



Comprehensive Plan 2002

Adopted: September 3rd, 2002 • Ordinance No. 2118



*Comprehensive
Planning
Overview*

Baseline Analysis

Goals & Objectives

*The
Thoroughfare
Plan*

*The
Future Land Use
Plan*

*The
Public Facilities
Plan*

*An
Infrastructure
System Overview*

*Community
Image
Considerations*

*Implementation
Strategies*

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Section 1: Comprehensive Planning Overview





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Section 1: Comprehensive Planning Overview

WHAT IS A COMPREHENSIVE PLAN?

A Comprehensive Plan can be described in many different ways, often depending on the audience it is serving at any given time. A land developer will generally describe a Comprehensive Plan much differently than a city planner; a Chamber of Commerce chairperson will generally describe it much differently than a city engineer, and so forth. However, several widely accepted descriptions prevail, including that a Comprehensive Plan is: 1.) a vision of what a community should be, 2.) a guide for municipal decision-makers, 3.) a tool for managing community changes that may affect the physical development and maintenance of a city, and perhaps most importantly, 4.) a document required by Texas state law as a precursor to municipal zoning authority.

A Comprehensive Plan may be defined differently by different people, but should reflect the community's vision, be a guide for the community, and serve as a planning tool.

WHY IS A COMPREHENSIVE PLAN NECESSARY?

Chapter 213¹⁻¹ of the Texas Local Government Code requires cities in Texas to have a comprehensive plan, and as mentioned, the zoning regulations of cities in Texas must be in accordance with a comprehensive plan under Chapter 211. These laws alone are sufficient endorsement of the need for a Comprehensive Plan. However, there are other numerous reasons in addition to the legal necessity.

Advance, or comprehensive, planning efforts undertaken by cities have been proven effective in ways people may not easily recognize. A new roadway that makes the commute to work less congested, a new neighborhood playground that provides children with a place to play, and a new fire station that makes the response time to a developing part of a city shorter are all examples of advance planning efforts that work together to enhance a community's quality of life. These are also examples of recommendations that may be made within a Comprehensive Plan.

The purpose of a comprehensive plan as defined under state law is to promote the sound development of municipalities and to promote the public health, safety and welfare.

Source: Texas Local Government Code, Chapter 213, Section 213.001. Purpose

¹⁻¹ During the 2001 Legislative Session, the enabling chapter for comprehensive plans was renumbered from Chapter 219 to Chapter 213.

PURPOSE AND INTENT OF A COMPREHENSIVE PLAN

Comprehensive planning is basically a four-step process, whereby a city: 1.) assesses what it has, 2.) expresses what it wants, 3.) identifies ways in which to achieve what it wants, and 4.) decides how to implement what it wants. The Comprehensive Plan for Terrell, therefore, is divided into four basic parts that correlate with this process, as follows: 1.) The Overview and Baseline Analysis (Section One and Section Two), 2.) The Goals & Objectives (Section Three), 3.) The Plan Recommendations (Section Four through Section Eight), and 4.) The Implementation Strategies (Section Nine). **Illustration 1-1** graphically shows this correlation.

Within the Plan Recommendations phase of the program, Terrell's Comprehensive Plan sets forth a generalized pattern for various land use locations based primarily on their respective distribution and interrelationships. It also outlines the transportation corridors, current and future, necessary to support those land uses. As **Illustration 1-1** identifies, these aspects of the Plan are supported

by a set of goals and objectives drawn from the desires of citizens, business leaders, City leaders and other interested people, and are intended to help Terrell maintain and further create an attractive, vibrant community. The Plan, once adopted, should be considered the City's statement of public policy with respect to how the community should grow and

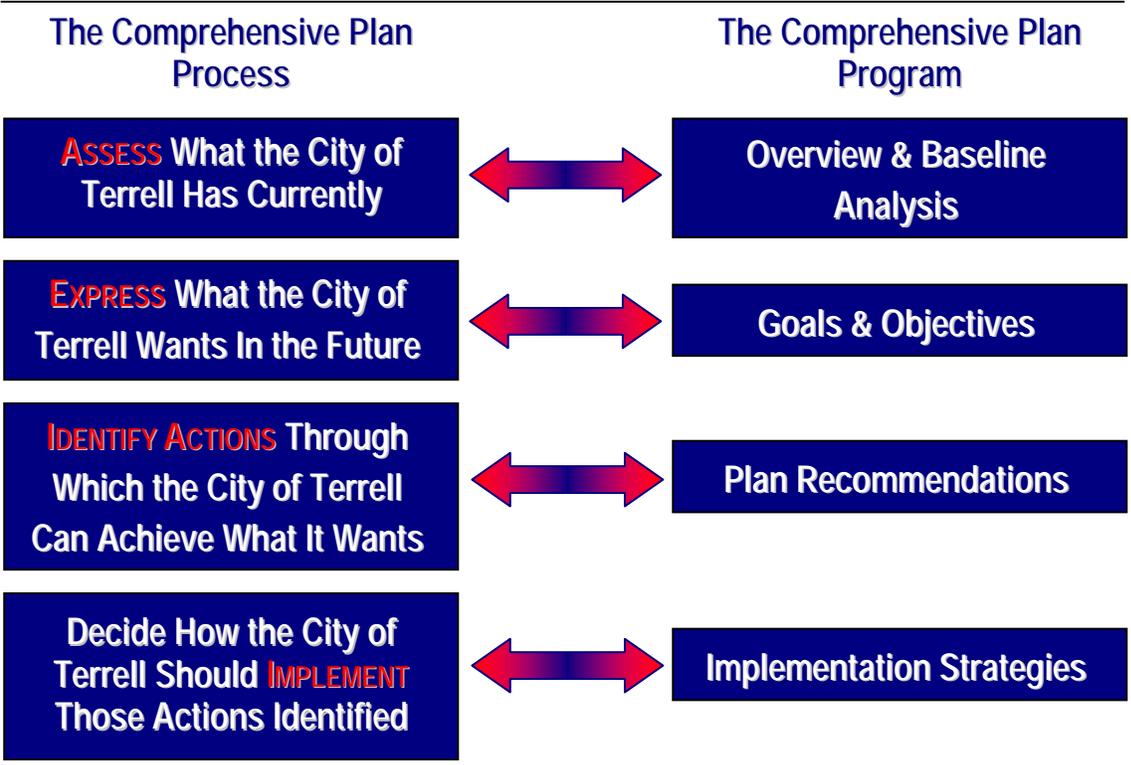


Illustration 1-1
THE COMPREHENSIVE PLAN: PROCESS AND PRODUCT

develop over time. It should, therefore, be used on a daily basis by City staff, decision-makers and citizens to direct the growth and physical development of Terrell.

Terrell's Comprehensive Plan should ultimately be an accurate reflection of what is in the best interest of the City, as perceived by citizens, property owners and City leaders. The Plan, by law and through practice, should help guide zoning and development decisions, and should serve as a basis for future capital expenditures. The primary objectives of the Comprehensive Plan are to ensure the following:

- Efficiency of delivery of public services,
- Coordination of public and private investment,
- Minimization of any conflicts between land uses,
- Management of growth in an orderly manner,
- Cost-effectiveness of public investments, and
- Maintenance of a rational and reasonable basis for making decisions about the community.

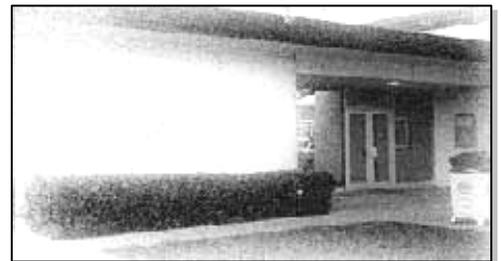
It is important to emphasize that the Comprehensive Plan *is not a rigid policy* of the City, but rather *is a guide* for the City. The Plan is a viable document for as long as it is utilized for this express purpose. However, when it becomes apparent that Terrell has changed to the extent that the Comprehensive Plan is no longer providing guidance, a new or updated comprehensive planning effort should be undertaken. The Plan, which is a product of a comprehensive planning effort, should not be seen as a static document. As the nature of comprehensive planning is a continuous process, similarly the Comprehensive Plan itself should undergo continuous, consistent review and revision according to changes in physical, social, economic and/or environmental conditions within Terrell. It is important to note that certain sections of the Comprehensive Plan, such as the Future Land Use Plan, may require more consistent updates than other sections of the Comprehensive Plan, such as the Community Image Considerations. However, the City's alteration of one section of the Comprehensive Plan should not invalidate the substance of or recommendations within other sections of the Plan; each section should be viewed as an individualized guide for Terrell that contributes to the comprehensive nature of the Comprehensive Plan document.

*Terrell's
Comprehensive Plan
should not be viewed
as a rigid policy, but
as a guide that should
undergo consistent
review to ensure that
it is able to provide
this important
function as the City
experiences change.*



Comprehensive Plan 2002

Section 2: Baseline Analysis





Comprehensive Plan 2002

Section 2: Baseline Analysis

INTRODUCTION

The foundation of the comprehensive planning process Terrell has undertaken rests in basic information about the City, including the historical, regional, environmental, and demographic information about the community. The *Baseline Analysis* section also gives a general insight into the community's urban pattern, with information about the current land uses and housing characteristics within the City. All of these elements together are essential for a clear understanding of the local physical and social composition. The primary objective of this section is to use the information contained herein to identify various opportunities and constraints Terrell must consider in terms of shaping its future form and character. The secondary objective of the *Baseline Analysis* is to ensure that the information being used as the foundation of the planning process accurately portrays the community and its needs. The following components serve as a basis for creating the *Baseline Analysis* section:

- Terrell's Historical Background,
- The Relationship of Terrell to the Region,
- Physical Factors Influencing Development Within the City,
- Terrell's Demographic Profile & Economic Characteristics,
- Existing Land Use Characteristics,
- Existing Housing Characteristics, and
- Review of Terrell's Existing Ordinances.

Each component contains information pertaining to the topic as well as graphic support, where appropriate. The *Baseline Analysis* section includes the identification of other issues that will be addressed in the formulation of the Goals & Objectives section of the Comprehensive Plan, which are instrumental in generating the various recommendations contained within the Comprehensive Plan.

The Baseline Analysis provides a starting point for the planning process by providing existing information about Terrell's historical, regional, physical, socioeconomic, and housing characteristics, as well as about the City's existing plans and ordinances.

HISTORICAL BACKGROUND²⁻¹

The surveyor Robert A. Terrell built in 1844 the first cabin in the area that would become the City of Terrell. His brother-in-law, William D. Irvine, became the first permanent settler in 1846, followed very shortly by Terrell and his new wife. Terrell, Irvine, C.C. Nash, and John G. Moore offered the Texas and Pacific Railroad Company 100 acres of land in 1873 to locate a depot in a specific location selected by them near Robert Terrell's farm. A new town named Terrell was laid out around that depot, and carloads of lumber began arriving to build businesses and homes. The community grew rapidly, obtaining a post office in 1873, electing its first mayor in 1874, and incorporating the town in 1875. It quickly became the largest town in Kaufman County and was the center of commerce for the area. The opening in 1855 of the institution now known as the Terrell State Hospital led to further growth of the town. Growth was further enhanced by the selection of Terrell by E.H.R. Green as the headquarters of the Texas Midland Railroad in 1892. Although the town at that time was primarily a commercial center and shipping point, it had a diversified economy with cotton gins, flour mills, a creamery, a canning plant, an iron foundry, a cotton seed oil mill, and an ice plant. The cooperation of local businessmen and farmers in 1903 with Dr. S.A. Knapp of the U.S. Department of Agriculture led to the first successful demonstration farm, which was the beginning of a nation-wide program for farming that was based on the "Terrell Plan."

The first private school opened in Terrell in 1874, even before the first church was built. The school was quickly followed by others, and in 1883, the town voted to establish a public school system. S.M.N. Marrs, who later became the State Superintendent of Public Instruction, was one of the notable early educators, being superintendent of the local schools for 25 years. The founding of Toon College in 1897 by W.B. Toon, the son-in-law of Robert A. Terrell, was followed by a succession of short-lived colleges until Texas Military College was established by Colonel L.C. Perry in 1914. In 1949, it was purchased by Southwestern Christian College, and the new college significantly expanded the existing educational facilities. Also, a branch campus of Trinity Valley Community College was established in Terrell in the 1980's.

The industrial growth of Terrell began with the closing of the British flight training school that operated during World War II out of what is now the Terrell Municipal Airport. The vacant buildings were utilized and expanded by various companies, and today those companies provide a major source of employment. The companies in another industrial area to the west of Terrell have also helped sustain the growth of Terrell. The population of Terrell was estimated to be almost 14,000 in the year 2000 (by the U.S. Census), and the City is poised for further growth as the Dallas-Fort Worth Metroplex continues to expand.

Terrell has a long history, beginning approximately 154 years ago in 1848.

²⁻¹ Written By: Becky Sullivan and Dr. Horace Flatt.

REGIONAL RELATIONSHIP

It is important to understand the relationship between Terrell and the surrounding area, both physically and economically. Major regional thoroughfares, major employers, large recreational facilities, and environmental features are examples of some of the factors that contribute to or influence a community's impact on a region, or conversely, a region's impact on a community.

U.S. Highway 80 and Interstate Highway 20 provide Terrell with east-west access to the region. Other regional thoroughfares such as State Highway 34, State Highway 205, and Farm Road 148 provide north-south access. The presence of these prominent north Texas highways not only provides good access for the residents of Terrell, but they also bring Terrell to the attention of travelers using these routes, thereby creating an opportunity for a higher retail and commercial base in the City. Terrell's proximity to Dallas provides the City with both national and international air transportation from the Dallas/Fort Worth and Love Field Airports. Terrell's own Municipal Airport also adds to the City's ability to attract transportation-related industries. In addition, the Union Pacific Railroad passes through the center of Terrell, which provides further opportunity for nonresidential uses, economic growth, and future rail transit connections.

In addition, Terrell's proximity to a city of Dallas's size also allows its residents to take advantage of the employment opportunities created by such a diverse economic base. Terrell's residents may also avail themselves of the services of a larger base of restaurants, retail and recreational facilities that exist because of Dallas. The fact that Terrell is close enough to such opportunities and facilities while removed from the "big city" by geographic distance can be a strong attraction for people looking for a country lifestyle with urban amenities close by.

Local attractions in Terrell, which include the Terrell Heritage Museum, Historical Tours, outdoor activities at nearby lakes, the City's park system and Terrell's Classic Indoor Arenas, all serve as regional attractions to the City.

*Communities in proximity to Terrell include:
Oak Ridge,
Wills Point,
Kaufman,
Talty,
Crandall,
Mesquite,
Sunnyvale,
Heath,
Rockwall,
and Dallas.*

*Local attractions in Terrell include:
The Terrell Heritage Museum,
Historical Tours,
the Terrell Classic Indoor Arena, and activities at nearby lakes.*

PHYSICAL FACTORS INFLUENCING DEVELOPMENT

Physical features that influence the development of a community generally fall under two major categories, those that are natural and those that are man-made. Natural features include geology, topography, soils and vegetation; it is the interrelation of these features that creates the natural environment of a community. Floodplains, aquifers, endangered species and the climate of the area are some other natural features that may also affect development in an area. In addition, there are numerous man-made factors that may impact development patterns, including major thoroughfare routes, extra-territorial jurisdiction (ETJ), railroads, airports and public facilities. Both natural and man-made physical factors are discussed in the following section.

Natural Features

GEOLOGY

In order to utilize different landforms efficiently, it is important to study and take into consideration the geological formation²⁻² of an area before developing that area. The City of Terrell is situated in a region of Texas where the main geographic formations were developed during the Cretaceous era (approximately 140 million years ago). During this period, seawaters covered this part of Texas. These waters were key to the development of many significant elements, specifically, the prevalence of limestone and "Austin Chalk" that were deposited when the Cretaceous seas over Texas became deeper. Therefore, it is mostly the presence of limestone that needs consideration while planning for physical development within Terrell, though generally any adverse effects can be mitigated through the various modern construction techniques available today.

SOILS

The physical development also depends heavily upon soils²⁻³ existing in an area. The main soil type that exists throughout the region that includes Terrell is known as Blackland Prairie soil. It is the principal soil throughout approximately 13 million acres of East Central Texas, extending in a southeasterly direction from the Red River to Bexar County. Blackland Prairie soils consist of various soil series, including the Houston Black, Heiden, and Austin soil

The physical features of Terrell discussed within this section include geology, topography, soils, vegetation, floodplains, endangered species, major thoroughfare routes, extraterritorial jurisdiction, and railroads.

According to geologic information, limestone may be a consideration in the way in which construction projects are undertaken in Terrell.

²⁻² Factual information pertaining to geology was obtained from the Texas Almanac 2000-2001, published by the Dallas Morning News.

²⁻³ Factual information pertaining to soils was obtained from the Geologic Atlas of Texas, Texarkana Sheet, The University of Texas, Bureau of Economic Geology.

series with smaller areas of the Lewisville, Altoga, and Eddy series. In dry weather these soils form large deep cracks, a fact that needs to be considered during the construction of foundations, highways and other structures that can be damaged due to this high shrink-swell potential. The Blackland soils are conducive to use as both farmland and grassland. Cotton, grain sorghums, corn, wheat, oats and hay are easily grown in this soil. The major management problems of these soils are water erosion, cotton root rot, and brush control.

VEGETATION²⁻⁴

In its native state, this area is comprised of generally grassy plains that are extremely fertile. The original vegetation includes plant life such as Indiangrass, switchgrass, sideoats grama, Texas wintergrass and buffalograss. But due to fertile soils much of this area has been cultivated and only small acreages of grassland prairie remain in original vegetation. Much of the City's original tree-covered areas are encountered along creeks and drainage areas. The vegetation is also associated with a variety of timber, including oaks, pecan, elm, and mesquite.

TOPOGRAPHY AND FLOODPLAINS

The topography in Terrell can generally be described as gently rolling. It is important to study the topography (see **Plate 2-2**) of an area due to the fact that such knowledge of the terrain not only helps in planning efficient locations for these developments, but it can also save on the cost of development. The City is situated along a drainage divide that separates the two major drainage features, Kings Creek and Bachelor Creek. Both creeks have substantial related floodplain areas and the drainage divide, which passes through the City generally from the north to south, delineates their respective drainage basins. The eastern section of Terrell falls within the basin of Kings Creek, while areas to the west of the divide fall within the basin of Bachelor Creek. Knowledge of floodplains, drainage ways and their boundaries helps to prevent future problems such as flooding by allowing application of appropriate construction technology and proper planning principles during the initial stages of development. It should be noted that floodplain areas, although not generally conducive to residential or business development, do provide opportunities for creating recreational open spaces and for conservation of open spaces in Terrell; open space will become increasingly important as the City continues to grow and land is further developed.

Significant soil series in and around Terrell include the Houston Black, the Heiden and the Austin soil series; soils within these series can have high shrink-swell potential.

Kings Creek and Bachelor Creek are two major drainage features in Terrell, both of which have significant related floodplain areas in which development should be limited.

²⁻⁴ Factual information pertaining to vegetation was obtained primarily from the 1998-1999 Texas Almanac, the Dallas Morning News.



Plate 2-2
Physical Factors
 City of Terrell, Texas

Legend

- Residential Areas
- Non-Residential Areas
- Public/Semi-Public Parts
- Lake
- Floodplain
- Existing Major Thoroughfares
- Existing Collectors
- Creeks
- City Limits
- ETJ

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AQUIFERS

Approximately 80 percent of the land in the state of Texas is covered by underlying aquifers. Out of these, there are nine major and 20 minor aquifers in the state that account for approximately 56 percent of the water currently used in Texas. The City of Terrell is not directly affected by the availability of water supply from aquifers, as there are no major aquifers underneath the City or in the immediate area.

ENDANGERED SPECIES

Endangered species can be described as the species of plants and animals that are at a risk of extinction, and therefore should be protected by keeping their natural habitat intact and free of man-made disturbances to the greatest extent possible. Thus, the existence of any endangered species in an area has a limiting effect on urban development.

The endangered species of various wildlife, fish, mammals, & reptiles for Kaufman County, according to the Texas Parks and Wildlife Department as of April 1999, are as follows:

- Arctic Peregrine Falcon,
- Bald Eagle,
- Henslow's Sparrow,
- Interior Least Tern,
- Migrant Loggerhead Shrike,
- Western Burrowing Owl,
- Timber/Canebroke Rattlesnake,
- White-faced Ibis,
- Whooping Crane,
- Wood Stork,
- Plains Spotted Skunk,
- Texas Garter Snake,
- Texas Horned Lizard.

CLIMATE

Climate is another natural factor that can affect the type of development that can occur in an area. Climate of a community can either be a limiting or an encouraging factor to urban development depending on the type of industry or business. Terrell's climate can be considered moderate; therefore it does not have extreme effects on development. The climatic data²⁻⁵ is as follows:

- Coldest month — January, with an average temperature of 33 degrees Fahrenheit,
- Hottest month — July, with an average temperature of 96 degrees Fahrenheit,
- Annual average temperature — 64.5 degrees Fahrenheit,
- Wettest month — May with an average rainfall of 4.47 inches,
- Driest month — January with an average rainfall of 1.80 inches,
- Annual average rainfall — 40.77 inches.

There are 13 various types of animals that are on the endangered species list, according to the Texas Parks and Wildlife Department, that are found in Kaufman County.

The climate in Terrell, like that of most of the North Texas area, is generally mild.

²⁻⁵ Information obtained from the City of Terrell website at www.cityofterrell.org.

Man-Made Features

EXTRATERRITORIAL JURISDICTION

A city's extra-territorial jurisdiction (ETJ) helps to determine its future growth potential by establishing a definite area within which expansion of the city can occur. This helps a city plan for future annexations, and prepare its budget and Capital Improvement Program accordingly. This further helps determine desirable land uses within the current city limits, as well as the potential future city limits. The City of Terrell currently has a one-mile ETJ. All land area falling within the City's ETJ is within Kaufman County's jurisdiction. Though most of the ETJ area is presently comprised of vacant land, development in the ETJ will increase as the community and the surrounding area continues to grow.

Terrell has a one-mile extraterritorial jurisdiction (ETJ), the designated area within which the City can annex land into its City limits. Most of the ETJ is currently undeveloped.

