# City of Lake Worth



# Comprehensive Plan Vision Report | 2013



The work that provided the basis for this publication was supported by funding under an award with the U.S. Department of Housing and Urban Development. The substance and findings of the work are dedicated to the public. The author and publisher are solely responsible for the accuracy of the statements and interpretations contained in this publication. Such interpretations do not necessarily reflect the view of the Government.

© AECOM Technical Services 2013 Orlando 150 North Orange Avenue, Orlando, FL 32801

T: 407 843 6552 F: 407 839 1789

This document has been prepared by AECOM on behalf of the North Central Texas Council of Governments.

Project No. : 60242890 Client : North Central Texas Council of Governments | Planning Livable Military Communities

AECOM Contact : Liz.Drake@AECOM.com NCTCOG Contact: Tamara Cook - TCook@nctcog.org

# **Table of Contents**

City of Lake Worth Comprehensive Plan Vision	9
Section 1.1 : Plan Purpose Section 1.2 : Lake Worth Vision	9 9
Section 1.3 : Lake Worth Demographics 1.3.1   Lake Worth Population and Household Trends 1.3.2   Lake Worth Income Trends	12
Section 1.4 : Economic Development 1.4.1   Strengths, Weaknesses, Opportunities and Threats 1.4.2   Existing Retail Base 1.4.3   Retail Gap Analysis 1.4.4   Lake Worth Economic Development Catalyst Sites 1.4.5   Economic Development Goals, Policies and Actions	13
Section 1.5 : Land Use 1.5.1   Existing Land Use Overview 1.5.2   Future Land Use 1.5.3   Zoning Analysis 1.5.4   Compatibility with NAS Fort Worth, JRB 1.5.5   Lake Worth Vision Framework 1.5.6   Land Use Goals, Policies and Actions	22
Section 1.6 : Transportation 1.6.1   Maintaining and Improving Roadway Infrastructure 1.6.2   Roadway Infrastructure Goals, Policies and Actions 1.6.3   Public Transportation Options 1.6.4   Public Transportation Goals, Policies and Actions 1.6.5   Overview of Bicycle and Pedestrian Network 1.6.6   Bicycle and Pedestrian Network Goals, Policies and Actions	36
Section 1.7 : Housing 1.7.1   Existing Conditions and Trends 1.7.2   Housing Goals, Policies and Actions	62
Section 1.8 : Implementation Plan	79

#### NCTCOG Executive Board 2013-2014

President Steve Terrell Mayor City of Allen

Vice-President Bill McElhaney County Judge Wise County

Secretary-Treasurer Kathryn Wilemon Mayor Pro Tem City of Arlington

Past President Bobbie Mitchell Commissioner Denton County

Director Vonciel Jones Hill Councilmember City of Dallas

Director **Clay Jenkins** County Judge Dallas County

Director Marcus Knight Mayor City of Lancaster

Director Dr. Larry Marshall Councilmember City of Benbrook Director A.J. Mathieu Councilmember City of Joshua

Director Daniel Scarth Councilmember City of Fort Worth

Director Keith Self County Judge Collin County

Director Lissa Smith Mayor Pro Tem City of Plano

Director **B. Glen Whitley** County Judge Tarrant County

Ex Officio, Non-Voting Toni Rose Texas House of Representatives

General Counsel Jerry Gilmore

Executive Director **R. Michael Eastland** 

#### Regional Transportation Council 2013 - 2014

Kathryn Wilemon, Chair Mayor Pro Tem, City of Arlington

Mike Cantrell, Vice Chair Commissioner, Dallas County

Mark Riley, Secretary County Judge, Parker County

**Douglas Athas** Mayor, City of Garland

Ron Brown Commissioner, Ellis County

Sheri Capehart Councilmember, City of Arlington

Maribel Chavez, P.E. District Engineer TxDOT, Fort Worth District

Rudy Durham Councilmember, City of Lewisville

Andy Eads Commissioner, Denton County

Charles Emery Board Chair, Denton County Transportation Authority

**Mark Enoch** Board Member Dallas Area Rapid Transit

Gary Fickes Commissioner, Tarrant County Rob Franke, P.E. Mayor, City of Cedar Hill

Sandy Greyson Councilmember, City of Dallas

**Bill Hale, P.E.** District Engineer TxDOT, Dallas District

Roger Harmon County Judge, Johnson County

Vonciel Jones Hill Councilmember, City of Dallas

**Clay Jenkins** County Judge, Dallas County

Ron Jensen Mayor, City of Grand Prairie

Jungus Jordan Councilmember, City of Fort Worth

Sheffie Kadane Councilmember, City of Dallas

Pete Kamp Mayor Pro Tem, City of Denton

Geralyn Kever Councilmember, City of McKinney

Linda Koop Citizen Representative, City of Dallas

#### Regional Transportation Council 2013 - 2014

Brad LaMorgese Councilmember, City of Irving

Stephen Lindsey Mayor Pro Tem, City of Mansfield

Laura Maczka Mayor, City of Richardson

David Magness Commissioner, Rockwall County

Scott Mahaffey Board Chair Fort Worth Transportation Authority

Matthew Marchant Mayor, City of Carrollton

Maher Maso Mayor, City of Frisco

Bill McLendon Councilmember, City of Hurst

**John Monaco** Mayor, City of Mesquite

**Mike Nowels** Board Member Fort Worth Transportation Authority

Daniel Scarth Councilmember, City of Fort Worth Lissa Smith Mayor Pro Tem, City of Plano

T. Oscar Trevino, Jr., P.E. Mayor, City of North Richland Hills

William Velasco, II Citizen Representative, City of Dallas

Bernice J. Washington Board Member Dallas/Fort Worth International Airport

Duncan Webb Commissioner, Collin County

**B. Glen Whitley** County Judge, Tarrant County

Zim Zimmerman Mayor Pro Tem, City of Fort Worth

Michael Morris, P.E. Director of Transportation, NCTCOG

Surface Transportation Technical Committee Lori Shelton, Chair North Texas Tollway Authority

#### Planning Livable Military Communities Project Advisory Committee

David Bitters Assistant Superintendent of Operational Services White Settlement ISD

Karen Bolyard City Administrator City of Sansom Park

**Tamara Cook** Principal Transportation Planner NCTCOG

Eric Fladager Comprehensive Planning Manager City of Fort Worth

Dave Gattis Deputy City Manager City of Benbrook

**Curvie Hawkins** Director of Planning Fort Worth Transportation Authority

Marvin Gregory City Administrator City of River Oaks

Brett McGuire City Manager City of Lake Worth **Jim Ryan** Economic Development Director City of White Settlement

Randy Skinner Planning Manager Tarrant County

Scot Smith District Design Engineer Texas Department of Transportation Fort Worth District

**Roger Unger** City Administrator City of Westworth Village

Patricia Ward Director Tarrant County Community Development Division

Rachel Wiggins Community Planning Liaison Officer NAS Fort Worth, JRB

**Regional Coordination Committee** 

Jack Adkison, Chair Former Councilmember City of River Oaks

Randy Skinner, Vice Chair Planning Manager Tarrant County

Brett McGuire, Secretary City Manager City of Lake Worth

Mike Arnold Councilmember City of White Settlement

**Jim Barnett Jr.** Mayor City of Sansom Park

Karen Bolyard City Administrator City of Sansom Park

Joe Crews Councilmember City of River Oaks

Dave Gattis Deputy City Manager City of Benbrook

**Paul Paine** President Fort Worth South, Inc.

**Jim Ryan** Economic Development Director City of White Settlement Ron Sauma Councilmember City of Benbrook

Dennis Shingleton Councilmember City of Fort Worth

**Steve Townsend** Precinct Four Administrator Tarrant County

Roger Unger City Administrator City of Westworth Village

Debbie Whitley Assistant City Manager/Director of Finance City of Lake Worth

**Tony Yeager** Mayor City of Westworth Village

Non-Voting Members

**Captain Rob Bennett** Commanding Officer Naval Air Station Fort Worth, Joint Reserve Base

Art Cavazos Chief of District Operations Fort Worth ISD

Tamara Cook Principal Transportation Planner North Central Texas Council of Governments Anne Cozart Member Tri-City Area Chamber of Commerce

Matthew Geske Director of Governmental Affairs Fort Worth Chamber of Commerce

**Curvie Hawkins** Director of Planning Fort Worth Transportation Authority

**Grant Jackson Member** White Settlement Area Chamber of Commerce

Rachel Navejar Neighborhood and Recreation Enhancement Coordinator Tarrant Regional Water District

Brendon Payne Executive Director Northwest Tarrant Chamber of Commerce

Jamie Presley President Benbrook Area Chamber of Commerce

Norman Robbins Manager of Community Relations Lockheed Martin

Scot Smith District Design Engineer Texas Department of Transportation Fort Worth District

Jay Sweat Department of Defense Office of Economic Adjustment

#### Project Team

#### **Consultant Staff**

Ellen Heath Consultant Principal in Charge AECOM One Midtown Plaza 1360 Peachtree Street, Suite 500 Atlanta, Georgia 30309 (404) 965-9700 ellen.heath@aecom.com

Judy Meyer

Consultant Public Involvement Tasks Public Information Associates P.O. Box 570 Allen, Texas 75013 (214) 495-0403 judy. meyer@publicinformationassociates.com

Russell A. Archambault Consultant Economic Analysis Tasks RKG Associates, Inc. 300 Montgomery Street, Suite 203 Alexandria, Virginia 22314 (703) 739-0965 arch@rkgassociates.com

### Lake Worth Elected Officials

Walter Bowen Mayor

Andy Beason Councilmember

Gene Brooks Councilmember

Gene Ferguson Councilmember Pat O. Hill Councilmember

Clint Naramore Mayor Pro Tem

Ronny Parsley Councilmember

James Smith Councilmember

Brett McGuire City Manager

### WHAT IS NCTCOG?

The North Central Texas Council of Governments is a voluntary association of cities, counties, school districts, and special districts which was established in January 1966 to assist local governments in **planning** for common needs, **cooperating** for mutual benefit, and **coordinating** for sound regional development.

It serves a 16-county metropolitan region centered around the two urban centers of Dallas and Fort Worth. Currently the Council has 237 members, including 16 counties, 169 cities, 21 independent school districts, and 31 special districts. The area of the region is approximately 12,800 square miles, which is larger than nine states, and the population of the region is over 6.5 million, which is larger than 38 states.

NCTCOG's structure is relatively simple; each member government appoints a voting representative from the governing body. These voting representatives make up the General Assembly which annually elects a 15-member Executive Board. The Executive Board is supported by policy development, technical advisory, and study committees, as well as a professional staff of 306.

NCTCOG's offices are located in Arlington in the Centerpoint Two Building at 616 Six Flags Drive (approximately one-half mile south of the main entrance to Six Flags Over Texas).

North Central Texas Council of Governments P. O. Box 5888 Arlington, Texas 76005-5888 (817) 640-3300 NCTCOG's Department of Transportation

Since 1974 NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation for the Dallas-Fort Worth area. NCTCOG's Department of Transportation is responsible for the regional planning process for all modes of transportation. The department provides technical support and staff assistance to the Regional Transportation Council and its technical committees, which compose the MPO policy-making structure. In addition, the department provides technical assistance to the local governments of North Central Texas in planning, coordinating, and implementing transportation decisions.

Prepared in cooperation with the U.S. Department of Housing and Urban Development.

The work that provided the basis for this publication was supported by funding under an award with the U.S. Department of Housing and Urban Development. The substance and findings of the work are dedicated to the public. The author and publisher are solely responsible for the accuracy of the statements and interpretations contained in this publication. Such interpretations do not necessarily reflect the view of the Government.

### LAKE WORTH COMPREHENSIVE PLAN VISION

#### Section 1.1 | Plan Purpose

The Comprehensive Plan Vision for the City of Lake Worth serves as a long-term blueprint to enhance quality of life, guide future public investment decisions, and attract new growth to the community in the years ahead. This document sets overarching policies for building the elements that make up a healthy community—safe, efficient and balanced transportation options; attractive housing and retail choices; and strong growth and redevelopment opportunities. The concluding implementation plan then outlines a series of specific action steps designed to achieve the shared vision of the community and the region.

The City of Lake Worth adopted its previous Comprehensive Plan in 1995. This framework is not intended as a complete comprehensive planning document but updates the core planning areas of demographics, economic development, land use, transportation, and housing. The community should use the vision as a guide to assist in preparing a complete Comprehensive Plan update.

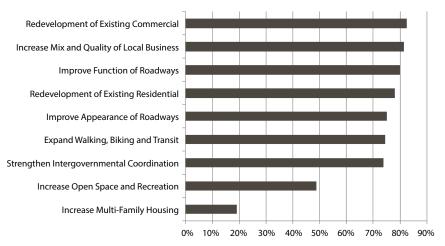
#### Section 1.2 | Lake Worth Vision

A central purpose of the Comprehensive Plan Vision is to reflect the values and priorities of the community on issues of quality of life, future growth and redevelopment, and access to public services and amenities. To ensure that the plan's goals, policies and actions are grounded in local feedback, the project team conducted a series of Comprehensive Planning Workshops in December of 2012. Participants used a wireless audience response system to rank the importance of a series of opportunities to strengthen the community. Similar feedback on the prioritization of strategies was gathered through an online survey.

Results from Lake Worth as shown in Figure 1.1 indicate a particular emphasis on redeveloping both existing commercial and residential areas, increasing the mix and quality of local businesses, and improving the function of local roadways in the community.

Figure 1.1 - Lake Worth Visioning Workshop Prioritization Results

### Voted 'Important' or 'Very Important



Workshop attendees were also asked to identify specific transportation and land use issues, local areas to maintain, and areas of the community to enhance or redevelop. **Figure 1.2** maps priorities for single-family and commercial redevelopment, including portions of the city to the east of Roberts Cut off Road and in southwest Lake Worth. Mapping exercise results also highlight potential commercial redevelopment along State Highway 199 and between Azle Avenue and State Highway 199. The suggested focus for this area is a mix of retail and residential uses linked by bike and pedestrian connections. Participants also identified potential land use compatibility issues with noise and air safety zones associated with NAS Fort Worth, JRB in the western portions of Lake Worth.

Members of the project team confirmed and further refined public input as part of a follow up strategy session with City of Lake Worth representatives in April of 2013. The priorities that emerged from outreach in the community help to shape the goals, policies and actions in the Comprehensive Plan.

LAKE WORTH COMMUNITY VISIONING WORKSHOPS December 2012 PROPOSED IMPROVEMENTS Noise Contours Commercial Redevelopment Areas (---) Multi- Family Residential / Infill Traffic Improvements Areas to Change - 85 db\_DNL Commercial Redevelopment Nodes -> Proposed Bike / Ped Connections 4-Traffic Improvement Areas Areas to Keep the Same 80 db\_DNL 米 Single Family Residential / Infill Proposed Open Space / Parks Proposed Traffic Signal Land Use Incompatibility 75 db\_DNL 70 db\_DNL - 65 db\_DNL APZs ZTEC CANYON WALLIS Clear Zone S LONGHORN **Accident Potential** ROCKY POINT BIG BEND Zone 1 CIRCLE RITCHIE **Accident Potential** Zone 2 LICN COMANCH GRAHAM YEARY COMANC HE S COWDEN APACHE

Figure 1.2 – City of Lake Worth Community Input – Priority Action Areas

#### Section 1.3 | Lake Worth Demographics

Understanding the demographic context of an area is critical in evaluating existing and future community needs. Demands for transportation, housing, and services evolve in relation to changes in the size and composition of the local population. In particular, trends such as an aging population emphasize the importance of alternatives to automobile travel and single family detached housing. Regional variation in population growth, housing values, and household income levels can also highlight gaps in the diversity and quality of the local housing and economic base.

#### 1.3.1 | Lake Worth Population and Household Trends

Rates of population change across the county and greater Fort Worth region demonstrate sustained and dramatic growth over the previous two decades; Lake Worth in contrast experienced either minimal growth or a slight decrease in its residential base between 1990 and 2010 (See **Table 1.1**).

The PLMC area is generally comparable in age to Texas and Tarrant County overall and it reflects the increasing diversity of the state. Following a pronounced national trend, the state, county and cities saw an aging population across the previous two decades. As shown in **Table 1.2**, since 1990, the age profile of Lake Worth has shifted sharply upward with a median age over 40.

#### Table 1.2 - Median Age - Fort Worth, Tarrant County and City of Lake Worth, 1990-2010

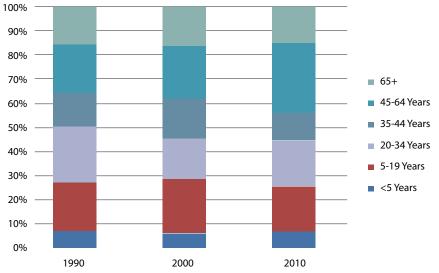
Median Age	1990	2000	2010
Tarrant County	30.5	32.3	33.4
Fort Worth	30.3	30.9	31.2
Lake Worth	34.8	38.1	40.1

Source: U.S. Census Bureau

#### Table 1.1 - Population Trends - Region, Tarrant County and City of Lake Worth, 1990 to 2012

Population Trends (1990-2012)	1990*	2000*	1990-2000 % Change	2010*	2000-2010 % Change	2011**	2012**
Lake Worth	4,591	4,618	0.59%	4,584	-0.74%	4,750	4,630
NCTCOG - 12 - County Region	4,013,418	5,197,317	29.50%	6,417,724	23.48%	6,461,120	6,515,710
Tarrant County	1,170,103	1,446,219	23.60%	1,809,034	25.09%	1,818,240	1,832,230

Source: \*U.S. Census Bureau Source: \*\* NCTCOG Figure 1.3 – Lake Worth Age Cohort, 1990 – 2010



Almost all of the six communities in the study area experienced growth in the Hispanic population between 2000 and 2010. Lake Worth's Hispanic population increased from 670 to 1,192; however, the overall share of Hispanics decreased from 32% to 26% (See Table 1.3).

#### Table 1.3 - Race & Ethnicity - City of Lake Worth, 1990-2010

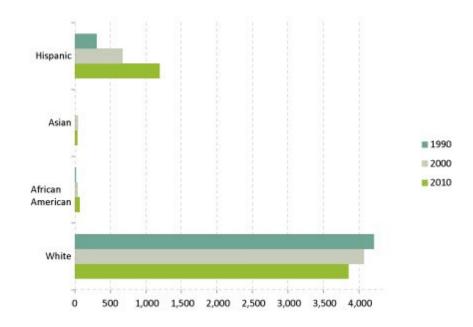
Lake Worth	2000 Pop	% of Total 2000 Pop	2010 Pop	% of Total 2010 Pop
White	4,073	71.0%	3,853	84.1%
Black	40	11.5%	68	1.5%
Asian	44	2.7%	34	0.7%
Hispanic	670	32.0%	1,192	26.0%
Total Population	4,618 <sup>1</sup>	See Note 1	4,584 <sup>1</sup>	See Note 1

<sup>1</sup>The population total by category and category percentages in table do not add to 100%. US Census statistics treat race and ethnicity as separate categories. The Hispanic category includes individuals that selfidentify with one or more race categories.

Source: US Census Bureau

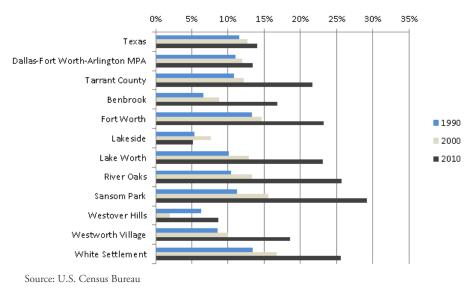
12 | PLMC | Comprehensive Plan Vision

Figure 1.4 - Lake Worth Race Cohort, 1990 - 2010



A higher percentage of female-headed households in a community can indicate a greater risk of poverty or economic instability in families. As shown in **Figure 1.5**, several PLMC communities, including Lake Worth, have 2010 percentages of female-headed households that exceed state, regional and county ratios.

Figure 1.5 – Female Headed Households – State, Region, PLMC Sub-Region, Tarrant County and City of Lake Worth, 2010



Coinciding with its slight population loss between 2000 and 2010, Lake Worth experienced limited growth in number of households city-wide. As shown in Table 1.4, the City of Lake Worth saw a slight increase in the number of households between 2000 and 2010, with 0.1% growth, compared to Tarrant County's 23.1% increase in total households.

Table 1.4 - Households - Tarrant County and City of Lake Worth, 1990-2010

Total Households	US Census 1990	US Census 2000	% Change 90-00	US Census 2010	% Change 00-10
Lake Worth	1,638	1,660	1.3%	1,662	0.1%
Tarrant County	438,634	533,864	21.7%	657,134	23.1%

Source: U.S. Census Bureau

#### 1.3.2 | Lake Worth Income Trends

The Dallas-Fort Worth-Arlington Metropolitan Planning Area (MPA) exceeds the State of Texas in median household income for 2010, highlighting a robust regional economy (See **Table 1.5**). Lake Worth's median household income is approximately 16.2%, or \$8,484, less than Tarrant County's median income.

Table 1.5 – Median Household Income – State, Region, PLMC Sub-Region, Tarrant County and City of Lake Worth, 2000 - 2010

Median Household Income	US Census 2000	US Census 2010	% Change 00-10
Texas	\$39,927	\$48,615	22%
Dallas-Fort Worth-Arlington MPA	\$49,277	\$54,449	10%
Tarrant County	\$46,179	\$52,385	13%
Benbrook	\$50,978	\$61,917	21%
Fort Worth	\$37,074	\$48,224	30%
Lake Worth	\$39,101	\$43,901	12%
River Oaks	\$31,229	\$46,100	48%
Sansom Park	\$28,714	\$33,750	18%
Westworth Village	\$40,493	\$45,550	12%
White Settlement	\$32,598	\$41,976	29%

Source: U.S. Census Bureau

#### Section 1.4 | Economic Development

#### 1.4.1 | Strengths, Weaknesses, Opportunities and Threats

Lake Worth is advantageously set within the Fort Worth region, with Interstate Highway 820 (Loop 820) and Highway 199 providing easy access to DFW Airport, downtown Fort Worth, the Alliance Area, NAS Fort Worth JRB, Lockheed Martin, and other major employment centers throughout the region. Lake Worth holds two of the top 10 major employers in the PLMC study area—a Wal-Mart Super Center and the Lake Worth ISD. In recent years the Dallas-Fort Worth region has undergone an economic rebound, with growing inventories, increasing employee payrolls, and decreasing unemployment rates—and the City of Lake Worth has absorbed some of the region's growth to a greater extent than other cities in the PLMC study area.

### EXISTING STRENGTHS AND WEAKNESSES:

To begin to evaluate and develop strategies for Lake Worth's future economic development, the planning team conducted a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis.

#### ECONOMIC DEVELOPMENT STRENGTHS

- Expanded Retail Shopping Options Over Past Decade
- Excellent Highway Access to DFW Airport & DFW Metroplex (Interstate 820), Downtown Fort Worth (Highway 199), Eagle Mountain Lake and the Alliance Area (Interstate 35W)
- High Traffic Counts to spur Business Growth
- Access to Housing and Recreational Opportunities on Lake Worth
- Close Proximity to Major Employment Centers at base, Lockheed Martin, Alliance, DFW and Arlington
- Fort Worth Nature Center & Boy Scout Camp
- Trinity River Recreational Opportunities
- Professional Staff handling economic development efforts

#### ECONOMIC DEVELOPMENT WEAKNESSES

- Aging Population with Fewer Young, Educated and Technically Skilled
   Entrepreneurs
- Growth of 2nd Generation Immigrant Population With Language and Educational
  Barriers
- Limited Land for Future Economic Development
- Homeownership Declining While Rentals Housing Growing
- Limited Affordable Housing Choices
- Lack of Walkable Neighborhoods
- Development Restrictions around NAS Fort Worth, JRB
- Under-utilization of Lake Worth

#### ECONOMIC DEVELOPMENT OPPORTUNITIES

- Major Retail Employment Center with Big Box Retail and New Retail Stores
- Single Family Subdivisions
- 40 acres Available for Prime New Development
- Opportunities for revitalization
- Various Training & Educational Options After High School: Tarrant County College NW Campus, Fire Service Fire Academy and Criminal Justice Training Center of Tarrant County

#### ECONOMIC DEVELOPMENT THREATS

- Future Mission Changes at NAS Fort Worth, JRB
- Residential Property Values Cooling
- Competition with Suburbs to the West in Fort Worth, Parker County and Azle
- Encroachment of Development within the Accident Potential Zone (APZ) at NAS Fort Worth, JRB

Of the PLMC cities, Lake Worth experienced the most significant industrial and commercial development, with between 500,000 and 1 million square feet (SF) of new big box retail development at the junction of Loop 820 and State Highway 199 (Jacksboro Highway) within the past decade. Although Lake Worth has captured some economic growth in recent years, the area is still vulnerable to the weaknesses shared among the PLMC communities. The challenges include aging retail corridors, mature neighborhoods, limited undeveloped land for new investment, intra-regional competition that pulls mixed use projects away from the PLMC communities, and lack of regional market competitiveness. With strategic repositioning and planning, these challenges can serve as opportunities to bring quality growth and development to Lake Worth.

#### 1.4.2 | Existing Retail Base

The City of Lake Worth currently has approximately 1.5 million SF of clusters of retail development, mostly in big box or power center developments (See **Appendix D** for the full Real Estate Market Analysis).

#### **Shopping Centers**

One of the two regional shopping centers that exist within the PLMC study area is Lake Worth Towne Crossing, at the intersection of Jacksboro Highway (State Highway 199) and Loop 820 in Lake Worth. Lake Worth Towne Crossing, and the surrounding retail area, offers a wide variety of retail, including major anchors, services, and casual dining. As evident by the building architecture and tenant mix the initial development occurred on the north side of Jacksboro Highway. While some store fronts have been renovated, much of the center's storefronts are in a mature state.

Although aging and facing direct competition from new development across Jacksboro Highway, the retailers on the north side of the highway appear vibrant. Vacancy is mainly limited to a few small to mid-sized store fronts (1,000 SF to 10,000 SF), and one large store front of approximately 25,000 SF to 50,000 SF.

Development occurring on the southern side of Jacksboro Highway is relatively recent, with some construction on-going and multiple pad sites ready for development. In addition to the investment made in the retail sector, newly constructed County offices anchor the western portion of the State Highway 199/Loop 820 retail center. The recently completed power center is anchored by major retailers and also includes multiple restaurants. As can be expected, some vacancy exists as the shopping center reaches completion with some storefronts in the early stages of tenant "fit-out" before occupation. Ample developable land remains in proximity to the power center, with much of it located between the center and the perimeter retail that fronts Jacksboro Highway.

#### **Commercial Corridors**

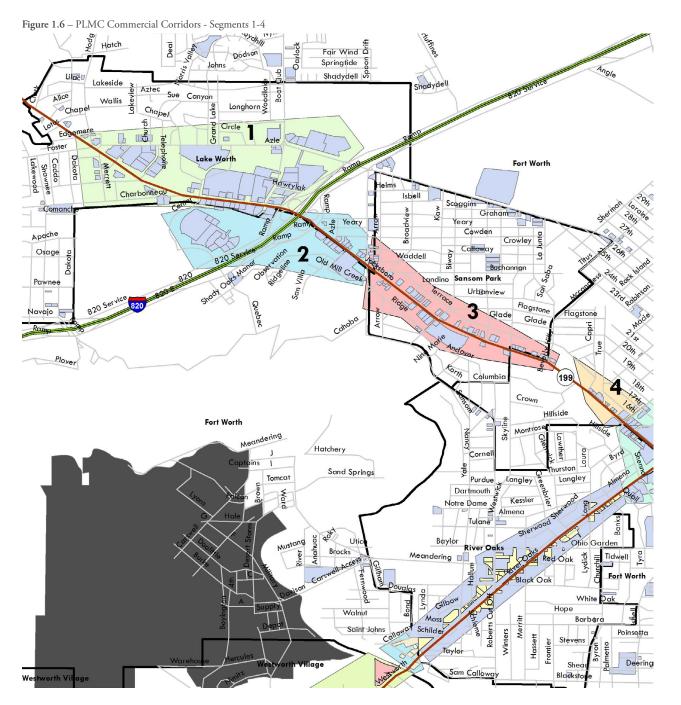
The primary commercial corridors within the PLMC study area play a variety of roles including:

- Meeting the shopping and service needs of local residents;
- Serving as main commuting corridors to regional and sub-regional employment centers;
- Serving as gateway entrances into the study area communities; and
- Moving local traffic through the study area.

To conduct an economic analysis of the commercial corridors within the overall area, the major commercial corridors were divided into 24 individual road segments. The segments denote areas where significant clusters of commercial development occur. Where possible the road segments were identified within existing jurisdictional boundaries. Segments 1 through 4 follow State Highway 199—and Segment 1 and portions of Section 2 are within the Lake Worth community. (See **Appendix D** for a description of the corridor analysis methodology) **Figure 1.6** illustrates Segments 1 through 4.

Segments 1 through 4 consist of retail establishments along Jacksboro Highway from the edge of the Lake Worth commercial cluster at Loop 820 to just north of River Oaks Boulevard. Segment 1 and the northern portions of Segment 2 consist of Lake Worth's Towne Crossing power center and adjacent power centers that converge to create a regional retail area with approximately 1 million square feet at the intersection of Jacksboro Highway and Loop 820. Large anchor stores include Wal-Mart, Target, Lowes and Best Buy. Grocers, pharmacies, and numerous national chain restaurants and banks round out the retail offering at this site. As Segment 2 traverses Loop 820 and transitions into segments 3 and 4, the retail stock drastically changes; from a regional shopping center comprised of multiple power centers to an eclectic mixture of standalone, commercial-strip establishments, including aging office buildings, a large warehouse facility currently utilized as a community bazaar, local restaurants and national fast food chains, independent used car lots, vehicle repair maintenance and parts stores line. Vacancy along this corridor appears to be fairly limited, suggesting that the landlord/tenant relationship is in balance with the local market demand for these unique and/or local offerings of services and products.

Segments 1 - 4 contain approximately 224 retail establishments, totaling an estimated 2.15 million square feet. As expected, the big box anchors of the regional shopping centers are evident in the General Merchandise and Building Material and Supply categories.



16 | PLMC | Comprehensive Plan Vision

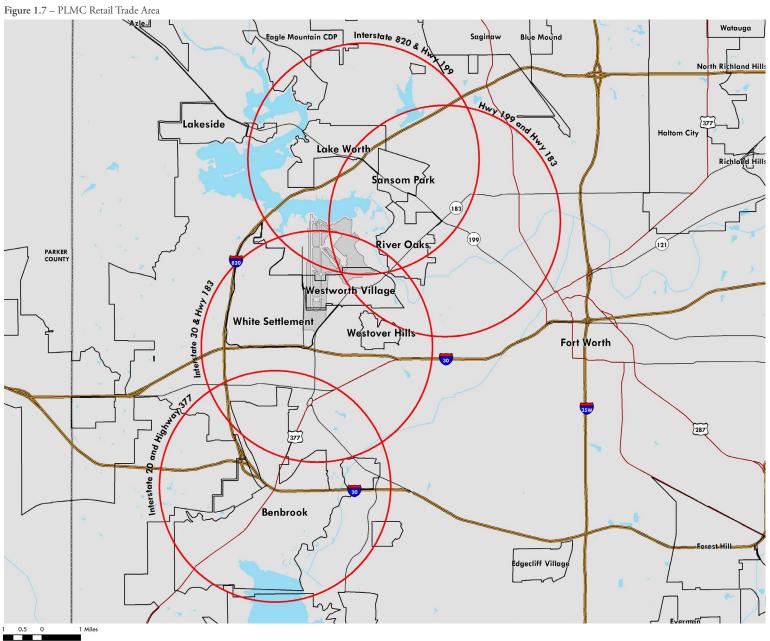
#### 1.4.3 Retail Gap Analysis

The planning team evaluated the retail environment along State Highway 199 and State Highway 183 by assessing four 3-mile trade areas, as illustrated in Figure 1.7. The City of Lake Worth falls within the Interstate 820 and State Highway 199 trade area. This trade area also includes Sansom Park and River Oaks, as well as portions of Fort Worth north of the NAS Fort Worth JRB. Of all the trade areas analyzed in the Regional Plan, the Lake Worth Trade Area has the lowest amount of sales surplus (\$78.2 million). Sales leakage occurs in 13 categories (excluding Non-Store Retailers). The largest categories of sales leakage occur in Grocery Stores (\$15.1 million), Automobile Dealers (\$8.4 million) and Clothing Stores (\$4.7 million). Although there is leakage in Automobile Dealers, the competition located within all three proximate trade areas diminishes the opportunity for additional dealers in the Interstate 820 and State Highway 199 Trade Area. See Appendix D for the detailed retail gap analysis by trade area.

All four trade areas within the PLMC study area are over-served with retail ranging from neighborhood strip center to regional shopping malls. The study area is home to clusters of automobile dealers, which accounts for the large amounts of surplus in the Interstate 30 and State Highway 183, State Highway 199 and State Highway 183, and Interstate 20 and U.S. Highway 377 trade areas. In addition the Ridgmar Mall contributes to the large amount of surplus within the Interstate 30 and State Highway 183 Trade Area.

However, despite the surplus in each trade area, results of the analysis demonstrated a gap in grocery and clothing stores in the Interstate 820 and State Highway 199 trade area, including Lake Worth. Additionally, retailers throughout the study area capture some of the retail sales lost to other shopping centers outside of the PLMC area through expanded product lines in existing establishments.

Figure 1.7 – PLMC Retail Trade Area



#### 1.4.4 | Lake Worth Economic Development Catalyst Sites

Based on community feedback, as well as factors such as physical site characteristics and future market absorption, the planning team identified a series of six catalyst economic development sites within the broader PLMC study area (See Figure 4.8). These sites do not represent the full range of potential redevelopment activity in any given community, but reflect the most visible and market-feasible revitalization opportunities. The sites are also intended to assist the community in prioritizing marketing efforts and public investments in support of key redevelopment projects that could fill highlighted gaps in the market analysis and significantly reshape nearby land use patterns. The planning team has also conducted a fiscal impact analysis for these sites.

The catalyst project identified in the City of Lake Worth is Site 2 along State Highway 199 near the interchange for Interstate 820. The site is just west of the city limits of Sansom Park. For Site 2, the Economic Development Building Program is described as follows:

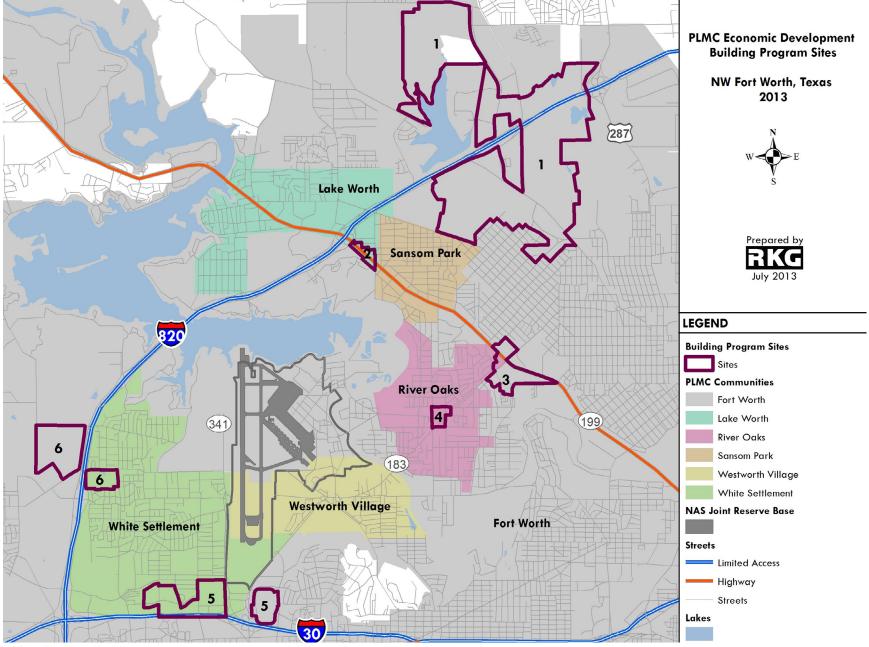
- Remake low-end retail environment into mixed retail, service and employment center
- Introduce primarily highway serving retail
- Make gateway statement for Samson Park
- Incorporate small business park location instead of larger scale retail uses

This concept seeks to revitalize the existing aging retail into mixed use retail nodes and create community gateways into Lake Worth from the southeastern boundary. The development program for Site 2 proposes an additional 80,000 SF of retail and service uses in a neighborhood shopping center format, 15,000 SF of limited service restaurant use and 80,000 SF of professional office space. This development would take the place of 32,573 SF of existing retail and office space. Overall, the concept creates a net gain of 142,427 SF of development.

Development and redevelopment are two ways of facilitating economic growth. Through the expansion of the tax base and retail sales associated with new development, each of the PLMC communities has the potential to expand employment, increase payroll and grow its tax base. Based on community feedback and an analysis of the region's real estate markets, the project team identified six sites as possible areas for future development or redevelopment to increase local economic development opportunities. In order to understand the economic development impact of the proposed development programs, the team also developed an impact analysis model to measure the tax revenue and employment impacts associated with various proposed economic development initiatives in different locations within the PLMC study area. See **Appendix G** for full Economic Development Tax Base Impacts analysis. For the proposed retail, restaurant, and office space developments in Site 2, the City of Lake Worth might anticipate an annual increase of \$849,308 in property tax revenue and \$492,922 in sales tax revenue for a total of \$1,342,230 of generated revenue above the current level. This amount reflects the loss of revenue associated with the retail and restaurant spaces that would have to removed to accommodate the new development. The City of Lake Worth revenues would increase by \$1,342,230 annually from taxes associated with development on Site 2.

The projected change in employment was based on the type and quantity of new development added or removed. Site 2 has the potential to lead to a net gain of 376 employees in the City of Lake Worth.

Figure 1.8 – Economic Development Catalyst Sites



0 0.15 0.3 0.6 0.9 1.2 Miles

Source: Tarrant County Appraisal District, 2009, ESRI, RKG Associates, Inc. 2013

#### 1.4.5 | Economic Development Goals, Policies and Actions

Economic development strategies in Lake Worth focus on addressing the challenges of aging retail corridors, mature neighborhoods, the limited supply of undeveloped land, and the lack of regional market competitiveness. The goals, policies and actions below highlight opportunities to reinforce the Regional Vision principles of strengthening overall identity, revitalizing prominent roadways, and pursuing cooperation among cities through strategies related to mixed use redevelopment, local and regional marketing capabilities, and leveraging the area's existing educational and workforce training assets. While many of these strategies are directly linked to physical development or job creation, the community should also continue to stress the value of enhancing its existing community assets, including housing, open spaces and lake access, and bike and pedestrian links as a means of attracting growth to the city. The Implementation section of the Comprehensive Plan includes specific action steps to support recommendations. **Appendix D** includes the full market analysis for the PLMC sub-region and information on available economic development incentives and financing tools.

Goal 1.1: Transform aging retail nodes into more compact, high quality, mixed use areas

**Policy 1.1.1:** Identify and market feasible, high profile mixed use redevelopment opportunities to attract private investment

Action 1.1.1.1: Use the Vision Framework to highlight one to two key redevelopment sites

*Action 1.1.1.2*: Seek out successful place making projects in Lake Worth and the PLMC sub-region as a way to establish desirable project models and redevelopment approaches

*Action 1.1.1.3*: Develop a specific branding message and communications strategy for the sites that emphasizes its market position, corridor visibility, transportation access, infrastructure capacity, and other locational assets

Action 1.1.1.4: Identify target groups including developers and investors for a communications campaign designed to create a positive image and stimulate market interest

*Action 1.1.1.5*: Use zoning to establish clear guidance for organizing project elements such as architectural and public realm design, pedestrian scale, the mix of uses, open spaces, access, and connectivity to the surrounding context

Action 1.1.1.6: Schedule the phasing of planned redevelopment to allow for

gradual community acceptance and financial feasibility with an early emphasis on anchor projects that have the highest community value, highest market value and greatest visual impact

Action 1.1.1.7: Plan public investments, including site development and preparation of infrastructure and identify incremental and innovative financing methods to implement necessary improvements

*Action 1.1.1.8*: Attract interest from prospective developers by increasing awareness of available economic incentives in advance of establishing any formal financing districts prior to project commitment and customize incentives as appropriate (see **Appendix F** for Summary of Economic Development Incentives & Financing Tools)

Goal 1.2: Foster an environment of innovation and entrepreneurship as a means to diversify the local and sub-regional economy and attract and retain talent

**Policy 1.2.1:** Leverage the proximity of technical experts from the military, defense, and oil and gas sectors to develop a science, technology, engineering, and mathematics (STEM) mentoring program for middle and high school age students

*Action 4.2.1.1*: Collaborate with area partners including the local Independent School Districts, Lockheed Martin, NAS Fort Worth, JRB, the Texas Air National Guard and the NCTCOG to expand participation in STEM-based curricula and outreach efforts, including STARbase and the North Texas Aviation Education Initiative

**Policy 1.2.2**: Use community resources to promote entrepreneurship, start up, research and manufacturing and the arts within the community

Action 1.2.1.1: Identify incubator space for an interactive Creativity Center that enables students and adults to explore science, art and technology projects

*Action 1.2.1.2*: Collaborate with partners including, Tarrant County College, TCU, ISDs, Fort Worth Nature Center, Cultural District Museums and Art Galleries, Lockheed Martin, and NAS Fort Worth, JRB to develop a curriculum

*Action 1.2.1.3*: Collaborate with local, sub-regional, regional and state economic development organizations to incorporate a workforce training component

*Action 1.2.1.4*: Market the innovative idea of a Creativity Center as a community amenity to retain and attract young people and families

*Action 1.2.1.5*: Form a 501c3 organization and create a program budget to fund the Creativity Center as an economic sustainability project

Action 1.2.1.6: Expand outreach and funding mechanisms for the development of neighborhood businesses

Goal 1.3: Enhance local economic development and marketing capabilities through regional and sub-regional partnerships

**Policy 1.3.1:** Establish a PLMC sub-regional marketing cooperative with surrounding communities to facilitate collaboration on common economic interests

*Action 1.3.1.1*: Develop marketing strategies to brand participating communities as the Northwest Fort Worth Area with an emphasis on area strengths such as convenient regional access, open spaces, lakes, and the Trinity River, and a growing technology and energy sector

*Action 1.3.1.2*: Embrace opportunities to market the community as part of a nationally recognized top metropolitan area for military personnel and veterans based on factors such as a robust regional economy, a strong system of peer support and access to health care and educational programs

*Action 1.3.1.3*: Use the PLMC sub-regional marketing cooperative as a knowledge exchange forum in which local professionals meet on a quarterly basis to share best practices in economic development and community revitalization and strengthen familiarity with available planning, financing and marketing tools

Action 1.3.1.4: Task the PLMC sub-regional cooperative with marketing of the selected catalyst redevelopment sites

Action 1.3.1.5: Continue to explore the longer-term creation of a formal and professionally staffed sub-regional economic development corporation with powers and authorities necessary to undertake economic development initiatives of regional and sub-regional significance, such as business park development

Goal 1.4: Promote growth through quality of life initiatives

Policy 1.4.1: Identify ways to strengthen the existing housing stock and neighborhoods as a means to maintain economic value, retain existing residents, and attract new households

Action 1.4.1.1: Identify one to two key neighborhoods in which to conduct an a neighborhood revitalization plan that uses an asset-based approach (see Housing section)

**Policy 1.4.2:** Enhance sense of place and expand available amenities for residents through a focus on improved physical connectivity

*Action 1.4.1.2*: Implement elements of the bicycle and pedestrian network plan (see Transportation section)

### Section 1.5 | Land Use

Land use patterns within a community interact with many other physical, economic and natural systems. The arrangement of residential, commercial and employment activities generates specific transportation demands on local roads, shapes the overall look and feel of neighborhoods, establishes access to open spaces and natural resources, and frames opportunities for private development. Communities that lack a diversity of land uses or that separate or spread out uses across a bigger area are often at risk of diluting their sense of place and using land and infrastructure less efficiently.

#### 1.5.1 | Existing Land Use Overview

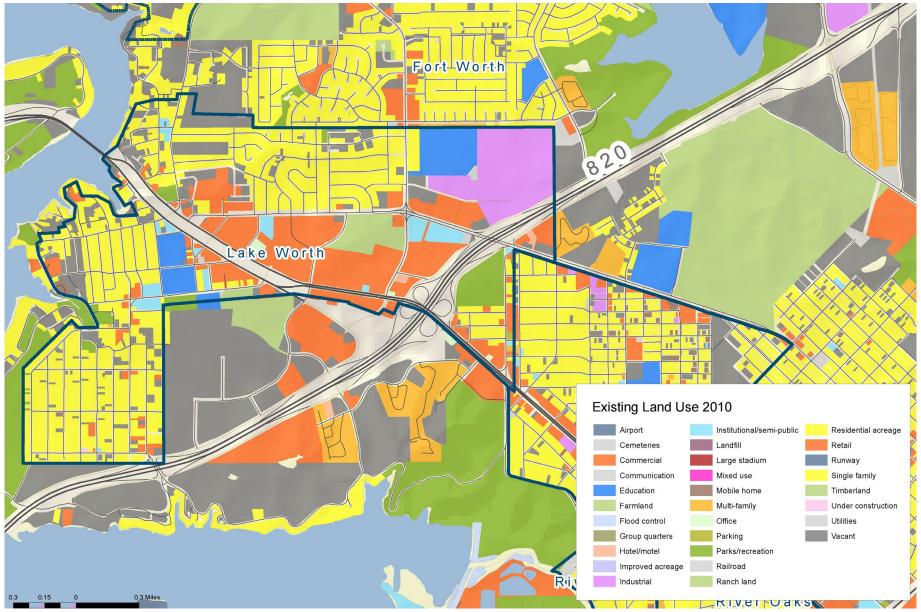
Just over 40% of Lake Worth's total land acreage is in use for single family housing (See Table 1.6). The city has a relatively large commercial base, comprising 18% of the existing land area. Industrial uses are 8.8%. As depicted in Figure 1.9, the majority of Lake Worth's commercial land uses are adjacent to State Highway 199 and the intersection of Interstate 820 and Highway 199. A large parcel of industrial land is in the northeast portion of Lake Worth along Interstate 820. As with many of the PLMC communities, Lake Worth has a fairly limited supply of vacant land to absorb new development, suggesting an increased focus on infill development strategies.

Table 1.6 – Existing Land Use, City of Lake Worth

Existing Land Use	Acres	Percent of Total
Single Family	507	41.5%
Commercial	219.6	18.0%
Vacant	138.4	11.3%
Industrial	107.8	8.8%
Education	68	5.6%
Retail	51.9	4.2%
Parks/Recreation	45.8	3.7%
Farmland	35.05	2.9%
Institutional/Semipublic	33.7	2.8%
Office	3.31	0.3%
Utilities	3.17	0.3%
Mobile Homes	3.04	0.2%
Hotel/Motel	2.9	0.2%
Multifamily	1	0.1%
Parking	0.71	0.1%
Communications	0.65	0.1%
Water	0.44	0.0%
Under Construction	0.42	0.0%

Source: NCTCOG, 2010 Land Use

#### Figure 1.9 – Lake Worth Existing Land Use



Source: NCTCOG, 2010 Land Use

#### 1.5.2 | Future Land Use

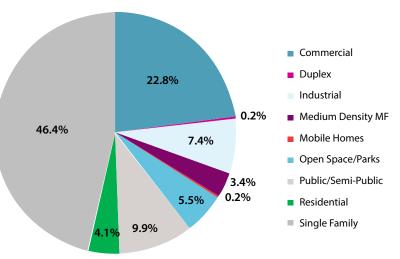
Lake Worth's Future Land Use Plan was last updated in 1995 in conjunction with the city's 1995 Comprehensive Plan Update. The land use categories depicted in the 1995 Future Land Use Plan may not represent what is on the ground today, but it is important to note the past vision of the city to build upon those efforts. As illustrated in **Table 1.7**, the major uses shown in Lake Worth's current Future Land Use Plan are 46.4% single family, 22.8% commercial, 9.9% public/semipublic, and 7.4% industrial. The Future Land Use Plan designates 5.5% of total acreage to Open Space and Parks. The 1995 Future Land Use Plan also divides multifamily residential categories into Medium Density and Duplex and allocates a total share of 3.6% for these uses.

#### Table 1.7 - Future Land Use, City of Lake Worth

Future Land Use	Acres	Percent of Total
Single Family	585.3	46.4%
Commercial	288.1	22.8%
Public/Semi-Public	125.2	9.9%
Industrial	93.1	7.4%
Open Space/Parks	69.8	5.5%
Residential	52.1	4.1%
Medium Density MF	42.3	3.4%
Duplex	2.75	0.2%
Mobile Homes	2.01	0.2%
Multi-Family	0.63	0.0%
Quadraplex	0.12	0.0%
Undeveloped	0.003	0.0%

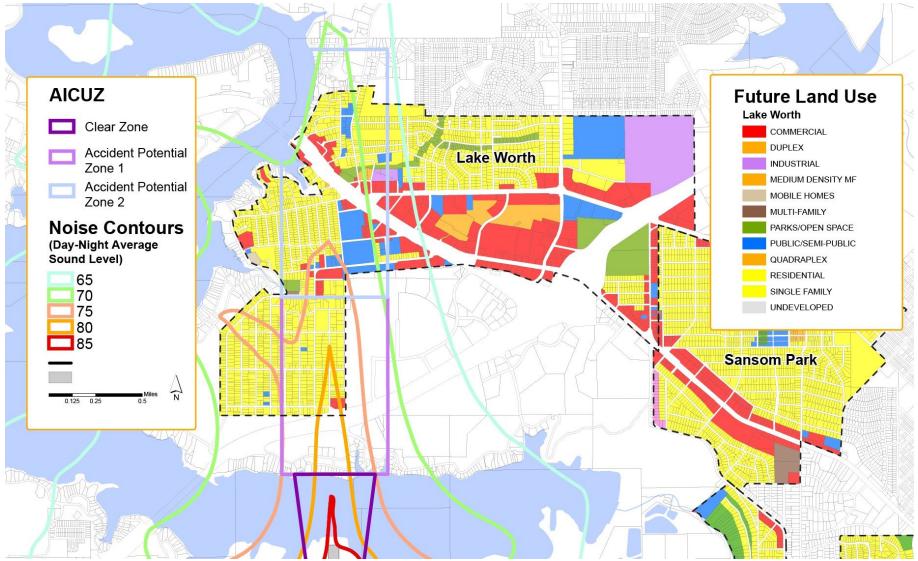
Source: Lake Worth Comprehensive Plan, 1995

Figure 1.10 - Lake Worth Future Land Use - Percent of Total Acreage



Source: Lake Worth Comprehensive Plan, 1995

#### Figure 1.11 – Lake Worth Future Land Use



Source: Lake Worth Comprehensive Plan, 1995 and 2008 Joint Land Use Study \*The future land use map was last updated in 1995 and may not accurately reflect existing land uses today.

#### 1.5.3 Zoning Analysis

The City of Lake Worth's zoning ordinance currently has nine separate districts, as shown below.

- One-Family District, or District "SF-1"
- Moderate Density District, or Districts "MD"
- Planned Multi-family District, or District "P-MF"
- Manufactured Housing District, or District "MH"
- Commercial District, or District "C"
- Planned Commercial District, or District "P-C"
- Industrial District, or District "I"
- Planned Industrial District, or District "PI"
- Mixed Planned Development District or District "M-PD"

Lake Worth's current 'Mixed Planned Development District' allows for the "creative development of the land" and accommodates a combination of various dwelling types and residential and nonresidential uses. This zoning district provides a flexible framework for developing mixed use projects within the city.

#### 1.5.4 Compatibility with NAS Fort Worth, JRB

Communities and military installations can face compatibility challenges when certain types of nearby development such as noise sensitive uses or activities that concentrate people reduce the safety and effectiveness of mission operations or when military activities produce higher than normal impacts such as noise or safety risks on surrounding areas. In 2008, regional partners, including NAS Fort Worth, JRB and the City of Lake Worth completed a Joint Land Use Study (JLUS) to address land use compatibility issues resulting from aviation operations.

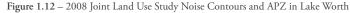
Two areas of potential incompatibility-noise contours, which delineate land exposed to high levels of aircraft noise and Accident Potential Zones, which indicate areas with a statistically higher risk of an aircraft accident due to runway proximity-extend north of the base over established residential neighborhoods in Lake Worth. The JLUS outlines a variety of tools to minimize conflicts between community and military uses. The Comprehensive Plan highlights several critical compatibility strategies related to communication, mitigation techniques to reduce specific impacts such as noise and the gradual transition of land toward less people-intensive, noise sensitive uses, including industrial activities.

### 1.5.4.1 Lake Worth Compatibility Ordinance Review *Sound Attenuation*

Residents surrounding NAS Fort Worth, JRB may experience noise impacts from military aircraft operations. Portions of the City of Lake Worth fall within the 65-69, 70-74, and 75 plus Day-Night Average Sound Level contours of the base, as well as Accident Potential Zones (APZ) I and II.

For existing development that falls within the noise contours and APZ, homeowners and business owners can modify their homes or businesses to make them insulate sound more efficiently. For new development that lies within the noise contours, builders should follow the most updated residential building codes and refer to the Code Comparison Matrix in the Ordinance Review Section of the Regional Vision Plan and **Appendix I** for additional sound attenuation methods.

**Figure 4.12** depicts the noise contours and APZs within the City of Lake Worth. The city should explore opportunities to preserve this vacant land as long-term open space or develop future uses that would be compatible with noise exposure such as light industrial or manufacturing activities.





#### Table 1.8 - Percentage of Land Falling within Joint Land Use Study Noise Contours

	Acreage	Percentage	Vacant Land (Acres)*	Percentage of Vacant Land
<65 DNL	835	53%	47	3%
65-69 DNL	148	9%	17	1%
70-74 DNL	411	26%	67	4%
>75 DNL	182	12%	18	1%
Totals	1,576		149	9%

In June 2013, the Lake Worth City Council adopted the 2012 International Codes, as well as the North Central Texas Council of Governments Regional Amendments. Adhering to the new building standards will ensure that new development has greater sound attenuation. Actions that all the local governments could take to increase sound attenuation and energy efficiency are located in Section 1.6. Priority efforts that the city of Lake Worth could undergo are listed in Table 1.9.

\*Does not include parks or infrastructure

Vacant Land Source: Tarrant County Appraisal District, 2012

#### Table 1.9 – Lake Worth Priority Recommendations to Increase Sound Attenuation

Recommendation	Time	Cost	Responsible Entity	Participants	Notes
Coordinate with the Community Plans and Liaison Officer at NAS Fort Worth, JRB on new development projects that are within the noise contours.	Short Term	Low	Developers	Cities NAS Fort Worth, JRB	
Encourage active code enforcement to ensure that new developments are adhering to the most recent building code standards.	Short Term	Medium	City	Building Community	
Provide resources to residential, commercial, and industrial developers and builders on residential energy efficiency.	Short-term	Low	City	Homeowners	
Consider incorporating sound attenuation elements from the code comparison matrix (found in Appendix I) for new residential units.	Mid Term	High	Development Community; Local Government Code Officials	Homeowners	
Update noise mitigation requirements when noise contours are updated.	Long Term	Medium	City	NAS Fort Worth, JRB	
Determine the feasibility of adopting a noise mitigation and/or safety overlay for areas that fall within the noise contours and/or APZ.	Long Term	High	City Council; Development Community		Case study: city of Fort Worth airport overlay zones

\*Generally, Short Term = 0 -2 years; Mid Term = 2-5 years; Long Term = 5+ years \*\*Costs are relative to other recommendations on the list JLUS: 2008 NAS Fort Worth, JRB Joint Land Use Study

#### Energy Efficiency

There are several efforts that residents and Lake Worth staff can undertake to increase the energy efficiency of residences and other buildings. Residents can utilize online resources to learn about proper insulation methods, renewable energy tax credits, and energy efficient appliances. Additionally, Tarrant County has an assistance program to help low-income homeowners weather-proof their homes, which would increase sound attenuation and make the residences more energy efficient. The South-Central Partnership for Energy Efficiency as a Resource provides information about how residential, commercial, and industrial uses in Texas can become more energy efficient. Several electricity providers also offer energy efficiency incentive programs. Lake Worth staff could develop a Community Energy Strategic Plan to set goals for reducing energy use and apply for Energy Efficiency and Conservation Block Grant funding through the U.S. Department of Energy. More information about these resources and funding opportunities are in **Appendix I**.

#### 1.5.5 | Lake Worth Vision Framework

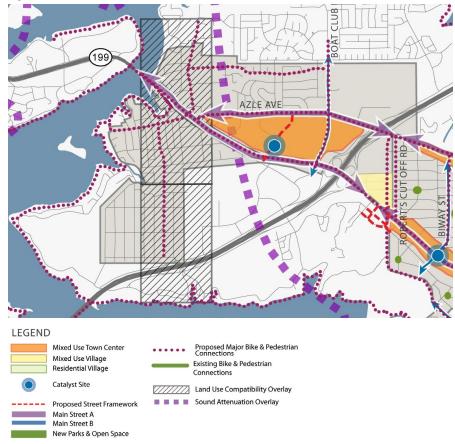
The vision framework as shown in **Figure 1.13** illustrates basic planning and design concepts to organize growth and inform future land use and public investment decisions in the City of Lake Worth. The graphic highlights conceptual areas, each with an overall character based on existing land uses, market potential, current development patterns, growth opportunities, and community priorities. It also shows key physical connections, including bicycle and pedestrian links and refinements to the street network, which can frame future development in the city and expand transportation choices. The character areas are described more fully in the next section.

The framework is not intended as a parcel-specific future land use or zoning map but as a flexible guide for development of more detailed zoning and land use maps as the city adopts new regulatory policies.

The framework features the catalyst redevelopment site highlighted in Section 1.4.4, as well as an additional growth opportunity along State Highway 199. The Town Center and Village character areas combine future retail and housing into more compact, walkable, pedestrian-scale environments. These activity areas are linked by corridors that emphasize buildings oriented to the street, an enhanced public realm, access management, and multiple mobility options. Other critical elements include the Sound Attenuation and Land Use Compatibility Overlays that call for special planning and communication strategies to minimize conflicts associated with noise and air safety from nearby base operations.

The overall intent of the vision is to establish a new central focal point for redevelopment and public and private investment in Lake Worth along State Highway 199 and transform the city's high visibility and high traffic volume corridor into a thriving, mixed use setting.

Figure 1.13 – Lake Worth Vision Framework



#### Vision Framework Character Area Descriptions

#### Mixed Use Town Center

- Accommodate mixed-use buildings with regional and neighborhood-serving retail & services
- Pedestrian-oriented, storefront-style shopping streets with shared parking and coordinated ingress/egress, with parking in back unless on-street parking
- Buildings oriented and built to the street
- Provide incentives to develop larger parcels at higher densities and in a coordinated, planned environment

#### Mixed Use Village

- Smaller and more compact in scale than Mixed Use Town Center
- Oriented around connected street network and intersections
- Accommodate mixed-use buildings with neighborhood-serving retail, office, service, and other uses
- Build upon the historic development patterns in existing village centers to create attractive and walkable places
- Encourage adaptive reuse of abandoned, vacant or underutilized buildings or parcels
- Maintain a consistently high level of design quality throughout the district
- Outline open space requirements and encourage civic uses

#### **Residential Village**

Predominantly residential, pedestrian-oriented development, including a range of housing styles and small scale neighborhood-serving retail

#### **Catalyst Sites**

Priority areas offering opportunity for economic redevelopment and reinvestment, selected based upon short- and long-term analysis of the regional market and redevelopment potential, existing infrastructure, land use, and growth opportunities Catalyst sites provide opportunities for targeted public and private reinvestment in critical areas throughout the PLMC study area

Main Street A - Street design elements and land use and urban design guidelines to promote livability, access/mobility, and safety

### Livability

- Mix of land uses, buildings oriented and built to the street
- Sidewalks and landscaping/Streetscaping

#### Access/mobility

- On street parking or rear and side parking
- Access points for structured/shared parking as much as possible
- Turn lanes where driveway consolidation/access management lanes have not been implemented

#### Safety

- Clearly marked crosswalks and traffic control markings
- Clearly marked and oriented bike facilities as appropriate

#### Livability

- Residential and lower density mixed uses
- Ample sidewalks and landscaping/Streetscaping to provide both leisure and utilitarian travel areas

#### Access/mobility

Driveways can access the street directly if necessary

### Safety

- Slower travel speeds
- Clearly marked and oriented bike facilities as appropriate

Land Use Compatibility Overlay - Local governments could adopt an overlay district to guide or restrict development falling in noise and safety zones of NAS Fort Worth, JRB to increase land use compatibility

- Areas falling within Accident Potential Zones 1 and 2 as determined by the 2004 Air Installation Compatible Use Study. These areas have the greatest potential for accidents near military air installations.
- Areas falling with 65 dB DNL noise contours or greater. These areas are exposed to high noise levels so new development should be limited or incorporate sound mitigation strategies.
- Land use policies and redevelopment activities should promote uses such as light industrial, small-scale commercial and open space that are compatible with military operations at NAS Fort Worth, JRB
- Consider implementing additional compatibility measures, such as sound attenuation guidelines for existing and future residential uses

#### 1.5.6 | Land Use Goals, Policies and Actions

Land use strategies in Lake Worth focus on addressing the challenges of limited housing choices; traffic, aesthetic issues, and the diminished sense of place created by conventional strip commercial development patterns; and land use conflicts associated with noise and air safety zones. The goals, policies and actions below seek to promote the Regional Vision principles of strengthening overall identity, revitalizing roadways and creating mixed use centers, refining the transportation network, and enhancing compatibility with NAS Fort Worth, JRB by directing growth and investment to core areas; promoting flexible, varied, and appealing living and shopping environments; increasing physical connectivity and travel options among destinations; and encouraging more compatible development patterns in proximity to aviation operations. The Implementation section of the Comprehensive Plan includes specific action steps to support recommendations.

### Goal 1.5: Complement and strengthen the visual identity and character of existing community cores

**Policy 1.5.1**: Focus public realm improvements to reinforce sense of place within city cores and identified town centers and villages

*Action 1.5.1.1*: Designate gateway features, such as signs, public art, or special landscaping, to accentuate entries into the city and its neighborhoods, particularly along Jacksboro Highway (SH 199)

Action 1.5.1.2: Use landscaping and decorative elements to draw visual interest into established commercial and residential areas, enhance aesthetics, and create a consistent look and feel

Action 1.5.1.3: Develop pedestrian facilities, particularly at key intersections, to provide for safe movement and encourage activity

**Policy 1.5.2:** Concentrate new institutional and civic uses, such as schools, library branches, recreation centers, and common gathering spaces within the city cores and identified town centers and village nodes

*Action 1.5.2.1*: Designate highly visible and centrally accessible sites, particularly at major intersections, to anchor future public uses and common spaces

Action 1.5.2.2: Integrate public uses with unifying visual elements, such as landscaping and signs, and physical links such as sidewalks or a walking trail that connects the site to adjoining residential and commercial areas

**Policy 1.5.3**: Use town centers, villages and corridors as a framework to organize redevelopment into high quality commercial and residential areas that complement the surrounding context

Action 1.5.3.1: Promote appropriate infill development of vacant lots and old commercial centers within developed areas

Action 1.5.3.2: Include projects in future Capital Improvement Programs that support the framework of town centers, villages and mixed use corridors

**Policy 1.4.4**: Improve the visual character along State Highway 199 and Azle Avenue to attract local investment and create a consistent, high quality corridor throughout the PLMC sub-region

*Action 1.4.4.1*: As major corridors redevelop, work with property owners and developers to incorporate context-sensitive design guidelines that enhance the built environment and complement surrounding areas

*Action 1.4.4.2*: Coordinate zoning and project initiatives with adjacent jurisdictions to achieve a coordinated approach to corridor redevelopment

Action 1.4.4.3: Coordinate with TXDOT and the NCTCOG to leverage public improvement investments that enhance the physical character as well as the transportation function and capacity of city roadways

Action 1.4.4.4: Improve the design, function, and appearance of major corridors by addressing traffic safety issues, drainage, excess parking, lighting, landscaping, outdoor storage, refuse containers, the amount and size of advertising, and related issues

Policy 1.4.5: Strengthen quality of life in existing residential areas

*Action 1.4.5.1*: Work with community organizations to create neighborhood plans that emphasize housing rehabilitation, improved aesthetics, including consistent signage and landscaping and the addition of amenities such as parks, gardens, and community centers

Goal 1.6: Promote complete neighborhoods and communities that integrate land uses, amenities, services, and transportation

Policy 1.6.1: Enhance the quality of residential subdivision design on a city-wide basis

Action 1.6.1.1: Strengthen the existing Subdivision Regulations for the city by incorporating street design and improvement requirements emphasizing street connections, pedestrian and bicycle facilities, small and walkable block sizes, and shared parking arrangements

Action 1.6.1.2: Require developers of future projects to provide outlined onsite improvements, such as water and sewer lines, sidewalks, curbs, public street connections, and street lighting according to establish design guidelines

**Policy 1.6.2**: Align future land use, zoning, and subdivision regulations to guide diverse housing options and walkable retail, office, and amenities to mixed use corridors, town centers and villages

*Action 1.6.2.1*: Update the Future Land Use map to reflect key elements of the Vision Framework including mixed use along Highway 199

Action 1.6.2.2: Conduct an in-depth review of existing zoning and subdivision ordinances to evaluate the ability of current regulations to implement the policies and goals set forth in the Comprehensive Plan Vision

Action 1.6.2.3: Strengthen mixed use zoning policy in the Mixed-Planned Development District to ensure that existing provisions can accommodate a range of residential, retail and office uses and promote open space and public realm amenities

*Action 1.6.2.4*: Explore the adoption of a mixed use zoning and design overlay for designated town centers, villages and Main Street "A" corridors that emphasize:

- Increase in the mix of uses permitted, including residential and office uses adjacent to compatible commercial and inclusion of a vertical mix of uses in appropriate areas with commercial or office uses on the ground floor and residential or office uses on upper floors of multi-story buildings
- Placement of buildings to create opportunities for plazas, courtyards, patios, or outdoor dining

- Incorporation of overall site amenities, such as courtyards, site furniture and seating, small recycled water fountains, walking path, special accent paving, and landscaping to create a sense of place
- Orientation of new buildings to the street front
- Minimal surface parking between the street and building front
- Design of parking areas so as not to dominate the street frontage and the screening of parking lots using buildings and landscaping when feasible
- On-street parking on both sides of the street with the potential for designated bike lanes
- Design of parking lots and driveways to avoid conflict with vehicular traffic in adjacent roadways
- Alignment of the setbacks of new buildings with existing structures to create a more continuous street front feel and replicate the rhythm of a traditional main street
- Incorporation of generous pedestrian amenities that include sidewalks, lighting, street furnishings, and bike storage facilities that are within a street furniture zone
- Street tree and parking lot landscaping
- Incorporation of pedestrian scale lighting, street furnishings, and bike storage facilities
- Regulation of sign types with emphasis on awning, wall, canopy, monument, and window signs
- Location of building entries so that they are easily identifiable with convenient public access
- Design of parking areas and structures to provide safe pedestrian access and circulation and clearly identifiable public access and visitor parking

- Design of site access and internal circulation through the parking lot that is safe, efficient, and convenient.
- Provision for a continuous circulation pattern though the site when feasible and connections to local streets
- Access to drive-through facilities by means of an adjacent alley, if practical
- Provision of shared access, inter-parcel connection and on-site service drives connecting adjacent properties to minimize the number of private property access cuts
- Trails to facilitate pedestrian and bicycle access between the site and nearby uses
- Design of individual buildings to relate visually to one another through similar architectural styles and materials, complementary roof forms, signs, and colors
- Use of appropriate exterior construction materials and architectural elements such as windows and doors, bulkheads, masonry piers, transoms, cornice lines, window hoods, awnings, canopies, and other similar details, along all facades facing public or private street rights-of-way
- Use of landscaping to define areas such as entrances to buildings and parking lots, provide transition between neighboring properties (buffering), and provide screening for outdoor storage, loading and equipment areas
- Screening of secondary structures such as trash enclosures, storage areas, and loading and service areas or placed at the rear of the site to limit visual impact and circulation conflicts
- Use of natural buffers or screening elements around the perimeter of the site to minimize noise, lighting, odor or other physical impacts on adjoining areas
- Incorporation of cut-off, shielded outdoor lighting fixtures to minimize light trespass onto nearby properties

*Action 1.6.2.5*: Explore the adoption of a mixed use zoning and design overlay for designated Main Street "B" corridors that emphasize on-street parking, a planting strip, minimum 5' sidewalk, and narrow building setbacks

Action 1.6.2.6: Update the Zoning Map to reflect the addition of mixed use categories

*Action 1.6.2.7*: Promote the transition of existing commercial areas along State Highway 199 and Azle Avenue into a cohesively designed and planned mixed use town center that combines neighborhood-serving retail, service, and other uses on the ground floor and residential units above the nonresidential space

*Action 1.6.2.8*: Promote residential development on available vacant lots within the city to balance and complement the existing commercial base

Policy 1.6.3: Continue to direct future growth toward identified town centers, villages, and mixed use corridors and encourage quality projects (See Figure 1.14)

*Action 1.6.3.1*: Prioritize the application of mixed use, human-scale, walkable main street design and planning concepts in designated catalyst redevelopment sites, particularly along State Highway 199 and Azle Avenue

Action 1.6.3.2: Continue to work with interested organizations, developers, and property owners to identify other areas appropriate for rezoning to mixed use within designated town centers and villages nodes

Figure 1.14 – State Highway 199 Mixed Use Redevelopment Concept



**Policy 1.6.4**: Use transportation and open space planning to connect the city's activity centers

Action 1.6.4.1: Link town cores and villages with major thoroughfares, public transportation, trails, sidewalks, and linear parks

Goal 1.7: Ensure that neighborhoods are designed with quality housing choices, amenities and services to maintain quality of life for existing residents and attract new residents

**Policy 1.7.1:** Encourage the development of a range of housing options to accommodate households of all ages and income levels

Action 1.7.1.1: Review existing land use, zoning, and subdivision regulations to identify barriers to the development of diverse housing options, including cottagestyle, small-lot developments, small-scale assisted living facilities and mixed use developments that emphasize services and on-site amenities (see Housing section)

**Policy 1.7.2:** Promote more compact, mixed use development as a means to improve land use efficiency, mobility, and sustainability

*Action 1.7.2.1*: Expand housing diversity and access to neighborhood-serving retail in identified mixed use centers and villages and along strategic corridors to support increased transit feasibility and to promote reduced automobile dependence, improved air quality, and healthier lifestyles through more physical activity

Policy 1.7.3: Promote neighborhood access to parks and recreational facilities

*Action 1.7.3.1*: Locate public neighborhood parks within easy access of residents (less than one-half mile)

Action 1.7.3.2: To the extent possible, locate elementary schools, parks, and neighborhood commercial uses within walking distance of major residential areas

Goal 1.8: Ensure the safety and quality of life of city residents and protect the mission of NAS Fort Worth, JRB through the adoption of land use compatibility strategies as identified in the 2008 Joint Land Use Study

**Policy 1.8.1**: Strengthen zoning and building code policies to minimize compatibility issues in areas affected by Joint Land Use Study noise contours for NAS Fort Worth, JRB

*Action 1.8.1.1*: Adopt a Land Use Compatibility Overlay to limit future incompatible land uses for properties falling within designated Accident Potential Zones

*Action 1.8.1.2*: Adopt a Noise Attenuation Overlay and encourage sound attenuation measures for future compatible developments falling within designated noise zones (see Housing element)

*Action 1.8.1.3*: As redevelopment opportunities emerge in Accident Potential Zone I and Accident Potential Zone II, promote compatible land uses such as light industrial, small-scale commercial and open space

**Policy 1.8.2:** Continue to coordinate land use and development decisions to promote safe, compatible growth across the PLMC sub-region

*Action 1.8.2.1*: Continue use of the Regional Coordination Committee Development Review Tool as a platform to facilitate the review of proposed development projects for compatibility issues related to noise and aviation safety

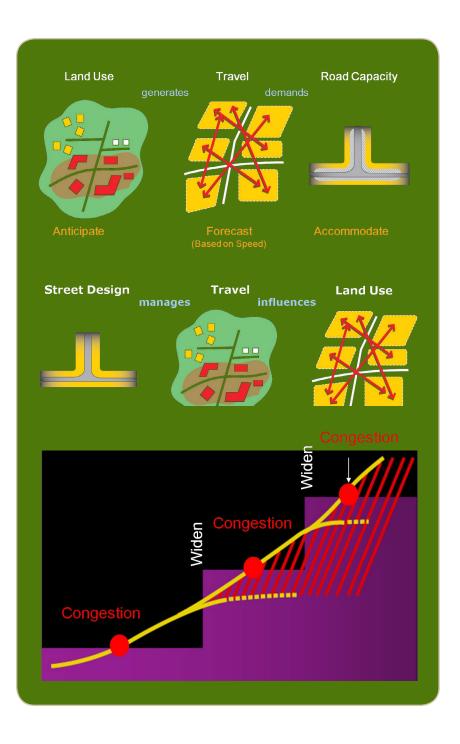
#### Section 1.6 | Transportation

Mobility has a significant impact on quality of life. It allows people to live where they want; to access jobs, education, and healthcare; and to connect with cultural and recreational activities. In addition to quality of life impacts, mobility also influences economic vitality and appeal. The ability to move goods easily from producers to consumers is a major factor in growing a local economy. The mobility needs of residents and businesses vary and what works for one area or group may not for another.

The conventional response to traffic congestion is roadway widening, such as converting a four-lane to a six-lane road. Roadway performance measures generally examine future growth patterns, forecast potential travel demand, and identify improvements to satisfy future needs. Transportation systems, in turn, significantly influence the quality of the built environment. A more sustainable transportation approach develops a street design that manages travel and shapes a land use pattern that is more balanced. Moving forward, a sustainable transportation system should:

- Manage mobility needs
- Move people and cars
- Improve the quality of travel and
- Create a framework for investment and development





According to the 2007 – 2011 American Community Survey, 88% of Lake Worth residents drove alone to work. Figure 1.15 shows that driving alone is the dominant mode of travel in Lake Worth, while carpooling is another significant mode used by Lake Worth residents to commute to and from work. Other modes of travel to work such as using a motorcycle, taxi, or other means; working from home; walking; and public transportation were minimally used.

Expanded transportation options can enhance overall livability in Lake Worth and support healthier lifestyles. Encouraging other modes of transportation such as bicycling, walking, and public transportation can reduce congestion, improve air quality, spur economic development, and meet the needs of residents who cannot drive or who do not have access to a car. Since transportation related expenditures account for 18% of the spending by the average U.S. household-as much as food and health care combined-additional mobility options can also increase affordability for families.

## 1.6.1 | Maintaining and Improving Roadway Infrastructure

Because the roadway system overwhelmingly serves large portions of the population and is vital to the movement of goods, it is important that this network be well developed and adequately maintained. Lake Worth adopted its Lake Worth Master Thoroughfare Plan in 2003. This plan summarizes the city's vision for major thoroughfares and major and minor collectors. Figure 1.16 illustrates the desired number of lanes and other key elements of major roadways and city streets according to the plan.

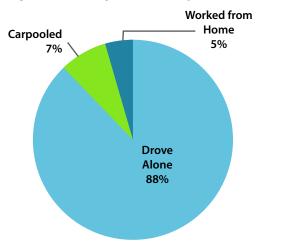
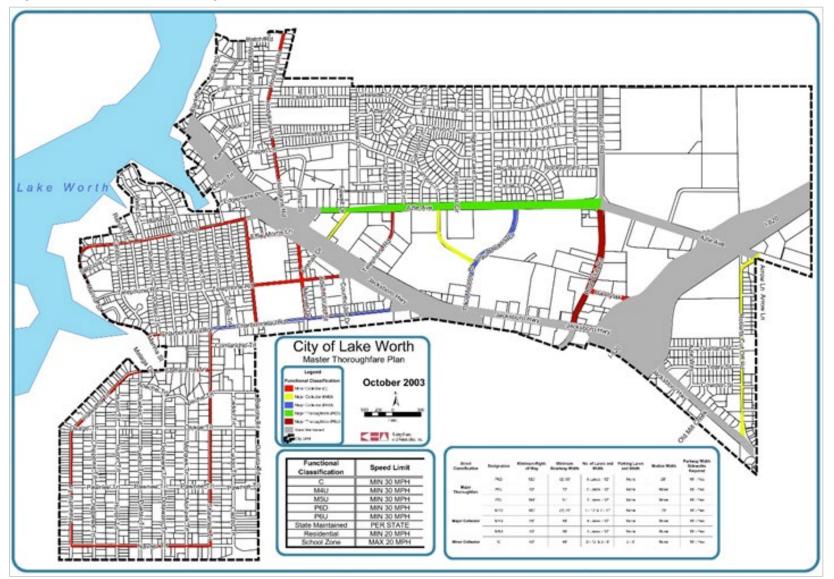


Figure 1.15 - Percentage of Mode of Transportation Used to Get to Work for Lake Worth

Source: 2007 – 2011 American Community Survey

Figure 1.16 – 2003 Lake Worth Master Thoroughfare Plan



SOURCE: City of Lake Worth, 2003

## Roadway Existing and Future Levels of Service

Level of Service (LOS) is one measure to evaluate roadway performance. LOS, as stated in the American Association of State Highway and Transportation Officials (AASHTO) 'Green Book', should be used as a guideline and not as a mandate for solely identifying infrastructure improvements. A comprehensive approach that examines the overall network, including non-motorized trips, should be considered. LOS is most effective when examining the conditions along freeways and interstates where high-rates of speed are appropriate and there is minimal pedestrian and bicycle activity is present.

LOS, expressed as a letter ranging from A to F, indicates how well a roadway is performing with respect to the number of vehicles using it, particularly during peak times. Roadways showing LOS A have relatively low volumes of traffic compared to their design capacity, allowing traffic to flow freely. Roadways at LOS E have volumes that are approaching their capacity, leading to crowded conditions and lower speeds. Roadways reaching LOS F have, in effect, more traffic than they can handle, leading to heavy congestion. Inputs to this measure include the average daily volume of the defined roadway segment, its average capacity (based on the functional class of the roadway and the type of land uses on either side), and the average number of travel lanes within the segment.

**Figures 1.17** and **1.18** illustrate the LOS during the peak period in 2012 and 2035 on selected corridors in Lake Worth. This analysis indicates that all roadway facilities in Lake Worth except Roberts Cut Off will experience worsening congestion between 2012 and 2035. The largest decline in service levels will occur on Interstate 820, Boat Club Road, and State Highway 199 west of North West Center Drive to Azle Avenue. It is worth noting that the actual peak in traffic volume may occur at different times on different roadways, or even different directions on the same roadway. For example, during the morning peak period, drivers driving southeast on State Highway 199 may experience heavy congestion while northwest-bound drivers experience lighter conditions. These figures offer a summary view of where congestion occurs during the course of the average weekday.

Worsening congestion will be due to future demographic growth in Lake Worth and surrounding areas, particularly areas Northwest and North of Lake Worth such as Azle and areas around Eagle Mountain Lake. The growth in population and future congestion levels is further demonstrated by using a district level analysis.







A LOS of A, B, or C represents a relatively uncongested facility. Vehicles can move freely with little interference.

# LOS DE

A LOS of D or E represents a relatively congested facility. Vehicles can move with some interference.

## LOS F

A LOS of F represents the worst level of congestion. Vehicles are unable to move freely without interference.



Figure 1.17 – Lake Worth Peak Hour Level of Service, 2012



Source: NCTCOG



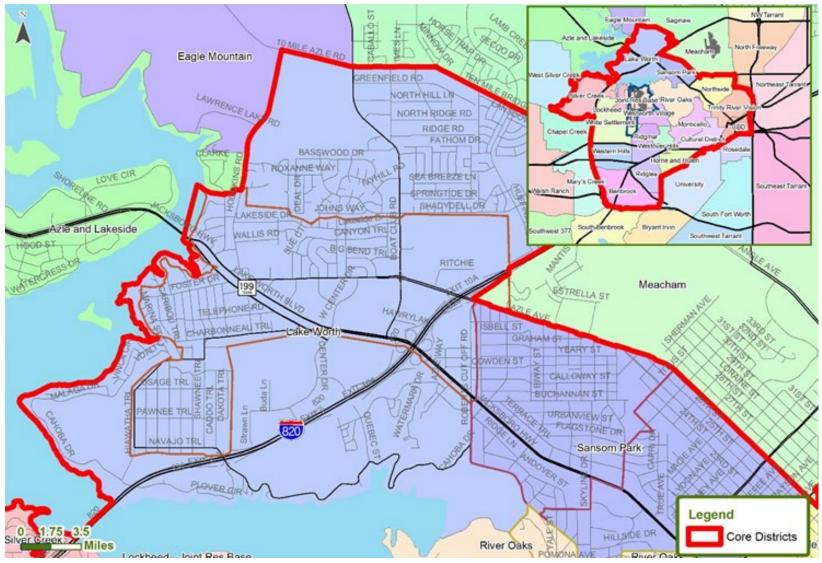
Figure 1.18 – Lake Worth Peak Hour Level of Service, 2035

Source: NCTCOG

# Local Travel

Considering traffic movements in smaller districts that roughly corresponded to city boundaries provides the opportunity to analyze changes in different roadway characteristics from 2012 to 2035. Figure 1.19 shows the location of the Lake Worth District in relation to the larger 16 districts making up the sub-region.

Figure 1.19 – Lake Worth Transportation Analysis Districts



Source: NCTCOG 42 | PLMC | Comprehensive Plan Vision

**Table 1.10** shows the growth from 2012 to 2035 in population, households, and employment in the Lake Worth District compared to the PLMC sub-region and DFW Region totals. In general, the Lake Worth District is expected to exceed the percent growth expected for the DFW region and Sub-Region for all three demographic categories.

The forecasted population, employment, and household growth will contribute to significant changes in the vehicle miles traveled and growth in congestion levels on all roadway facilities in the Lake Worth District and region-wide. Table 1.11 shows the percent change in lane miles and vehicle miles traveled for all roads (i.e. thoroughfares, freeways, ramps, and frontage roads), as well as the change in the percentage of lane-miles that represent LOS D, E, or F. The percent of lane miles that represent LOS D, E, or F indicates the spread of congestion rather than its intensity; meaning rather than demonstrating the increase in hours people are spending in congestion in each district, it shows how many more roads are suddenly congested.

**Table 1.11** demonstrates the Lake Worth District is forecasted to experience a 148% increase in percent of lane miles at LOS D, E, or F but only have 5% growth in lane miles. The lack of increased capacity (5% growth in lane miles) on all roadways in the Lake Worth District coupled with population and vehicle miles of traveled growth will result in a decline in the ability of the roadway system to meet demand in 2035.

Table 1.10 – Percent Change in Demographics for the Lake Worth Districts and Sub-Region and DFW Regional Totals from 2012 to 2035

	Population				Households			Employment		
District <sup>1</sup>	2012	2035	Growth	2012	2035	Growth	2012	2035	Growth	
Lake Worth	17,022	33,531	97%	6,218	12,025	93%	7,187	11,666	62%	
Sub-region Total	192,552	271,464	41%	70,339	97,351	38%	183,188	235,844	29%	
DFW Regional Total	6,699,977	9,902,543	48%	2,397,313	3,523,735	47%	4,222,781	6,198,013	47%	

<sup>1</sup>District boundaries do not exactly align with city boundaries.

Table 1.11 – Percent Change in Lane Miles and Vehicle Miles Traveled for All Roads for the Lake Worth District and Sub-Regional and DFW Regional Totals from 2012 to 2035

	Lane Miles <sup>2</sup>			V	Vehicle Miles Traveled			Percent of Lane Miles at LOS D, E, or F		
District <sup>1</sup>	2012	2035	Growth	2012	2035	Growth	2012	2035	Growth	
Lake Worth	104	109	5%	513,590	861,151	68%	18%	45%	148%	
Sub-region Total	876	916	5%	3,911,240	5,281,789	35%	21%	44%	108%	
DFW Regional Total	47,675	53,794	13%	181,274,462	287,336,463	59%	17%	33%	91%	

<sup>1</sup>District boundaries do not exactly align with city boundaries.

<sup>2</sup> Lane Miles are the number of lanes in each roadway segment, multiplied by the length of that segment, summed up within that district.

Table 1.12 shows the growth in lane miles, vehicle miles traveled, and growth in congestion delay on thoroughfares (Principal arterials, minor arterials, and collectors) for the Lake Worth District and Sub-region and DFW regional totals. Both Tables 1.11 and 1.12 demonstrate that the Lake Worth District will experience a triple-digit increase in the vehicle hours spent in congestion (Congestion Delay) and that congestion will increase more in the Lake Worth district (148% for all roads, 347% for arterial and collector streets) than the increase in the region as a whole (91% for all roads, 255% for arterial and collector streets alone). The key contributing factors to this increase in congestion delay is again the lack of increased capacity (7% growth in lane miles) on thoroughfares only in the Lake Worth District coupled with population and vehicle miles of traveled growth.

The forecasted increases in congestion delay, vehicle miles traveled, and greater percentages of roadways moving to LOS D, E, or F in 2035 in the Lake Worth District suggest future consideration for increasing lane miles and capacity may be warranted. This strategy, while important in providing an impetus to discuss roadway and intersection re-configurations, should be tempered with the overall vision for the area as a multi-modal mixed use community that retains its cultural character.

	Lane Miles <sup>2</sup>			٧	Vehicle Miles Traveled			Congestion Delay (hours)		
District <sup>1</sup>	2012	2035	Growth	2012	2035	Growth	2012	2035	Growth	
Lake Worth	56	60	7%	209,457	307,999	47%	828	3,700	347%	
Sub-region Total	620	638	3%	1,883,864	2,615,218	39%	5,634	15,865	182%	
DFW Regional Total	38,227	41,174	8%	83,800,836	135,844,459	62%	217,198	770,288	255%	

Table 1.12 – Percent Change in Lane Miles, Vehicle Miles Traveled, and Congestion Delay on Thoroughfares for the Lake Worth District and Sub-Region and DFW Regional Totals from 2012 to 2035

<sup>1</sup>District boundaries do not exactly align with city boundaries.

<sup>2</sup> Lane Miles are the number of lanes in each roadway segment, multiplied by the length of that segment, summed up within that district.

## Capacity and Lane Warrants

Based on LOS inputs and projected volumes, it is possible to estimate the number of lanes warranted in the future for specific segments of roadways. This information is helpful when considering possible expansion or redesign of a roadway. The target for this analysis was a LOS condition of D. Table 1.13 provides the detailed description of the major Lake Worth corridors. This table also provides the lanes and functional classification for these facilities as identified in the Lake Worth Master Thoroughfare Plan as a comparison.

In general, the lane warrant analysis demonstrates a need to increase lanes on most Lake Worth thoroughfares to maintain a LOS of D in 2035. The greatest increase in

lanes warranted occurs on State Highway 199 from just east of Interstate 820 to Boat Club Road. Based on the evaluation of local travel and lane warrants for thoroughfare facilities in Lake Worth, public input, and known transportation challenges, several roadway segments are recommended for future studies to evaluate improving mobility and safety and provide economic development opportunities. Lower-cost operational improvements and demand management strategies should be considered to improve traffic conditions prior to considering higher-cost roadway expansions and redesigns. For those roadways where expansions and redesigns are deemed necessary, future studies and roadway improvements should balance capacity demands with the community's vision for a walkable and multi-modal street network that contributes to the overall quality and character of the area.

Table 1.13 – City of Lake Worth Lane Warrants for 2012 and 2035

			2012		2035	C	City Thoroughfare Plan	3
Facility	From	То	LANES 1	LANES <sup>1</sup>	Lanes Warranted (LOS E/D) <sup>2</sup>	LANES 1	Functional Classification	Divided
AZLE AVE								
AZLE AVE	SH199 WB LAKE WORTH	BOAT CLUB RD	4	4	6/8	6	Major Thoro	Divided
AZLE AVE	BOAT CLUB RD	ROBERTS CUT OFF RD	4	4	4/6	N/A	N/A	N/A
BOAT CLUB RD								
BOAT CLUB RD	SHADYDELL RD	SH 199	4	4	6/8	6	Major Thoro	Undivided
JACKSBORO HWY (Highway 199)								
JACKSBORO HWY SH199	ROBERTS CUT OFF RD	E OF IH820	6	6	8/10	N/A	N/A	N/A
JACKSBORO HWY SH199	E OF IH820	BOAT CLUB RD	6	6	10/12	N/A	N/A	N/A
JACKSBORO HWY SH199	BOAT CLUB RD	NORTHWEST CENTRE	6	6	8	N/A	N/A	N/A
JACKSBORO HWY SH199	NORTHWEST CENTRE	AZLE AVE	6	6	6/8	N/A	N/A	N/A
ROBERTS CUT OFF ROAD								
ROBERTS CUT OFF RD	AZLE AVE	SH 199	2	2	2	4	Major Collector	Undivided

<sup>1</sup>LANES: The average number of lanes in each road segment, including lanes in both directions. Source: NCTCOG, 2013

<sup>2</sup>LANES WARRANTED: The number of lanes required to raise the Level of Service during the busiest hour to LOS E or D. Source: NCTCOG, 2013

<sup>3</sup>City of Lake Worth Master Thoroughfare Plan, 2003

## Roadway Recommended for Economic Development Emphasis

In addition to moving people, roadways can serve as a framework for catalytic economic development/re-development opportunities for communities. State Highway 199 through Lake Worth represents an opportunity to evaluate the addition of non-vehicular capacity, while also promoting economic development along the corridor. Assessing alternative mode choices such as public transportation and bicycle and pedestrian options while accommodating increased traffic in the future is encouraged in this corridor through coordination with TxDOT on a State Highway 199 Corridor Assessment Study.

# Roadways Recommended as Critical Mobility Linkages

In order to begin refining the city's street network, two roadways in Lake Worth provide critical mobility linkages and are recommended for future study consideration. Definition of these corridors is based on future traffic forecasts, the need to reduce future congestion, access to residential areas and other key interest points in the study area. Additionally, the identification of needed access management improvements, roadway design challenges, and public input are considered. Table 1.14 lists these corridors and identifies the key emphasis area identified through this planning process.

## Table 1.14 - Corridors Providing Critical Mobility Linkages for Future Study Consideration

Roadway	Roadway	Focus Area	Key Challenges	Potential Solutions
Azle Avenue (FM 1220)	Lake Worth	Sansom Park City Limit to Fort Worth City Limit	<ul> <li>Existing and future traffic congestion</li> <li>Parallel facility to SH 199</li> <li>Future development impact on traffic</li> <li>No sidewalks or bike paths</li> </ul>	<ul> <li>Context Sensitive Solutions</li> <li>Emphasize commercial center access</li> <li>Long-term evaluation of additional lane capacity</li> <li>Active transportation improvements</li> </ul>
Boat Club Road	Lake Worth	Shadydell Dr. to SH 199	<ul> <li>Existing and future traffic congestion</li> <li>Further reduction in peak hour Level of Service</li> <li>Safety concerns</li> <li>Signal synchronization</li> <li>No sidewalks or bike paths</li> </ul>	<ul> <li>Context Sensitive Solutions</li> <li>Signal re-timing (currently underway)</li> <li>Long-term evaluation of additional lane capacity</li> <li>Active transportation improvements</li> </ul>

## 1.6.2 | Roadway Infrastructure Goals, Policies and Actions

Roadway infrastructure strategies in Lake Worth focus on addressing the challenges of existing and future traffic congestion and access to commercial areas along major thoroughfares. Consistent with the overarching principles of refining the transportation network, expanding transportation choices and promoting cooperation among cities, the goals, policies, and actions below seek to reduce congestion levels along major thoroughfares; strengthen connections to major commercial districts; and, provide a framework for long-term coordination with partners to implement roadway improvement projects. The Implementation section of the Comprehensive Plan includes specific action steps to support recommendations.

### Goal 1.9: Reduce congestion and improve safety on major roadway thoroughfares

**Policy 1.9.1:** Improve traffic throughput, minimize delays, and reduce stops, and increase driver comfort and safety through operational efficiency strategies

Action 1.9.1.1: Coordinate with NCTCOG, major employers, commercial districts, and other agencies to encourage the use of travel demand management programs such as telecommuting, carpooling, employer trip reduction (ETR) programs and vanpooling. Increase the marketing and participation of major employers in Lake Worth in the ETR programs.

Action 1.9.1.2: Coordinate with TxDOT and NCTCOG to provide well-signed routes

*Action 1.9.1.3*: Coordinate with TxDOT and other jurisdictions to improve traffic signal synchronization by evaluating existing timing plans, installing new signals, and having repairs and maintenance performed promptly. Develop an interagency plan for signal timing to address future conditions.

Policy 1.9.2: Improve safety conditions on major thoroughfares

Action 1.9.2.1: Coordinate with NCTCOG and TxDOT to conduct analysis of the number of crashes related to the traffic volume to identify top safety needs

*Action 1.9.2.2*: Identify the contributing factors in order to determine an appropriate strategy for safety improvements such as engineering solutions, signing or lighting, traffic control, education, or design and identify funding sources to implement appropriate safety improvement strategies.

Goal 1.10: Develop a roadway network that provides adequate capacity to accommodate demand and sufficiently maintain the network.

**Policy 1.10.1**: Provide a well-connected network of thoroughfares to improve local travel and connectivity to major roadways.

*Action 1.10.1.1*: Review and update local thoroughfare plans as necessary and include considerations for future land uses, economic development needs, neighboring jurisdiction plans, alternative roadway design and operation strategies such as context sensitive design.

*Action 1.10.1.2*: Form a coalition between neighboring cities to assist and coordinate for common needs and mutual benefit along facilities that cross jurisdictional boundaries.

*Action 1.10.1.3*: Prioritize maintenance in local budget to ensure that local roadway facilities remain in optimal condition.

Action 1.10.1.4: Identify and prioritize improvements.

Action 1.10.1.5: Submit requests for planning assistance, such as thoroughfare plans, to NCTCOG through the biannual Unified Planning Work Program process.

*Action 1.10.1.6*: Submit formal requests for projects of regional significance to be considered during development of the Metropolitan Transportation Plan.

*Action 1.10.1.7*: Consider land use compatibility associated with NAS Fort Worth, JRB Accident Potential Zones and noise contours to ensure compatibility of future infrastructure improvements.

**Policy 1.10.2**: Coordinate with regional transportation partners to evaluate long-term transportation needs, define priorities, secure funding, and implement improvements

*Action 1.10.2.1*: Coordinate with NCTCOG, TxDOT, and neighboring jurisdictions to identify needed improvements and initiate formal corridor studies for regionally significant transportation facilities such as State Highway 199

*Action 1.10.2.2*: Coordinate with TxDOT (lead) on a State Highway 199 Corridor Assessment Study from Interstate 820/State Highway 199 Interchange to the City of Azle

Action 1.10.2.3: Coordinate with TxDOT and NCTCOG on corridors that provide critical mobility linkages and that are recommended for future study consideration. For those roadways that are local facilities, prioritize needs and work with regional partners to identify funding.

*Action 1.10.2.4*: Form a coalition with partner cities or agencies to build consensus, leverage resources, and develop projects that maximize benefits for the area instead of one entity

*Action 1.10.2.5*: Consider land use compatibility associated with NAS Fort Worth, JRB Accident Potential Zones and noise contours to ensure compatibility of future infrastructure improvements

**Policy 1.10.3**: Adopt Regional Transportation Council policies for which funding opportunities are often contingent

Action 1.10.3.1: Adopt the Regional Transportation Council Clean Fleet Vehicle Policy and Model Ordinance

# Goal 1.11: Enhance roadway design and support the provision of mobility options on local roadways

**Policy 1.11.1:** Consider and integrate alternative design and multi-modal features in future local thoroughfare planning

Action 1.11.1.1: Integrate Context Sensitive Design principles, including consideration for Green Streets principles, into future local roadway planning, design, construction, operations, and maintenance.

*Action 1.11.1.2*: Consider alternative roadway and intersection design features such as modern roundabouts, neighborhood traffic circles, traffic calming measures, or other features to improve safety, improve air quality, and enhance roadway attractiveness.

Action 1.11.1.3: Include bicycle and pedestrian modes in roadway corridor studies and support the funding and construction of bicycle and pedestrian elements of final corridor studies.

Action 1.11.1.4: Prioritize, fund, and implement sidewalks and other pedestrian facilities such as crosswalks, median islands, signage, and pedestrian signals as part of all new roadway construction or reconstruction projects, new developments, and redevelopments, and in high pedestrian traffic locations.

*Action 1.11.1.5*: Provide accessibility to bicyclists through preservation of bicycle and pedestrian access within appropriate roadway rights-of-way, as well as the development of innovative, safety-enhanced on-street bicycle facilities and enhancements as routine accommodations for all new roadway construction or reconstruction.

Action 1.11.1.6: Evaluate existing roadway right-of-ways for public transportation service options.

Action 1.11.1.7: Coordinate with transit providers to ensure accessibility through onstreet bicycle facilities and sidewalks.

## 1.6.3 | Public Transportation Options

Individuals that may need transportation options beyond a personal vehicle include populations such as elderly and those with disabilities, young adults, and zero-car households.

The City of Lake Worth's population is slightly over 4,500 people and is expected to grow by 43% between 2012 and 2035. The increasing population growth will bring additional needs for transportation options. Compared to Tarrant County as a whole, where approximately 13% of the population is over the age of 60, Lake Worth has a significant population of older adults. About 20% of the population is made up of people over the age of 60.

Lake Worth also has approximately 3,500 jobs including major retailers such as Wal-Mart and The Home Depot. By 2035, employment opportunities within Lake Worth are expected to grow by 55% as the city continues to bring in additional economic development. Accessing current employment opportunities may be difficult for those with limited transportation options and further job growth may increase the need for transportation options for employees and shoppers who cannot or choose not to drive.

For most residents and workers of all abilities and incomes in Lake Worth, there are limited transportation options currently available. Catholic Charities of Fort Worth's Medical Transportation service or the Non-Emergency Medical Transportation Program (MTP) through Medicaid may be used only by residents that meet eligibility criteria. Catholic Charities of Fort Worth Medical Transportation is a demand-response service that provides medical trips for individuals not eligible for other services or programs. Trips must begin and end in Tarrant County, and therefore service to/from Lake Worth is eligible so long as the trip does not go beyond Tarrant County's borders. Trip purposes are restricted to non-emergency medical and pharmacy trips. Medicaid beneficiaries, Children with Special Health Care Needs (CSHCN) and Transportation for Indigent Cancer Patients (TICP) in Lake Worth that are travelling to a qualified and covered service or to a pharmacy are eligible for transportation services. Service is provided through Logisticare, the Medicaid transportation broker for the region.

Lake Worth currently provides alternative transportation information for residents on its website which includes links and phone numbers to MITS, Nets, Easter Seals, and the Wheels Program. Table 1.15 provides a summary of the many different types of public transportation services available and parameters commonly associated with each type of service. When considering the needs of Lake Worth residents and the type of services that should be evaluated, service parameters such as frequency of service, type of trips serviced, costs, and potential funding options are critical to the decision-making and implementation process.

Lake Worth's growing population, proximity to the NAS Fort Worth, JRB, increasing employment opportunities and significant population of older adults indicate that there may be a need for public transit options. The following section outlines potential options for improving access to public transit and ultimately improving access to jobs, medical appointments and life's daily activities for Lake Worth residents.

# Table 1.15 – Public Transportation Service Types and Service Parameters

Service Type	Fixed-Route	Demand Response	Population Served	Frequency of Service	Type of Trips Included in Service	Relative Cost	Primary Funding Entity and Partners
Community Shuttle	Х	Х	Seniors, individuals with disabilities, or general public	Ranges from one round trip to dozens of trips/day on specified days	Shopping, medical services, other key interest points	Low	Could include many such as city, group of cities, social service agencies, private industry, etc.
Site Specific Shuttle	Links to existing transit centers or stops		Daily employees of large employers, institutions development, or retail centers	Shift change times, peak periods, or other frequency depending on the sponsor needs	Trips for employees of major employment centers	Low to Medium	Could include large employers, institutions, retail destinations, and city or other local, state, or federal funds.
ADA/Eligibility Based Dial-A-Ride		Х	Older adults, individuals with disabilities	Pre-scheduled day and time pick-up and drop-off	Specific trip types are served	High	City, partnership with existing provider (the T) or other communities
General Public Dial- A-Ride		Х	General Public	Pre-scheduled day and time pick-up and drop-off	Specific trip types are served	High	City, partnership with existing provider (the T) or other communities
Voucher Program/Far Reimbursement		Х	General public but could focus on specific groups with greater needs (i.e. seniors, low-income)	Can be personalized depending on private and non-profit options	Varies and defined by partners	Based on parameters and participation	City, Private and non-profit providers
Volunteer Driver Program/Driver Reimbursement Program		х	Generally provided for specific groups (i.e. seniors, individuals with disabilities, those with temporary needs)	Potential for same-day service	Varies and defined by partners	Low	City, Non-profit, Volunteers
Regional Rail	Х		General public	Daily and frequent	No Defined Trip Purpose	Very High	Federal, state, local, and existing transit authority partnerships
Light Rail	Х		General public	Daily and frequent	No Defined Trip Purpose	Very High	Federal, state, local, and existing transit authority partnerships
Streetcar	Х		General public	Daily and frequent	No Defined Trip Purpose	Very High	Federal, state, local, and existing transit authority partnerships
Local/Express Buses	х		General public	Daily and frequent	No Defined Trip Purpose	High	Federal, state, local, and existing transit authority partnerships

Source: NCTCOG

## **1.6.4** | Public Transportation Goals, Policies and Actions

Public transportation strategies in Lake Worth focus on addressing the challenges of a lack of transportation options available to residents; demographic shifts such as increases in the elderly populations; existing and future congestion; and needs of potentially transit-dependent individuals, such as low-income residents, older adults, individuals with disabilities, and residents without access to a vehicle. The goals, policies and actions below seek to promote the guiding principles of expanded mobility choices and strengthened regional cooperation by improving the availability of public transportation; increasing connections to community services, jobs, medical facilities, and other quality of life points of interest; and, providing a framework for long-term coordination with partners to implement public transportation projects. The Implementation section of the Comprehensive Plan includes specific action steps to support recommendations.

# Goal 1.12: Raise public awareness of existing public transportation options through outreach, marketing, and educational efforts

**Policy 1.12.1:** Increase education on services provided throughout the county to assist residents in making regional connections

Action 1.12.1.1: Target outreach to particular groups who are more likely to be transit-dependent, such as low-income residents, older adults, individuals with disabilities and residents who may not have access to a car. Distribute via city website, flyers in public buildings, and community newsletters.

*Action 1.12.1.2*: Institute a travel navigation service that provides comprehensive information about a variety of services that are available, a user's eligibility for select transportation programs, and a one-stop-shop that can assist in evaluating needs and match them to a service provider

Policy 1.12.2: Identify and prioritize existing transportation needs in Lake Worth

*Action 1.12.2.1*: Conduct interviews, public meetings, or other public involvement to identify specific information about who needs transportation, what locations need to be accessible, frequency of needed services, and level of mobility assistance needed

Action 1.12.2.2: Identify resources and community leadership available to fulfill those needs

# Goal 1.13: Improve public transportation options to meet the needs of special populations and support employee access to jobs

**Policy 1.13.1:** Evaluate opportunities to partner with sponsoring employers, institutions, or retail/commercial destinations, and surrounding jurisdictions and transportation partners to implement a Site Specific Shuttle Service

*Action 1.13.1.1*: Evaluate the need for a site specific shuttle to provide links to and from regional public transit services such as the T to large employers, commercial and retail developments, or institutions

Action 1.13.1.2: Work with employers, retail and commercial development management to establish a link to the T to enhance the attractiveness of the development

Action 1.13.1.3: Determine joint funding, marketing sponsors, and transit center or stations in close proximity to major employment destinations

Action 1.13.1.4: Explore partnerships and potential funding assistance from large employers, institutions, retail/commercial developments and Federal, state and local funds aimed at job access

**Policy 1.13.2**: Establish a lifeline service such as ADA/Eligibility Based Dial-A-Ride demand-response service for sensitive population groups that need higher level of services than a Community Shuttle

*Action 1.13.2.1*: Evaluate service needs and potential demand of older adults and individuals with disabilities and the costs to implement such a service

*Action 1.13.2.2*: Coordinate with existing providers and/or other jurisdictions to consider cost-sharing options because this service is expensive to operate, especially as a stand-alone service

# Goal 1.14: Improve public transportation options to meet the needs of the general population

**Policy 1.13.1**: Evaluate opportunities to partner with surrounding jurisdictions and public/private agencies to implement a Community Shuttle, General Dial-A-Ride service, Voucher Program, or Volunteer Driver Program

Action 1.13.1.1: Evaluate needs and potential demand for a Community Shuttle service, potential service design (fixed schedule and/or route or rider-requested), and frequency

*Action 1.13.1.2*: Evaluate financing of a Community Shuttle such as cost-sharing options with other jurisdictions, grant funding, private industry and social service agency contributions and sponsorships

Action 1.13.1.3: Conduct necessary planning of Community Shuttle routes and services and develop financial program to implement a community shuttle

Action 1.13.1.4: Evaluate the needs and potential demand for a General Public Dial-A-Ride Service

*Action 1.13.1.5*: Coordinate with existing providers and/or other jurisdictions to consider cost-sharing options because this service is expensive to operate, especially as a stand-alone service. Collaboration with other like size communities and an existing provider could assist in allaying some of the capital and operating costs and allow leveraging of greater federal, state, and local dollars.

*Action 1.13.1.6*: Evaluate demand for a Transportation Voucher/Fare Reimbursement Program that would help residents pay for transportation trips from private and non-profit providers at a pre-negotiated rate

Action 1.13.1.7: Consider a voucher program to support very low-income individuals that need transportation assistance

Action 1.13.1.8: Evaluate the demand or need for a Volunteer Driver/Driver Reimbursement Program to fill gaps in the transportation system

Action 1.13.1.9: Establish a strong network of volunteer drivers and an entity such as the city or nonprofit to manage the program

Action 1.13.1.10: Review opportunities to coordinate services already offered in the area by nonprofit organizations such as SeniorMovers, Social Transportation for Seniors, and Mid-Cities Care Corps

# Goal 1.14: Coordinate and leverage resources to provide effective and efficient transportation services and improve transportation options

**Policy 1.14.1:** Evaluate opportunities to cost-share with others with a stake in improving transportation service options

Action 1.14.1.1: Leverage a wide variety of resources to provide additional local transportation service options such as large employers, major retail/commercial developments, non-profits, health and human service agencies, other jurisdictions, chambers of commerce, and the county.

**Policy 1.14.2**: Coordinate with the existing transit authority, NCTCOG, and other partners to conduct further public transportation fixed-route service evaluations

Action 1.14.2.1: Prioritize public transportation needs and work with regional partners to identify funding and develop innovate partnerships to implement interim or permanent services

Action 1.14.2.2: Coordinate with The T and NCTCOG to continue modification and evaluation of potential fixed-route bus service routes identified in the PLMC Regional Comprehensive Plan

Action 1.14.2.3: Evaluate the provision of right-of-way for Bus Rapid Transit and a staged approach to long-term public transportation options in the Highway 199 Corridor Assessment Study

*Action 1.14.2.3*: Submit formal public transportation requests to NCTCOG for consideration during development of the Metropolitan Transportation Plan

**Policy 1.14.3:** Adopt Regional Transportation Council policies for which funding opportunities are often contingent

*Action 1.14.3.1*: Adopt the Regional Transportation Council Clean Fleet Vehicle Policy and Model Ordinance.

# 1.6.5 | Overview of Bicycle and Pedestrian Network

A well-connected network of bicycle and pedestrian facilities, such as sidewalks, bicycle and walking paths, and on-street bike lanes, benefits communities by encouraging active and healthy lifestyles, offering transportation alternatives for short trips, and decreasing overall vehicle traffic on local roadways. Additionally, pedestrian and bicycle links create appealing amenities that can attract new residents and visitors to the community, while the associated activity can help to support local businesses and spark economic growth.

# Lake Worth Plans and Existing Bicycle and Trail Network

Currently, no designated bicycle infrastructure exists within the City of Lake Worth. Additionally, the 1995 Comprehensive Plan for the City of Lake Worth does not address bicycling in the Transportation section.

The Parks, Recreation and Open Space section does identify a Y-shaped greenbelt. Since 1995, homes have been built along this greenbelt and it is no longer under consideration by the city as a potential greenspace.

The NCTCOG's Regional Veloweb does include a planned off-street trail along the shores of Lake Worth, in the City of Fort Worth. The Regional Veloweb is an extensive 12-county network of off-street shared use paths or trails designed for use by bicyclists, pedestrians, and other non-motorized forms of transportation. This trail, once constructed will offer a significant recreational opportunity for Lake Worth residents. The design process for the Lake Worth Trail Phase 1 is scheduled to conclude in August 2013 with a followup Phase 2 that will provide final construction plans. The 11.5 mile proposed trail will utilize roadway right-of-way and public land as close to the lake shoreline as possible and will not include the trail along State Highway 199 or the bridge.

# Existing Pedestrian Network

Currently in Lake Worth, short stretches of sidewalks have been inventoried along several roadways and a neighborhood park including: Boat Club Road, Paul Meador Drive (West Center Drive), Lakeside Drive, Boat Club Road, Sue Court, Canyon Trail, Keyhole Circle, Dakota Trail, Charbonneau Road, Firehall Drive, Merrett Drive, Adam Grubbs Street, and in a neighborhood park at Navajo Trail and Pueblo Trail. There are no additional sidewalk facilities planned in the 1995 Comprehensive Plan.

# Regional and Community Connectivity Priorities

Over 70 percent of attendees at the December 2012 City of Lake Worth Comprehensive Plan workshop indicated that expanding walking, bicycling and transit as well as strengthening intergovernmental coordination is important or very important as a strategy. Intergovernmental coordination is essential in creating seamless bicyclist and pedestrian systems that cross jurisdictional boundaries. Participants expressed a desire for improved lake access via trails, bicycle and pedestrian improvements along Highway 199 as part of a boulevard with roundabouts, and redevelopment of the commercial area between Azle Avenue and Highway 199 to a mixed use pedestrian friendly area. Feedback also reflected concern about safety and congestion along Highway 199, Azle Avenue, and Roberts Cut Off Road. Priority areas as identified in the map exercise also showed interest in a park space south of Charbonneau Road.

The 2010 City of Fort Worth: Bike Fort Worth - A Comprehensive Bicycle Transportation Plan (Bike Fort Worth) and the planned Regional Veloweb both show a proposed off-street trail surrounding Lake Worth, except for the lake area that is the northern boundary of NAS Fort Worth, Joint Reserve Base.

Three planned on-street bikeways are shown in the Bike Fort Worth map:

- An on-street signed bike route, providing northern access to the base via the proposed Lake Worth Trail Loop (Regional Veloweb), is proposed along Shadydell Drive and Johns Way in Fort Worth, entering Lake Worth along Highland Lake Drive, then following Canyon Trail/Northwest Center Drive returning to Fort Worth at NW Center Drive, and following Quebec Street/Cahoba Drive, with access to the planned Veloweb along Lake Worth lake.
- A second on-street signed bike route along Hodgkins Road/Foster Drive/Shawnee Trail/Comanche Trail to the Lake Worth Trail Loop (Regional Veloweb).
- On-street bike lanes along Azle Avenue heading north on Boat Club Dive through the City of Lake Worth are also shown.

# **Regional Bicycle and Pedestrian Recommendations**

The PLMC Regional bicycle and pedestrian recommendations also support local bicycle and pedestrian travel in Lake Worth. PLMC Regional Bicycle and Pedestrian recommendations in proximity to Lake Worth include:

- Connecting to the current efforts of the City of Fort Worth's Lake Worth Trail Route Study, which is evaluating trail alignment feasibility surrounding the lake
- Implement the Lake Worth Trail Loop bike route
- Bike lanes and sidewalks along State Highway 199, supporting envisioned mixeduse, pedestrian friendly redevelopment in the area between Azle Avenue and Highway 199

The PLMC Regional Bicycle and Pedestrian sections, in addition to **Appendix K**, provide additional information and maps illustrating the recommended regional bicycle facilities.

# Local Bicyclist and Pedestrian Network Recommendations

The recommended local bicycle and pedestrian network reflects community and public input and priorities and strengthens the regional bicycle and pedestrian system by providing local access – with a priority on access to schools, parks, work, retail, and civic destinations. The majority of the local bicycle recommendations align with existing planned routes in the BikeFW Plan and city comprehensive plans except for a few minor modifications for ensuring local and regional connectivity in the study area. Additional local facilities have been added, and some BikeFW bike routes are indicated in this planned network as bike lanes or trails due to city and stakeholder input.

The short- and mid-term recommended implementation projects, shown in Table 1.17 begin to address overall citywide connectivity and access from residential neighborhoods to school, work, parks, shopping, and other civic destinations. The remainder of the long-term recommended projects expands the local system and can be seen on the bicycle map (Figure 1.20) and pedestrian map (Figure 1.21) for Lake Worth, including Lake Worth's connectivity to adjacent jurisdictions.

Long term, sidewalks are recommended along both sides of all arterial and collector streets; however, in the short and mid-term, in order to gain connectivity over a larger area, and when implemented as a project separate from overall street reconstruction, installing sidewalks along only one side of most streets is acceptable. The recommended routes included in this plan include residential streets, together with the regional routes, that support safer access to schools, parks, and jobs.

There are several locally planned or proposed off-street trails serving both bicyclists and pedestrians within or adjacent to Lake Worth. Planned local off-street trails include:

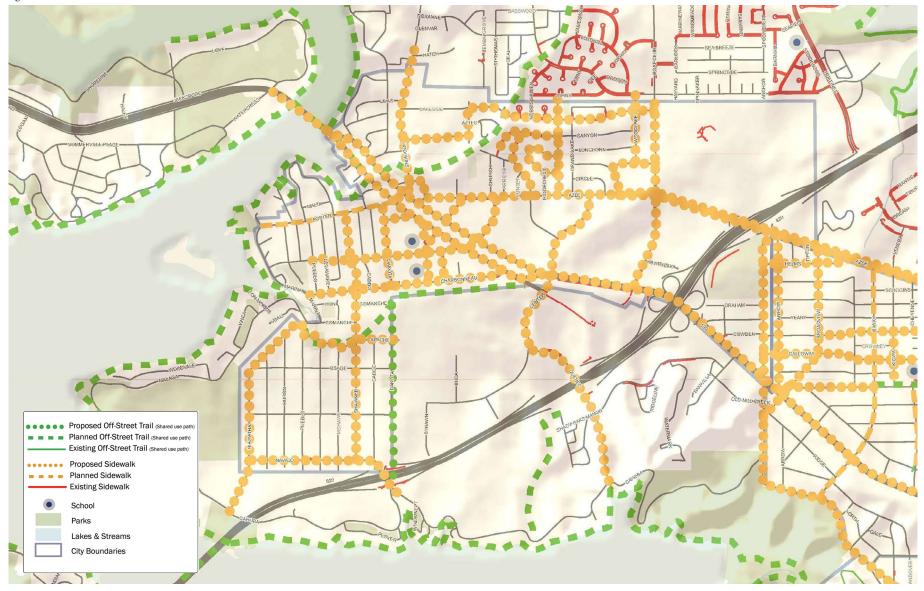
- A northeast trail extension from the Lake Worth Trail, across State Highway 199, and following a drainageway, to beyond the Lake Worth City Limit
- A proposed trail connecting to the Marina Drive Spur near the Lake Worth Multi-Purpose Center (Comanche Trail road terminus), traveling south along Dakota Trail and terminating at the Lake Worth Trail
- A spur extending from the Lake Worth Trail at Malaga Drive, extending eastward between Comanche Trail and Apache Trail, and continuing east along the Lake Worth city limit to Northwest Center Drive

## Figure 1.20 – Recommended Lake Worth Bicycle Network



\*Proposed routes are routes recommended as part of this comprehensive plan vision. Planned routes are those recommended in previous plans and studies.

Figure 1.21 – Recommended Lake Worth Pedestrian Network



\*Proposed routes are routes recommended as part of this comprehensive plan vision. Planned routes are those recommended in previous plans and studies.

# Local Bicycle and Pedestrian Project Implementation

Bicycle and pedestrian facilities in Lake Worth that provide key links between areas of interest can begin to be implemented through short-term (1-2 years) and midterm (2-5 years) projects as listed in Table 1.17. Table 1.16 provides estimated costs associated with different types of bicycle facilities. Prior to undertaking the long term on-street projects (those that are 5 years or more in the future) it is recommended that a citywide bicycle and pedestrian plan be completed. This document would update the network for bicyclists and for pedestrians, and include other important elements in establishing a bike and pedestrian friendly community. This plan would include the network facility updates and priorities and chapters on bicycle and pedestrian education, encouragement, engineering design, law enforcement, facility maintenance, and program evaluation.

#### Table 1.16 – Estimates of Probable Costs

Facility	Width	Unit*	Cost Per Linear Foot (LF)	Cost Estimate Source	Comments
On-Street Bike Lanes (curbed street)	5' minimum each side, 6' preferred where space available	LF (2 lanes, one each direction)	\$3.60	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Suitable for arterials, and some collector streets. Includes bike lane striping each side, pavement markings every 300', and signs every 500'
On-Street Bike Lanes (no curbs)	4' minimum each side, 5' preferred	LF (2 lanes, one each direction)	\$3.60	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Suitable for arterials, and some collector streets. Includes bike lane striping each side, pavement markings every 300', and signs every 500'
On-Street Signed (Bike) Route – route signage	NA	LF (both sides of street)	\$0.30	<u>Mobility 2035 - 2013 Update</u> Appendix E, pp. E.39-E.40. NCTCOG	Suitable for local / residential streets and some collectors with low speeds and traffic volumes. Signs every ¼ mile, plus at intersections where route turns or is intersected by another route (assume 2 intersections)
On-Street Signed (Bike) Route – Shared Lane Marking (pavement marking)	40″	LF	\$0.76	<u>Mobility 2035 - 2013 Update</u> Appendix E, pp. E.39-E.40. NCTCOG	Suitable for roadways with speed limit of 35 mph or less. Where on-street parallel parking may exist, place 11' from edge of curb face or edge of pavement; without parking 4' from curb or edge. Use immediately after an intersection, and at least every 250'. Assumes old paint does not need to be changed.
On-Street Signed (Bike) Route "Bikes May Use Full Lane" (R4-11) Signs	NA	EA	\$.045	<u>Mobility 2035 - 2013 Update</u> Appendix E, pp. E.39-E.40. NCTCOG	\$200 each, 4 per miles each side
Off-Street Trail (Shared Use Path)(Regional)	12'+4'	LF	\$151.52	<u>Mobility 2035 - 2013 Update</u> Appendix E, pp. E.39-E.40. NCTCOG	Includes 2' minimum shoulder each side of trail. Does not include engineering and other associated costs, contingency, or land costs

## Table 1.16 - Estimates of Probable Costs (continued)

Facility	Width	Unit*	Cost Per Linear Foot (LF)	Cost Estimate Source	Comments
Off-Street Trail (Shared Use Path) (Suburban/Local)	10'+4'	LF	\$144.00	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Includes 2' minimum shoulder each side of trail. Does not include engineering and other associated costs, contingency, or land costs
Sidepath	10′	LF	\$ 85.23	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Plus 2' minimum shoulder each side, 3' preferred; plus 5' setback required from curb or shoulder, barrier if less than 5' setback.
Sidewalk – 4″ deep	5'	LF	\$22.98	TxDOT Average Low Bid Unit price – construction only Fort Worth District (5/8/13)	Sidewalk construction cost only (4" deep, \$41.37/square yard)
Sidewalk -4" deep	6′	LF	\$27.58	TxDOT Average Low Bid Unit price – construction only Fort Worth District (5/8/13)	Sidewalk construction cost only (4" deep, \$41.37/square yard)
Sidewalk (Greenwalk) – 5″deep	8′	LF	\$44.44	TxDOT Average Low Bid Unit price – construction only Fort Worth District (5/8/13)	Sidewalk construction cost only (\$50.00/ square yard)
Sidewalk Ramp	4' excluding flared sides	EA	\$1500.00	TxDOT Average Low Bid Unit price – construction only Fort Worth District (5/8/13)	2 per corner recommended
Examples of Oth	er Costs (may be identified des	ign phase) include:			
Remove parking stripes, where needed	NA	LF - Cost depends on the number of lanes that need to be repainted.	\$.95-\$1.89	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Need for parking removal to be determined during design – costs not included in the Order of Magnitude Costs below. Removing parking requires extensive public outreach, prior to implementation
Lane Diet	NA	LF - Cost depends on the number of lanes that need to be repainted.	\$0.95-\$1.89	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Used to create space for bicycle facilities within existing road right-of-way. The 2010 Highway Capacity Manual includes safety data supporting 10' wide travel lanes as a standard option.
Road Diet	NA	LF - Cost depends on the number of lanes that need to be repainted.	\$0.95-\$1.89	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	Used to reduce the number of motorized travel lanes to create space for bicycle and/or pedestrian facilities.
Buffered Bike Lanes	2x5' lanes + 2x 2-6' buffer and bicycle pavement marking every 50-100'	LF - Cost depends on the number of lanes that need to be repainted.	\$3.60-\$5.87	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	For roads with high motor vehicle traffic volume and/or traffic speeds; on roadways with on-street parking that has a high turnover.
Cycle Track	2x 6-8' wide track with 2' buffer on the motor vehicle side.	LF	\$81.44	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	For roadways with high motor vehicle volumes and / or speeds. Separation from the motor vehicle lane is channelized (elevated or at-grade), a mountable curb, or bollards/markings.

## Table 1.16 - Estimates of Probable Costs (continued)

Facility	Width	Unit*	Cost Per Linear Foot (LF)	Cost Estimate Source	Comments
Paved Shoulders	2x 4' minimum, without a curb, 5' minimum with curb. Signage optional.	LF	\$1.52 striping only (\$2.27 striping and signage)	<u>Mobility 2035 - 2013 Update,</u> Appendix E, pp. E.39-E.40. NCTCOG	For rural roadways, or where adequate ROW for on-street facilities cannot be acquired.
Crosswalk (Ladder)	6' minimum	Leg	\$100 for transverse crosswalk. \$300 for ladder crosswalk	<u>http://safety.fhwa.dot.</u> gov/saferjourney/library/ countermeasures/04.htm	Determination for placement of a crosswalk should be determined by an engineering study. (Note: Cost estimate is dated 2004)
Pedestrian Signal Head	NA	EA	\$573.34	TxDOT Average Low Bid Unit price – construction only Fort Worth District (5/8/13)	LED Countdown pedestrian module with housing
Inverted U Bike Parking Rack	NA	EA	Under \$100.00 each	Many brands now available on line	Parking for 2 bikes; type of rack bicyclists prefer

\*LF = Linear Feet

EA = Each

# Table 1.17 – Lake Worth Local Bicycle and Pedestrian Project Implementation Matrix

Project #	Street	From	То	Type of Facility/ Treatment	Comments and Potential Improvements	Timeframe
1	Charbonneau Road	Marina Drive	Existing sidewalk south of Lake Worth Bd (SH 199)	Sidewalk along north side of street	Creates pedestrian connectivity to schools, library, City Hall, Malaga Park, and other civic destinations	Short Term
2	Charbonneau Road	Shawnee Trail	Lake Worth Bd (SH 199)	On-street signed (bike) route	Creates bicyclist connectivity to schools, library, City Hall and other civic destinations	Short Term
3	Shawnee Trail	Foster Drive	Navaho Trail	Sidewalk (either side of road)	Creates pedestrian connectivity to civic center and schools from neighborhoods	Short Term
4	Shawnee Trail	Foster Drive	Navaho Trail	Bike Lanes	Creates bicyclist connectivity to civic center and schools from neighborhoods	Short Term
5	Adam Grubb Street	Telephone Road	Charbonneau Road	Sidewalk on west side of road	Creates pedestrian access to civic destinations	Short Term

# Table 1.17 – Lake Worth Local Bicycle and Pedestrian Project Implementation Matrix (continued)

Project #	Street	From	То	Type of Facility/ Treatment	Comments and Potential Improvements	Timeframe
6	(Fort Worth Planned) Trail	Northern city limit	Fort Worth's planned Lake Worth Trail	Shared use path (multi-use trail)	Creates bicycle and pedestrian access from northwest quadrant of city to the planned Lake Worth Trail, currently in design. City needs to coordinate/ partner with City of Fort Worth	Mid Term
7	Foster Drive/ Hodgkins Road, including median crossing of SH 199	Lake Worth northern city limit	Marina Drive	Sidewalk (either side of road)	Creates recreational and residential access across SH 199 to Lake Worth, park south of Chapel Drive and Fort Worth planned trail within Lake Worth	Mid-Term
8	Foster Drive/ Hodgkins Road	Lake Worth northern city limit	Marina Drive	On-street Signed (Bike) Route		Mid-Term
9	Telephone Rd (north side)	North side of SH 199, including median crossing	Pueblo Trail	Sidewalk (north side)	Creates civic, educational, residential and recreational access	Mid-Term
10	Telephone Road	Shawnee Trail	Merrett Drive	On-street Signed (Bike) Route		Mid-Term
11	Lakeside Drive/ Lakeview Drive/ Wallis Road	Boat Club Road	Hodgkins Road	Sidewalk (either side)- some exists	Creates east-west connectivity to bike and pedestrian network from north central area of city	Mid-Term
12	Lakeside Drive/ Lakeview Drive/ Wallis Road	Boat Club Road	Hodgkins Road	On-street signed (bike) route		Mid-Term

## **1.6.6** | Bicycle and Pedestrian Network Goals, Policies and Actions

The goals, policies and actions below seek to promote the guiding principle of expanded mobility choices by enhancing pedestrian and bicycle access and overall physical connectivity throughout the community.

Goal 1.15: Connect to the region and sub-region's planned bicycle and pedestrian network

**Policy 1.15.1:** Implement high priority, regional and sub-regional links to establish the basis for an integrated set of bicycle and pedestrian links

Action 1.15.1.1: Add bike facilities that connect to the current efforts of the City of Fort Worth's Lake Worth Trail Route Study (part of the Regional Veloweb), which is evaluating trail alignment feasibility surrounding the lake, except for the southeast area occupied by NAS Forth Worth, JRB

*Action 1.15.1.2*: Implement the bike route called out in the Bike Fort Worth plan providing northern access to the base via the proposed Lake Worth Trail Loop (Regional Veloweb), traveling along Shadydell Drive and Johns Way in Fort Worth, entering Lake Worth along Highland Lake Drive, then following Canyon Trail/Azel Avenue/Northwest Center Drive before returning to Fort Worth at NW Center Drive, and following Quebec Street/Cahoba Drive, with access to the planned Veloweb along Lake Worth

Action 1.15.1.3: Implement bike lanes and sidewalks along State Highway 199 to support envisioned mixed use, pedestrian friendly redevelopment in the area between Azle Avenue and State Highway 199

# Goal 1.16: Build on the regional bicycle and pedestrian network by enhancing local connectivity

**Policy 1.16.1**: Strengthen overall citywide connectivity by adding links that improve access from residential neighborhoods to school, work, parks, shopping, and other civic destinations

Action 1.16.1.1: Implement short- and mid-term bicycle and pedestrian projects (see Implementation section)

*Action 1.16.1.2*: Prioritize sidewalk installation for residential streets and PLMC sub-regional routes that provide access to schools, parks, and employment areas

*Action 1.16.1.3*: Prioritize the addition of bicycle and pedestrian facilities within and around proposed redevelopment sites, particularly those for areas with a mixed use focus

**Policy 1.16.2**: Continue to build on citywide connectivity by emphasizing links that increase connectivity to adjacent jurisdictions and fill in local gaps the bicycle and pedestrian network

Action 1.16.2.1: Implement long-term bicycle and pedestrian projects (see Implementation section)

Action 1.16.2.2: Install sidewalks on both sides of all arterial and collector streets

Action 1.16.2.3: Prior to undertaking long term on-street projects, develop a bicycle and pedestrian plan that includes an update of network facilities, confirms priorities for enhancements and features chapters on bicycle and pedestrian education, encouragement, engineering design, law enforcement, facility maintenance, and program evaluation

Appendix K – Regional Bicycle and Pedestrian Facilities contains an overview of bicycle and pedestrian facility design guidelines and possible funding sources.

## Section 1.7 | Housing

The City of Lake Worth strives to maintain desired levels of service for housing, providing a safe, healthy, affordable, and sustainable environment in which to live. The housing element of the Comprehensive Plan seeks to evaluate the status of Lake Worth's housing base and provide strategies to ensure equitable, affordable, and sustainable housing options in the community.

### 1.7.1 | Existing Conditions and Trends

### **Residential Value Analysis**

The Tarrant Appraisal District keeps record of land and improvement values for each parcel in the county. Land values describe how much a site is worth, while improvement values represent the worth of any buildings or structures on the piece of land. Comparing land and improvement values of residential sites can help reveal potential sites for redevelopment or infill, as well as areas to maintain as a residential strength. For this study, a residential SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was conducted to compare the value of residential sites in the City of Lake Worth. This is an empirical analysis based on parcel data and does not consider intrinsic or community value that a site could possess.

The SWOT analysis compares the land and improvement values per acre for each residential parcel to the average land and improvements values per acre for all of the residential parcels in Lake Worth. In the City of Lake Worth, the average land value for all residential parcels is \$56,440 per acre and the average improvement value for all residential parcels is \$262,184 per acre. To determine the final SWOT designation for each parcel, the following classifications are used:

Strength: higher than average land and improvement values

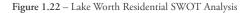
Weakness: lower than average land value and higher than average improvement value

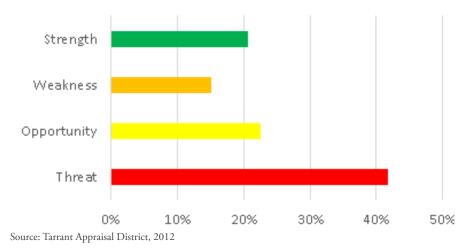
**Opportunity**: higher than average land value and lower than average improvement value

Threat: lower than average land and improvement values

Figure 1.22 shows the percentage of strengths, weaknesses, opportunities, and threats

in the City of Lake Worth based on 2012 Tarrant Appraisal District data. The relatively high percentage of threats could be attributed to decreased improvement values because of the age of residential structures.





## Number of Housing Units

According to 2010 Census estimates, the total number of housing units in Lake Worth was 1,742 in 2010, a slight decrease since 2000. Of all housing units in 2010, 95.5 percent were categorized as single-family detached housing units, 1.3 percent as single-family attached units, 2.0 percent contained two to four units, 0.7 percent were multifamily, and 0.6 percent mobile home or other. The share of single-family housing in the city increased by 2.1% between 2000 and 2010, while the share of multifamily housing decreased by 0.4%.

#### Table 1.18 - Housing Type for Lake Worth, 2000-2010

Units in	20	000	20	)10	2000-20	10 Change
Structure	#	%	#	%	#	%
Single-Family detached	1,627	93.0%	1,663	95.5%	36	2.2%
Single-Family attached	29	1.7%	22	1.3%	-7	-24.1%
2-4 units	47	2.7%	34	2.0%	-13	-27.7%
Multifamily	10	0.6%	12	0.7%	2	20.0%
Mobile home or Other	37	2.1%	11	0.6%	-26	-70.3%
Total	1,750	100.0%	1,742	100.0%	-8	-0.5%

U.S. Census Bureau, 2006-2010 American Community Survey, Census 2000

### Homeownership and Vacancy History

Of the total number of housing units in 2010, 69.4% were owner-occupied, 23.2% were renter-occupied, and the remaining 7.4% were vacant.<sup>1</sup> Table 1.19 outlines housing tenure in Lake Worth for the years 2000 and 2010. The percentage of owner-occupied units in the city decreased by 6.7% between 2000 and 2010. Approximately 28% of single-family housing in the city was renter-occupied in 2010. With development of multifamily housing options, some of these housing units can be made available for homeownership opportunities. Figure 1.23 shows the occupancy rates in the city by census block group between 2006 and 2010. Figures 1.24 and 1.25 illustrate the share of owner- occupied and rental housing in the city by census block group. The city had 132 vacant units in 2010. Vacancy rates in the city increased by 2.2% during the tenyear period.

#### 12006-2010 ACS

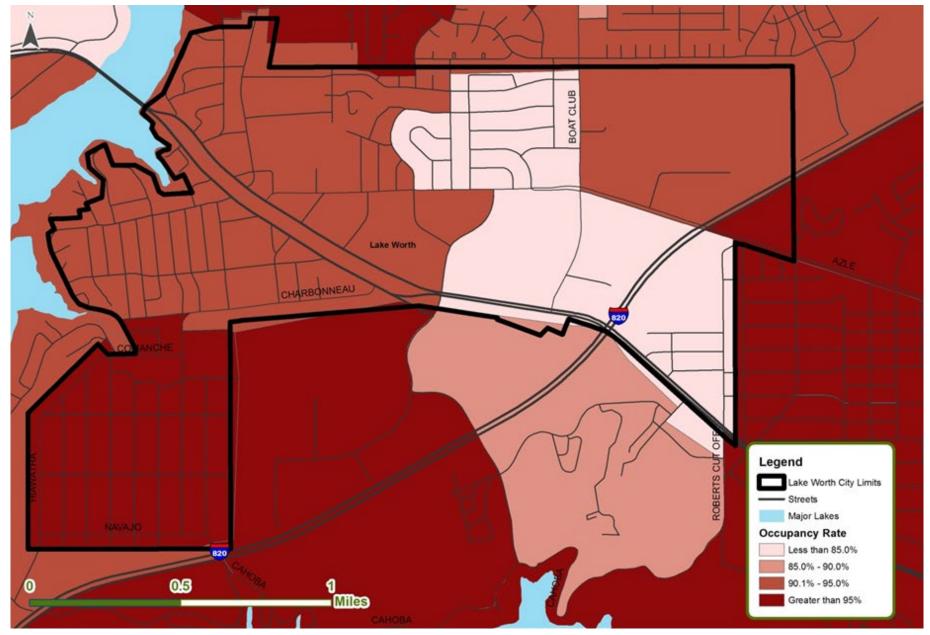
#### Table 1.19 - Tenure for Housing in Lake Worth, 2010

Tenure	2000		2010		2000-2010 Change	
Tenure	#	%	#	%	#	%
Owner-occupied	1,333	76.1%	1,245	69.4%	-88	-6.6%
Renter-occupied	327	18.7%	417	23.2%	90	27.5%
Total occupied (Owner + Renter)	1,660	94.8%	1,662	92.6%	2	0.1%
Vacant	91	5.2%	132	7.4%	41	45.1%
Total housing units	1,751	100.0%	1,794	100.0%	43	2.5%

Source: U.S. Census Bureau, 2010 Census, Census 2000

In recent years, foreclosure rates in Tarrant County remained much lower than communities across the United States. State-wide, one in every 1,213 housing units foreclosed, compared to 1 in 202 units in California and 1 in 336 units in Florida. According to the foreclosure data provided by RealtyTrac, the Tarrant County foreclosure rate was 1 in every 782 and the average sales price of foreclosed home in Tarrant County was \$82,193 in 2012. Many of these homes could be affordable for low- and moderate-income households, especially with down payment and closing cost assistance.

# Figure 1.23 – Occupancy Rate, 2010



Source: Census Bureau, 2006-2010 American Community Survey

# **Housing Conditions**

Without adequate maintenance, housing stock deteriorates over time. Typically, housing condition correlates with the age of the structure. Most structures begin to need significant repairs 30 years after construction. As shown in **Table 1.20**, 73.3% of the city's housing was built prior to 1970, and based on national standards these units may contain lead-based paint and are likely to be in need of repairs. Approximately 56% of units were built prior to 1960 and may be in need of major maintenance and repairs. **Figure 1.26** illustrates the percentage of pre-1960 housing in the city by census block group.

Table 1.20 - Age of Housing Stock in Lake Worth, 2010

Year Structure Built	# of Units	% of Units
1939 or earlier	104	6.0%
1940-1949	393	22.6%
1950-1959	472	27.1%
1960-1969	307	17.6%
1970-1979	53	3.0%
1980-1989	225	12.9%
1990-1999	15	0.9%
2000-2004	63	3.6%
2005 or later	110	6.3%
Total	1,742	100.0%

Source: U.S. Census Bureau, 2006-2010 American Community Survey

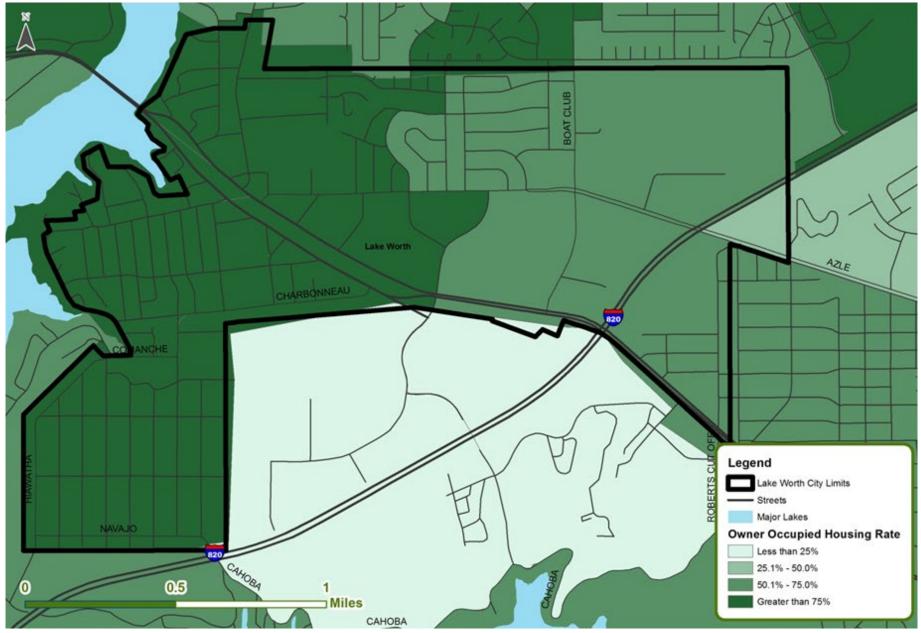
Though relatively constant over the last three years, housing values in the PLMC study area lag behind the state and county, as shown in Table 1.21. Owner-occupied median value is above \$100,000 for Texas and Tarrant County. Lake Worth's median owner-occupied home value was approximately \$83,900 in 2010 and the average single family market value for 2010 was just over \$70,000.

Table 1.21 – Median Owner-Occupied Home Value – State, PLMC Sub-Region, Tarrant County and City of Lake Worth, 2010

Median Owner-Occupied Home Value	2010
Texas	\$128,000
Tarrant County	\$137,100
Benbrook	\$132,900
Fort Worth	\$124,400
Lake Worth	\$83,900
River Oaks	\$82,000
Sansom Park	\$64,600
Westworth Village	\$78,100
White Settlement	\$77,100

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Figure 1.24 – Percentage of Owner-Occupied Housing, 2010



Source: Census Bureau, 2006-2010 American Community Survey

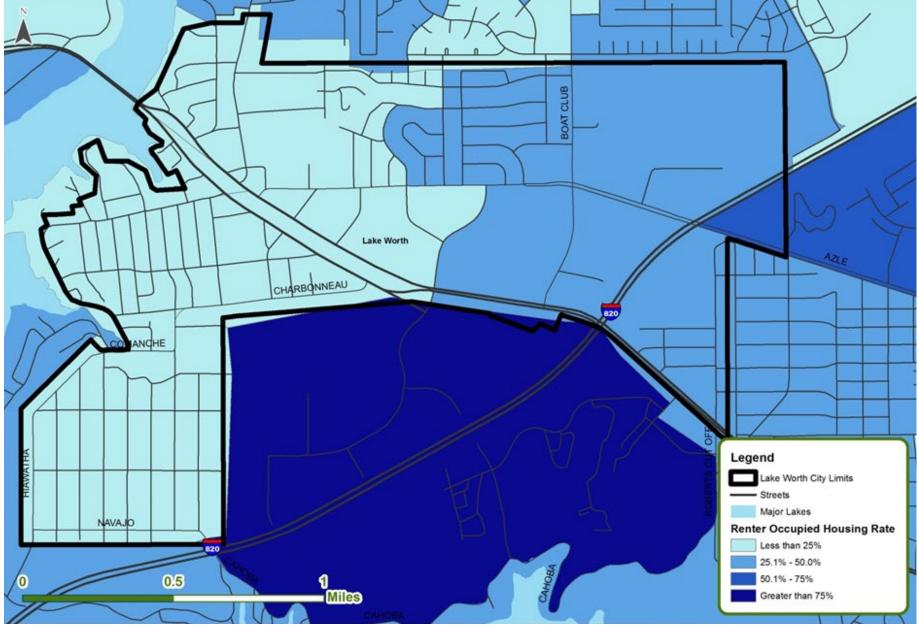
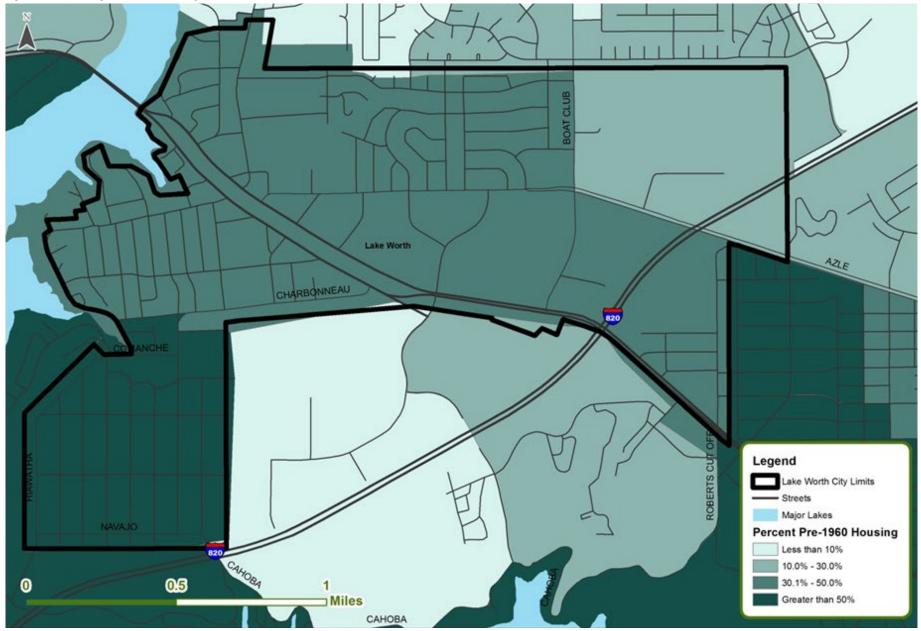


Figure 1.25 – Percentage of Renter-Occupied Housing, 2010

Source: Census Bureau, 2006-2010 American Community Survey

Figure 1.26 – Percentage of Pre-1960 Housing Units



Source: Census Bureau, 2006-2010 American Community Survey

## **Quality Affordable Housing**

The Comprehensive Housing Affordability Strategy Data (2000) provided by HUD, shown in **Table 1.22**, outlines the percentage of housing problems such as incomplete kitchen and plumbing facilities or overcrowding (more than 1 person per room as defined by HUD) by income group. Overall, 21% of housing units in the city had housing problems. Approximately 70% of Very Low Income households, 51% of Low Income households, 18% of Moderate Income households lived in housing units with housing problems in 2000. **Table 1.22** outlines housing problems in the city by income group and tenure. Housing problems among renter households in Very Low, Low, and Moderate Income households were higher than owner households, which indicate the need for quality rental housing among low to moderate income households in the city.

#### Table 1.22 - Housing Problems in Lake Worth, 2000

Household by Type, Income, &	Total	Total	Total
Housing Problem	Renters	Owners	Households
Household Income <= 50% MFI	69	270	339
Household Income <=30% MFI (Very Low)	36	143	179
% with any housing problems	88.9	65	69.8
Household Income >30 to <=50% MFI (Low)	33	127	160
% with any housing problems	87.9	41.7	51.2
Household Income >50 to <=80% MFI (Moderate)	72	302	374
% with any housing problems	25	15.9	17.6
Household Income >80% MFI	172	705	877
% with any housing problems	2.3	7.2	6.3
Total Households	313	1,277	1,590
% with any housing problems	26.5	19.2	20.6

Housing problems: overcrowding (1.01 or more persons per room) and/or without complete kitchen or plumbing facilities.

Source: HUD- Comprehensive Housing Affordability Strategy Data, 2000

<sup>2</sup> 2006-2010 ACS
 <sup>3</sup> MetroTex Association of Realtors

## Housing Sales and Homeownership Costs

The median housing value in Lake Worth was \$83,900 in 2010.<sup>2</sup> The average sale price of a single-family house in the city was \$43,076 and the median sales price of a single-family house was \$70,500 in 2011.<sup>3</sup> Housing demand, as measured by existing home sales, is illustrated in **Table 1.23**. Between 2007 and 2011, 276 single-family units were sold in the city, and the number of home sales dropped from 2007 to 2010 and started to rise in 2011. As shown in **Table 1.23**, the average housing sale price and the median sales price increased in the city for the same period. On average, single family homes sat on the market unsold for 97 days in 2011, up from 56 in 2007.

Table 1.23 – Housing Sales in Lake Worth

Lake Worth City, Texas Single Family	2007	2008	2009	2010	2011
Number sales	79	61	58	30	48
Average sales price	\$85,205	\$89,439	\$60,736	\$60,656	\$43,076
Median sales price	\$86,000	\$78,500	\$45,500	\$56,750	\$70,500
Average number of days on the market	56	72	66	81	97

Source: MetroTex Association of Realtors

**Table 1.24** shows the number of units in the city by housing value. The most frequent housing value range in the city was \$70,000 to \$99,999, with approximately 43% of the units in this range. Approximately 35% of housing units were valued below \$70,000 and approximately 32% were valued at \$100,000 or more. As a reference, the Median Household Income in the city was \$43,901 between 2006 and 2010. Figure 4.27 illustrates median household income and Figure 1.28 illustrates median housing value in the city by census block group.

### Table 1.24 - Value of Owner-Occupied Units in Lake Worth, 2010

Housing Value	# of Units	% of Units
Less than \$50,000	171	14.0%
\$50,000 to \$69,999	257	21.1%
\$70,000 to \$99,999	400	32.8%
\$100,000 to \$149,999	230	18.9%
\$150,000 to \$199,999	97	8.0%
\$200,000 to \$299,999	65	5.3%
\$300,000 or more	0	0.0%
Total Units	1,220	100.0%

Source: U.S. Census Bureau, 2006-2010 American Community Survey

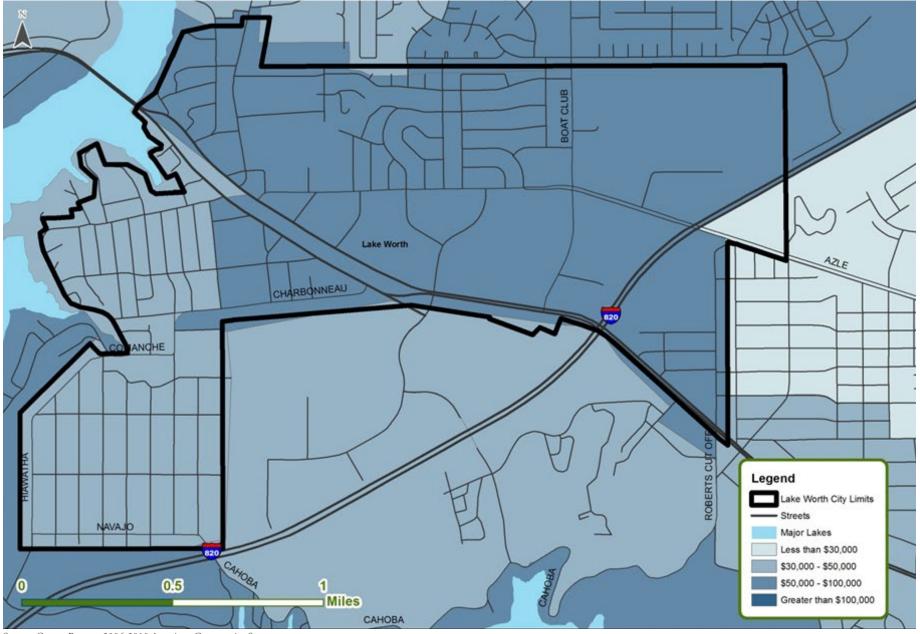
**Table 1.25** shows the percentage of owner occupied households paying more than 30% of their household income towards housing expenses such as mortgage. HUD defines 30% of the median household income as the affordability threshold for housing costs. Approximately 25% of the owner households allocated in excess of 30% of their household income to housing and thus were cost burdened.

Table 1.25 – Housing Costs as a Percentage of Household Income for Lake Worth, 2010	
---	--

Percent of Income in Owner-Occupied units	# of Units	% of Units
Less than 20%	581	47.6%
20 to 29%	326	26.7%
30% or more	303	24.8%
Households with zero or negative income	10	0.8%
Total Owner-Occupied units	1,220	100.0%

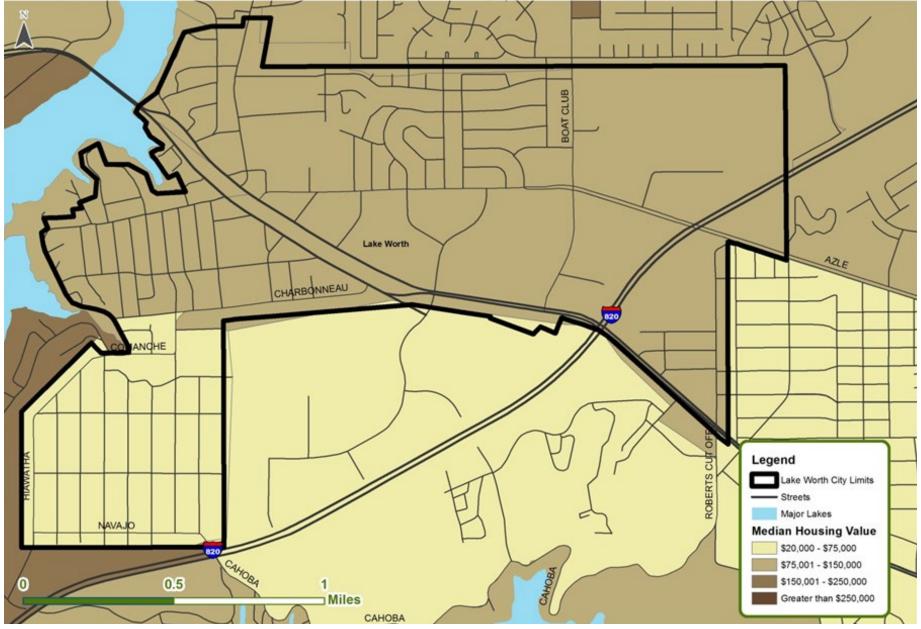
Source: U.S. Census Bureau and 2006-2010 American Community Survey

## Figure 1.27 – Median Income Household Income, 2010



Source: Census Bureau, 2006-2010 American Community Survey

# Figure 1.28 – Median Housing Value, 2010



Source: Census Bureau, 2006-2010 American Community Survey

## **Rental Housing Costs**

In 2010, approximately 23.2% of the housing stock in the city was rental housing and 0.7% was multifamily housing.<sup>4</sup> The Median Contract Rent for Lake Worth was \$726 in 2010. The median contract rent of the city was \$509 in 2010.<sup>5</sup> This represents an increase of \$227, or 42%, in rent over the ten year period. **Figure 1.29** illustrates median contract rent in the city by census block group.

Table 1.26 outlines gross rent by number of bedrooms in Lake Worth between 2006and 2010. For two-bedroom units the modal rent category was \$750 to \$999 with54% of units in this rent range. For three or more bedroom units, modal rent was\$1000 or more, with 67% of units in the range.

#### Table 1.26 - Gross Rent by Number of Bedrooms for Renter-Occupied Units in Lake Worth, 2010

Rent Range	Two Be	edroom	Three or More Bedrooms	
	# of Units	% of Units	# of Units	% of Units
With cash rent	183	100.0%	197	94.7%
Less than \$200	12	6.6%	0	0.0%
\$200 to \$299	0	0.0%	0	0.0%
\$300 to \$499	9	4.9%	0	0.0%
\$500 to \$749	41	22.4%	15	7.2%
\$750 to \$999	99	54.1%	42	20.2%
\$1,000 or more	22	12.0%	140	67.3%
No cash rent	0	0.0%	11	5.3%
Total	183	100.0%	208	100.0%

Source: U.S. Census Bureau and 2006-2010 American Community Survey

Table 1.27 outlines the percentage of household income that was paid towards housing expenses among renter households between 2006 and 2010. 41% of rental housing in Lake Worth paid more than 30% of their income towards rent, which indicates that these households are under cost burden under HUD's definition.

<sup>4</sup> 2006-2010 ACS <sup>5</sup> 2000 Census

Table 1.27 - Housing Costs as a Percentage of Rental Household Income for Lake Worth, 2010

Renter-occupied units	# of Units	% of Units
Less than 20%	105	26.9%
20 to 29%	114	29.2%
30% or more	161	41.2%
Renters with zero or negative income	0	0.0%
Renters with no cash rent	11	2.8%
Total Renter-occupied Units	391	100.0%

Source: U.S. Census Bureau, 2006-2010 American Community Survey

#### Figure 1.29 – Median Contract Rent, 2010



Source: Census Bureau, 2006-2010 American Community Survey

#### 1.7.2 | Housing Goals, Policies and Actions

The analysis of land, real estate and housing conditions in Lake Worth indicates several key challenges that can affect the supply, quality and diversity of residential choices in the community:

- The limited availability of land for new development
- Land use compatibility due to the noise and air safety impacts of aviation operations at NAS Fort Worth, JRB
- Declining housing conditions and relatively low median housing value associated with an aging housing stock
- Evidence of affordability challenges with about one in four households experiencing a cost burden
- A lack of diversity in available housing types

The goals, policies and actions below seek to reinforce the overarching principles of an increased range of housing options and compatibility with NAS Fort Worth, JRB through strategies that facilitate the development of varied housing types, promote greater land use compatibility and mitigate noise impacts for new construction, enhance housing and neighborhood conditions through revitalization and rehabilitation strategies and increase access to fair housing and financial education resources. The Implementation section of the Comprehensive Plan includes specific action steps to support recommendations. **Appendix H** contains the full housing analysis report and more detailed information on recommended sound attenuation practices.

Goal 1.17: Promote quality infill development as a means to expand the supply and type of available housing

Policy 1.17.1: Ease the site challenges associated with infill development

Action 1.17.1.1: Prepare an inventory of available infill sites

*Action 1.17.1.2*: Explore land assembly strategies and collaborate with developers as necessary to acquire land

Policy 1.17.2: Increase market interest in infill development

*Action 1.17.2.1*: Generate developer interest through a marketing strategy that features available sites, economic incentives, and market characteristics

*Action 1.17.2.2*: Participate in economic development and real estate development events as a way to showcase available opportunities

*Action 1.17.2.3*: Register developments in the Rental Partnership Program at NAS Fort Worth, JRB and market residential opportunities to other major employers within or near the city

Policy 1.17.3: Increase the city's organizational capacity to support mixed use and residential infill development

Action 1.17.2.1: Partner with area non-profit agencies or developers to develop quality, affordable housing

*Action 1.17.2.2*: Target and leverage Tarrant County and HUD housing resources to provide stimulus for redevelopment in targeted geographic areas

# Goal 1.18: Improve the aesthetic character of the community by reducing general land use incompatibilities

Policy 1.18.1: Reduce incompatibilities associated with abrupt land use transitions or visual intrusion

*Action 1.18.1.1*: Evaluate and enhance existing guidelines to allow for appropriate transitions from commercial development to residential neighborhoods and other less intensive land uses

Action 1.18.1.2: Evaluate and enhance existing guidelines to establish adequate buffering and screening

Action 1.18.1.3: Identify areas with specific land use compatibility issues

Goal 1.19: Minimize compatibility issues associated with noise exposure from aviation operations

Policy 1.19.1: Implement sound attenuation techniques

*Action 1.19.1.1*: Adopt a Noise Attenuation Overlay and encourage sound attenuation measures for future compatible developments falling within designated noise zones (see Land Use element)

Action 1.19.1.2: Create a subcommittee of the Regional Coordination Committee comprised of area building officials that meets periodically to discuss noise mitigation and energy efficiency issues

Action 1.19.1.3: Work with real estate community to disclose aircraft noise to potential commercial/residential buyers within noise contours

*Action 1.19.1.4*: Adopt measures to increase sound attenuation in new construction non-residential buildings

**Policy 1.19.2**: Promote weatherization and other energy efficient building practices as complementary tools for achieving sound reduction

*Action 1.19.2.1*: Provide local homeowners with information and education about home weatherization techniques and funding opportunities as a means to insulate existing residences from aircraft noise

Action 1.19.2.2: Consider the adoption of incentives to encourage future commercial construction to incorporate LEED energy and sustainability best practices and other performance-based design improvements

# Goal 1.20: Increase household and neighborhood capacity by building on the social, economic and physical assets of the community and its residents

**Policy 1.20.1**: Promote an integrated asset-based approach to neighborhood revitalization

*Action 1.20.1.1*: Identify one to two key neighborhoods in which to conduct a revitalization plan that focuses on the inter-related elements of healthy, sustainable places:

- Quality schools to attract new residents and retain existing families;
- Workforce and human capital development;
- Protection of unique characteristics of the built environment;
- Development of place-making features such as consistent signage and landscape improvements
- Equity-building through affordable homeownership; and
- Job creation through business development and entrepreneurship

*Action 1.20.1.2*: Provide technical assistance to neighborhoods interested in participating in the planning process

*Action 1.20.1.3*: Form a partnership with area non-profit groups, faith-based organizations and financial institutions to support community planning initiatives

Policy 1.20.2: Improve the quality of existing housing stock

Action 1.20.2.1: Promote housing rehabilitation by:

- Strengthening local code enforcement
- Providing direct financial assistance to homeowners for home repairs or linking residents to other available resources
- Funding non-profit agencies that rehabilitate houses
- Creating a Rental Registration Program for rental units in the community and documenting conditions

# Goal 1.21: Diversify the mix of housing choices in the community

Policy 1.21.1: Expand housing options for young families

*Action 1.21.1.1*: Promote development in compact, pedestrian-friendly, mixed use environments (see Economic Development and Land use sections)

Policy 1.21.2: Increase the supply of higher and moderate-end housing

*Action 1.21.2.1*: Identify land appropriate for higher and moderate-end housing development and assemble land

*Action 1.21.2.2*: Reduce barriers to the development of higher and moderate-end housing by (see Economic Development section):

- Using marketing and communications strategies to enhance the image of the area and stimulate developer interest
- Identifying public improvements or other amenities to increase the appeal of available sites
- Collaborating with NAS Fort Worth, JRB Lockheed Martin, and other major employers to establish employers incentives to live in the area

**Policy 1.21.3:** Encourage best practices in the design and construction of residential and mixed use developments to meet the needs of seniors, individuals with disabilities, and other special needs populations

*Action 1.21.3.1*: Encourage "Aging in Place" neighborhoods that can accommodate residents throughout all life stages

*Action 1.21.3.2*: Explore the possibility of adopting a Universal Design Ordinance, requiring developers to incorporate accessibility provisions into a specified percentage of new housing units

**Policy 1.21.4**: Encourage the development of a range of housing options to accommodate households of all ages, specifically housing developments such as cottagestyle houses and other residential options that balance community support with privacy and independence

Action 1.21.4.1: Review existing land use, zoning, and subdivision regulations to identify barriers to the development of senior housing options, including cottage-style, small-lot developments, small-scale assisted living facilities and other multifamily and mixed use developments that emphasize services and on-site amenities

*Action 1.21.4.2*: Enhance the ability of the existing local land use and development framework to accommodate new small lot and multifamily residential construction and to facilitate the delivery of affordable housing units that meet the needs of seniors and others

*Action 1.21.4.3*: Ease the local regulatory process for projects designed to meet the needs of seniors by streamlining the plan submittal review, waiving development fees, and creating a fast-track approval process.

Policy 1.21.5: Ensure that neighborhoods offer a range of housing options for households of all sizes and income-levels

Action 1.21.5.1: Review existing land use, zoning, and subdivision regulations to identify barriers to the development of alternative housing options, including cottage-style, small-lot developments and other multifamily and mixed use developments that emphasize a range of housing sizes and prices

*Action 1.21.5.2*: Explore the addition of inclusionary zoning policies to create mixed income housing neighborhoods and expand the supply of affordable housing units.

*Action 1.21.5.3*: Provide density bonuses, which permit more units to be built than otherwise would be allowed under conventional zoning to encourage the voluntary inclusion of affordable units

*Action 1.21.5.4*: Consider establishing a mandatory set-aside policy, wherein developers of market-rate housing projects establish a given percentage of units for low to moderate income households

Action 1.21.5.5: Require that affordable units be constructed in similar appearance as market-rate housing units and with access to comparable amenities and facilities

Action 1.21.5.6: Consider adopting an urban residential or residential village zoning classification, which provides for predominantly residential, pedestrian-oriented development, including small-scale neighborhood-serving retail and creates a transition between mixed use centers and existing single-family neighborhoods

#### Goal 1.22: Increase access to quality, affordable housing choices for all residents

#### Policy 1.22.1: Promote fair housing outreach

*Action 1.22.1.1*: Conduct an annual housing fair in collaboration with faith-based institutions, public agencies and non-profit organizations as a means to market the availability of housing programs and resources

Action 1.22.1.2: Create publications, such as newsletter articles and posters to publicize informational resources and outreach events

#### Policy 1.22.2: Promote greater financial literacy for households

*Action 1.22.2.1*: Create a broad partnership among financial institutions and community reinvestment entities to promote increased participation in comprehensive financial literacy programs as a means to strengthen the economic stability of families and neighborhoods:

- Promote use of financial literacy programs such as the Federal Deposit Insurance Corporation sponsored Money Smart curriculum to enhance personal financial management skills
- Explore partnerships with local schools and faith-based institutions to target participation in young adult and train-the-trainer classes

# Section 1.8 | Implementation Plan

The Implementation Section lays out the critical programs and initiatives necessary to realize the goals and policies of the City of Lake Worth Comprehensive Plan Vision. The tables below organize recommended steps by resource area with corresponding goals and policies, timeframes, responsible entities, partnerships, and order of magnitude costs. Table 1.28 focuses specifically on the most critical actions designed to strengthen

the local community, catalyze private investment, and improve regional coordination. This table serves as a near-term guide for the foundational implementation steps of the Comprehensive Plan Vision. Table 1.29 summarizes all of the recommended action items across resource areas, reflecting a range of short-, mid-, and long-term strategies.

## Table 1.28 – Implementation Plan: City of Lake Worth - Priority Actions

Implementation Plan: City of Lake Worth – Priority Actions						
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants		
Economic Development (pp. 13-22)						
Goal: Enhance local economic development and marketing capabilities through regional and sub-regional partnerships						
<ul> <li>Build on the creation of the joint economic development coalition by developing a regional marketing identity to attract new businesses and residents and to facilitate collaboration on other common economic interests <ul> <li>Develop marketing strategies to brand participating communities as the Northwest Fort Worth Area</li> <li>Embrace opportunities to market the community as part of a nationally recognized top metropolitan area for military personnel and veterans</li> <li>Use the PLMC sub-regional marketing cooperative as a knowledge exchange forum</li> </ul> </li> </ul>	Short- Term	Medium	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement, Chambers of Commerce, Economic Development Corporations		
Collaborate with other communities when applying for implementation funding Coordinate with other communities to identify project needs	Short-Term	Low	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement		
Land Use (pp. 22-35)						
Goal: Promote complete neighborhoods and communities th	at integrate land uses, ameniti	es, services, and transportatior	1			
<ul> <li>Align future land use, zoning, and subdivision regulations to guide diverse housing options and walkable retail, office, and amenities to mixed use corridors, town centers and villages <ul> <li>Conduct an in-depth review of existing zoning and subdivision ordinances to evaluate the ability of current regulations to implement the policies and goals set forth in the Comprehensive Plan Vision</li> <li>Update the Future Land Use map to reflect key elements of the Vision Framework including mixed use along State Highway 199</li> </ul> </li> </ul>	Short-Term	Low	City	Public		

#### Table 1.28 - Implementation Plan: City of Lake Worth - Priority Actions (continued)

Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants		
Goal: Minimize compatibility issues associated with noise exposure from aviat	ion operations					
<ul> <li>Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate         <ul> <li>Continue entering proposed development projects onto the RCC Development Review Tool for city staff to review and consider land use AICUZ compatibility for proposed development projects</li> <li>Update future land use to align with Vision Framework and AICUZ</li> <li>Create a subcommittee from the Regional Coordination Committee comprised of area building officials to meet periodically on noise mitigation and energy efficiency issues</li> <li>Coordinate with the Community Plans and Liaison Officer at NAS Fort Worth, JRB on new development projects that are within the noise contours</li> </ul> </li> </ul>	Short-Term	Low	City	RCC Partners, NAS Fort Worth, JRB		
Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate • Adopt and follow the 2012 International Residential Code and the 2012 International Energy Efficiency Code, as well as the accompanying NCTCOG Regional Amendments	Mid-Term	Medium	City	Local Government Code Officials;, Developers		
Transportation (pp. 36-61) Goal: Develop a roadway network that provides adequate capacity to accommodate demand and sufficiently maintain the network						
<ul> <li>Implement PLMC Economic Development Corridor Studies</li> <li>Participate in and potentially provide local match for SH 199 Corridor Assessment Study</li> </ul>	Short -Term	Medium	City, TxDOT, and NCTCOG	Neighboring Cities, Economic Development Corporations, The T, Tarrant County, Major Employers, Property Owners, Public		
Goal: Connect to the region and sub-region's planned bicycle and pedestrian n	etwork					
Establish an implementation program for bicycle infrastructure Include/adopt Trail Recommendations in this study, Regional Veloweb and Bike Fort Worth plan into city thoroughfare plan to ensure that future roadway and development accommodates the appropriate bike facility	Short-Term	Low	City	NCTCOG, Tarrant Regional Water District		
Housing (pp. 62-78)						
Goal: Ensure that neighborhoods are designed with quality housing choices, and	menities and services to	o maintain quality of life f	for existing residents ar	nd attract new residents		
<ul> <li>Encourage the development of a range of housing options to accommodate households of all ages and income levels</li> <li>Review existing land use, zoning, and subdivision regulations to identify barriers to the development of diverse housing options, including cottage-style, small-lot developments, small-scale assisted living facilities and mixed use developments</li> </ul>	Short-Term	Low	City	Neighborhood and Business Associations, Developers, Public		
				Short: 1-2 years Mid: 3-5 years Long: 5+ years		

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
Economic Development (pp. 13-22)				
Goal: Transform aging retail nodes into more compact, high c	juality, mixed use areas			
Identify and market feasible, high profile mixed use redevelopment opportunities to attract private investment • Use the Vision Framework to highlight one to two key redevelopment sites	Short-Term	Low	City	Tarrant County and Developers
<ul> <li>Develop a specific branding message and communications strategy for the sites         <ul> <li>Identify target groups including developers and investors for a communications campaign</li> <li>Attract interest from prospective developers by increasing awareness of available economic incentives</li> </ul> </li> </ul>	Mid-Term	Medium	City	Developers
Establish clear guidance for organizing project elements • Use zoning to organize project elements such as architectural and public realm design, pedestrian scale, the mix of uses, open spaces, access, and connectivity	Mid-Term	Low	City	Developers
<ul> <li>Prepare sites for redevelopment         <ul> <li>Schedule the phasing of planned redevelopment to allow for gradual community acceptance and financial feasibility with an early emphasis on anchor projects</li> <li>Plan public investments, including site development and preparation of infrastructure and identify incremental and innovative financing methods</li> </ul> </li> </ul>	Long-Term	High	City	Developers and NAS Fort Worth, JRB
Goal: Foster an environment of innovation and entrepreneurs	ship as a means to diversify the	e local and sub-regional econo	my and attract and retain talen	t
Develop a science, technology, engineering, and mathematics (STEM) mentoring program for middle and high school age students • Collaborate with area partners to expand participation in STEM-based curricula and outreach efforts, including STARbase and the North Texas Aviation Education Initiative	Short-Term	Medium	Regional Partners	Independent School Districts, Lockheed Martin, NAS Fort Worth, JRB, the Texas Air National Guard and the NCTCOG
<ul> <li>Use community resources to promote entrepreneurship, start up, research and manufacturing and the arts within the community <ul> <li>Identify incubator space for an interactive Creativity Center that enables students and adults to explore science, art and technology projects</li> <li>Collaborate with partners to develop a curriculum and incorporate a workforce training component</li> <li>Form a 501 c 3 organization and create a program budget to fund the Creativity Center as an economic sustainability project</li> <li>Expand outreach and funding mechanisms for the development of neighborhood businesses</li> </ul> </li> </ul>	Short- to Mid-Term	Medium	Regional Partners	Tarrant County College, TCU, ISDs, Fort Worth Nature Center, Cultural District Museums and Art Galleries, Lockheed Martin, and NAS Fort Worth, JRB, NCTCOG and Workforce Solutions
<ul> <li>and incorporate a workforce training component</li> <li>Form a 501 c 3 organization and create a program budget to fund the Creativity Center as an economic sustainability project</li> <li>Expand outreach and funding mechanisms for the</li> </ul>		Medium	Regional Partners	Martin, and NAS Fort Worth, JR

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
Goal: Enhance local economic development and marketing c	apabilities through regional	and sub-regional partnerships		
<ul> <li>Build on the creation of the joint economic development coalition by developing a regional marketing identity to attract new businesses and residents and to facilitate collaboration on other common economic interests <ul> <li>Develop marketing strategies to brand participating communities as the Northwest Fort Worth Area</li> <li>Embrace opportunities to market the community as part of a nationally recognized top metropolitan area for military personnel and veterans</li> <li>Use the joint economic development coalition as a knowledge exchange forum</li> <li>Task the PLMC sub-regional cooperative with marketing of the selected catalyst redevelopment sites</li> </ul> </li> </ul>	Short- to Mid-Term	Medium	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement, Chambers of Commerce, Economic Development Corporations
Collaborate with other communities when applying for implementation funding Coordinate with other communities to identify common needs	Short-Term	Low	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement
Continue to explore the longer-term creation of a formal and professionally staffed sub-regional economic development corporation • Establish powers and authorities necessary to undertake economic development initiatives of regional and sub-regional significance, such as business park development	Long-Term	High	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement
Land Use (pp. 23-35)				
Goal: Complement and strengthen the visual identity and cha	aracter of existing community	y cores		
<ul> <li>Focus public realm improvements to reinforce sense of place within city cores and identified town centers and villages</li> <li>Designate gateway features, such as signs, public art, or special landscaping, to accentuate entries into the city and its neighborhoods, particularly along Jacksboro Highway/Highway 199</li> <li>Use landscaping and decorative elements to draw visual interest into established commercial and residential areas,</li> <li>Develop pedestrian facilities, particularly at key intersections</li> </ul>	Short- to Mid-Term	Medium	City	Neighborhood and Business Associations, Property Owners, TXDOT
Concentrate new institutional and civic uses and common gathering spaces within the city cores and identified town centers and village nodes • Revise the future land and zoning map to designate highly visible and centrally accessible sites, particularly at major intersections, to anchor future public uses and common spaces	Short- to Mid-Term	Low	City	Neighborhood and Business Associations, Property Owners
				Short: 1-2 yea

mplementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Use the Vision Framework to organize redevelopment around town centers, villages and corridors</li> <li>Include projects in future Capital Improvement Programs that support the framework of town centers, villages and mixed use corridors</li> </ul>	Short- to Mid- Term	High	City	Neighborhood and Business Association Property Owners, Developers
<ul> <li>Participate in a coordinated, inter-jurisdictional approach to corridor redevelopment</li> <li>Coordinate zoning and project initiatives with adjacent jurisdictions</li> <li>Leverage public improvement investments that enhance the physical character as well as the transportation function and capacity of city roadways</li> </ul>	Short- to Long- Term	High	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement, TXDOT, NCTCC
<ul> <li>Work with community organizations to create neighborhood plans that emphasize housing rehabilitation, improved aesthetics, including consistent signage and landscaping and the addition of amenities</li> </ul>	Mid-Term	Medium	City	Neighborhood Associations, Public
<ul> <li>mprove the visual character along State Highway 199 and Azle Avenue to attract local investment</li> <li>and create a consistent, high quality corridor throughout the PLMC sub-region</li> <li>Work with property owners and developers to incorporate context-sensitive design guidelines</li> <li>Improve the design, function, and appearance of major corridors by addressing traffic safety issues, drainage, excess parking, lighting, landscaping, outdoor storage, refuse containers, the amount and size of advertising, and related issues</li> </ul>	Long-Term	High	City	Neighborhood and Business Association Property Owners, TXDOT
Goal: Promote complete neighborhoods and communities that integrate land uses, amenities, serv	vices, and transpor	tation		
<ul> <li>Enhance the quality of residential subdivision design on a city-wide basis</li> <li>Strengthen the existing Subdivision Regulations for the city by incorporating street design and improvement requirements emphasizing street connections, pedestrian and bicycle facilities, small and walkable block sizes, and shared parking arrangements</li> <li>Require developers of future projects to provide outlined on-site improvements, such as water and sewer lines, sidewalks, curbs, public street connections, and street lighting according to establish design guidelines</li> </ul>	Short- to Mid- Term	Medium	City	Neighborhood and Business Association: Property Owners, Developers, Public
<ul> <li>Align future land use, zoning, and subdivision regulations to guide diverse housing options and walkable retail, office, and amenities to mixed use corridors, town centers and villages</li> <li>Conduct an in-depth review of existing zoning and subdivision ordinances to evaluate the ability of current regulations to implement the policies and goals set forth in the Comprehensive Plan Vision</li> <li>Update the Future Land Use map to reflect key elements of the Vision Framework including mixed use along State Highway 199</li> </ul>	Short-Term	Low	City	Public
<ul> <li>Revise zoning ordinance as appropriate to implement the policies and goals</li> <li>Strengthen mixed use zoning policy in the Mixed-Planned Development District to ensure that existing provisions can accommodate a range of residential, retail and office uses</li> <li>Explore the adoption of a mixed use zoning and design overlay for designated town centers, villages and Main Street "A" corridors</li> <li>Explore the adoption of a mixed use zoning and design overlay for designated Main Street "B" corridors that emphasize on-street parking, a planting strip, minimum 5' sidewalk, and narrow building setbacks</li> <li>Update the Zoning Map to reflect the addition of mixed use categories</li> <li>Promote the transition of existing commercial areas along State Highway 199 and Azle Avenue into a cohesively designed and planned mixed use town center</li> <li>Promote residential development on available vacant lots within the city to balance and complement the existing commercial base</li> </ul>	Short- to Mid- Term	Medium	City	Neighborhood and Business Association Property Owners, Public

Mid: 3-5 years Long: 5+ years

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Continue to direct future growth toward identified town centers, villages, and mixed use corridors and encourage quality projects</li> <li>Prioritize the application of mixed use, human-scale, walkable main street design and planning concepts in designated catalyst redevelopment sites, particularly along Jacksboro Highway/Highway 199 and Azle Avenue</li> <li>Continue to work with interested organizations, developers, and property owners to identify other areas appropriate for rezoning to mixed use</li> </ul>	Short- to Mid- Term	Low	City	Neighborhood and Business Associations, Developers
<ul> <li>Use transportation and open space planning to connect the city's activity centers</li> <li>Link town cores and villages with major thoroughfares, public transportation, trails, sidewalks, and linear parks</li> </ul>	Long-Term	High	City	Neighborhood and Business Associations, Developers, TXDOT
Goal: Ensure that neighborhoods are designed with quality housing choices, amenities and servi	ces to maintain qua	ality of life for exis	ting residents and	attract new residents
<ul> <li>Encourage the development of a range of housing options to accommodate households of all ages and income levels</li> <li>Review existing land use, zoning, and subdivision regulations to identify barriers to the development of diverse housing options, including cottage-style, small-lot developments, small-scale assisted living facilities and mixed use developments</li> </ul>	Short-Term	Low	City	Neighborhood and Business Associations, Developers, Public
Promote more compact, mixed use development as a means to improve land use efficiency, mobility, and sustainability • Expand housing diversity and access to neighborhood-serving retail in identified mixed use centers and villages and along strategic corridors	Mid- to Long- Term	Medium	City	Neighborhood and Business Associations, Developers, TXDOT
<ul> <li>Promote neighborhood access to parks and recreational facilities         <ul> <li>Locate public neighborhood parks within easy access of residents (less than one-half mile)</li> <li>To the extent possible, locate elementary schools, parks, and neighborhood commercial uses within walking distance of major residential areas</li> </ul> </li> </ul>	Mid- to Long- Term	High	City	Neighborhood and Business Associations, Developers, TXDOT
Goal: Ensure the safety and quality of life of city residents and protect the mission of NAS Fort Wo	orth, JRB through th	he adoption of lar	nd use compatibili	ty strategies
<ul> <li>Strengthen zoning and building code policies to minimize compatibility issues in areas affected by the most current Air Installation Compatible Use Zone study for NAS Fort Worth JRB         <ul> <li>Consider adopting a Land Use Compatibility Overlay to limit future incompatible land uses for properties falling within designated Accident Potential Zones</li> <li>Consider adopting a Noise Attenuation Overlay and encourage sound attenuation measures for future compatible developments falling within designated noise zones</li> </ul> </li> </ul>	Short-Term	Low	City	Neighborhood and Business Associations, Property Owners, NAS Fort Worth, JRB
<ul> <li>Continue to coordinate land use and development decisions to promote safe, compatible growth across the PLMC sub-region</li> <li>Continue use of the Regional Coordination Committee Development Review Tool as a platform to facilitate the review of proposed development projects for compatibility issues related to noise and aviation safety</li> </ul>	Short-Term	Low	Regional Partners	Tarrant County, Benbrook, Fort Worth, Sansom Park, River Oaks, Westworth Village, White Settlement, NAS Fort Worth, JRB, NCTCOG
<ul> <li>Strengthen zoning and building code policies to minimize compatibility issues in areas affected by the most current Air Installation Compatible Use Zone study for NAS Fort Worth JRB</li> <li>As redevelopment opportunities emerge in Accident Potential Zone I and Accident Potential Zone II, promote compatible land uses such as light industrial, small-scale commercial and open space</li> </ul>	Short- to Long- Term	Low	City	Neighborhood and Business Associations, Property Owners, NAS Fort Worth, JRB
				Short: 1-2 ye Mid: 3-5 ye

Implemen	ntation Plan: City of Lake Worth				
Project/In	itiative	Time	Cost	Responsible Agency	Other Key Participants
Roadway	Infrastructure (pp. 36-48)				
Goal: Red	uce congestion and improve safety on major roadway thoroughfar	es			
Characteri Characteri C C C C C C C C C C C C C	he Local Transportation System Management and Operational istics Continue coordination with NAS Fort Worth, JRB, Lockheed and other major employers in the area on supporting their transportation needs Coordinate with NCTCOG, major employers, commercial districts, and other agencies to encourage the use of travel demand management programs such as telecommuting, carpooling, employer trip reduction (ETR) programs and vanpooling. Increase the marketing and participation of major employers in the study area in ETR programs	Short-Term	Low	City, Tarrant County	Major Employers, NCTCOG, Tarrant County, Neighboring Cities
Characteri • F • C • C	he Local Transportation System Management and Operational istics Prioritize maintenance in local budgets to ensure that local oadway facilities remain in optimal condition Conduct regular interval traffic counts Conduct crash analysis and identify top safety needs and contributing factors	Short-Term	High	City	Tarrant County, TxDOT, NCTCOG
Characteri • C • • •	he Local Transportation System Management and Operational istics Coordinate to improve traffic signal synchronization by evaluating existing timing plans, installing new signals, and having repairs and maintenance performed promptly. Develop an interagency plan for signal timing to address future conditions. Coordinate to provide well-signed routes	Short to Long-Term	Medium	City and/or TxDOT	TxDOT, Tarrant County, NCTCOG
Goal: Dev	elop a roadway network that provides adequate capacity to accom	modate demand and su	ufficiently maintain the	network	
of Thorouc	t Local Priority Improvements to Provide a Well-Connected Network ghfares Submit formal requests for projects of regional significance to be considered for further evaluation during the development of the Metropolitan Transportation Plan	Short	Low	City, TxDOT, and NCTCOG	Neighboring Cities, Economic Development Corporations, The T, Tarrant County, Major Employers, Property Owners Public
۰ F ۱۱ ۲	t PLMC Economic Development Corridor Studies Participate in SH 199 Corridor Assessment Study Integrate multi-modal considerations, context sensitive design, access management, land-use evaluations, safety, stormwater management, streetscape improvements, and other engineering, olanning, and economic development strategies into corridor studies	Short to Mid-Term	Low	City	TxDOT, Tarrant County, NCTCOG

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Update and Establish Review Process for Local Transportation Planning Documents         <ul> <li>Establish a review and update schedule for local thoroughfare plans and include considerations for future land uses, economic development needs, neighboring jurisdiction plans, and alternative roadway design and operation strategies such as context sensitive design</li> <li>Identify and prioritize improvements of importance to individual cities, the study area, and the larger Dallas-Fort Worth region as part of thoroughfare planning process</li> <li>Submit requests for transportation technical planning assistance to NCTCOG through the biannual Unified Planning Work Program process</li> </ul> </li> </ul>	Short-Term and Ongoing	Low	City	Tarrant County, Economic Development Corporations, NCTCOG
<ul> <li>Update and Establish Review Process for Local Transportation Planning Documents</li> <li>Consider land use compatibility associated with NAS Fort Worth, JRB Accident Potential Zones and noise contours to ensure compatibility of future infrastructure improvements</li> </ul>	Short-Term	Low	City	NCTCOG, Other Jurisdictions, NAS Fort Worth, JRB
<ul> <li>Update and Establish Review Process for Local Transportation Planning Documents         <ul> <li>Integrate multi-modal considerations, context sensitive design, access management, parking, land-use evaluations, safety, stormwater management, streetscape improvements, and other engineering, planning, and economic development strategies into local roadway planning, design, construction, operations, and maintenance.</li> <li>Update local regulations to reflect desired access management, design features, landscaping, maintenance, parking regulations and other requirements associated with streets and thoroughfares</li> <li>Consider Corridor Overlays or other land use planning tools (e.g. Form Based Codes) to encourage desired future commercial development</li> </ul> </li> </ul>	Short to Long- Term	Low to Medium	City	TxDOT, NCTCOG, Economic Development Corporation, Public
<ul> <li>Coordinate with Regional Transportation Partners to Evaluate Transportation Needs, Define Priorities,</li> <li>Secure Funding, and Implement Improvements         <ul> <li>Engage with your Regional Transportation Council representative</li> <li>Engage with Tarrant County and NCTCOG for planning assistance and other technical/policy needs</li> <li>Engage other transportation implementers such as TxDOT and Tarrant Regional Water District and non-profit agencies</li> </ul> </li> </ul>	Short to Long- Term	Low	City	Tarrant County, NCTCOG, Regional Transportation Council, Other Transportation Implementers
Coordinate with Regional Transportation Partners to Evaluate Transportation Needs, Define Priorities, Secure Funding, and Implement Improvements • Adopt Regional Transportation Council (RTC) Clean Fleet Vehicle Policy and Model Ordinance	Short-Term	Low	City	NCTCOG
<ul> <li>Implement Local Priority Improvements to Provide a Well-Connected Network of Thoroughfares         <ul> <li>Identify and prioritize improvements of importance to individual cities, the study area, and the larger Dallas-Fort Worth region.</li> <li>Integrate multi-modal considerations, context sensitive design, access management, land-use evaluations, safety, stormwater management, streetscape improvements, and other engineering, planning, and economic development strategies into local roadway planning, design, construction, operations, and maintenance.</li> <li>Update local thoroughfare plans to reflect priorities and implementation actions</li> <li>Establish local bond programs to implement or improve local facilities.</li> <li>Pursue Tarrant County Bond program funds for identified priority projects.</li> <li>Pursue all applicable traditional and non-traditional funding opportunities and leverage partnership opportunities</li> </ul> </li> </ul>	Mid- to Long- Term	Low	City, Tarrant County	TxDOT, NCTCOG, Tarrant County, Neighboring Cities
				Short: 1-2 years Mid: 3-5 years

Mid: 3-5 years Long: 5+ years

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
Goal: Enhance roadway design and support the provision of mobility options	on local roadways			
<ul> <li>Incorporate multi-modal components in roadway design and planning         <ul> <li>Integrate Context Sensitive Design principles, including consideration for Green Streets principles, into future local roadway planning, design, construction, operations, and maintenance.</li> <li>Consider alternative roadway and intersection design features such as modern roundabouts, neighborhood traffic circles, traffic calming measures, or other features to improve safety, improve air quality, and enhance roadway attractiveness.</li> <li>Include bicycle and pedestrian modes in roadway corridor studies.</li> <li>Evaluate existing roadway rights-of-way for public transportation service options.</li> </ul> </li> </ul>	Short- to Long-Term	Low to High	City	Tarrant County, TxDOT, NCTCOG
<ul> <li>Incorporate multi-modal components in roadway design and planning</li> <li>Prioritize, fund, and implement sidewalks and other pedestrian facilities such as crosswalks, median islands, signage, and pedestrian signals as part of new roadway construction or reconstruction projects, new developments, and re-developments, and in high pedestrian traffic locations.</li> <li>Provide accessibility to bicyclists through preservation of bicycle and pedestrian access within appropriate roadway rights-of-way, as well as the development of innovative, safety-enhanced on-street bicycle facilities as routine accommodations for new roadway construction or reconstruction</li> </ul>	Short- to Long-Term	High	City	Tarrant County, TxDOT
<ul> <li>Implement PLMC Mobility Linkages Corridor Improvement Studies <ul> <li>Identify and define specific needs and goals of transportation corridor</li> <li>Engage with Tarrant County and NCTCOG for planning assistance and other technical/policy needs</li> <li>Engage other transportation implementers such as TxDOT and Tarrant Regional Water District and non-profit agencies such as Streams and Valleys</li> <li>Integrate multi-modal considerations, context sensitive design, access management, land-use evaluations, safety, stormwater management, streetscape improvements, and other engineering, planning, and economic development strategies into studies.</li> <li>Seek out and utilize non-traditional funding such as grants from non-profits, philanthropies, non-transportation and transportation federal and state agencies (e.g. National Park Service, FHWA safety technical resources, etc.)</li> </ul> </li> </ul>	Mid- to Long-Term	Low	City and/or TxDOT	Neighboring Cities, Tarrant County, NCTCOG, Txdot, The T, Economic Development Corporations, TRWD, Major Employers, Property Owners, Public
<ul> <li>Incorporate multi-modal components in roadway design and planning</li> <li>Coordinate with transit providers to ensure accessibility through on-street bicycle facilities and sidewalks</li> </ul>	Long-Term	Medium	City	The T, NCTCOG

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
Public Transportation (pp. 49-52)				
Goal: Raise public awareness of existing public transportation options throu	igh outreach, marketing	, and educational effo	rts	
<ul> <li>Increase education on services provided throughout the county to assist residents in making regional connections         <ul> <li>Increase education and marketing of existing services provided by cities and throughout Tarrant County</li> <li>Target outreach to particular groups who are more likely to be transit-dependent, such as low-income, older adults, individuals with disabilities and residents who may not have access to a car</li> <li>Institute a travel navigation service that serves as a one-stop-shop to assist in evaluating user needs and eligibility for available services</li> </ul> </li> </ul>	Short-Term	Low	City	TCTS, Other Existing Service Providers, Tarrant County, Neighboring Jurisdictions, NCTCOG
Goal: Improve public transportation options to meet the needs of special po	pulations and support	employee access to job	os	
<ul> <li>Evaluate opportunities to partner with sponsoring employers, institutions, or retail/commercial destinations, and surrounding jurisdictions and transportation partners <ul> <li>Evaluate demand and need for Volunteer Driver/Driver Reimbursement Program</li> <li>Establish a network of volunteer drivers and an entity to manage the program</li> <li>Review and coordinate with services already offered in the area by non-profit organizations such as SeniorMovers, Social Transportation for Seniors, and Mid-Cities Care Corps</li> </ul> </li> </ul>	Short- to Long-Term depending on need	Low	City	Neighboring jurisdictions, Existing service providers, Non-profit organizations, volunteers, Tarrant County
<ul> <li>Evaluate opportunities to partner with sponsoring employers, institutions, or retail/commercial destinations, and surrounding jurisdictions and transportation partners <ul> <li>Evaluate opportunities to implement a Site Specific Shuttle Service to serve major employers, institutions, or retail/commercial centers</li> <li>Establish a lifeline service such as ADA/Eligibility Based Dial-A-Ride demand-respnose service for sensitive population groups</li> <li>Coordinate with existing providers and/or other jurisdictions to consider cost-sharing options</li> </ul> </li> </ul>	Mid-Term	High	City	Neighboring Jurisdictions, Tarrant County, Senior Centers, Major Employers, Institutions, Retail/Commercial Centers, The T, NCTCOG, Existing Providers
Goal: Improve public transportation options to meet the needs of the gene	ral population			
<ul> <li>Evaluate needs and potential demand for a more frequent and expanded</li> <li>Community Shuttle Service         <ul> <li>Evaluate demand for a Transportation Voucher/Fare</li> <li>Reimbursement Program</li> <li>Consider a voucher program for low-income individuals</li> </ul> </li> </ul>	Short- to Long-Term	Low to Medium	City	Neighboring Jurisdictions, Employment Centers, Private Industry, Health and Social Service agencies, Tarrant County
				Short: 1-2 year

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Enhance, Market, and Monitor Park and Ride System</li> <li>Market the two existing park-and-ride lots in the study area</li> <li>Identify and evaluate informal park-and-ride lots to determine if they should be formal park-and-ride lots or alternative options for improving park-and-ride facilities</li> <li>Implement candidate park-and-rides currently identified by the Fort Worth Transportation Authority Park-and-Ride Study and the Metropolitan Transportation Plan, Mobility 2035 – 2013 Update as deemed appropriate</li> <li>Monitor the need for additional park-and-ride facilities in the area</li> </ul>	Short- to Mid-Term	Medium to High	City, The T, NCTCOG	Neighboring jurisdictions, Employment, Entertainment, and Retail centers
<ul> <li>Evaluate needs and potential demand for a more frequent and expanded</li> <li>Community Shuttle Service</li> <li>Conduct further modification and assessments of potential fixed-route (shuttle, bus and Bus Rapid Transit) service options at the community and sub-regional level</li> </ul>	Mid- to Long-Term	Low	City	The T and NCTCOG
Evaluate needs and potential demand for a more frequent and expanded Community Shuttle Service • Consider pilot programs or service demonstrations to build support for public transportation	Mid- to Long-Term	High	City	The T, NCTCOG, Neighboring Jurisdiction
<ul> <li>Evaluate needs and potential demand for a more frequent and expanded</li> <li>Community Shuttle Service</li> <li>Evaluate potential service design and frequency</li> <li>Evaluate financing such as cost-sharing options with other jurisdictions, grant funding, private industry, and social service agency contributions and sponsorships</li> <li>Conduct planning of Community Shuttle routes and services</li> </ul>	Long-Term	High	City	Neighboring Jurisdictions, Tarrant Count The T, Other Existing Providers, Private, Non-Profits, NCTCOG
<ul> <li>Evaluate needs and potential demand for a more frequent and expanded</li> <li>Community Shuttle Service <ul> <li>Evaluate needs and demand for a general Public Dial-A-Ride Service</li> <li>Coordinate with existing providers and/or other jurisdictions to consider cost-sharing options</li> </ul> </li> </ul>	Long-Term	High	City	Neighboring jurisdictions, Tarrant County Existing providers
Goal: Coordinate and leverage resources to provide effective and efficient transpo	rtation services and im	prove transportation o	otions	
<ul> <li>Update and Establish Review Process for Local Transportation Planning Documents</li> <li>Review and update comprehensive plans to reflect public transportation service needs, priorities, and implementation actions</li> <li>Identify and prioritize public transportation needs for individual city, the study area, and the larger Dallas-Fort Worth region</li> <li>Submit requests for transportation technical planning assistance to NCTCOG through the biannual Unified Planning Work Program process</li> <li>Submit formal requests for public transportation projects of regional significance to be considered during development of the Metropolitan Transportation Plan</li> </ul>	Short-Term	Low	City	The T, NCTCOG, Tarrant County, Transportation Providers, Public

Mid: 3-5 years Long: 5+ years

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Coordinate with Transportation Partners and Leverage Resources to Improve</li> <li>Transportation Options         <ul> <li>Collectively prioritize needs</li> <li>Engage with your Regional Transportation Council representative</li> <li>Engage with Tarrant County and NCTCOG for planning assistance and other technical/policy needs</li> <li>Engage others interested or already providing public transportation services such as non-profit agencies, health and social services, volunteer groups, etc.</li> </ul> </li> </ul>	Short- to Long-Term	Low	City	Neighboring jurisdictions, The T, Tarrant County, NCTCOG, Regional Transportatio Council, Other transportation implementers
Coordinate with Transportation Partners and Leverage Resources to Improve Transportation Options <ul> <li>Continue coordination with NAS Fort Worth, JRB, Lockheed and other major employers in the area on supporting their public transportation needs</li> </ul>	Short-Term	Low	City, The T	The T, Major employers, NCTCOG, Tarran County, Neighboring cities
<ul> <li>Create partnerships to pool funding amongst multiple communities or other partners <ul> <li>Look beyond study participants to local agencies such as businesses, nonprofits, and health-care facilities that have an interest in their clients' mobility</li> <li>Evaluate collective contracting for specific services with the T and leverage existing resources, such as through contracts or other agreements with the T, nonprofits, or taxi companies</li> <li>Strategically seek grant funding such as start-up costs or capital expenditures</li> <li>Seek out and utilize non-traditional funding such as grants from non-profits, philanthropies, non-transportation and transportation federal and state agencies</li> </ul> </li> </ul>	Short-Term	Low	City	The T, NCTCOG, Tarrant County, Neighboring jurisdictions
Bicycle and Pedestrian Network (pp. 53-61)				
Goal: Connect to the region and sub-region's planned bicycle and pedestrian net	work			
<ul> <li>Implement a bicycle educational awareness campaign</li> <li>Include consistent language to describe the existing or planned bike facilities in the general descriptions and in maps as bike plans, thoroughfare plans, and comprehensive plans are being updated</li> <li>Continue with regional partnerships to pursue all eligible federal and state funds for bicycle and pedestrian planning and development through grant programs/applications</li> </ul>	Short-Term	Low	City Staff, County Staff, NCTCOG	Private /Non-profit
<ul> <li>Implement a bicycle educational awareness campaign</li> <li>Bike education regarding existing and planned facilities and safety via website, social media, paper publications/brochures</li> </ul>	Short-Term	Low to Medium	City, Schools	Police Department, NCTCOG
<ul> <li>mplement a bicycle educational awareness campaign</li> <li>Support and encourage regular and continuing bicycle and pedestrian training and safety programs in conjunction with local institutions, organizations, and bicycle and pedestrian interest groups</li> </ul>	Short-Term	Low to Medium	City, Schools	Police Department, Tarrant County, Priva /Non-profit
				Short: 1-2 Mid: 3-5

Long: 5+ years

# Table 1.29 – Implementation Plan: City of Lake Worth (continued)

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Establish an implementation program for bicycle infrastructure</li> <li>Include/adopt Trail Recommendations in this study, Regional Veloweb and Bike Fort Worth plan into city thoroughfare plan to ensure that future roadway and development accommodates the appropriate bike facility</li> </ul>	Short-Term	Low	City	NCTCOG
<ul> <li>Implement pedestrian safety measures for bicycle infrastructure</li> <li>Develop a Pedestrian Safety Action Plan (PSAP) which should include data that identifies safety issues and challenges, analyze and prioritize concerns, identify funding opportunities for implementation of safety solutions, and evaluate the effectiveness of proposed implementation solutions</li> </ul>	Short-Term	Medium	City	ISD, School Staff, Public
<ul> <li>Implement pedestrian safety measures</li> <li>Create a Safe Routes to School team to identify needs and work towards applying for funding opportunities</li> </ul>	Short Term	Medium	City, ISD	Public
<ul> <li>Implement pedestrian safety measures</li> <li>Work with local governments and law enforcement to patrol areas around schools during arrival and dismissal and place crossing guards and key intersections</li> </ul>	Short-Term	Medium to High	City	ISD, School Staff, Law Enforcement
<ul> <li>Implement a pedestrian educational awareness campaign</li> <li>Create after-school clubs or programs that reinforce walking and bicycling safety through fun excursions that are both educational and recreational</li> <li>Incorporate lessons and messages about bicycling and walking into health curricula, physical education, lessons, school announcements, and other events at school</li> <li>Promote walk and bike to school days combined with health and safety messaging to students and parents. (Schools and ISDs can participate in International Walk and Bike to School Day, or hold campus/district level events like "walking Wednesdays" to encourage more active transportation</li> <li>Encourage walking and biking through school-based events. Encourage parents and staff members to model active transportation behaviors whenever possible</li> <li>Coordinate community-based events like walking school buses to encourage students to walk to school</li> </ul>	Short-Term	Low	ISD	ISD
<ul> <li>Implement a pedestrian educational awareness campaign         <ul> <li>Begin collection counts of pedestrians and bicyclists in target areas that can provide a baseline of data regarding active transportation and serve as an objective analysis to support investment in active transportation facilities for the future. This data is important for evaluation of changes made and projects constructed</li> <li>Conduct surveys among students and parents to determine current commuting habits and identify barriers to active transportation</li> </ul> </li> </ul>	Short-Term	Low	City /School Staff	NCTCOG, ISD, Public
<ul> <li>Implement a bicycle educational awareness campaign</li> <li>In depth safety analysis to get additional information on the reason(s) for bicycle/pedestrian accidents</li> </ul>	Mid-Term	Medium to High	City, Tarrant County	Hospitals, Police Department, NCTCOG
Short: 1-2 years				

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Establish an implementation program for bicycle infrastructure</li> <li>Move forward with trail engineering plans to continue planning efforts to take opportunity of federal funding</li> </ul>	Mid-Term	Medium	City	
<ul> <li>Establish an implementation program for bicycle infrastructure</li> <li>Explore establishing a staff position to act as a technical resource for zoning, land use, and roadway design changes to promote bicycle and pedestrian friendly development, as well as for grant writing</li> </ul>	Mid-Term	Medium to High	City, Tarrant County	
<ul> <li>Implement pedestrian safety measures</li> <li>Coordinate with local governments and law enforcement personnel to expand the radius protected by school zones into the neighborhoods adjacent to schools</li> <li>Advocate for policies that reduce speed limits in designated school zones, increase fines/sanctions against drivers who disobey school zone laws, and dedicate additional fines to fund safety programs and/or infrastructure improvements near schools</li> </ul>	Mid-Term	Low to Medium	State/County Agencies	TxDOT, City , ISD, School Staff
<ul> <li>Adopt engineering and design elements for pedestrian infrastructure</li> <li>Partner with local governments on a comprehensive assessment of infrastructure and safety issues around schools to help prioritize investments</li> <li>Develop school transportation safety policies at the district or campus level that included considerations specific to safety for students walking and biking</li> <li>Develop a sidewalk maintenance program to ensure facilities are safe and operational for all users including individuals with mobility impairments</li> </ul>	Mid-Term	Medium	City	ISD, School Staff, Law Enforcement
<ul> <li>Engage students (and families) in activities to assess traffic safety issues and needed infrastructure improvements near schools</li> <li>Create safe walking route maps for every school with input from city officials, school personnel, parents, and students</li> <li>Engage students and community members in the process of assessing their environment through traffic counts, hazard assessments, photo documentation, air quality sampling, and community surveys</li> </ul>	Mid-Term	Low	ISD	School Staff, Public, Law Enforcement
<ul> <li>Adopt engineering and design elements for bicycle infrastructure</li> <li>Provide amenities and end-of-trip facilities such as bicycle parking and storage, lighting, landscaping, signing, pavement marking, and signalization to enhance the value and increase the utility and safety of the bicycle facilities</li> <li>Include bicycle and pedestrian planning infrastructure in all transportation improvements, reconstruction, and maintenance)</li> </ul>	Long-Term	Medium	City	Private /Non-profit
Adopt engineering and design elements for bicycle infrastructure • Establish a maintenance program and maintenance standards that ensure sage and usable bicycle and pedestrian facilities	Long-Term	Medium to High	City	

Timo	Cost	Posponsible Agency	Other Key Participants
Long-Term	High	City	Other Key Participants Private/Non-profit
Long-Term	High	City	ISD
Long-Term	High	City	Private/Non-profit
Long- Term	High	City	ISD
nnectivity			
Short- to Long-Term	Medium to High	City	Major Employers, Schools, Developers
Mid-Term	Medium	City	Public
Long-Term	Medium to High	City	Property Owners, TxDOT
	Long-Term Long-Term Long-Term nectivity Short- to Long-Term Mid-Term	Long-TermHighLong-TermHighLong-TermHighLong-TermHighshort-to Long-TermMedium to HighMid-TermMedium	Long-Term High City   Long-Term High City   Long-Term High City   long-Term High City

Implementation Plan: City of Lake Worth					
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants	
Housing (pp. 62-78)					
Goal: Promote quality infill development as a means to expand the supply and ty	pe of available housing				
Intergovernmental Coordination • Explore options to create a consortium of governments	Short-Term	Low	Tarrant County	Cities	
<ul> <li>Generate developer interest</li> <li>Create development incentives</li> <li>Prepare list of available infill sites</li> <li>Event to showcase city incentives and developments/marketing</li> </ul>	Mid-Term	Medium	City	Developers	
Land acquisition and land assembly <ul> <li>Prepare list of available infill sites</li> <li>Purchase land and work with developers</li> </ul>	Mid-Term	High	City	Developers	
<ul> <li>Infill development for Base housing or other major employers</li> <li>Register developments in Rental Partnership Program or market to major employers</li> </ul>	Long-Term	Low	City	Developers and NAS Fort Worth, JRB	
<ul> <li>Increase Land Availability for New Development</li> <li>Cities can partner with area non-profit agencies or developers to develop housing</li> <li>Research requirements/seek housing funding sources from Tarrant County and HUD</li> </ul>	Long-Term	High	City	Tarrant County, Developers	
Goal: Improve the aesthetic character of the community by reducing general land	d use incompatibilities				
<ul> <li>Set standards for adequate buffering and screening         <ul> <li>Collect examples of comparable community ordinances and best practices</li> <li>Evaluate city standards for buffering between incompatible land uses</li> <li>Amend zoning ordinance</li> </ul> </li> </ul>	Short-Term	Low	City	Public	
Make zoning changes to match long-term vision <ul> <li>Update Zoning Ordinance</li> </ul>	Mid-Term	Medium	City	Neighborhood and Business Associations, Property Owners, Public	
Goal: Minimize compatibility issues associated with noise exposure from aviation	operations				
Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate Continue entering proposed development projects onto the RCC Development Review Tool for city staff to review and consider land use AICUZ compatibility for proposed development projects	Short-Term	Low	City	RCC Partners	
Establish future land uses in long-term vision plan <ul> <li>Update Future Land Use Map</li> </ul>	Short-Term	Low	City	Public	
Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate • Create a subcommittee from the Regional Coordination Committee comprised of area building officials to meet periodically on noise mitigation and energy efficiency issues	Short-Term	Low	City	RCC Members, Local Government Code Officials	
				Short: 1-2 years	

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate Coordinate with the Community Plans and Liaison Officer at NAS Fort Worth, JRB on new development projects that are within the noise contours	Short-Term	Low	Developers	Cities; NAS Fort Worth, JRB
<ul> <li>Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate</li> <li>Adopt and follow the 2012 International Residential Code and the 2012 International Energy Efficiency Code, as well as the accompanying NCTCOG Regional Amendments</li> </ul>	Mid-Term	Medium	City	Local Government Code Officials;, Developers
<ul> <li>Promote weatherization and other energy efficient building practices as complementary tools for achieving sound reduction <ul> <li>Provide local homeowners with information and education about home weatherization techniques and funding opportunities</li> <li>Apply for weatherization program grants to insulate existing residences from aircraft noise</li> </ul></li></ul>	Mid-Term	Low to Medium	City	Neighborhood and Business Associations, Property Owners, Public
Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate • Work with the real estate community to disclose aircraft noise to potential commercial/residential buyers • Update noise mitigation requirements if and when AICUZ noise contours are modified	Long-Term	Medium	Real Estate Agents; City	Cities; NAS Fort Worth, JRB
Incorporate compatible land use strategies in coordination with NAS FW JRB as appropriate <ul> <li>Determine feasibility of adopting a noise mitigation overlay for areas that fall within the AICUZ noise and safety contours</li> </ul>	Long-Term	High	City	Developers
Make building improvements for noise attenuation <ul> <li>Identify noise attenuation measures</li> <li>Incorporate in building codes</li> <li>Code enforcement</li> </ul>	Long-Term	Medium	City	Building Owners and Developers
<ul> <li>Consider incorporating sound attenuation elements beyond the 2012 residential code         <ul> <li>Consider adopting the Green Construction Code for additional energy efficiency measures in residential development.</li> <li>Adopt measures to increase sound attenuation in new construction non-residential buildings.</li> <li>Encourage new commercial development to adopt Leadership in Energy and Environmental Design (LEED) standards</li> </ul> </li> </ul>	Long-Term	High	City	Developers

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
Goal: Increase household and neighborhood capacity by building on the social, e	conomic and physical as	ssets of the community	and its residents	
Improve the quality of existing housing stock <ul> <li>Proactive code enforcement</li> </ul>	Short-Term	Low	City	
Create rental registration program <ul> <li>Create inventory of rental housing</li> <li>Document housing conditions</li> <li>Code enforcement</li> </ul>	Short-Term	Low	City	
<ul> <li>Promote an integrated asset-based approach to neighborhood revitalization</li> <li>Identify neighborhoods in need of a study</li> <li>Conduct a revitalization plan that focuses on the inter-related elements of healthy, sustainable places</li> </ul>	Mid-Term	Medium	City	Neighborhood Associations, Public
Create neighborhood identity • Create plans for consistent signage and landscape improvements • Provide technical assistance to neighborhoods to make improvements	Mid-Term	Medium	City	Neighborhood Associations, Public
<ul> <li>Enhance multifamily site development requirements</li> <li>Identify improvements to multifamily site development requirements</li> <li>Update development regulations</li> </ul>	Mid-Term	Low	City	Tarrant County Apartment Association
<ul> <li>Housing rehabilitation</li> <li>Research requirements/seek housing funding sources from Tarrant County and HUD</li> <li>Code enforcement</li> <li>Provide financial assistance to homeowners for repairs</li> <li>Fund non-profit agencies for housing rehabilitation</li> </ul>	Long-Term	High	City	Tarrant County and Developers
<ul> <li>Infrastructure improvements to attract development</li> <li>Identify infrastructure improvement needs</li> <li>Seek CDBG or other funding sources to create amenities to attract development</li> </ul>	Long-Term	High	City	Tarrant County
Goal: Diversify the mix of housing choices in the community				
Improve development climate • Identify impediments for the creation of mid-range and high-value housing	Short-Term	Low	City	Developers
Expand Supply of Mid and High Value Housing • Identify land appropriate for mid-range and high-value housing development	Mid-Term	High	City	Developers
Create employer incentives • Work with the Base, Lockheed Martin, and other major employers on employee incentives	Mid-Term	Medium	City	Major Employers
<ul> <li>Promote universal design through incentives         <ul> <li>Review local plans and zoning requirements</li> <li>Explore options to create incentive programs for the development of housing options for aging populations</li> </ul> </li> </ul>	Mid-Term	Low	City	Housing Developers for Seniors
Encourage best practices in the design and construction of residential and mixed use developments to meet the needs of seniors, individuals with disabilities, and other special needs populations • Encourage "Aging in Place" neighborhoods	Mid-Term	Low	City	Housing Developers
				Cl . 1.2

# Table 1.29 – Implementation Plan: City of Lake Worth (continued)

Implementation Plan: City of Lake Worth				
Project/Initiative	Time	Cost	Responsible Agency	Other Key Participants
<ul> <li>Encourage the development of a range of housing options to accommodate households of all ages         <ul> <li>Review existing land use, zoning, and subdivision regulations to identify barriers to the development of senior housing options</li> <li>Review existing land use, zoning, and subdivision regulations to identify barriers to the development of alternative housing options, including cottage-style, small-lot developments and other multifamily and mixed use developments</li> </ul> </li> </ul>	Mid-Term	Medium	City	
<ul> <li>Develop downtown mixed use housing</li> <li>Identify sites for mixed use housing</li> <li>Zoning updates to remove barriers for mixed use development</li> <li>Incentivize mixed use development</li> </ul>	Long-Term	High	City	Developers
Goal: Increase access to quality, affordable housing choices for all residents				
<ul> <li>Promote fair housing outreach</li> <li>Coordinate with Tarrant County and non-profit fair housing education providers</li> <li>Create publications - Newsletter articles and posters</li> </ul>	Short-Term	Low	City	Tarrant County and Non-Profit Housing Education Providers
<ul> <li>Promote greater financial literacy for households</li> <li>Promote use of financial literacy programs to enhance personal financial management skills</li> <li>Explore partnerships with local schools and faith-based institutions to target participation in young adult classes</li> </ul>	Mid-Term	Medium	City	Tarrant County and Non-Profit Housing Education Providers
Short: 1-2 years				