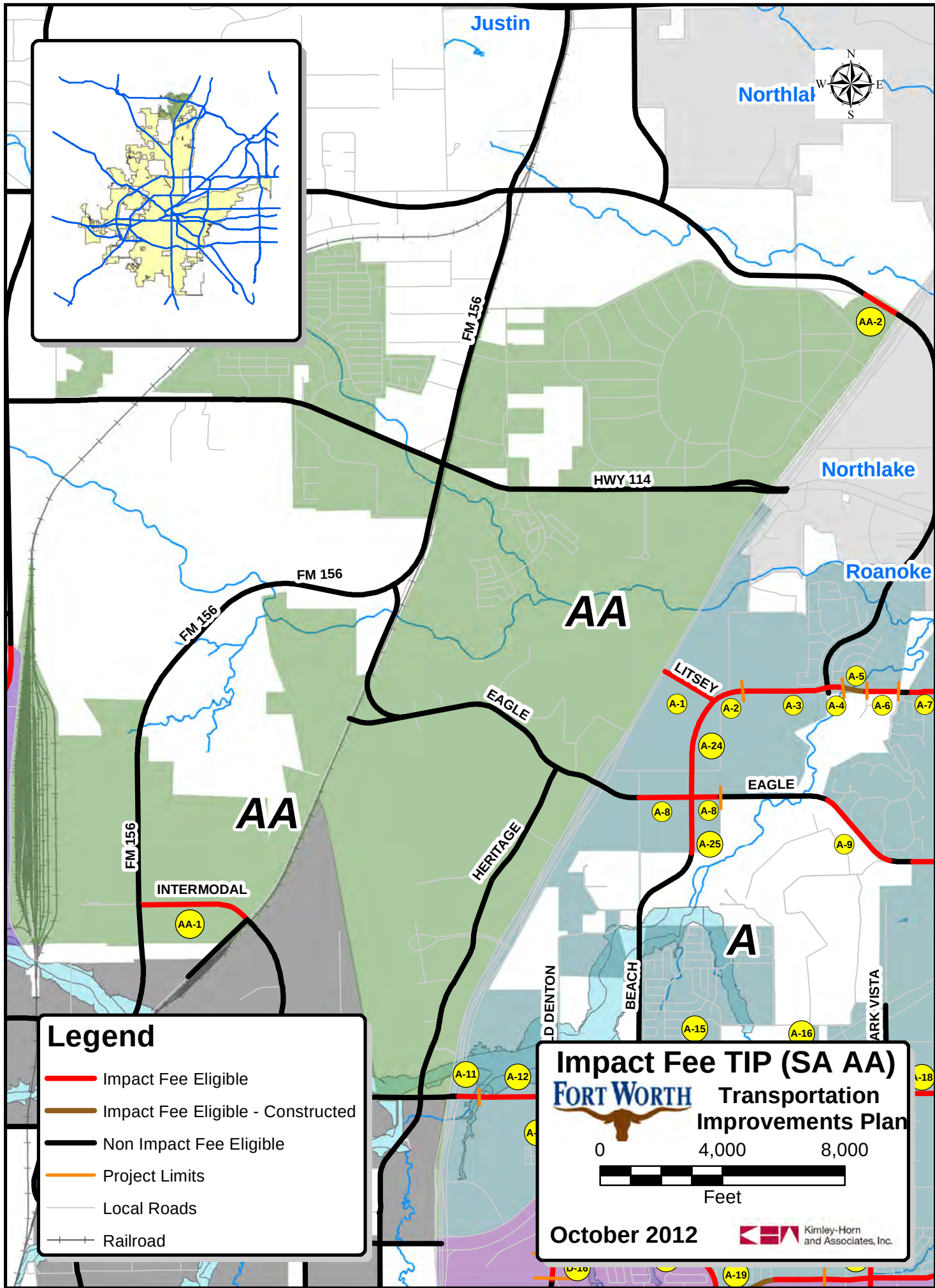
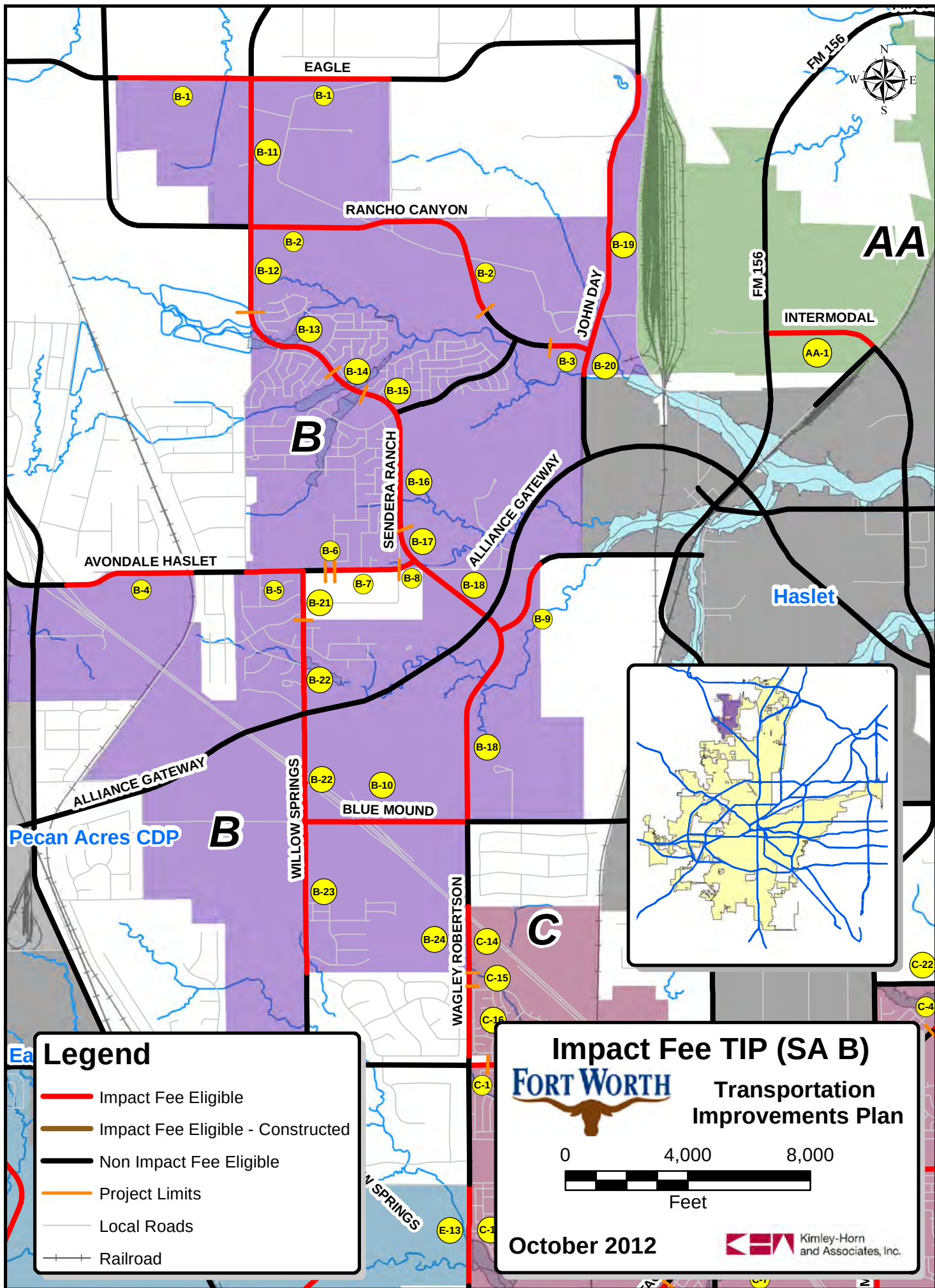
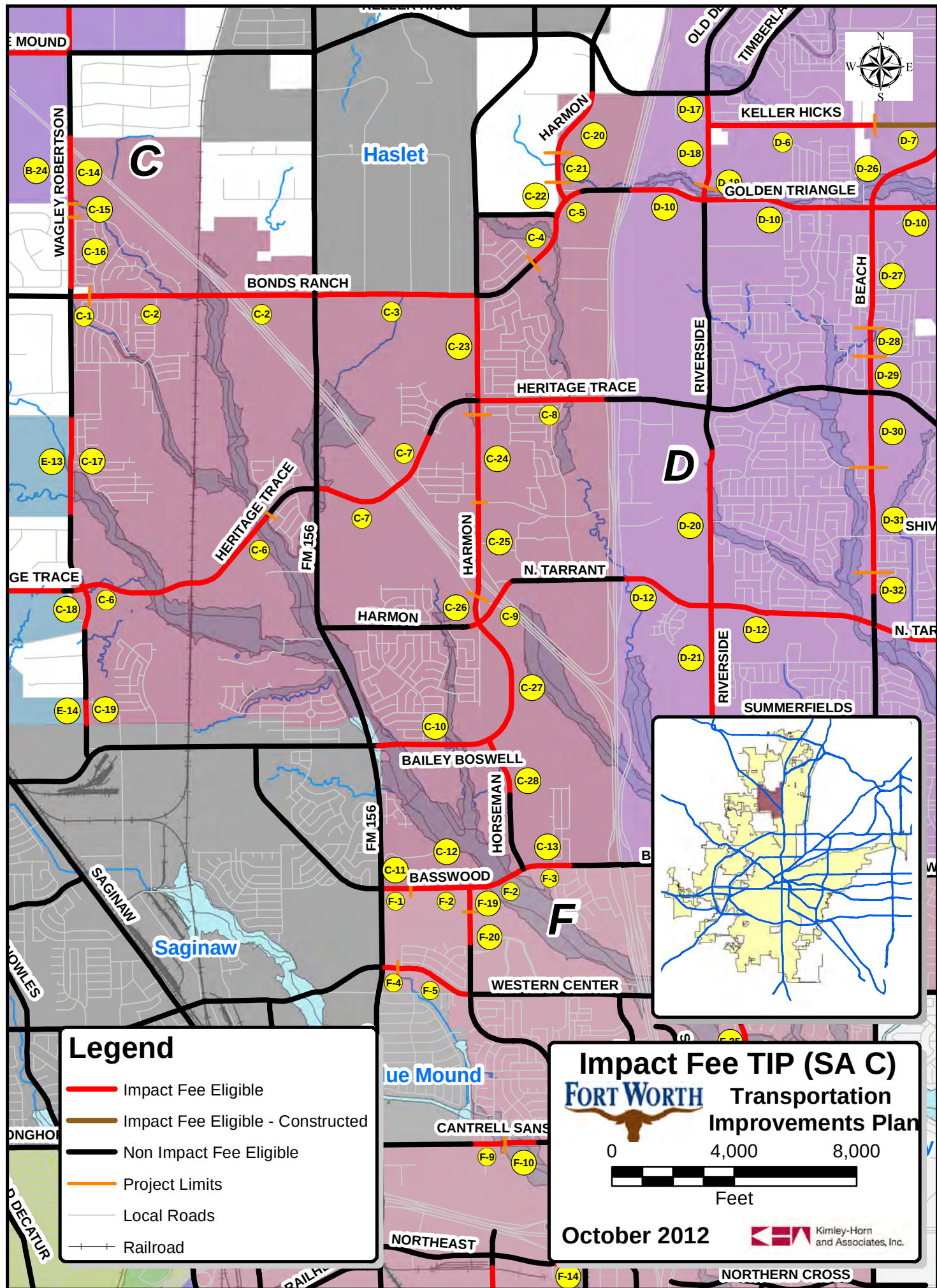
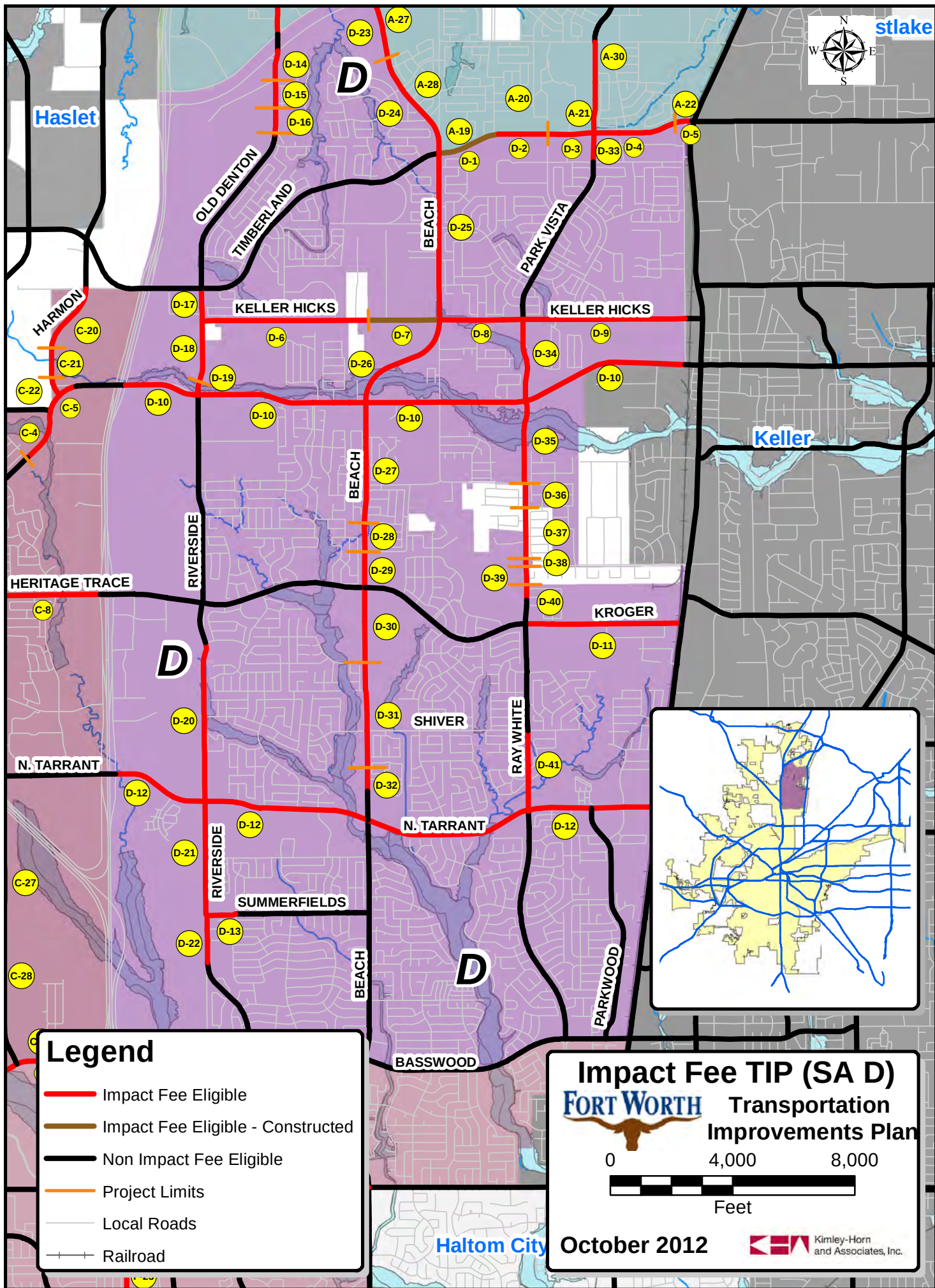


