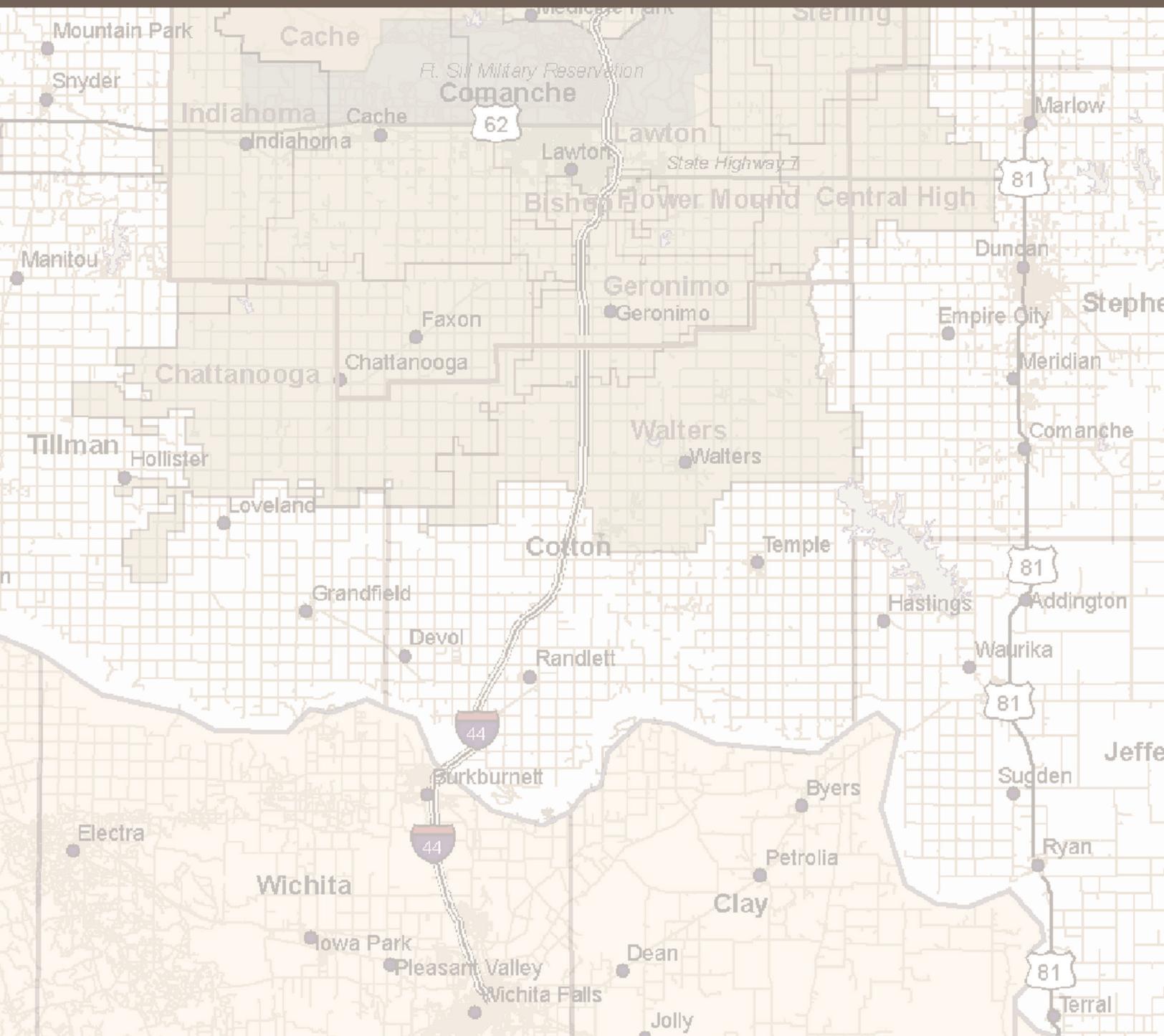
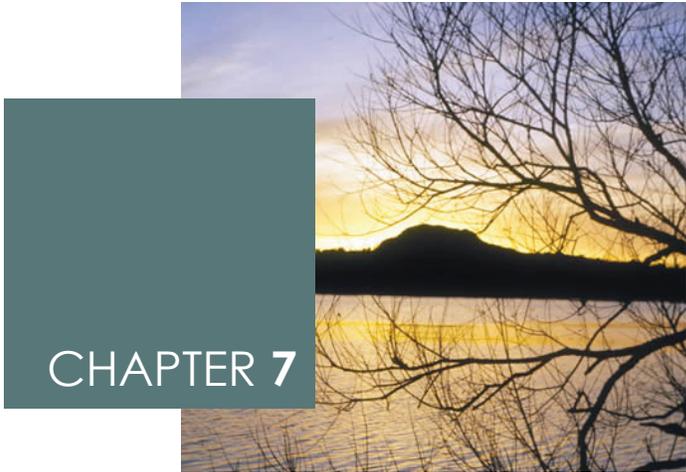


CHAPTER 7 TRANSPORTATION





CHAPTER 7

Introduction

Adequate transportation facilities are vital to promote growth, manage the effects of development and protect and improve the Lawton/Fort Sill area's quality of life. The projected changes and growth resulting from BRAC requires a local and regional transportation system that can assure sufficient transportation mobility to accommodate the transportation needs of the community. Mobility needs must take into account all modes of transportation from pedestrians, bicycles, public transportation, streets and highways, railroads and airports.

This chapter includes a description of the current transportation planning efforts, the existing transportation system and conditions, transportation system issues and needs, future transportation plans, and recommendations regarding the future development of an effective overall transportation system for the Lawton/Fort Sill region.

Current Transportation Planning Efforts

The City of Lawton currently cooperates with local, state and federal agencies to identify and prioritize transportation improvement needs for the region. The Lawton Metropolitan Planning Organization (LMPO) serves as the primary transportation planning organization for the City of Lawton, and since its inception, LMPO has enabled the greater Lawton area gain a better understanding of the critical transportation issues and needs facing the community. The LMPO's Transportation Policy Committee (TPC) holds regular meetings to discuss transportation issues, solutions and forecasted needs for the area, and includes representatives of the City, Comanche County, Lawton Fort Sill Regional Airport, Fort Sill, Oklahoma Department of Transportation (ODOT), and other related agencies. As such, the LMPO and the TPC provides coordinated analysis and recommendations that help produce a prioritized list of short, intermediate and long range transportation improvement needs

in an effort to assist the region and ODOT in their identification, planning and funding of projects for their annual Federal Aid Highway Construction Work Plan (eight year highway improvements plan). In addition to working with the MPO and establishing a priority list of thoroughfare improvements community wide, the City of Lawton maintains its own priority of desired local thoroughfare and bikeway improvements with their 2030 Long Range Transportation Plan and their Lawton Metropolitan Bicycle and Pedestrian Plan. All of these plans serve to ensure orderly and timely development of the City's region's highway, street, transit and bikeway systems to serve the community's mobility and access needs. Through the implementation of these plans, the City can secure the needed rights-of-way and transportation system improvements to extend the transportation system network within the city limits, thus providing an excellent system of mobility for its citizens.

The transportation planning efforts in the remainder of the Growth Management Plan study area are relatively sparse and inconsistent in their approach and comprehensiveness. The lack of local funding availability limits the planning that can be accomplished, and in most cases, the smaller communities within the region rely upon ODOT to provide direction and funding for any needed improvements. The projected BRAC growth will likely not change this policy for many cities. The communities of Cache and Elgin, however, are projected for growth rates that could begin to strain their local roadways, thus their planning efforts may have to increase.

Related Studies and Key Information Sources Used

Since its earliest days as an outpost on the western frontier, transportation and access have been critical to the Lawton Fort Sill area. Even though the Lawton area now serves as the regional “hub” for southwest Oklahoma, its future prosperity is connected to its ability to connect to the greater Oklahoma City region. As such, the transportation planning studies and information available for the region is plentiful (see box). Each of these reports and studies assisted the Team in developing the key recommendations included in this chapter.