MAJOR REGIONAL FACILITIES

The presence of major regional facilities in and around the City also affects development trends by drawing regional interest towards the community by attracting businesses and population to the City, as well as tourists who can add to local sales tax revenue. Terrell's major tourist draws include the Terrell Heritage Museum, Terrell's historical tours, the historic downtown area, Terrell Classic Indoor Arenas, and Tanger Outlet Center. In addition, the City's location within the triangle formed by three of the state's premier fishing lakes, Tawakoni, Ray Hubbard and Cedar Creek, also helps draw people to the community. Campgrounds, picnic areas, fishing and boating facilities are available at each of these lakes, which are all less than a one-hour drive from Terrell.

Access to regional facilities can attract residents and visitors into a community.

The Trinity Valley Community College (TVCC) and Southwestern Christian College (SWCC) provide students with two years of academic study, offering courses that can be transferred to a four-year college or university.

TRANSPORTATION ROUTES

Major transportation routes are additional man-made elements that can affect the development patterns of a city. They can often help to attract desirable growth in terms of businesses, thereby proving economic development opportunities for communities. Businesses often seek to locate in an area that has the availability of rail and air services, as well as a regional thoroughfare system. Additionally, one of the primary considerations of the general population looking at locating in a community is the availability of convenient access to the region.

The availability and proximity to major transportation facilities can greatly contribute to economic development opportunities.

With respect to transportation routes, the City of Terrell has an advantage in attracting future business and population growth with numerous regional thoroughfares running through the

City. Interstate Highway 20 and U.S. Highway 80 provide for high-volume, high-speed traffic in an east-west direction. State Highway 34, State Highway 205, and F.M. 148 provide north-south access within the region. Further, the presence of the Union Pacific Railroad, which passes through the center of Terrell in an east-west direction, provides an opportunity for nonresidential uses next to the railroad, which in turn may bring additional economic growth to Terrell's industrial parks. The railroad also provides opportunity for future rail transit connections to the Metroplex and other neighboring cities. The City also offers the services of Terrell Municipal Airport for private aircraft use; it should be noted that there is an additional 1,000 feet of runway as well as T-hangars planned for the future. The Dallas Love Field Airport, located 35 miles from Terrell, and the Dallas/Fort Worth International Airport, located 50 miles from Terrell, provide commercial air services. In addition to these convenient road, rail and air services, the City also offers excellent motor freight services provided by Federal Express, and United Parcel Service. Also, Greyhound Bus Line provides passenger bus service for the City of Terrell.

*There are several major roadway transportation routes that provide access to and from Terrell, including:
Interstate Highway 20,
U.S. Highway 80,
State Highway 34,
State Highway 205,
and F.M. 148.*

City Services

PUBLIC UTILITIES

The provision of public utilities such as water, sewer, electricity, gas and communication technology, will become increasingly important with population growth within the City. The availability of adequate and affordable services helps in drawing and maintaining the desirable population and business growth in a community. The residents of Terrell currently are provided with electric power and natural gas services from Oncor, and with telephone, network and special communication services from Southwestern Bell Telephone, AT&T, U.S. Sprint, and other long distance carriers. The water and wastewater systems are managed by the City of Terrell. Terrell has a contract with the Sabine River Authority to purchase nine million gallons of water daily, and the Terrell City Lake is capable of supplying an additional five million gallons daily. The City is served by a water treatment plant with a maximum capacity of over six million gallons per day; this due to the expansion of facilities, this will increase in the near future to 10 million gallons per day. Sanitation services are provided through a contract with Independent Environmental Services, Inc. (IESI).

PUBLIC SERVICES²⁻⁶

The availability of public services and community facilities can also affect development trends in a community. Such services and facilities include community administration, police and fire protection, parks and recreational facilities, library services, health facilities, planning services, street improvement and management services, community clubs and organizations. The City of Terrell operates under a Council/City Manager type of government. The City has an administration department that oversees City activities; ensures enforcement of City ordinances, state and federal laws; reviews and supervises management policies and city regulations; presents the annual City budget; and, makes recommendations to the City Council for actions concerning the City of Terrell. The Fire Department provides fire protection, fire suppression, rescue, and training for fire fighters and volunteers. It has 17 full-time paid employees and 30 volunteer personnel, and covers an area that is over 18 square miles. In addition, Terrell has a Police Department with 36 municipal officers to provide police protection for the citizens of the City.

The City also provides residents with the services of a Housing Department and an Engineering Department. The Housing Department administers the City's *Section 8 Housing, First Time Homebuyer, Volunteer Home Repair, and Weatherization* programs. The Engineering Department provides services that include the mapping of plats and subdivisions within the City, assigning addresses throughout the City (in order to meet "9-1-1" standards), planning and development services, construction management (for capital projects), street improvement programs, traffic safety, floodplain administration, and serving as a liaison between the Terrell Municipal Airport and the City staff.

Other public facilities in Terrell include the City's park and recreation system, with a total of 150 acres consisting of 5 parks, an Olympic-size swimming pool, 6 tennis courts, 2 lighted baseball-softball complexes (8 fields), 9 soccer fields, and a pavilion overlooking a lake. Health services available are the Medical Center at Terrell, a 100+-physician, 130-bed acute care hospital, and the Terrell State Hospital, a 357-bed psychiatric facility (mentioned previously). The community services available include the American Red Cross, Kaufman Senior Citizens Center, Kaufman Area Rural Transit, the Texas Department of Human Services, 38 churches, and numerous civic clubs.

The public facilities provided by a community are often used to analyze the quality of life within that community.

*City of Terrell
Departments include:
Administration,
City Management,
Engineering,
Fire,
Police,
Human Resources,
Housing,
Library,
Municipal Court,
Municipal
Development,
Public Works,
and Utilities.*

Source: City of Terrell Website

²⁻⁶ Much of the information contained within the Public Services discussion was obtained from the City of Terrell's Website: www.cityofterrell.org.

DEMOGRAPHIC PROFILE

Terrell's geographic location and its easy access to the Dallas/Fort Worth Metroplex and other cities in the region can be considered major factors in the community's future potential for growth and development. The Metroplex is one of the most dynamic growth areas in the nation, and Terrell's proximity to it will allow the City to share in its development. Although such regional advantages will be important to Terrell, the people who live and work in the City are and will continue to be the community's most important resource. Therefore, the following demographic and socioeconomic analysis is provided to help in understanding the characteristics of the general population that will be served by this Comprehensive Plan document.

Terrell's most important resource is and will continue to be its residents.

Population Change

The historical population data shown in **Table 2-1** reflects the population changes in Terrell over the past 5 decades. This data provides the basis for assuming the rate of growth that can be expected in the future. These future population projections, based on historical population changes, are in turn the foundation for planning thoroughfares, land uses, parks and other public facilities that will be required by the citizens over the next five, ten, or twenty years. Refer to the *Future Land Use Plan* section for further discussion of population projections for Terrell.

Table 2-1
HISTORICAL POPULATION GROWTH (1950-2000)
City of Terrell, Texas

Year	Population	Percentage of Growth	Average Annual Compounded Growth
1950	11,544	—	—
1960	13,803	19.57%	1.80%
1970	14,182	2.75%	0.27%
1980	13,225	(-) 6.75%	(-) 0.69%
1990	12,490	(-) 5.56%	(-) 0.57%
2000	13,606	8.89%	0.86%

Source: U.S. Census

The data in **Table 2-1** indicates that the population in Terrell increased steadily from 1950 to 1970, experiencing its greatest increase in population between 1950 and 1960 at 19.5 percent growth. However, the City decreased in population in the two decades between 1970 and 1990²⁻⁷. The fact that other cities in the region (e.g., Forney) started to capture a larger share of the region's population could have been a major contributing factor to Terrell's population decline, especially between 1980 and 1990. This theory is further substantiated by the regional population data shown in **Table 2-2**. The table reflects the growth trends in Terrell and several neighboring cities. This information can help to predict areas where future population growth may occur, and it gives the City a guide for targeting a reasonable amount of population growth.

Other cities in the region began to grow rapidly around 1980, which meant that cities other than Terrell were capturing increasingly large amounts of the regional population.

²⁻⁷ The reduction of patients at the Terrell State Hospital was likely a major contributing factor to this decrease.

Table 2-2 shows seven cities that are considered to be within the same general region as Terrell. As can be seen from the information within the table, Heath and Rockwall experienced the highest rates of growth between 1970 and 2000. Many other cities in the region doubled or tripled their populations during that same time period.

Table 2-2
REGIONAL POPULATION GROWTH (1970-2000)
City of Terrell, Texas and Surrounding Communities

City	1970	1980	1990	2000	Average Annual Compounded Growth Rate 1970-2000
Terrell	14,182	13,225	12,490	13,606	(-) 0.14%
Forney	1,745	2,483	4,070	5,558	3.94%
Mesquite	55,131	67,053	101,484	124,523	2.75%
Heath	520	1,459	2,108	4,149	7.17%
Rockwall	3,121	5,939	10,486	17,976	6.01%
Seagoville	4,390	7,304	8,969	10,823	3.05%
Crandall	774	831	1,652	2,774	4.35%
Kaufman	4,012	4,658	5,251	6,050	1.38%

Source: U.S. Census

Another method of evaluating a community's percentage of growth is to compare it to a larger regional area. Table 2-3 shows this method of evaluating Terrell's population by comparing it to Kaufman County. This comparison shows that despite the fact that the region has experienced a high rate of growth, the percentage of regional growth that has been captured by the City has been declining since 1970. This is a common situation faced by cities similar to Terrell, meaning that those cities that have historically been dominant in terms of growth often experience a "leveling off" or a decline in population as other communities in the region are established.

Table 2-3
REGIONAL POPULATION GROWTH DATA (1970-2000)
City of Terrell, Texas

Year	Population of Kaufman County	Population of Terrell	Percentage of Terrell in Kaufman County
1970	32,392	14,182	43.8%
1980	39,015	13,225	33.9%
1990	52,220	12,490	23.9%
2000	71,313	13,606	19.1%

Source: U.S. Census

As previously stated, it is reasonable to assume that Terrell's regional location in addition to the regional transportation system has contributed largely to its growth. The availability of developable land in close proximity to Dallas is a likely factor for future growth. Also, the City's ability to provide adequate public services and facilities, reasonable land costs, scenic surroundings, and the availability of historic homes could be other important factors that will promote steady growth in the City. It is evident from Table 2-2 and 2-3 that in recent years Terrell has been competing with neighboring cities to capture a part of the region's growth, which is likely to continue.

Race and Age Composition

The information regarding the race and ethnic composition of the local population provides the City with knowledge of the ethnic background of its citizenry. **Table 2-4** shows a comparison between the race/ethnic composition of Terrell's population in 1990 and in 2000, according to the U.S. Census.

While the figures in **Table 2-4** show that the population's composition has been relatively consistent between 1990 and 2000, they also show that the City is becoming increasingly diverse. The White/Caucasian population remains the largest group, but the number of persons of Hispanic origin has more than doubled within Terrell. In addition, the number of people within the "Other" category has more than tripled. Two factors that may have contributed to this increased diversity are the varied employment base and the ease of access to surrounding areas via numerous transportation corridors.

The age composition of the population within a city can provide insight into the types of facilities and services that may need to be provided in the future (e.g., schools, higher-level education facilities, senior citizen facilities, etc.). An analysis of age composition can help to ensure that the Comprehensive Plan is tailored to meet any age-related needs of the people within Terrell in the future. The age composition for Terrell is shown in **Table 2-5**.

As reflected in **Table 2-5** and as would be expected from the overall population increase between 1990 and 2000, all age group categories have increased in number. Perhaps more indicative of possible trends and therefore in need of analysis are the changes not in the basic *numbers*, but in the *percentages* of the respective age groups. The *Prime Labor Force* and the *Elderly* categories have both experienced a slight decrease of two percentage points, while the *Older*

Table 2-4
RACE / ETHNIC DISTRIBUTION
City of Terrell, Texas

Race / Ethnicity	1990		2000	
	Number	Percent	Number	Percent
White/Caucasian	7,354	58.8%	7,732	56.8%
African American	4,546	36.4%	4,452	32.7%
Hispanic/Spanish Origin ⁽¹⁾	833	6.7%	2,390	17.6%
Asian/Pacific Islander	127	1.0%	103	0.8%
Other	463	3.7%	1,570	11.5%

⁽¹⁾ Hispanic/Spanish Origin may be of any race and may be included in any category.

Source: U.S. Census

Table 2-5
AGE COMPOSITION AND DISTRIBUTION
City of Terrell, Texas

Age Groups	1990		2000	
	Number	Percent	Number	Percent
Young Children (Less than 5 years old)	1,034	8.3%	1,068	7.8%
School Age Children & Young Adults (5-19 years old)	2,920	23.4%	3,250	23.9%
College/New Family (20-24 years old)	810	6.5%	993	7.3%
Prime Labor Force (25-44 years old)	3,710	29.7%	3,779	27.8%
Older Labor Force (45-64 years old)	2,137	17.1%	2,752	20.2%
Elderly (65+ years old)	1,879	15.0%	1,764	13.0%
Total	12,490	100.0%	13,606	100.0%
Median Age	32.5		32.8	

Source: U.S. Census

Labor Force category has increased by three percentage points. The changes within the *Prime* and the *Older Labor Force* categories are significant in that they provide the majority of the employment base within Terrell, and therefore may affect economic development opportunities. It seems that between 1990 and 2000, the overall labor force in Terrell generally became older. Changes in the *Elderly* category are significant primarily due to the fact that people in this age group often require special housing (e.g., nursing home facilities, assisted living facilities), some of which may need to be publicly funded (at least partially). In addition, although the *School Age Children & Young Adults* category did not experience any major fluctuation between 1990 and 2000, the City should monitor this age group carefully in order to ensure that adequate educational facilities continue to be provided within Terrell (discussed further below).

Education²⁻⁸

The availability and quality of educational facilities in a community can be a major factor in its growth. Such facilities are considered by businesses and industries looking to locate, relocate, or expand within a given community. The Terrell Independent School District (TISD) is the public school district that serves the City of Terrell. The TISD operates five elementary schools, one middle school and one high school campus. The TISD also manages an additional education program on the grounds of the Terrell State Hospital. Terrell ISD is fully accredited by the Texas Education Agency and the Southern Association of Colleges and Schools. The school district employs 350 classroom teachers, with a student enrollment of 4,000 and an operating budget of approximately 29 million dollars (1999-2000). In addition to the public school facilities, several private schools are also available, including Terrell Christian Academy, which is currently the largest fully accredited private school in Kaufman County. Trinity Valley Community College and Southwestern Christian College, both located in Terrell, provide collegiate-level education.

Trends relative to the educational level of a population generally indicate the skills and abilities of a community's workforce. As mentioned earlier, the trends relative to the educational level of a population generally indicate the skill and abilities of the residents of the community. According to the 1990 U.S. Census, 32.6 percent of the persons in Terrell had completed high school (i.e., received a diploma) and 13.1 percent had attained at least a bachelor's degree; this reflects a total of 45.7 percent of the residents of Terrell with at least a high school diploma. The Census also estimated that the average percentage of persons to have attained a bachelor's degree or higher statewide in 1990 was approximately 20.3 percent.

²⁻⁸ Much of the information within the Education discussion was obtained from the Terrell Chamber of Commerce Website: www.terrelltexas.com/educat.

The labor force in Terrell generally aged between 1990 and 2000, as evidenced by the two percent decrease in the "Prime Labor Force" and the three percent increase in the "Older Labor Force" (refer to Table 2-5).

The quality and availability of educational facilities within a community can not only contribute to the local quality of life, but can also attract businesses and industries.

The 1990 U.S. Census estimated that 13.1 percent of the people in Terrell (of appropriate age) had received a bachelor's degree.

Household Size²⁻⁹

In 1990, the average household size in Terrell was 2.79 persons, and in 2000 it had decreased slightly to 2.77 persons. This trend is consistent with a nationwide trend of decreasing family size. The average household size for the City was marginally higher than the average household size for the state of Texas in both 1990 and 2000, which were 2.73 and 2.74 persons per household, respectively. The data pertaining to household size is important in helping to project future population and public facility needs.

Income Levels

The information pertaining to income levels in a community usually determines the type and intensity of non-residential uses that can be expected to occur in a community. The median household incomes in the City can generally be representative of the disposable income of the population. It is the spending capacity that is used by major retail, commercial and industrial companies to determine the areas in which they should locate. Table 2-6 shows the median income in Terrell and that of the state of Texas in 1990.

Knowledge of the average household size in Terrell is useful in making population projections, which are contained within the Future Land Use Plan section of this Comprehensive Plan.

Table 2-6
MEDIAN HOUSEHOLD INCOME
City of Terrell, Texas

Year	City of Terrell	State of Texas
1990	\$21,633	\$27,016

Source: U.S. Census

Economic Characteristics

The type of work/labor force and the businesses existing in a community are two of the primary determinants of the local economy. Further, the knowledge of a community's labor force gives some insight into the types of industries that are currently located in the City in addition to the types of industries that can be expected to locate in Terrell in the future. Information pertaining to Terrell's labor statistics helps form the basis for its economic development efforts by indicating the existing labor conditions within the City.

Knowledge of the economic characteristics in Terrell is useful for providing a basis for economic development efforts by indicating existing labor conditions within the City.

²⁻⁹ U.S. Census 1990 and 2000 data.

Table 2-7
EMPLOYMENT BY OCCUPATION - 1990
City of Terrell, Texas

Occupation	Persons
Executive, administrative, and managerial occupations	463
Professional specialty occupations	687
Technicians and related support occupations	196
Sales occupations	395
Administrative support occupations, including clerical	676
Private household occupations	85
Protective service occupations	108
Service occupations, except protective and household	995
Farming, forestry, and fishing occupations	41
Precision production, craft, and repair occupations	478
Machine operators, assemblers, and inspectors	336
Transportation and material moving occupations	285
Handlers, equipment cleaners, helpers, and laborers	106
Total	4,851

Source: U.S. Census

The 1990 U.S. Census data shows that the number of people in Terrell that were at least 16 years old and were gainfully employed was approximately 4,851 people. Tables 2-7 and 2-8 show the employment data of these 4,851 individuals by occupation and industry, respectively. Referring to Table 2-7, a high number of individuals in the labor force are employed in service occupations, professional specialty occupations and administrative support occupations. The smallest sources of employment are in private household occupations and occupations related to farming, forestry and fishing. This information is further supplemented in Table 2-8, which shows employment of the City's residents by industry.

The current economic base of Terrell is diversified, with the largest sources of employment stemming from health services (likely from Terrell State Hospital), retail trade, and manufacturing (of durable goods).

In addition to the ability of industries to obtain adequate labor, the City's taxation levels may act as locational determinants for many industries. Terrell's tax unit, as is prevalent in most Texas communities, is based on "assessed value". The total combined effective tax rate per \$100 in Terrell was 2.6185 in 2001.

Table 2-8
EMPLOYMENT BY INDUSTRY - 1990
City of Terrell, Texas

Industry	Persons
Agriculture, forestry, and fisheries	53
Mining	27
Construction	291
Manufacturing – Nondurable goods	156
Manufacturing - Durable goods	553
Transportation	267
Communications and other public utilities	89
Wholesale trade	117
Retail trade	819
Finance, insurance, and real estate	248
Business and repair services	136
Personal services	218
Entertainment and recreation services	51
Health services	838
Educational services	479
Other professional and related services	216
Public administration	293
Total	4,851

Source: U.S. Census

The City has an aggressive industrial incentive policy that is implemented through several programs to help industries locate and thrive in Terrell. The Terrell Economic Development Corporation (TEDC) was formed in 1990 after the establishment of a \$.0005 (half-cent) sales tax. This tax provides funding for assisting industries with low interest loans, grants, infrastructure improvements, and land purchases. In addition, the TEDC is involved in the *Job Training Partnership Act*, which helps to provide businesses with funding for job training. As a further industrial incentive, the City of Terrell have adopted a policy of tax abatement for industries locating in Terrell. The City is also authorized to issue industrial revenue bonds, and is eligible to apply for the Texas Capital Fund. These industrial incentives create a positive business-friendly atmosphere for future non-residential development within the City. During the last six years, these efforts have locally generated over 2,000 new jobs and over \$200 million added to the tax rolls. **Table 2-9** shows the employment and dollar investments of new and expanding businesses in Terrell between 1995 and 2001.

Table 2-9
EMPLOYMENT AND DOLLAR INVESTMENTS BETWEEN 1995 AND 2001
City of Terrell, Texas

Company	Investment (\$)	New Employees
Flexible Foam (Expansion)	6.5 million	40 (additional)
Renfro Enterprises	2.2 million	80
BOC Gases	23 million	40
Madix (Initial Construction & Expansion)	1 million	50 (initial), 35 (additional)
Naturalite/EPI	1.3 million	35 (additional)
Air Systems Components	0.3 million	35
Image National	1.5 million	40
Windsor Nursing Home	2 million	75
Russell Stover Candies	6.5 million	35
Tanger Outlet Center	20 million	300
Van Tone Inc.	1 million	30
Perfection Industries	2 million	95
Tanger Factory Outlet Center	2.5 million	60 (additional)
Vistawall (Skywall relocation)	2 million	35
Vistawall	5 million	35
CSI	12 million	50
Walmart Super Center	8.5 million	200
Naturetech	2 million	35
Goodyear	20 million	150
Paslode	3 million	50
Nucor	20 million	200
Walmart Distribution Center	35 million	225
Exxon/Denny's	6 million	60
Others ⁽¹⁾	6.1 million	102

⁽¹⁾ Includes all other industries of 25 employees or less, which are not specifically listed.

Source: City of Terrell Economic Development Corporation

EXISTING LAND USE CHARACTERISTICS

Providing for the orderly and efficient use of land is one of the primary reasons communities engage in planning efforts; such orderliness and efficiency enables cities to make better decisions regarding capital expenditures and locations for public facilities, to name a few. The activities of the residents of a city create a need for residential, retail, commercial, recreational, office and industrial areas, as well as for an efficient thoroughfare system. In order to more accurately assess what the future land use needs will be in Terrell, an analysis of present land use patterns is essential. Those that exist today within the City have evolved to satisfy the requirements of the community as it has grown, both geographically and in terms of population. Growth and development occurring within Terrell in the future will require the conversion of vacant and agricultural land to more intensified urban uses. The conversion process and how it occurs will be very important to the City in that it is one of the factors that will determine the community's future urban form. The relationships between existing and future land uses will shape the character and livability of the community for many years to come; these relationships will also have an impact upon how Terrell develops economically. Likewise, these relationships will be reflected in the provision of services and facilities throughout the community. An orderly and compact land use arrangement can be served more easily and efficiently than a random and scattered association of unrelated uses.

The land uses that exist today within the City today have evolved to satisfy the requirements of the community as it has grown, both geographically and in terms of population.

Land Use Survey Methodology

In order to analyze the land use trends within Terrell, a field survey was conducted during the preparation of this Plan. Using accepted survey methodologies and land use categories, a comparison of existing land uses can be made. **Table 2-10** shows the existing land use composition for Terrell both in 1985 and in 2000. Many portions of the City remain undeveloped, and extensive additional development may occur in the future in those areas. **Plate 2-3** shows a general representation of the existing land use pattern in Terrell as of the year 2000. Each parcel was color-coded and documented according to the following categories:

A parcel-by-parcel land use survey was conducted as part of this comprehensive planning process.

RESIDENTIAL USES

Single-Family Residences - One-family dwellings including town homes and related accessory buildings.

Two-Family Residences - Duplex dwellings and related accessory buildings.

Multiple-Family Residences - Apartments, condominiums, rooming houses & related buildings.

Manufactured Homes - A manufactured home located on a lot or parcel and used as a dwelling.

PUBLIC, SEMI-PUBLIC AND RELATED USES

Schools, churches, cemeteries, public buildings, and utilities.

PARKS AND OPEN SPACES

Parks, playgrounds and public open space.

OFFICE USES

Professional/administration, doctors, dentists, real estate, architects, accountants, secretarial service, etc.

RETAIL USES

Retail stores, shops and personal service establishments, service stations and any associated off-street parking facilities.

COMMERCIAL USES

Commercial amusements, shopping centers, building materials yards, automobile garages and sales lots, automobile body repair, warehouses, telecommunications/broad-casting towers and facilities, wholesale establishments, sale of used merchandise and welding shops.

INDUSTRIAL USES

Processing, storage, light fabrication, assembly and repairing.

RIGHTS-OF-WAY

Land dedicated to public use for street and alley rights-of-way.

VACANT AND AGRICULTURAL USES

Vacant land having no apparent use, or land used for agricultural purposes (ranching or farming).

Existing land uses within Terrell are categorized according to the following: Single-Family Residential, Two-Family Residential, Multiple-Family Residential, Manufactured Homes, Public/Semi-Public, Parks and Open Spaces, Office, Retail, Commercial, Industrial, Rights-of-Way, and Vacant/ Agricultural.

Existing Land Use Analysis

The percentages of developed land that the various types of land use account for have changed slightly in the years between 1985 and 2000. *Single-Family Residential* land use, although it remains the predominant type of land use in the City, accounted for approximately 12 percent more of the developed land in 1985 than in 2000, specifically at 35.9 percent and 23.9 percent, respectively. Other types of residential land use continue to account for a minimal amount of the developed land in Terrell. The percentage of land used for *Public & Semi-Public* purposes increased in between 1985 and 2000, while the percentage of land used for *Parks & Open Spaces* slightly decreased. Nonresidential land use remained relatively consistent, at 24.2 percent in 1985 and 22.6 percent in 2000. Also significant is the fact that the overall amount of land that had been developed by 2000 was almost twice as was developed in 1985. Although the calculation is not included within **Table 2-10**, the percentage of the total amount of land within the City limits that was developed in 1985 was approximately 27.4 percent (2,836.7 developed acres out of a total of 10,352.6 acres within the City limits), compared to almost 40 percent in 2000 (4,684.1 developed acres out of a total of 11,866.5 acres within the City limits). It is expected that the composition of land uses in Terrell will

Table 2-10
LAND USE ACREAGE – 1985 & 2000
City of Terrell, Texas

LAND USE CATEGORY	1985			2000		
	Acreage	Acres Per 100 Persons ⁽¹⁾	Percentage of Developed Acreage	Acreage	Acres Per 100 Persons ⁽²⁾	Percentage of Developed Acreage
Single-Family	1,017.8	7.70	35.9%	1,097.2	8.07	23.9%
Duplex, Triplex, Quadraplex & Town Home	23.6	0.18	0.8%	48.8	0.36	1.0%
Multiple-Family	26.3	0.20	0.9%	49.1	0.36	1.0%
Manufactured Home	—	—	—	15.1	0.11	0.3%
Residential Sub-Total	1,067.7	8.08	37.6%	1,210.2	8.90	25.8%
Public & Semi-Public	169.8	1.28	6.0%	873.3	6.42	18.6%
Parks & Open Spaces	122.7	0.93	4.3%	152.8	1.12	3.3%
Public Sub-Total	292.5	2.21	10.3%	1,026.1	7.54	21.9%
Office and Retail ⁽³⁾	105.4	0.80	3.7%	240.1	1.77	5.1%
Commercial	483.3	3.65	17.0%	308.6	2.27	6.6%
Industrial	99.0	0.75	3.5	510.9	3.76	10.9%
Nonresidential Sub-Total	687.7	5.20	24.2%	1,059.6	7.80	22.6%
Rights-of-Way	788.8	5.96	27.8%	1,388.2	10.21	29.6%
Total Developed Land Within the City Limits	2,836.7	21.45	100.0%	4,684.1	34.45	100.0%
Vacant Land	7,515.9	56.83	—	7,182.4	52.81	—
Total Land Within City Limits	10,352.6	78.28	—	11,866.5	87.25	—

⁽¹⁾ Refer to the 1985 Comprehensive Plan for additional information on population numbers.

⁽²⁾ Calculated using a population of 13,606 people.

⁽³⁾ During the 2000 land use survey, office uses accounted for approximately 26.9 acres (0.20 acres per 100 persons), and retail uses accounted for approximately 211.8 acres (1.56 acres per 100 persons).

Source: Dunkin, Sefko & Associates

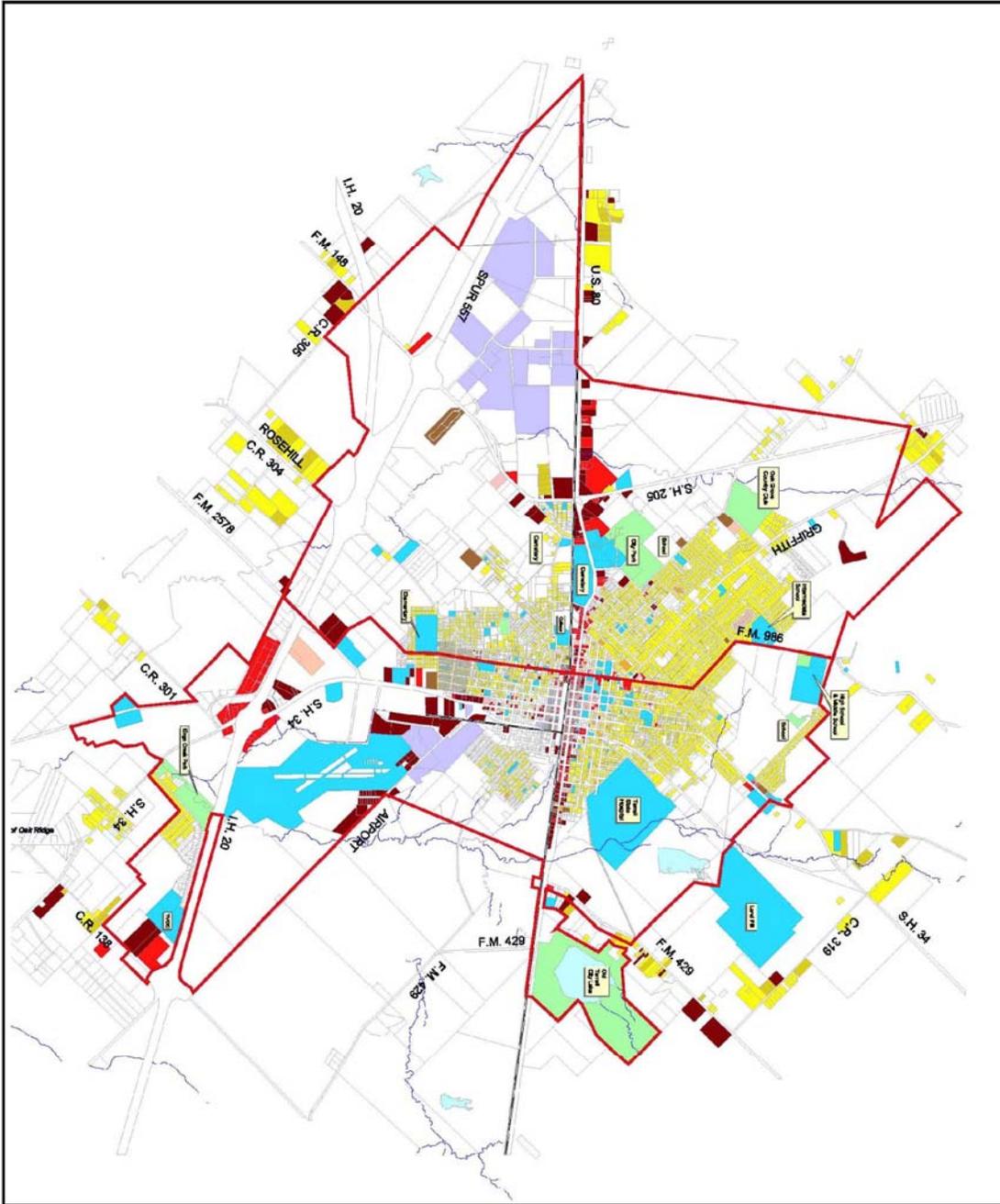


Plate 2-3
Existing Land Use
 City of Terrell, Texas

Legend

- Single-Family
- Duplex
- Townhomes
- Multi-family
- Manufactured Home
- Public/Semi-Public
- Parks
- Retail
- Commercial
- Office
- Industrial
- Vacant
- Lake

City Limits

Creeks

DUNKIN SERKO & ASSOCIATES, INC.
 Adopted September 3, 2002

2000 0 2000 4000 6000 Feet

change in the future as a part of the urban development process within the City. However, it is also anticipated that in spite of fluctuations in land use compositions, single-family residential land use will continue to account for the largest amount of developed land in Terrell.

Calculating the amount of acreage consumed for various land uses and comparing it to population also can help provide insight into future land use demands. Assumptions can be made regarding the future consumption of land use based upon these relationships, balanced with the community's own desired goals and objectives. **Table 2-10** illustrates this relationship based on the land consumed by each land use type and the City's population in 1985 and 2000 (refer to the *Acres per 100 Persons* column). Especially noteworthy is the relationship of retail uses to the overall land use pattern. Retail demand usually ranges from 0.3 to 0.4 acres per 100 persons (on the low end) to 0.6 to 0.7 acres per 100 persons (on the high end); 0.5 acres per 100 persons is generally accepted as around average. A *low* number would indicate that local residents are *spending* retail dollars elsewhere, while a *high* number would indicate that the community is *capturing* retail dollars from elsewhere. Terrell has a large amount of retail acres, specifically 1.77 retail acres per 100 persons (in 2000) compared to the accepted average of 0.5. The number of acres per 100 persons used for *Commercial* purposes is also significant at 2.27 acres per 100 persons; this is likely indicative of the large amount of economic development activities in the City.

Calculating the number of acres used per 100 people in Terrell can help to determine future land use demand, assuming consumption and need will be proportional to population growth.

Summary of Land Use Analysis

The following summarizes features of Terrell's existing land use pattern:

- The predominant land use in the City is *Single-Family Residential*.
- Nearly all of Terrell's *Commercial* uses are located along, or in close proximity to, U.S. Highway 80, State Highway 34, and the railroad.
- Most of the City's nonresidential developments, especially *Commercial* uses, have direct access to a major thoroughfare.
- *Retail* land uses are located primarily along U.S. Highway 80, in the City's downtown area, and along Interstate Highway 20.
- The floodplain areas in the City provide the possibility for future public open spaces.
- *Industrial* land uses in the City exist in the area south of U.S. Highway 80 and to the north of Interstate Highway 20.
- Residential development is slowly spreading away from the City center.

EXISTING HOUSING CHARACTERISTICS

The quality of housing and the appreciation of housing values in a city are extremely important planning considerations. Among the factors influencing the desirability of Terrell as a place to live and affecting the potential for the future development of various portions of the City and surrounding area is the condition of existing housing and the quality of the residential neighborhoods they form. The City has a strong interest in the ability to attract new industry/businesses and new residents, as well as to provide adequate habitation for its residents.

The quality of housing in Terrell is an important consideration in the evaluation of the adequacy of the existing housing stock, and in estimating future housing requirements. Condition and age are two of the physical characteristics of the housing supply that reflect the present quality of housing. The number of persons per household is also important in evaluating current densities and in helps in to make future population projections. The condition of housing within an area can influence the attractiveness of investment in new or remodeled dwelling units. Normally, residents of a neighborhood area consisting of sound housing units with school facilities within a reasonable distance, convenient parks and open space, adequate streets, good sanitation and drainage, and other features that make up a sound neighborhood will reflect minimum health, economic and social problems. In contrast, a blighted or partially blighted area, where many of the above-listed elements are either nonexistent or poorly provided will likely present a greater number of problems to the community in general.

Analysis of residential neighborhood areas assists in defining any existing problems or deficiencies that are related to the physical features found within the surrounding environment. Such analysis further provides a basis for determining proper corrective measures required for bringing specific areas up to acceptable community standards. For sound neighborhood areas it is appropriate to establish the goals or standards that will emphasize continuation of existing characteristics contributing to the present desirable physical condition. The following sections outline the various characteristics of Terrell's housing supply.

Quality neighborhood areas often have the following elements: sound housing units, school facilities within a reasonable distance, convenient parks and open spaces, adequate streets, and good drainage; neighborhoods with these elements will generally have few health, economic and social problems, and will generally be better maintained.

Trends in Housing Supply

The total number of dwelling units in Terrell has increased from 1990 to 2000, while the household size has gradually decreased (see Table 2-11). As can be expected, the increase in housing units has followed a trend similar to that established by the City's population during the same period. In May of 2000, a housing inventory was conducted for the City of Terrell in conjunction with the land use survey. Table 2-12 shows the number of dwelling units within the existing City limits by dwelling unit type as of the year 2000, along with a comparison with dwelling units existing in 1990. Terrell remains a predominantly single-family community (consistent with the land use discussion), with approximately 82 percent of the total dwelling units being single-family detached residences. Though the City has increased in the total number of multi-family units, the percentage of multi-family has decreased from 14.81 percent in 1990 to 13.76 percent in 2000. Approximately 1.6 percent of the total housing structures in the City are currently manufactured home units.

2000 Housing Inventory

A housing inventory was conducted during this planning process for the purpose of determining the physical condition of housing and identifying any concentrated blighted areas. Each structure was classified according to visible exterior (physical) conditions. Four categories of condition were used, as described below. Table 2-13 shows the number and percentages of housing units (single-family and two-family units only) that have been classified for each type.

TYPE 1

Good and sound condition – Structures placed in this category were either new or were older housing units that had been maintained and therefore were in sound physical condition.

Table 2-11
TOTAL DWELLING UNITS
City of Terrell, Texas

Year	Total Number of Dwelling Units	Persons Per Household
1990	4,735	2.98
2000	5,032 ²	2.77

Source: U.S. Census

Table 2-12
HOUSING TYPES – 1990 & 2000
City of Terrell, Texas

HOUSING TYPE	1990 ⁽¹⁾		2000 ⁽²⁾	
	Number	Percent	Number	Percent
Single-Family & Duplexes	3,834	80.97%	4,572*	82.80%
Multi-Family	701	14.81%	760	13.76%
Manufactured Homes	—	—	87	1.57%
Other	200	4.22%	103	1.87%
Total	4,735	100.00	5,522	100.00

Source: ⁽¹⁾ U.S. Census

⁽²⁾ Dunkin, Sefko & Associates, Inc. (Field Survey)

*Approximately 4,408 single-family units and 164 duplex units.

Table 2-13
HOUSING CONDITIONS – 2000
City of Terrell, Texas

Housing Condition	Number of Units	Percent
Type 1	2,746	60.06
Type 2	1,317	28.81
Type 3	445	9.73
Type 4	64	1.40
Total	4,572	100.00

Source: Dunkin, Sefko & Associates, Inc. Field Survey

NOTE: Information in this table includes only Single-Family and Two-Family housing units.

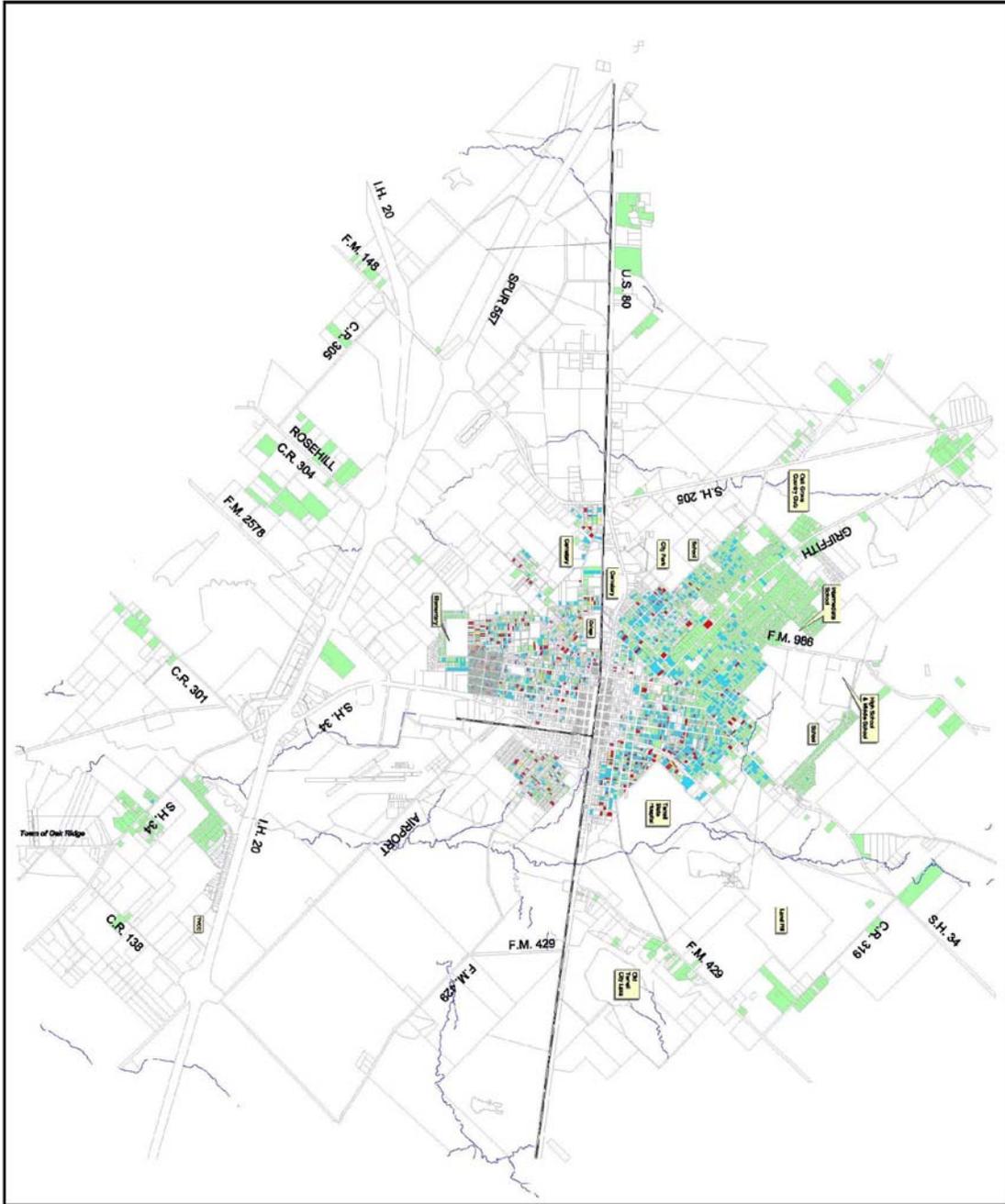


Plate 2-4 Housing Conditions City of Terrell, Texas

- Legend**
- Sound
 - Minor Repair Needed
 - Major Repair Needed
 - Dilapidated
 - City Limits
 - Creeks

DUNKIN SERKO & ASSOCIATES, INC. N
Adopted September 3, 2002
2000 0 2000 4000 6000 Feet

TYPE 2

Housing in need of minor repair – These structures included those needing minor maintenance (i.e., maintenance that could reasonably be performed by the occupant), which generally included painting of trim or exterior surfaces, replacement of small trim areas, missing shingles, or other similar minor repairs.

TYPE 3

Housing in need of major repairs – Structures placed in this category were those needing repairs that would not generally be performed as part of normal, annual maintenance by the occupant. The structures placed in this category were in various stages of deterioration and showed signs of sagging roofs, structural problems, and similar major repairs.

TYPE 4

Dilapidated – When a structure was considered to be inadequate as a dwelling unit and major structural deficiencies were apparent, it was placed in the dilapidated category. These structures are not generally repairable.

HOUSING ANALYSIS

The results of the housing field survey are shown in **Table 2-13**. **Plate 2-4** shows the various conditions of housing by the above types. The majority of the housing in Terrell is in good condition or is in need of only minor repairs (approximately 89 percent). Approximately 11 percent of the housing stock is of the Type 3 or Type 4 category. It is also important to recognize that the Type 2 housing units will need specific attention in the coming years. This category currently accounts for almost 29 percent of the single-family and duplex dwelling units in the City. If these structures are neglected, they could regress into the third condition category (Type 3) and potentially cause the beginning of blighted areas. Overall, Terrell's housing stock can be generally considered structurally sound. It is evident though that some maintenance and rehabilitation programs will be necessary to make sure that Type 2 housing does not deteriorate further. Terrell has very few dilapidated structures, or structures that could be categorized as Type 4. Less than two percent of the single-family and two-family structures surveyed were of this type. The minimal numbers of Type 3 and Type 4 housing units is a positive reflection on the overall general condition of the housing available in Terrell.

The housing survey in Terrell categorized units by their exterior physical condition; Type 1 units were in the best condition, and Type 4 units were deteriorated.

Terrell has very few Type 3 and Type 4 units, which reflected the fact that in general, Terrell has a good supply of quality, well-maintained housing.

EXISTING PLANS & ORDINANCES

Existing Plans

The previous comprehensive planning effort for the City of Terrell was completed in July of 1986. J.T. Dunkin and Associates, Inc., now known as Dunkin, Sefko & Associates, Inc., completed this plan in association with Hogan & Rasor, Inc. This effort addressed three main areas of planning, resulting in a Future Land Use Plan, Thoroughfare Plan and Growth Management Policy Study.

As is the case with most communities, Terrell has experienced growth in the years since 1986, and therefore, the previous plans are no longer as effective as they were more than fifteen years ago. This gives rise to a need for an updated plan that reflects the changes in the community since the previous planning effort was completed. The purpose of the updated Comprehensive Plan, which this *Baseline Analysis* is part of, is to help maintain desirable and balanced future growth in Terrell.

Terrell's previous comprehensive planning effort consisted of a Future Land Use Plan, a Thoroughfare Plan, and a Growth Management Study, and was completed in 1986.

The Terrell Zoning Ordinance

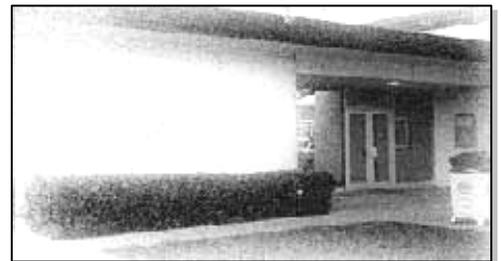
The City of Terrell's current zoning ordinance was adopted during the 1960's. Even though this ordinance is now over 30 years old, the City updates its zoning map on a regular basis; the latest update of the map was done in January 2000. Generally, the purpose of a zoning ordinance is to provide for division of a city into various districts and to provide regulations for those districts. Another purpose of the zoning ordinance is to promote health, safety, general welfare and convenience of local citizens, in a manner consistent with community goals and objectives. Terrell's Zoning Ordinance creates 12 districts within the City, out of which there are five residential and five nonresidential districts, an agricultural district, and a planned development district. Ideally, a zoning ordinance should be updated following a comprehensive plan update, such as the one Terrell is engaged in, so that the zoning ordinance can reflect any recommended policy changes and can help implement the comprehensive plan to the fullest extent possible.

Revisions to the Zoning Ordinance will be important for the implementation of recommendations contained within this Comprehensive Plan.



Comprehensive Plan 2002

Section 3: Goals & Objectives





Comprehensive Plan 2002

Section 3: Goals & Objectives

INTRODUCTION

The *Goals & Objectives* section of the Comprehensive Plan is intended to reflect the ideology and values of the community. Goals are philosophical in nature and are a guide to the community's shared vision of what Terrell should become. The objectives discussed in this section are similar to implementation-oriented policies, which help to shape and direct growth and development of the City for the next ten years and beyond. The *Goals & Objectives* section of this Comprehensive Plan articulates the community's aspirations for the future through broadly termed goals and provides specific objectives that will enable the City to realize the residents' desired vision for their community.

The following goals and objectives have been developed to guide the community's vision of itself as it grows, matures and ultimately attains its anticipated build-out configuration. They establish a framework for specific actions (i.e., policies), to be conceived during later phases of the comprehensive planning process, that will help the citizens and stakeholders of Terrell, achieve their ultimate vision of the City's future.

FORMULATION OF THE GOALS & OBJECTIVES

General ideas of citizen's views regarding the City of Terrell were derived from the discussions with the Comprehensive Plan Steering Committee during workshops in March 2000. Dialogues with the City Staff also assisted in formulating the goals and objectives for the City's Comprehensive Plan. These discussions indicated residents' views concerning the quality of life in Terrell, as well as important issues in Terrell that need to be addressed in this Comprehensive Plan.

The most common issues in Terrell as pointed out by the committee members are those pertaining to thoroughfares and housing. One of the most important thoroughfare-related issues that was identified is the need for a comprehensive thoroughfare plan for the City, which is intended to be provided within the *Thoroughfare Plan* section of this Comprehensive Plan. Other specific concerns raised included local street improvements, performance of traffic lights in certain areas of the City, and traffic flow throughout the City.

The Goals & Objectives section of this Comprehensive Plan articulates the community's aspirations for the future through broadly termed goals and provides specific objectives that will enable the City to realize the residents' desired vision for their community.

Issues identified during this comprehensive planning process include: thoroughfares, housing, water supply, and flood control.

Housing-related issues that were pointed out by many members of the Steering Committee included a need for upgrading existing sub-standard housing, protecting older houses, and encouraging development of more affordable, middle-income housing in the City.

Issues related to other infrastructure improvements such as water supply, flood control and general drainage in the City were also mentioned. Specifically, the need for developing plans for long-term improvements that address drainage and flooding problems has been consistently identified by the Committee members. Other infrastructure-related issues mentioned were the need to make improvements to aging water and sewer lines that run under existing structures in the City, as well as the need to make provisions for water supply that would accommodate future growth.

Other issues pertained to the need for parks and leisure spaces, additional professional personnel for police, fire and the schools, land for future cemetery needs, increased regulation in the ETJ, and renovation of the downtown area. Improvement of existing public facilities and the provision of parks, recreation and open space in the various neighborhoods in Terrell were specifically mentioned.

Some committee members also expressed the need for a review of existing zoning policies and procedures in Terrell. Elimination of cumulative zoning in the City and revision to existing zoning regulations (specifically in and around the downtown area) have also been suggested. Members of the Steering Committee also expressed a need for economic development strategies to attract higher income industries along major highways and general retail in the downtown area.

These comments from the Steering Committee, in conjunction with general municipal planning principles, were used to formulate the goals and objectives for the City of Terrell's Comprehensive Plan. **Goals** are general statements concerning an aspect of the City's desired ultimate physical, social and/or economic environment; goals set the tone for development decisions in terms of the citizens' desired quality of life. **Objectives** express the kinds of action that are necessary to achieve the stated goals without assigning responsibility to any specific action. Related **policies** clarify the position of the City regarding a specific objective, and encourage definite courses of action for the community to undertake to achieve the applicable stated objective; policies are often associated with Comprehensive Plan recommendations.

GOALS
are general statements concerning an aspect of the City's desired ultimate physical, social and/or economic environment; goals set the tone for development decisions in terms of the citizens' desired quality of life.

OBJECTIVES
express the kinds of action that are necessary to achieve the stated goals without assigning responsibility to any specific action.

The goals and objectives formulated during the comprehensive planning process pertain to the following specific areas:

- ◆ The Environment,
- ◆ The Physical Form of the City,
- ◆ Transportation & the Thoroughfare Network,
- ◆ Infrastructure & Utility Systems,
- ◆ Public Services & Facilities,
- ◆ Fiscal Responsibility,
- ◆ Quality of Life, and
- ◆ Housing & Community Livability.

GOALS & OBJECTIVES

The Environment

Goal 1: To promote respect, conservation and enhancement of important natural features and resources within the community.

Objectives:

- 1.01 Conserve and protect ecologically sensitive areas. The City should develop guidelines that continue to allow water infiltration within areas that are characterized by the floodplains (e.g., maximizing permeable surface areas, minimizing paving and building coverage, etc.).
- 1.02 Conserve natural areas of vegetation, especially those along flood plains and creeks.
- 1.03 Promote and provide public access to publicly owned open space and natural areas.
- 1.04 Maintain high standards for surface water quality (in creeks, streams) through effective drainage solutions and natural erosion controls.
- 1.05 Restrict development in flood-prone areas to allow for efficient water drainage throughout the City.

GOAL 1:
*To promote respect,
conservation and
enhancement of
important natural
features and resources
within the
community.*

- 1.06 Establish and/or enhance green space and natural areas along existing floodways and within the 100-year flood plain.
- 1.07 Encourage public and private streetscape enhancement strategies (i.e., medians with landscaping, etc.).

Physical Form of the City

Goal 2: To provide opportunities for coordinated, well-planned growth and development, while retaining the natural setting of the City.

Objectives:

- 2.01 Maintain a continuous and coordinated planning process that involves citizens, stakeholders, City Council, City boards/commissions, City departments, and other public and private entities in policy development and decision-making.
- 2.02 Provide for the efficient use of land, coordinated with the provision of essential public infrastructure and facilities.
- 2.03 Promote the future development of a variety of land uses.
- 2.04 Utilize the *Future Land Use Plan* in daily decision-making regarding land use and development proposals.
- 2.05 Develop companion policies and guidelines to assist in the review of zoning and development requests.
- 2.06 Determine appropriate locations for future residential and nonresidential development, while considering existing neighborhoods and natural features.
- 2.07 Separate or create transitions/buffer areas between conflicting or incompatible land uses.

GOAL 2:
To provide opportunities for coordinated, well-planned growth and development, while retaining the natural setting of the City.

- 2.08 Continue cooperative efforts with the Terrell Independent School District in planning for the projected population of the City with respect to educational needs.
- 2.09 Encourage Kaufman County to support legislation that would allow the County to regulate developments in the unincorporated county areas and in turn would help prevent sub-standard developments from locating in Terrell's ETJ.

Goal 3: To encourage development of high quality residential neighborhoods that are aesthetically pleasing, yet meet the diverse housing market needs of the community.

Objectives:

- 3.01 Consider development of design guidelines for future single-family and/or multi-family developments to ensure provision of safe, attractive places for people to live.
- 3.02 Identify areas on the *Future Land Use Plan* that are appropriate for a variety of residential densities (e.g., low, medium, and high) and lot sizes.
- 3.03 Preserve and protect single-family neighborhoods from high traffic volumes, congestion and through traffic generated by commercial and high-density residential areas.
- 3.04 Consider various housing programs and grants for the purpose of rehabilitating dilapidated or deteriorating housing in some areas of the City.
- 3.05 Encourage infill housing within the City on existing vacant lots.

Goal 4: To encourage quality nonresidential development that is aesthetically pleasing, yet meets the market and economic development needs of the community.

Objectives:

- 4.01 Consider development of design guidelines (e.g., addressing signage, landscaping, parking, building orientation and setbacks, etc.) for commercial properties fronting along major freeways, especially Interstate Highway 20 and other regional traffic arterials.

GOAL 3:
To encourage development of high quality residential neighborhoods that are aesthetically pleasing, yet meet the diverse housing market needs of the community.

GOAL 4:
To encourage quality nonresidential development that is aesthetically pleasing, yet meets the market and economic development needs of the community.

- 4.02 Identify areas suitable for future commercial, industrial and/or business park development within the City.
- 4.03 Consider development of design guidelines that suggest different landscaping techniques for transition/buffer areas between nonresidential developments and residential neighborhoods that are more environmentally pleasing.
- 4.04 Utilize Terrell's theme, "Building a Better Community", and develop design elements and/or guidelines for the downtown area that are in keeping with this theme.

Goal 5: To provide for coordinated growth and physical expansion of the City.

Objectives:

- 5.01 Plan for continued growth and development that improves the City's overall quality of life and economic viability.
- 5.02 Plan for future development that is compatible with the City's natural features and existing residential neighborhoods.
- 5.03 Encourage cooperative efforts (e.g., coordination in site planning, school locations, traffic flow patterns, etc.) with the Terrell Independent School District in planning for adequate school facilities to serve the educational needs of the City's growing population.

Goal 6: To encourage and positively influence the development of existing vacant properties within the City of Terrell.

Objectives:

- 6.01 Explore various alternatives and programs for further enhancing the City's downtown and surrounding historic areas.
- 6.02 Consider establishment of new programs and/or ordinances, as well as the enhancement of existing ones, related to the enforcement of City codes that are intended to protect the public health, safety and welfare and to keep the community attractive (e.g., removal of hazardous/unsightly structures and junk, mowing high grass and weeds, litter control, etc.).

GOAL 5:
*To provide for
coordinated growth
and physical
expansion of the City.*

GOAL 6:
*To encourage and
positively influence
the development of
existing vacant
properties within the
City of Terrell.*

Goal 7: To develop a strategy and a plan for the City's downtown that will help maintain the area's heritage and historic character, and at the same time enhance downtown as the "heart" of the City and increase community pride.

Objectives:

- 7.01 Develop a list of desired land uses for Downtown Terrell and the surrounding residential area.
- 7.02 Ensure that the downtown area has a unique range of land uses that help Downtown Terrell remain competitive with other developing areas of the City (i.e., along Interstate Highway 20).
- 7.03 Encourage public and private reinvestment within the downtown area to help ensure its long-term economic viability, to preserve its "small-town" heritage and atmosphere, and to maintain and increase its use as a "people" place for social interaction and commerce (i.e., a pleasant location to shop, eat, conduct business, relax, be entertained, etc.).
- 7.04 Maintain and encourage adaptive reuse of historic and other significant structures.
- 7.05 Consider development of a special zoning district for the downtown area that addresses historic preservation and other issues specific to downtown (such as streetscape enhancements), making the area more attractive for commerce and helping to ensure architectural compatibility among the downtown buildings.
- 7.06 Develop strategies to reduce high-speed traffic utilizing U.S. Highway 80 through downtown.
- 7.07 Create a committee to help the City address Downtown issues, such as the committee that was created to help the City draft the Downtown Sign Ordinance.
- 7.08 Explore creative initiatives for the improvement of Downtown such as the development of incentives for rebuilding and/or rehabilitating structures and the enhancement of open space areas for public assemblies and functions.

GOAL 7:
To develop a strategy and a plan for the City's downtown that will help maintain the area's heritage and historic character, and at the same time enhance downtown as the "heart" of the City and increase community pride.

Transportation & the Thoroughfare Network

Goal 8: To provide a transportation system that will effectively and economically serve the existing and projected travel needs of the community in a safe and efficient manner.

Objectives:

- 8.01 Maintain a continuous, coordinated transportation planning process that addresses long-term needs while emphasizing short-term problem solving.
- 8.02 Define "adequacy" standards for the transportation system.
- 8.03 Plan roadways that are adequate to carry traffic that will be generated by anticipated future development and density levels (e.g., traffic impact analysis for larger projects, etc.).
- 8.04 Identify and plan for various roadway types based upon how they are expected to function and upon expected traffic volumes.
- 8.05 Promote compatibility between roadway alignments/improvements and land use patterns, community character, and the environment.
- 8.06 Promote transportation efficiency in new development proposals.
- 8.07 Minimize disruption of residential areas by minimizing traffic volumes and by planning for the efficient dispersion of traffic from neighborhoods.
- 8.08 Include transportation system considerations in the development review process for the planning and alignment of future roadways, and to promote safe, efficient on- and off-site access and vehicular circulation.
- 8.09 Develop a unifying "theme" or other visual concept for the consistent streetscape treatment of U.S. Highway 80 and other appropriate thoroughfare rights-of-way, medians, and/or intersection corner areas.
- 8.10 Continue to promote and improve the Terrell Municipal Airport for public use in the future.

GOAL 8:
To provide a transportation system that will effectively and economically serve the existing and projected travel needs of the community in a safe and efficient manner.

Goal 9: To optimize mobility and decrease dependency upon the automobile by encouraging multi-modal and travel demand reduction alternatives.

Objectives:

- 9.01 Encourage multi-modal transportation options (e.g., pedestrian, bicycling, equestrian, etc.) by designating areas for their development.
- 9.02 Encourage other modes of transportation by providing for alternatives to the automobile (e.g., trolley, bus, etc.), wherever possible.

GOAL 9:
To optimize mobility and decrease dependency upon the automobile by encouraging multi-modal and travel demand reduction alternatives.

Infrastructure & Utility Systems

Goal 10: To ensure that utility and infrastructure systems (e.g., water supply, wastewater treatment, storm drainage, etc.) will adequately serve present and future residents and businesses.

Objectives:

- 10.01 Define standards for adequate service levels for public utility infrastructure systems, including:
 - ◆ Water treatment, storage and distribution,
 - ◆ Wastewater collection and treatment,
 - ◆ Storm water/drainage management and erosion control (including non-point pollution prevention).
- 10.02 Provide utilities and infrastructure for all residents and businesses in the most efficient, equitable and fiscally responsible manner possible.
- 10.03 Develop a set of capital recovery tables/schedules that will ensure that the above-listed utility services are fiscally maintained for all customers.
- 10.04 Use the *Future Land Use Plan* and future land use projections contained therein to help plan where infrastructure improvements will be needed.
- 10.05 Encourage new development to occur within areas that are already served by necessary utilities/infrastructure and those wherein utility extensions can be realistically provided.

GOAL 10:
To ensure that utility and infrastructure systems (e.g., water supply, wastewater treatment, storm drainage, etc.) will adequately serve present and future residents and businesses.

- 10.06 Address future water and sewer demands within areas not already served, and within areas that will be difficult to serve.
- 10.07 Encourage private/franchise utilities (e.g., telephone, gas, electricity, cable TV, etc.) to provide service to newly developing areas as quickly and efficiently as possible, and to place utility lines underground and within shared conduits, wherever possible.
- 10.08 Ensure that private/franchise telecommunications facilities and services are coordinated with City planning efforts.
- 10.09 Update capital recovery mechanisms for the recoupment of the costs associated with infrastructure needed to serve new developments (e.g., impact and other capital recovery fees) based upon recommendations contained within the new Comprehensive Plan.
- 10.10 Use the development review process to help coordinate development with the provision of essential public infrastructure and utilities.
- 10.11 Consider development of guidelines and other mechanisms that will help to ensure that storm water runoff, and potential non-point pollution problems, will not adversely affect floodplains, surrounding properties, or other properties. Guidelines should also be complimentary to development density objectives.
- 10.12 Coordinate efforts with other agencies and entities (e.g., applicable water and utility districts, etc.) to ensure the long-term provision of adequate utility commodities and services for Terrell's residents and businesses.
- 10.13 Base infrastructure-need calculations and related planning on the *Future Land Use Plan* and on current zoning densities.

Public Services & Facilities

Goal 11: To ensure that public services and facilities (e.g., police and fire protection, library services, administrative facilities, etc.) will adequately serve present and future residents and businesses.

Objectives:

- 11.01 Define standards for adequate response / service / staffing levels for public services and facilities:
- ◆ Police protection
 - ◆ Fire protection and emergency medical services
 - ◆ Library services
 - ◆ Water supply and storage management
 - ◆ Solid waste management
 - ◆ Public administrative facilities
- 11.02 Develop a comprehensive parks plan to ensure provision of adequate park and recreational facilities for current and future residents of Terrell.
- 11.03 Provide public services and facilities for all residents and businesses in the most efficient, equitable, and fiscally responsible manner possible.
- 11.04 Use the *Future Land Use Plan* and future land use projections contained therein to help plan where public service/administrative facilities will be needed.
- 11.05 Encourage new development to occur within areas that are already served by necessary public services and facilities, or where services can be realistically provided.
- 11.06 Co-locate public facilities with other municipal facilities and/or with those of other quasi-governmental jurisdictions (e.g., School District, etc.), wherever possible.
- 11.07 Utilize recycling and other solid waste management techniques that are environmentally responsible whenever it is financially feasible to do so.

GOAL 11:
To ensure that public services and facilities (e.g., police and fire protection, library services, administrative facilities, etc.) will adequately serve present and future residents and businesses.

Fiscal Responsibility

Goal 12: To ensure that future community facility and service needs are met through sound, long-range fiscal planning.

Objectives:

- 12.01 Utilize recommendations contained within the Comprehensive Plan to assist in decision-making on short- and long-range capital improvement projects (e.g., streets, water, sanitary sewer, storm water management, purchase of major equipment, construction of public facilities, etc.).
- 12.02 Ensure that City staffing, real property acquisitions, infrastructure improvements, and facility construction/maintenance are based upon priorities set forth in the Comprehensive Plan and upon fiscal practicality.
- 12.03 Strive for a fiscal balance of land uses that will create a positive impact upon the City's budget.
- 12.04 Ensure the future economic stability of the community by encouraging the attraction of new nonresidential land uses, and by locating them within certain areas to help support and subsidize the overall tax base.

Quality of Life

Goal 13: To promote a more livable city and high quality of life through good urban design practices and through a proactive approach to how the City looks. Reinforce Terrell's image and identity as a community of excellence in business, residence, leisure and education through urban design and increased public awareness and involvement.

Objectives:

- 13.01 Consider development of streetscape/urban design standards to enhance the City's visual/aesthetic appeal (e.g., design guidelines for landscaping, building facades, signage, entryway treatments, etc.).

GOAL 12:
To ensure that future community facility and service needs are met through sound, long-range fiscal planning.

GOAL 13:
To promote a more livable city and high quality of life through good urban design practices and through a proactive approach to how the City looks.

- 13.02 Create visual “gateways” at principal entry points in order to establish an overall design theme for Terrell.
- 13.03 Create and promote a stronger sense of “community” through urban design. Also, reinforce Terrell’s charm and integrity as that of a “small town city”, and continue efforts to instill a stronger sense of civic pride and involvement among citizens.
- 13.04 Enhance neighborhood streets and other pedestrian ways in order to make the City more “people-oriented”.
- 13.05 Encourage public/private participation and cooperation in beautification efforts. Explore utilizing assistance that may be available from private/volunteer groups to perform urban design related projects and to help maintain enhanced public areas (e.g., street medians, small landscaped areas, etc.).
- 13.06 Increase public awareness, involvement, and support of urban design initiatives.
- 13.07 Use the development review process to evaluate private projects and their contributions to urban design initiatives or their compliance with adopted studies/guidelines.
- 13.08 Increase public awareness of community assets (e.g., library, parks, the historic buildings, cultural and tourist attractions, etc.) through the use of innovative communication media such as a community newsletter, public bulletin board postings, publications and newspaper articles, use of the Internet and public cable television, etc.
- 13.09 Increase enforcement of City codes and regulations pertaining to property maintenance, upkeep and appearance (e.g., mowing of high grass and weeds, littering, removal of clutter and inoperative vehicles within residential areas, etc.).

Goal 14: To create pedestrian and bicycle linkages (connections) between residential neighborhoods, parks/linear greenbelts, schools, public administrative facilities and other activity center, wherever physically and financially possible.

Objectives:

- 14.01 Utilize hike/bike trails, wherever possible, to connect residential areas with schools and parks.
- 14.02 Encourage the provision of pedestrian and/or bicycle pathways within large private developments.

GOAL 14:
To create pedestrian and bicycle linkages (connections) between residential neighborhoods, parks/linear greenbelts, schools, public administrative facilities and other activity center, wherever physically and financially possible.

Housing & Community Livability

Goal 15: To be a full life-cycle city.

Objectives:

- 15.01 Provide housing and residential facilities for people to live their entire life span within Terrell.
- 15.02 Ensure the provision of a variety of housing types that will meet the needs of all age, physical ability, household size, and economic groups.
- 15.03 Encourage home ownership and long-term residency.

GOAL 15:
To be a full life-cycle city.

Goal 16: To protect and, where possible or needed, improve existing housing units and residential areas within the City.

Objectives:

- 16.01 Plan a variety of housing types to meet special needs (e.g., economic, physical ability, age, etc.).
- 16.02 Develop a neighborhood enhancement/integrity program that bolsters civic pride and encourages reinvestment within established residential areas (e.g., home improvement initiatives, better turf establishment and maintenance on

GOAL 16:
To protect and, where possible or needed, improve existing housing units and residential areas within the City.

residential lots, removal of visible household clutter and inoperative vehicles, etc.).

16.03 Develop a program to encourage infill development of vacant residential lots.

16.04 Initiate programs to preserve and stabilize existing neighborhoods.

16.05 Where possible, protect and retain the City's existing stock of affordable housing.

Goal 17: To ensure the orderly, attractive and economically stable development of new residential neighborhoods.

Objectives:

17.01 Develop a plan for new, high quality single-family residential areas.

17.02 Develop density and locational criteria for new multi-family and single-family residential uses within the City, recognizing the potential effects of land use compatibility, traffic generation, noise levels and aesthetics.

17.03 Provide adequate areas for residential developments that will meet the diverse housing/social needs and the desired standard of living for Terrell's existing and future population.

17.04 Encourage diverse, innovative and affordable housing opportunities.

17.05 Reinforce the "neighborhood" concept, in the emotional, sociological, and physical sense, in the design of new residential areas (e.g., connections between neighborhoods, pedestrian linkages to schools and parks, inclusive neighborhood design techniques, maximizing social interaction between neighbors, the provision of neighborhood-oriented shopping areas, etc.).

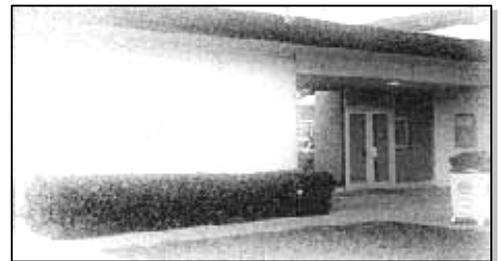
17.06 Promote neighborly rapport and unity, and minimize negative polarization within the community by encouraging the development of residential neighborhoods having a balance of lot sizes within all sectors of the City.

GOAL 17:
*To ensure the orderly,
attractive and
economically stable
development of new
residential
neighborhoods.*



Comprehensive Plan 2002

Section 4: Thoroughfare Plan





Comprehensive Plan 2002

Section 4: Thoroughfare Plan

INTRODUCTION

Many factors contribute to the fact that Terrell is primed for growth, including that it is the largest city in Kaufman County. The factor that is likely to contribute most to the City's future growth, however, is its location in relation to several major highways. Interstate Highway 20 traverses the southern area of the City, and U.S. Highway 80 crosses through the center. Both of these are major east-west transportation routes. There are also numerous other roads that provide access to and from Terrell.

In general, the ability of urban areas to accommodate growth is largely dependent on the efficiency of the transportation system - that is, how efficiently goods and people are moved throughout the community. Many elements of urban areas, such as the way in which development occurs, can create and/or contribute to challenges to the transportation system's efficiency. The City of Terrell was incorporated over a century ago; the fact that the City's initial development took place prior to societal dependence on the automobile has led to the relatively complex roadway network Terrell has today, especially in the urbanized area of the City. The challenge for Terrell now lies in the accommodation of population growth within the existing transportation system and in the accommodation of new land development through the expansion of that system. Increasing development within major transportation corridors, such as Interstate Highway 20, U.S. Highway 80, State Highway 205, and State Highway 34 can affect the circulation of traffic adjacent to and surrounding the corridor. Other key transportation corridors within Terrell pose similar challenges, including Griffith Avenue, Rockwall Street, and Airport Road.

In addition, coordination among local and regional (i.e. Kaufman County) jurisdictions and with the Texas Department of Transportation (TxDOT) in transportation planning is of extreme importance to the integrity of the overall transportation system. This coordination is also key in securing funding for roadway improvements and/or construction. A comprehensive thoroughfare system, both locally and regionally, that is capable of accommodating expanding vehicular traffic volumes is critical to the sustained growth and planned development of Terrell.

The principal transportation planning challenge for Terrell now lies in the accommodation of population growth within the existing transportation system and in the accommodation of new land development through the expansion of that system.

PREVIOUS THOROUGHFARE PLANNING EFFORTS

The City of Terrell has engaged in numerous planning efforts over the years. A Thoroughfare Plan was adopted in June of 1985⁴⁻¹, but was repealed in the mid 1990's. This plan provided design criteria for roadways, and recommended cross sections, routes and alignments for future development. In the mid-1990s, Terrell's *Community Development Plan*⁴⁻² discussed numerous topics related to planning, including population, land use, water and wastewater, and streets. The "Streets" section included an analysis of existing roadways and related deficiencies, and recommended improvements to the thoroughfare system. The growth of the City and the region in recent years has contributed to the need for a new *Thoroughfare Plan* for Terrell. The City adopted a *Thoroughfare Plan* map in 2001; this *Thoroughfare Plan* section is the written support of the graphic representation shown on the map itself.

The Thoroughfare Plan map, Plate 4-1, has already been adopted by Terrell.

THE EXISTING THOROUGHFARE SYSTEM

The thoroughfare system is one of the most visible and permanent elements of the urban structure. As alignments and rights-of-way of major transportation routes are established and adjacent properties are developed, making changes to the system becomes increasingly difficult. The *Thoroughfare Plan* is a guide for the integration of developments and roadways into a unified, coordinated transportation system. It depicts not only the existing network of roads, but also anticipates the roads and thoroughfares necessary to ensure efficient movement of traffic throughout the community. The Plan is also one of the few planning tools that can be implemented within the City's extraterritorial jurisdiction (ETJ).

The Thoroughfare Plan is one of the few planning tools that can be implemented within the City's Extraterritorial Jurisdiction (ETJ).

The *Thoroughfare Plan* works in coordination with the *Future Land Use Plan*, which identifies the locations of various land uses, potential growth areas, and areas that may have specific traffic circulation needs. As a circulation framework, the *Thoroughfare Plan* recommends a functional hierarchy of roadways and thoroughfare systems. In addition to its function as a guide for the integration of development and roadways, the *Thoroughfare Plan* is also a guide for the programming of capital projects (i.e., prioritizing, budgeting and scheduling) by providing documentation of current and projected roadway alignments and rights-of-way needs.

⁴⁻¹ Written by Hogan & Rasor, Inc. – Adopted June 4th, 1985 (Ordinance #1417).

⁴⁻² Written by Tim F. Glendening & Associates (TFGA)

The Regional Traffic Circulation System

Four major regional traffic corridors have been identified within Terrell as follows: Interstate Highway 20, U.S. Highway 80, State Highway 34, and State Highway 205.

INTERSTATE HIGHWAY 20

Interstate Highway 20 begins in southwest Texas in Reeves County and travels in a northeastern direction through the Midland-Odessa area, Abilene, the Dallas-Fort Worth Metroplex (south of both cities), Longview, Marshall, and into Louisiana (through Shreveport and Bossier City).

U.S. HIGHWAY 80

U.S. Highway 80 originates in Dallas, and provides for east-west travel between Dallas and the Longview/Marshall area (just west of Louisiana). U.S. Highway 80 was the original east-west route prior to construction of the Interstate. Major cities along this highway route (in an eastern direction) include Mesquite, Forney, Terrell, Wills Point, Fruitvale, Mineola, and Gladewater. It should be noted that a new connection between U.S. Highway 80 and Interstate Highway 20 is currently being investigated.

STATE HIGHWAY 34

State Highway 34 travels in a north-south direction from Italy, Texas (located along Interstate Highway 35 East, south of Dallas) north until it ends at its intersection with State Highway 56 near the community of Honey Grove, Texas. Major communities along this highway include Ennis, Kaufman, Terrell, Quinlan, Greenville, Wolfe City, and Ladonia. It should be noted that new alignments for State Highway 34 are currently being investigated.

STATE HIGHWAY 205

State Highway 205 provides for travel in a northwestern direction from U.S. Highway 80 through Terrell. This roadway continues past Interstate Highway 30 until it intersects State Highway 78 near Lake Lavon, northeast of Dallas.



Picture 4-1
Interstate Highway 20



Picture 4-2
U.S. Highway 80



Picture 4-3
State Highway 34



Picture 4-4
State Highway 205

The Local Traffic Circulation System

As previously mentioned in the Baseline Analysis, the primary catalyst for the development of Terrell was the railroad. Therefore, much of the early development within the City is clustered around the rail line that runs east-to-west and parallels U.S. Highway 80. Various local collector streets serve as routes that extend to and from the City center. The inner core of the City contains a dense, diverse pattern of land uses. The number of ingress/egress access points along many of the roadways within this core area has resulted in circulation problems, especially during peak traffic hours. The key existing collector streets within Terrell are:

- Brin Street,
- Dellis Street
- West State Street,
- High Street
- Pacific Avenue,
- Town North
- 1st Street,
- 9th Street,
- Walnut Street,
- Griffith Avenue,
- Colquitt Road,
- Williams Street,
- Mineral Wells Street,
- Rochester Street,
- Rockwall,
- Baker Street,
- Bradshaw Street,
- Grove Street,
- Rose Hill Road,
- Airport Road,
- University Avenue, and
- College Mound Road.

FUNCTIONAL CLASSIFICATION SYSTEM & THOROUGHFARE STANDARDS

The *Thoroughfare Plan* is based upon a road classification system that depicts the function of every roadway in the thoroughfare system. Roadway types include freeways, major and minor arterials, major and minor collectors, and local streets (refer to **Table 4-1**). Their functions can be differentiated by comparing their ability to provide *mobility* with their ability to provide *access* to various locations. **Illustration 4-1** graphically shows these differences.

For example, roadways identified as arterials are designed to convey heavier volumes of traffic; therefore, they should have fewer intersections and curb cuts (driveway openings) in order to protect the integrity of the high-speed traffic flow. Arterials provide mobility, but because of the speed and volume of traffic, access to properties is extremely limited.

*Types of roadways
can be differentiated
by comparing their
ability to provide
ACCESS.*

**Table 4-1
ROADWAY FUNCTIONAL CLASSIFICATIONS AND GENERAL PLANNING GUIDELINES**

DESIGNATION	FUNCTION	CONTINUITY	APPROX. SPACING ⁽³⁾	DIRECT LAND ACCESS ⁽³⁾	MINIMUM ROADWAY INTERSECTION SPACING	SPEED LIMIT (MPH)	PARKING	COMMENTS
FREEWAY (e.g., Interstate Highway 20)	Traffic Movement	Continuous	4 miles	None	1 mile	55 to 70mph	None	Supplements capacity and arterial street system, and provides high-speed mobility.
ARTERIAL	Moderate distance inter-community traffic; Land access should be primarily at intersections	Continuous	1/2 to 1 1/2 ⁽¹⁾ miles	Restricted -- some movements may be prohibited; number & spacing of driveways controlled; May be limited to major generators on regional routes.	1/8 mile 1/4 mile on regional route	35 to 45 mph	None	"Backbone" of the street system. Usually four to six lanes.
COLLECTOR	Collect / distribute traffic between local & arterial streets; Direct land access; Inter-neighborhood traffic movement.	Not necessarily continuous. May not extend across arterial.	1/4 to 1/2 ⁽²⁾ mile	Safety controls; limited regulation. Residential access prohibited; nonresidential access allowed with shared driveways.	300 feet	30 mph	Limited	Through traffic should be discouraged.
LOCAL	Land Access Sidewalks	None	As needed	Safety controls only.	200 feet	30 mph	Permitted	Through traffic should be discouraged.

(1) Spacing determination should also include consideration of (travel projections within the area or corridor based upon) ultimate anticipated development.

(2) Denser spacing needed for commercial and high-density residential districts.

(3) Spacing and intersection design should be in accordance with state and local thoroughfare standards.

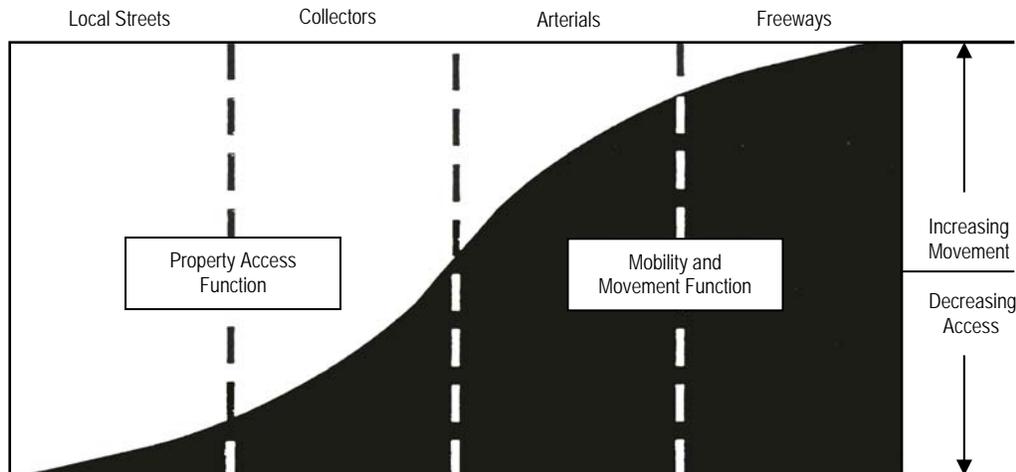


Illustration 4-1
Functional Classification System

Collector streets are designed to funnel traffic to arterial roadways. Collectors should also provide access to adjacent land uses on a limited basis. This type of roadway can be described as providing an equal amount of mobility and access. Local streets provide the greatest access to adjacent properties, but they function poorly regarding mobility. **Table 4-1** describes the functional classification of each type of roadway in further detail.

In assessing the mobility-versus-access concept, it is important to recognize the need to protect the integrity of arterials and major collectors in their ability to function as high volume roadways. Therefore, the City should minimize access to and from adjacent property along major arterials by limiting the number and locations of curb cuts and by requiring the use of shared entrances to nonresidential facilities when possible (refer to **Illustrations 4-2 and 4-3**).

In general, a thoroughfare plan should complement land use planning and subdivision design. The diversion of traffic from neighborhoods is an example of how positive traffic-management planning can contribute to the long-term stability of land use patterns. Other benefits from transportation planning, both in the short- and long-term, include fewer urban land parcels dedicated to streets, increased property values, and decreased traffic accidents.

It is recommended that neighborhoods be developed between arterials and collector streets so that traffic may be diverted from residential areas. Minor collector streets should not be used as cut-through routes, but should be configured to penetrate the neighborhoods to collect and distribute light traffic. In addition, good subdivision design should orient homes to local streets, not to collectors.

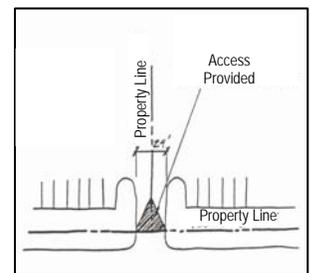


Illustration 4-2
Joint Cross-Access Requirement

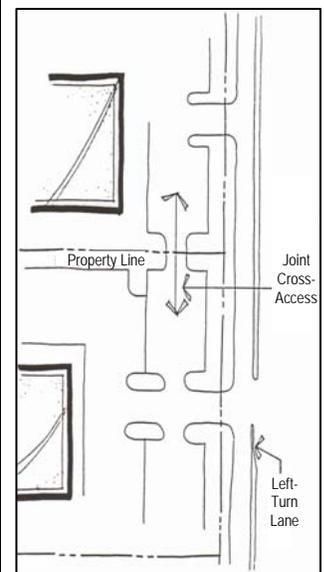


Illustration 4-3
Shared Driveway Access
Recommended for Collector Streets

The following discussion outlines each type of roadway recommended within this *Thoroughfare Plan*. General daily traffic capacities, the nature of the roadway (i.e., high-traffic, residential, etc.), and recommended cross-sections are included. Terrell should utilize these guidelines and cross-sections during the development platting process to ensure that an adequate amount of right-of-way is provided in order to accommodate growth as it occurs.

Freeways

Freeways are high-capacity highways along which direct access to property is generally eliminated. Ingress and egress are controlled by access ramps, interchanges and frontage roads, as on Interstate Highway 20. Construction and maintenance of freeways is not usually the responsibility of municipalities. The Texas Department of Transportation (TxDOT) and federal monies fund this type of roadway.



Illustration 4-4
An Example of a Freeway

Major Thoroughfares or Arterials

Roadways identified as arterials are designed to convey relatively heavy volumes of traffic. As previously mentioned, arterials provide mobility, but because of the speed and volume of traffic, access to properties should be minimal. Within the arterial (or major thoroughfare) classification, this *Thoroughfare Plan* provides for differentiation between rights-of-way sizes based on three types, Type "AA", Type "A", Type "B". The first two types are designed to provide connections between communities and/or freeways. The third type is designed to provide a connection between Type "AA" and Type "A" roadways. Examples of arterial roadways in Terrell are U.S. Highway 80 and State Highway 34.

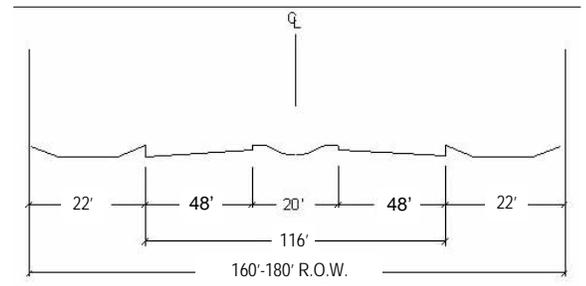


Illustration 4-5
Type "AA" Major Arterial

TYPE "AA" MAJOR ARTERIAL

The Type "AA" major arterial is applicable to the outer loop that has been recommended for Terrell to provide an alternate route for traffic to outlying areas around the City; this loop would provide a major thoroughfare for the future growth that is expected to occur to the north. The Type "AA" roadway would also be applicable for the new route for State Highway 34. Right-of-way for this roadway type should be between 160 and 180 feet with four 12-foot wide lanes in each direction, separated by a 20-foot wide median. **Illustration 4-5** shows the cross section for this roadway.

TYPE "A" MAJOR THOROUGHFARE

Equipped to serve approximately 40,000 vehicles daily, the Type "A" Major Thoroughfare (see **Illustration 4-6**) consists of six lanes (three lanes 12-foot in width in each direction) and a 16-foot wide median with 120 feet of right-of-way. The center median may be painted or raised. The flat median offers ease of access, but can be dangerous. The raised, curbed median creates a divided roadway, which is considered safer and offers the opportunity for landscaping. It is recommended that wherever possible, the City construct arterials with raised medians, for safety as well as aesthetics. No on-street parking should be permitted on this type of thoroughfare.

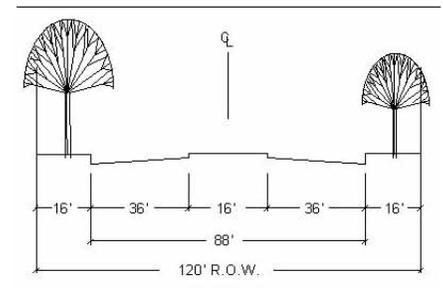


Illustration 4-6
Type "A" Major Thoroughfare Cross Section

TYPE "B" MAJOR THOROUGHFARE

The Type "B" Major Thoroughfare is capable of carrying 20,000 to 25,000 vehicles per day. It consists of six lanes that are slightly narrower than was recommended for "Type A" thoroughfares at 11 feet. As with principal arterials, incorporation of a raised median is recommended. Right-of-way required is 100 feet with a 15-foot-wide median. **Illustration 4-7** shows the cross-section for these thoroughfares.

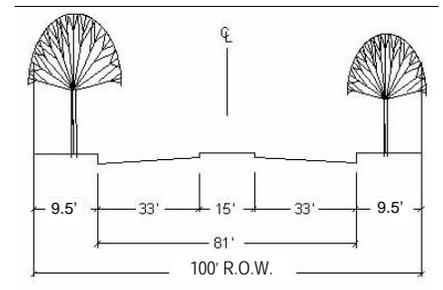


Illustration 4-7
Type "B" Major Thoroughfare Cross Section

Collector Streets

A collector street can be defined as a street that serves as the principal thoroughfare between large and separated areas or districts and which is the main means of access to an arterial roadway. The collector street distributes traffic from local access streets (i.e., from residential developments to major arterials). Collector streets can be configured to discourage through-traffic movement by using offset intersections or curvilinear street design. In addition, collectors may be used as streets internal to industrial areas, adjacent to multifamily areas, or to access elementary schools.

TYPE "C" SECONDARY THOROUGHFARE

Type "C" Secondary Thoroughfares are moderately high volume facilities whose primary purpose is to collect traffic from smaller collector streets and to convey it to the nearest arterial roadway. This collector street provides for 80 feet of right-of-way, providing for four 11-foot wide lanes of traffic. **Illustration 4-8** shows the recommended cross section for this roadway. Roadways in industrial areas in Terrell should be developed such that they meet the criteria of this collector.

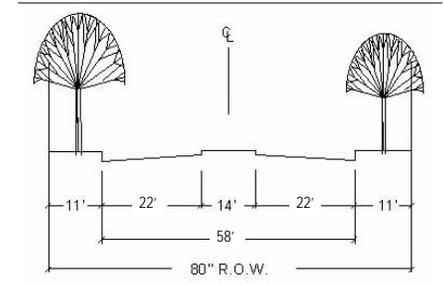


Illustration 4-8
Type "C" Secondary Thoroughfare Cross Section

TYPE "D" MAJOR COLLECTOR STREET

Type "D" collector streets are low to moderate volume facilities intended to collect traffic from smaller streets within an area and to convey it to principal or secondary arterials. The average daily traffic volume for this type of street is approximately 10,000 to 15,000 trips per day. The Type "D" collector street provides for 60 feet of right-of-way, with two 12-foot wide traffic lanes and two 8-foot wide parking lanes, with 10 feet on either side for the incorporation of sidewalks. **Illustration 4-9** shows the recommended cross section for this roadway.

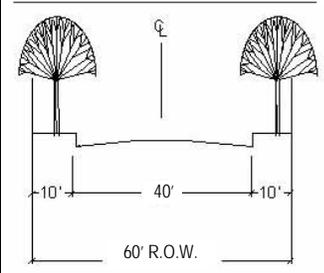


Illustration 4-9
Type "D" Collector Street
Cross Section

TYPE "E" MINOR COLLECTOR STREET

The Type "E" minor collector street is a two-lane roadway, with slightly narrower lanes than a major collector. These thoroughfares require 60 feet of right-of-way, with two 10-foot wide lanes and two 8-foot wide parking lanes (**Illustration 4-10**), with 12 feet on either side for the incorporation of sidewalks. This type of collector street is intended for use around school areas in Terrell.

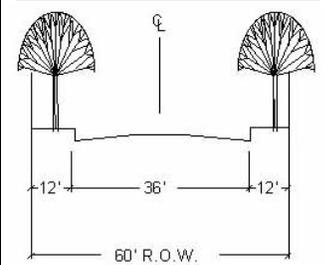


Illustration 4-10
Type "E" Collector Street
Cross Section

Residential Streets

TYPE "F" RESIDENTIAL STREET

Structured to convey lighter traffic volume (approximately 500 vehicles per day), the Type "F" residential street consists of two lanes, 26 feet to 30 feet in total width, with a right-of-way of 50 feet, as **Illustration 4-11** shows. Designed to discourage cut-through traffic in residential areas, these streets are often curvilinear, discontinuous, or looped.

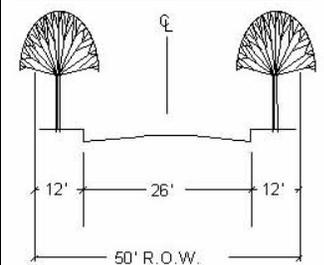


Illustration 4-11
Type "F" Residential Street
Cross Section

TYPE "G" RURAL RESIDENTIAL STREET

The City has many outer areas within the ETJ that are available for rural residential land use. The construction of curbs and gutters may not be necessary within large-lot developments, and therefore, **Illustration 4-12** shows a right-of-way intended for residential developments with lot sizes greater than one acre. The Type "G" rural street consists of two lanes, 30 feet in total width, with a minimum right-of-way of 60 feet. A 15-foot-width on either side of the paved area allows room for swales that ensure proper drainage. It should be noted that with construction of these roadways, the City may require (1) additional right-of-way in order to ensure that ditch slopes are maintained to a safe standard (4-to-1 maximum) where larger quantities of runoff must be conveyed along the roadway, or (2) the installation of a pipe storm drain in order to maintain shallow swales.

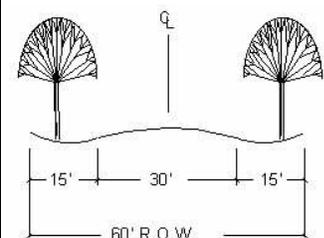


Illustration 4-12
Type "G" Rural Residential Street
Cross Section

ALLEYWAYS

The requirements for alleyways, intended to provide direct access to a property or a small number of properties, should vary depending on the development; the type of land use should be a factor, as should the number of properties to which access via the alleyway is intended. The general requirement for alleyways in residential areas is 10 feet of paving with 15 feet of right-of-way, and the general requirement for those in nonresidential areas is 20 feet of right-of-way.

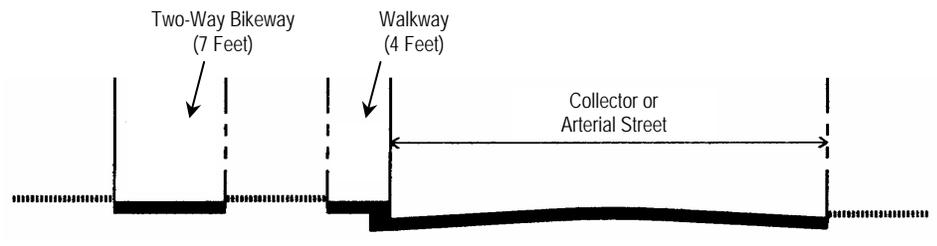


Illustration 4-13:
Type A: Exclusive Bikeway and Walkway

Collectors and Arterials With Bicycle Lanes/Routes

Roadways can be designed to include bicycle lanes, which requires the acquisition of additional right-of-way. Terrell has several natural drainage or creek areas that could be used for an off-street trail system, but it will likely be necessary to utilize roadway rights-of-way in many locations if the City wants to create a bike trail system that connects various areas of the community. In many areas, the use of street pavement and/or right-of-way for bicycle transportation purposes will be possible if the roadways are properly sized and designed in the future. Illustrations 4-13 through 4-15 show the different ways in which sidewalks and bikeways can be integrated alongside a roadway. Communities that construct these facilities will realize the benefits not only in the short-term, but also in the long-term – creating a means for citizens to be less dependent on the automobile will become increasingly important in accommodating future growth in Terrell.

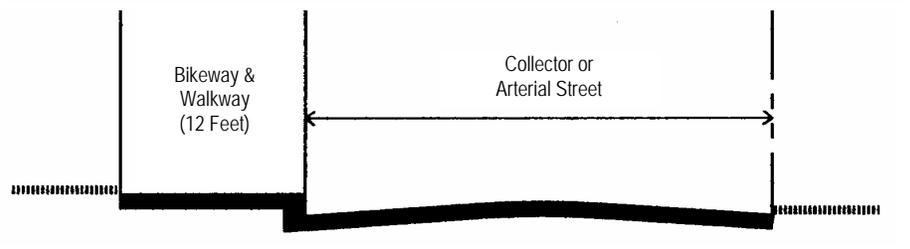


Illustration 4-14:
Type B: Walkway and Bikeway (separated by curb and grade change)

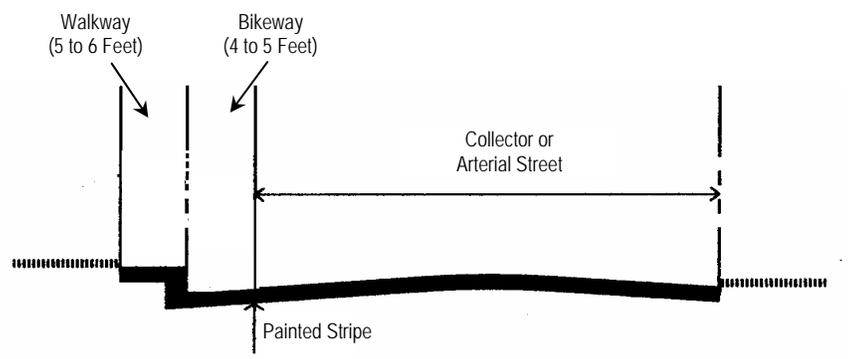


Illustration 4-15:
Type C: Separate Walkway With Bikeway Directly Alongside the Roadway

TRAFFIC CAPACITY & LEVEL OF SERVICE

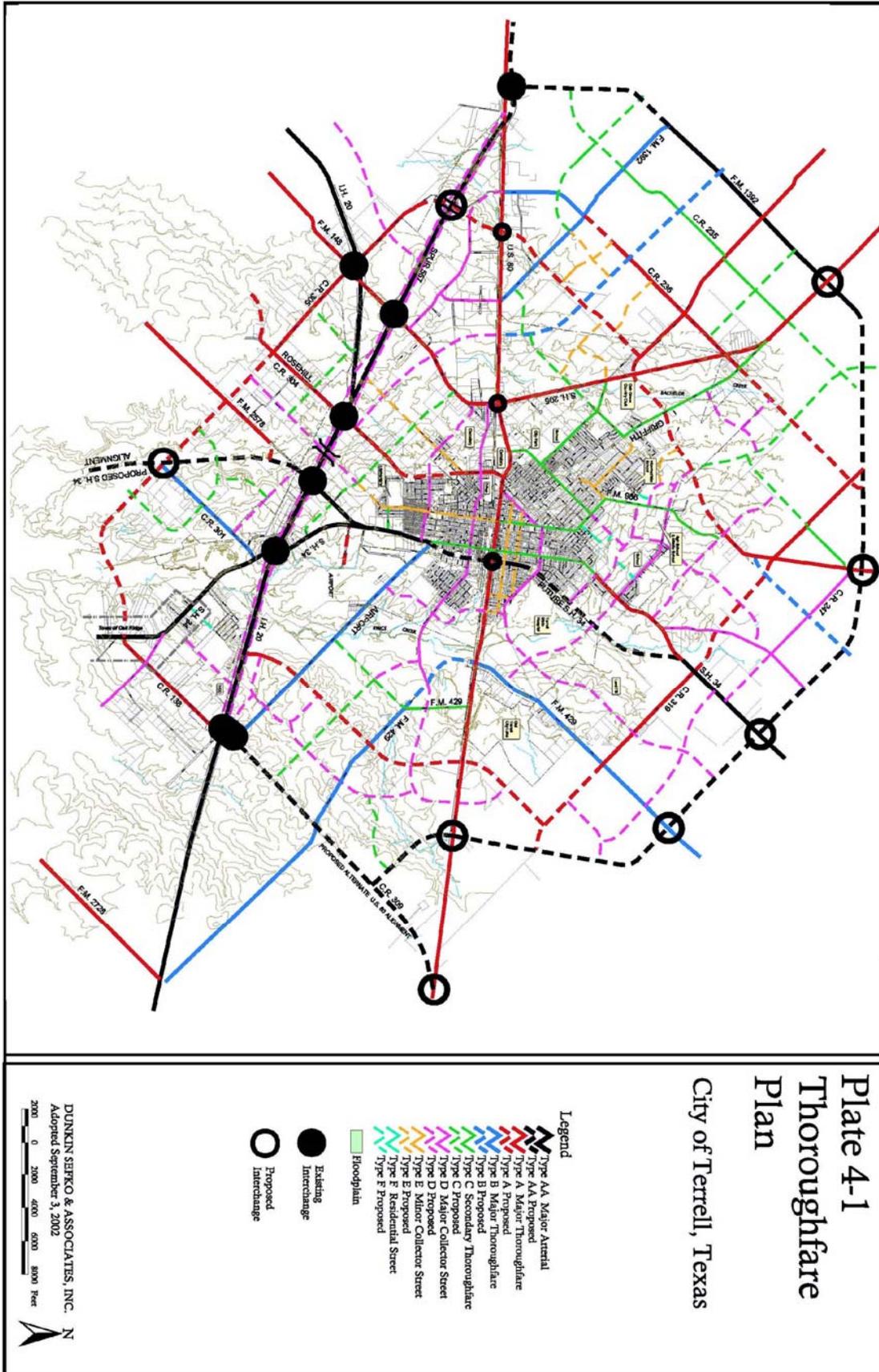
Capacity is generally defined as the volume of traffic that a roadway can serve. *Level of Service* (LOS) takes into consideration various elements related to capacity, including speed, travel time, traffic impediment conditions, and mobility. **Table 4-2** shows the definitions of level of service used by the North Central Texas Council of Governments. The rankings range from "A" (optimum flow) to "F" (poorest traffic congestion). A Level of Service of "C" is considered the minimal recommended for roadway design; the City should strive to maintain a level of service "C" for local roadways.

Table 4-2
Definition of Level of Service for Roadway Links

LEVEL OF SERVICE (LOS)	DESCRIPTION	EXAMPLE
A and B	Light, free-flowing traffic volumes. Virtually no delays with smooth progression of traffic, and speed is generally unaffected by other vehicles. Slight decline in the freedom to maneuver from A to B.	Residential or rural streets.
C	Basically satisfactory to good progression of traffic, but at that point where individual drivers become affected by interactions with other vehicles. Light congestion, and speed is affected by the presence of other vehicles.	Urban thoroughfares at off-peak hours.
D	High density, but stable, traffic flow. Speed and freedom to maneuver are restricted. Small increases in traffic flow will cause significant operational problems. This LOS is generally used to justify thoroughfare improvements.	Secondary Central Business District streets at peak hours.
E	Operating conditions at or near capacity level. All speeds are reduced to low, but remain relatively uniform, meaning generally not stop-and-go. Operations at this level are usually unstable, because small increases will cause severe speed reductions.	Primary Central Business District streets at peak hours.
F	Forced flow. Heavy congestion. Total breakdown with stop-and-go operation. Queues (i.e., vehicle stacking) at intersections on these lengths may exceed 100 vehicles.	Downtown areas usually in larger cities at the A.M. or P.M. peak hours.

Source: North Central Texas Council of Governments

The North Central Texas Council of Governments uses levels of services to define whether regional roadways are functioning at an optimal level.



THOROUGHFARE PLANNING ISSUES

A number of issues must be considered in the process of developing a *Thoroughfare Plan* for Terrell. First, the Plan must be compatible with the City's *Future Land Use Plan* (Section 5) and requirements of growth. Second, it must address the integrity of existing nonresidential and residential areas. The Plan must balance functions of the thoroughfare system through efficient moving of traffic, and facilitate access requirements. It must consider alignments and right-of-way issues. Another important issue is how Terrell's thoroughfare network blends with the region.

The Evolution of Terrell's Thoroughfare System

The transportation system as it exists today in Terrell has evolved over decades. The center area of the City is densely developed, with rights-of-way and land uses firmly in place. Therefore, opportunities for improving traffic flow and access within the core of the City will mainly be products of street maintenance and widening, wherever possible. The existing pattern of streets is the result of street construction over different time periods, thus resulting in its relatively complex nature. This characteristic will require careful consideration in widening or expanding the existing core roadway network. However, in less developed areas, specifically toward the outer City limits and within Terrell's ETJ, there are opportunities for the City to ensure that adequate mobility is provided with future growth.

The Link Between Thoroughfare & Land Use Planning

As previously mentioned, land use and roadway planning are closely linked. Just as inappropriate land uses can reduce the effectiveness of adjacent roadways, poorly planned roadways can reduce the viability of adjacent land uses. Inappropriate zoning, various types of development activity, the existence of older roadways that now carry higher traffic volumes than originally intended, and continually changing traffic patterns can have negative impacts on the City's thoroughfare system. As previously mentioned, Terrell should ensure that adequate access (driveway) spacing standards are implemented for land uses located on arterial and major collector streets in order to promote a smooth flow of traffic and to minimize the impact of individual developments on the safe and efficient function of these roads.

The following were important considerations in establishing Terrell's Thoroughfare Plan:

- 1) Its compatibility with the Future Land Use Plan,*
- 2) Its relationship with existing residential and nonresidential areas, and*
- 3) Its relationship with the region.*

Recommended Thoroughfare Plan

The *Thoroughfare Plan*, shown graphically on **Plate 4-1**, recommends arterial and collector connections that will help to accommodate the land uses proposed. The recommendations are generally for connections between existing thoroughfares that blend with existing routes. Engineering analysis and evaluation should be conducted as each alignment is defined through the subdivision platting process. The following are major features of Terrell's *Thoroughfare Plan*:

- ◆ A new connection/bypass for U.S. Highway 80 to accommodate truck traffic;
- ◆ The outer arterial loop (just north of the existing ETJ line);
- ◆ The future State Highway 34 alignment; and
- ◆ Numerous new major thoroughfares and collector streets to serve developing areas of the City.

Relationship Between Thoroughfares & Neighborhoods

As previously mentioned, Terrell's initial development predated dependence on a thoroughfare system. Therefore, many of the local neighborhood streets are now carrying volumes of traffic that are higher than the volume for which they were designed. One of the primary objectives of this *Thoroughfare Plan* is to ensure that future residential neighborhoods are protected from heavy traffic. For example, internal neighborhood streets may be arranged in a discontinuous, curvilinear pattern to discourage cut-through traffic. Facilities such as churches and shopping centers, which provide services beyond the immediate neighborhood and which periodically generate heavy traffic and parking congestion, should be encouraged to locate at the edge of neighborhoods near intersections of major thoroughfares. **Illustration 4-16** is an example of the way in which this can be achieved. To further this objective, the Plan designates several collector

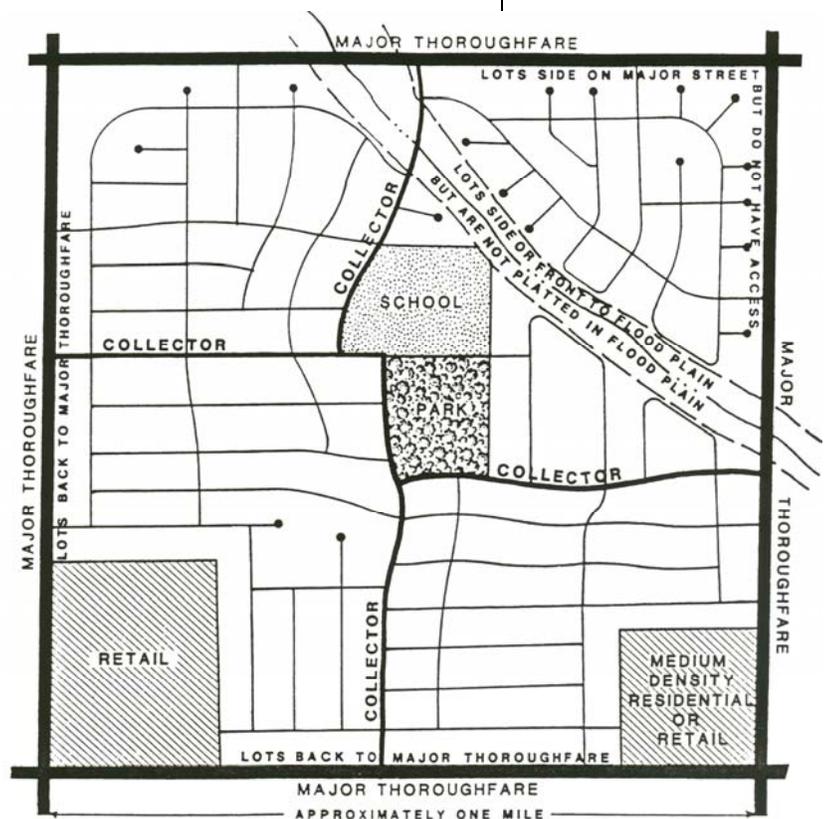


Illustration 4-16
Typical Residential Neighborhood Layout

roadways that are intended to serve the primary traffic from future residential development. It will be important for the City to preserve the rights-of-way recommended within the *Thoroughfare Plan* through its Subdivision Ordinance.

THOROUGHFARE IMPLEMENTATION

Implementation of the *Thoroughfare Plan* will require consistent administration by the City, especially within the ETJ area. Design and technical standards should be adopted to ensure that such practices are uniform in terms of the required size of right-of-way, access controls along rights-of-way (i.e. joint or shared access to mitigate traffic congestion), and sight and visibility standards. Further, recommended actions in the administration of the *Thoroughfare Plan* have been considered in the context of funding mechanisms, subdivision control, and zoning/land use control in the following discussion.

Funding Mechanisms

The *Thoroughfare Plan* must incorporate realistic methods of implementation within the context of budgeting constraints. In addition, building and maintaining an efficient street network requires significant investment of local resources. Careful planning is needed to ensure that Terrell makes the most cost-effective investments in its street network. Thoroughfare funding is usually based upon general obligation bonds or the general fund budgeting process. The City should also continue its coordination efforts with the Texas Department of Transportation (TxDOT) and Kaufman County in order to maximize the potential for shared financing, especially in outlying areas of the City. In establishing its thoroughfare system in the past, the City of Terrell has relied upon three sources of funding: 1) the construction of facilities solely funded by the City (principally through bonds); 2) joint participation with other jurisdictions (i.e., the County and/or the State); and 3) developer participation. Consideration of impact fees, coordination of the City's capital improvements, and continued use of bond referendums are related methods of providing funding for improving the thoroughfare system.

STATE LAW PERTAINING TO IMPACT FEES

Impact fees can be described as fees charged to new development based on that development's impact on the infrastructure system. Chapter 395 of the Texas Local Government Code, which provides the legal context for impact fees, addresses the issue of developer participation in the construction of off-site roadways. This state law allows cities in Texas to decide whether to assess fees for roadway construction to new residential and

Funding mechanisms for Thoroughfare Plan implementation include:
1) *Impact fees,*
2) *Regional assistance, and*
3) *Bond referendums.*

nonresidential development. The City should investigate the feasibility of using Chapter 395 as a funding mechanism for roadway construction as Terrell continues to expand and develop.

The primary advantage to having impact fees as a funding source is that it provides cities with the increased ability to plan and construct capital facilities so that the needed roadway system capacity is available when the market warrants. If they are not implemented, new capital facilities will likely be financed through taxes (e.g., ad valorem taxes), which are paid by existing as well as future residents. With impact fees, the development community is responsible for paying its related share of the cost of growth. However, while impact fees provide financing help for cities, they also increase the cost of development. As most costs associated with development are "passed through" to the consumer, it can be argued that impact fees increase the cost of housing or deter economic development. It must also be noted that if the facilities (and the related capacity) are not available, growth would likely not occur anyway, and therefore, impact fees would not be charged.

REGIONAL COORDINATION OF CAPITAL IMPROVEMENTS

As applicable, coordination with TxDOT and/or Kaufman County for the joint planning and cost-sharing on projects is recommended. Where the City assumes sole responsibility for the construction and financing of transportation needs, a long-term (20-30 year) plan for the incremental construction and financing of projects is recommended. The City should work with Kaufman County and the North Central Texas Council of Governments (NCTCOG) to develop a County-wide Thoroughfare Plan that would enable Terrell to make better-informed transportation decisions based on regional information.

BOND REFERENDUMS

It should be noted that if the City chooses to adopt an impact fee ordinance and bonds have been included in the assessment of impact fees, the City could use any funds derived from impact fees to retire the bonds. Cities across Texas have successfully used this process as a funding mechanism.

Subdivision Control

The subdivision of land into building sites represents the first step in the development of land uses, and therefore, the creation of potential traffic. Rights-of-way must be acquired at the time of subdivision platting to guarantee the provision of adequate thoroughfares and the value, stability, and character of the area in development. Specifically, as individual plats are approved, right-of-way must be dedicated in conjunction with the recommendations as

Impact fees allow the development community to pay its related share of the cost of growth in relation to roadway capacity. Impact fees can also be adopted to help fund water and wastewater infrastructure..

Rights-of-way must be acquired at the time of subdivision platting as individual plats are approved in conjunction with the recommendations contained herein.

generally set forth in the *Thoroughfare Plan*. Especially important is the planning and reservation of rights-of-way in the ETJ as specific roadways are planned and aligned.

Zoning and Land Use Control

All zoning and land use changes should be made within the context of existing roadways as well as planned thoroughfares (i.e., those described within the *Thoroughfare Plan*). The City must ensure that rights-of-way for thoroughfares are preserved or constructed in accordance with the proposed land uses (refer to the *Future Land Use Plan*, Section 5).

THOROUGHFARE PLANNING POLICIES

Standards and criteria for consistent design practices in new roadway development and redevelopment are based upon transportation-related planning studies and an analysis of existing conditions. Proposed changes and recommendations for future thoroughfares are predicated upon the goals and objectives formulated during the comprehensive planning process. *Thoroughfare Plan* recommendations intended to provide policies to guide Terrell's transportation planning are included in the following table, **Table 4-3**.

Table 4-3
City of Terrell Thoroughfare Plan
Recommended Policies

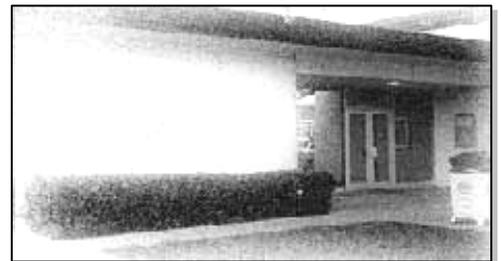
Policy #1	The City should use this Plan to determine the classification of planned roadway segments.
Policy #2	The alignment and capacity of these streets should be determined as part of any action on a preliminary plat, final plat, site plan or zoning case, and they should also be based upon the <i>Thoroughfare Plan</i> .
Policy #3	Any new plat, site plan or zoning change request not in conformance with the <i>Thoroughfare Plan</i> should not be approved unless an acceptable alternative is developed and approved.
Policy #4	The City should use the recommended roadway sections contained herein (Illustrations 4-5 thru 4-12) in conjunction with detailed specifications in the adopted Subdivision Ordinance to determine the appropriate design standards for planned roadway construction and improvements.
Policy #5	The City should seek to maintain a minimum level of service (LOS) standard of "C" as described in Table 4-2. This standard should be used in reviewing the transportation needs and impact of development proposals.
Policy #6	On-site local and collector streets that are constructed by developers must be in accordance with City regulations. The City may also require construction of off-site streets or street improvements needed to provide adequate access to the development. This policy should be implemented through specific provisions of the City's Subdivision and Zoning Ordinances.
Policy #7	Terrell should coordinate with TxDOT, the NCTCOG, other local jurisdictions, and Kaufman County, when planning transportation improvements. A Kaufman County Thoroughfare Plan would be helpful in establishing a basis for such regional transportation planning.
Policy #8	The City should consider all alternatives for increasing roadway capacity before physical road widening is recommended for roadways within existing neighborhoods.
Policy #9	The City should limit commercial and other non-residential uses that generate high volumes of traffic to locations where arterial streets provide sufficient access for non-local traffic.
Policy #10	Except as specifically approved by the City, all development should provide adequate on-site parking for normal operations. This policy should be implemented through specific provisions in the City's Subdivision and Zoning Ordinances.

Source: Dunkin, Sefko & Associates, Inc.



Comprehensive Plan 2002

Section 5: Future Land Use Plan





Comprehensive Plan 2002

Section 5: Future Land Use Plan

INTRODUCTION

The right of a municipality to regulate land is rooted in its need to protect the health, safety and welfare of local citizens. The first step in establishing the guidelines for such regulation is the Comprehensive Plan. Perhaps the most significant Plan element involved in establishing these guidelines is the *Future Land Use Plan*, which designates various areas within cities for particular land uses based principally on population growth, locational criteria, compatibility criteria, and a balance of land use types. The *Future Land Use Plan* establishes an overall framework for the preferred pattern of development within the City of Terrell. The *Future Land Use Plan* is not a zoning map, which deals with specific, adopted development requirements on individual parcels. Graphically depicted for use during the development plan review process, the *Future Land Use Plan* should ultimately be reflected through City policy and development decisions. In general, the *Future Land Use Plan* is intended to be a comprehensive blueprint of and guide toward the City's vision for its future composition based on a balanced, compatible, and diversified land use pattern.

The Future Land Use Plan designates various areas within cities for particular land uses based principally on population growth, locational criteria, compatibility criteria, and a balance of land use types.

FUTURE POPULATION INCREASE

Additional people within the City will require additional retail and commercial opportunities, increased office space, and increased public services, as will be discussed within the *Public Facilities Plan* element. Also, the housing inventory will need to be expanded in proportion with population growth. Increased demand for all types of land uses must be taken into account when establishing a *Future Land Use Plan*. Growth projections form the basis of planning decisions regarding how much land will be required in Terrell to support a given population, and how much land should be allocated to each type of land use.

The City of Terrell experienced a slight decline in population during the decade between 1980 and 1990, which could be attributed to a number of factors including the declining

Table 5-1
HISTORICAL POPULATION CHANGE
City of Terrell, Texas

YEAR	Population	Population Change	Percent Change	Average Annual Compounded Growth Rate
1980	13,225	(-) 957	(-) 6.75%	(-) 0.69%
1990	12,490	(-) 735	(-) 5.56%	(-) 0.57%
2000	13,606	1,116	8.89%	0.86%

Source: U.S. Census

number of patients at the State Hospital, the slow economy, and the growth of other communities in the area. The estimated "group quarter" population of the State Hospital is approximately 450 people. Growth was more positive between 1990 and 2000, with an overall growth rate of almost nine percent. A more detailed discussion of Terrell's historical growth is contained within the *Baseline Analysis*, Section 2.

However, historical growth rates should not provide the sole basis for making population projections. As **Table 5-2** shows, many cities surrounding Terrell have experienced marked growth between 1980 and 2000. The City of Crandall grew at the highest rate, at an average compounded growth rate of just over six percent. Heath, Rockwall, and Forney experienced similar rapid growth at between three and six percent. Considering the growth of surrounding communities, it can be expected that Terrell's percentage of growth, although it has been relatively low in the past, could experience a substantial increase in the next few years. Another factor that may contribute to faster growth in Terrell in the coming years is the increased urbanization of surrounding cities that are closer to the Dallas/Fort Worth Metroplex. People often move out of the city in pursuit of a more rural environment; as some of these surrounding cities continue to grow, their ability to provide such an environment will decrease, thereby making Terrell increasingly attractive. It is also important to note that while population growth in Terrell has been lower than surrounding communities, nonresidential growth has occurred at a high rate.

The population projections shown in **Table 5-3** have been established after taking into account each of the factors discussed above. Scenario B is reflective of a future growth trend that correlates with an average of approximately 400 residential building permits per year over the next twenty years. As can be seen in **Table 5-**

Table 5-2
REGIONAL POPULATION GROWTH (1980-2000)
City of Terrell, Texas and Surrounding Communities

City	1980	1990	2000	Average Annual Compounded Growth Rate 1970-2000
Terrell	13,225	12,490	13,606	0.14%
Forney	2,483	4,070	5,558	4.11%
Mesquite	67,053	101,484	124,523	3.14%
Heath	1,459	2,108	4,149	5.36%
Rockwall	5,939	10,486	17,976	5.69%
Seagoville	7,304	8,969	10,823	1.99%
Crandall	831	1,652	2,774	6.21%
Kaufman	4,658	5,251	6,050	1.32%

Source: U.S. Census

Table 5-3
POPULATION PROJECTIONS
City of Terrell, Texas

YEAR	Scenario A 3.4% Growth Rate	Scenario B 4.8% Growth Rate	Scenario C 6.2% Growth Rate
2000 ⁽¹⁾	13,606	13,606	13,606
2001	14,070	14,260	14,450
2006	16,630	18,030	19,520
2011	19,660	22,800	26,370
2016	23,240	28,820	35,620
2021	27,500	36,430	48,120
Average Number of Dwelling Permits Per Year ⁽²⁾	220	400	540

⁽¹⁾ Population estimated by the 2000 U.S. Census.

⁽²⁾ Based on 2.77 persons per household and an occupancy rate of 91.5, consistent with the 2000 U.S. Census.

Source: Dunkin, Sefko & Associates, Inc.

3, this calculates into an average annual compounded growth rate of approximately 4.8 percent. A 4.8 percent average growth rate would result in a City population of approximately 22,800 by 2011 and 36,430 by 2021. Lower and higher annual compounded growth rates are included as Scenario A and Scenario C, respectively. Scenario A reflects a conservative rate that assumes an average of 220 residential permits issued annually, and calculates into a growth rate of approximately 3.4 percent. Scenario C reflects a relatively aggressive rate of growth for Terrell, and is based on the highest annual compounded growth rate in the surrounding area of 6.2 percent (which occurred in Crandall between 1980 and 1990, refer to Table 5-2). This rate would result in the City growing to a population of approximately 26,370 in ten years and 48,120 in twenty years. It is recommended that if growth exceeds Scenario C, then infrastructure planning, specifically water and wastewater, needs to be reevaluated. For planning purposes, the moderate growth rate represented by Scenario B, specifically a compounded rate of 4.8 percent, and a population in 2021 of 36,430, is used herein to project the 20-year future population of Terrell.

ULTIMATE CAPACITY

Table 2-12 of the *Baseline Analysis* (Section 2) contains information regarding the existing use of land within Terrell. Of the 11,866 acres within the City's corporate limits today, over 52 percent remain vacant. Specifically, there are approximately 2,264 acres that are vacant and are allocated for single-family residential land use (on the *Future Land Use Plan* map, Plates 5-1 through 5-3). Also, there are approximately 2,200 vacant, platted single-family lots. The number of vacant acres allocated for medium density residential is approximately 184, and approximately 98 acres for high density residential. Also, there are also 37 acres that are currently vacant and are planned for manufactured housing. As Figure 5-1 shows, the land area within the

Figure 5-1
ULTIMATE CAPACITY WITHIN THE TERRELL CITY LIMITS
City of Terrell, Texas

VACANT LOW DENSITY RESIDENTIAL AREAS						
Acres	Total Acreage Less 25% (Rights-of-Way)	Dwelling Units Per Acre	Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
2,264	1,698	3	0.915	4,661	2.77	12,911
VACANT SINGLE-FAMILY PLATTED LOTS						
Total Number of Lots			Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
2,200			0.915	2,013	2.77	5,576
VACANT MEDIUM DENSITY RESIDENTIAL AREAS						
Acres	Total Acreage Less 15% (Rights-of-Way)	Dwelling Units Per Acre	Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
184	156	8	0.915	1,145	2.77	3,171
VACANT HIGH DENSITY RESIDENTIAL AREAS						
Acres	Total Acreage Less 10% (Rights-of-Way)	Dwelling Units Per Acre	Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
98	88	15	0.915	1,211	2.77	3,353
VACANT MANUFACTURED HOME AREAS						
Acres	Total Acreage Less 15% (Rights-of-Way)	Dwelling Units Per Acre	Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
37	28	3	0.915	76	2.77	211
Total Number of Additional People Within the Terrell City Limits				25,222 people		
Current Population of Terrell				13,606 people		
ULTIMATE CAPACITY OF THE CITY OF TERRELL				38,828 people		

Source: Dunkin, Sefko & Associates, Inc.

current City limits, including both platted and unplatted land, would support approximately 38,828 people, based on expected densities. This allows for a population growth of approximately 25,222 people. Assuming a compounded growth rate of 4.8 percent, the City of Terrell will almost reach its ultimate capacity in 2021 (refer to **Table 5-3**). Therefore, unless higher density rates occur by 2021 than what is anticipated, the land within Terrell's current City limits will have to be expanded to be able to support any additional population after 2016. It should be noted, however, that the previous statement is based on a 4.8 percent annual compounded growth rate. Other surrounding cities have experienced higher growth rates in recent years, as could Terrell in the future. Therefore, the City should remain aware of population growth and land development that is occurring, and should expand the City limits accordingly to be able to accommodate additional population.

The ultimate capacity of Terrell's extraterritorial jurisdiction (ETJ) is shown in **Figure 5-2**. There is room for significant population growth in the ETJ area, much of which has been designated on the *Future Land Use Plan* for low density residential land use (refer to the discussion on "Land Use in Terrell's Extraterritorial Jurisdiction" later within this section for additional information). Based on recommended densities, the ETJ could support an additional 79,679 people. It should be noted that it is highly unlikely that the ETJ area will experience growth amounting to this population in the near future. Nevertheless, if the entire area does develop at the assumed densities, the area could "hold" almost 80,000 people.

Figure 5-2
ULTIMATE CAPACITY WITHIN THE CITY OF TERRELL'S EXTRATERRITORIAL JURISDICTION (ETJ)

VACANT LOW DENSITY RESIDENTIAL AREAS						
Acres	Total Acreage Less 10% (Rights-of-Way)	Dwelling Units Per Acre	Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
13,000	9,750	3	0.915	26,764	2.77	74,136
VACANT HIGH DENSITY RESIDENTIAL AREAS						
Acres	Total Acreage Less 10% (Rights-of-Way)	Dwelling Units Per Acre	Occupancy Rate (91.5%)	Occupied Dwelling Units	Household Size	Additional Number of People
162	146	15	0.915	2,001	2.77	5,543
TOTAL NUMBER OF ADDITIONAL PEOPLE WITHIN TERRELL'S EXTRATERRITORIAL JURISDICTION						79,679

Source: Dunkin, Sefko & Associates, Inc.

A BALANCED LAND USE PATTERN

In order to better assess how much land should be allocated to each type of land use, thereby creating the desired *balance* of land uses, the existing allocation of land uses within Terrell was included as part of the research contained within the *Baseline Analysis* (Section 2, **Table 2-12, Number of Acres Per 100 Persons**). **Table 5-4** uses the concept of *acres per 100 persons* to provide analysis of how land uses are allocated by the *Future Land Use Plan*, and to facilitate a better understanding of how land uses relate to future population projections. It should be noted that retail land use has been allocated at 1.56 acres per 100 persons, which is higher than is allocated in many cities in Texas. Generally, a city can

The existing allocation of land uses that exists within Terrell today was taken into account in establishing the City's recommended future land use pattern.

support approximately 0.5 acres of retail for every 100 persons. However, that fact that Terrell is located along or near several major thoroughfares dictates a higher allocation of retail uses. Generally, the best use for land along major roadways is considered to be retail because such roadways provide opportunities for high visibility, and because retail uses can be designed in such a way that contributes to a positive image of the community. Also, future anticipated thoroughfares (the extension of F.M. 1392, the realignment of U.S. Highway 80, etc.) would increase retail opportunities for the City even more. With these transportation corridors, it is anticipated that Terrell will be able to serve the retail needs of a larger geographic area (i.e., surrounding communities where retail opportunities are not as available). This is in fact what is occurring now within Terrell, especially considering the regional draw of the Tanger Outlet Center, which is representative of retail use. It should be noted that other types of nonresidential land uses (e.g., commercial and industrial) have been increased proportional to their existing amounts in relation to the population.

As **Table 5-4** further shows, as Terrell grows in population, the amount of single-family land use will grow in order to accommodate the additional people – indeed, the City's ability to provide for quality housing and market choice will likely be one of the major factors that contributes to Terrell's future population growth. Also, the City's ability to provide park and recreation areas will become increasingly important; parks and open spaces have been calculated within **Table 5-4** such that this land use reflects the National Recreation & Park Association recommended number of acres per 100 persons. In addition, it is anticipated

Table 5-4
PROJECTED FUTURE LAND USE REQUIREMENTS BASED ON
CURRENT LAND USE IN RELATION TO POPULATION
City of Terrell, Texas

LAND USE	Acres per 100 Persons ⁽¹⁾	Acres Needed in 2021 With a Projected Population of 36,430 Persons	Ultimate Capacity of 38,828 Persons
Residential Use	8.90	3,242.3	3,455.7
<i>Low Density Residential (Single-Family)</i>	10.9	3,970.9	4,250.6
<i>Medium Density Residential (Duplex/Townhome)</i>	0.36	131.1	139.8
<i>High Density Residential (Multi-Family)</i>	0.36	131.1	139.8
<i>Manufactured Home</i>	0.11	40.1	42.7
Parks/Open Space	2.00 ⁽²⁾	728.6	776.6
Public/Semi-Public	6.42	2,338.8	2,492.8
Office	0.20	72.9	77.7
Retail	1.56	568.3	605.7
Commercial	2.27	827	881.4
Central Business District (CBD)	—	16	16.0
Industrial	3.76	1,369.8	1,459.9
TOTAL DEVELOPED ACRES	27.94	10,194.6	10,882.9
Rights-of-Way⁽³⁾	—	1,529.2	1,628.1
TOTAL ACRES REQUIRED	32.45	11,723.8	12,511.0⁽⁴⁾

⁽¹⁾ Generally based on "Acres per 100 Persons" within Table 2-12 of the Baseline Analysis.

⁽²⁾ Equal to the amount of acres recommended by the National Recreation & Park Association for 100 people.

⁽³⁾ Right-of-way allocation adds approximately 15% to the number of acres required (general estimate).

⁽⁴⁾ Equal to the total amount of acres within the current City limits of Terrell as of October, 2001.

Source: Dunkin, Sefko & Associates, Inc.

The City can support a higher amount of retail uses than many other cities in Texas, primarily due to its location along several major thoroughfares.

that the increase in population will lead to a necessary increase in Public/Semi-Public uses (as described in the *Baseline Analysis*, Section 2, this type of use includes municipal services, schools, churches, libraries etc.); this increase is also reflected in **Table 5-4**.

Regardless of the existing allocation of land uses and historical land use patterns, predicting future land use needs and predetermining the amount of land that should be allocated to a specific use is a difficult task. Creating a balance of land uses should be the focus as Terrell continues to grow. In order to do so, it is recommended that Terrell strive to maintain the land use percentages recommended within this *Future Land Use Plan*. **Table 5-5** and **Table 5-6** (page 5-17) outline the amount of acreage designated for the various types of land use by the *Future Land Use Plan* within the City limits and the ETJ area, respectively. **Plate 5-1** shows the land area within the existing City limits, and **Plate 5-2** shows a detailed version of the dense land area in and around the Central Business District. **Plate 5-3** shows the land area within the City and in the ETJ. Each of these is a graphic depiction of the land use allocations discussed within this *Future Land Use Plan* and calculated within **Table 5-5** and **5-6**.

Table 5-5
FUTURE LAND USE CALCULATIONS
City of Terrell, Texas

LAND USE CATEGORY	Acres	Percent
Residential Use	5,189	41.5%
<i>Low Density Residential (Single-Family)</i>	4,760	38.0%
<i>Medium Density Residential (Duplex/Townhome)</i>	232	1.9%
<i>High Density Residential (Multi-Family)</i>	146	1.2%
<i>Manufactured Home</i>	51	0.4%
Parks/Open Space	522	4.2%
Public/Semi-Public	1,352	10.8%
Office	11	0.1%
Retail	176	1.4%
Commercial	1,814	14.5%
Central Business District (CBD)	15	0.1%
Mixed Use	104	0.8%
Industrial	2,151	17.2%
Rights-of-Way	1,178	9.4%
TOTAL LAND ACREAGE WITHIN THE CITY LIMITS	12,511	100.0%

Source: Dunkin, Sefko & Associates, Inc.

Note: City limit total reflects annexations made as of October 2001.

A COMPATIBLE LAND USE PATTERN

The various types of land use have different needs in terms of location. For example, automobile traffic should be able to circumvent residential areas, thereby preserving the integrity of local neighborhoods and ensuring the safety of local residents. In contrast, nonresidential uses should generally be located along major thoroughfares in order to allow them high visibility and easy accessibility. The exception to this may be heavy commercial and industrial uses, which may have open storage areas and large warehouses that do not make a positive contribution to the way in which Terrell is viewed from major thoroughfares (this concept will be discussed further in the *Community Image Considerations*, Section 8). The various needs of different land use types, outlined in the following discussion, have been considered in establishing Terrell's *Future Land Use Plan*.

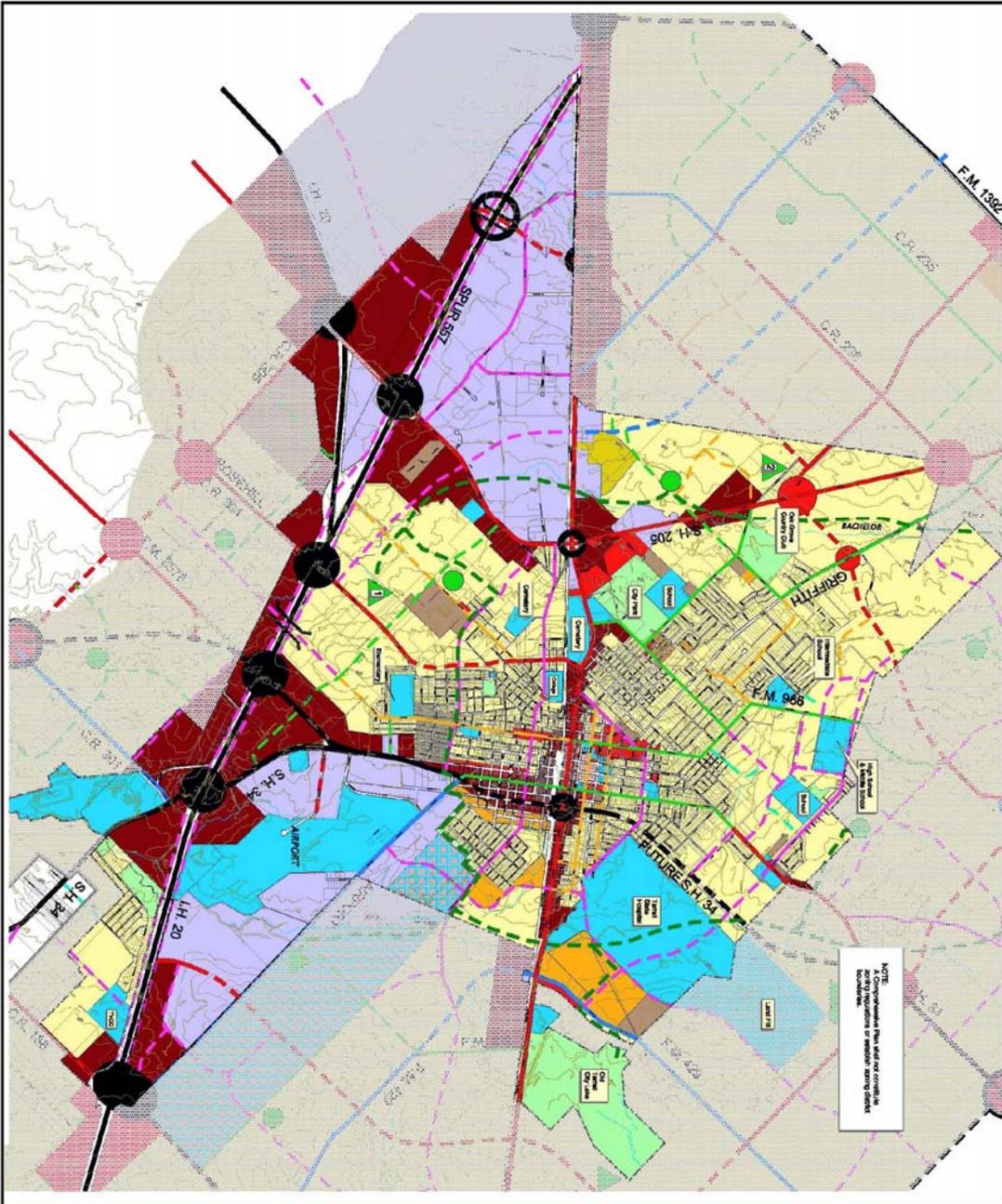


Plate 5-1 Future Land Use Plan (Inside City Limits) City of Terrell, Texas

Future Land Use Legend

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Manufactured Homes
- Public/Semi-Public Uses
- Parks or Open Space
- General Business District
- Mixed Use
- Commercial
- Office
- Industrial

Freeshield

Terrell City Limits

Terrell E.T.I.

Thoroughfare Legend

- Type AA Major Arterial
- Type A Major Thoroughfare
- Type A Proposed
- Type B Major Thoroughfare
- Type B Proposed
- Type C Secondary Thoroughfare
- Type C Proposed
- Type D Major Collector Street
- Type D Proposed
- Type E Minor Collector Street
- Type E Proposed
- Type F Residential Street
- Type F Proposed

Future Parks Legend

- Neighborhood Park
- Community Park Alternatives (as priority coded)
- Proposed Trail System
- Existing Parks

DUNKIN SERKO & ASSOCIATES, INC.
 Adopted September 3, 2002

Scale: 0 1000 2000 3000 4000 5000 6000 Feet

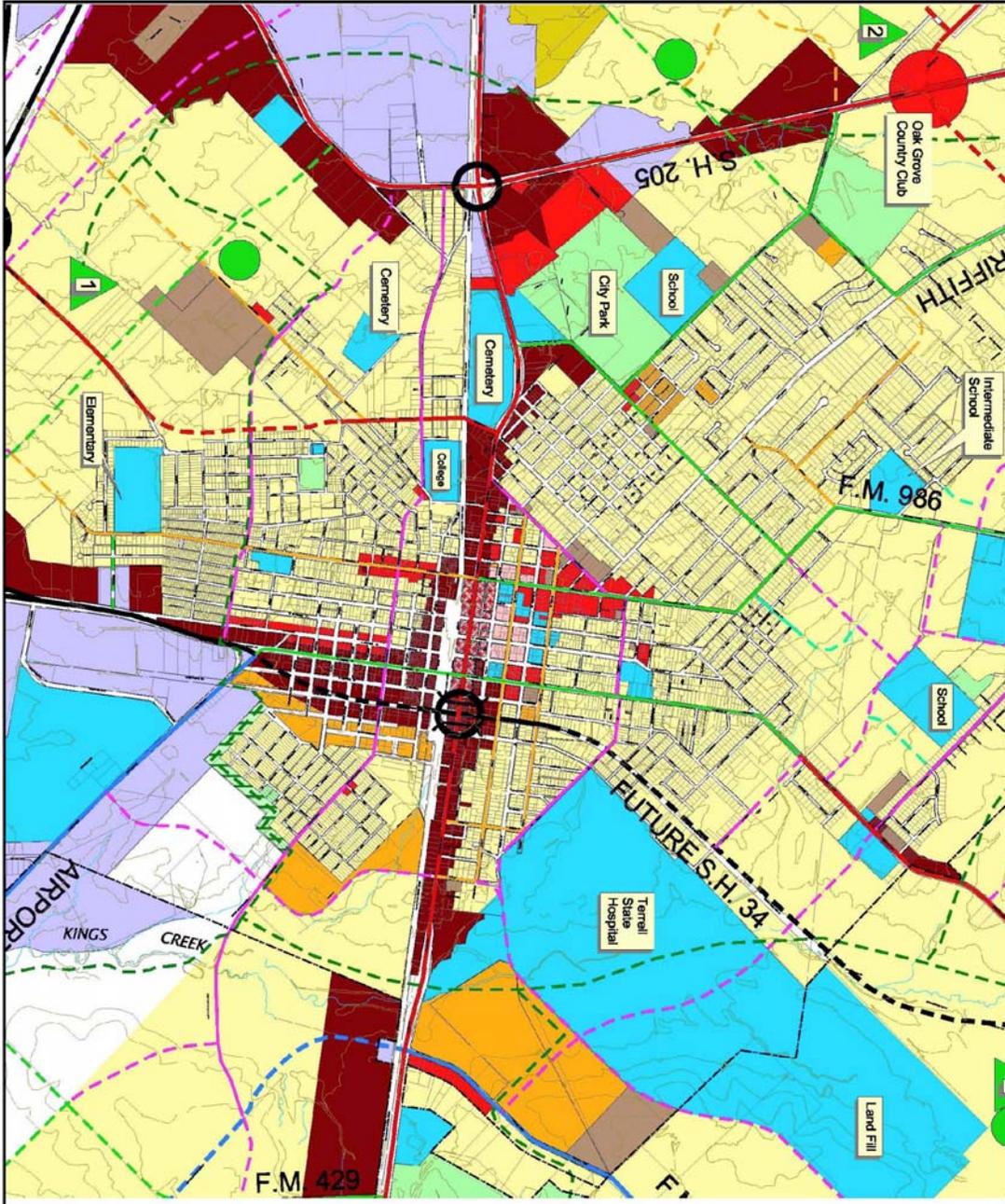


Plate 5-2
Future Land Use
Plan
 (Detailed)
 City of Terrell, Texas

Future Land Use Legend

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Manufactured Homes
- Public & Open Space
- Retail
- Central Business District
- Commercial
- Other
- Industrial
- Freight
- Terrell City Limits
- Terrell E.T.J.

Thoroughfare Legend

- Type AA Major Arterial
- Type AA Proposed
- Type A Major Thoroughfare
- Type A Proposed
- Type B Major Thoroughfare
- Type B Proposed
- Type C Secondary Thoroughfare
- Type C Proposed
- Type D Major Collector Street
- Type D Proposed
- Type E Minor Collector Street
- Type E Proposed
- Type F Residential Street
- Type F Proposed

Future Parks Legend

- Neighborhood Park
- Community Park Alternatives (see priority order)
- Proposed Trail System
- Existing Parks

Scale: 0 2000 4000 6000 8000 Feet

DUNKIN' SERKO & ASSOCIATES, INC.
 Adopted September 3, 2002

Retail and some commercial land uses require locations that provide visibility, because this type of land use often depends on “walk-in business” for success. Consequently, existing vacant land areas along major thoroughfares and at major intersections (e.g., U.S. Highway 80, State Highway 34, State Highway 205, etc.) should primarily be planned for and preserved for retail and certain commercial land uses; such uses should generally be aesthetically pleasing in order to ensure that a positive community image is projected to the many people that drive through Terrell via these thoroughfares (see **Illustration 5-1**). The market, in conjunction with City policy, has dictated the existing land use pattern (shown on **Plate 2-3** in the *Baseline Analysis*, Section 2) in Terrell over the years, and the pattern generally supports these concepts of residential and nonresidential locations. The *Future Land Use Plan*, shown on **Plates 5-1, 5-2** and **5-3**, further reinforces these concepts. It should be noted that nonresidential development will become increasingly important as the City continues to grow; and therefore, the remaining optimal locations for such development should be protected (i.e., a piece of property should not be developed as residential when it has all the characteristics of a prime nonresidential location).

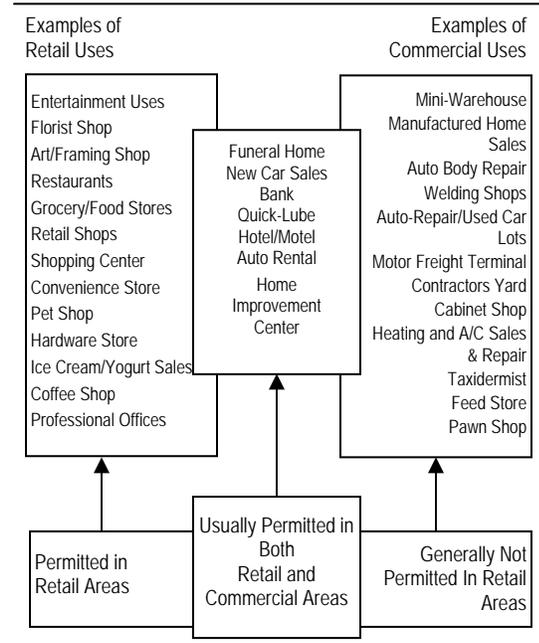


Illustration 5-1
 Retail/Commercial Land Use Concept

In addition, the *Future Land Use Plan* guides the allocation of land uses in a way that is intended to yield greater opportunity for compatibility of land use; this is also in keeping with the Comprehensive Plan goals for balanced development and better traffic circulation within Terrell. As **Illustration 5-1** shows, the more intense the type of nonresidential land use is, the less compatible the land use is with residential land use. In general, office uses and small (neighborhood) retail establishments adjacent to residential uses create positive relationships in terms of land use compatibility; these are considered lower intensity land uses. There are many techniques, including setback standards, buffering, screening, and landscaping, that can be implemented through zoning and subdivision regulation that can help increase compatibility between different land uses. These techniques are discussed in detail in the *Community Image Considerations*, Section 8.

A DIVERSIFIED LAND USE PATTERN

Tables 5-5 (page 5-6) and 5-6 (page 5-17) list the categories of land use by acreage for the City of Terrell and its ETJ, respectively, based upon **Plates 5-1, 5-2** and **5-3**. These graphic portrayals of land use objectives within the community have been blended with other components of the Plan, such as the *Thoroughfare Plan* (Section 4) and *Infrastructure System Overview* (Section 7). Land uses have been recommended not only for the existing

City limits, but also within the City's ETJ (the ETJ area is discussed in detail later within the *Future Land Use Plan*). The following sections outline the various types of land uses that will help to provide a diversified land use pattern in Terrell with future growth and development. It should be noted that the discussion of amounts of acreage and percentages of developed land refer to the land area within the Terrell City limits; however, land use descriptions should be considered consistent within both the City limits and the ETJ.

Low Density Residential (Single-Family)

*Accounts for 1,097 acres of existing land use.
Accounts for 4,760 acres on the Future Land Use Plan.*

Currently, residential land use is the predominate use within the City at almost 26 percent of the total developed acreage. Single-family residential use accounts for almost 24 percent of that 26 percent. The *Future Land Use Plan* proposes that this trend continue, with much of the remaining vacant land within the City (as well as much of the land in the ETJ) recommended for low density, single-family residential land use. As mentioned previously within this section, Terrell has approximately 2,200 platted, single-family lots; these lots, when purchased and built on, will represent a major increase in the local population (refer to **Figure 5-1**).

The recommended minimum lot size for new development in Terrell is 7,500 square feet (4 units per acre). This size has been used in population density estimates and utility planning. Smaller lot sizes can be approved, provided that additional amenities or other benefits to the City can be cited and that developments with smaller lots are developed through a Planned Development process.

The land that has been developed for single-family land use in the inner part of the City (in and around the Central Business District) is generally characterized by small lots. One of the challenges Terrell will face in the coming years is the ability to provide areas for single-family housing that are varied in terms of their density. It is recommended that the City review its existing Zoning Ordinance to ensure that the ordinance has allowed for adequate variation in terms of lot sizes. Ensuring that there is adequate market choice for housing in Terrell also means that larger-lot subdivisions (e.g., one-half acre and above) will also be needed to meet future demand.

Terrell has approximately 2,200 platted, single-family lots; these lots, when purchased and built on, will represent a major increase in the local population.

Medium Density Residential (Duplex/Townhome)

*Accounts for 49 acres of existing land use.
Accounts for 232 acres on the Future Land Use Plan.*

There are currently very few areas of the City that have been developed for attached two-family dwelling units such as duplex units and townhomes. This type of land use accounts for approximately one percent of the total developed land within Terrell, and for approximately three percent of the total dwelling units within the City. This trend has been market driven in the past, and the local housing market is not expected to experience any rapid changes in the near future⁵⁻¹.

It is recommended that the City slightly increase its percentage of medium density land use (refer to **Table 5-5**) to just over two percent, thereby increasing the City's housing diversity. It should be noted that this type of residential land use can be used to effectively buffer single-family residential areas from roadways and from higher intensity land uses; this technique has been employed along the proposed alignment of State Highway 34 and along F.M. 429, as the *Future Land Use Plan* map shows (**Plate 5-1**). Also, duplexes and townhomes can compliment a Planned Development area by helping to diversify the type of housing provided. Generally, a maximum of eight dwelling units per acre should be allowed within designated medium density areas and within any Planned Development.

High Density Residential (Multi-Family)

*Accounts for approx. 49 acres of existing land use.
Accounts for 146 acres on the Future Land Use Plan.*

High density residential land use is characterized by traditional apartment-type units in attached living complexes. The amount of land that has been developed for multi-family land use is similar to that which has been for duplex and townhomes - that is, approximately one percent. Perhaps more indicative of the housing market, however, is the number of multi-family units that are within Terrell. The land use survey determined that there were approximately 760 multi-family units, accounting for almost 14 percent of the total housing units in Terrell. Several areas been designated for this type of land use within this *Future Land Use Plan*, including areas along Colquitt Road, Mineral Wells Street, and along F.M. 429. It is recommended that the City generally continue to maintain its existing land use percentage and housing unit percentage of high density residential use. In terms of future multi-family development, the following guidelines should be applied:

A maximum of eight dwelling units per acre should be allowed within designated medium density areas, including those proposed within a Planned Development.

⁵⁻¹ Examples of catalysts that might change the local housing market would be the construction of a college or university or the establishment of a large corporation. These events may increase the need for higher density housing at a later date.

- The proposed multi-family tract should be located along a collector or major thoroughfare (i.e., not directly along local residential streets).
- The tract should not be less than approximately ten acres in size; this will help to ensure that the complex is large enough to have an office on-site and that the complex will be well-maintained.
- If the tract is adjacent to single-family residential dwellings, transition areas (greenspace, buffer areas, medium density development, etc.) should be incorporated into the project.
- Based upon the density of the complex, an appropriate amount of usable open space should be required of such developments.
- The average number of dwelling units for high density residential areas should be approximately 15, with a maximum of 21 units per acre. The City may also want to incorporate "density bonuses", allowing a higher number of units per acre for specific amenities, such as garages and landscaping.

An average of 15 dwelling units per acre should be allowed within designated high density areas, with a maximum of 21 units per acre.

Manufactured Home Areas

*Accounts for 15 acres of existing land use.
Accounts for 51 acres on the Future Land Use Plan.*

The existing land use pattern within Terrell is characterized by an adequate percentage of manufactured housing (refer to the *Baseline Analysis*, Section 2, for further detail). In the future, it is recommended that the percentage of land used for manufactured housing developments not exceed one percent. This percentage will likely be adequate to meet market demand and still allow housing choice for all income groups. As can be seen on the *Future Land Use Plan* map (Plate 5-1), areas designated for manufactured homes are generally in close proximity to U.S. Highway 80.

Park & Open Space Land Use

*Accounts for 153 acres of existing land use.
Accounts for 522 acres on the Future Land Use Plan.*

This land use designation is provided to identify all public parks and open spaces within Terrell. Locations have also be shown on the *Future Land Use Plan* map (Plate 5-1) wherein neighborhood and community parks could benefit local areas in the future, as have locations for a trail system showing how hike/bike connections could be made between various areas of the City. A community's park system is key to a high quality of life. Additional land should be set aside for parks, recreation and open space areas in proportion

Manufactured home areas represent an important affordable housing component in many cities across Texas.

to population growth⁵⁻²; the National Recreation and Park Association (NRPA) standard is approximately 20 acres per 1,000 people (2.0 per 100 people), not including trails. This standard has been applied to the calculation of how much land Terrell will need in the future to accommodate population growth (refer to **Table 5-4**). Approximately 522 acres of parks and open spaces have been recommended within this *Future Land Use Plan*. Terrell should develop a comprehensive park master plan in the near future that can address specific park locations, local park and open space needs, park dedication, and other recreation-related issues.

Terrell should develop a comprehensive park master plan in the near future.

Public/Semi-Public Land Use

*Accounts for 873 acres of existing land use.
Accounts for 1,352 acres on the Future Land Use Plan.*

The *Public/Semi-Public* land use designation is intended to show the locations of institutions that are educational, religious, institutional or governmental in nature. Schools, churches, hospitals, governmental buildings, fire stations and water towers would be considered Public/Semi-Public areas. This type of land use is generally permitted within any area; therefore, the areas shown on the *Future Land Use Plan* map include only City-related public uses that are currently in existence. The City should remain aware of increases in the population and the resultant necessary increases in public and semi-public uses. This subject is further discussed within the *Public Facilities Plan*, Section 6.

Office Land Use

*Accounts for approx. 27 acres of existing land use.
Accounts for approx. 11 acres on the Future Land Use Plan.*

Areas on the *Future Land Use Plan* that are designated for office land use are intended to be used for professional and organizational office needs (e.g., administrative, doctors, dentists, real estate, architects, accountants, secretarial service, etc.). It should be noted that although the land use recommendations contained herein appear to suggest a reduction of office use areas, this is not the case; the reduction in acreage (i.e., from 27 to 11 acres, shown above) results from the consolidation of many of the existing office uses into the *Central Business District* land use designation. The *Future Land Use Plan* recommends development of new office uses generally in the Central Business District

⁵⁻² The NRPA has recently begun to recommend that cities use a Level of Service standard, which is based more on individual community needs and the number of related facilities/acreage.

(CBD) and along major roadways. Office uses can also be incorporated as a transitional land use between residential and higher intensity land uses. This is consistent with the way in which office uses within Terrell have developed in the past. When adjacent to residential uses, offices should be designed in a manner that is compatible with adjacent residential land uses. Office uses are also encouraged within any area designated for retail or commercial uses on the *Future Land Use Plan* map, **Plate 5-1**.

Retail Land Use

*Accounts for 212 acres of existing land use.
Accounts for 176 acres on the Future Land Use Plan.*

Retail land use areas are intended to provide for a variety of retail trade, personal and business services and establishments. As was mentioned with regard to office uses, it should be noted that although the land use recommendations contained herein appear to suggest a reduction of retail use areas, this is not the case; the reduction in acreage (from 212 to 176 acres) results from the consolidation of many existing retail uses into the *Central Business District* land use designation. Retail establishments generally require higher visibility than do other types of nonresidential land use (e.g., office, commercial). In response to this need, retail land uses have been designated in the higher traffic areas of Terrell, with high concentrations in the following locations:

- Along Interstate Highway 20;
- Along U.S Highway 80;
- Around the intersection of Spur 557 and Interstate Highway 20;
- In and around the Central Business District (CBD); and
- Around several future major intersections (e.g., along the extension of F.M. 1392, along the proposed U.S. Highway 80 alignment).

In general, the *Future Land Use Plan* recommends locating retail land uses primarily along major thoroughfares and at major intersections, as **Plate 5-1** shows. In keeping with this concept, circles of retail land use, often referred to as “retail nodes”, have been shown and are intended to represent concentrations of retail at designated major intersections; most of these retail nodes fall either within the City’s ETJ or in the vicinity immediately outside of the City’s ETJ.

*Several retail nodes
have been
recommended within
the City’s ETJ or in
the vicinity
immediately outside
of the City’s ETJ,
which are intended to
represent
concentrations of
retail at designated
major intersections.*

The Central Business District (CBD)

*Note: This is a new land use designation.
15 acres are designated as CBD on the Future Land Use Plan.*

The *Central Business District (CBD)* land use designation is intended to help with revitalization efforts in the core area of Terrell by providing a concentrated, mixed-use focal point and center of business/government in the heart of the City. This area is also intended to provide the community with additional tax revenues and with jobs that are close to home. A mixture of land uses is appropriate for the CBD, as it is intended to remain a place for basic office and retail uses, but also it is also intended to be a unique setting in which local residents can live (above a retail establishment), shop, conduct personal and government-related business, eat at a local café or coffee shop, enjoy arts/cultural facilities (such as a local museum), gather for community events and festivals, and engage in other similar activities. The mixture of land uses recommended (refer to the *Future Land Use Plan* map) will help create activity in the CBD, and the close proximity of uses will also help increase pedestrian traffic.

It is recommended that the City revise the Central Business District within the Zoning Ordinance. