

**APPENDIX A:  
FINANCIAL PLAN**

## MPO ID LEGEND

MPO IDs are unique identification codes for projects within the WFMPO that meet specific criteria as defined by the TAC and TPC. As of FY 2010 MPO IDs are standardized across all WFMPO project specific documentation.

<b>PREFIX CODE</b> <i>Project Type</i>		<b>SUFFIX CODE</b> <i>Nomination Area</i>	
MO	Mobility	TX	TxDOT
RH	Rehabilitation	WF	Wichita Falls
BR	Bridge	LSC	Lakeside City
RR	Railroad Grade Separation	PV	Pleasant Valley
LD	Landscape	WC	Wichita County
SF	Safety		
IT	Intelligent Transportation System		
BP	Bicycle & Pedestrian		
TI	Transit Improvements		
PM	Preventive Maintenance		
<b>Example:</b> <span style="margin-left: 100px;"><i>PM-64TX</i></span>			
PREFIX:	PM		Preventative Maintenance
PROJ NO:	64		
SUFFIX:	TX		TxDOT

**FUNDING SCHEDULE FOR WICHITA FALLS 2010-2035 MTP  
Ten-Year Plan (2010-2020)**

HIGHWAY	CSJ	PROJECT LIMITS	DESCRIPTION OF WORK	ESTIMATED AMOUNT	MPO ID	MO	RH	BR	RR	LD	SF	IT	BP	TI	PM	STATUS
IH 44	0156-07-102	On West Frontage Rd. and Old Bacon Switch Rd.	Replace Bridge and Approaches	\$121,000	BR-16TX			\$121,000								Sep-14
SP 325	0685-01-909	On SP 325 at FM 890	Replace Bridge and Approaches	\$2,873,102	BR-17TX			\$2,873,102								Sep-14
US 82	0044-01-930	North of Holliday Creek to South of Holliday Creek	Bridge Rehabilitation - Repairing Various Bridge Elements	\$1,436,185	BR-19TX			\$1,436,185								Jan-15
BU 277 A	0156-14-957	Fairway Blvd to Allendale Road	Rehabilitation of Existing Roadway - Full Depth Pavement Repair and Ultra Thin Bond Hot Mix Wear Course	\$918,954	PM-44TX										\$918,954	Jan-12
US 287	0044-01-996	On Frontage Roads, from US 82/277 to McKinney Road	Rehabilitation of Existing Road - Concrete Patch Repair on Frontage Roads and Ramps	\$433,433	PM-51TX										\$433,433	Jan-13
US 82	0156-04-997	On Frontage Roads, from FM 369 to US 287	Rehabilitation of Existing Road - Concrete Patch Repair on Frontage Roads and Ramps	\$733,134	PM-52TX										\$733,134	Jan-13
US 281	0249-01-995	On Frontage Roads, from LP 473 to Rathgeber Road	Rehabilitation of Existing Road - Concrete Patch Repair on Frontage Roads and Ramps	\$433,433	PM-53TX										\$433,433	Jan-13
US 82	0044-01-977	LP 473 to Clay County Line	Rehabilitation of Existing Roadway - Full Depth Pavement Repair (Entrance/Exit Ramps and Frontage Roads)	\$4,984,299	PM-54TX										\$4,984,299	Feb-13
US 82/287	0044-01-931	8th Street to Clay County Line	Rehabilitation of Existing Roadway - Concrete Patch and Novachip	\$2,200,000	PM-55TX										\$2,200,000	Sep-13
US 82	0156-04-913	0.7 Miles West of FM 369 to Archer County Line	Asphaltic Concrete Pavement Overlay - Hot Mix Overlay	\$1,046,000	PM-58TX										\$1,046,000	Dec-13
US 82	0044-01-990	US 277 to Clay County Line	Asphaltic Concrete Pavement Overlay - Mill and Hot Mix Overlay	\$4,411,318	PM-61TX										\$4,411,318	Mar-14
US 82	0156-04-959	FM 369 to US 287	Rehabilitation of Existing Roadway - Full Depth Pavement Repair (Entrance/Exit Ramps and Frontage Roads)	\$6,322,097	PM-64TX										\$6,322,097	Dec-15
IH 44	0043-09-116	IH 44 / US 287 / SP 325 Interchange to Wichita River	Rehabilitation of Existing Road - Full Depth Repair of Concrete Pavement	\$8,624,473	RH-01TX		\$8,624,473									Nov-11
Maplewood	0903-03-094	From Midwestern Pkwy. To Kemp Blvd.	Misc. Construction of Safety Treat Fixed Objects (Breakaway Light Poles)	\$218,000	SF-12TX						\$218,000					Mar-11
<b>TOTAL PROPOSED - TxDOT STATE 10-YEAR PLAN</b>				<b>\$34,755,428</b>		<b>\$0</b>	<b>\$8,624,473</b>	<b>\$4,430,287</b>	<b>\$0</b>	<b>\$0</b>	<b>\$218,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$21,482,668</b>	

NOTE: The Wichita Falls MPO is part of a nine county TxDOT District that must allocate limited funds between MPO projects and county projects.

**FUNDING SCHEDULE FOR WICHITA FALLS 2010-2035 MTP  
Long-Range Plan (2021-2035)**

Highway	CSJ	PROJECT LIMITS	DESCRIPTION OF WORK	ESTIMATED COST	MPO ID	MO	RH	BR	RR	LD	SF	IT	BP	TI	PM	STATUS
IH 44	0043-09-112	Near Maurine Street to US 287 (SB) / IH 44 (West) Merge	Rehabilitate Existing Roadway - Entrance Ramp & Widen Freeway	\$304,444	MO-01TX	\$304,444										Nov-11
FM 367	0681-04-956	Peterson Rd. to FM 369	Rehabilitation of Existing Roadway - Add 4' Shoulders, Widen Existing Lanes to 12', Seal Coat and Hot Mix Overlay	\$2,889,715	MO-02TX	\$2,889,715										Dec-11
US 82	0044-01-924	At US 82-287 Under Windthorst Road	Rehabilitate Bridge and Approaches	\$3,411,734	MO-03TX	\$3,411,734										Oct-14
FM 2650	2644-01-909	FM 369 to Archer County Line	Rehabilitate Existing Roadway - Extend Culverts & Add Shoulders	\$1,915,625	MO-04TX	\$1,915,625										Nov-13
US 281	0249-01-931	FM 369 to Near Rathgeber Road	Rehabilitation of Existing Road - Construct Entrance Ramp	\$4,000,000	MO-05TX	\$4,000,000										Jan-13
SH 79	0283-06-915	0.5 Miles North of Professional Drive to 0.5 Miles S of Professional Dr.	Rehabilitation of Existing Road - Add Left Turn Lane and Upgrade Signals	\$770,900	MO-07TX	\$770,900										Jan-14
FM 890	2582-01-015	SP 325 to SH 240	Widening of a Non-Freeway Facility - Widen to 4-Lane Divided Facility	\$2,832,548	MO-08TX	\$2,832,548										Aug-25
FM 890	2582-01-016	IH 44 to SP 325	Widening of a Non-Freeway Facility - Widen to 4-Lane Divided Facility	\$2,922,085	MO-09TX	\$2,922,085										Aug-25
FM 369	0802-02-052	In Wichita Falls, Near Hughes Street	Miscellaneous Work - Drainage Improvements	\$401,467	MO-10TX	\$401,467										Sep-21
FM 369	0802-02-053	In Wichita Falls, Near McNeil Street	Miscellaneous Work - Drainage Improvements	\$133,823	MO-11TX	\$133,823										Sep-21
FM369	0802-02-054	In Wichita Falls, Near Kemp Street	Miscellaneous Work - Drainage Improvements	\$200,733	MO-12TX	\$200,733										Sep-21
US 82	0156-04-086	Archer County Line to 0.7 Miles West of FM 369	Widen Non-Freeway - Upgrade to 4 Lane Divided	\$18,800,000	MO-13TX	\$18,800,000										Jan-50
US 281	0249-02-021	From Wichita Falls City Limits to Archer County Line	Widen to 5 Lanes - Add Left-turn Lane	\$2,540,000	MO-14TX	\$2,540,000										May-50
VA	0903-00-931	Various locations inside Wichita Falls MPO	Preventive Maintenance - Bridge Repair	\$200,000	PM-45TX										\$200,000	Nov-12
LP 473	0249-11-917	Hatton Road to FM 369	Rehabilitation of Existing Road - Place Curb and Gutter to Facilitate Drainage	\$551,400	RH-02TX		\$551,400									Jan-14
LP 473	0249-11-974	Near Norman Street to Norman Street	Rehabilitation of Existing Roadway - Improve Drainage	\$301,170	RH-03TX		\$301,170									Mar-22
FM 171	0156-10-001	0.25 miles E of Bus 287/Loop 370	Replace Existing Railroad Underpass	\$4,002,580	RR-03TX				\$4,002,580							Sep-14
<b>TOTAL PROPOSED - TxDOT STATE LONG-RANGE PLAN</b>				<b>\$46,178,224</b>		<b>\$41,123,074</b>	<b>\$852,570</b>	<b>\$0</b>	<b>\$4,002,580</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200,000</b>	

NOTE: The Wichita Falls MPO is part of a nine county TxDOT District that must allocate limited funds between MPO projects and county projects.

**FUNDING SCHEDULE FOR WICHITA FALLS 2010-2035 MTP  
Unmet Needs (Non-Funded, Non-Prioritized)**

TxDOT STATE (TABLE I)				
Roadway	Project Limits	Description	Estimated Cost	MPO ID
US 82	At US 287 Southbound Lanes Over US 281 and SH 79	Replace Bridge and Approaches	\$375,000	BR-08TX
BUS 287J	At Jefferson St/FW&D RR to 1.3 km Eof Junction with US 287	Replace Bridge and Approaches	\$2,852,996	BR-09TX
Kingston Drive	South of Brookdale at channel	Construct Bridge	\$250,000	BR-12TX
SH 79	From Jacksboro Hwy. (LP 473) to FM 2380	Widen to 4 Lanes	N/A	MO-15TX
Kell and Fairway	Exit Ramp	Ramp too close to Fairway. Relocate ramp.	N/A	MO-17TX
Old Burk Road/Hwy 240	From Spur 325 to Missile Road	Continuous left turn lanes needed	\$1,000,000	MO-18TX
SH 79	From FM 1954 to FM 2380	Increased traffic; widen to four (4) lanes; this area will continue to grow	N/A	MO-19TX
FM 369	From 367 to US 82/277	Widen to 4 Lanes	N/A	MO-21TX
Barnett Road	From BU 277A to FM 367	Widen to 4 Lanes	N/A	MO-22TX
Southwest Pkwy.	From US 82/US 277 to US 281	Various intersection improvements needed	N/A	MO-23TX
FM 369 East	At FM 369, US 281 and SH 79 Interchange	Address Bonny Homes subdivision access management issue	\$2,200,000	MO-24TX
Old Jacksboro Hwy.(SP 473)/Archer City Hwy.(SH 79)	From E. Scott Ave. to Kemp Blvd./SH 79 intersection	Create Multi-modal Corridor	N/A	MO-25TX
Seymour Hwy.	From Loop 11 to Scott Ave.	Create Multi-modal Corridor	N/A	MO-26TX
FM 369/Sisk Rd.	From Southern MPO Boundary north to US 287 on around to IH-44	Added Capacity with Access Management	N/A	MO-27TX
Seymour Hwy.	From FM 369 to Loop 11	Added Capacity with Access Management	N/A	MO-28TX
US 281/US 287	From FM 369 to US 287 to Wichita Falls Business Park	Added Capacity Improvements	N/A	MO-29TX
US 287	From US 281/US 287 Interchange to East MPO Boundary	Freight Corridor Improvements	N/A	MO-30TX
North Wichita Falls	North Part of City Surrounding IH-44, Spur 325 and US 287	Improve Network Connectivity	N/A	MO-31TX
Old Iowa Park Road (BUS 287J)	From Wellington to Lincoln (FM 171)	Reconstruct Curb and Gutter	N/A	RH-04TX
FM 367	From Loop 11 to FM 369	Shoulders need to be widened	N/A	RH-05TX
US 287, US 281, SH 79	Interchange at US 287, US 281 and SH 79	Reconstruct Interchange (Realign Geometry)	N/A	RH-06TX
IH-44, US 287, Spur 325	Interchange at IH-44, US 287 and Spur 325	Reconstruct Interchange (Realign Geometry)	N/A	RH-07TX
Southwest Pkwy.	At intersection of Southwest Pkwy. and Kemp Blvd.	Reconstruct and rehabilitate right-hand turning lanes	N/A	RH-08TX
US 281, SH 79, FM 369	At FM 369, US 281 and SH 79 Interchange	Reconstruct and rehabilitate interchange	N/A	RH-09TX
US 287	From Clay County Line to 15th Street	Rehabilitation of Existing Road	N/A	RH-10TX
South Wichita Falls	Encompasses Area along SH 79 between Kemp Blvd. & Professional Dr.	Develop Sustainable (CSS) Improvements	N/A	RH-11TX
Kell Frontage Road East	Between Barnett and Fairway	Includes improvements to frontage road east of railroad track. Project related to Old Iowa Park road closings and upgrades	\$300,000	RR-04TX
Kell Frontage Road West	Between Barnett and Fairway	Includes improvements to frontage road west of railroad track. Project related to Grainger Road.	\$300,000	RR-05TX
IH-44, Spur 325, US 287	In and around interchange at IH-44, Spur 325, and US 287 North	Replace lighting to improve safety	\$1,400,000	SF-13TX
		N/A = No current estimate.		
<b>TOTAL PROPOSED - TxDOT STATE UNMET NEEDS</b>			<b>\$8,677,996</b>	

**FUNDING SCHEDULE FOR WICHITA FALLS 2010-2035 MTP**  
**Unmet Needs (Non-Funded, Non-Prioritized)**

CITY OF WICHITA FALLS, CITY STREETS PROJECTS (TABLE II)				
Roadway	Project Limits	Description	Estimated Cost	MPO ID
Kemp Blvd.	From Elliot to Kemp Blvd, Call Field, Midwestern Pkwy.	Construct ADA ramps; crosswalks, and Ped Heads for bicyclists and pedestrians	\$250,000	BP-01WF
Hike & Bike Trail - Sections 3 & 4	From Wichita River to Turtle Creek Road (Seymour Hwy.)	Construction of Bicycle/Pedestrian Trail	\$2,600,000	BP-02WF
Hike & Bike Trail - Sections 6, 7 & 8	From Turtle Creek Rd to Lake Shore Drive (Kell Frwy & Barnett Rd.)	Construction of Bicycle/Pedestrian Trail	\$2,600,000	BP-03WF
Southern Hills Elementary School Area	At Midwestern Pkwy, Hatton Rd, H.S. Grace Frwy, Jacksborro Hwy.	SRTS: Install sidewalks, ADA ramps, & traffic calming devices	\$160,000	BP-04WF
City View Elementary School Area	At City View Dr. from Airport Dr. to Old Iowa Park Rd.	SRTS: Install sidewalks, ADA ramps, & traffic calming devices	\$450,000	BP-05WF
John Tower Elementary School Area	At Missile Rd, Puckett Rd, IH-44 and SH 240	SRTS: Install sidewalks, ADA ramps, & traffic calming devices	\$465,000	BP-06WF
Lucy Park Bicycle Trail - Section 2	From Lucy Park along Wichita River	Construction of Bicycle/Pedestrian Trail	\$3,400,000	BP-07WF
SW Rails-to-Trails	From West Loop to MPO Boundary Along Abandoned Rail Line	Construction of Bicycle/Pedestrian Trail		BP-08WF
Railroad Tressel at Bridge St.	On Bridge Street at the Wichita River	Rehabilitate the Abandoned Railroad Bridge for Bicycle/Pedestrian Use		BP-09WF
City View Dr.	From US 287 to Airport Rd.	Widen Existing Street	\$200,000	MO-01WF
Airport Dr.	From City View Drive to Loop 11	Widen Existing Street	\$1,200,000	MO-02WF
Lakeshore Drive	From Fairway to Barnett	Widening of Existing Street and Drainage Improvements	\$1,350,000	MO-03WF
Midwestern Parkway	From US 281 to Hammon Road	Construction to Wichita Falls Business Park	\$3,902,000	MO-04WF
Puckett Road	From IH 44 to Hooper Drive	Widening of Existing Street/Extension	\$462,000	MO-05WF
Rathgeber Road	From SH 79 to Stonelake Boulevard	Widening of Existing Street (Phase I)	\$380,000	MO-06WF
Rathgeber Road	From Stonelake Blvd. to FM 2380	Widening of Existing Street (Phase II)	\$1,604,800	MO-07WF
Taft Boulevard	From FM 369 to FM 2380	Widening of Existing Street and Drainage Improvements	\$1,000,000	MO-08WF
Turtle Creek Rd (TPC-High Priority)	From Ridgemont to US 277 Business	Widening of Existing Street and Drainage Improvements	\$3,315,000	MO-09WF
Wellington Road (South)	From FM 367 to BUS 287J	Widening of Existing Street	\$1,300,000	MO-01WC
Wellington Road (North)	From BUS 287J to US 287	Widening of Existing Street	\$1,300,000	MO-11WF
Bacon Switch Road	From .25 miles W of IH 44 to SH 240	Widen Existing Street	\$840,400	MO-12WF
Cypress Avenue	From North Shore Drive to Lake Shore Drive	Construction of two (2) Lane Street	\$385,000	MO-13WF
Hatton Road	From US 281 to Hammon Road	Widen Existing Street	\$2,200,000	MO-14WF
Wenonah Street	From US 82/277 to Maplewood Ave	Extend from US 82/277 eastbound frontage road to connect with Maplewood Avenue	\$1,200,000	MO-15WF
Lebanon Street	From Seymour Road going North to Seymour Highway	Add 4-lane Un-divided Road to Facilitate Access to Lawrence Rd. Retail Area (TIF District)	\$1,500,000	MO-16WF
Windthorst Road	US 287 SB to Hatton Road	Widening of Existing Facility	\$1,200,000	MO-17WF
Midwestern Parkway	At Midwestern Parkway and US 281 Intersection	Widening of existing street	\$400,000	MO-18WF
Maplewood Extension Phase III	From Lawrence to McNiel	Construction of 4-Lane Street (Phase III)	\$650,000	MO-19WF
Beverly Dr, Ave H, Kemp St.	From N. Beverly Dr along Ave H to Kemp Street	Construct Major Collector or Minor Arterial to increase north to south traffic progression	\$2,500,000	MO-20WF
Woods St.	From Smith St. to Homes Ave.	Close the street	\$50,000	MO-21WF
Reilly Road	From IH 44 to John Tower	Widening of Existing Street	\$1,300,000	MO-22WF
Kemp Blvd.	From Seymour Hwy. to Archer City Hwy.	Create Multi-modal Corridor	\$6,300,000	MO-23WF
Scott Ave.	From Sheppard Access Rd. to Old Jacksboro Hwy.	Create Multi-modal Corridor	\$2,800,000	MO-24WF
Fairway Rd.	From Southwest Pkwy. to Seymour Hwy.	Added Capacity Improvements	\$5,000,000	MO-25WF
Wichita Falls Business Park	Southeast corner of area between US 287 and US 281	Improve Network Connectivity		MO-26WF
West Wichita Falls/Kell Frwy.	Area Between Barnett and FM 369 Surrounding Seymour Hwy. & Kell Frwy.	Improve Network Connectivity		MO-27WF
McNiel Ave.	From Southwest Pkwy. to Kell Frwy. to Seymour Hwy.	Reconstruction of existing street with drainage improvements	\$5,820,000	RH-01WF
Covington Lane	From Old Iowa Park Road (BUS 287) to US 287	Reconstruction of existing street	\$875,000	RH-02WF
Rhea/Call Field/Lawrence	From Rhea Road to Lawrence Road	Realignment of Existing Intersection	\$950,000	RH-03WF
Maplewood Avenue	North Bound on Maplewood at Midwestern Parkway	Add Right Turn Bay/Lane to Reduce Congestion on North Bound Approach	\$35,000	RH-05WF

**FUNDING SCHEDULE FOR WICHITA FALLS 2010-2035 MTP  
Unmet Needs (Non-Funded, Non-Prioritized)**

CITY OF WICHITA FALLS, CITY STREETS PROJECTS (TABLE II)				
Seymour Road	At Intersection of Rivercrest Drive and McGrath Lane	Reconfigure Intersection to Eliminate Driver Confusion of East & West Traffic	\$500,000	RH-06WF
Craigmont Dr./Ridgemont Dr.	From Shady Lane to Tanglewood Drive (Includes Ridgemont Dr.)	Reconstruct street to raise profile and provide access into Tanglewood during flood events	\$1,500,000	RH-07WF
Rhea Road	At Rhea Road and FM 369 (Southwest Parkway)	Addition of turn bay at intersection	\$50,000	RH-08WF
Lake Park Road	At Lake Park and FM 369 (Southwest Parkway)	Addition of free right turn lane	\$50,000	RH-09WF
Downtown/Eastside	Encompasses Downtown and Eastside	Develop Sustainable (CSS) Improvements		RH-10WF
South Kemp	Encompasses Area South of Kell Frwy. Between Taft and McNiel	Develop Sustainable (CSS) Improvements		RH-11WF
Maplewood Avenue	On Maplewood at Elmwood Intersection	Add Signalization	\$100,000	SF-01WF
<b>TOTAL PROPOSED - CITY OF WICHITA FALLS UNMET NEEDS</b>			<b>\$62,144,200</b>	

NOTE: SRTS = Safe Routes to School Program

## FUNDING SCHEDULE FOR WICHITA FALLS 2010-2035 MTP

### Unmet Needs (Non-Funded, Non-Prioritized)

CITY OF LAKESIDE CITY, CITY STREETS PROJECTS (TABLE III)				
Roadway	Project Limits	Description	Estimated Cost	MPO ID
Edwards Way	From Intersection of Fry to Edgewater Drive	Overlay	\$65,000	PM-01LSC
Edgewater Drive	From Intersection of Edwards Way to end of Pavement	Overlay	\$30,000	PM-02LSC
Seabea Drive	From Skyline Drive to Shoreline Drive	Overlay	\$45,000	PM-03LSC
<b>TOTAL ESTIMATED COST</b>			<b>\$140,000</b>	
CITY OF PLEASANT VALLEY, CITY STREETS PROJECTS (TABLE IV)				
Roadway	Project Limits	Description	Estimated Cost	MPO ID
Huntington Lane	From US 287 to FM 367	Widen Existing Road	\$500,000	MO-01PV
WICHITA COUNTY, COUNTY ROADS PROJECTS (TABLE V)				
Roadway	Project Limits	Description	Estimated Cost	MPO ID
Wellington Road	From BUS 287J to US 287	Widening of Existing Street	\$1,100,000	MO-01WC
Cashion Road (C.R. 271)	From S.H. 240 to Powell Road (C.R. 277) (2.016 miles)	HMAC Overlay	\$296,352	PM-01WC
Haws Road (C.R. 204)	From Peterson Road East to FM 369 (2.018 miles)	Reconstruction and Overlay to 24 feet	\$1,078,000	RH-01WC
Peterson Road (C.R. 2197)	From FM 367 South to Road's End (1.326 miles)	Reconstruction and Widening to 24 feet	\$731,000	RH-02WC
Horseshoe Lake Road (C.R. 203)	From FM 367 South to Road's End (0.957 miles)	Reconstruction and Widening to 24 feet	\$546,000	RH-03WC
Church Camp Road (C.R. 205)	From West Peterson Road (C.R. 206) South to Road's End (0.514 miles)	Reconstruction and Widening to 24 feet	\$325,000	RH-04WC
<b>TOTAL PROPOSED</b>			<b>\$4,076,352</b>	



# Category 1 - PM & Rehabilitation

## FY 2010-2015 Breakdown by District by Year

### 2010-2015 UTP LETTING CAPS

(1/14/2010)

#### Category 1: Preventive Maintenance and Rehabilitation

DISTRICT	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	PM	REHAB										
ABILENE	\$ 12,930,477	\$ 1,320,000	\$ 10,435,407	\$ 7,686,160	\$ 10,435,407	\$ 15,253,011	\$ 10,435,407	\$ 15,556,884	\$ 10,435,407	\$ 16,336,950		
AMARILLO	13,186,505	13,273	13,080,848	13,039,017	13,080,848	25,875,634	13,080,848	26,391,132	13,080,848	27,714,458		
ATLANTA	11,240,175	2,484,000	8,804,126	5,284,273	8,804,126	10,486,520	8,804,126	10,695,434	8,804,126	11,231,733		
AUSTIN	18,590,919	4,490,000	24,793,983	19,094,092	24,793,983	37,891,795	24,793,983	38,646,680	24,793,983	40,584,534		
BEAUMONT	10,000,000	8,000,000	11,749,014	10,085,541	11,749,014	20,014,528	11,749,014	20,413,260	11,749,014	21,436,839		
BROWNWOOD	11,126,482	70,000	7,339,394	3,699,006	7,339,394	7,340,595	7,339,394	7,486,835	7,339,394	7,862,246		
BRYAN	10,000,000	-	13,061,480	8,767,477	13,061,480	17,398,861	13,061,480	17,745,483	13,061,480	18,635,292		
CHILDRESS	8,900,000	-	7,586,565	4,101,210	7,586,565	8,138,760	7,586,565	8,300,901	7,586,565	8,717,132		
CORPUS CHRISTI	11,362,516	-	16,045,118	13,729,870	16,045,118	27,246,616	16,045,118	27,789,427	16,045,118	29,182,867		
DALLAS	11,248,229	14,055,886	20,846,818	28,894,952	20,846,818	57,341,380	20,846,818	58,483,743	20,846,818	61,416,283		
EL PASO	10,000,000	-	5,933,195	7,407,469	5,933,195	14,699,954	5,933,195	14,992,809	5,933,195	15,744,590		
FORT WORTH	19,486,399	8,000,000	20,211,478	22,138,551	20,211,478	43,933,454	20,211,478	44,808,702	20,211,478	47,055,537		
HOUSTON	15,230,705	18,985,886	23,560,172	32,619,460	23,560,172	64,732,581	23,560,172	66,022,192	23,560,172	69,332,732		
LAREDO	13,642,891	2,200,000	10,281,626	7,657,884	10,281,626	15,196,898	10,281,626	15,499,653	10,281,626	16,276,849		
LUBBOCK	11,960,459	-	13,489,600	14,188,992	13,489,600	28,157,734	13,489,600	28,718,696	13,489,600	30,158,733		
LUFKIN	8,166,000	1,834,000	12,424,608	6,667,608	12,424,608	13,231,717	12,424,608	13,495,321	12,424,608	14,172,015		
ODESSA	10,000,000	-	6,378,387	6,909,815	6,378,387	13,712,371	6,378,387	13,985,551	6,378,387	14,686,826		
PARIS	6,790,312	5,685,846	20,146,388	13,808,957	20,146,388	27,403,564	20,146,388	27,949,502	20,146,388	29,350,969		
PHARR	13,863,040	1,070,000	20,746,436	12,551,730	20,746,436	24,908,625	20,746,436	25,404,859	20,746,436	26,678,730		
SAN ANGELO	6,350,000	-	6,453,145	3,453,896	6,453,145	6,854,178	6,453,145	6,990,727	6,453,145	7,341,262		
SAN ANTONIO	21,754,337	635,901	24,825,248	20,891,845	24,825,248	41,459,393	24,825,248	42,285,353	24,825,248	44,405,661		
TYLER	23,841,371	-	14,062,403	7,383,909	14,062,403	14,653,200	14,062,403	14,945,123	14,062,403	15,694,514		
WACO	14,696,363	2,300,000	13,110,669	10,814,371	13,110,669	21,460,875	13,110,669	21,888,422	13,110,669	22,985,969		
WICHITA FALLS	9,800,000	200,000	7,102,629	5,583,372	7,102,629	11,080,076	7,102,629	11,300,815	7,102,629	11,867,470		
YOAKUM	16,192,573	-	17,531,263	9,760,103	17,531,263	19,368,704	17,531,263	19,754,570	17,531,263	20,745,120		
BRIDGE												
TRAFFIC												
DESIGN												
STATEWIDE												
<b>TOTAL</b>	<b>\$ 320,359,752</b>	<b>\$ 71,344,792</b>	<b>\$ 350,000,000</b>	<b>\$ 296,219,560</b>	<b>\$ 350,000,000</b>	<b>\$ 587,841,023</b>	<b>\$ 350,000,000</b>	<b>\$ 599,552,073</b>	<b>\$ 350,000,000</b>	<b>\$ 629,615,313</b>	<b>\$ 350,000,000</b>	<b>\$ 658,065,117</b>
		<b>\$ 391,704,544</b>		<b>\$ 646,219,560</b>		<b>\$ 937,841,023</b>		<b>\$ 949,552,073</b>		<b>\$ 979,615,313</b>		<b>\$ 1,008,065,117</b>

# Category 11 - District Discretionary

## Breakdown by District by Year

### 2010-2020 UTP LETTING CAPS

(1/14/2010)

#### Category 11: District Discretionary

DISTRICT	FY 2010	FY 2011 *	FY 2012 *	FY 2013 *	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FYs 2010-2020 Totals
ABILENE	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 27,500,000
AMARILLO	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
ATLANTA *	4,022,500	3,022,500	3,522,500	3,522,500	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 31,590,000
AUSTIN	4,830,000	4,830,000	4,830,000	4,900,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 36,890,000
BEAUMONT	2,875,000	2,875,000	2,875,000	2,875,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 29,000,000
BROWNWOOD	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
BRYAN	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
CHILDRESS	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
CORPUS CHRISTI	2,500,000	2,500,000	2,550,000	2,600,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,650,000
DALLAS	2,700,000	2,700,000	2,700,000	2,570,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 28,170,000
EL PASO	2,750,000	2,750,000	2,770,000	2,770,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 28,540,000
FORT WORTH **	5,000,000	5,000,000	5,000,000	5,120,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 37,620,000
HOUSTON	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
LAREDO	2,700,000	2,700,000	2,700,000	2,730,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 28,330,000
LUBBOCK	3,735,000	3,735,000	3,735,000	3,735,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 32,440,000
LUFKIN	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
ODESSA	3,365,000	3,365,000	3,365,000	3,365,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 30,960,000
PARIS	3,365,000	3,365,000	3,365,000	3,365,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 30,960,000
PHARR	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
SAN ANGELO	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
SAN ANTONIO	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
TYLER	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
WACO	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
WICHITA FALLS	2,722,500	2,722,500	2,722,500	2,722,500	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 28,390,000
YOAKUM	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	\$ 27,500,000
BRIDGE TRAFFIC DESIGN STATEWIDE												\$ -
TOTAL	\$ 73,065,000	\$ 72,065,000	\$ 72,635,000	\$ 72,775,000	\$ 62,500,000	\$ 62,500,000	\$ 62,500,000	\$ 62,500,000	\$ 62,500,000	\$ 62,500,000	\$ 62,500,000	\$ 728,040,000

**Notes:**

\* \$2,500,000 in FYs 2011-2013 is reserved for CSJ: 0248-01-068 for Atlanta District

\*\* FTW to reserve \$2,500,000 in FY 2010 and/or 2011 to fund CDA commitment (NTE).

**Transit Financial Summary  
Wichita Falls MPO / District**

**FY 2008 - 2011 Transportation Improvement Program**

All Figures in Year of Expenditure (YOE) Dollars									
Current as of January 27, 2010									
Transit Program									
	Federal	FY 2008 State/Local	Total	Federal	FY 2009 State/Local	Total	Federal	FY 2010 State/Local	Total
1 Sec. 5307 - Urbanized Formula >200K			0			0			0
2 Sec. 5307 - Urbanized Formula <200K	1,821,234	963,406	2,784,640	1,004,579	736,797	1,741,376	2,006,303	998,707	3,005,010
3 Sec. 5309 - Discretionary			0			0			0
4 Sec. 5310 - Elderly & Individuals w/Disabilities			0			0			0
5 Sec. 5311 - Nonurbanized Formula			0			0			0
6 Sec. 5316 - JARC >200K			0			0			0
7 Sec. 5316 - JARC <200K			0			0			0
8 Sec. 5316 - JARC Nonurbanized			0			0			0
9 Sec. 5317 - New Freedom >200K			0			0			0
10 Sec. 5317 - New Freedom <200K			0			0			0
11 Sec. 5317 - New Freedom Nonurbanized			0			0			0
12 Other FTA (2009 ARRA Funds)			0	1,340,000		1,340,000	430,192		430,192
13 Regionally Significant or Other (incl FHWA transfers)			0			0			0
<b>Total Funds</b>	<b>\$1,821,234</b>	<b>\$963,406</b>	<b>\$2,784,640</b>	<b>\$2,344,579</b>	<b>\$736,797</b>	<b>\$3,081,376</b>	<b>\$2,436,495</b>	<b>\$998,707</b>	<b>\$3,435,202</b>
Transportation Development Credits									
Requested			\$0			\$0			\$0
Awarded			\$0			\$0			\$0
All Figures in Year of Expenditure (YOE) Dollars									
Transit Program									
	Federal	FY 2011 State/Local	Total	Federal	Total	Total			
1 Sec. 5307 - Urbanized Formula >200K			0	0	0	0			
2 Sec. 5307 - Urbanized Formula <200K	916,078	745,122	1,661,200	5,748,194	3,444,032	9,192,226			
3 Sec. 5309 - Discretionary			0	0	0	0			
4 Sec. 5310 - Elderly & Individuals w/Disabilities			0	0	0	0			
5 Sec. 5311 - Nonurbanized Formula			0	0	0	0			
6 Sec. 5316 - JARC >200K			0	0	0	0			
7 Sec. 5316 - JARC <200K			0	0	0	0			
8 Sec. 5316 - JARC Nonurbanized			0	0	0	0			
9 Sec. 5317 - New Freedom >200K			0	0	0	0			
10 Sec. 5317 - New Freedom <200K			0	0	0	0			
11 Sec. 5317 - New Freedom Nonurbanized			0	0	0	0			
12 Other FTA (2009 ARRA funds)			0	1,770,192	0	1,770,192			
13 Regionally Significant or Other (incl FHWA transfers)			0	0	0	0			
<b>Total Funds</b>	<b>\$916,078</b>	<b>\$745,122</b>	<b>\$1,661,200</b>	<b>\$7,518,386</b>	<b>\$3,444,032</b>	<b>\$10,962,418</b>			
Transportation Development Credits									
Requested			\$0			\$0			
Awarded			\$0			\$0			

**YOE Total Project Cost Methodology:**

- Calculations for Year of Expenditure costs were accomplished by first establishing base year estimates for FY 2008 in all four major project areas: Capital, Preventive Maintenance, Operating Assistance and Planning.
- All Capital programming costs are based on information provided by the City of Wichita Falls Purchasing Department. This includes the projected estimated cost of new replacement buses, shop equipment and tools.
- Preventive Maintenance, Operating Assistance and Planning programming costs were calculated for each YOE by utilizing FY 2008 as the base year then multiplying by 4% per year to increase YOE incrementally.
- NOTE: Replacement buses are generally purchased two at a time every other year.

**APPENDIX B:  
PUBLIC MEETING DOCUMENTS**



## Public Participation

The Wichita Falls public participation procedures for regional transportation planning, approved by the Transportation Policy Council (TPC) on July 25, 2007 outlines a proactive process meaningfully engaging the public to participate in transportation plans and programs, and for soliciting comments and input from all who desire to be involved. These procedures require that public meetings be conducted 60 days prior to TPC approval of the Metropolitan Transportation Plan (MTP), and a second series of meetings 30 days prior, with a 30-day written comment period following each series of meetings. Additional components of the public participation process include reasonable public access to technical and policy information, open public meetings, and explicit consideration and response to public input. A meeting notification form is available at all public meetings to allow interested individuals the opportunity to receive notification of future public meetings and other transportation related reports and information.

The following is a review of the Wichita Falls Metropolitan Planning Organization’s (WFMPO) Public Participation Plan (PPP). Kimley-Horn and Associates performed the review based upon the ten procedures, strategies and desired outcomes listed in 23CFR Part 450.316. Our findings are listed below.

### Baseline Procedures, Strategies and Desired Outcomes for PPPs.

Element	WFMPO compliance (yes/no)	Recommendation
Public Notice of public participation activities	Yes, notice procedures are in place. Local media identified.	Seek grass roots organizations such as neighborhood assoc.
Time for public review, public comment at key decision points	Yes, minimum review and hearing times are established.	Seek to involve participants earlier in the process.
Opportunity to comment	Yes, written and oral are received and summarized.	Seek interactive means for persons to comment (visual preference and map chip exercise.
Timely notice	Yes, while times vary all are within guidelines.	None
Access to information about transportation issues	Yes, plans and program information are made available.	Use more brochures and summaries of plans and programs.
Visualization techniques	Yes, many of the visualization techniques are apparent in plans and presentations.	Use scenario planning to illustrate various future land use and transportation conditions.
Public information available in electronic formats (WWW)	Yes, the WFMPO website is the best small to medium sized MPO site in Texas.	None, the comment form is perfect.
Public meetings in convenient and accessible locations and times	Yes, the MPO makes every effort to have centralized meeting locations.	None
Consideration and response to public input	Yes, it is integral part of the WFMPO decision-making process.	None
Review effectiveness of procedures and strategies	Yes, the five performance measures are practical and measurable.	None
Public comment period provided for initial or revised participation plan = 45 calendar days	Yes	None
In Nonattainment areas one formal public hearing during the development of the TIP	N/A	N/A



*Source: 23CFR Part 450.*

Given this satisfactory report, no major refinements to the PPP were recommended. The 2007 PPP serves as the basis for the 2035 MTP Update. The following measures were used to meaningfully engage the public and agencies:

1. Stakeholder Committee of staff members of TxDOT, City of Wichita Falls and MPO
2. In-Depth Personal Interviews with, City of Wichita Falls Planning, Engineering and Public Works Staff, Wichita Falls Board of Commerce and Industry and various private land owners and developers
3. Email, web and newsletter announcements and information
4. Presentation to Wichita Falls Lions Club
5. Growth Workshop with Wichita Falls Homebuilders Association
6. Goals and Objectives and Growth Workshop with TPC
7. Growth Workshop with Public
8. TPC and TAC Presentation
9. Open House with Public
10. TAC and TPC Consideration



**What:** Public Meeting Concerning Local Transportation Projects

**When:** June 4, 2009 - 6:00 p.m. to 8:00 p.m.

**Where:** Wichita Falls Public Library, 600 11th St., room 204

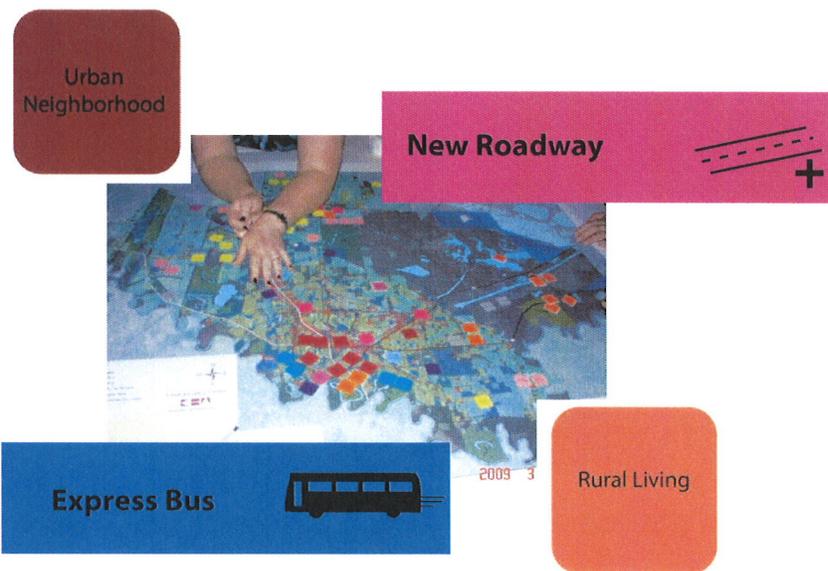
**Why:** This update will address various changes to federal transportation funding and your participation will be critical to identifying the needs for roadways, transit, bicycle and pedestrian amenities and freight infrastructure.

### What to expect:

As a participant at this meeting you will be provided a presentation by transportation experts on the strengths and weaknesses of the Wichita Falls transportation network of roads, trails, rails and transit assets.

With this information you will work with a facilitator and a group of other participants to envision Wichita Falls in the year 2035. Using land use and transportation stickers you will plan where growth and infrastructure should go.

The resulting maps and written input will be combined into a public consensus map. This scenario for the future will be tested using a transportation computer model and fiscal analysis. A follow-up meeting in fall will illustrate how this input was reflected in the final plan.



**Contact:** Wichita Falls MPO at (940) 761-7450 or [www.wfmpo.com](http://www.wfmpo.com)

# Public Meeting



WF Home Builders 2 to 4 P.M.  
 &  
 Area Realtors

## Transportation/Land Use Workshop

June 4, 2009

Name	Organization	E-mail
DAVIS L. POWELL	CWF	DAVIS.POWELL@CWF.TX.NET
Teresa Rose	CWF	teresa.rose@cwftx.net
Andrew Howard	KIMH	Andrew.Howard@kimmh.com
ROB RAE	Kimley-Horn: Associates	robert.rae@kimley-horn.com
Sandy Cathiw	State National Bank	randyc@snbt.net
Jeff Watts	City of Pleasant Valley	jwatts@iesi.com
Chuck Dennis	Dennis Co.	CHUCK.DENNIS@COMPANY.HOUSE.COM
TAMMY MARLOW	TXDOT	tmarrow@txdot.us.tx.us
Sean Delaney	CENTURY 21	delaney21@aol.com
Tim Sawyer	NTHB	tsawyer@sw.rr.com
CHARLES ELMORE	City	Charles.Elmore@cwftx.net
Rick Spicer	State National Bank	rick@snbt.net
DONNIE ARBEAU	WFMDO	
Lia Barnett	WFMPD	Lia.Barnett@cwftx.net



# Transportation/Land Use Workshop

MTP General Public Meeting  
6:40 8 P.M.

June 4, 2009

Name	Organization	E-mail
Karen Degre	CWF-Plng. Division	Karen.montgomery@cwftx.net
Mona Williams-Horton	Workforce Solutions	mona.stator@twe.state.tx.us
DALE TEICHMAN	Wichita Falls Runners Club	
MARION STADE		marion.stade@gmail.com
Donna Ruth-Rosen	Cady	PBSIMONE@AOL.COM
K. Callah	Skylark Taxi	Kcallah8600@aol.com
Lisa Gunnell	North Texas Rural Rail Transportation District	lisa.raildist@aol.com
LANE BROCK	WPT Power Teams	LANE@WPTPOWER.COM
KATE TEICHMAN	WICHITA FALLS RUNNERS CLUB	ktreichman@workservicescorp.com
DEWAYNE ROBERTSON	AIDS CIRCLE OF HOPE	dashley@sw.rr.com
JIM EMMINGS	CWFTX	
JOHN BURRUS		
Bill Smith	Truwood Neighborhood Assoc.	Smith4800@SBCGLOBAL.NET
Sandy Monson	Liv Streams & Valley's Runners club	info@wearechita.org





# Transportation/Land Use Workshop

Name	Organization	E-mail
Robert Seabury	N. Sub Cap.am	rseabury@aol.com
Roberta Sund	NA	robertasund@yahoo.com
Elton Sund	NA	<del>6226</del>
Davis Powell	CWF	
Kris + Candice Dornell	SKY10013	
Jack + Vicky Stephenson	bicycle	5judy1@juno.com
Michael + Karen Smith	City of W.F.	
Ben ZIP FIKER	HMH	info@hh100.org
Koch Family Susan? Richard	WFRunners Club	r.koch@sw.rr.com
JACK MORPHY	CWF	
CHARLES ELMORE	CIPM	
David MacLagan		maclagan@wf.net
Lin Barnett	CWF/WFMPO	Lin.Barnett@CWFtx.net

# Wichita Falls

**Metropolitan Transportation Plan Update  
2010-2035 for the Wichita Falls Urban Transportation Study (MPO)  
Workshop Materials Packet**



**TABLE NUMBER:**



**Kimley-Horn  
and Associates, Inc.**

# Wichita Falls MPO, Metropolitan Transportation Plan Update Public Workshop

June 4th, 2009

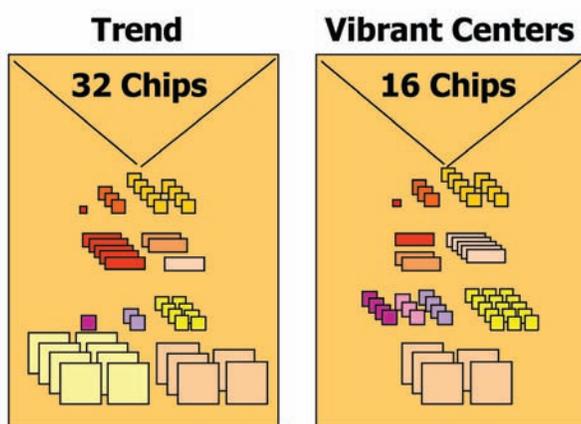
## Facilitator Instructions

The workshop process is intended to challenge residents and stakeholders with the task of deciding where land use and transportation improvements should and should not occur within the region. Participants will be asked to grapple with the issues and trade-offs related to placing different land use types – and doing this within the constraints of population and employment projections for the future. In the workshop, the public will answer the key questions of:

- What kind of development and growth is preferred in the region?
- Where should this growth be located?

In the workshop, participants will be given a hands-on opportunity to place residential, employment and mixed-use land uses throughout the area along with drawing important transportation improvements needed. Following a detailed presentation on the current state of the region, future growth projections, and detailed workshop instructions, participants will work together in groups of 8-10 people to create their “vision” for the area. At each table, the neutral facilitator (you) will provide support to familiarize participants with the materials and the process, answer questions and help resolve conflicts, and help the group complete the tasks within the time allotted. Each group will be asked to create a land use/transportation map for the region using a specific chipset created especially for the Wichita Falls MPO based on future demographics and transportation expenditures. For the workshops, a series of land use and transportation types will be represented by icons, or “chips” that are scaled to the base map. Each “chip” represents a specific land use or transportation type, and for land uses each chip includes associated population and/or employment numbers and with the transportation chips each sticker represent an associated cost of improvement.

Each table can choose to start with one of two chipsets:



### Residential Types



### Employment Types



### Mixed-Use Types



### Transportation Types



New Roadway/  
Roadway Widening



Express Bus



Multi-use Path/Trail

Each chipset will include the same total population and employment with a unique mix of chip types. Along with population and employment, each chipset will include the same appropriation of costs for transportation improvements. A description of each land use type is provided in the chip materials. Once participants select a chipset, they will be asked to create a design for their map area. Participants can distribute the chips across the study area. Each group will put together their own combination of chips to create a vision. At the end of the workshop, each workshop table will present their design to the entire workshop group. The input gained from this workshop will be instrumental in forming the land use and transportation scenarios for testing and modeling.

The maps are the only mechanism to communicate the group's ideas. Please encourage the group to write, label, draw, sketch, cut, and paste all of their agreed-upon ideas on the map or in the margins. To maintain consistency and ensure consensus, you may have to write down their ideas often. The end result should be a map that is clear enough that the project team can easily interpret and input the groups' ideas. The consultant team will be digitizing every chip placed and comment written on the maps.

## FACILITATOR'S ROLE

It is important that all participants have fun, learn what is involved in planning for the region, and inform the team about their desires. As a facilitator you should make sure that everyone has the opportunity to share his or her opinions and that areas of consensus are documented on the map.

As a facilitator you should be neutral. This may be difficult and you may hear things said that you believe are wrong. However, the workshop works best if participants are allowed to discover what works for them on their own. While there is no hard-and-fast rule, you should be fairly passive in your conduct. Use your expertise to help explain concepts or brainstorm new ideas. Intervene to channel participants' ideas onto the map, to aid them when they appear stuck, and to ensure they are accomplishing the steps outlined on the next page.



Engage both extroverts and introverts. One of your primary challenges as the facilitator will be to manage the personalities at the table. Each group will most likely contain a mix of gregarious extroverts and quiet introverts. Your role is to ensure that everyone's voice is heard. It will be natural for the extroverts to begin as the most active. This will break the ice and work to your advantage. As the exercise progresses, however, you may need to turn attention to the opinions of the quiet participants and ensure that the more outgoing group members speak in turn. Experience has shown that often quiet participants are in fact actively processing information and have many great ideas to share.

Set basic ground rules. Facilitators should set some basic ground rules with your table; the following are helpful examples:

- Focus on interests and ideas, not positions.
- Listen in order to understand everyone's ideas. Ask questions.
- Respect different viewpoints.

- All ideas count, even wild ones.
- Everybody should participate.
- Everyone shares responsibility for following the ground rules.

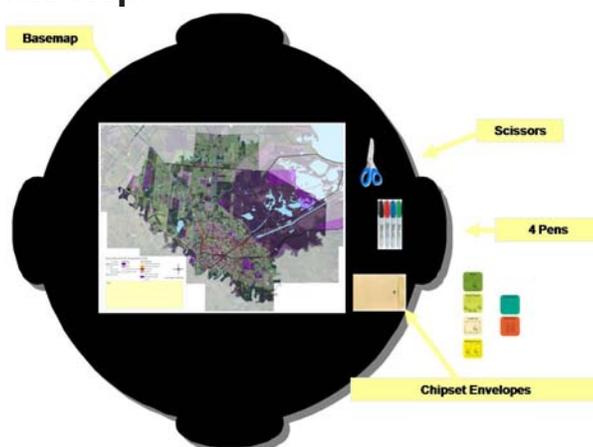
## LAND USE AND TRANSPORTATION WORKSHOP EXERCISE

Please lead your group through the steps that follow. Next to each step number is an approximate duration of time. Please use these times as a guide only. Feel free to spend more or less time on a task, as needed, while keeping track of the overall schedule.

**Step 1. (15 min.)** Introductions, Goal Setting & Deciding a Starter Chipset: Take a moment for everyone to introduce themselves. Everyone should tell the group what he or she hopes to accomplish with this exercise. Each participant should write his/her name on the base map in the designated location and locate his/her home and workplace on the map to help them get oriented.

Identify the group’s goals for the workshop map. Goals can include anything that has to do with land use and transportation in the region. Write the goals on the map. Throughout the session, you can return to the goals to make sure that the group is achieving what they set out to do. **If your group members are having difficulty identifying goals, you can move on to the next step.**

Introduce chip materials and choose a starter chipset. Go over the Land Use and Transportation Chip Menu briefly. The menu shows that different land use and transportation types are represented by chips (game pieces or stickers). The Land Use and Transportation Chip Menu” handouts summarize the chip type information shown in the presentation. Understanding the trade-offs in terms of cost, capacity and land use implications between these land use and transportation types is fundamental to playing the workshop game. This will be discussed in the presentation, but you should have a good understanding of these types before facilitating the group.



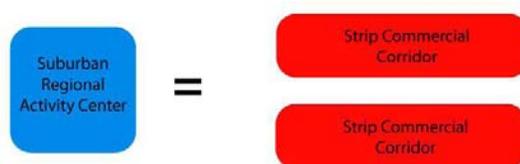
Explain the chipset envelopes. The two starter chip envelopes on your table contain different combinations of transportation chips (which all add up to approximately the same population and employment and transportation costs). Now is the time for the table to choose which starter chipset it wants to use: Trend or Vibrant Centers?

**TIME CHECK** – about 20 or 30 minutes into the workshop, you should be ready to start experimenting with placing the chips on the map. Steps 2 – 4 should take about 45 minutes—this time is yours to spend as you see fit. Feel free to move back and forth between the steps.

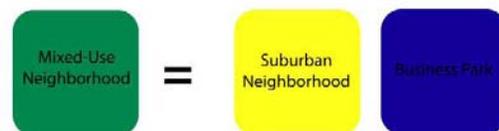
**Step 2. (30 min.)** Place chips on the map: The central task of the game is to place chips on the map representing the group’s desired land use and transportation changes in the region. The group can also return to its previously-identified goals as a starting point. As they place the chips, the participants should think of how these land use changes might relate to current and future transportation improvements in the region.

Encourage the participants to play with different ideas as the chips are moved around. This is the time to experiment with different themes. **Don't stick the chips down yet!**

Trade and cut chips. With your guidance and the chip trading guide, participants can trade chips as the group sees fit. If the bank runs out of a particular chip which you need, you may pull chips from other chipsets. The participants can cut chips if they would like smaller increments of a particular chip type or for trading purposes.



**Step 3. Review the map:** Spend some time examining your new map. The group should make sure the previously-discussed goals have been met. Assess whether the group vision (the map) is consistent with these goals. Rearrange the chips if necessary.



**Step 4. (15 min.) Stick chips on map:** A “ten-minute warning” will be called. Once the group has finished arranging the chips on the map, peel off the backing and stick them down. If the group has any additional points to make, you can annotate the map with the pens provided. Please place any unused chips from your main chip envelope in the designated area on the map (this is very helpful as we digitize the map results). As participants stick the chips, have them think of a map name that captures the spirit of their map and choose a group member to present the map to the larger group.

**Step 5. Name your map and choose a presenter** (someone other than the facilitator).

**Step 6. (10 min.) Present maps to the group:** The project team will tell you when it is time to stop the discussion and make presentations to the rest of the workshop participants. A few tables will be chosen at random to present their maps to the group. Remind your presenter to tell the group about any specific goals that you were working toward or problems you were trying to solve.

**Step 7. (5 min.) Next steps:** After the individual tables have presented their maps, the project team will discuss conclusions and briefly outline the next steps in the Wichita Falls MPO Metropolitan Transportation planning process.

# Land Use Toolbox

Suburban  
Neighborhood

## Suburban Neighborhood

Suburban neighborhoods are found in close proximity to strip commercial corridors. These neighborhoods are generally formed as subdivisions with residential densities ranging from 0.5 to 6 dwelling units per acre

**Chip Size: 90 Acres**  
**Population: 1,212**

Urban  
Neighborhood

## Urban Neighborhood

Urban neighborhoods support a mix of moderate to high density housing options. These neighborhoods are relatively compact and walkable. The design and scale of the development in an urban neighborhood encourages active living with a complete and comprehensive network of walkable streets.

**Chip Size: 90 Acres**  
**Population: 2,627**

Rural Living

## Rural Living

Rural living areas are characterized by very large lots, abundant open space and a high degree of separation between buildings. Residential home sites are located randomly throughout the countryside, which helps to maintain the rural character, scale and scenic views.

**Chip Size: 90 Acres**  
**Population: 101**

Industrial Park

## Industrial Park

Industrial parks provide basic jobs and keep people in the city during normal work hours. They typically locate near major transportation corridors and may include manufacturing centers, transportation hubs, or technology centers.

**Chip Size: 90 Acres**  
**Employment: 491**

Business Park

## Business Park

Business parks provide service jobs in the region and have a greater density of employees. Typical uses include professional offices, corporate campus, research and development and technology centers.

**Chip Size: 90 Acres**  
**Employment: 2,514**



# Land Use Toolbox

Strip Commercial  
Corridor

## Strip Commercial Corridor

A strip commercial corridor is characterized by big box stores or multi-tenant commercial centers located along both sides of a highway or arterial. Strip commercial centers are accessible primarily by automobile. Buildings are typically set back from the road behind large surface parking lots, with little or no connectivity between adjacent businesses.

**Chip Size: 90 Acres or 1 linear mile**  
**Employment: 900**

Town  
Center

## Town Center

Town centers are locally-serving areas of economic, entertainment, and community activity. The size of a town center makes it an employment center and shopping destination for surrounding mixed-use or urban neighborhoods. Buildings typically stand two or more stories with condominiums or apartments over storefronts. The design and scale of the development in a town center encourages active living, with a comprehensive and interconnected network of walkable streets.

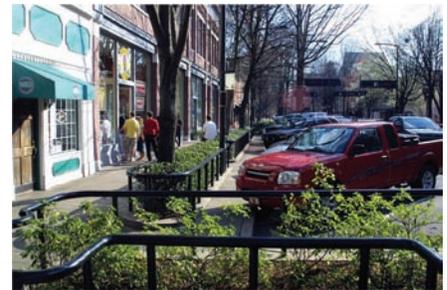
**Chip Size: 90 Acres**  
**Population: 4,026**  
**Employment: 166**

Mixed-Use  
Neighborhood

## Mixed-Use Neighborhood

A mixed-use neighborhood offers residents the ability to live, shop, work, and play in one community. They include a mixture of housing types and residential densities within close proximity to the goods and services residents need on a daily basis. A small urban square supports commercial uses in the neighborhood. The design and scale of the development in a mixed-use neighborhood encourages active living, with a complete and comprehensive network of walkable streets.

**Chip Size: 90 Acres**  
**Population: 1,329**  
**Employment: 76**



# Transportation Toolbox



## New Roadways/ Roadway Widening

Widening of roadways is adding capacity to the existing roadways to account for the increasing vehicular demands. Widening of roadways mitigates congestion and delay and increases safety.

**Cost per mile for freeways: \$10 million**  
**Cost per mile for arterials: \$2 million**  
**Cost per mile for collectors/local: \$1 million**  
**(Each assumes the addition of two lanes)**



## Express Bus

Express bus service operates in mixed traffic and has short stop spacing. Increased efficiency of this service comes from intelligent system operations. Priority and preemption is used at intersections and real-time information is given at stops through the utilization of GPS technology.

**Cost per mile: \$1 million**  
**Station Spacing: 1/2 mile**



## Multi-Use Path

A multi-use path is a route separated from other roads by a barrier or open space, that is designed to accommodate a mix of non-automotive users (e.g. walkers, runners, strollers, wheelchair users, roller skaters, and bicyclists).

**Cost per mile: \$500,000**

Multi-modal Street Design

## Multi-Modal Street Design

Multi-modal streets emphasize bicycle, pedestrian and transit infrastructure. Multi-modal streets can be a main street or a large arterial, but the focus remains on moving more than just automobiles.

**Cost per mile, roadway: \$2 million**

Traffic Calming

## Traffic Calming

A Traffic Calming improvement is used to slow through traffic on residential streets. A number of different techniques can be implemented depending on the context. Concepts such as: Speed bumps and humps, bulb-outs, chicanes and roundabouts are just a few examples of Traffic Calming techniques

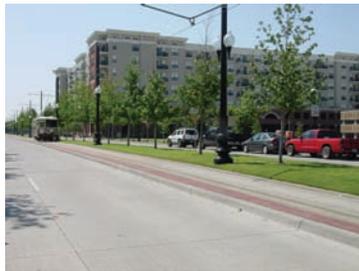
**Cost per mile: \$50,000**

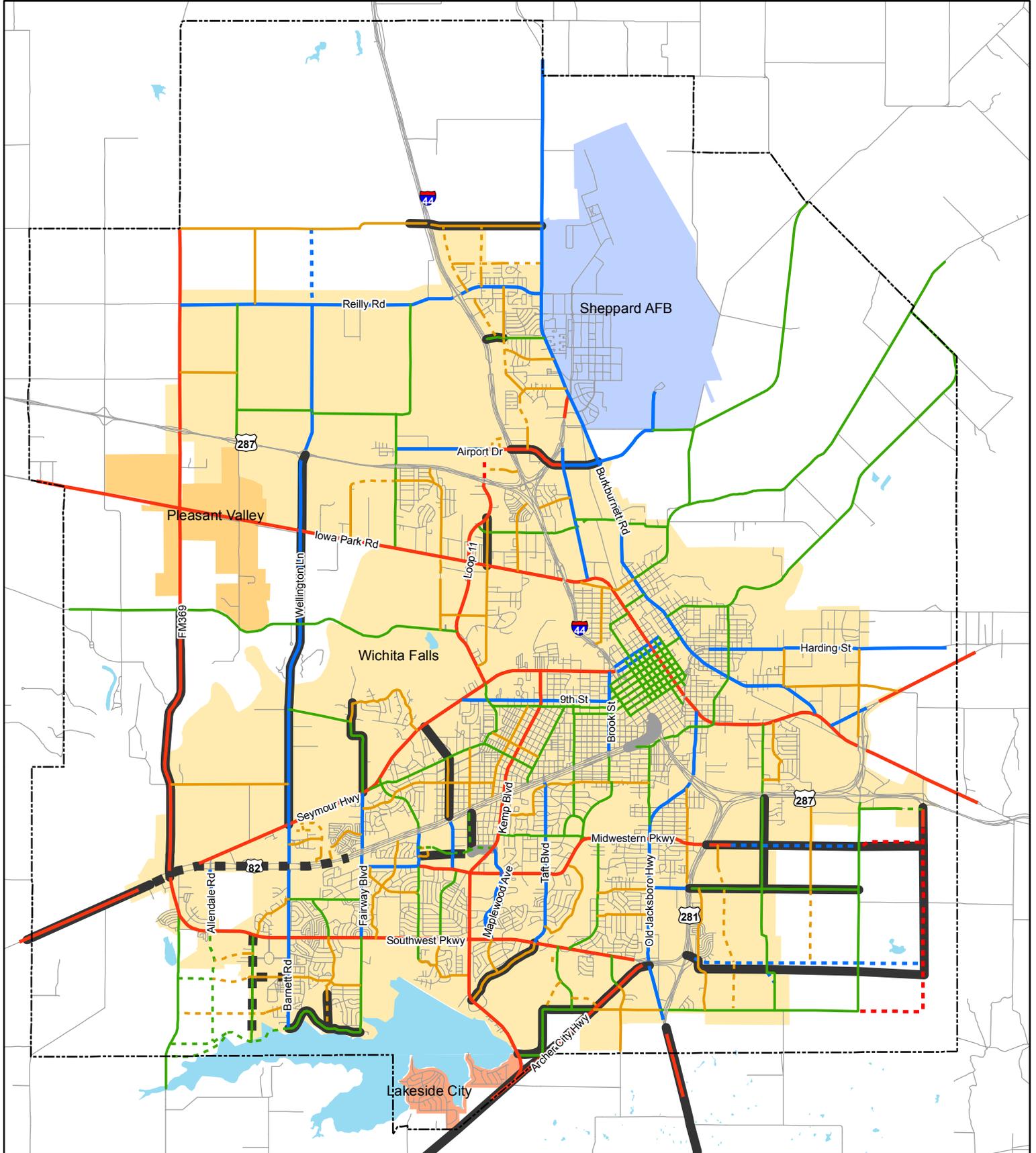
Neighborhood Connector

## Neighborhood Connector

A neighborhood connector allows for a greater access between suburban neighborhood and places of employment and also shopping. Increasing the access can reduce the vehicles on the arterials as well as making the neighborhood more walkable.

**Cost per mile: \$1 million**





**Thoroughfare Plan**

**Existing**

- Major Arterial - Existing
- Minor Arterial - Existing
- Major Collector - Existing
- Minor Collector - Existing
- WF County Road File

**Thoroughfare Plan**

**Proposed**

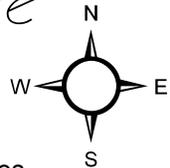
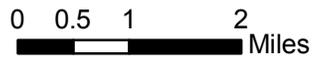
- - - Major Arterial - Proposed
- - - Minor Arterial - Proposed
- - - Major Collector - Proposed
- - - Minor Collector - Proposed
- WF Water Features

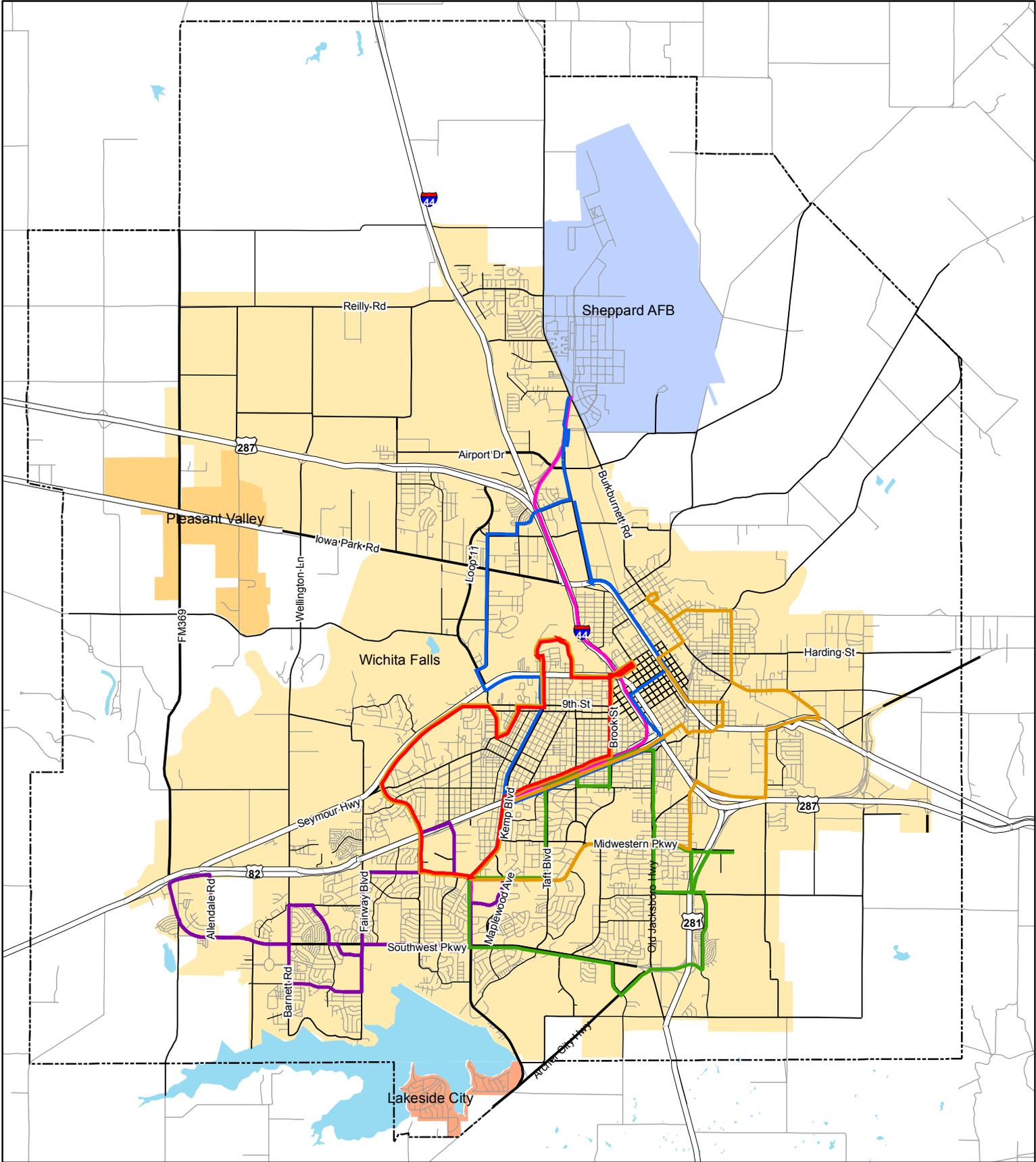
**Planned Improvements**

- Completed
- Proposed
- Under Construction
- WF MPO Boundary
- Sheppard AFB

2005

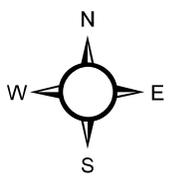
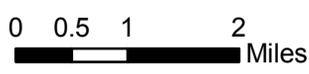
*Thoroughfare Plan*

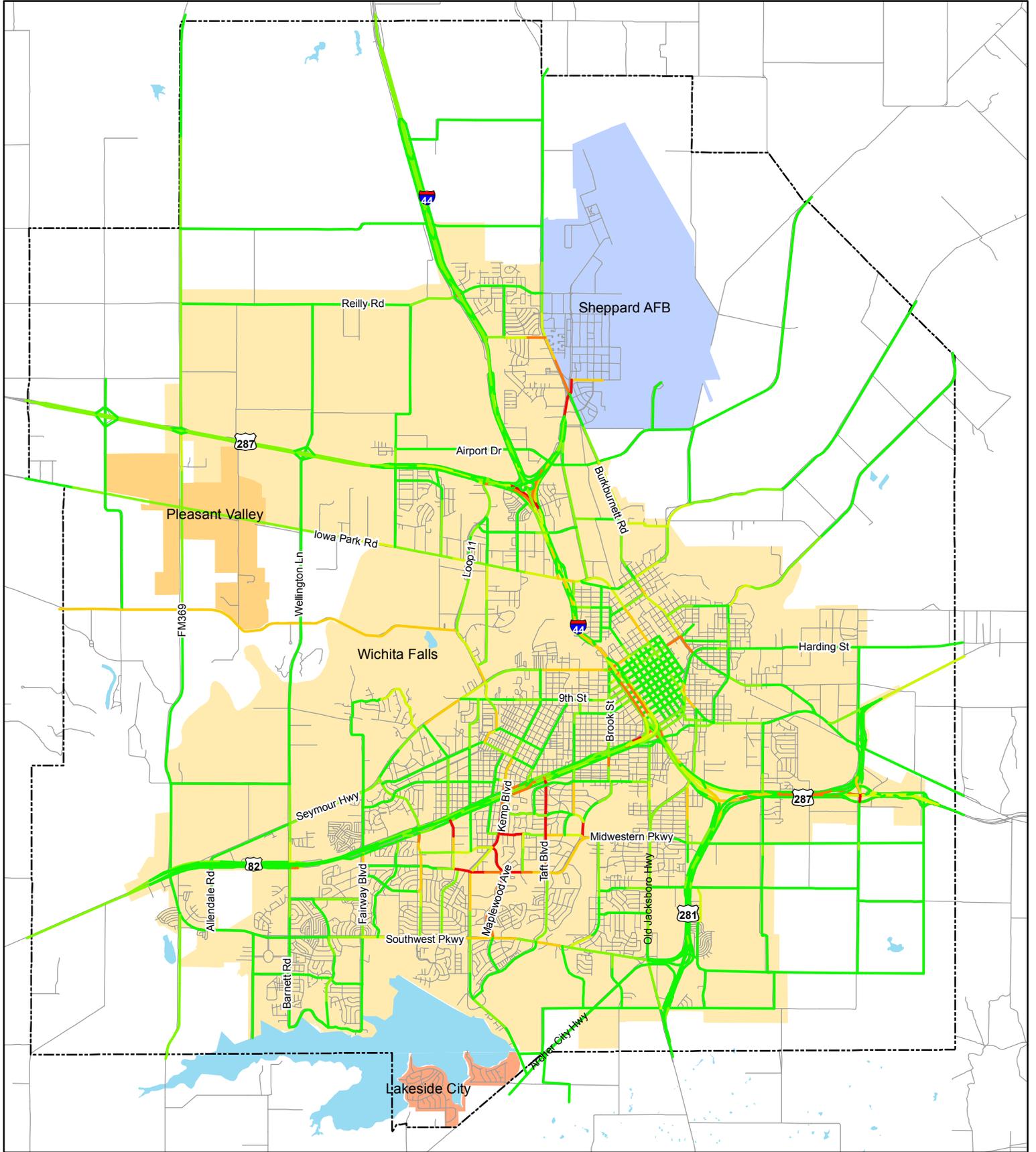




- Route 1
  - Route 2
  - Route 3
  - Route 4
  - Route 5
  - Route 6
- WF MPO Boundary
  - WF County Road File
  - WF Water Features
  - Sheppard AFB

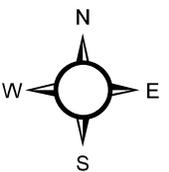
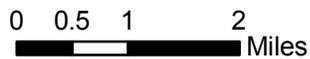
# Transit Map

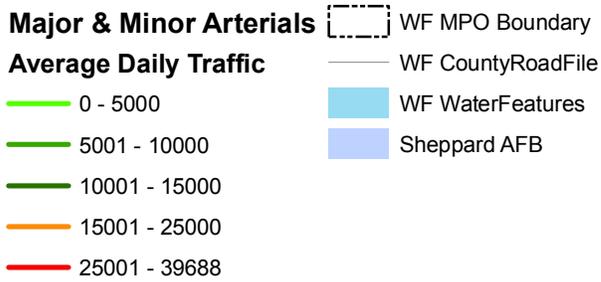
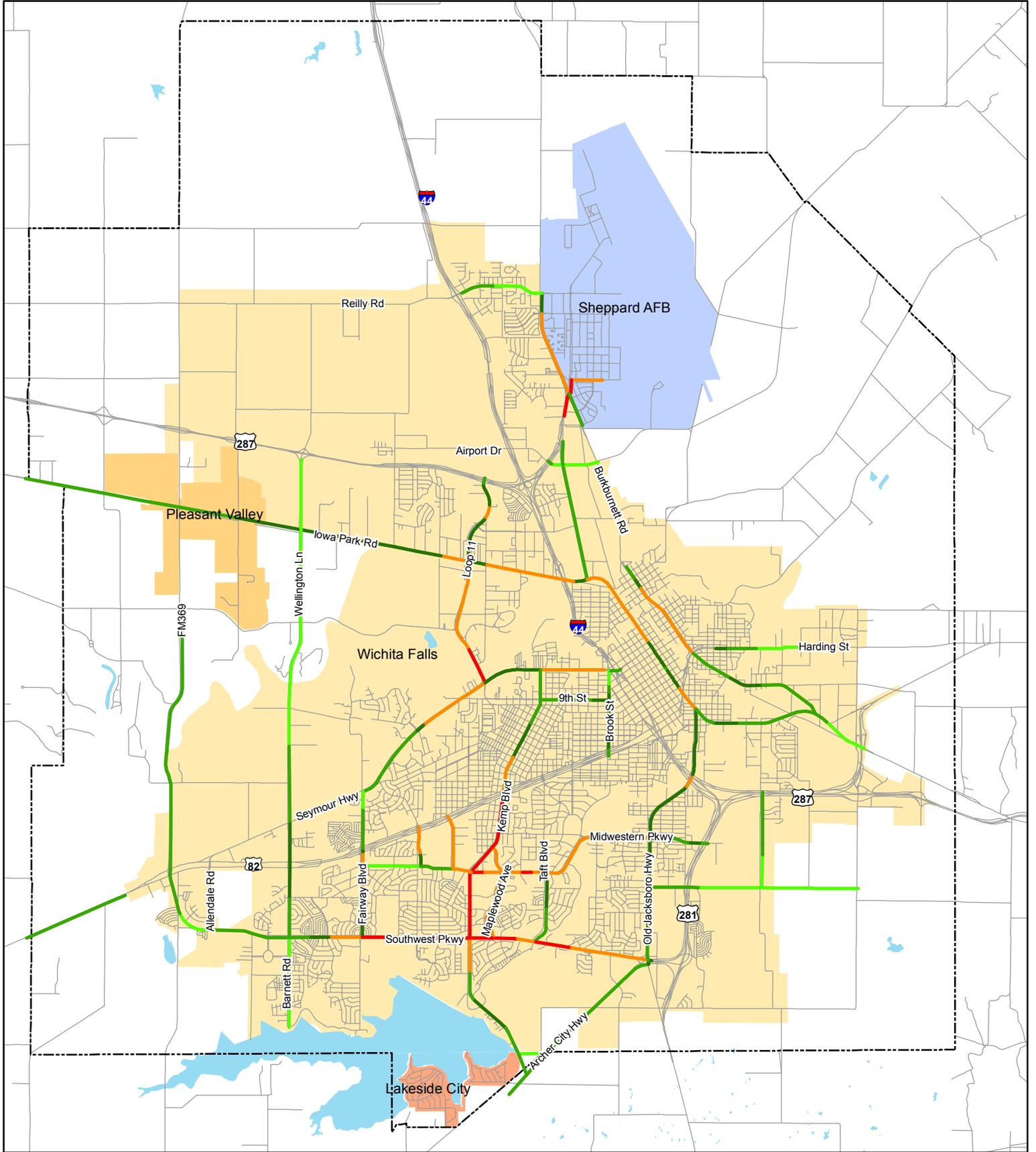




- Level of Service**
- LOS A
  - LOS B
  - LOS C
  - LOS D
  - LOS E
  - LOS F
- WF MPO Boundary
  - WF County Road File
  - WF Water Features
  - Sheppard AFB

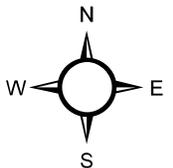
# 2030 Congestion Map

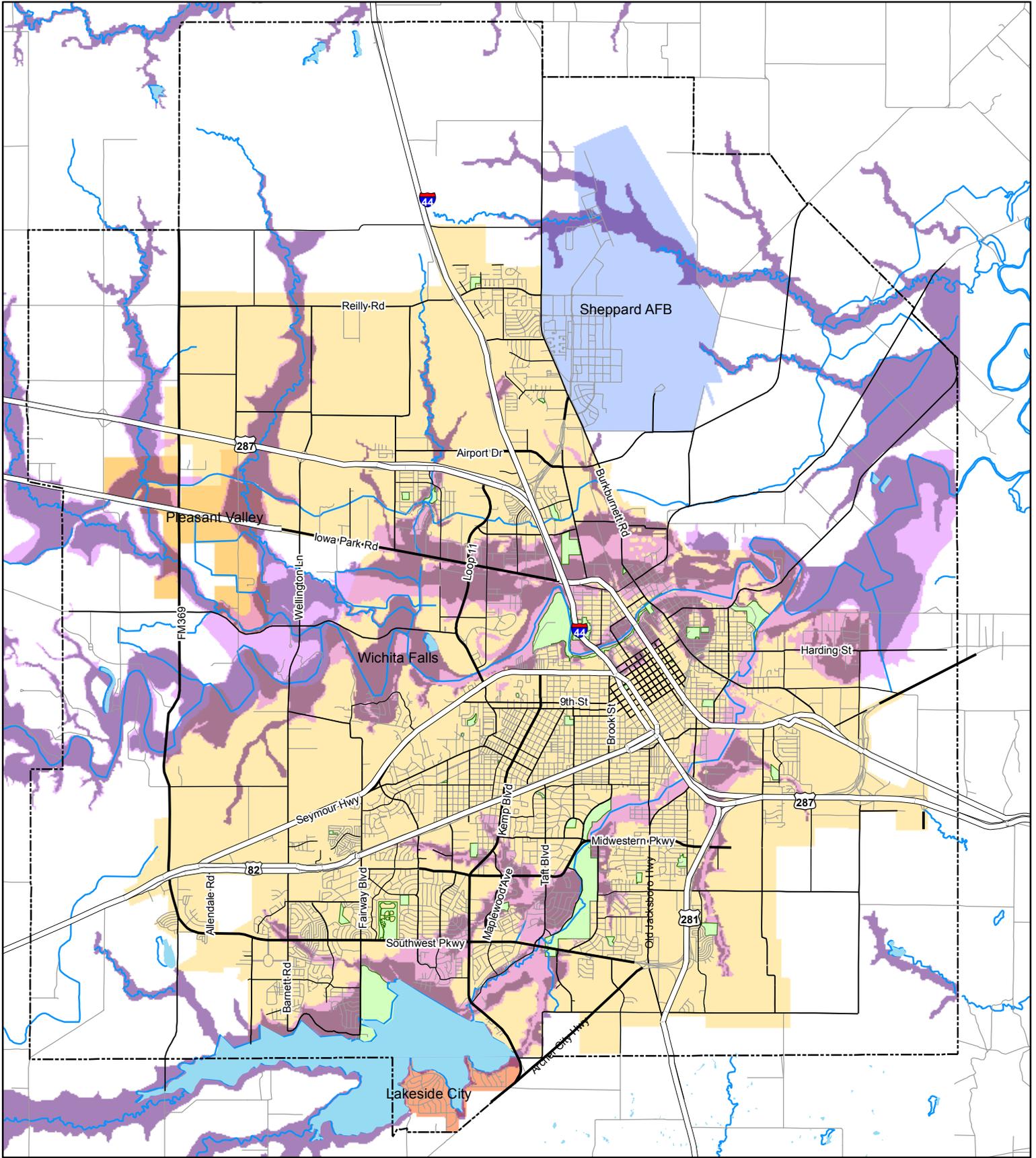




# 2030 Daily Traffic Map

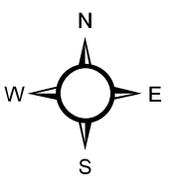
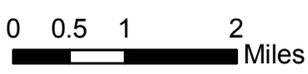
## 4 Lane Arterials

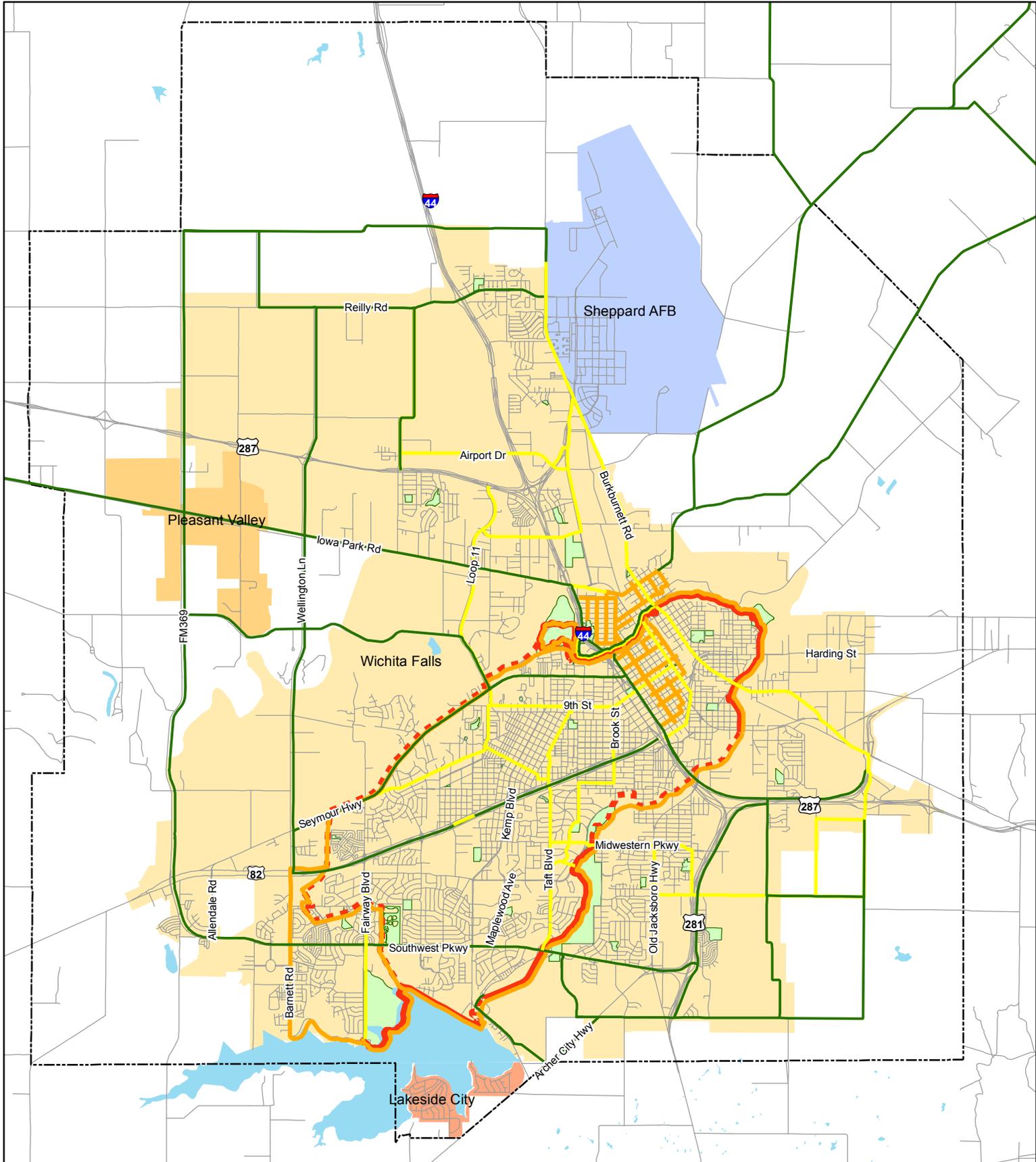




- FEMA Floodplain**
- 100 Year Floodplain
  - 500 Year Floodplain
  - Parks
  - Rivers & Streams
- Legend**
- WF MPO Boundary
  - WF County Road File
  - WF Water Features
  - Sheppard AFB

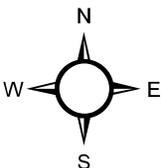
# Environmental Map





- Proposed On-Road and Off-Road Sections**
- Class A Route (High Calibre Training)
  - Class B Route (Daily Use)
  - Class C Route (All Users)
  - Trails Existing
  - - - Trails Proposed
  - Parks
- WF MPO Boundary
  - WF County Road File
  - WF Water Features
  - Sheppard AFB

# Bicycle & Pedestrian Trail System



# Chip Trading Sheet

**Residential Types**

Suburban Neighborhood + Suburban Neighborhood = Urban Neighborhood

Rural Living x12 = Suburban Neighborhood

**Employment Types**

Industrial Park x5 = Business Park

Strip Commercial Corridor + Strip Commercial Corridor + Strip Commercial Corridor = Business Park

Industrial Park + Industrial Park = Strip Commercial Corridor

**Mixed-Use Types**

Industrial Park + Urban Neighborhood + Urban Neighborhood = Town Center

Industrial Park + Suburban Neighborhood = Mixed-Use Neighborhood

**NOTES/COMMENTS/SUGGESTIONS:**

**APPENDIX C:  
MODEL VALIDATION REPORT**

## Travel Demand Model Validation Update

In order to evaluate existing travel patterns and to anticipate future travel conditions in the Wichita Falls area, the Wichita Falls Travel Demand Model was updated to analyze current and projected demographic data. The primary goal in developing and validating the travel demand model is to more accurately identify future needs and to help with the decision making process for transportation improvements.

Model validation is the process in which a model's credibility is based on replicating observed conditions, primarily through existing traffic counts and vehicle miles of travel. This document is a validation update to the previous model validation that was performed by the Transportation Planning & Programming Division of the Texas Department of Transportation (TxDOT) that was completed in 2003.

### Travel Demand Model Background

The Wichita Falls Travel Demand Model was last validated for a base year of 2000 and is maintained by TxDOT. The data for this travel demand model update was provided to Kimley-Horn & Associates from TxDOT through the Wichita Falls Metropolitan Planning Organization (MPO). The model was run using TransCAD 4.8 and the inputs supplied were adjusted to match the existing conditions for a new base year of 2005. The following report provides detail of the steps used to validate the current model to match existing trends in Wichita Falls.

### Demographic Database

In April 2008, the Socioeconomic Data Collection and Forecast Study was completed for the Wichita Falls MPO. This study analyzed current trends in order to forecast future demographics, namely population and employment as a spatial component in Wichita Falls. The study, which was a key element in the model validation process, separated the base year population and employment demographics into Traffic Analysis Zones (TAZ) from 2005 to 2035 in five-year increments. This data was provided to the consultant in both a database format and as an ESRI shapefile.

The TAZ structure remained almost constant between this update and the previous model validation. However, the socioeconomic study did emphasize a change in TAZ structure within the boundary of the Sheppard Air Force Base, (**Figure 1**)

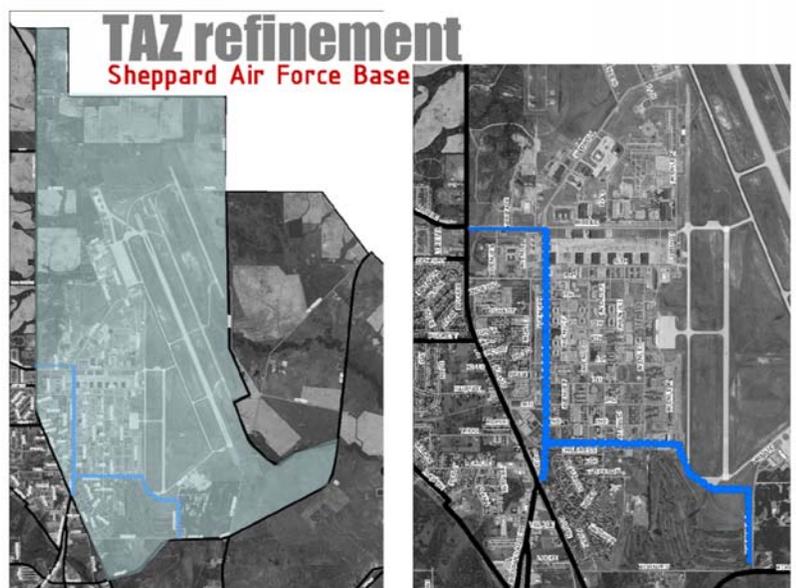


Figure 1: Base TAZ refinement (graphic from 2008 Socioeconomic Study)



the City of Lakeside City and on the north MPO boundary, TAZ ID 298 was divided.

In order to accommodate the addition of these new TAZs, extra centroids were placed in these locations. The new centroids were pulled from “dummy” nodes located on the periphery of the model network. Instead of creating brand new nodes and assigning them demographic data, these “dummy” nodes were created for the purpose of anticipating future TAZ growth. In the travel demand model network, all of the nodes that are centroids have a related ID of less than 320. All other nodes are not connected with any demographic data. The “dummy” nodes that were used have ID numbers of 161, 229 and 257. ID 161 was assigned to the TAZ in Lakeside City; ID 229 was used on the north boundary along with ID 298; and, ID’s 98, 257 and 299 were used for the 3 TAZs at the Sheppard Air Force Base (Figure 1)

The socioeconomic study took the existing population numbers from the Census Transportation Planning Package (CTPP) and compared them to the TAZ data aggregated by Census Blocks. To go beyond simply using the census as a way to determine the existing population, the study also estimated current population by looking at new building permits between 2000 and 2005 and new houses by TAZ. This process can better determine new growth within the study area. **Table 1** identifies the current base year (2005) with the previous travel demand model base year (2000).

Table 1 - Summary of Demographic Data

	2005
Population	112,700
Households	41,650
Household Size	2.71
Median HH Income	\$29,825
Basic Employment	12,464
Retail Employment	13,220
Service Employment	17,333
Special Generators	14,781
Total Employment	63,127
Population/ Employment Ratio	1.79

Employment in the region was also determined in the MPO socioeconomic study. The data for the new employment estimates were derived from 2005 Texas Workforce Commission dataset as well as the Claritas 2005 dataset. The employment numbers were divided into five different employment types: basic, retail, service, education and special generators. The employment types are standardized by North American Industry Classification System (NAICS) for each business type. However, due to the fact that the travel demand model only recognizes basic, retail, service and special generators, the education employment numbers were joined into the service employment category.



Special generators in this travel demand model differ from the typical business types that are found in the demographic set (i.e. basic, retail, and service). According to TxDOT,

Trip production and trip attraction models are for average or usual conditions and development types. Certain developments, however, are considered unique and are considered special generators. For each identified special generator within an urban area, trip productions and attractions are considered separately using individual trip production and attraction rates for that generator.

In the socioeconomic study, a special generator was defined as a large employment center with over 100 employees in most cases. However, large employers can have similar trip patterns to the regular three trip types. For example, a large employer such as communications distributor with over 100 employees will have similar trip patterns as determined in the service employment type category of the travel demand model. On the other hand, Sheppard Air Force Base or Midwestern State University will have different trip patterns from the typical basic, retail, or service employment types and therefore deserve a closer look at the trip distribution.

In this validation update, the only land use types that were set apart as special generators were universities, colleges, high schools, hospitals, and the military base. (Table 2)

**Table 2 - Special Generator Distribution**

TAZ	POP	EMP	Basic	Retail	Service	EDUCATION	Trip Rate/ Employee	Total Trips
136	411	31	0	0	31	MSU Recreation	9.1	283
140	680	556	0	0	556	MSU Campus	9.1	5076
151	9	48	0	0	48	MSU Residences/Vernon College	9.1	438
221	0	97	0	0	97	Hirschi High School	19.7	1915
250	0	138	0	0	138	S.H. Rider High School	19.7	2724
120	0	131	0	0	131	Wichita Falls High School	19.7	2586
246	0	4	0	0	4	Wayland Baptist University - Call Field	15.6	62
178	0	22	0	0	22	Vernon College	15.6	342
						<b>HOSPITALS</b>		
70	0	1265	0	0	1265	Red River Hospital and United Health Care System	5.2	6578
71	0	859	0	0	859	United Regional Health Care System - Bethania	5.2	4467
160	0	906	0	0	906	North Texas State Hospital	5.2	4711
272	0	224	0	0	224	Kell West Regional Hospital	5.2	1165
83	0	496	0	0	496	Health South Rehabilitation Hospital	5.2	2579
224	0	153	0	0	153	Wichita Valley Rehabilitation Hospital	5.2	796
250	0	140	0	0	140	Hospice of Wichita Falls	5.2	728
						<b>MILITARY</b>		
299	0	9711	0	0	9711	University, Sheppard Air Force Base	1.8	17286

The trip rates for the special generators were determined using ITE’s Trip Generation 8<sup>th</sup> Edition, by determining the number of employees by land use type. As seen from the Trip Rate/Employee column in **Table 2**, there is a different trip rate for universities, community colleges, and high schools, as well as different trip rates for hospitals and military bases. Each of the total trip amounts were allocated into the model by identifying the unique productions and attractions by trip type.

The remaining large employers identified in the 2008 socioeconomic study as special generators that are not listed in **Table 2** above were joined up with the basic, retail and service employment types of their respective TAZ location in the travel demand model.

### Network Adjustments

Instead of recreating the network from scratch using aerials, road centerline shapefiles, or other data, the 2005 base year network was adjusted from the year 2000 network received from TxDOT. From 2000 to 2005, a number of network improvements have occurred. These changes were identified using 2005 aerial photos provided by the MPO. **Figures 2** through **5** show the areas in which network adjustments were made to the travel demand model.

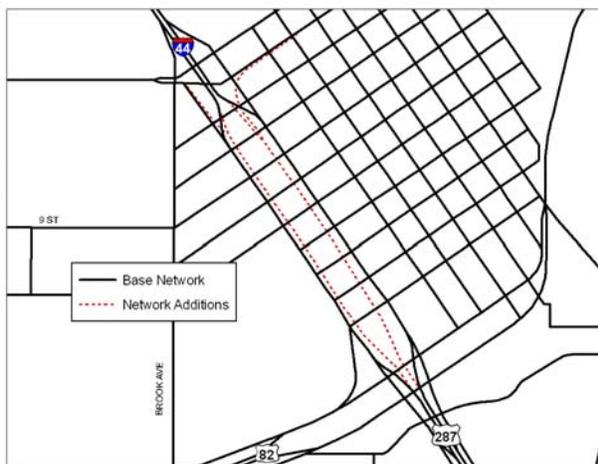


Figure 2: Raised freeway on the west end of downtown



Figure 3: Main lanes added to U.S. 82 in southwest Wichita Falls from Kemp to Fairway



Figure 4: Frontage roads on IH 44 in north Wichita Falls from Reilly Rd to the MPO boundary

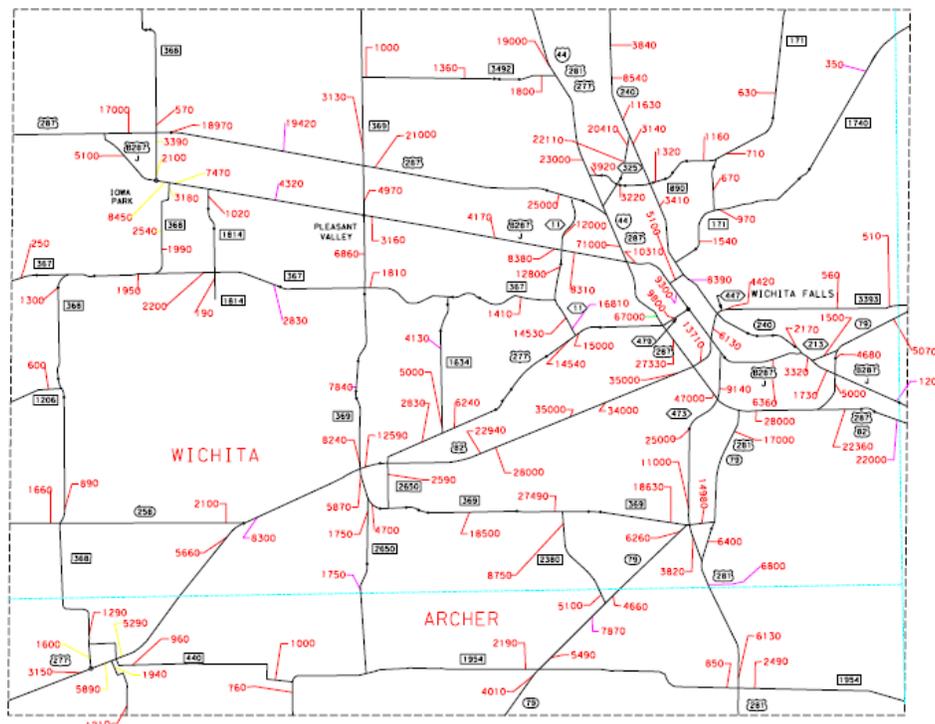


Figure 5: Interchange ramps along U.S. 287 northwest of Wichita Falls from IH 44 to the MPO Boundary

These adjustments were added to the 2005 base year network in order to reflect current traffic patterns in the Wichita Falls region. All of the added network links were assigned capacities and speeds based on similar functional class, area type and number of lanes of existing network links. Once all of the new network links were updated with their appropriate capacity and speed amounts, the free flow time field was updated and populated. The free flow time is defined in the model as  $(\text{length} / \text{speed}) \times 60$ .

These adjustments increase the accuracy of the model in projecting future travel patterns in the region. Once the network is updated, the model can be validated with observed traffic patterns.

**Model Validation Update**



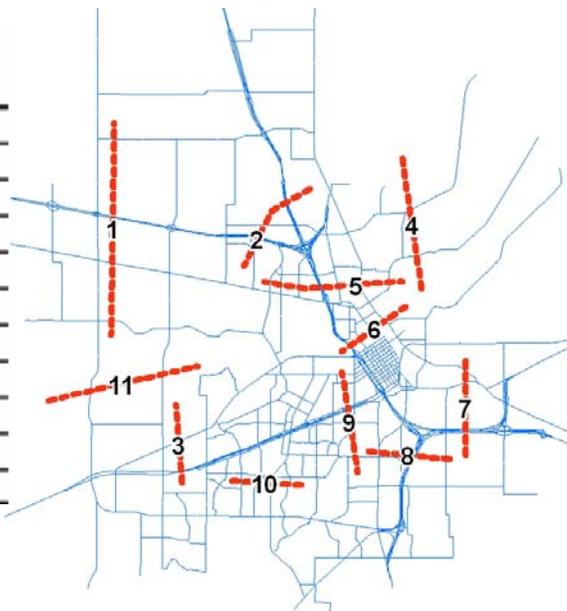
In order to match the observed 2005 counts with the modeled volumes, a number of comparisons took place to ensure model validity. The model’s validity is determined by comparing the modeled traffic volumes to the actual counts in the network. Three validation methods were used to perform this task: screenline traffic volume validation, area type validation, and functional class validation. The following paragraphs describe these three methods in greater detail.

Screenlines, which are traffic flows that are found on parallel facilities or within a corridor, were developed in the model to determine validity. The benchmark set for this validation update was for screenline model volumes to be within 85% to 115% (+/- 15%) of the actual traffic counts. **Figure 7** below shows the screenlines developed for this model update.

Figure 7: Screenline distribution within the Wichita Falls region

**Table 3 - Screenline Validation**

Screenline	Model Volume	Total Count	Total Ratio
1	29,122	27,330	1.07
2	43,437	41,222	1.05
3	32,664	29,180	1.12
4	1,535	1,680	0.91
5	82,645	84,540	0.98
6	96,076	84,690	1.13
7	40,240	36,530	1.10
8	34,828	42,000	0.83
9	56,453	52,991	1.07
10	36,951	40,990	0.90
11	12,052	11,970	1.01



Screenline	Screenline Roads										
	1	2	3	4	5	6	7	8	9	10	11
Road 1	FM 367	IH 44	Seymour Hwy	FM 171	FM 171	Eastside Dr	US 287	US 281	Midwestern Pkwy	Kemp Blvd	Barnett Rd
Road 2	Iowa Park Rd	US 287	US 82	FM 1740	Loop 11	IH 44	Scott Ave	Old Jacksboro	US 82	Maplewood Ave	FM 369
Road 3	US 287					Scott Ave	SH 240			McNiel Ave	
Road 4										Rhea Rd	

As seen in **Figure 7**, the screenlines attempt to encompass traffic flows along major corridors and parallel facilities to maintain accuracy in trip characteristics. All but one of the 11 screenlines sampled fell within the +/- 15% target range. The screenline results are consistent with the previous model validation performed in 2003. **Table 3** shows the screenline results.



Along with developing a screenline validation of the model, accurate volumes were identified with respect to functional class and area type. In this process, the vehicle miles traveled (VMT) element of the observed counts and the modeled volumes were compared to determine the precision of the model. VMT is defined as the number of vehicles times the length of roadway traversed. The standard of error for these comparisons is a range 90% and 110% (+/- 10%). **Table 4** identifies the comparison of observed volumes to modeled volumes with respect to area type and the functional classification of roadways.

**Table 4**  
Comparison of Observed to Assigned VMT

Area Type	Observed	Assigned	Percent Difference
CBD Fringe	150,538	151,830	100.86
Urban	329,332	357,253	108.48
Suburban	52,425	49,746	94.89
<b>Total</b>	<b>532,294</b>	<b>558,828</b>	<b>104.98</b>
<b>Functional Class</b>			
Interstate	57,834	61,418	106.20
Other Freeways	172,388	186,383	108.12
Principal Arterial	224,106	232,197	103.61
Minor Arterial	54,721	55,629	101.66
Collectors	18,650	18,297	98.11
Frontage Roads	4,596	4,906	106.73
<b>Total</b>	<b>532,294</b>	<b>558,828</b>	<b>104.98</b>

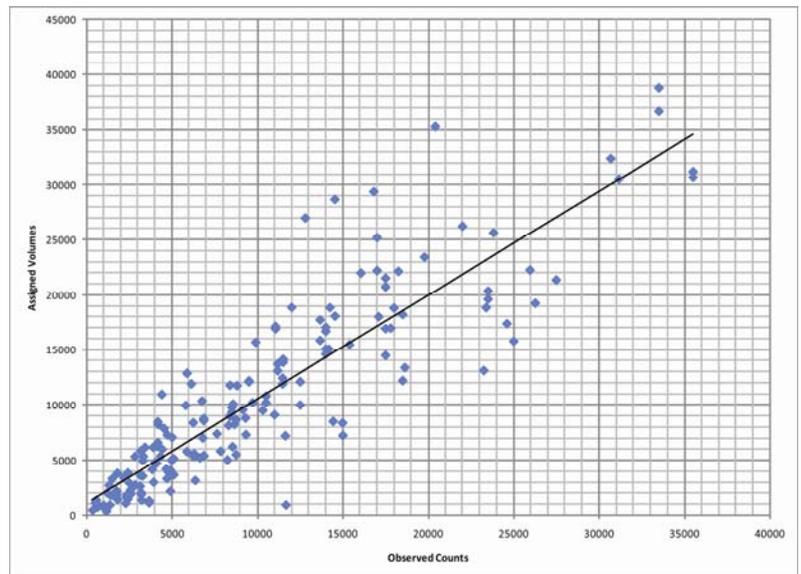


Figure 8: Distribution of all observed counts and modeled volumes arranged in a scatter plot diagram

As a region, the percent difference between actual counts and modeled volumes is close, with a difference of approximately 5 percentage points. **Table 4** also shows that certain functional classification types have a greater degree of error. For example, Frontage Roads have almost a 7% difference and Other Freeways have an 8% difference. However, the previous validation report identified similar results, with Frontage Roads and Other Freeways having the greatest percent difference when comparing functional classification.

**Conclusion**

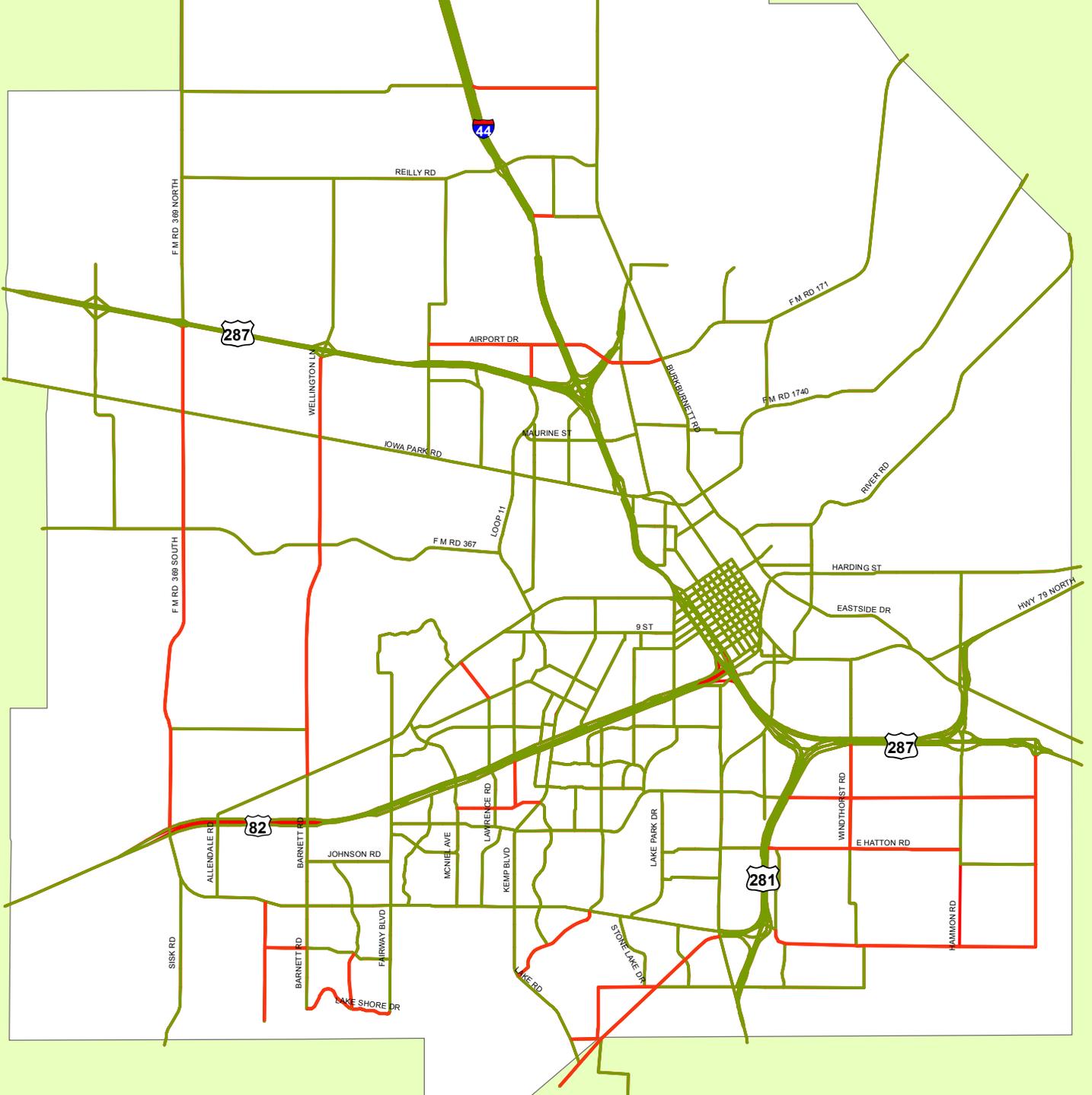
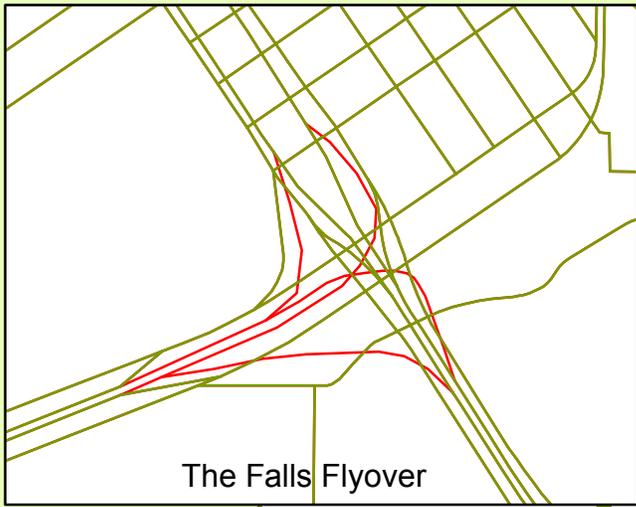
As a result of the 2005 base model update and the model validation process, the 2005 base model successfully replicates base year travel characteristics. This updated validation model will help to identify where to focus transportation priorities in the future using forecasted demographic data. This model will be a useful tool in identifying existing capacity issues within the transportation network as well as addressing potential deficiencies in the coming years. The horizon year demographic data as well as data acquired from the public workshop will be used to identify future growth pattern scenarios for the Wichita Falls MPO.

**APPENDIX D:  
TRAVEL DEMAND MODEL  
MEASURES OF EFFECTIVENESS**

# Wichita Falls MPO 2005 - 2035 Network Improvements

## Legend

- 2005 Network
- Model Network Improvements
- MPO Boundary

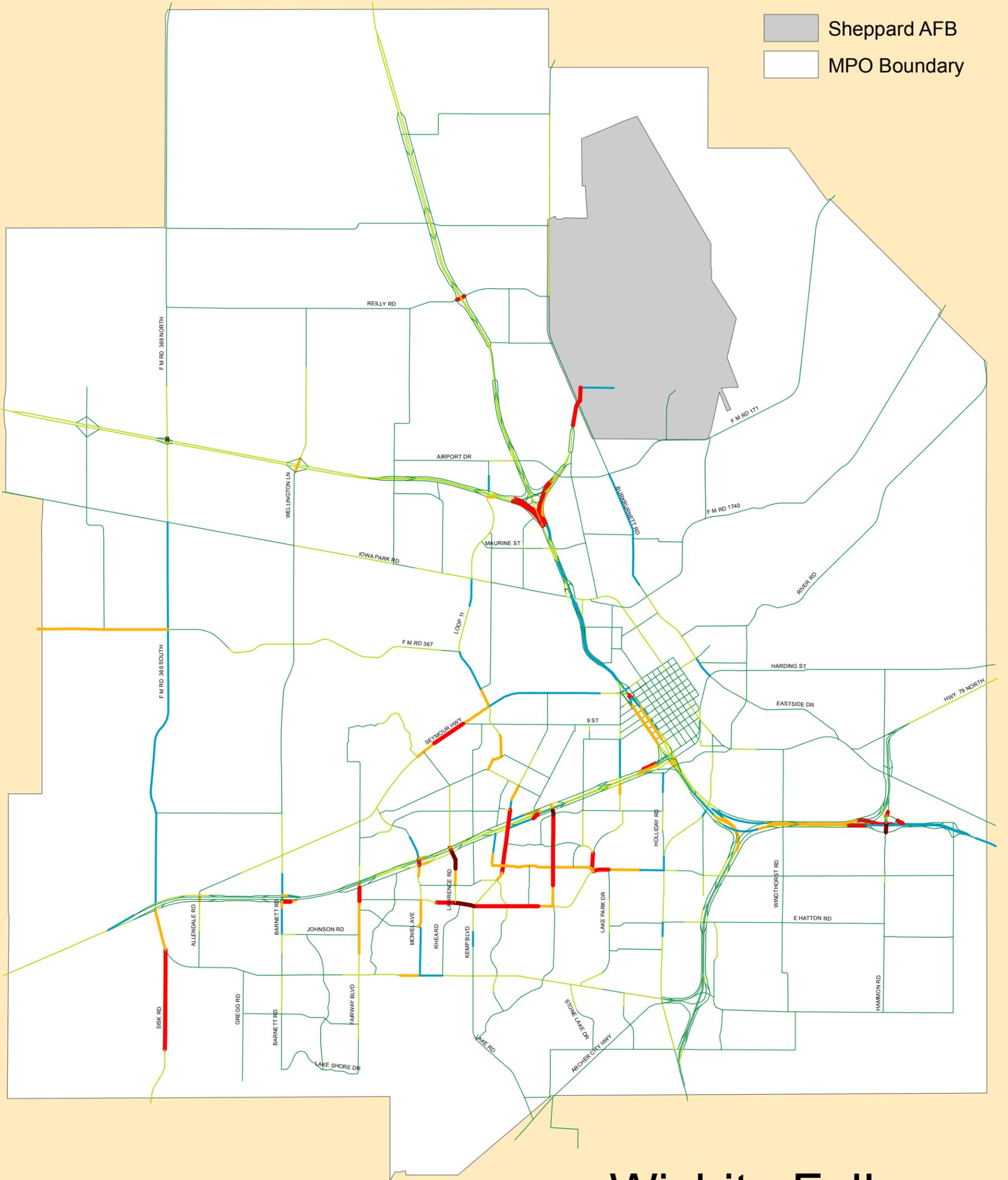




# 2035 Network

## Congestion

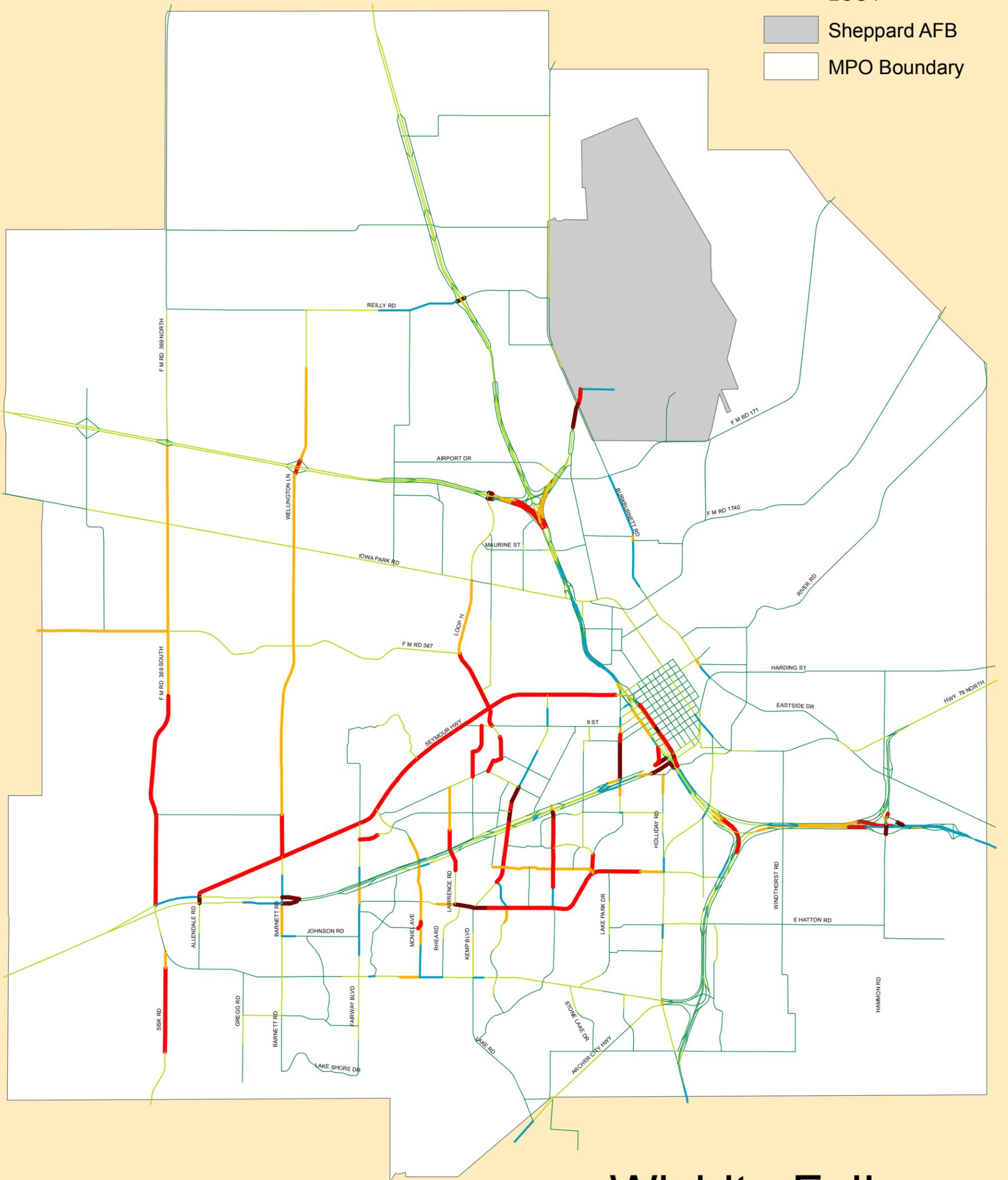
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F
- Sheppard AFB
- MPO Boundary



# Wichita Falls Travel Demand Model Update

# 2035 on 2005 Network Congestion

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F
- Sheppard AFB
- MPO Boundary



# Wichita Falls Travel Demand Model Update

**APPENDIX E:  
ACCESS MANAGEMENT BEST PRACTICES**

## Appendix Access Management Practices

### Addressing Access Management in Local Government Policies

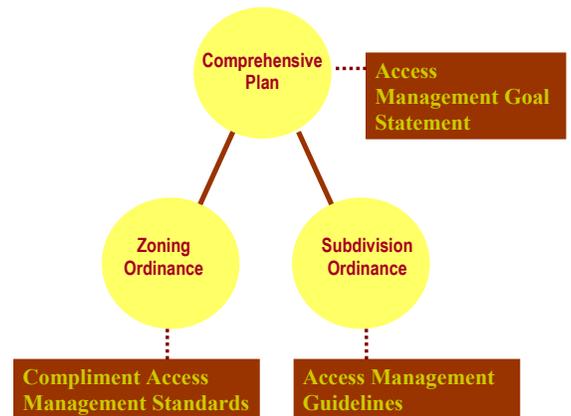
Effective access management requires planning as well as regulatory solutions. Communities that establish a policy framework that supports access management in local comprehensive plans, prepare corridor or access management plans for specific problem areas and encourage good site planning techniques will be better prepared to permit and manage access.

#### 6.1 Local Government and Access Management

There are many ways in which planning documents and municipal codes can address access management issues and set the stage for an effective access management program. Local governments can accomplish access management as follows:

- 1 – Address access management in the transportation and land use elements of the comprehensive plan.
- 2 – Adopt an access management ordinance that establishes connection spacing, driveway design and corner clearance requirements for all major roadways, along with supporting land development regulations.
- 3 – Consider establishing a corridor overlay district for high priority arterial roadways (e.g. a new bypass or strategic state highway) that establishes a high degree of access control and supporting land development regulations. Small communities may choose this approach to focus on one key corridor, as opposed to a system-wide program.
- 4 – Promote the development of a supporting network of local and collector streets to provide alternative access off of major arterial roadways through subdivision regulations, development exactions, traffic impact studies, and capital improvement plans and programs.

Two of the most widely accepted methods are to reference a separate “Access Management Guidelines” or make broad policy statements concerning access management in their



comprehensive plans, thoroughfare plans and local municipal codes. These options are explained in further detail in the following sections.

## **6.2 Authority**

Responsibilities granted by Chapter 213.001 of the Texas Municipal Code are for the purpose of promoting sound development of municipalities and promoting public health, safety, and welfare. Local Comprehensive Plans are the policy and decision making guide for future development and capital improvements in the municipality. It is also the correct document to identify the desired access management approach.

Municipalities also have the authority to practice access management through the rules and definitions of the State of Texas Local Government Code Chapter 212 "MUNICIPAL REGULATION OF SUBDIVISION AND PROPERTY DEVELOPMENT." Therein, Cities may adopt Access Management Plans as a part of the existing Subdivision and Zoning regulations or tailor sections of the ordinances to advance access management strategies.

## **6.3 The Comprehensive Plan**

Responsibilities granted by Chapter 213.001 of the Texas Municipal Code are for the purpose of promoting sound development of municipalities and promoting public health, safety, and welfare. Local Comprehensive Plans are the policy and decision making guide for future development and capital improvements in the municipality. It is also the correct document to identify the desired access management approach.

The comprehensive plan and corridor studies provide the legal basis for access management by establishing the relationship between access management and the public health, safety, and welfare. In determining the validity of local regulatory actions, courts typically review whether the action is consistent with and based upon a local comprehensive plan (6). Access management policies in the comprehensive plan demonstrate an overall public commitment to managing access, rather than an arbitrary approach that singles out property owners for special treatment.

Core elements of a local comprehensive plan are those that relate to transportation, land use, and capital improvements. Most local governments include the following in the transportation element of their comprehensive plan:

1. A roadway classification system based on function (e.g., major arterial, minor arterial collector, local).
2. A map indicating the existing streets and roadways according to the adopted classification system.
3. A map indicating future transportation needs, including any new corridors and planned improvements to existing roadways.
4. A typical cross-section for each class of street/roadway.
5. Transportation goals, objectives and policies of the community.

The transportation element should also include a section that describes the principles and benefits of access management. This section would describe how access management carries out the physical and policy objectives of the transportation plan and protects public safety. Policy statements in the transportation element of the comprehensive plan that support access management as well as efficient and stable land use patterns include:

1. Public roadways are to be planned, designed and managed to preserve their functional integrity.
2. Allowable levels of access will be established for each functional classification of roadway to preserve the safe and efficient operation of the major roadways.
3. Direct access to major roadways will not be permitted where alternative access is available.
4. Access connections to major arterials that may be considered for future signalization must conform to a uniform one-half mile spacing unless it can be demonstrated that an intersection deviating from this interval can be signalized without interfering with traffic operations or safety.
5. A thoroughfare map will be adopted that indicates all existing and potential signalized locations.
6. A nontraversable, landscaped median will be provided on all new multilane major arterials. Undivided roadways and roadways with a continuous two-way, left-turn lane will be considered for reconstruction when the volume exceeds 24,000 vehicles per day.
7. Unsignalized median openings will be designed as directional openings.
8. New driveway connections will not be located within the functional distance of an intersection.

Policies to include in the land use element of the comprehensive plan in support of efficient and stable land use patterns as well as to support the objectives of access management include:

1. Access to land development along major arterial roadways shall be preserved through the use of parallel roads, side streets, and cross access easements connecting adjacent developments.
2. Properties under the same ownership, consolidated for development, or part of phased development plans shall be considered one property for the purposes of access management. Access points to such developments shall be the minimum necessary to provide reasonable access, and not the maximum available, for that property frontage.

3. New residential subdivisions shall include an internal street layout that connects to the streets of surrounding developments to accommodate travel demand between adjacent neighborhoods, without the need to use the major thoroughfare system.
4. Residential subdivisions abutting arterial roadways shall be designed so that street connections conform with access spacing standards for those roadways. Streets between those points shall be cul-de-sacs with pedestrian and bicycle connections to be arterial wherever feasible to preserve bicycle and pedestrian mobility. Where the street pattern is discontinuous within the subdivision, continuity shall be maintained for pedestrian and bicycle movement.
5. Commercial development shall be encouraged to share common access connections as well as to provide a convenient system of interparcel circulation so that customers as well as delivery and service vehicles can move between the sites without using the abutting public roadway.
6. Zoning and subdivision actions shall discourage shallow commercial strip development where most, or all, access is directed to the abutting major public roadway.
7. Commercial office and retail will be encouraged to develop activity centers schematically illustrated as the preferred pattern in Figure 6.3-1. This land use arrangement facilitates pedestrian circulation between businesses, eliminates the need for vehicles to use the public street when moving from one establishment to another, increases the corner clearance between driveways and the intersection, and improves safety and intersection operations by reducing the occurrence of conflicts within close proximity of the intersection.

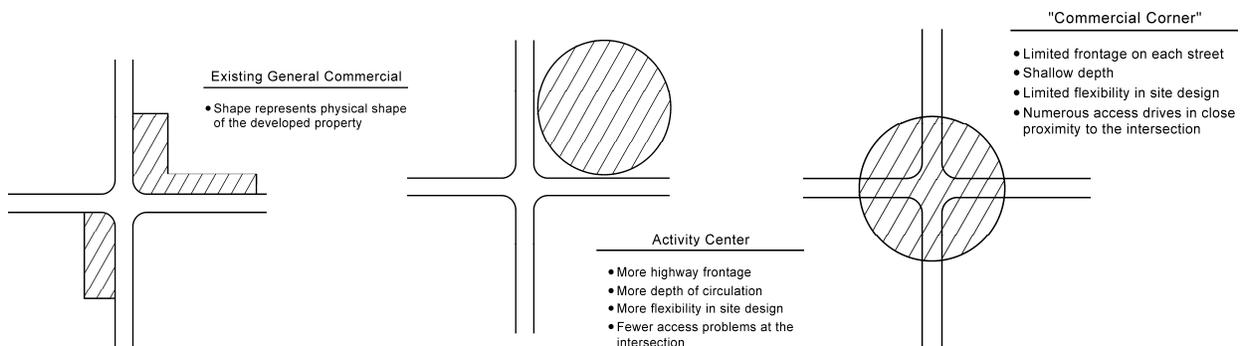


Figure 6.3-1 Activity Centers

## 6.4 Subdivision Ordinance

Communities' access management policies may be codified by the State of Texas Local Government Code Chapter 212 "Municipal Regulation of Subdivisions and Property Development." Herein, "Municipalities may adopt rules governing plats and subdivisions of land within the municipality's jurisdiction (including ETJ) to promote the health, safety, morals or general welfare of the municipality and the safe, orderly and healthful development of the municipality."

Therefore, municipalities may choose to adopt "traffic access management guidelines" by ordinance as part of the Subdivision Ordinance. Typically, these standards would be available for the general public as a separate or stand alone document, but the official codification of these standards would be found in the Subdivision Ordinance. See **below** for an example of an Access Management Ordinance.

### 6.5 Zoning Ordinances

Zoning Ordinances may compliment the "traffic access management guidelines" by establishing lot standards (minimums and possibly maximums) that correspond appropriately with the access criteria. For example, if the subdivision criteria states that the first median cut from an intersection shall be no closer that 750' from the centerline of the intersection, the zoning standards for the adjacent property(s) should have the minimum depth and width to allow for orderly growth. Similarly, with the driveways spacing, if the first driveway cut shall be no closer than 100' from the centerline of the intersection, than the zoning standards for the adjacent property(s) should have the minimum depth and width to compliment. See **Appendix B** for an example of an Access Management Ordinance that establishes minimum lot widths.

### 6.6 Thoroughfare Planning

Access management programs should not only strive to limit and control access to major arterial roadways. It is equally important to provide local and collector streets that can accommodate access to development. Roadway functional classification systems in transportation plans call for local and collector roads to provide more access to property than arterial roadways. Therefore, a supporting system of local and collector roads should be provided along arterial roadways where development is desired.

Benefits of an adequate supporting street system include improved accessibility of corridor businesses to abutting neighborhoods, more compact development patterns, and reduced need for individual driveway access to the principal roadway. Local streets also provide alternative routes for short local trips, thereby reducing traffic congestion on the arterial.

### Regulatory Techniques that Support Access Management

- Regulate driveway spacing, sight distance and corner clearance;
- Requirements for joint and cross access, driveway consolidation, interparcel connections, and unified access and circulation plans (including regulations for shopping center outparcels);
- Limit the number of driveways per existing parcel on developing corridors;
- Increase the minimum lot frontage along major thoroughfares.
- Encourage joint access and parking lot cross access.
- Review lot splits to prevent access problems.
- Minimize commercial strip zoning and promote mixed use and flexible zoning.
- Require measurements of building setbacks from future right-of-way lines.
- Promote unified circulation and parking plans.
- Traffic impact assessment requirements and procedures, that are keyed to access management requirements;
- Redevelopment or "change in use" criteria for bringing existing situations into conformance when there is a change in use;

Existing local street systems can provide an initial framework for a corridor access management plan. Where they are not adequate, then the plan could identify preferred future locations. Side streets may be laid out in a general grid pattern or branch out to accommodate terrain or other natural features. A system of parallel roads or service roads could run behind corridor properties with side streets intersecting the arterial at reasonable spacing intervals. Frontage roads often connect too close to an intersection, creating new access problems.

Ideally, major arterial roadways would not accommodate low volume, individual driveways. Instead, minor arterial and collector roadways could be planned to intersect the arterial roadways at regular intervals to coordinate with desired spacing of median openings and signals. Unsignalized local streets or high volume access points could connect to the arterial at intervals that conform to connection spacing standards, and commercial driveways could be primarily focused onto local and collector streets.

## **Model Municipal Access Management Ordinance**

### **Minimum Connection Spacing Along Major Thoroughfares**

The minimum distance between driveways, alleys, service drives, streets, or other roadway facilities along a major thoroughfare shall not be less than the distances shown in table 1 below for the posted speed limit on the major thoroughfare. Major thoroughfares are the roadways designated on the City of (insert city) Thoroughfare Plan. The minimum distance between driveways, alleys, service drives, streets or other roadway facilities is measured along the edge of the travel way from closest edge of pavement of the first access connection to the closest edge of pavement of the second access connection including corner clearance. This is illustrated in figure 1.

Minimum Connection Spacing	
Posted Speed (mph)	Distance (ft)
≤ 30	200
35	250
40	305
45	360
≥ 50	425

Table 1

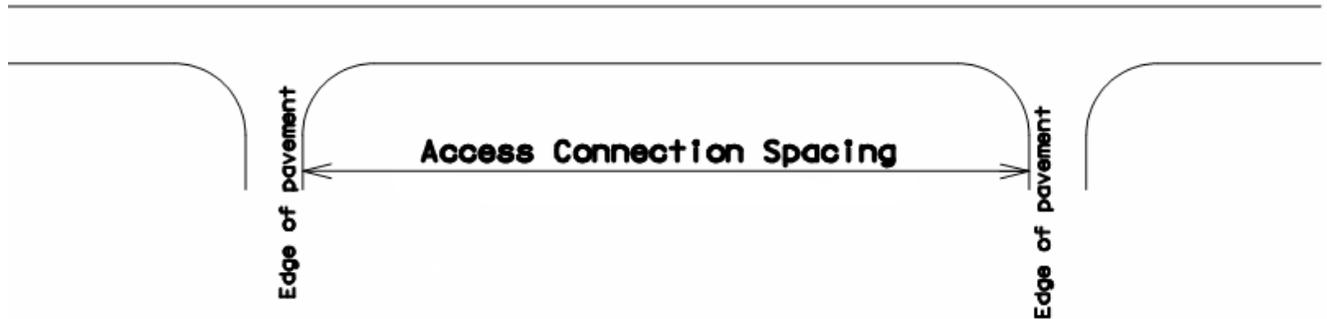


Figure 1

### **Joint and Cross Access**

Adjacent commercial or office properties and major traffic generators (i.e. shopping plazas, office parks) shall provide a cross access drive and pedestrian access way to allow circulation between sites. This requirement shall also apply to a building site that abuts an existing developed property unless the decision making body finds that this would be impractical.

Property owners shall:

1. Record an easement in the public records of (insert city) allowing cross access to and from the adjacent properties;
2. Agree that any pre-existing driveways provided for access in the interim shall be closed and eliminated after construction of the joint use driveway; and
3. Record a joint maintenance agreement in the public records of (insert city) defining maintenance responsibilities of property owners that share the joint use driveway and cross access system.

### **Requirements for Unified Access and Circulation**

1. In the interest of promoting unified access and circulation systems, development sites under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be considered unified parcels. This shall also apply to phased development plans. Accordingly, the following requirements shall apply:
  - a. The number of connections permitted shall be the minimum number necessary to provide reasonable access to the overall site and not the maximum available for that frontage.
  - b. All easements and agreements required under the above shall be provided.
  - c. Access to outparcels shall be internalized using the shared circulation system and designed to avoid excessive movement across parking aisles or queuing across surrounding parking and driving aisles.
2. Where abutting properties are in different ownership and not part of an overall development plan, cooperation between the various owners in development of a unified access and

circulation system is encouraged. Abutting properties shall not be required to provide unified access and circulation until they are developed or are redeveloped.

**Access to Homes and Subdivisions**

When a residential development is proposed that would abut an arterial or major collector roadway, it shall be designed to provide lots abutting the roadway with access from an interior local road or frontage road. Direct driveway access to individual one and two family dwellings from arterial and major collector roadways shall be avoided. All other reasonable access alternatives shall be investigated and judged unacceptable by the City Engineer before direct residential driveway access on an arterial or major collector is permitted.

**Redevelopment Requirements**

1. Properties with access connections which do not meet the requirements above shall be brought into compliance to the extent possible when modifications to the roadway are made or when a change in use results in one or more of the following conditions:
  - a. When a connection permit is required.
  - b. When site plan review is required.
  - c. When a site experiences an increase of twenty percent (20%) or greater in peak hour trips or 100 vehicles per hour in the peak hour, whichever is less, as determined by one of the following methods:
    - (1) An estimation based on the ITE Trip Generation Manual (latest edition) for typical land uses, or
    - (2) Traffic counts made at similar traffic generators located in (insert city), or
    - (3) Actual traffic monitoring conducted during the peak hour of the adjacent roadway traffic for the property.
2. If the principal activity on a parcel with access connections which do not meet the regulations of the above is discontinued for a period of one year or more, then that parcel must comply with all applicable access requirements of the above to the extent possible.

**Corridor Access Management Overlay Zones**

(Insert city) may designate segments of a roadway corridor for the purpose of developing corridor access management plans that apply special access management requirements to the corridor. The purpose of this designation is to develop a specific plan for the roadway system, including, but not limited to, median openings, signal location, access connections and cross access and joint access requirements for adjacent developments that reduces access problems on major thoroughfares and advances sustainable development patterns in conformance with the desired character of the (insert city) and the Comprehensive Plan. Corridor access management overlay zones do not supercede underlying land use and zoning provisions, but provide additional requirements for designated areas.

**Minimum Lot Frontage**

The minimum lot frontage for access to a major thoroughfare shall not be less than the lot width shown in table 2. Major thoroughfares are the roadways designated on the (insert city) Thoroughfare Plan.

<b>Minimum Lot Frontage</b>	
Posted Speed (MPH)	Lot Width
< 30	225
35	275

40	330
45	385
$\geq 50$	450

Table 2

A greater lot width may be required for driveways greater than twenty-five (25) feet or requiring more than one access connection to the major thoroughfare.

A lesser lot width may be provided for lots with common access easements and shared access driveways.