Related Studies and Information Sources:

- *LMPO 2030 Long Range Transportation Plan, LMPO, 2007*
- *Lawton – Fort Sill Regional Airport Master Plan, LMAAA, 2007*
- *Lawton Metropolitan Bicycle and Pedestrian Plan, Kimley Horn Associates, 2007*
- *Traffic Impact Analysis Report of the I-44/Ft. Sill Key Gate Closure, Smith Roberts Baldischwiler, LLC, 2008*
- *ODOT Construction Work Plan, 2006-2009*
- *ODOT Needs Study and Sufficiency Rating Report, 2005*

Methodology

Our analysis of the region’s transportation system was completed utilizing current average daily traffic (ADT) volumes on the major roadways within the area and projecting the ADT increases set to occur with the anticipated BRAC growth. Our analysis utilized existing data sets from the local communities, ODOT and other transportation planning sources. Our analysis also evaluated the work that had been accomplished in the latest transportation modeling (2030 Long Range Plan) and evaluated how these ADT’s may change in each traffic analysis zone (TAZ). In general, our roadway analysis compared projected volumes against the current or projected roadway conditions and capacities to determine if critical links in the network were undersized, or if crucial intersections within the network were limiting the overall capacity of the system.

The transportation analysis concentrated on the communities and roadway/transportation networks within the “primary impact area.” Comanche County’s transportation infrastructure, particularly within the cities of Lawton, Elgin and Cache, will experience the greatest impact and strain on their system, and consequently, our research and analysis targets them.

Existing Conditions

The existing transportation network within the primary impact area of Comanche County consists of several elements, including a highway and street network, a regional airport, sidewalks and a dispersion of hike and bike trails, a public transit system (LATS), and a railroad. Exhibit 7.1 graphically depicts the major elements included in this transportation network.



Insert Exhibit 7.1



Similar to the majority of military installation communities across the U.S., the Lawton region and its inhabitants use private vehicles as their primary mode of transportation. In the year 2000, the total number of vehicles within Comanche County was 67,643 or 1.70 vehicles per occupied dwelling unit. Although the City of Lawton's vehicles per occupied dwelling unit was slightly lower for the same period (1.61 vehicles vs. 1.70 vehicles), these statistics confirm the region's reliance on private automobile use. Furthermore, because of this reliance, the growth and development patterns within the area have remained low density in nature, with the employment centers and the residential areas generally separated by significant distances. These development patterns have strained existing roadways throughout the community, particularly in Lawton, and to a lesser extent, in the smaller communities of Cache and Elgin.

In an effort to reduce the overall impact and effects of vehicular transportation, the region, led by the City of Lawton and the LMPO, has increasingly been evaluating alternative transportation modes. The Lawton Area Transit System (LATS) has added extended hours to its system and has seen an increase in ridership over the last 12 months. In addition, the City of Lawton is now investigating bicycle and pedestrian routes in all new roadway improvement projects in order that these modes of travel can be accommodated and offered as viable alternatives to the area.

On the whole, this network of transportation modes serves the region well with efficient and effective access to the major employment and residential areas. Rail service provides efficient access to local markets and strong connectivity to the broader network of interstate rail providers. The public transit system is established and has an increasing customer base, and its routes and service hours meet current and estimated future demands. Finally, the City of Lawton has been proactive in their provision of roadway improvements to ensure an effective network of surface streets and freeways that serves the business and social service needs and "hub" of the region that is the Lawton area.

Existing Roadway Network

Exhibit 7.2 displays the current Functional Classification system of roadways within the Lawton MPO, including federal and state highways, freeways, principal and minor arterials, urban collector streets, and rural collector streets. Also included, Exhibit 7.3 indicates the major traffic count locations used to analyze the system (see accompanying Figure 7-1 for complete traffic count data.)

The primary impact area has six major highways that provide vehicular connectivity throughout the area, including:

- Interstate 44 (provides north-south access)
- U.S. Highway 62 (provides east-west access)
- U.S. Highway 277 & State Highway 17 (provides east – west access in the northern portions of the area and connects Elgin and Sterling to I-44)
- U.S Highway 281 (provides north-south access in northern portion of the area and links Lawton to Apache and Anadarko)
- State Highway 7 (provides east-west access through the central portion of the area and links Lawton to Duncan); and
- State Highway 115 (provides north-south access in western portion of the area and links the Wichita Mountains Wildlife Refuge to Cache and Chattanooga)

These roadways serve as major transportation routes for local travelers to access goods and services in the Lawton area, as well as to provide access to the major highways throughout southwestern Oklahoma. These transportation routes are vital to the economic health of the area's economy and continued growth, and in general, they provide good access to the overall Lawton, Cache and Elgin areas.

Finally, in addition to the major roadways, these roadway networks contain numerous collector and residential streets which provide connectivity within and around subdivisions. The connectivity of these roadways is critical to the efficiency and effectiveness of the overall transportation system, and particularly important in providing access to the newly developing residential areas within these communities.



Insert Exhibit 7.2



Insert Exhibit 7.3



MAP ID Number	STREET	SEGMENT (E-W or S-N)	ODOT (2001)	ODOT (2002)	ODOT (2003)	LMPO 2004	ODOT (2004)	ODOT (2005)	Level of Service (LOS)	No. of Lanes
City of Elgin ADT Counts										
1	U.S. Highway 277	Tony Creek Rd. - Happy Hollow						3,100	LOS A	2
2	U.S. Highway 277	HE Bailey Turnpike - Stillwater Central RR						7,900	LOS D	2
3	State Highway 17	Stillwater Central RR - Keeney Rd						3,000	LOS B	2
4	U.S. Highway 277	Wolf Rd - Keeney Rd						3,700	LOS B	2
City of Cache ADT Counts										
4A	Old Cache Road	3rd Ave - 4th Ave						4,512	LOS C	2
5	SH 115 (8th Ave)	U.S. Highway 62 - Railroad						3,953	LOS C	2
6	U.S. Highway 62	west of SH 115 exit						5,800	LOS A	4
7	SH 115 (8th Ave)	north of U.S. Highway 62						710	LOS A	2
8	U.S. Highway 62	east of SH 115 exit						7,700	LOS A	4
City of Lawton ADT Counts										
	1st Street	I Ave - J Ave				2,819			LOS A	2
	2nd Street	Lee Blvd - Summit				4,826			LOS B	2
	2nd Street/US281B	D Ave							LOS A	5
	2nd Street/US281B	E Ave - F Ave	3,733		4,043				LOS A	5
9	2nd Street/US281B	Washington - Jefferson			4,600			4,200	LOS B	2
	2nd Street/US281B	C Ave - Gore Blvd		12,800	12,800				LOS C	5
	6th Street	Lee Blvd - Summit				3,239			LOS A	4
	6th Street	Washington - Lee Blvd				2,699			LOS A	4
	11th Street	Bishop - Oklahoma	7,657		11,610				LOS B	4
	11th Street	Bishop - Ranch Oaks -	6,023		10,507				LOS B	5
10	11th Street	City Limits - Coombs		4,000	4,500			4,500	LOS A	5
	11th Street	Lee Blvd - Gore Blvd	15,703						LOS C	4
	11th Street	New York - Pennsylvania							LOS B	4
	11th Street	Pecan - Woodlawn	1,936		3,888				LOS B	2
	11th Street	Wisconsin - New York	7,881		9,811				LOS B	4
	11th/US281B	Bishop - Lee Blvd		4,600	4,200				LOS A	5
	17th Street	H Ave - G Ave	5,317		6,847				LOS C	2
	27th Street	Lee Blvd - J Ave	3,352		3,726				LOS B	2
	29th Street	Bell Ave	3,091		3,013				LOS A	2
	29th Street	Gore Blvd - Arlington Ave							LOS A	2
	38th Street	Bishop Rd - Rolling Hills Dr	1,088		1,320				LOS A	2
	38th Street	Cache Rd - Rogers Ln/US62	9,818		8,160				LOS D	2
	38th Street	Dearborn - Columbia	15,721		16,027				LOS D	4
	38th Street	Gore Blvd - Arlington Ave							LOS E	4
	38th Street	Oak Ave - Cache Rd	15,621		16,411				LOS D	4
	38th Street	Rolling Hills Dr - Lee Blvd							LOS B	2
	45th Street	Lee Blvd - Avalon Rd			4,572				LOS B	2
	45th Street	Lee Blvd - Avandale			7,681				LOS D	2
	45th Street	Lee Blvd - Gore Blvd			1,060				LOS A	2
	45th Street	South of Bishop			592				LOS A	2
	45th Street	Wilshire Terrace - Gore Blvd			7,072				LOS D	2
	52nd Street	Bishop Rd - Lee Blvd	393		411				LOS A	2
	52nd Street	Quanah Parker - Wilfred			3,916				LOS A	4
	53rd Street	Cherry - Elm			9,956				LOS F	2
11	53rd Street	Gore Blvd - Columbia				10,102			LOS F	2
	60th Street	Lee Blvd./SH7 - Gore			769				LOS A	2
	67th Street	69th - Gore Blvd	8,764						LOS B	4
	67th Street	Bishop - Lee Blvd	1,108		1,547				LOS A	2
	67th Street	Elm - Cache Rd			18,043				LOS D	5
	67th Street	Lee Blvd - Drakestone							LOS A	4
	72nd Street	Cache Rd - Quanah Parker			432				LOS A	2
	82nd Street	Bishop - Lee Blvd	2,322		2,883	1,341			LOS A	2
	82nd Street	Gore Blvd - Mickelgate	1,736		5,775				LOS A	4
12	82nd Street	north of Lee Blvd				1,902			LOS A	4
	97th Street	Bishop - Lee Blvd	517		603				LOS A	2
	97th Street	Railroad Tracks - Cache Rd	3,333		3,358				LOS B	2
	112th Street	Railroad Tracks - Cache Rd	1,069		1,654				LOS A	2
	Bishop Road	11th - 13th	1,389		1,805				LOS A	2
	Bishop Road	11th - 17th							LOS A	2
	Bishop Road	38th - Sheridan	645		940				LOS A	2
	Bishop Road	Flower Mound - Railroad St.			603				LOS A	2
	Cache Road	Flower Mound - 45th			1,975				LOS A	2
13	Cache Road	Elmer Thomas Park Rd & Central Jr High				19,758			LOS D	4
	Cache Road	I-44 - Fort Sill Blvd.	15,398		20,498				LOS D	4
	Cache Road	Ft. Sill Blvd. - 17th			24,099				LOS C	6
	Cache Road	33rd - 35th			37,638				LOS E	6

Figure 7-1: Study Area Traffic Counts



MAP ID Number	STREET	SEGMENT (E-W or S-N)	ODOT (2001)	ODOT (2002)	ODOT (2003)	LMPO 2004	ODOT (2004)	ODOT (2005)	Level of Service (LOS)	No. of Lanes
City of Lawton ADT Counts (continued)										
	Cache Road	44th - 47th	31,103		34,583				LOS E	6
14	Cache Road	47th - 50th				36,422			LOS E	6
	Cache Road	52nd			21,614				LOS D	4
	Cache Road	Briarwood - 61st			26,505				LOS F	4
	Cache Road	67th - Hunter			19,862				LOS E	4
	Cache Road	80th - 82nd	12,124		8,585				LOS B	4
	Cache Road	82nd - 97th	7,803		10,143				LOS F	2
	Cache Road	Quanah Parker Tr							LOS F	4
	Cache Road	97th - 112th	5,069		7,359				LOS D	2
	Cache Road	112th - west	3,470		4,499				LOS B	2
	Compass Drive	62nd - 63rd			1,088				LOS A	2
	Compass Drive	Gore - Eisenhower							LOS A	2
	Euclid Avenue	Sheridan - Homestead Dr.	7,833		7,807				LOS D	4
	F Avenue	2nd - 3rd	3,947		4,399				LOS A	4
	F Avenue	9th - 11th	4,226		4,086				LOS B	2
	F Avenue	12th - 13th	2,999		3,215				LOS B	2
	F Avenue	18th	2,817		3,118				LOS B	2
	F Avenue	22nd	2,470		3,125				LOS B	2
	F Avenue	37th - 38th				1,752			LOS A	2
	F Avenue	Wallock St. - Railroad Tracks							LOS A	2
	Ferris Avenue	9th - 10th	4,793		8,355				LOS D	2
	Ferris Avenue	16th - 17th	8,426		9,930				LOS B	4
	Ferris Avenue	21st - Sheridan	9,608		10,556				LOS B	4
	Flower Mound Road	Bishop - Lee			1,542				LOS A	2
	Flower Mound Road	Gore - Cache			5,163				LOS C	2
	Flower Mound Road	Lee - Gore			3,492				LOS A	4
	Fort Sill Boulevard	Bessie - Hilltop			1,235				LOS A	4
15	Fort Sill Boulevard	Cache - Baldwin				13,894			LOS C	4
16	Fort Sill Boulevard	Ferris - Ash				14,666			LOS C	4
	Goodyear Boulevard	Lee - Plant Entrance	2,007		3,435				LOS A	4
	Goodyear Boulevard	Plant Entrance - Cache							LOS A	2
	Gore Boulevard	2nd/US281B - 3rd	16,002		17,613				LOS C	4
	Gore Boulevard	7th - I-44	15,290		17,342				LOS D	4
	Gore Boulevard	9th - 10th	16,618		23,774				LOS E	4
	Gore Boulevard	14th - 15th	22,365		25,124				LOS E	4
	Gore Boulevard	17th - Sheridan							LOS F	4
	Gore Boulevard	22nd Street	23,319		29,359				LOS F	4
	Gore Boulevard	38th - 40th	23,839		26,184				LOS F	4
	Gore Boulevard	45th - 60th			1,371				LOS A	2
	Gore Boulevard	50th Street	16,572		24,852				LOS E	4
	Gore Boulevard	64th - 67th	12,626		1,088				LOS A	4
	Gore Boulevard	71st - 82nd	1,549		12,023				LOS F	2
	Gore Boulevard	Flower Mound - 15th			16,450				LOS C	4
17	Gore Boulevard	I-44 - 15th			25,154	21,928			LOS D	4
	Gore Boulevard	Sheridan - 24th	23,002		26,844				LOS F	4
	Homestead Drive	Euclid - Cache	5,904		6,571				LOS C	2
18	I-44	Coombs - Bishop		6,500	6,500			6,500	LOS A	4
	I-44	Bishop - Lee Blvd	14,403		7,602				LOS A	4
	I-44	11th/US281B - Lee			6,500				LOS A	4
	I-44	SH36 - 11th/US281B			6,400				LOS A	4
19	I-44	Lee - Gore		16,329	17,158			17,200	LOS B	4
20	I-44	Gore - Cache		22,100	20,700			20,700	LOS B	4
21	I-44	Cache - Rogers Ln/US62			24,600			24,600	LOS B	4
	I-44	Rogers Ln/US62 - Key Gate Exit	23,279		30,600				LOS C	4
22	I-44	Goodin - City Limits						6,400		
	Interstate Drive	C Ave - D Ave				1,751			LOS A	2
	Interstate Drive	J Ave - Park				764			LOS A	2
	Lee Boulevard	2nd - I-44	20,576		20,778				LOS D	4
23	Lee Boulevard	9th - 10th				19,574			LOS D	4
24	Lee Boulevard	11th - 12th	22,031		36,876	23,275			LOS E	4
	Lee Boulevard	20th - 21st		22,500	26,754				LOS F	4
	Lee Boulevard	27th - 30th							LOS E	4
25	Lee Boulevard	52nd - Boyles Landing				17,083			LOS C	4
	Lee Boulevard	63rd - 67th	12,828		16,664				LOS C	4
	Lee Boulevard	70th - 82nd	7,485		9,196				LOS B	4
	Lee Boulevard	82nd - Goodyear	3,333		4,254				LOS A	4
	Lee Boulevard	112th - 127th	2,461		3,123				LOS B	2

Figure 7-1: Study Area Traffic Counts



MAP ID Number	STREET	SEGMENT (E-W or S-N)	ODOT (2001)	ODOT (2002)	ODOT (2003)	LMPO 2004	ODOT (2004)	ODOT (2005)	Level of Service (LOS)	No. of Lanes
City of Lawton ADT Counts (continued)										
26	Lee Boulevard	26th - 30th				23,898			LOS E	4
27	Lee Boulevard	east of 82nd				4,283			LOS A	4
	Lee Boulevard	Goodyear - 112th							LOS B	2
	Lee Boulevard	I-44 - Railroad Street							LOS D	4
	Lee Boulevard	Railroad St - 2nd	19,531		23,524				LOS E	4
	Lee Boulevard	Sheridan - 25th	23,252		26,385				LOS F	4
	Lee Boulevard	west of 82nd				3,390			LOS A	2
	Lee Boulevard/SH7	45th - 60th			11,913				LOS B	4
28	Lee Boulevard/SH7	East I-44 Overpass		18,600	18,400	20,060		18,600	LOS D	4
	Lee Boulevard/SH7	Skyline - Flower Mound			20,157				LOS D	4
	Lincoln Ave	23rd	1,639		1,531				LOS A	2
	Meadowbrook	38th - 47th				1,792			LOS A	2
	Meadowbrook	41st - 44th	3,224						LOS B	2
	Meadowbrook	47th - 52nd	2,123						LOS A	2
	Quanah Parker	50th - 52nd			11,847				LOS B	4
	Quanah Parker	52nd -Horton Blvd			12,392				LOS B	4
	Quanah Parker	67th - 82nd			8,633				LOS B	4
29	Quanah Parker	97th - 112th			9,800		9,700		LOS A	4
	Quanah Parker	Crosby Park Blvd - 67th			9,626				LOS B	4
	Railroad Street	Bishop - Texas			1,293				LOS A	2
	Railroad Street	I Ave - J Ave				1,651			LOS A	2
	Railroad Street	Park - I Ave	1,905		1,923				LOS A	2
	Railroad Street	Pecan - Woodland	109		159				LOS A	2
	Rogers Lane	15th - Flower Mound Rd			4,807				LOS B	2
30	Rogers Lane	Lawrie Tatum - Angus				7,816			LOS D	2
	Rogers Lane/US 62	I-44 - Fort Sill Blvd.			23,000		22,400	22,400	LOS B	4
	Rogers Lane/US 62	I-44 - Inwood Pl	15,983		23,984				LOS B	4
	Rogers Lane/US62	Ft. Sill Blvd. - Sheridan			25,200		24,400	24,000	LOS B	4
	Rogers Lane/US 62	22nd - 24th							LOS C	4
	Rogers Lane/US 62	38th							LOS B	4
	Rogers Lane/US 62	Austin - 52nd		25,000	31,493				LOS C	4
	Rogers Lane/US 62	52n d- 67th			25,000				LOS B	4
	Rogers Lane/US 62	78th - 82nd			9,652				LOS A	4
	Sheridan Road	Bishop - Pennsylvania	1,324		1,989				LOS A	2
	Sheridan Road	Pecan - Woodland	710		748				LOS A	2
	Sheridan Road	Coombs - Bishop	681		1,386				LOS A	2
	Sheridan Road	H Ave - G Ave			12,200				LOS F	2
	Sheridan Road	Lee Blvd - J Ave	10,324	12,200	14,176				LOS C	4
	Sheridan Road	Oak - Cache	13,850		27,873				LOS F	4
	Sheridan Road	Lincoln - Smith			21,200				LOS A	4
	Smith Avenue	12th - 13th	2,219		2,458				LOS D	2
	Smith Avenue	13th - 14th							LOS A	2
	Smith Avenue	18th - 19th	2,691		2,623				LOS A	2

Figure 7-1: Study Area Traffic Counts

Sidewalks and Bikeways

The City of Lawton has several miles of existing sidewalks throughout the community, and the majority of the sidewalks have been installed by developers in subdivisions constructed after 1992 when Lawton modified its Subdivision Ordinance to require sidewalks for new developments. In general, these pedestrian facilities provide good walking access throughout the community. The smaller communities of Elgin and Cache have a much more limited range of pedestrian transportation routes. In general, these communities do not provide adequate facilities in existing or developing areas.

Due to the natural, scenic qualities of the area and the abundance of public refuge lands, the Lawton area, and in particular the surrounding rural areas of Comanche County, have been and continue to be a popular destination and touring route for bicyclists. In terms of bicycling as an alternative transportation mode, all of the primary impact areas are deficient in the provision of such facilities and the capacity and configuration of their existing roadways to accommodate this mode. Lawton, however, has developed a Bicycle and Pedestrian Master Plan that identifies priority projects for the community, and the City is currently planning the design and construction for their first project. According to the local leaders, additional funding will be applied for and the City is confident of their ability to compete and win these critical grant monies to begin the full scale implementation of the Bicycle and Pedestrian Master Plan (see Exhibit 7.4 on the next page).

Public Transportation

The Lawton Area Transit System (LATS) provides city bus transit service to the majority of areas within the Lawton community. Specific routes are dedicated for service to Fort Sill (including the Post Main Exchange, the hospital and the Commissary), as well as additional routes throughout the city's residential and business districts. The transit system provides fixed route urban transit service to the Lawton area and complementary paratransit service on a demand basis. A network of five fixed routes and ten buses comprise the fixed route bus service. Demand Responsive Paratransit service is provided 3-4 vehicles per day. In general, LATS ridership approximates 1,800 – 2,000 riders per day since their institution of a 13th hour of service that

has expanded their business and employment riders on a daily basis. LATS recently constructed a new administrative facility and is presently remodeling their maintenance facility. The LATS' vehicles are nearing a condition that will require replacement and these aging vehicles are experiencing significant maintenance issues and availability of parts has become a problem for maintenance staff. According to LATS officials, the rising cost to maintain the LATS fleet is a burden that will soon outweigh the benefit. Finally, public transit is available in the broader region, however, the rural providers do not provide fixed route service but operate on a demand response system.

Rail Transportation

Southwest Oklahoma is served by a network of regional, shorthaul, Class III railroad lines that provide intraregional connectivity, as well as connection to the two Class I rail lines operated in the state by Burlington Northern San Francisco (BNSF) and Union Pacific (UP). For the Comanche County area, the Stillwater Central Railroad provides rail service and has approximately 14 miles of track in the region for the primary purposes of providing commercial freight service to the industrial areas of Lawton.

Air Transportation

The Lawton – Fort Sill Regional Airport is located in south Lawton and provides commercial air service and an intermodal freight service to the region. This facility is critical to the overall transportation network due to its primary role as a provider of air transportation for military families and its increasing role as a primary provider and location of an expanded Air Mobility Complex for the Department of Defense. Airline enplanements are currently projected to increase from 51,443 (2007) to almost 68,000 in 2012 and then to 76,000 by 2017. These projections led to the Airport's securing of additional Delta Airlines flights in August of 2008 to service the growing military and commercial demand. Furthermore, the Air Mobility Complex plans by the Army have been factored into the Airport's Master Plan, and the airport has purchased additional land to accommodate heavy military air traffic (almost 500 missions in 2007) and the increased air traffic anticipated as the Complex becomes fully utilized. The existing runway lengths are an issue for the Air Mobility Complex aircraft.



Insert Exhibit 7.4



Issues/Needs Assessment

Over the next four years and into the foreseeable future (i.e. 2020), the Lawton Fort Sill region is anticipated to experience at 10% increase in population growth, and based on historic trends, accompanying this growth will be an increase in traffic throughout the community, particularly in the areas of Lawton, Cache and Elgin. In order to handle the transportation needs for the incoming BRAC residents, the transportation needs must be planned well in advance of the growth. If not, a majority of the transportation corridors will be blocked by development making it extremely difficult and costly to retrofit good mobility.

A variety of data sources were used to develop the following list of critical needs, issues and gaps in the overall transportation network within the region. The consulting team analyzed a number of empirical data sets including current and projected ADT's and traffic assignments in the study area to investigate possible capacity and congestion issues within the current and future roadway network. Interviews with local transportation leaders (LMPO Technical and Transportation Committee members, BRAC Transportation Subcommittee members, ODOT officials, Fort Sill technical staff, etc.) provided additional details of the pressure points within the system and gave the Team a sense of the relative priority of each need. Furthermore, the existing and proposed transportation policies and regulations for each community were reviewed, with particular attention paid to the presence and sufficiency of access management and control policies, alternative transportation modes and policies and potential funding sources. Finally, a review of current transportation master plans (including those of Fort Sill and the surrounding communities) was completed to develop an understanding of the community's overall intent in meeting previously identified needs and issues.

Exhibit 7.5 (next page) graphically displays the location of the key issues and gaps in the overall transportation network that were identified as critical components in preparing the Lawton Fort Sill region for the anticipated BRAC growth and impacts. In general, the region has prepared well for this growth by developing and maintaining adequate transportation planning

documents and policies, as well as funding these transportation priorities through Capital Improvement Plans and accompanying federal/state aid programs. The critical needs are segmented into four major categories: Needed Roadway Network Enhancements; Operational Characteristics of Major Roadways; Design and Development Standards; and Alternative/Other Transportation Modes.

Needed Roadway Network Enhancements

Analysis of current and projected capacity and levels of service on the major roadway segments within the primary impact area indicated that there are several growth nodes within Lawton, Cache and Elgin that when fully developed will require significant upgrades to the roadway network in these areas. Additionally, recent force protection and transportation planning measures "inside the fence" at Fort Sill have generated key gaps in the Rogers Lane area of north Lawton. Exhibit 7.5 provides a listing of the major roadway segments that require widening or improvement based on anticipated BRAC growth.

Cache and Elgin Roadway Needs: The major roadways into these communities already are stressed at peak periods during the day, and the forecasted BRAC growth will compound this peak period demand and strain the limited road capacity. Old Cache Road, between Lawton and Cache, has sufficient capacity and laneage, but the projected turning movements at key intersections and housing addition entrances will likely constrain the capacity later in the planning period. Furthermore, the main roadways, Old Cache Road and Eighth Avenue (SH 115) in Cache and U.S. Highway 277 and SH 17 in Elgin, have similar capacity and turning movement restrictions. As the projected residential development occurs in these areas, these roadways will require a 3-5 lane section in order to accommodate the increased volume with this growth, as well as the projected left turning movements into the commercial areas fronting these gateways into the cities. Finally, Trail Road, like Old Cache Road, is a critical "rural connector" for the eastern portion of the primary impact area. When adequate water infrastructure is provided along this corridor, the residential growth will likely occur and begin to stress the carrying capacity and operation of this vital north south link.



Insert Exhibit 7.5



City of Lawton Roadway Needs: The high growth areas of west, southwest and east Lawton have already begun to strain the limited laneage available in the area roadways. While the existing grid network of streets provides an adequate base of collector and residential streets for these areas, these neighborhoods will require higher classification and wider arterial streets to move traffic through these sections of the community and to areas of commerce and employment. The following roadway segments have been evaluated as needing upgrades and widening in order that they can serve their function in the overall network:

Southwest and West Lawton Roadways:

- 67th Street (selected segments from Rogers Lane to Bishop Road – 5 lanes): to serve the high growth areas of southwest Lawton and connect them to Interstate 44 via U.S. 62 and Lee Blvd.
- 52nd Street (selected segments from Gore Blvd. to south of Bishop Road – 5 lanes): to serve the high growth areas of southwest Lawton and connect them to Interstate 44 via U.S. 62 and Lee Blvd.
- 38th Street (selected segments from U.S. 62 to Lee Blvd. – 5 lanes): to serve the high growth areas of southwest Lawton
- Gore Boulevard (from 67th to 82nd Street – 5 lanes): to serve as parallel reliever to Cache Road and Lee Blvd.

East Lawton Roadways:

- Rogers Lane (east of I-44 to Flower Mound Road – 5 lanes): this segment needs widening to enable it to become a part of the circumferential network (along with Flower Mound Road) on the east side of Lawton and service the growth of east Lawton and the Nine Mile Creek sewer basin developments
- 45th Street (Gore Blvd. to Lee Blvd – 5 lanes): serves as a primary collector and arterial (parallel reliever to Flower Mound) in a high growth residential area
- Future arterials/collectors in the Nine Mile Creek sewer basin development area - 60th Street to Trail Road (east/west) and Gore Blvd to Bishop Road (north/south): although development has not yet been planned and/or commenced in this area, the recent funding of sanitary sewer services in this area will generate housing and traffic.

Fort Sill and Rogers Lane (west of I-44):

Proposed changes to on-post circulation routes, the alignment and geometry of Rogers Lane gates, and the proposed access limitation measures at Key Gate on Interstate 44 at Fort Sill have created the need for an expanded Rogers Lane network in north Lawton, not only to deal with the increased traffic from BRAC deployment but also to accommodate the redistributed traffic that would have otherwise used Key Gate. Key needs are:

- Rogers Lane (U.S. 62) interchange improvements at Sheridan Road and Fort Sill Boulevard to accommodate increased traffic due to BRAC and closure of Key Gate
- Additional ramp capacity for north bound traffic on Interstate 44 onto Rogers Lane to accommodate increased traffic due to BRAC and closure of Key Gate

Lawton Area Freight Route: Even before the proposed freight/truck route changes anticipated at Fort Sill became public, the City of Lawton suffered from a poorly defined and effective truck/freight route through the City to access the industrial areas on the west side. Currently, truck traffic uses the existing grid network of streets in west Lawton that are not designed to accommodate the larger turning radius. Depending on the driver's personal experience with Lawton driving conditions and roadways, these trips can dramatically impact safety, capacity and overall mobility in the west Lawton area. The recently adopted Long Range Transportation Plan for the Lawton MPO identifies a proposed freight route for the area generally consisting of a large loop connecting the western industrial areas to Interstate 44 via Rogers Lane, 97th & 82nd streets, Lee Blvd. and State Highway 36 back to Interstate 44.



Operational Characteristics of Major Roadways

While it is beyond the scope of this analysis to identify detailed intersection improvements or potential signal timing measures on specific road segments, the preliminary research indicates that these two traffic and congestion mitigation measures could be enhanced on critical road segments. Lawton has instituted these measures and an expansion of these efforts could provide short term, interim solutions to reduce congestion and improve capacity and flow as development occurs and funding for long term widening projects is secured.

Roadway and Corridor Design Standards

While many of the transportation planning documents created for the region recommend policies and standards for multi-modal roadway facilities, a review of current development and infrastructure regulations and ordinances indicate that these recommendations have not yet been fully incorporated and adopted throughout the region. The City of Lawton has led the effort to adopt and implement these “complete street” standards, and their regulations form a basis for similar efforts throughout the communities. “Complete streets” are roadways that not only accommodate vehicular traffic, but also provide safe zones and design features that encourage and accommodate all forms of transportation, including pedestrians, bicycles and transit.

Additionally, there are several critical roadway corridors that serve as important transportation facilities for the respective communities, as well as serving as a “gateway” to the community from the major interregional and interstate routes. Old Cache Road and 8th Avenue in Cache, U.S. Highway 277 in Elgin and 2nd Street, 11th Street, and Gore Boulevard in Lawton represent the most important corridors within the primary impact area that could benefit from studies that identify context sensitive solutions that provide aesthetically-pleasing streets that can provide the required capacity and operational characteristics for area motorists.

Alternative/Other Transportation Modes

The research pointed to the dramatic projected increase in air enplanements at the Lawton – Fort Sill Regional Airport, and a comprehensive expansion of the airport’s facilities is needed to accommodate this growth (much of which is created by significant increases in standard and itinerant military flights). The single most important need is the expansion of the primary runway to 10,000 feet to accommodate the landing/takeoff requirements of the projected military aircraft.

Also, the major roadway improvement projects in the area are now benefiting from the inclusion of bikeway and pedestrian facilities in their construction (i.e. 2nd Avenue streetscape program, proposed Cameron “connector” bikeway improvements from downtown, etc.). While these new facilities represent an improvement in the overall mobility network, the current locations are not yet sufficient to dramatically impact overall connectivity and multimodal choices. Continued and more widespread implementation of the bicycle routes is needed.



Recommendations

Introduction

This section provides a summary of the overall recommendations regarding the transportation infrastructure and system within the Lawton Fort Sill region, particularly those communities within the primary impact area. The research and analysis of the transportation network indicated that the region, led by the Lawton Metropolitan Planning Organization (LMPO), has successfully planned and implemented a comprehensive and connected roadway network that has done a sufficient job of providing safe, convenient and efficient access to the area's residents and employers. Our analysis indicates, however, that while this road network is sufficient to handle the near and short term growth anticipated in the community, it is likely that the anticipated "multiplier" growth resulting from the BRAC deployment will stress key segments of the roadway system, particularly in the high growth areas of west Lawton and the Rogers Lane area near Fort Sill's southern entry gates. Furthermore, in addition to adding lanes or improving intersections to add capacity on local roads, the region has begun implementing various multi-modal improvements to their system (i.e. bikeways, sidewalks improvements, additional public transit routes and hours, etc.) that can add to the carrying capacity of the system. While these additions have yet to have a measurable impact on the overall mobility of the region, they represent significant first steps in enhancing modal opportunities and improving the overall quality of life in the community.

Figure 7.6 (next page) provides a graphic illustration of the proposed Transportation Plan for the region, including the proposed functional classifications of the area's major roadways, as well as other key network components that require attention based on our research. This Transportation Plan addresses the major findings and issues identified earlier in this chapter by creating a Transportation Plan that begins with the basics of roadway spacing and creating an arterial grid system for the community in order to provide both north-south and east-west movement. In general, the Lawton area has developed a strong network of roads that have created good traffic mobility and they have followed the basic

planning rules and have not allowed the major roadways to be compromised with discontinuity, inadequate right-of-way widths, or offset intersections. Exhibit 7.6 illustrates the proposed thoroughfare system of freeways, arterials and major rural collector streets, some of which are constructed to their ultimate configurations and others that will require additional rights-of-way and wider pavement cross sections. The Transportation Plan shows approximate alignments for planned roadways to be dedicated and constructed with the platting of subdivisions or with the City's capital improvement program. The Plan does not show future residential streets or collectors because these streets function principally to provide access and their future alignments may vary depending on development plans. This does not mean that collectors and residential streets are optional, only that there is flexibility based on trip generation rates of the proposed development and the internal handling of that traffic generated.

The following pages provide a summary of the overall transportation recommendations segmented into four primary areas: Needed Roadway Enhancements, Operational Characteristics; Design and Corridor Standards; and Alternative Transportation Modes.



Insert Exhibit 7.6



Needed Roadway Network Enhancements

The BRAC troop deployment and commencement of training classes at the Air Defense Artillery School at Fort Sill and the accompanying population and job growth within the region will generate additional traffic demands on the area's roadway network. Outlined below are the major roadway segments that require adjustment and/or improvement to handle the long term impacts of this growth. Further detailed analysis of the needed improvements should be completed at the time of design to ensure that the anticipated traffic distributions and patterns are realized and the final design and construction of new roadways meet the critical needs.

City of Cache, Oklahoma Roadway Improvements

Old Cache Road (eastern City limits to Eighth Avenue)

This roadway segment serves as the major gateway into the community from the Lawton area and should be improved to a minor arterial classification (3 lanes) in order to provide needed capacity for future growth in Cache and to service the anticipated commercial/business growth that will occur along its frontage.

Eighth Avenue (Old Cache Road to U.S. 62)

This roadway segment serves as the major north south arterial in community from the U.S. 62 inter-regional freeway and should be improved to a minor arterial classification (3 lanes) in order to provide needed capacity for future growth in Cache.

New Collector street in central Cache

If and when new residential development occurs north of the railroad in Cache, the city should ensure that proper connectivity through this area be provided from U.S. 62 and Eighth Avenue down to Old Cache Road.

City of Elgin, Oklahoma Roadway Improvements

U.S. 277 (Interstate 44 to Railroad to city limits)

This roadway segment serves as the major gateway into the community from the interstate and as a critical route for Elgin area residents to Fort Sill and should be improved

to a principal arterial classification (5 lanes from interstate to railroad) in order to provide needed capacity for future growth and to service the anticipated commercial/business growth that will occur along its frontage, and then to a minor arterial north to the city limits to service the new growth areas in town and to the areas north of town. See associated recommendations regarding corridor and design standards for this roadway segment.

State Highway 17 (railroad to Trail Road)

This roadway segment serves as a major rural connector and artery for the east side of Elgin and the community of Sterling and should be improved to a minor arterial classification (3 lanes) in order to provide needed capacity for future growth.

New Minor Arterial street

If and when new residential and commercial development occurs north of U.S. 277 in Elgin, the city should ensure that proper connectivity through this area be provided and a parallel reliever to the U.S. 277 be created to the areas north of town.

Trail Road (Elgin to east Lawton)

This roadway is forecasted for increased traffic volumes as the eastern sections of the cities of Elgin and Lawton continue to develop. This rural collector serves as a critical connector between these communities and also serves as a parallel reliever to Interstate 44 for the area residents. The roadway should be developed as a full two lane section with appropriate turning lanes at key intersections.

City of Lawton Roadway Improvements

Lawton has developed a foundation of area roads that serves the existing community well. The following roadway improvements are targeted in areas expected to experience the strongest growth and development pressures and will consequently experience the greatest impact on the existing roads. In addition, the Rogers Lane area in north Lawton will also experience tremendous traffic growth due to the proposed BRAC deployment and the projected closure of Key Gate on I-44. The recommendations for these Rogers Lane intersections are provided in the section entitled, "Transportation Network Operational Characteristics" which follows.



Southwest and West Lawton areas

The following roadway improvements are recommended for specific sections of existing roadways to service the current and future residential and commercial developments in this high growth area of Lawton.

- Widen 67th Street from Cache Road to Rogers Lane to 5 lanes (principal arterial)
- Widen Gore Boulevard from 67th Street to 82nd Street to 5 lanes (principal arterial)
- Widen 52nd Street from Gore Blvd. to Bishop Road to 5 lanes (principal arterial)
- Widen 38th Street from Cache Road to Bishop Road to 5 lanes (principal arterial)
- Development of a designated truck/freight route in West Lawton from U.S. 62 to industrial areas and then south to SH 36 and east to Interstate 44

East Lawton area

The following roadway improvements are recommended for specific sections of existing roadways to service the current and future residential and commercial developments in this high growth area of Lawton.

- Completion of a circumferential connector system in NE Lawton by Widening Rogers Lane from Interstate 44 to Flower Mound Road (5 lanes) and then to Trail Road (3 lanes)
- Widen 45th Street from Gore Blvd. to Lee Blvd. to 5 lanes (principal arterial)
- Designate and widen future arterial roadways in the developing areas contained in the Nine Mile Creek sewer basin (Specific recommendations depend on the implementation of the sanitary sewer installation capital project in the area. Recommendations are forecasted for implementation beyond the time period of this study but are forecasted for need in the 2015-2020 planning period.)

Transportation Network Operational Characteristics

In addition to providing extra lanes to the existing roadway network, the traffic flow and capacity of area streets can be greatly improved by enhancing the operational characteristics of the roadway network via intersection improvements and signal timing measures. The study scope did not include specific analyses of critical intersections or signal timing opportunities, but the following recommendations are offered as guides to additional study and implementation.

Intersection Improvements

There are many intersections within Lawton and the entire study area that will require improvements as the area buildouts and BRAC growth occurs, however, outlined below are four key intersections that were identified as critical, short term actions required to adequately accommodate BRAC movements, as well as directly enhancing Fort Sill's ability to better accomplish its primary missions on a day-to-day basis.

Rogers Lane intersections at Fort Sill gate locations

The following roadway and intersection improvements are recommended for the Rogers Lane interchanges at Interstate 44, Fort Sill Boulevard, and Sheridan Road due to the proposed re-routing of on-post traffic, post BRAC deployment and the redistribution of traffic affected by the access limitations at Key Gate on Interstate 44.

- Geometric and roadway improvements at Sheridan Road and Rogers Lane (see Exhibit 7.7)
- Geometric and roadway improvements at Fort Sill Blvd. and Rogers Lane (see Exhibit 7.8)
- Geometric and roadway improvements at Interstate 44 and Rogers Lane (see Exhibit 7.9). Potential alternate recommendation/design for this area is the development of a northbound I-44 flyover ramp to westbound Rogers Lane. The specifics of this recommendation are still under consideration at the City of Lawton, Fort Sill and ODOT.

Insert Exhibit 7.7



Insert Exhibit 7.8



Insert Exhibit 7.9



Signal Timing and Coordination Improvements and Studies

The City of Lawton Engineering division currently maintains a signal timing and coordination program within the city. Due to the proposed closure of Key Gate at Interstate 44, the Rogers Lane facility is projected to experience an increase in traffic from visitors and employees at Fort Sill. The proposed intersection improvements included in Exhibits 7.7 through 7.10 will assist in accommodating the traffic utilizing Rogers Lane, but as the local community develops new travel patterns based on the increased congestion on Rogers Lane, the remaining east-west arterials within the City that provide parallel relief to Rogers Lane (i.e. Cache Road, Gore Boulevard, Lee Blvd.) will likely experience increased local traffic. As such the following recommendations are offered:

1. Review, revise and implement enhanced signal timing and coordination programs along Gore Blvd. and Cache Road:

The existing timing and coordination programs may not require adjustment, but a review and recalibration of this tool should be accomplished post Rogers Lane intersection improvements.

2. Complete comprehensive analysis of Key Gate interchange closure impacts:

The proposed abandonment of the Key Gate interchange will likely have significant impacts on the overall network of Lawton area roadways that intersect with Interstate 44. While the Rogers Lane intersections improvements will provide short term actions and relief, a comprehensive review of the overall, long term impacts and changed travel patterns is needed to accurately and effectively prepare the City for traffic conditions on their other critical arteries to I-44. These roadways, and their operational effectiveness and aesthetic features, are crucial elements to the economic success and development of the region. The long term impacts and potential needed changes must be evaluated.

Design and Corridor Standards

The development of new and expanded roadway facilities can be undermined by ineffective traffic and access management along these corridors. The carrying capacity and operational efficiency of an arterial roadway can be severely diminished if that road is interrupted continuously within private driveways, improperly spaced connecting streets and/or driveways that lack sufficient throat lengths and thus cause backups into the public rights-of-way. On the other hand, a street that does not sufficiently address the pedestrian and bicyclist fails to provide the maximum potential for mobility throughout the community. Accordingly, the following recommendations are offered.

Corridor Planning and Design Standards

A comprehensive corridor study (traffic, access management policies, multi-modal design, and streetscape aesthetics, etc.) should be developed in the short term for the following critical gateways into the primary impact area communities. These studies should identify the scope and nature of future public and private realm developments along and in the corridor to ensure efficient and effective future travel and maximum economic development opportunities.

- **U.S. Highway 277 in Elgin (both east and west of I-44 to the railroad)**
- **Old Cache Road in Cache (8th Avenue to eastern city limits)**
- **Lee Boulevard in SW Lawton (38th Street to 67th Street)**
- **Gore Boulevard in east Lawton (45th Street to Trail Road)**

"Complete Streets" Design Standards

Multi-modal transportation along major roadways is an important element in the overall quality of life for a community, and as our nation's dependence on fossil fuels increases as a subject of public policy, the concept of planning and design of "Complete Streets" will become increasingly popular and funded by federal and state transportation agencies. The LMPO has developed an initial prototype design palette for incorporating multi-modal (bikes, sidewalks, transit stops, etc.) into their roadway improvement designs. The City of Lawton should adopt a policy that requires these design features and

elements be included in all funded projects within the City and develop a design guidelines manual for incorporating these elements.

Streetscape Enhancement Program

The City of Lawton has initiated several streetscape enhancement projects on major arterials in the city. While these projects do not necessarily improve overall network operations or efficiencies, they do improve the aesthetic quality of the corridors and increase the quality of life for the community. The Plan recommends that the following corridors be included (or continue to be included) in the overall streetscape enhancement program:

- **2nd Street (from Elmer Thomas Park to Downtown)**
- **11th Street (from the airport to Downtown to Fort Sill gate)**
- **Gore Boulevard (from NW 67th Street to Downtown to Trail Road)**
- **38th, 52nd, and 67th Street (from Rogers Lane to Gore Blvd.)**

Alternative Transportation Modes

Lawton – Fort Sill Regional Airport

The Lawton – Fort Sill Regional Airport is projected to be a significant contributor to the overall transportation system due to its increased flights and its proposed location as the future Air Mobility Complex for Fort Sill and associated military installations. A critical short term need for the airport and the resultant recommendation for this Plan is to develop an adequate air transport infrastructure at the Airport that can support the landing/takeoff requirements of an ARC D-IV aircraft and that the requisite approaches, taxiways, apron parking and terminal building facilities be developed in support of the anticipated travel demands forecasted in the Airport Master Plan.

Public Transit (LATS) Enhancements

The Lawton Area Transit System provides valuable public transit services to the greater Lawton area. The extended service times provide additional service and support to the Lawton population that relies on public transportation. While this study did not provide an in-depth analysis of the LATS program and/or capital budgets, the Plan does recommend the following

concepts be studied and evaluated as potential system enhancements:

- **Commuter Route and Park-n-Ride Location in Elgin, Oklahoma:** the significant residential growth forecasted for the Elgin area is likely to generate a demand for public transit to and from the central Lawton Transfer Center, and possibly, the Fort Sill Main Exchange.

Bikeways and Pedestrian Routes

The LMPO, in conjunction with the City of Lawton, has developed a Bicycle and Pedestrian Plan for the Lawton MPO area and this Plan recommends that the major findings and recommendations of the Plan be incorporated into future roadway widening projects and that the City (with assistance provided by LMPO) begin pursuit of unique and sufficient funding of the short term priority projects included in the Plan, specifically the Cameron University connector and the Elmer Thomas connector.

Implementation

The following pages indicates the specific implementation steps, processes, participants and costs for the recommendations included in this chapter.



Lawton Fort Sill Growth Management Plan Implementation Checklist Subject: Transportation			Responsibilities		Timing	Estimated Cost	Potential Funding Sources
			Primary	Secondary			
<p>Issue: Future development and growth will strain the operational capacity and effectiveness of area roadways and require additional laneage at select locations.</p> <p>Recommendation: Plan, develop, adopt, design and implement a coordinated set of roadway enhancement projects in the area that provides effective connectivity and sufficient roadway widths to accommodate future growth in the high growth areas of the primary impact area</p>							
Action 1:	Investigate the possibility of revising the current LMPO boundaries to include the areas of Cache and Elgin city limits in order that these roadway improvements can be included in the LMPO planning and funding recommendations for state/federal funds	LMPO, CITY, CO	ENG		NA		NA
Action 2:	Investigate and initiate the process to amend the current LMPO Transportation Plan to include the following roadway enhancement projects and timeframes that are not currently identified and prioritized in the current 2030 Long Range Transportation Plan						
Action 2.1	Plan, design and begin construction on the following roadway projects as they are critical to the near term needs of the community: Rogers Lane intersection improvements at the Sheridan and Bentley Gates and alterations at Interstate 44	LMPO, CITY, CO	ODOT, FORT, CO, ENG	Near	\$2.3 million, \$2.2 million, \$2.3 million respectively	DAR, ODOT, LOCAL, FHWA	
Action 2.2	Plan, design and begin construction on the following Lawton area roadway projects as they are critical to the "mid" term needs of the community: NW 67th Street, NW 38th Street, SE 45th Street, NE Rogers Lane (I-44 to Flower Mound)	LMPO, CITY, CO	ODOT, FORT, CO, ENG	Mid	\$6.0 million, \$6.0 million, \$6.0 million, \$12.0 million, respectively	ODOT, LOCAL, FHWA	
Action 2.3	Plan, design and begin construction on the following Lawton area roadway projects as they are critical to the "long" term needs of the community: Gore Blvd (67th to 82nd), SW 52nd Street (Gore to south of Bishop), 38th SW (Lee to Bishop)	LMPO, CITY, CO	ODOT, FORT, CO, ENG	Long	\$6.0 million, \$15.0 million, \$6.0 million, respectively	ODOT, LOCAL, FHWA	
Action 2.4	If the LMPO boundary is expanded, Plan, design and begin construction on the following roadway projects as they are critical to the long term needs of the community: Elgin area roadways (U.S. 277, SH 17, Trail Road, new minor arterial), Cache area roads (Old Cache Road, 8th Avenue (SH 115), East Lawton area future roadways (Nine Mile Creek sewer basin area), upgrades of study area "rural collectors" (Trail Road, Deyo Mission Road, Old Cache Road, SH 17 east of Elgin)	LMPO, CITY, CO	ODOT, FORT, CO, ENG	Near	estimated at approx. \$1.0 million per mile	ODOT, LOCAL, FHWA	
Action 3:	Plan, designate and develop a future truck/freight route (per the LMPO recommendations) in the Lawton area to provide efficient and safe access for large vehicles for the transport of goods through and to Lawton industrial areas (intersection improvements likely needed)	LMPO, CITY, CO	ODOT, FORT, CO, ENG	Near	estimated at approx. \$0.5 million per intersection	ODOT, LOCAL, FHWA	
<p>Implementation Partners / Agencies</p> <p>CITY - Local government planning departments or city administrations CO - County governments FORT - Fort Sill ODOT - Oklahoma Dept. of Transportation LMPO - Lawton Metropolitan Planning Organization ENG - City of Lawton Engineering Department LCD - Lawton Community Development department OEA - Office of Economic Adjustment LATS - Lawton Area Transit System LFSA - Lawton Fort Sill Regional Airport FAA - Federal Aviation Administration</p> <p>Timing</p> <p>Near - 2008 - 2009 Mid - 2010 - 2011 Long - 2012+</p> <p>Funding Sources</p> <p>LOCAL - bond/general revenues from local governments STATE - state revenue source DAR - Defense Access Road Program funds (DoD) OEA - Office of Economic Adjustment ODOT - Oklahoma Dept. of Transportation Federal Aid funds FHWA - Federal government highway funds OSMC - Oklahoma Strategic Military Commission FAA - Federal Aviation Administration</p>							

Lawton Fort Sill Growth Management Plan Implementation Checklist Subject: Transportation		Responsibilities		Timing	Estimated Cost	Potential Funding Sources
		Primary	Secondary			
Issue: Limited rights-of-way and prohibitive roadway widening costs limit the opportunities to increase operational efficiencies of urban streets in Lawton						
Recommendation: Study, develop and implement an enhanced and coordinated program of signalization timing on the major streets within the most developed areas of Lawton to improve traffic flow and capacity, especially on streets that connect to I-44 and parallel Rogers Lane						
Action 1:	Coordinate with ODOT and their consultant in obtaining traffic counts and analysis of trip distribution and assignment data from their special study of the Rogers Lane and Fort Sill gate intersections	ENG, LMPO	ODOT	Near	NA	NA
Action 2:	Coordinate with the LMPO to identify and request federal/state funding options for Traffic Signalization Program study	ENG, LMPO	ODOT	Short	\$175,000	ODOT, FHWA, LOCAL
Issue: Proposed changes to on-post circulation routes and the reworking of the Key Gate access point and Rogers Lane entry gates to Fort Sill could lead to increased traffic congestion at the other major east-west routes into Lawton and the downtown area						
Recommendation: Prepare a comprehensive study and analysis of the impacts on the Lawton downtown transportation network caused by the proposed revisions to the Key Gate interchange at Interstate 44 and the alterations proposed at the Rogers Lane entry points to Fort Sill						
Action 1:	Coordinate with ODOT and their consultant in obtaining traffic counts and analysis of trip distribution and assignment data from their special study of the Rogers Lane and Fort Sill gate intersections	ENG, LMPO	ODOT	Near	NA	NA
Action 2:	Investigate funding options (in coordination with LMPO and ODOT) for the study assessing overall and comprehensive impacts of the Key Gate interchange revisions/Rogers Lane alterations	ENG	LMPO, ODOT	Short	\$150,000	OEA, ODOT, OSMC
Issue: Existing and future land use, development and transportation infrastructure regulations and standards contribute to limiting the capacity and effectiveness of area roadways due to the lack of access management and access control standards for corridor developments						
Recommendation: Develop comprehensive corridor studies for key transportation routes into Lawton, Elgin and Cache in order to promote and regulate access to and control of the roadways and provide for more appealing entryways into these communities						
Action 1:	Identify key priority corridors that require immediate attention due to their projected development pressures and anticipated development timeframes	CITY, CO	ODOT	Short	NA	NA
Action 2:	Prepare a funding request and implementation funding for studies of the following corridors with these roadways being targeted initially: U.S. Highway 277 in Elgin, Gore Boulevard east of Lawton, and Lee Boulevard in Southwest Lawton	CITY, CO	ODOT, OEA	Long	\$125,000 per study	ODOT, LOCAL, OEA
Implementation Partners/Agencies						
<p>CITY - Local government planning departments or city administrations</p> <p>CO - County governments</p> <p>FORT - Fort Sill</p> <p>ODOT - Oklahoma Dept. of Transportation</p> <p>LMPO - Lawton Metropolitan Planning Organization</p> <p>ENG - City of Lawton Engineering Department</p> <p>LCD - Lawton Community Development department</p> <p>OEA - Office of Economic Adjustment</p> <p>LATS - Lawton Area Transit System</p> <p>LFSA - Lawton Fort Sill Regional Airport</p> <p>FAA - Federal Aviation Administration</p>						
Timing						
Near - 2008 - 2009						
Mid - 2010 - 2011						
Long - 2012+						
Funding Sources						
LOCAL - bond/general revenues from local governments						
STATE - state revenue source						
DAR - Defense Access Road Program funds (DoD)						
OEA - Office of Economic Adjustment						
ODOT - Oklahoma Dept. of Transportation Federal Aid funds						
FHWA - Federal government highway funds						
OSMC - Oklahoma Strategic Military Commission						
FAA - Federal Aviation Administration						

Lawton Fort Sill Growth Management Plan Implementation Checklist Subject: Transportation				Responsibilities	Timing	Estimated Cost	Potential Funding Sources
				Primary	Secondary		
Issue: Projected residential development in the Elgin area may increase need for transit ridership							
Recommendation: Investigate the possibility of providing a park-n-ride location and commuter bus route in the Elgin area							
Action 1:	Investigate the potential to revise or amend the current LATS charter to included the Elgin area into their UZA	LMPO, LATS	CITY	Short	NA	NA	NA
Action 2:	If the LATS charter can be amended to include Elgin, revise LATS budget and LMPO work plan to include funding request for commuter bus route feasibility study for the Elgin area	LMPO, LATS	CITY	Long	\$100,000	LOCAL	LOCAL
Issue: Increased flight schedules and enplanements at Lawton - Fort Sill Regional airport require additional runway lengths and airport facilities							
Recommendation: Develop and implement adequate air transport infrastructure to support the projected increase in air traffic (including military missions)							
Action 1:	Review and implement the recommendations of the airport master plan regarding runway length and support areas (taxiways, aprons, etc.)	LFS, CITY CO, LMPO	FAA, ODOT	Long	\$52 million	FAA, ODOT, LOCAL	
Implementation Partners/Agencies							
<p>CITY - Local government planning departments or city administrations CO - County governments FORT - Fort Sill ODOT - Oklahoma Dept. of Transportation LMPO - Lawton Metropolitan Planning Organization ENG - City of Lawton Engineering Department LCD - Lawton Community Development department OEA - Office of Economic Adjustment LATS - Lawton Area Transit System LFS - Lawton Fort Sill Regional Airport FAA - Federal Aviation Administration</p>							
Timing							
Near - 2008 - 2009							
Mid - 2010 - 2011							
Long - 2012+							
Funding Sources							
<p>LOCAL - bond/general revenues from local governments STATE - state revenue source DAR - Defense Access Road Program funds (DoD) OEA - Office of Economic Adjustment ODOT - Oklahoma Dept. of Transportation Federal Aid funds FHWA - Federal government highway funds OSMC - Oklahoma Strategic Military Commission FAA - Federal Aviation Administration</p>							