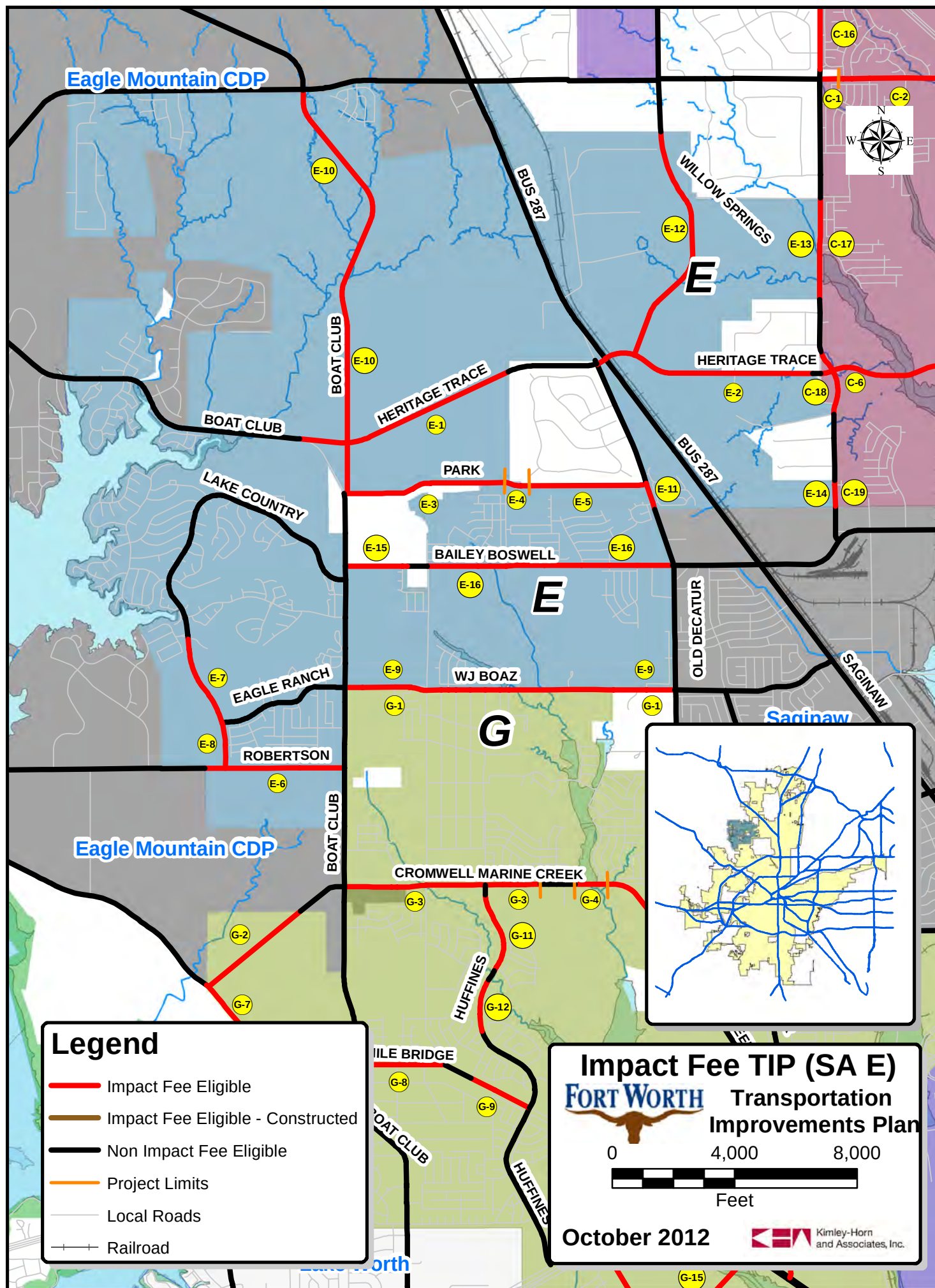


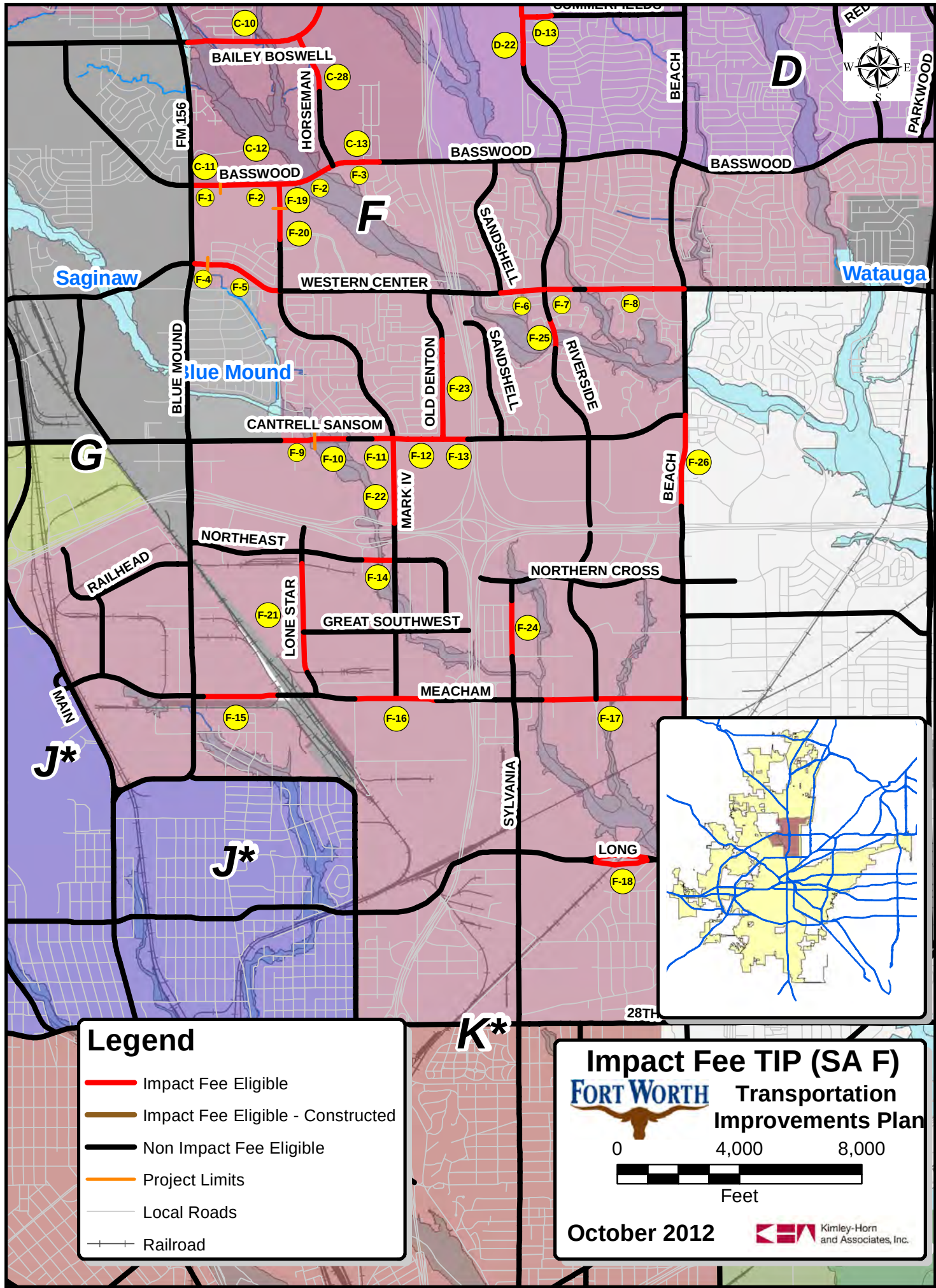


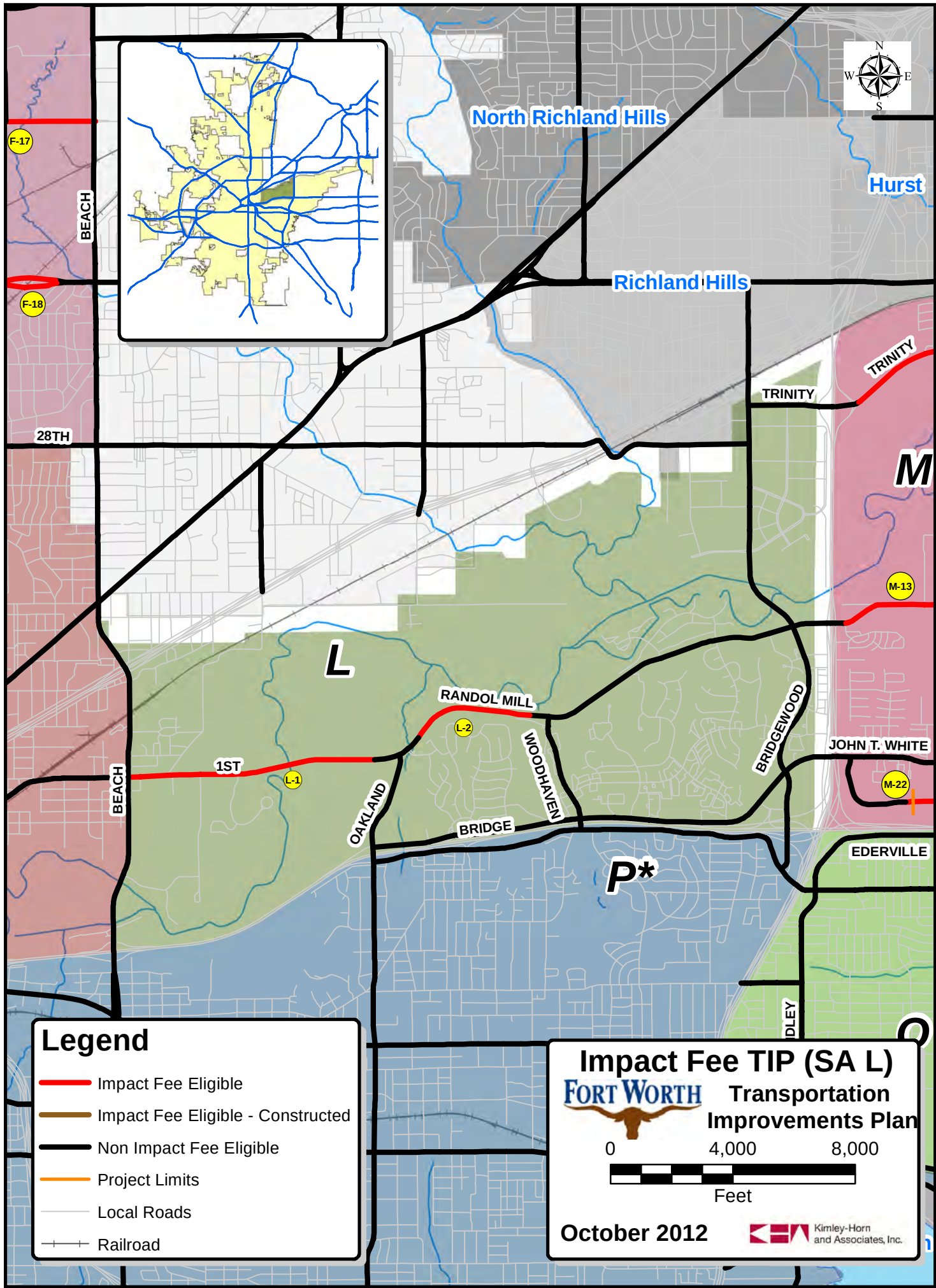












North Richland Hills

Bedford



Richland Hills

Hurst

Euless

PIPELINE

RAIDER

BELL SPUR

SH 10

NORWOOD

TRINITY

HOUSE ANDERSON

HOUSE ANDERSON

M

M

PRECINCT LINE

TRINITY

RANDOL MILL

COOKS

LOWERY

JOHN T. WHITE

JOHN T. WHITE

ANDERSON

RANDOL MILL

EDERVILLE

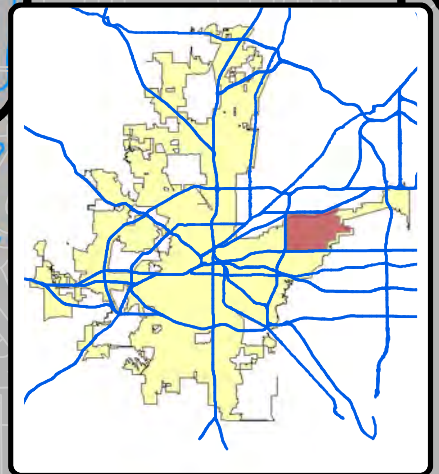
BRENTWOOD STAIR

EDERVILLE

MEADOWBROOK

DOTTIE LYNN

O



Legend

- Impact Fee Eligible
- Impact Fee Eligible - Constructed
- Non Impact Fee Eligible
- Project Limits
- Local Roads
- Railroad

Impact Fee TIP (SA M)



Transportation
Improvements Plan

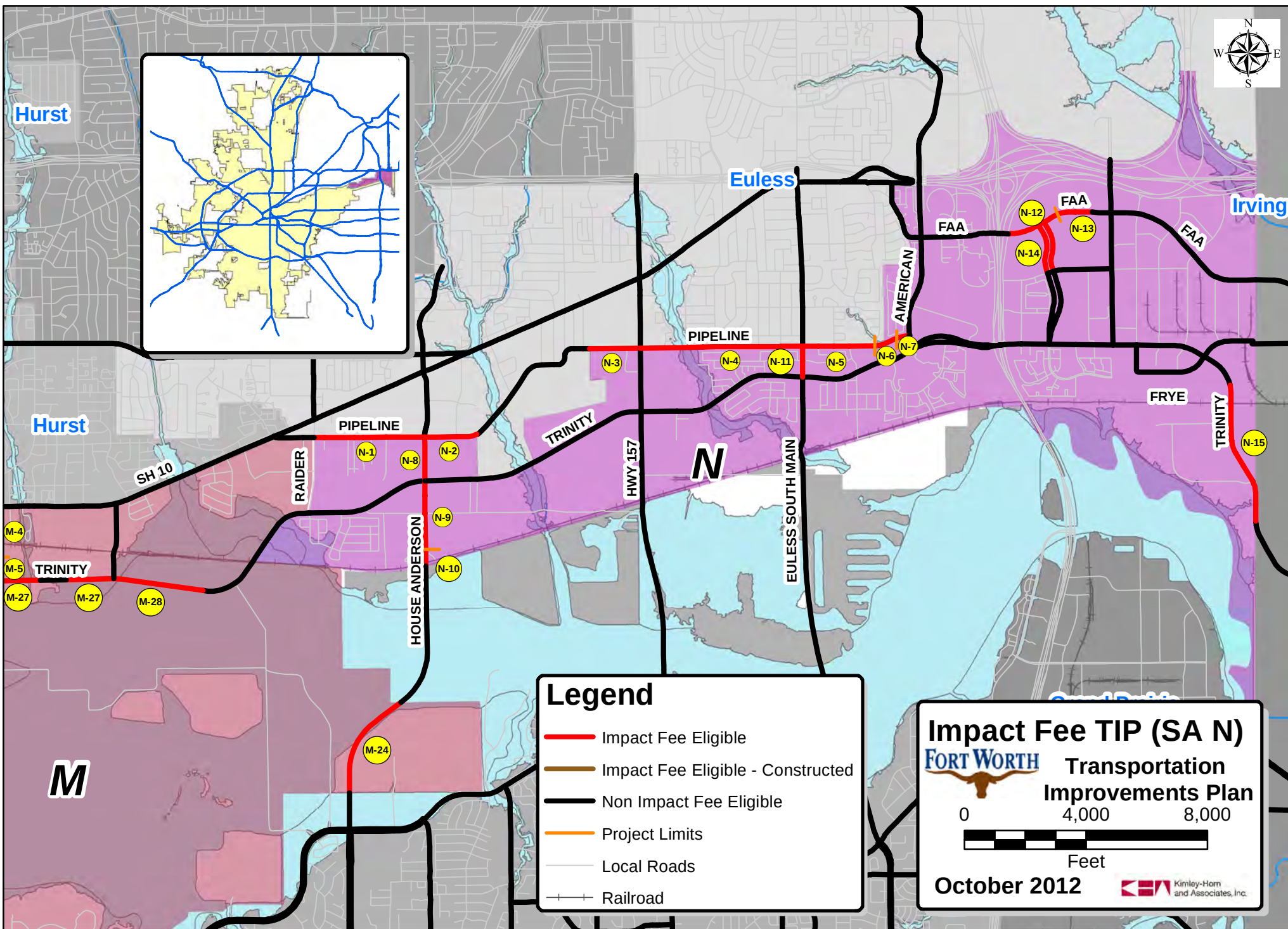
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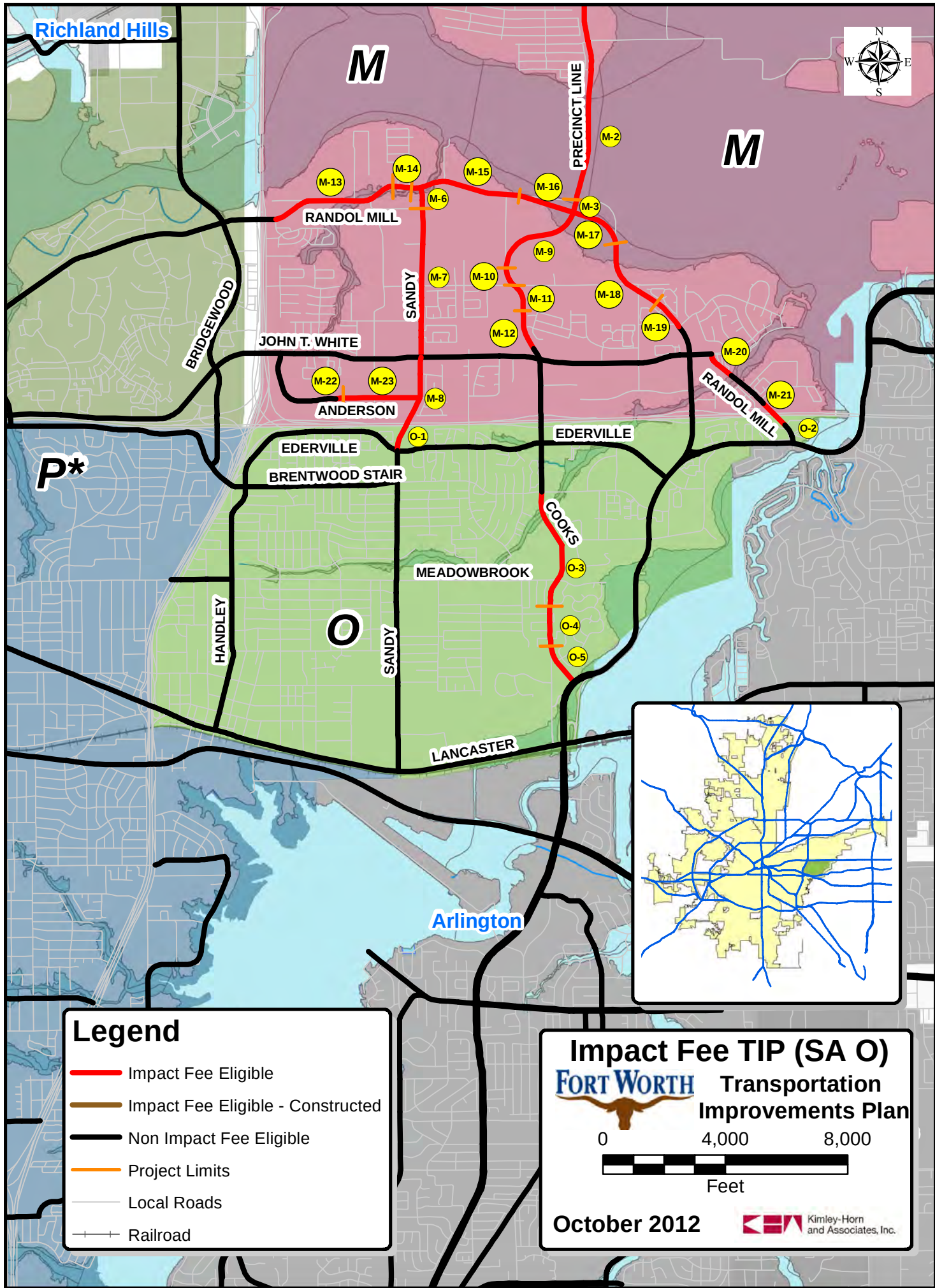


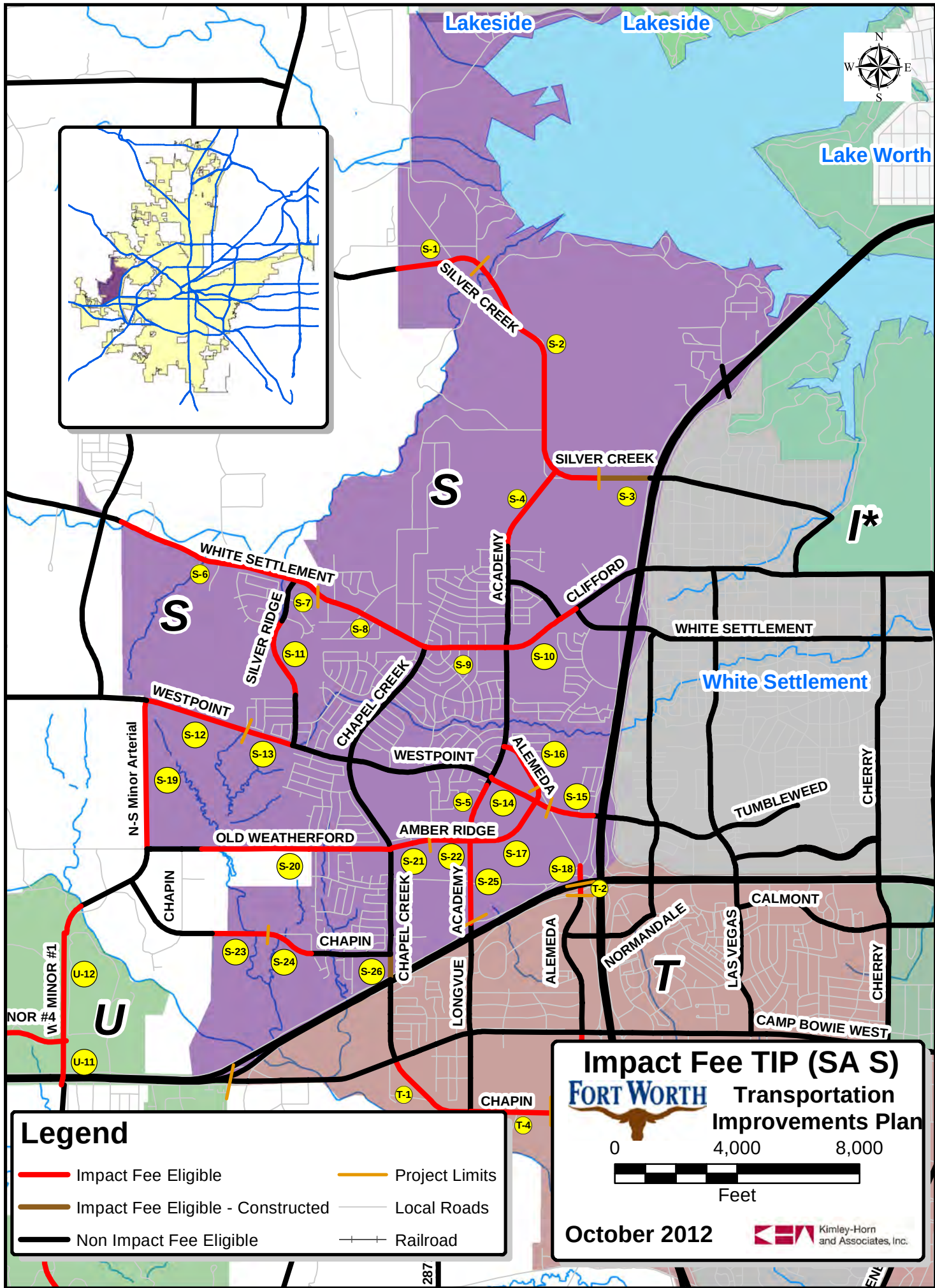
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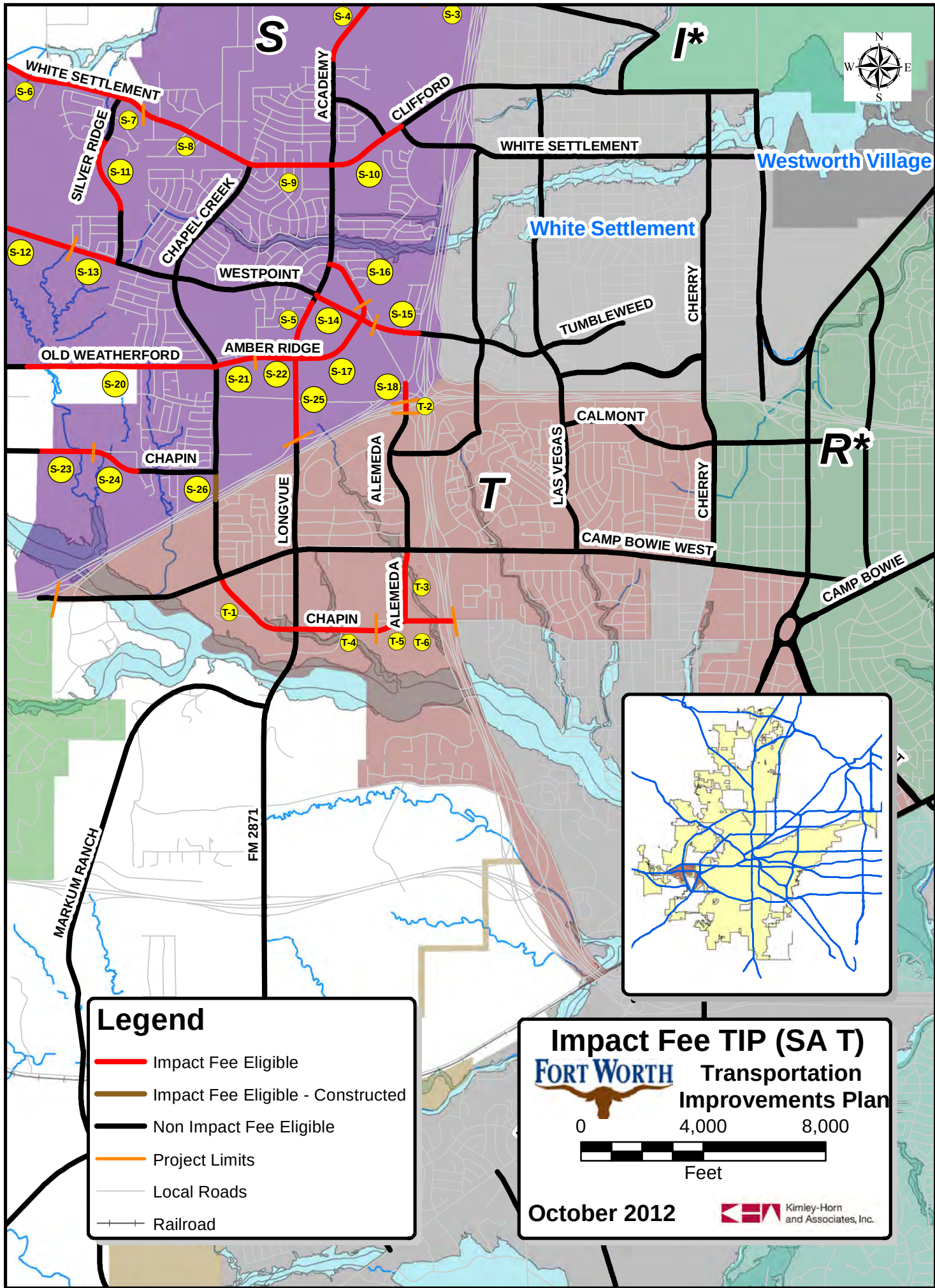
October 2012

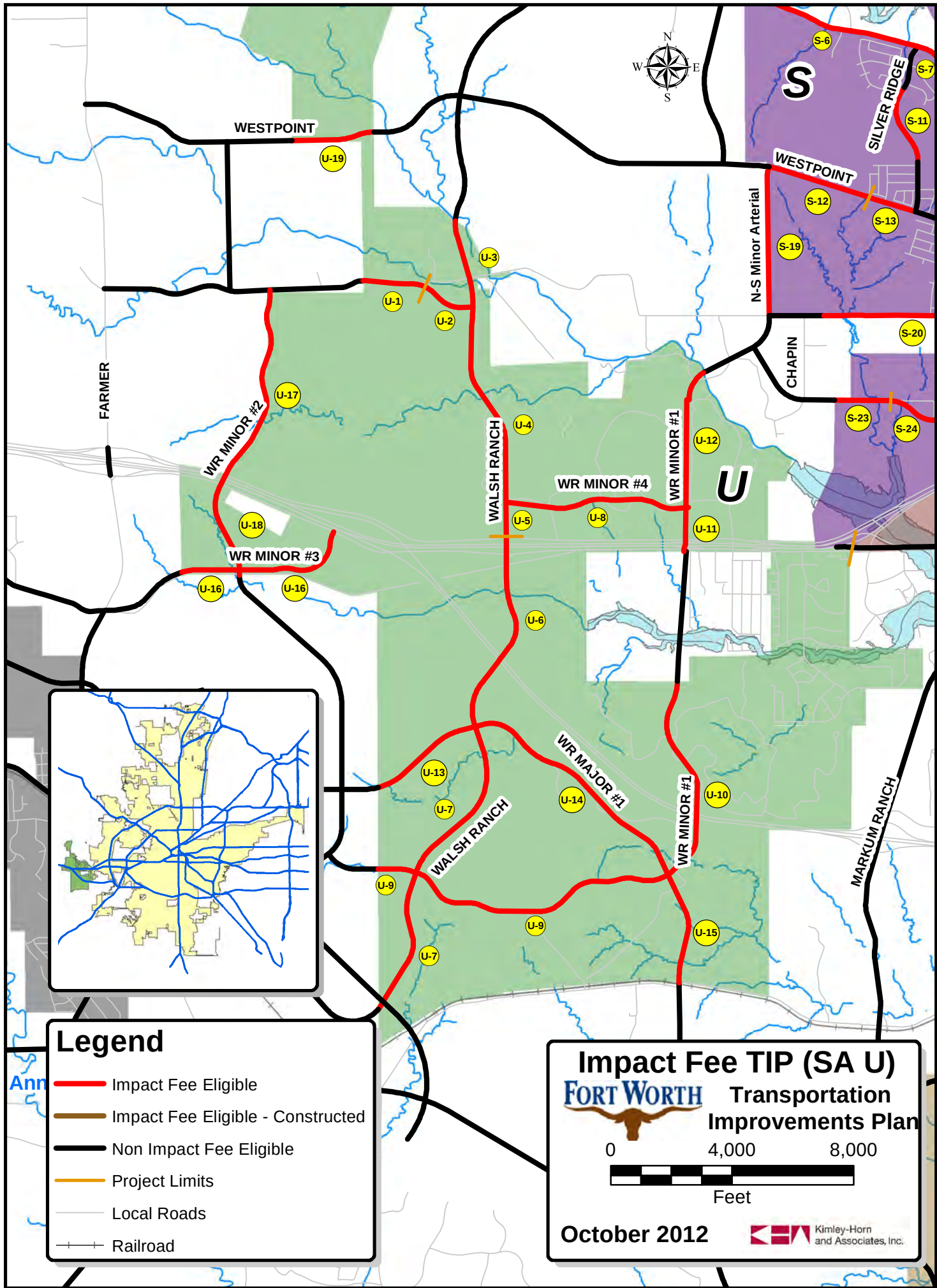
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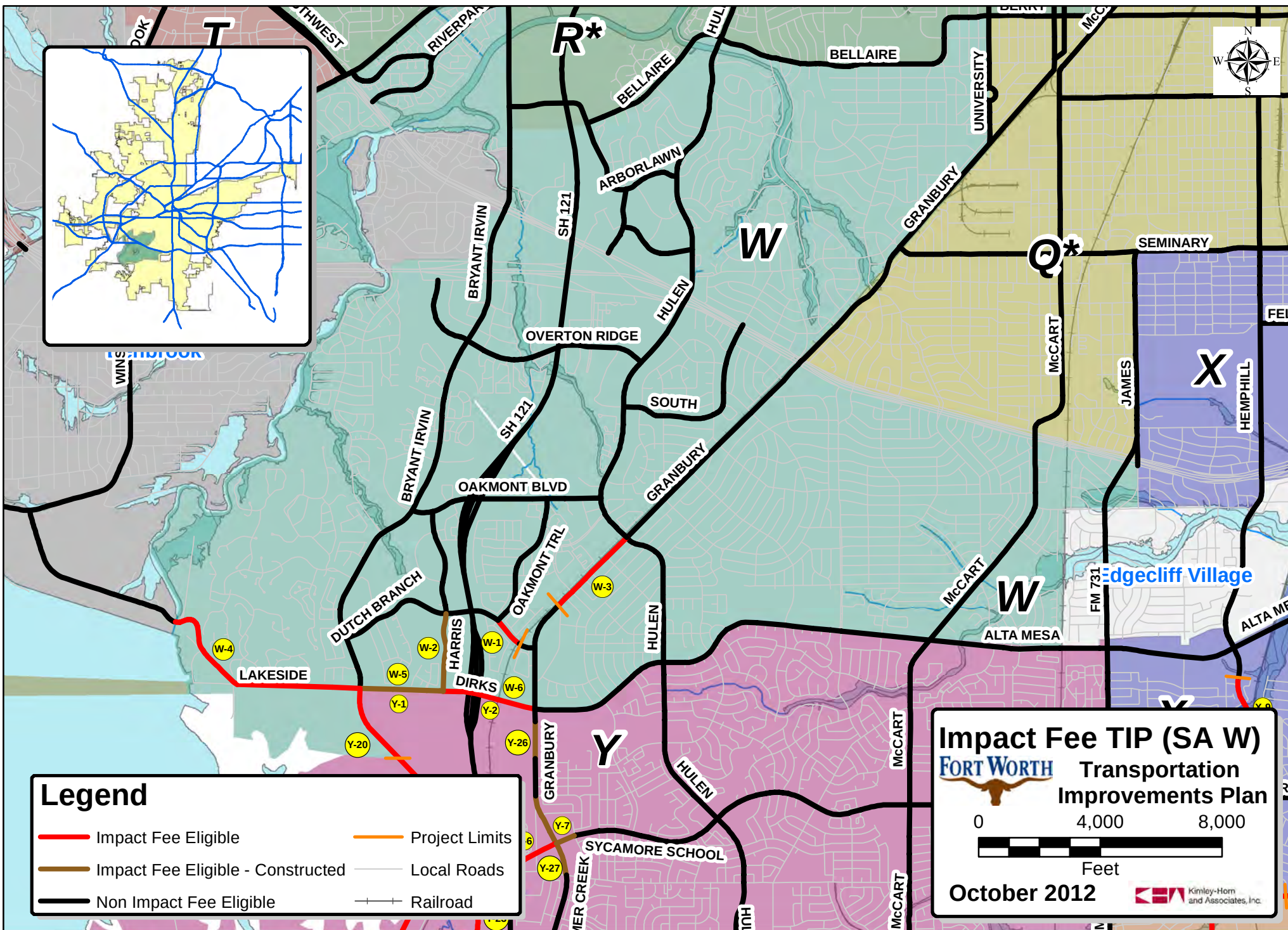


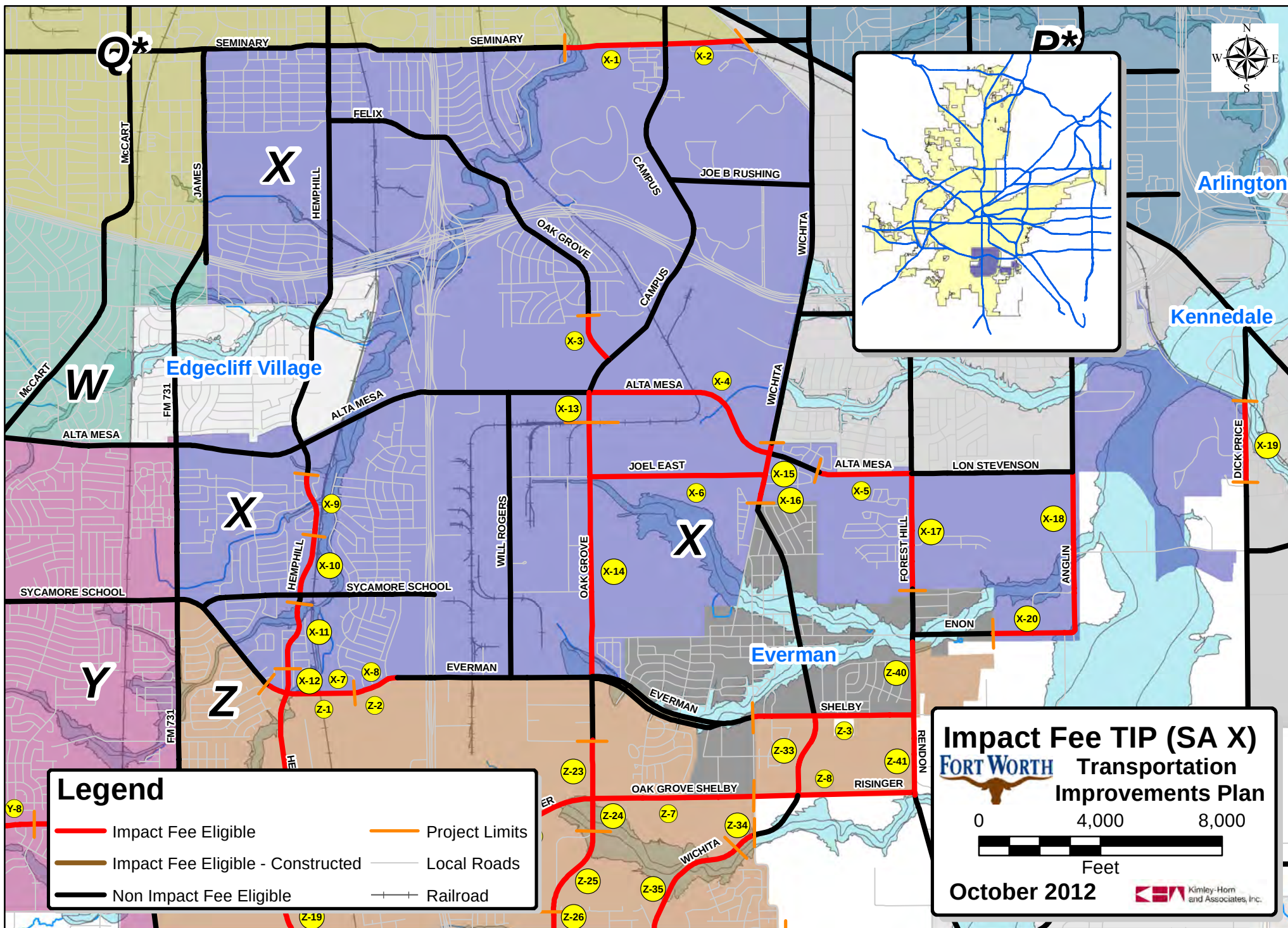


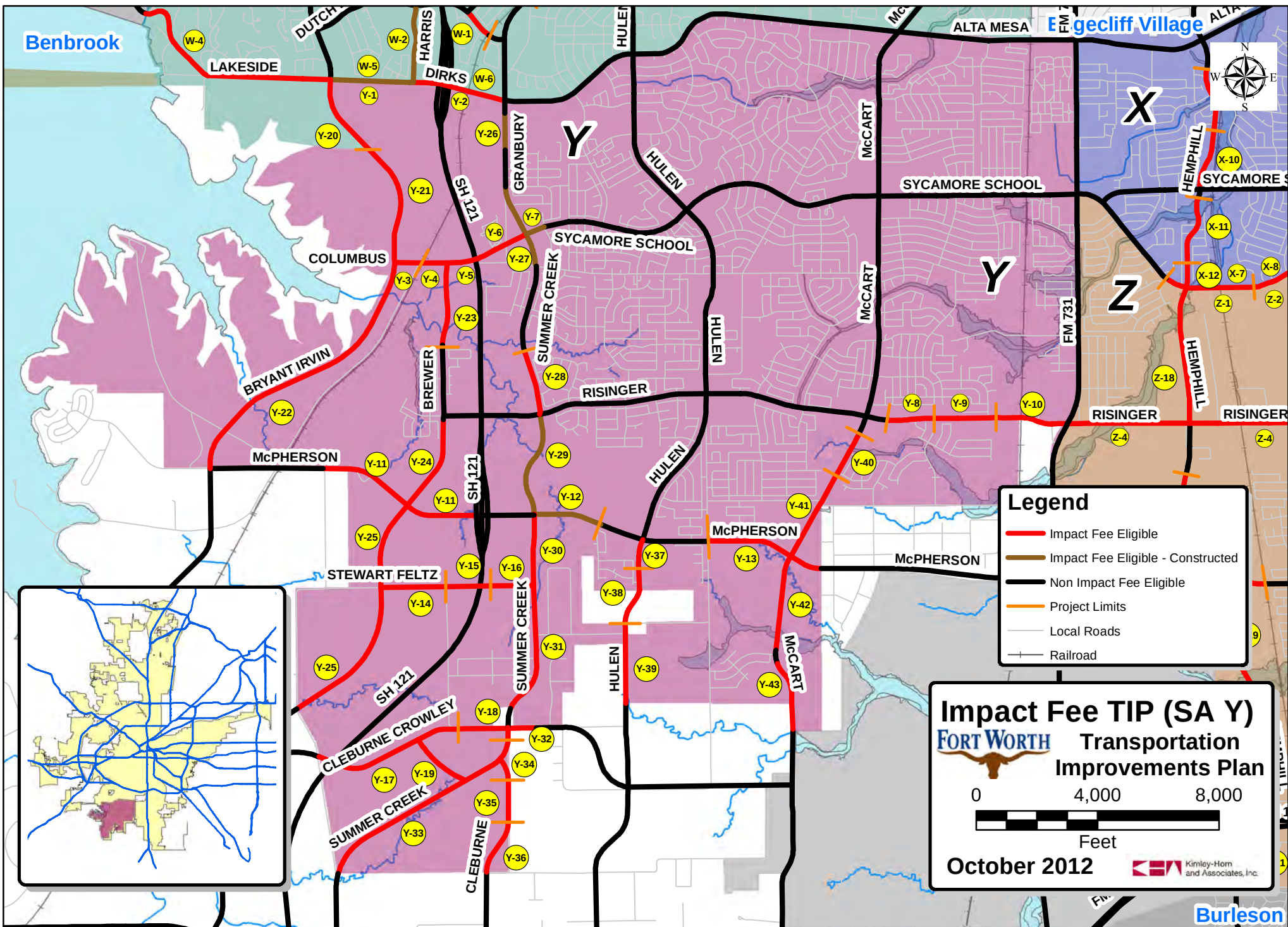


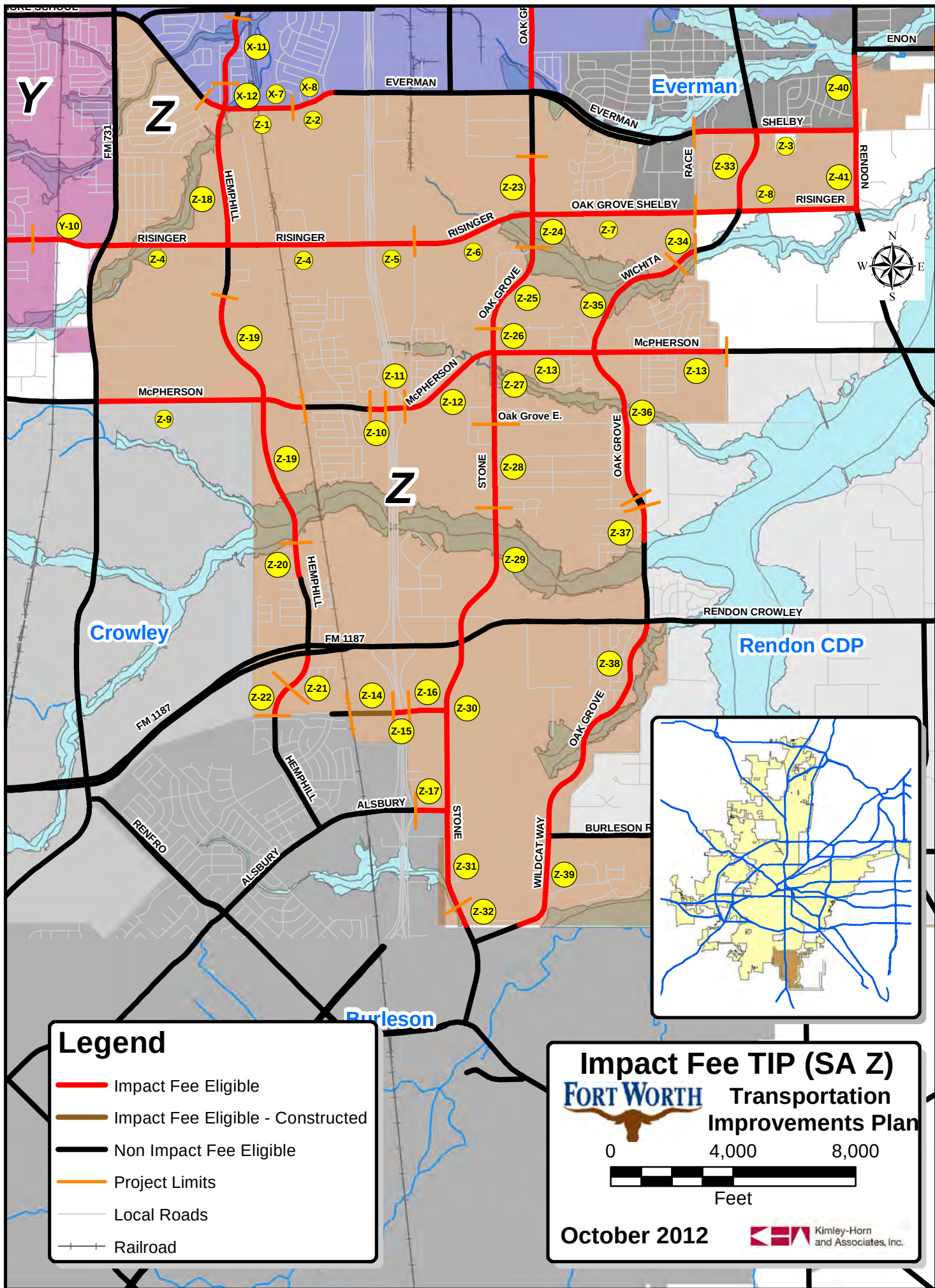












IV. METHODOLOGY FOR TRANSPORTATION IMPACT FEES

A. SERVICE AREAS

The twenty-seven (27) service areas used in the 2013 Transportation Impact Fee Study are shown in the previously referenced **Exhibit 1**. These service areas cover the entire corporate boundary of the City of Fort Worth. Chapter 395 of the Texas Local Government Code specifies that “the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles.” The service areas in the 2013 Transportation Impact Fee Study are consistent with those in the previous Transportation Impact Fee Study with slight modifications to include annexations since the previous study.

B. SERVICE UNITS

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

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

The capacity values used in the 2013 Transportation Impact Fee Study are based upon Thoroughfare Capacity Criteria published by the North Central Texas Council of Governments (NCTCOG) and applied to City of Fort Worth thoroughfare standards. **Tables 3A** and **3B** show the service volumes as a function of the facility classification and type.

**Table 3A. Service Volumes for Proposed Facilities
(used in Appendix B – TIP Service Units of Supply)**

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

Table 3B. Service Volumes for Existing Facilities
(used in Appendix C – Existing Roadway Facilities Inventory)

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-R	Rural Cross-Section (i.e., gravel, dirt, etc.)	150
2U-H	Two lane undivided – Arterial Type	700
2U	Two lane undivided	425
3U	Three lane undivided (two-way, left-turn lane)	650
4U	Four lane undivided	650
4D	Four lane divided	700
6D	Six lane divided	700

C. COST PER SERVICE UNIT

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

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

D. COST OF THE TIP

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

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

The engineer’s opinion of the probable costs of the projects in the TIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The cost for location specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project as

appropriate. Cash funds allocated from community facilities agreements have been subtracted from the corresponding City projects. In addition, based upon discussions with City of Fort Worth staff, state and county highway projects in which the City will contribute a portion of the total project cost have been included in the TIP as lump sum costs.

A typical roadway project consists of a number of costs, including the following: construction, design engineering, survey, and right-of way acquisition. While the construction cost component of a project may actually consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. Each new project's construction cost was divided into two cost components: roadway construction cost and major construction component allowances. The roadway construction components consist of the following pay items: (1) unclassified street excavation, (2) lime stabilization, (3) concrete pavement, (4) curb & gutter, (5) topsoil, (6) sidewalk, and (7) turn lanes and median openings.

A percentage of the paving construction cost subtotal, is allotted for various major construction component allowances as appropriate. These allowances include preparation of ROW, traffic control, pavement markings/markers, roadway drainage, illumination, minor water and sewer adjustments, establishing turf / erosion control and basic landscaping / irrigation. These allowance percentages are also based on historical data. In addition, lump sum dollar allowances are provided for special drainage structures, railroad crossings, and intersection improvements at half-mile intervals. The paving and allowance subtotal is given a fifteen percent (15%) contingency to determine the construction cost total. To determine the total Impact Fee Project Cost, a percentage of the construction cost total is added for engineering, surveying, testing, and mobilization. Percentages are also allotted for mobilization and ROW/easement acquisition.

The construction costs are variable based on the proposed Master Thoroughfare Plan classification of the roadway. Additional classifications are utilized in cases where a portion of the facility currently exists. The following indication is used for these projects:

- “(1/2)” for facilities where half the facility still needs to be constructed;
- “(1/3)” for future six-lane principal arterials facilities where two additional median lanes are needed;
- “(2/3)” for future six-lane principal arterials facilities where four additional lanes are needed; and
- “- B” for facilities identified on the City of Fort Worth's Bike Plan.

Tables 4.A – 4.Z are the 10-Year Transportation Improvements Plan (TIP) project lists for each service area with planning level project costs. Individual project cost worksheets can be seen in **Appendix A**, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are recoverable through impact fees. Actual project costs are likely to change with time and are dependent on market and economic conditions that cannot be predicted. The TIP establishes the list of projects for which Impact Fees may be utilized. Essentially, it establishes a list of projects for which an impact fee funding program can be established. Projects not included in the TIP are not eligible to receive impact fee funding. The TIP is different from a City's construction CIP, which provides a short-term list of projects that the City is committed to building. The TIP for Impact Fees is simply an inventory of future projects needed to serve future development. The cost projections utilized in this study should not be utilized for the City's building program or construction CIP.

**Table 4.A – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area A**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
A	A-1	MA4D	Litsey Rd. (1)	IH-35W to Future N. Beach St.	0.35	100%	\$ 2,340,000	\$ 2,340,000	
	A-2	MA4D	Litsey Rd. (2)	Future N. Beach St. to Existing Litsey Rd.	0.19	100%	\$ 1,267,000	\$ 1,267,000	
	A-3	MA4D	Litsey Rd. (3)	425' E. of Elizabethtown C. Rd. to Cleveland Gibbs Rd.	0.53	100%	\$ 3,583,000	\$ 3,583,000	
	A-4	MA4D	Litsey Rd. (4)	Cleveland Gibbs Rd. to 470' E of Cleveland Gibbs Rd.	0.09	100%	\$ 560,000	\$ 560,000	
	A-5	MA4D	Litsey Rd. (5)	Henrietta Creek Bridge	0.15	100%	\$ 1,600,000	\$ 1,600,000	
	A-6	MA4D	Litsey Rd. (6)	Henrietta Creek Bridge to Seventeen Lakes Blvd.	0.20	100%	\$ 1,273,000	\$ 1,273,000	
	A-7	MA4D	Litsey Rd. (7)	270' E of Seventeen Lakes Blvd. to E. City Limits	0.37	100%	\$ 2,309,000	\$ 2,309,000	
	A-8	MA4D-B	Eagle Pkwy. (1)	Elizabethtown C. Rd. to 950' E. of Future Beach St.	0.50	100%	\$ 3,709,000	\$ 3,709,000	
	A-9	MA4D-B	Eagle Pkwy. (2)	W. City Limits to Henrietta Creek Rd.	0.54	100%	\$ 3,974,000	\$ 3,974,000	
	A-10	MA4D-B (1/2)	Henrietta Creek Rd.	W. City Limits to Independence Pkwy.	0.31	100%	\$ 1,130,000	\$ 1,130,000	
	A-11	MA4D-B (1/2)	Westport Pkwy. (1)	IH-35W NBFR to 640' E. of IH-35W NBFR	0.12	100%	\$ 612,000	\$ 612,000	
	A-12	MA4D-B	Westport Pkwy. (2)	640' E. of IH-35W NBFR to Old Denton Rd.	0.50	100%	\$ 3,482,000	\$ 3,482,000	
	A-13	MA4D-B	Westport Pkwy. (3)	Old Denton Rd. to Future N. Beach St.	0.50	100%	\$ 3,888,000	\$ 3,888,000	
	A-14	MA4D-B	Westport Pkwy. (4)	Future N. Beach St. to Alta Vista Rd.	0.41	100%	\$ 2,610,000	\$ 2,610,000	
	A-15	MA4D-B (1/2)	Westport Pkwy. (5)	Alta Vista Rd. to Haslet-Roanoke Rd.	0.22	100%	\$ 806,000	\$ 806,000	
	A-16	MA4D-B	Westport Pkwy. (6)	495' NW of SH 170 WBFR to SH 170 WBFR	0.09	100%	\$ 642,000	\$ 642,000	
	A-17	MA4D-B	Westport Pkwy. (7)	SH 170 EBFR to Existing Westport Pkwy.	0.40	100%	\$ 2,732,000	\$ 2,732,000	
	A-18	MA4D-B (1/2)	Westport Pkwy. (8)	400' E of Park Vista Blvd. to 1370' W of Independence Pkwy.	0.37	100%	\$ 1,341,000	\$ 1,341,000	
	A-19, D-1	MA4D-B	Timberland Blvd. (1)	Beach St. to 425' E of Lillybrook Ln.	0.39	50%	\$ 544,917	\$ 272,459	
	A-20, D-2	MA4D-B	Timberland Blvd. (2)	425' E of Lillybrook Ln. to Caylor Rd.	0.30	50%	\$ 1,970,000	\$ 985,000	
	A-21, D-3	MA4D-B	Timberland Blvd. (3)	Caylor Rd. To Park Vista Blvd.	0.29	50%	\$ 1,571,000	\$ 785,500	
	A-22, D-5	MA4D-B	Timberland Blvd. (5)	390' E of Harvest Oaks Dr. to E. City Limits	0.10	50%	\$ 695,000	\$ 347,500	
	A-23	MA4D-B	Old Denton Rd. (1)	Westport Pkwy. to SH 170 WB	0.52	100%	\$ 3,605,000	\$ 3,605,000	
	A-24	MA4D	N. Beach St. (1)	Litsey Rd. to Eagle Pkwy.	0.63	100%	\$ 4,391,000	\$ 4,391,000	
	A-25	MA4D-B	N. Beach St. (2)	Eagle Pkwy. to S. City Limits	0.35	100%	\$ 2,388,000	\$ 2,388,000	
	A-26	P6D-B	N. Beach St. (3)	Westport Pkwy. to SH 170 WB	0.21	100%	\$ 1,844,000	\$ 1,844,000	
	A-27, D-23	P6D-B	N. Beach St. (4)	SH 170 EBFR to 410' N of Saratoga Downs	0.39	50%	\$ 3,383,000	\$ 1,691,500	
	A-28, D-24	P6D (1/3)	N. Beach St. (5)	410' N of Saratoga Downs Way to Timberland Blvd.	0.70	50%	\$ 1,378,000	\$ 689,000	
	A-29	MA4D-B	Independence Pkwy. (1)	N. City Limits to Henrietta Creek Rd.	1.15	100%	\$ 8,404,000	\$ 8,404,000	
	A-30	MA4D-B (1/2)	Park Vista Blvd. (1)	Keller-Haslet Rd. to Timberland Blvd.	0.56	100%	\$ 2,282,000	\$ 2,282,000	

**Table 4.AA – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area AA**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
AA	AA-1	P6D (2/3)	Intermodal Pkwy.	FM 156 to Haslet County Line Rd	0.70	100%	\$ 4,178,000	\$ 4,178,000
	AA-2	P6D (1/2)	Cleveland-Gibbs Rd.	N. City Limits to IH-35W SBFR	0.24	100%	\$ 1,049,000	\$ 1,049,000
	Service Area Project Cost Subtotal							\$ 5,227,000
Transportation Impact Fee Study Cost (Per Service Area)							\$ 25,555	
Total Cost in SERVICE AREA AA								\$ 5,252,555

**Table 4.B – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area B**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
B	B-1	MA4D-B	Eagle Pkwy.	W. City Limits to E. City Limits	1.69	50%	\$ 12,769,000	\$ 6,384,500
	B-2	M4U	Rancho Canyon Way (1)	Sendera Ranch Blvd. to Salida Rd.	1.82	100%	\$ 9,470,000	\$ 9,470,000
	B-3	M4U-B	Rancho Canyon Way (2)	80' E of Cabo St. to Future John Day Rd.	0.25	100%	\$ 1,222,000	\$ 1,222,000
	B-4	M4U	Avondale Haslet Rd. (1)	US 287 NBFR to Bates Aston Rd.	0.80	100%	\$ 3,205,608	\$ 3,205,608
	B-5	M4U	Avondale Haslet Rd. (2)	N. Willow Springs Rd. to Willow Springs Rd.	0.36	100%	\$ 1,609,000	\$ 1,609,000
	B-6	M4U	Avondale Haslet Rd. (3)	235' W. of Moonlake Way to Moonlake Way	0.04	100%	\$ 165,000	\$ 165,000
	B-7	M4U	Avondale Haslet Rd. (4)	Moonlake Way to Sendera Ranch Blvd.	0.40	100%	\$ 1,808,000	\$ 1,808,000
	B-8	M4U	Avondale Haslet Rd. (5)	Sendera Ranch Blvd. to Future Sendera Ranch Blvd.	0.11	100%	\$ 943,000	\$ 943,000
	B-9	M4U	Avondale Haslet Rd. (6)	Future Sendera Ranch Blvd. to E. City Limits	0.52	100%	\$ 2,730,000	\$ 2,730,000
	B-10	M4U-B	Blue Mound Rd.	Willow Springs Rd. to Future Wagley Robertson Rd.	1.00	100%	\$ 5,181,000	\$ 5,181,000
	B-11	P6D	Sendera Ranch Blvd. (1)	Future Eagle Pkwy. to Rancho Canyon Way	0.92	100%	\$ 8,158,000	\$ 8,158,000
	B-12	P6D	Sendera Ranch Blvd. (2)	Rancho Canyon Way to Suncatcher Way	0.53	50%	\$ 4,846,000	\$ 2,423,000
	B-13	P6D (1/3)	Sendera Ranch Blvd. (3)	Suncatcher Way to Snaffle Bit Trl.	0.69	100%	\$ 1,354,000	\$ 1,354,000
	B-14	P6D (2/3)	Sendera Ranch Blvd. (4)	Snaffle Bit Trl. to Mustang Ridge Dr.	0.23	100%	\$ 2,071,000	\$ 2,071,000
	B-15	P6D (1/3)	Sendera Ranch Blvd. (5)	Mustang Ridge Dr. to Diamondback Ln.	0.25	100%	\$ 481,000	\$ 481,000
	B-16	P6D (2/3)	Sendera Ranch Blvd. (6)	Diamondback Ln. to Future Sendera Ranch Blvd.	0.72	100%	\$ 4,678,000	\$ 4,678,000
	B-17	P6D	Sendera Ranch Blvd. (7)	Existing Sendera Ranch Blvd. to Future Avondale Haslet	0.21	100%	\$ 1,849,000	\$ 1,849,000
	B-18	P6D	Sendera Ranch Blvd. (8)	Future Avondale Haslet to Blue Mound Rd.	1.93	100%	\$ 18,225,000	\$ 18,225,000
	B-19	MA4D-B	John Day Rd. (1)	N. City Limits to Rancho Canyon Way	1.78	100%	\$ 13,392,000	\$ 13,392,000
	B-20	MA4D	John Day Rd. (2)	Rancho Canyon Way to S. City Limits	0.15	100%	\$ 998,000	\$ 998,000
	B-21	M4U-B	Willow Springs Rd. (1)	Avondale Haslet Rd. to 205' S. of Velda Kay Ln.	0.30	50%	\$ 1,426,000	\$ 713,000
	B-22	M4U-B	Willow Springs Rd. (2)	205' S. of Velda Kay Ln. to Blue Mound Rd.	1.25	100%	\$ 6,462,000	\$ 6,462,000
	B-23	M4U-B	Willow Springs Rd. (3)	Blue Mound Rd. to S. City Limits	0.93	100%	\$ 4,628,000	\$ 4,628,000
	B-24, C-14	MA4D	Wagley Robertson Rd. (1)	250' N. of US 287 to 125' N of Hawks Landing Rd.	0.41	50%	\$ 7,067,000	\$ 3,533,500
Service Area Project Cost Subtotal								\$ 101,683,608
Transportation Impact Fee Study Cost (Per Service Area)								\$ 25,555
Total Cost in SERVICE AREA B								\$ 101,709,163

**Table 4.C – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area C**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
C	C-1	MA4D-B	Bonds Ranch Rd. (1)	Wagley Robertson Rd. to Foothill Dr.	0.12	50%	\$ 1,158,000	\$ 579,000
	C-2	MA4D-B	Bonds Ranch Rd. (2)	Foothill Dr. to FM 156	1.39	100%	\$ 10,340,000	\$ 10,340,000
	C-3	MA4D-B	Bonds Ranch Rd. (3)	FM 156 to Harmon Rd.	1.00	100%	\$ 7,368,000	\$ 7,368,000
	C-4	MA4D-B (1/2)	Golden Triangle Blvd. (1)	Misty Redwood Trl. to Golden Heights Rd.	0.34	100%	\$ 1,635,000	\$ 1,635,000
	C-5	MA4D-B	Golden Triangle Blvd. (2)	Golden Heights Rd. to Existing Golden Triangle Blvd.	0.23	100%	\$ 1,565,000	\$ 1,565,000
	C-6	MA4D-B	Heritage Trace Pkwy. (3)	Wagley Robertson Rd. to 220' SW of Drovers View Trl.	1.43	100%	\$ 12,315,000	\$ 12,315,000
	C-7	MA4D-B	Heritage Trace Pkwy. (4)	FM 156 to 130' S of Creosote Dr.	0.93	100%	\$ 9,972,000	\$ 9,972,000
	C-8	P6D (1/3)	Heritage Trace Pkwy. (5)	Harmon Rd. to IH-35W SBFR	0.80	100%	\$ 1,561,000	\$ 1,561,000
	C-9	P6D-B	N. Tarrant Pkwy. (1)	Existing Harmon Rd. to Existing N. Tarrant Pkwy.	0.41	100%	\$ 9,779,000	\$ 9,779,000
	C-10	MA4D	Bailey Boswell Rd. (3)	FM 156 to Horseman Rd.	0.69	100%	\$ 5,670,000	\$ 5,670,000
	C-11, F-1	MA4D-B (1/2)	Basswood Blvd. (1)	Blue Mound Rd. (FM 156) to 960' E. of FM 156	0.18	50%	\$ 664,000	\$ 332,000
	C-12, F-2	MA4D-B	Basswood Blvd. (2)	960' E. of FM 156 to Horseman Rd.	0.72	50%	\$ 6,048,000	\$ 3,024,000
	C-13, F-3	MA4D-B (1/2)	Basswood Blvd. (3)	Horseman Rd. to Candler Dr.	0.29	50%	\$ 1,061,000	\$ 530,500
	B-24, C-14	MA4D	Wagley Robertson Rd. (1)	250' N. of US 81 to 525' N of Hawks Landing Rd.	0.41	50%	\$ 7,067,000	\$ 3,533,500
	C-15	MA4D	Wagley Robertson Rd. (2)	525' N of Hawks Landing Rd. to 125' N of Hawks Landing	0.08	50%	\$ 552,000	\$ 276,000
	C-16	MA4D (1/2)	Wagley Robertson Rd. (3)	125' N of Hawks Landing Rd. to 80' S of Darby Ln.	0.43	50%	\$ 1,531,000	\$ 765,500
	C-17, E-13	MA4D-B	Wagley Robertson Rd. (4)	Hillwood Blvd. to 440' N of Coneflower Trl.	0.63	50%	\$ 5,088,000	\$ 2,544,000
	C-18	MA4D	Wagley Robertson Rd. (5)	225' S. of Prairie Clover Trl. to Tarrant Pkwy.	0.42	100%	\$ 3,638,000	\$ 3,638,000
	C-19, E-14	MA4D	Wagley Robertson Rd. (6)	150' N of Mystic River Trl. to 700' S of Mystic River Trl.	0.16	50%	\$ 1,023,000	\$ 511,500
	C-20	MA4D-B	Harmon Rd. (1)	Keller Hicks Rd. to Existing Harmon Rd.	0.44	100%	\$ 2,986,000	\$ 2,986,000
	C-21	MA4D-B	Harmon Rd. (2)	Future Harmon Alignment to 260' N. of Golden Triangle Blvd.	0.18	50%	\$ 1,588,000	\$ 794,000
	C-22	MA4D-B	Harmon Rd. (3)	260' N. of Golden Triangle Blvd. to Future Golden Triangle Alignment	0.12	100%	\$ 825,000	\$ 825,000
	C-23	MA4D-B (1/2)	Harmon Rd. (4)	Bonds Ranch Rd. to 475' S. of Heritage Trace Pkwy.	0.74	100%	\$ 2,938,000	\$ 2,938,000
	C-24	MA4D-B	Harmon Rd. (5)	475' S. of Heritage Trace Pkwy. to Presidio Vista Dr.	0.54	100%	\$ 3,764,000	\$ 3,764,000
	C-25	P6D-B	Harmon Rd. (6)	Presidio Vista Dr. to US 287 SBFR	0.58	100%	\$ 5,040,000	\$ 5,040,000
	C-26	P6D-B	Harmon Rd. (7)	US 287 SBFR to Future N. Tarrant Pkwy.	0.17	100%	\$ 1,449,000	\$ 1,449,000
	C-27	MA4D	Harmon Rd. (8)	Future N. Tarrant Pkwy. to Horseman Rd.	0.84	100%	\$ 5,828,000	\$ 5,828,000
	C-28	M4U (1/2)	Horseman Rd.	Bailey Boswell Rd. to 600' N. of Canchim St.	0.37	100%	\$ 1,237,000	\$ 1,237,000
							Service Area Project Cost Subtotal	\$ 100,800,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 25,555
							Total Cost in SERVICE AREA C	\$ 100,825,555

**Table 4.D – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area D**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
D	A-19, D-1	MA4D-B	Timberland Blvd. (1)	Beach St. to 425' E of Lillybrook Ln.	0.39	50%	\$ 544,917	\$ 272,459
	A-20, D-2	MA4D-B	Timberland Blvd. (2)	425' E of Lillybrook Ln. to Caylor Rd.	0.30	50%	\$ 1,970,000	\$ 985,000
	A-21, D-3	MA4D-B	Timberland Blvd. (3)	Caylor Rd. To Park Vista Blvd.	0.29	50%	\$ 1,571,000	\$ 785,500
	D-4	MA4D-B (1/2)	Timberland Blvd. (4)	Park Vista Blvd. to 390' E of Harvest Oaks Dr.	0.52	100%	\$ 2,129,000	\$ 2,129,000
	A-22, D-5	MA4D-B	Timberland Blvd. (5)	390' E of Harvest Oaks Dr. to E. City Limits	0.10	50%	\$ 695,000	\$ 347,500
	D-6	M4U-B	Keller Hicks Rd. (1)	Riverside Dr. to 600' W of Ridgeview Cir.	1.03	100%	\$ 5,292,000	\$ 5,292,000
	D-7	M4U-B	Keller Hicks Rd. (2)	600' W. of Ridgeview Cir. to Alta Vista Rd.	0.44	100%	\$ 1,071,577	\$ 1,071,577
	D-8	M4U-B	Keller Hicks Rd. (3)	Alta Vista Rd. to Park Vista Blvd.	0.52	100%	\$ 1,304,000	\$ 1,304,000
	D-9	M4U-B	Keller Hicks Rd. (4)	Park Vista Blvd. to Katy Rd.	1.00	100%	\$ 5,176,000	\$ 5,176,000
	D-10	P6D (1/3)	Golden Triangle Blvd. (3)	IH-35W NBFR to Katy Rd.	3.54	100%	\$ 13,397,000	\$ 13,397,000
	D-11	MA4D-B (1/2)	Kroger Dr.	Park Vista Blvd. to US 377	0.31	100%	\$ 1,478,000	\$ 1,478,000
	D-12	P6D (1/3)	N. Tarrant Pkwy. (2)	IH-35W NBFR to US 377	3.48	100%	\$ 6,661,000	\$ 6,661,000
	D-13	M4U-B (1/2)	Summerfields Blvd.	N Riverside Dr. to Cannonwood Dr.	0.18	100%	\$ 410,000	\$ 410,000
	D-14	MA4D-B	Old Denton Rd. (2)	SH 170 EB to 190' N of Hidden Valley Dr.	0.18	100%	\$ 1,188,000	\$ 1,188,000
	D-15	MA4D-B (1/2)	Old Denton Rd. (3)	90' N of Hidden Valley Dr. to 135' S of San Fernando Dr.	0.17	100%	\$ 618,000	\$ 618,000
	D-16	MA4D-B	Old Denton Rd. (4)	135' S of San Fernando Dr. to 325' N of Sawtimber Trl.	0.16	100%	\$ 1,071,000	\$ 1,071,000
	D-17	MA4D-B (1/2)	N. Riverside Dr. (1)	Timberland Blvd. to Keller Hicks Rd.	0.20	100%	\$ 736,000	\$ 736,000
	D-18	MA4D-B (1/2)	N. Riverside Dr. (2)	Keller Hicks Rd. to 410' N of Golden Triangle Blvd.	0.38	100%	\$ 1,399,000	\$ 1,399,000
	D-19	MA4D-B	N. Riverside Dr. (3)	410' N of Golden Triangle Blvd. to Golden Triangle Blvd.	0.08	100%	\$ 950,000	\$ 950,000
	D-20	MA4D-B	N. Riverside Dr. (4)	Dalton St. to N. Tarrant Pkwy.	0.98	100%	\$ 6,726,000	\$ 6,726,000
	D-21	MA4D-B (1/2)	N. Riverside Dr. (5)	N. Tarrant Pkwy. to Summerfields Blvd.	0.71	100%	\$ 2,824,000	\$ 2,824,000
	D-22	MA4D-B (1/2)	N. Riverside Dr. (6)	Summerfields Blvd. to 710' S of Princess Victoria Ct.	0.29	100%	\$ 1,061,000	\$ 1,061,000
	A-27, D-23	P6D-B	N. Beach St. (4)	SH 170 EBFR to 410' N of Saratoga Downs Way	0.39	50%	\$ 3,383,000	\$ 1,691,500
	A-28, D-24	P6D (1/3)	N. Beach St. (5)	410' N of Saratoga Downs to Timberland Blvd.	0.70	50%	\$ 1,378,000	\$ 689,000
	D-25	P6D (1/3)	N. Beach St. (6)	Timberland Blvd. to Keller Hicks Rd.	1.03	100%	\$ 7,287,000	\$ 7,287,000
	D-26	P6D (1/3)	N. Beach St. (7)	Keller Hicks Rd. to Golden Triangle Blvd.	0.75	100%	\$ 7,861,000	\$ 7,861,000
	D-27	P6D (1/3)	N. Beach St. (8)	Golden Triangle Blvd. to Vista Meadows Dr.	0.74	100%	\$ 1,456,000	\$ 1,456,000
	D-28	P6D-B (2/3)	N. Beach St. (9)	Vista Meadows Dr. to Alta Vista Rd.	0.18	100%	\$ 1,393,000	\$ 1,393,000
	D-29	P6D-B	N. Beach St. (10)	Alta Vista Rd. to Heritage Trace Pkwy.	0.22	100%	\$ 1,835,000	\$ 1,835,000
	D-30	P6D-B	N. Beach St. (11)	Heritage Trace Pkwy. to Heritage Glen Dr.	0.47	100%	\$ 3,889,000	\$ 3,889,000
	D-31	P6D-B (2/3)	N. Beach St. (12)	Heritage Glen Dr. to 155' S of Springview Ln.	0.65	100%	\$ 3,864,000	\$ 3,864,000
	D-32	P6D (1/3)	N. Beach St. (13)	155' S of Springview Ln. to 380' S of Spring Mist Cv.	0.14	100%	\$ 198,000	\$ 198,000
	D-33	MA4D-B	Park Vista Blvd. (2)	Timberland Blvd. to Caylor Rd.	0.18	100%	\$ 1,240,000	\$ 1,240,000
	D-34	MA4D-B	Park Vista Blvd. (3)	Keller Hicks Rd. to Golden Triangle Blvd.	0.51	100%	\$ 3,663,000	\$ 3,663,000
	D-35	MA4D-B	Park Vista Blvd. (4)	Golden Triangle Blvd. to Ray White Rd./Wyndbrook St.	0.51	100%	\$ 4,151,000	\$ 4,151,000
	D-36	MA4D-B	Ray White Rd. (1)	Wyndbrook St. to 320' S of Pinellas Ave.	0.15	100%	\$ 979,000	\$ 979,000
	D-37	MA4D-B	Ray White Rd. (2)	320' S of Pinellas Ave. to 230' N of Wall Price Keller Rd.	0.32	50%	\$ 2,067,000	\$ 1,033,500
	D-38	MA4D-B	Ray White Rd. (3)	230' N of Wall Price Keller Rd. to Wall Price Keller Rd.	0.04	100%	\$ 284,000	\$ 284,000
	D-39	MA4D-B	Ray White Rd. (4)	Wall Price Keller Rd. to 145' N of Archer Dr.	0.12	50%	\$ 763,000	\$ 381,500
	D-40	MA4D-B	Ray White Rd. (5)	145' N of Archer Dr. to 170' N of Mirage Dr.	0.09	100%	\$ 616,000	\$ 616,000
	D-41	MA4D-B (1/2)	Ray White Rd. (6)	Shiver Rd. to N. Tarrant Pkwy.	0.50	100%	\$ 2,283,000	\$ 2,283,000
							Service Area Project Cost Subtotal	\$ 100,676,536
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 25,555
							Total Cost in SERVICE AREA D	\$ 100,702,091

**Table 4.E – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area E**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
E	E-1	MA4D-B	Heritage Trace Pkwy. (1)	Existing Boat Club Rd. to City Limits	1.39	100%	\$ 9,999,000	\$ 9,999,000
	E-2	MA4D-B	Heritage Trace Pkwy. (2)	Old Decatur to 250' W. of Wagley Robertson Rd.	1.39	100%	\$ 10,772,000	\$ 10,772,000
	E-3	M4U	Park Dr. (1)	Boat Club Rd. to Park Dr. (Right-angle turn)	1.01	100%	\$ 5,053,000	\$ 5,053,000
	E-4	M4U (1/2)	Park Dr. (2)	Park Dr. (Right-angle turn) to 815' E. of Park Dr.	0.15	100%	\$ 351,000	\$ 351,000
	E-5	M4U	Park Dr. (3)	815' E. of Park Dr. to Old Decatur Rd.	0.72	100%	\$ 3,699,000	\$ 3,699,000
	E-6	M4U	Robertson Rd.	680' W. of Lake Country Dr. to Boat Club Rd.	0.87	100%	\$ 4,155,000	\$ 4,155,000
	E-7	M4U	Lake Country Dr. (1)	Western Lakes Dr. to Eagle Ranch Blvd.	0.57	100%	\$ 2,817,000	\$ 2,817,000
	E-8	M4U	Lake Country Dr. (2)	Eagle Ranch Blvd. to Robertson Rd.	0.28	100%	\$ 1,274,000	\$ 1,274,000
	E-9, G-1	M4U-B	W J Boaz Rd.	Boat Club Rd. to Old Decatur Rd.	2.05	50%	\$ 11,351,000	\$ 5,675,500
	E-10	MA4D-B	Boat Club Rd.	Bonds Ranch Rd. to Park Dr.	2.68	100%	\$ 21,254,000	\$ 21,254,000
	E-11	M4U-B	Old Decatur Rd. (1)	285' S. of Milo Dr. to 200' S. of Millstone Trl.	0.17	100%	\$ 718,000	\$ 718,000
	E-12	M4U-B	Willow Springs Rd.	1680' S. of Hicks Rd. to Future Heritage Trace Pkwy.	1.54	100%	\$ 8,803,000	\$ 8,803,000
	C-17, E-13	MA4D-B	Wagley Robertson Rd. (4)	Hillwood Blvd. to 440' N of Coneflower Trl.	0.63	50%	\$ 5,088,000	\$ 2,544,000
	C-19, E-14	MA4D	Wagley Robertson Rd. (6)	150' N of Mystic River Trl. to 700' S of Mystic River Trl.	0.16	50%	\$ 1,023,000	\$ 511,500
	E-15	MA4D-B	Bailey Boswell Rd. (1)	Boat Club Rd. to 165' E. of Axis Deer Run	0.38	50%	\$ 2,448,000	\$ 1,224,000
	E-16	MA4D-B	Bailey Boswell Rd. (2)	40' W. of Bowman Roberts Rd. to 30' W. of Old Decatur Rd.	1.52	100%	\$ 10,008,000	\$ 10,008,000
Service Area Project Cost Subtotal							\$ 88,858,000	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 25,555	
Total Cost in SERVICE AREA E							\$ 88,883,555	

**Table 4.F – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area F**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
F	C-11, F-1	MA4D-B (1/2)	Basswood Blvd. (1)	Blue Mound Rd. (FM 156) to 960' E. of FM 156	0.18	50%	\$ 664,000	\$ 332,000
	C-12, F-2	MA4D-B	Basswood Blvd. (2)	960' E. of FM 156 to Horseman Rd.	0.72	50%	\$ 6,048,000	\$ 3,024,000
	C-13, F-3	MA4D-B (1/2)	Basswood Blvd. (3)	Horseman Rd. to Candler Dr.	0.29	50%	\$ 1,061,000	\$ 530,500
	F-4	P6D	Western Center Blvd. (1)	Blue Mound Rd. (FM 156) to 410' E. of FM 156	0.08	100%	\$ 636,000	\$ 636,000
	F-5	P6D (1/3)	Western Center Blvd. (2)	410' E. of FM 156 to Mark IV Pkwy	0.50	100%	\$ 974,000	\$ 974,000
	F-6	P6D (1/6)	Western Center Blvd. (3)	Sandshell Blvd. to Riverside Dr.	0.27	100%	\$ 304,000	\$ 304,000
	F-7	P6D (1/3)	Western Center Blvd. (4)	Riverside Dr. to 980' E. of Riverside Dr.	0.19	100%	\$ 364,000	\$ 364,000
	F-8	P6D (1/3)	Western Center Blvd. (5)	605' W. of Bayberry Dr. to Beach St.	0.62	100%	\$ 1,208,000	\$ 1,208,000
	F-9	MA4D-B	Cantrell Sansom Rd. (1)	455' W of Nafex Way to 145' W of Maiden Ln.	0.21	100%	\$ 1,748,000	\$ 1,748,000
	F-10	MA4D-B (1/2)	Cantrell Sansom Rd. (2)	145' W of Maiden Ln. to 190 E. of Deerfoot Trl.	0.21	100%	\$ 760,000	\$ 760,000
	F-11	MA4D-B (1/2)	Cantrell Sansom Rd. (3)	195' W. of Lionfish Way to Mark IV Pkwy.	0.13	100%	\$ 481,000	\$ 481,000
	F-12	MA4D-B	Cantrell Sansom Rd. (4)	Mark IV Pkwy. to Old Denton Rd.	0.32	100%	\$ 1,941,000	\$ 1,941,000
	F-13	MA4D-B	Cantrell Sansom Rd. (5)	Old Denton Rd. to Future IH-35W SBFR	0.15	100%	\$ 1,059,000	\$ 1,059,000
	F-14	M4U	Northeast Pkwy.	Superior Pkwy. to Mark IV Pkwy.	0.20	100%	\$ 1,232,000	\$ 1,232,000
	F-15	MA4D-B (1/2)	Meacham Blvd. (1)	315' E. of Blue Mound Rd. to RR Bridge	0.46	100%	\$ 1,693,000	\$ 1,693,000
	F-16	P6D-B (1/2)	Meacham Blvd. (2)	Deen Rd. to 590' W of Gemini Pl.	0.51	100%	\$ 2,520,000	\$ 2,520,000
	F-17	P6D (1/3)	Meacham Blvd. (3)	Little Fossil Creek Bridge to Beach St.	0.89	100%	\$ 1,741,000	\$ 1,741,000
	F-18	MA4D-B	Long Ave Bridge	700' W. of UP RR to Half Moon Dr.	0.32	100%	\$ 5,430,000	\$ 5,430,000
	F-19	MA4D-B	Robert W. Downing Dr. (1)	Basswood Blvd. to 1,245' N. of Lou Menk Dr.	0.15	100%	\$ 1,045,000	\$ 1,045,000
	F-20	MA4D-B (1/2)	Robert W. Downing Dr. (2)	1,245' N. of Lou Menk Dr. to 230' N. of Lou Menk Dr.	0.19	100%	\$ 702,000	\$ 702,000
	F-21	M4U	Lone Star Blvd.	Existing Dead End to 800' N. of Meacham Blvd.	0.68	100%	\$ 4,211,000	\$ 4,211,000
	F-22	MA4D-B (1/2)	Mark IV Pkwy.	Cantrell Sansom Rd. to Loop 820 WBFR	0.52	100%	\$ 2,144,000	\$ 2,144,000
	F-23	M4U (1/2)	Old Denton Rd.	Staybridge Pl. to Cantrell Sansom Rd.	0.61	100%	\$ 1,625,000	\$ 1,625,000
	F-24	M4U	Sylvania Ave.	150' of Melody Hills Dr. to Quorum Dr.	0.35	100%	\$ 1,580,000	\$ 1,580,000
	F-25	MA4D-B	Riverside Dr. Bridge	Stone Creek Pkwy. to Existing Riverside Dr.	0.19	100%	\$ 6,000,000	\$ 6,000,000
	F-26	P6D (1/3)	N. Beach St. (14)	Fossil Creek to Sandshell Blvd.	0.56	100%	\$ 1,104,000	\$ 1,104,000
Service Area Project Cost Subtotal							\$ 44,388,500	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 25,555	
Total Cost in SERVICE AREA F							\$ 44,414,055	

**Table 4.G – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area G**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
G	E-9, G-1	M4U-B	W J Boaz Rd.	Boat Club Rd. to Old Decatur Rd.	2.05	50%	\$ 11,351,000	\$ 5,675,500
	G-2	M4U	Cromwell Marine Creek Rd. (1)	Ten Mile Bridge Rd. to N. City Limits	0.74	100%	\$ 3,771,000	\$ 3,771,000
	G-3	MA4D-B	Cromwell Marine Creek Rd. (2)	Boat Club Rd. to Chesterfield Dr.	1.21	100%	\$ 8,747,000	\$ 8,747,000
	G-4	MA4D-B	Cromwell Marine Creek Rd. (3)	360' E. of Crystal Lake Dr. to Stonewater Bend Tr.	0.20	100%	\$ 1,605,000	\$ 1,605,000
	G-5	MA4D-B	Cromwell Marine Creek Rd. (4)	Stonewater Bend Tr. to Marine Creek Pkwy.	0.58	100%	\$ 4,521,000	\$ 4,521,000
	G-6	MA4D-B	Longhorn Rd.	Marine Creek Pkwy. to Old Decatur Rd.	0.24	100%	\$ 1,563,000	\$ 1,563,000
	G-7	M4U-B	Ten Mile Bridge Rd. (1)	W. City Limits to Boat Club Rd.	1.09	100%	\$ 5,600,000	\$ 5,600,000
	G-8	M4U-B	Ten Mile Bridge Rd. (2)	Boat Club Rd. to Bowman Roberts Rd.	0.55	100%	\$ 2,842,000	\$ 2,842,000
	G-9	M4U-B	Ten Mile Bridge Rd. (3)	Westgate Dr. to Huffines Blvd.	0.41	100%	\$ 1,916,000	\$ 1,916,000
	G-10	M4U	Hodgkins Rd.	Ten Mile Bridge Rd. to 105' S. of Hatch Rd.	1.03	100%	\$ 5,141,000	\$ 5,141,000
	G-11	M4U-B (1/2)	Huffines Blvd. (1)	330' S. of Cromwell Marine Creek Rd. to 135' S. of Sunrise Lake Rd.	0.51	100%	\$ 1,422,000	\$ 1,422,000
	G-12	M4U-B (1/2)	Huffines Blvd. (2)	Texas Shiner Dr. to Sea Bass Dr.	0.33	100%	\$ 775,000	\$ 775,000
	G-13	MA4D	Marine Creek Pkwy. (1)	Old Decatur to Existing Cromwell Marine Creek Rd.	0.34	100%	\$ 2,246,000	\$ 2,246,000
	G-14	MA4D-B	Marine Creek Pkwy. (2)	Existing Cromwell Marine Creek Rd. to 420' N of Grayson Ridge Dr.	0.77	100%	\$ 5,210,000	\$ 5,210,000
	G-15	MA4D	Marine Creek Pkwy. (3)	Angle Ave. to Azle Ave.	0.98	100%	\$ 7,154,000	\$ 7,154,000
	G-16	M4U (1/2)	Old Decatur Rd. (2)	River Rock Blvd. to IH-820 WBFR	0.30	100%	\$ 672,000	\$ 672,000
	G-17	M4U	Old Decatur Rd. (3)	IH-820 EBFR to Angle Ave.	0.80	100%	\$ 3,880,000	\$ 3,880,000
	G-18	M4U	Delfin St	345' S. of IH-820 EBFR to Future Marine Creek Pkwy	0.70	100%	\$ 3,586,000	\$ 3,586,000
Service Area Project Cost Subtotal								\$ 66,326,500
Transportation Impact Fee Study Cost (Per Service Area)								\$ 25,555
Total Cost in SERVICE AREA G								\$ 66,352,055

**Table 4.L – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area L**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
L	L-1	MA4D-B	E 1st St. (1)	N. Beach St. to 825' W of Oakland Blvd.	1.53	100%	\$ 3,315,000	\$ 3,315,000
	L-2	MA4D-B	Randol Mill Rd. (1)	500' NE of Lake Havasu Tr. to 630' W of Woodhaven Blvd.	0.77	100%	\$ 5,222,000	\$ 5,222,000
Service Area Project Cost Subtotal								\$ 8,537,000
Transportation Impact Fee Study Cost (Per Service Area)								\$ 25,555
Total Cost in SERVICE AREA L								\$ 8,562,555

**Table 4.M – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area M**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
M	M-1	MA4D-B	Precinct Line Rd. (1)	Trinity Railway Express (City Limits) to Trinity Blvd.	0.34	100%	\$ 962,000	\$ 962,000
	M-2	MA4D-B	Precinct Line Rd. (2)	Trinity Blvd. to Existing Randol Mill Rd.	1.74	100%	\$ 10,837,000	\$ 10,837,000
	M-3	MA4D-B	Precinct Line Rd. (3)	Existing Randol Mill Rd. to Future Randol Mill Rd.	0.07	100%	\$ 500,000	\$ 500,000
	M-4	M4U	Norwood Dr. (1)	65' S. of SH 10 to 750' N of Trinity Blvd.	0.31	100%	\$ 1,754,000	\$ 1,754,000
	M-5	M4U (1/2)	Norwood Dr. (2)	750' N of Trinity Blvd. to Trinity Blvd.	0.14	100%	\$ 323,000	\$ 323,000
	M-6	M4U	Sandy Ln. (1)	Randol Mill Rd. to Winters St.	0.13	100%	\$ 1,051,000	\$ 1,051,000
	M-7	M4U-B	Sandy Ln. (2)	Winters St. to John T. White Rd.	0.92	100%	\$ 4,546,000	\$ 4,546,000
	M-8	M4U-B	Sandy Ln. (3)	John T. White Rd. to IH-30 EB	0.45	100%	\$ 2,773,000	\$ 2,773,000
	M-9	MA4D-B	Cooks Ln. (1)	Future Randol Mill Rd. to Existing Cooks Ln.	0.59	100%	\$ 4,293,000	\$ 4,293,000
	M-10	MA4D-B	Cooks Ln. (2)	Future Cooks Ln. Alignment to Lowery Rd.	0.12	100%	\$ 788,000	\$ 788,000
	M-11	MA4D-B (1/2)	Cooks Ln. (3)	Lowery Rd. to 545' N. of Meadow View Tr.	0.18	100%	\$ 357,000	\$ 357,000
	M-12	MA4D-B (1/2)	Cooks Ln. (4)	545' N. of Meadow View Tr. To 400' N of John T. White Rd.	0.25	100%	\$ 906,000	\$ 906,000
	M-13	M4U-B	Randol Mill Rd. (2)	Stone View Circle to 125' W. of Flyaway Ln.	0.79	100%	\$ 4,317,000	\$ 4,317,000
	M-14	M4U-B (1/2)	Randol Mill Rd. (3)	125' W. of Flyaway Ln. to 45' E. of Goldeneye Ln.	0.10	100%	\$ 243,000	\$ 243,000
	M-15	M4U-B	Randol Mill Rd. (4)	45' E. of Goldeneye Ln. to 410' E of Existing Cooks Ln.	0.69	100%	\$ 3,862,000	\$ 3,862,000
	M-16	M4U-B	Randol Mill Rd. (5)	410' E of Existing Cooks Ln. to Future Precinct Line Rd.	0.35	100%	\$ 1,752,000	\$ 1,752,000
	M-17	M4U-B	Randol Mill Rd. (6)	Future Precinct Line Rd. to Existing Randol Mill Rd.	0.35	100%	\$ 1,757,000	\$ 1,757,000
	M-18	M4U-B	Randol Mill Rd. (7)	Future Randol Mill Alignment to Mill Water Dr.	0.48	100%	\$ 2,253,000	\$ 2,253,000
	M-19	M4U-B (1/2)	Randol Mill Rd. (8)	Mill Water Dr. to Racquet Club Dr.	0.21	100%	\$ 483,000	\$ 483,000
	M-20	M4U-B	Randol Mill Rd. (9)	John T. White Rd. to 165' SE of Winding Ln.	0.19	100%	\$ 891,000	\$ 891,000
	M-21	M4U-B (1/2)	Randol Mill Rd. Bridge	145' SE of Cottonwood Village Dr. to IH-30 EB	0.11	100%	\$ 1,265,000	\$ 1,265,000
	M-22	M4U	Anderson Blvd. (1)	1270' W of Williams Rd. to 1055' W of Williams Rd.	0.04	100%	\$ 196,000	\$ 196,000
	M-23	M4U	Anderson Blvd. (2)	1055' W of Williams Rd. to Sandy Ln.	0.48	100%	\$ 2,176,000	\$ 2,176,000
	M-24	M4U	House Anderson Rd. (4)	N City Limits to S City Limits	0.70	100%	\$ 3,573,000	\$ 3,573,000
	M-25	MA4D-B	Trinity Blvd. (1)	IH-820 NB to Precinct Line Rd.	1.67	100%	\$ 11,532,000	\$ 11,532,000
	M-26	MA4D-B	Trinity Blvd. (2)	Precinct Line Rd. to Norwood Dr.	0.86	100%	\$ 6,570,000	\$ 6,570,000
	M-27	MA4D-B	Trinity Blvd. (3)	Norwood Dr. to Bell Spur	0.58	100%	\$ 4,386,000	\$ 4,386,000
	M-28	P6D-B	Trinity Blvd. (4)	Bell Spur to 1110' W of Greenbelt Rd.	0.56	100%	\$ 5,247,000	\$ 5,247,000
							Service Area Project Cost Subtotal	\$ 79,593,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 25,555
							Total Cost in SERVICE AREA M	\$ 79,618,555

**Table 4.N – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area N**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
N	N-1	M4U-B	S. Pipeline Rd. (1)	Raider Dr. to House Anderson Rd	0.69	100%	\$ 3,465,000	\$ 3,465,000
	N-2	M4U-B	S. Pipeline Rd. (2)	House Anderson Rd. to E. City Limits	0.33	100%	\$ 1,546,000	\$ 1,546,000
	N-3	M4U-B	S. Pipeline Rd. (3)	W. City Limits to FM 157	0.32	100%	\$ 1,449,000	\$ 1,449,000
	N-4	M4U-B	S. Pipeline Rd. (4)	FM 157 to Euless South Main St.	1.01	100%	\$ 5,609,000	\$ 5,609,000
	N-5	M4U-B	S. Pipeline Rd. (5)	Euless South Main St. to Summerbrook Dr.	0.46	100%	\$ 2,142,000	\$ 2,142,000
	N-6	M4U-B (1/2)	S. Pipeline Rd. (6)	Summerbrook Dr. to Boulder Park Dr.	0.14	100%	\$ 728,000	\$ 728,000
	N-7	M4U-B	S. Pipeline Rd. (7)	Boulder Park Dr. to American Blvd.	0.08	100%	\$ 370,000	\$ 370,000
	N-8	M4U (1/2)	House Anderson Rd. (1)	S. Pipeline to Trinity Blvd.	0.27	100%	\$ 618,000	\$ 618,000
	N-9	M4U	House Anderson Rd. (2)	Trinity Blvd. to 420' N of Trinity Railway Express	0.43	100%	\$ 1,953,000	\$ 1,953,000
	N-10	M4U	House Anderson Rd. (3)	420' N of Trinity Railway Express to 100' S of TRE	0.10	100%	\$ 838,000	\$ 838,000
	N-11	M4U-B	Euless South Main St	S. Pipeline Rd. to Trinity Blvd.	0.19	100%	\$ 891,000	\$ 891,000
	N-12	MA4D-B	FAA Blvd. (1)	SH 360 NBFR to Existing FAA Blvd. Dead End	0.33	100%	\$ 2,291,000	\$ 2,291,000
	N-13	MA4D-B (1/2)	FAA Blvd. (2)	Existing FAA Blvd. Dead End to 620' W of Amon Carter Blvd.	0.22	100%	\$ 788,000	\$ 788,000
	N-14	MA4D-B	Centreport Dr.	FAA Blvd. to Sovereign Rd.	0.31	100%	\$ 2,155,000	\$ 2,155,000
	N-15	P6D (1/3)	Trinity Blvd. (5)	595' N of Trinity Railway Express to E. City Limits	0.88	100%	\$ 1,895,000	\$ 1,895,000
							Service Area Project Cost Subtotal	\$ 26,738,000
							Transportation Impact Fee Study Cost (Per Service Area)	\$ 25,555
							Total Cost in SERVICE AREA N	\$ 26,763,555

**Table 4.O – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area O**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
O	O-1	M4U-B (1/2)	Sandy Ln. (4)	IH-30 EB to Ederville Rd.	0.16	100%	\$ 792,000	\$ 792,000
	O-2	M4U-B	Randol Mill Rd. (10)	IH-30 EB to 120' NW of Mill Valley Cir.	0.08	100%	\$ 822,000	\$ 822,000
	O-3	MA4D-B	Cooks Ln. (5)	Brentwood Stair Rd. to Whitney Ln.	0.75	100%	\$ 5,372,000	\$ 5,372,000
	O-4	MA4D-B (1/2)	Cooks Ln. (6)	Whitney Ln. to S Maegen Cir.	0.26	100%	\$ 855,000	\$ 855,000
	O-5	MA4D-B	Cooks Ln. (7)	S Maegen Cir. To Dottie Lynn Pkwy.	0.27	100%	\$ 1,853,000	\$ 1,853,000
		Service Area Project Cost Subtotal						\$ 9,694,000
	Transportation Impact Fee Study Cost (Per Service Area)						\$ 25,555	
Total Cost in SERVICE AREA O								\$ 9,719,555

**Table 4.S – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area S**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
S	S-1	MA4D-B	Silver Creek Rd. (1)	W. City Limits to Existing Silver Creek	0.52	100%	\$ 3,825,000	\$ 3,825,000
	S-2	MA4D-B	Silver Creek Rd. (2)	570' N of Heron Dr. to Brewer HS Entrance	1.72	100%	\$ 12,251,000	\$ 12,251,000
	S-3	MA4D-B	Silver Creek Rd. (3)	Brewer HS Entrance to Loop 820 W SBFR	0.31	100%	\$ 1,542,173	\$ 1,542,173
	S-4	MA4D-B	Academy Blvd. (1)	Silver Creek Rd. to 130' N. of Sparrow Hawk Ln.	0.57	100%	\$ 4,131,000	\$ 4,131,000
	S-5	MA4D-B	Academy Blvd. (2)	75' S. of Caravelle Ct. to Future Amber Ridge Dr.	0.36	100%	\$ 2,493,000	\$ 2,493,000
	S-6	P6D-B	White Settlement Rd. (1)	W. City Limits to Silver Ridge Blvd.	1.14	50%	\$ 11,078,000	\$ 5,539,000
	S-7	P6D-B	White Settlement Rd. (2)	Silver Ridge Blvd. to 430' W. of Yuchi Trl	0.17	50%	\$ 1,388,000	\$ 694,000
	S-8	P6D-B	White Settlement Rd. (3)	430' W. of Yuchi Trl to 300' W. of Chapel Creek Blvd.	0.69	100%	\$ 5,949,000	\$ 5,949,000
	S-9	P6D (1/3)	White Settlement Rd. (4)	300' W. of Chapel Creek to Academy Blvd.	0.56	100%	\$ 1,100,000	\$ 1,100,000
	S-10	P6D (1/3)	White Settlement Rd. (5)	Academy Blvd. to Clifford St.	0.50	100%	\$ 986,000	\$ 986,000
	S-11	M4U	Silver Ridge Blvd.	135' S. of Broken Arrow Tr. to 120' N of Fandor St.	0.51	100%	\$ 2,677,000	\$ 2,677,000
	S-12	MA4D-B	Westpoint Blvd. (1)	W. City Limits to Basset Locke Dr.	0.65	100%	\$ 4,695,000	\$ 4,695,000
	S-13	MA4D-B (1/2)	Westpoint Blvd. (2)	Basset Locke Dr. to American Flyer Blvd.	0.30	100%	\$ 1,085,000	\$ 1,085,000
	S-14	MA4D-B	Westpoint Blvd. (3)	Academy Blvd. to Existing Alameda St.	0.41	100%	\$ 2,646,000	\$ 2,646,000
	S-15	MA4D	Westpoint Blvd. (4)	Existing Alameda St. to Loop 820 W SBFR	0.28	100%	\$ 1,755,000	\$ 1,755,000
	S-16	M4U-B	Alameda St. (1)	Academy Blvd. to 525' N of Westpoint Blvd.	0.33	100%	\$ 1,567,000	\$ 1,567,000
	S-17	M4U	Alameda St. (2)	525' N of Westpoint Blvd. to Future Academy Blvd.	0.62	100%	\$ 3,215,000	\$ 3,215,000
	S-18	M4U-B	Alameda St. (3)	IH-30 WBFR to IH-30	0.12	100%	\$ 1,235,000	\$ 1,235,000
	S-19	M4U	N-S Minor Arterial	Westpoint Blvd. to Old Weatherford Rd.	0.92	100%	\$ 4,657,000	\$ 4,657,000
	S-20	M4U	Old Weatherford Rd. (1)	645' E of County Rd 1029 to Chapel Creek Blvd.	1.17	100%	\$ 6,546,000	\$ 6,546,000
	S-21	M4U (1/2)	Amber Ridge Dr. (1)	Chapel Creek Blvd. to Wind Star Way	0.26	100%	\$ 601,000	\$ 601,000
	S-22	M4U	Amber Ridge Dr. (2)	Wind Star Way to Future Academy Blvd	0.24	100%	\$ 1,143,000	\$ 1,143,000
	S-23	M4U-B	Chapin Rd. (1)	W. City Limits to 1,800' E. of W. City Limits	0.34	100%	\$ 1,991,000	\$ 1,991,000
	S-24	M4U-B	Chapin Rd. (2)	1,800' E. of W. City Limits to 470' W of Wakecrest Dr.	0.30	100%	\$ 1,930,000	\$ 1,930,000
	S-25	MA4D	Academy Blvd. (3)	Future Amber Ridge to IH-30 WBFR	0.51	100%	\$ 3,632,000	\$ 3,632,000
	S-26	MA4D	Chapel Creek Blvd	Chapin Rd. to IH-30	0.17	100%	\$ 967,698	\$ 967,698
	Service Area Project Cost Subtotal							\$ 78,852,871
	Transportation Impact Fee Study Cost (Per Service Area)							\$ 25,555
	Total Cost in SERVICE AREA S							\$ 78,878,426

**Table 4.T – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area T**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
T	T-1	MA4D	Chapin Rd. (3)	Camp Bowie West Blvd. to Longvue Ave.	0.61	100%	\$ 4,682,000	\$ 4,682,000
	T-2	M4U-B	Alemeda St. (4)	IH-30 EB to IH-30 EBFR	0.07	100%	\$ 676,000	\$ 676,000
	T-3	M4U-B	Alemeda St. (5)	Camp Bowie West Blvd. to Chapin Rd.	0.44	100%	\$ 2,464,000	\$ 2,464,000
	T-4	M4U-B	Chapin Rd. (4)	Longvue Ave. to Chapin Curve	0.51	100%	\$ 2,998,000	\$ 2,998,000
	T-5	M4U-B	Chapin Rd. (5)	Chapin Curve to Alemeda St.	0.18	100%	\$ 912,000	\$ 912,000
	T-6	M4U-B	Chapin Rd. (6)	Alemeda St. to IH-820 NBFR	0.30	100%	\$ 1,809,000	\$ 1,809,000
Service Area Project Cost Subtotal								\$ 13,541,000
Transportation Impact Fee Study Cost (Per Service Area)								\$ 25,555
Total Cost in SERVICE AREA T								\$ 13,566,555

**Table 4.U – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area U**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
U	U-1	M4U-B	Old Weatherford Rd. (1)	W. City Limits to 1800' W of Future Walsh Ranch Pkwy.	0.38	100%	\$ 1,800,000	\$ 1,800,000
	U-2	M4U-B	Old Weatherford Rd. (2)	1800' W of Future Walsh Ranch Pkwy. to Future Walsh Ranch Pkwy.	0.34	100%	\$ 1,691,000	\$ 1,691,000
	U-3	P6D-B	Walsh Ranch Pkwy. (1)	North City Limits to Future Old Weatherford Rd.	0.55	100%	\$ 5,448,000	\$ 5,448,000
	U-4	P6D-B	Walsh Ranch Pkwy. (2)	Future Old Weatherford to Future Walsh Ranch Minor #4	1.27	100%	\$ 11,976,000	\$ 11,976,000
	U-5	P6D	Walsh Ranch Pkwy. (3)	Future Walsh Ranch Minor #4 to IH-30 WBFR	0.22	100%	\$ 1,882,000	\$ 1,882,000
	U-6	P6D-B	Walsh Ranch Pkwy. (4)	IH-30 WBFR to Walsh Ranch Major #1	1.26	100%	\$ 15,859,000	\$ 15,859,000
	U-7	P6D	Walsh Ranch Pkwy. (5)	Walsh Ranch Major #1 to SW City Limits	2.00	100%	\$ 18,885,000	\$ 18,885,000
	U-8	M4U-B	Walsh Ranch Minor #4	Future Walsh Ranch Pkwy. to Walsh Ranch Minor #1	1.15	100%	\$ 6,206,000	\$ 6,206,000
	U-9	M4U	Walsh Ranch Minor #1 (1)	W City Limits to Walsh Ranch Major #1	1.72	100%	\$ 8,955,000	\$ 8,955,000
	U-10	M4U	Walsh Ranch Minor #1 (2)	Walsh Ranch Major #1 to City Limits	1.33	100%	\$ 8,716,000	\$ 8,716,000
	U-11	M4U	Walsh Ranch Minor #1 (3)	IH-30 EBFR to Walsh Ranch Minor #4	0.27	100%	\$ 2,762,000	\$ 2,762,000
	U-12	M4U-B	Walsh Ranch Minor #1 (4)	Walsh Ranch Minor #4 to N City Limits	0.86	100%	\$ 4,528,000	\$ 4,528,000
	U-13	MA4D-B	Walsh Ranch Major #1 (1)	W City Limits to Future Walsh Ranch Pkwy.	0.72	100%	\$ 5,632,000	\$ 5,632,000
	U-14	MA4D-B	Walsh Ranch Major #1 (2)	Future Walsh Ranch Pkwy. to Walsh Ranch Minor #1	1.58	100%	\$ 12,421,000	\$ 12,421,000
	U-15	MA4D-B	Walsh Ranch Major #1 (3)	Walsh Ranch Minor #1 to RR tracks	0.70	100%	\$ 5,912,000	\$ 5,912,000
	U-16	M4U	Walsh Ranch Minor #3	W City Limits to IH-30/20 Intersection	1.09	100%	\$ 6,118,000	\$ 6,118,000
	U-17	M4U-B	Walsh Ranch Minor #2 (1)	Old Weatherford Rd. to IH-20 WBFR	1.24	100%	\$ 7,064,000	\$ 7,064,000
	U-18	M4U-B	Walsh Ranch Minor #2 (2)	IH-20 WBFR to S City Limits	0.66	100%	\$ 4,997,000	\$ 4,997,000
	U-19	MA4D-B	Westpoint Blvd. (5)	W. City Limits to E. City Limits	0.52	100%	\$ 3,780,000	\$ 3,780,000
Service Area Project Cost Subtotal								\$ 134,632,000
Transportation Impact Fee Study Cost (Per Service Area)								\$ 10,000
Total Cost in SERVICE AREA U								\$ 134,642,000

**Table 4.W – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area W**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
W	W-1	M4U-B	Dutch Branch Rd.	Oakmont Trail to 45° E of RR	0.20	100%	\$ 1,182,000	\$ 1,182,000
	W-2	M4U	Harris Pkwy.	Dutch Branch Rd. to Dirks Rd.	0.49	100%	\$ 1,256,097	\$ 1,256,097
	W-3	P6D (1/3)	Granbury Rd. (1)	Dan Danciger Rd. to Hulen St.	0.61	100%	\$ 1,191,000	\$ 1,191,000
	W-4	M4U	Lakeside Dr.	Clear Fork Trinity River to Bryant Irvin Rd.	1.38	100%	\$ 6,634,000	\$ 6,634,000
	W-5, Y-1	P6D	Dirks Rd. (1)	Bryant Irvin Rd. to Harris Pkwy.	0.52	50%	\$ 1,797,748	\$ 898,874
	W-6, Y-2	P6D	Dirks Rd. (2)	Harris Pkwy. to Granbury Rd.	0.58	50%	\$ 2,479,747	\$ 1,239,874
Service Area Project Cost Subtotal								\$ 12,401,845
Transportation Impact Fee Study Cost (Per Service Area)								\$ 25,555
Total Cost in SERVICE AREA W								\$ 12,427,400

**Table 4.X – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area X**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
X	X-1	P6D (1/3)	Seminary Dr. (1)	Carter Park Dr. to Campus Dr.	0.62	100%	\$ 1,573,000	\$ 1,573,000
	X-2	P6D (1/3)	Seminary Dr. (2)	Campus Dr. to Old Mansfield Rd.	0.48	100%	\$ 1,256,000	\$ 1,256,000
	X-3	M4U-B	Oak Grove Rd. (1)	Oak Grove Rd. to Oak Grove Rd / Campus	0.32	100%	\$ 1,497,000	\$ 1,497,000
	X-4	MA4D	Altamesa Blvd. (1)	Oak Grove Rd./Campus Dr. to Wichita St.	1.31	100%	\$ 9,423,000	\$ 9,423,000
	X-5	MA4D	Altamesa Blvd. (2)	Lana Circle to Forest Hill Dr.	0.58	100%	\$ 4,083,000	\$ 4,083,000
	X-6	M4U	Joel East Rd.	Oak Grove Rd. to Wichita St.	1.10	100%	\$ 5,473,000	\$ 5,473,000
	Z-1, X-7	MA4D	Everman Pkwy. (1)	Butterwick St. to Cameron Hill	0.56	50%	\$ 4,769,000	\$ 2,384,500
	Z-2, X-8	MA4D (1/2)	Everman Pkwy. (2)	Cameron Hill to 320' E. of Sheridan Rd.	0.29	50%	\$ 1,026,000	\$ 513,000
	X-9	MA4D-B (1/2)	Hemphill St. (1)	Sunderland Ln. to 130' S of Kielder Cir.	0.39	100%	\$ 1,413,000	\$ 1,413,000
	X-10	MA4D-B	Hemphill St. (2)	130' S of Kielder Cir. to Sycamore School Rd.	0.40	100%	\$ 2,732,000	\$ 2,732,000
	X-11	MA4D-B (1/2)	Hemphill St. (3)	360' S of Sycamore School Rd. to Rosedale Springs Ln.	0.41	100%	\$ 1,509,000	\$ 1,509,000
	X-12	MA4D-B	Hemphill St. (4)	Rosedale Springs Ln. to Everman Pkwy.	0.15	100%	\$ 1,059,000	\$ 1,059,000
	X-13	MA4D-B (1/2)	Oak Grove Rd. (2)	Altamesa Blvd. to RR tracks	0.19	100%	\$ 871,000	\$ 871,000
	X-14	MA4D-B	Oak Grove Rd. (3)	RR tracks to Everman Pkwy.	1.58	100%	\$ 11,541,000	\$ 11,541,000
	X-15	MA4D	Wichita St. (1)	340' N of Altamesa Blvd. to Joel East Rd.	0.20	100%	\$ 1,250,000	\$ 1,250,000
	X-16	MA4D	Wichita St. (2)	Joel East Rd. to 130' N of Buie Dr.	0.18	100%	\$ 1,107,000	\$ 1,107,000
	X-17	MA4D-B	Forest Hill Dr. (1)	Lon Stevenson Rd. to S City Limits	0.72	100%	\$ 4,723,000	\$ 4,723,000
	X-18	M4U	Anglin Dr.	Lon Stevenson Rd. to Enon Rd.	1.00	100%	\$ 5,399,000	\$ 5,399,000
	X-19	M4U	Dick Price Rd.	N City Limits to S City Limits	0.48	100%	\$ 2,194,000	\$ 2,194,000
	X-20	M4U	Enon Rd.	W. City Limits to Anglin Dr.	0.50	100%	\$ 2,261,000	\$ 2,261,000
Service Area Project Cost Subtotal								\$ 62,261,500
Transportation Impact Fee Study Cost (Per Service Area)								\$ 25,555
Total Cost in SERVICE AREA X								\$ 62,287,055

**Table 4.Y – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area Y**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
Y	W-5, Y-1	P6D	Dirks Rd. (1)	Bryant Irvin Rd. to Harris Pkwy.	0.52	50%	\$ 1,797,748	\$ 898,874
	W-6, Y-2	P6D	Dirks Rd. (2)	Harris Pkwy. to South Orient RR	0.35	50%	\$ 2,479,747	\$ 1,239,874
	Y-3	MA4D-B	Columbus Trl. (1)	Future Bryant Irvin to South Orient RR	0.17	100%	\$ 1,331,000	\$ 1,331,000
	Y-4	MA4D-B	Columbus Trl. (2)	South Orient RR to future Brewer Blvd.	0.16	100%	\$ 1,234,000	\$ 1,234,000
	Y-5	MA4D-B	Sycamore School Rd. (1)	Future Brewer Blvd. to future SH 121	0.19	100%	\$ 1,262,000	\$ 1,262,000
	Y-6	P6D (1/3)	Sycamore School Rd. (2)	Future SH 121 to Summer Creek Dr.	0.33	100%	\$ 653,000	\$ 653,000
	Y-7	MA4D	Sycamore School Rd. (3)	Summer Creek Dr. to Creek Meadow Dr.	0.12	100%	\$ 130,679	\$ 130,679
	Y-8	MA4D-B (1/2)	Risinger Rd. (1)	760' E of McCart Ave. to Poynter St.	0.28	100%	\$ 1,033,000	\$ 1,033,000
	Y-9	MA4D-B	Risinger Rd. (2)	Poynter St. to existing Risinger Rd. Dead End	0.39	100%	\$ 2,534,000	\$ 2,534,000
	Y-10	MA4D-B	Risinger Rd. (3)	Existing Risinger Rd. Dead End to FM 731	0.45	100%	\$ 3,260,000	\$ 3,260,000
	Y-11	MA4D	McPherson Blvd. (1)	FM 1902 to future SH 121	1.08	100%	\$ 1,134,475	\$ 1,134,475
	Y-12	MA4D-B (1/2)	McPherson Blvd. (2)	Summer Creek Dr. to Willow Branch Way	0.43	100%	\$ 1,887,880	\$ 1,887,880
	Y-13	MA4D-B	McPherson Blvd. (3)	Cleburne Rd. to E City Limits	0.54	100%	\$ 4,392,000	\$ 4,392,000
	Y-14	M4U	Stewart Feltz Rd. (1)	Future Brewer Blvd. to Stewart Feltz Rd. SB Bend	0.40	100%	\$ 1,808,000	\$ 1,808,000
	Y-15	M4U	Stewart Feltz Rd. (2)	Stewart Feltz Rd. SB Bend to Sunflower Ridge Rd.	0.27	100%	\$ 1,286,000	\$ 1,286,000
	Y-16	M4U (1/2)	Sunflower Ridge Rd.	Existing Sunflower Ridge Rd. Dead End to future Summer Creek Dr.	0.27	100%	\$ 617,000	\$ 617,000
	Y-17	MA4D-B	Cleburne Crowley Rd. (1)	W City Limits to Stewart Feltz Rd. EB Curve	0.92	100%	\$ 6,583,000	\$ 6,583,000
	Y-18	MA4D-B	Cleburne Crowley Rd. (2)	Stewart Feltz Rd. EB Curve to 460' W. of Rancho Viejo	0.50	100%	\$ 3,494,000	\$ 3,494,000
	Y-19	M4U	Cleburne Rd.	Cleburne Crowley Rd. to Summer Creek Dr.	0.40	100%	\$ 1,901,000	\$ 1,901,000
	Y-20	MA4D-B	Bryant Irvin (1)	Dirks Rd. to 2,755' S. of Dirks Rd.	0.52	50%	\$ 3,786,000	\$ 1,893,000
	Y-21	MA4D-B	Bryant Irvin (2)	2,755' S. of Dirks Rd. to future Columbus Trl.	0.76	100%	\$ 5,414,000	\$ 5,414,000
	Y-22	MA4D	Bryant Irvin (3)	Future Columbus Trl. to S City Limits	1.83	100%	\$ 13,717,000	\$ 13,717,000
	Y-23	MA4D-B	Brewer Blvd. (1)	Columbus Trl. to 155' N. of Bindweed St.	0.52	100%	\$ 4,565,000	\$ 4,565,000
	Y-24	M4U-B	Brewer Blvd. (2)	125' S. of Risinger Rd. to McPherson Blvd.	0.61	100%	\$ 3,270,000	\$ 3,270,000
	Y-25	M4U	Brewer Blvd. (3)	McPherson Blvd. to SW City Limits	1.55	100%	\$ 8,599,000	\$ 8,599,000
	Y-26	MA4D	Granbury Rd. (2)	350' S. of Alta Mesa Blvd. to 630' N. of Appalachian Way	0.23	100%	\$ 1,648,291	\$ 1,648,291
	Y-27	MA4D	Granbury/Summer Creek Dr.	Summer Meadows to Columbus Trail	0.54	100%	\$ 595,316	\$ 595,316
	Y-28	MA4D-B (1/2)	Summer Creek Dr. (1)	Summer Park to Risinger Rd.	0.40	100%	\$ 1,458,000	\$ 1,458,000
	Y-29	MA4D-B	Summer Creek Dr. (2)	Risinger Rd. to McPherson Blvd.	0.66	100%	\$ 2,952,839	\$ 2,952,839
	Y-30	MA4D-B (1/2)	Summer Creek Dr. (3)	McPherson Blvd. to Sunflower Ridge Rd.	0.45	100%	\$ 1,624,000	\$ 1,624,000
	Y-31	MA4D-B	Summer Creek Dr. (4)	Sunflower Ridge Rd. to 640' N. of Cleburne Crowley Rd.	0.82	100%	\$ 6,254,000	\$ 6,254,000
	Y-32	MA4D-B	Summer Creek Dr. (5)	Cleburne Crowley Rd. to future Cleburne Rd. Alignment	0.07	100%	\$ 474,000	\$ 474,000
	Y-33	MA4D	Summer Creek Dr. (6)	Existing Cleburne Rd. to SW City Limits	1.40	100%	\$ 10,176,000	\$ 10,176,000
	Y-34	M4U-B	Cleburne Rd. (1)	Future Summer Creek Dr. to existing Cleburne Rd.	0.15	100%	\$ 724,000	\$ 724,000
	Y-35	M4U-B	Cleburne Rd. (2)	Existing Cleburne Rd. to future Cleburne Rd. Alignment	0.26	100%	\$ 1,207,000	\$ 1,207,000
	Y-36	M4U-B	Cleburne Rd. (3)	Existing Cleburne Rd. to S City Limits	0.35	100%	\$ 1,743,000	\$ 1,743,000
	Y-37	MA4D-B (1/2)	Hulen St. (1)	McPherson Blvd. to Carriage Crossing Dr.	0.19	100%	\$ 689,000	\$ 689,000
	Y-38	MA4D-B	Hulen St. (2)	Carriage Crossing Dr. to S City Limits	0.36	100%	\$ 480,000	\$ 480,000
	Y-39	MA4D-B	Hulen St. (3)	325' N. of Rancho Verde Pkwy. To S. City Limits	0.50	100%	\$ 3,236,000	\$ 3,236,000
	Y-40	MA4D (1/2)	McCart Ave. (1)	585' S. of Risinger Rd. to 135' S. of Cayman Dr.	0.31	100%	\$ 1,474,000	\$ 1,474,000
	Y-41	MA4D	McCart Ave. (2)	135' S of Cayman Dr. to future McPherson Blvd.	0.57	100%	\$ 4,053,000	\$ 4,053,000
	Y-42	M4U	McCart Ave. (3)	McPherson Blvd. to 145' N of Twinleaf Dr.	0.60	100%	\$ 3,730,000	\$ 3,730,000
	Y-43	M4U (1/2)	McCart Ave. (4)	300' S of Twinleaf Dr. to S City Limits	0.44	100%	\$ 987,000	\$ 987,000
Service Area Project Cost Subtotal							\$ 117,643,228	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 25,555	
Total Cost in SERVICE AREA Y							\$ 117,668,783	

**Table 4.Z – 10-Year Transportation Improvements Plan
with Conceptual Level Cost Projections – Service Area Z**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
Z	Z-1, X-7	MA4D	Everman Pkwy. (1)	Butterwick St. to Cameron Hill	0.56	50%	\$ 4,769,000	\$ 2,384,500
	Z-2, X-8	MA4D (1/2)	Everman Pkwy. (2)	Cameron Hill to 320' E. of Sheridan Rd.	0.29	50%	\$ 1,026,000	\$ 513,000
	Z-3	MA4D	Shelby Rd.	Race St. to Rendon / Forest Hill Dr.	1.00	100%	\$ 6,747,000	\$ 6,747,000
	Z-4	MA4D-B	Risinger Rd. (4)	FM 731 to IH-35W SBFR	1.62	100%	\$ 11,925,000	\$ 11,925,000
	Z-5	MA4D-B	Risinger Rd. (5)	IH-35W SBFR to Old Burleson Rd.	0.28	100%	\$ 1,821,000	\$ 1,821,000
	Z-6	MA4D-B	Risinger Rd. (6)	Old Burleson Rd. to Oak Grove Rd.	0.79	100%	\$ 6,047,000	\$ 6,047,000
	Z-7	MA4D-B	Oak Grove Shelby Rd.	Oak Grove Rd. to Race St.	1.01	100%	\$ 7,005,000	\$ 7,005,000
	Z-8	MA4D-B	Oak Grove Shelby Rd./Risinger Rd.	Race St. to Rendon / Forest Hill Dr.	1.00	100%	\$ 7,076,000	\$ 7,076,000
	Z-9	MA4D-B	McPherson Blvd. (4)	FM 731 to UP RR	1.30	100%	\$ 9,779,000	\$ 9,779,000
	Z-10	MA4D-B (1/2)	McPherson Blvd. (5)	Bilsky Bay Dr. to IH-35W SBFR	0.09	100%	\$ 336,000	\$ 336,000
	Z-11	MA4D-B (1/2)	McPherson Blvd. (6)	IH-35W SBFR to IH-35W NBFR	0.13	100%	\$ 3,591,000	\$ 3,591,000
	Z-12	MA4D-B	McPherson Blvd. (7)	IH-35W NBFR to Stone (Oak Grove)	0.67	100%	\$ 5,255,000	\$ 5,255,000
	Z-13	MA4D	McPherson Blvd. (8)	Stone (Oak Grove) to Forest Hill - Everman Rd.	1.44	100%	\$ 9,501,000	\$ 9,501,000
	Z-14	M3U-B	McAlister Rd. (1)	50' W of UP RR to IH-35W SBFR	0.27	100%	\$ 921,761	\$ 921,761
	Z-15	M4U-B	McAlister Rd. (2)	IH-35W SBFR to IH-35W NBFR	0.09	100%	\$ 2,716,000	\$ 2,716,000
	Z-16	M4U-B	McAlister Rd. (3)	IH-35W NBFR to Stone Rd.	0.24	100%	\$ 1,198,000	\$ 1,198,000
	Z-17	MA4D	Alsbury Blvd.	70' E of IH-35W NBFR to Stone Rd.	0.20	100%	\$ 1,256,000	\$ 1,256,000
	Z-18	MA4D-B	Hemphill St. (5)	Future Everman Pkwy. to Risinger Rd.	0.86	100%	\$ 6,540,000	\$ 6,540,000
	Z-19	MA4D-B	Hemphill St. (6)	1670' S of Risinger Rd. to 580' N of Brasenose St.	1.66	100%	\$ 12,541,000	\$ 12,541,000
	Z-20	MA4D-B (1/2)	Hemphill St. (7)	580' N of Brasenose St. to Nuffield Ln.	0.23	100%	\$ 822,000	\$ 822,000
	Z-21	M4U-B (1/2)	Hemphill St. (8)	FM 1187 EB to McAlister Rd.	0.25	100%	\$ 593,000	\$ 593,000
	Z-22	M4U-B	Hemphill St. (9)	McAlister Rd. to S. City Limits	0.20	100%	\$ 1,006,000	\$ 1,006,000
	Z-23	MA4D-B	Oak Grove Rd. (4)	Forum Way to Future Risinger Rd./Oak Grove Shelby	0.36	100%	\$ 2,369,000	\$ 2,369,000
	Z-24	MA4D-B	Oak Grove Rd. (5)	Oak Grove Shelby to Oak Grove Rd. (Realigned)	0.19	100%	\$ 1,607,000	\$ 1,607,000
	Z-25	MA4D-B	Oak Grove Rd. (6)	Oak Grove Rd. (Realigned) to Buffalo Springs Dr.	0.62	100%	\$ 4,514,000	\$ 4,514,000
	Z-26	MA4D-B	Oak Grove Rd. (7)	Buffalo Springs Dr. to McPherson Blvd.	0.13	100%	\$ 844,000	\$ 844,000
	Z-27	MA4D-B	Oak Grove Rd. (8)	McPherson Blvd. to Oak Grove E.	0.43	100%	\$ 3,212,000	\$ 3,212,000
	Z-28	MA4D-B	Stone Rd. (1)	Oak Grove E. to Nelson Pl.	0.52	100%	\$ 3,641,000	\$ 3,641,000
	Z-29	MA4D-B	Stone Rd. (2)	Nelson Pl. to FM 1187	0.90	100%	\$ 6,844,000	\$ 6,844,000
	Z-30	M4U-B	Stone Rd. (3)	FM 1187 to Alsbury Dr.	1.07	100%	\$ 5,799,000	\$ 5,799,000
	Z-31	M4U-B	Stone Rd. (4)	Alsbury Blvd. to Abner Lee Dr.	0.62	100%	\$ 3,146,000	\$ 3,146,000
	Z-32	M4U-B	Stone Rd. (5)	Abner Lee Dr. to S City Limits	0.11	100%	\$ 560,000	\$ 560,000
	Z-33	MA4D	Wichita St. (3)	Shelby Rd. to Risinger Rd.	0.52	100%	\$ 3,727,000	\$ 3,727,000
	Z-34	MA4D (1/2)	Wichita St. (4)	Race St. to 790' W. of Race St.	0.15	100%	\$ 532,000	\$ 532,000
	Z-35	MA4D	Wichita St. (5)	790' W of Race St. to McPherson Blvd.	0.81	100%	\$ 6,057,000	\$ 6,057,000
	Z-36	MA4D	Oak Grove Rd. (9)	McPherson Blvd. to Nicole Way	0.96	100%	\$ 7,041,000	\$ 7,041,000
	Z-37	MA4D-B	Oak Grove Rd. (10)	Nelson Pl. to 115' N. of Doe Meadow Dr.	0.22	100%	\$ 1,403,000	\$ 1,403,000
	Z-38	M4U-B	Oak Grove Rd. (11)	FM 1187 to Burleson Retta Rd.	1.55	100%	\$ 8,836,000	\$ 8,836,000
	Z-39	M4U-B	Wildcat Way	Burleson Retta Rd. to S. City Limits	0.64	100%	\$ 3,416,000	\$ 3,416,000
	Z-40	MA4D	Rendon / Forest-Hill (1)	640' N of Chambers Creek Dr. to Shelby Rd.	0.45	50%	\$ 3,270,000	\$ 1,635,000
	Z-41	MA4D	Rendon / Forest-Hill (2)	Shelby Rd. to 80' S of future Risinger Rd.	0.50	50%	\$ 3,409,000	\$ 1,704,500
Service Area Project Cost Subtotal							\$ 166,461,761	
Transportation Impact Fee Study Cost (Per Service Area)							\$ 25,555	
Total Cost in SERVICE AREA Z							\$ 166,487,316	

Notes:

- These cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Fort Worth.
- The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.
- This project total cost within each Service Area may differ from the total shown in the Summary sheets contained within **Appendix A** due to some projects that are split between multiple service areas.

E. SERVICE UNIT CALCULATION

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

The growth in vehicle-miles from 2012 to 2022 is based upon projected changes in population and employment for the period. In order to determine this growth, estimates of population, basic employment, service employment, and retail employment for 2012 were made, along with growth projections for each of these demographic statistics through 2022. The Land Use Assumptions section of this report details the growth estimates used for impact fee determination.

The population and employment statistics in the Land Use Assumptions provides the "independent variables" that are used to calculate the existing (2012) and projected (2022) transportation service units. The roadway demand for each service area is the sum of the service units (vehicle-miles) "generated" by each category of land use in the service area.

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

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

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition*. This characteristic is more appropriate than the number of employees because building square footage is tied more closely to trip generation and is known at the time of application for any development that would require the assessment of an impact fee.

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

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 9th Edition* and the Regional Origin-Destination Travel Survey performed by NCTCOG. The *ITE Trip Generation Manual, 9th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail trip generation rates to avoid double counting trips.

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

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

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

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

Variables:

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

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

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

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

Table 5. Transportation Demand Factor Calculations

Variable	Residential	Basic	Service	Retail
T	1.00	0.97	1.49	3.71
P_b	0%	0%	0%	34%
L	17.21	10.02	10.92	6.43
L_{max} *	6.00	5.01	5.46	3.22
TDF	6.00	4.86	8.14	7.89
* L _{max} is less than 6 miles for non-residential land uses; therefore this lower trip length is used for calculating the TDF for non-residential land uses				

Variables:

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

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 6**. This table shows the total vehicle-miles by service area for the years 2012 and 2022. These estimates and projections lead to the Vehicle-Miles of Travel for both 2012 and 2022.

Table 6. 10-Year Growth Projections

Year 2012	SERVICE AREA	RESIDENTIAL			SQUARE FEET ⁴			TRANS. DEMAND FACTOR ⁵			NON-RESIDENTIAL VEHICLE-MILES ⁹			TOTAL VEHICLE MILES ¹⁰		
		POPULATION	DWELLING UNITS ¹	VEHICLE MILES ³	BASIC	SERVICE	RETAIL	BASIC ⁶	SERVICE ⁷	RETAIL ⁸	BASIC	SERVICE	RETAIL			
	A	26,167	8,870	6.00	4,263,380	1,093,895	45,898	4.86	8.14	7.89	20,720	8,904	362	29,986	383,206	
	AA	5,820	1,940	6.00	6,711,730	2,528,723	7,979,516	4.86	8.14	7.89	32,619	20,584	62,958	116,161	127,801	
	B	7,404	2,468	6.00	1,608,351	203,810	75,201	4.86	8.14	7.89	7,817	1,659	593	10,069	24,877	
	C	18,510	6,170	6.00	1,466,165	388,325	66,843	4.86	8.14	7.89	7,126	3,161	527	10,814	47,834	
	D	151,803	50,601	6.00	303,606	1,753,218	1,228,686	1,958,433	4.86	8.14	7.89	8,521	10,002	15,452	33,975	377,581
	E	2,931	1,000	6.00	6,001	900,526	181,184	130,591	4.86	8.14	7.89	4,377	1,475	1,030	6,882	12,883
	F	43,332	15,046	6.00	90,276	11,443,121	3,988,305	2,139,681	4.86	8.14	7.89	55,614	32,465	16,882	104,961	195,237
	G	23,181	7,858	6.00	47,148	879,717	799,670	939,041	4.86	8.14	7.89	4,275	6,509	7,409	18,193	65,341
	L	12,934	4,808	6.00	28,848	2,978,038	1,155,718	1,170,301	4.86	8.14	7.89	14,473	9,408	9,234	33,115	61,963
	M	28,932	10,081	6.00	60,486	1,174,603	966,014	1,711,200	4.86	8.14	7.89	5,709	7,863	13,501	27,073	87,559
	N	9,182	3,452	6.00	20,712	5,396,911	2,352,851	1,679,769	4.86	8.14	7.89	26,229	19,152	13,253	58,634	79,346
	O	16,810	5,961	6.00	35,766	250,854	373,694	569,805	4.86	8.14	7.89	1,219	3,042	4,496	8,757	44,523
	S	18,420	6,140	6.00	36,840	2,843	199,203	1,525,765	4.86	8.14	7.89	14	1,622	12,038	13,674	50,514
	T	13,327	4,864	6.00	29,184	481,752	600,838	1,548,337	4.86	8.14	7.89	2,341	4,891	12,216	19,448	48,632
	U	1,905	635	6.00	3,810	0	0	0	4.86	8.14	7.89	0	0	0	0	3,810
	W	40,617	14,506	6.00	87,036	0	2,628,844	4,999,718	4.86	8.14	7.89	0	21,399	39,448	60,847	147,883
	X	23,016	7,964	6.00	47,784	6,867,530	2,006,409	1,475,625	4.86	8.14	7.89	33,376	16,332	11,643	61,351	109,135
	Y	50,472	17,226	6.00	103,356	343,959	446,033	864,252	4.86	8.14	7.89	1,672	3,631	6,819	12,122	115,478
	Z	15,270	5,090	6.00	30,540	5,818,420	1,774,228	982,653	4.86	8.14	7.89	28,278	14,442	7,753	50,473	81,013
	Totals	510,033	174,680		1,048,081	52,341,118	22,916,429	29,862,630				254,380	186,541	235,614	676,535	1,724,616

Notes:

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

Table 6 (cont.) 10-Year Growth Projections

Year 2022															
SERVICE AREA	RESIDENTIAL			VEHICLE MILES ³			SQUARE FEET ⁴			TRANS. DEMAND FACTOR ⁵			NON-RESIDENTIAL VEHICLE-MILES ⁹		TOTAL VEHICLE MILES ¹⁰
	POPULATION	DWELLING UNITS ¹	TDF ²		BASIC	SERVICE	RETAIL	BASIC ⁶	SERVICE ⁷	RETAIL ⁸	BASIC	SERVICE	RETAIL	TOTAL	
A	32,943	11,282	6.00	67,692	5,451,694	2,001,981	1,008,199	4.86	8.14	7.89	26,495	18,296	7,955	50,746	118,438
AA	7,483	2,528	6.00	15,168	8,740,627	3,301,402	8,766,992	4.86	8.14	7.89	42,479	26,873	69,172	138,524	153,692
B	17,060	5,744	6.00	34,464	2,350,801	657,292	1,162,028	4.86	8.14	7.89	11,425	5,350	9,168	25,943	60,407
C	36,929	12,434	6.00	74,604	2,552,589	1,137,143	3,735,639	4.86	8.14	7.89	12,406	9,256	29,474	51,136	125,740
D	156,137	53,289	6.00	319,734	2,241,707	3,666,832	6,756,809	4.86	8.14	7.89	10,895	29,848	53,311	94,054	413,788
E	4,354	1,466	6.00	8,796	1,089,199	297,425	318,293	4.86	8.14	7.89	5,294	2,421	2,511	10,226	19,022
F	47,139	16,540	6.00	99,240	13,174,049	4,911,744	3,048,848	4.86	8.14	7.89	64,026	39,982	24,055	128,063	227,303
G	30,934	10,594	6.00	63,564	2,584,146	1,301,223	1,300,805	4.86	8.14	7.89	12,559	10,592	10,263	33,414	96,978
L	13,225	4,880	6.00	29,280	2,988,405	1,177,959	1,222,951	4.86	8.14	7.89	14,524	9,589	9,649	33,762	63,042
M	33,762	11,723	6.00	70,338	1,372,340	1,333,221	2,170,805	4.86	8.14	7.89	6,670	10,852	17,128	34,650	104,988
N	9,517	3,578	6.00	21,468	5,635,199	3,385,034	3,149,063	4.86	8.14	7.89	27,387	27,554	24,846	79,787	101,255
O	18,637	6,609	6.00	39,654	250,854	579,790	999,621	4.86	8.14	7.89	1,219	4,719	7,887	13,825	53,479
S	23,214	7,790	6.00	46,740	2,843	302,115	2,152,681	4.86	8.14	7.89	14	2,459	16,985	19,458	66,198
T	14,421	5,263	6.00	31,578	538,600	689,115	1,990,580	4.86	8.14	7.89	2,618	5,609	15,706	23,933	55,511
U	7,375	2,483	6.00	14,898	0	117,006	893,080	4.86	8.14	7.89	0	952	7,046	7,998	22,896
W	42,196	15,070	6.00	90,420	0	2,842,318	5,524,121	4.86	8.14	7.89	0	23,136	43,585	66,721	157,141
X	25,847	8,882	6.00	53,292	7,754,356	2,264,507	1,607,432	4.86	8.14	7.89	37,686	18,433	12,683	68,802	122,094
Y	60,106	20,514	6.00	123,084	421,772	1,195,623	2,955,113	4.86	8.14	7.89	2,050	9,732	23,316	35,098	158,182
Z	19,529	6,620	6.00	39,720	6,440,306	2,002,711	1,259,395	4.86	8.14	7.89	31,300	16,302	9,937	57,539	97,259
Totals	600,808	207,289		1,243,734	63,589,485	33,164,440	50,022,456				309,047	269,955	394,677	973,679	2,217,413

Notes:

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

Table 6 (cont.) 10-Year Growth Projections

VEHICLE-MILES OF INCREASE¹¹ (2012 - 2022)

SERVICE AREA	VEH-MILES
A	35,232
AA	25,891
B	35,530
C	77,906
D	76,207
E	6,139
F	32,066
G	31,637
L	1,079
M	17,429
N	21,909
O	8,956
S	15,684
T	6,879
U	19,086
W	9,258
X	12,959
Y	42,704
Z	16,246
Total	492,797

Notes:

¹¹ Total Vehicle-Miles (2012) subtracted from Total Vehicle-Miles (2022)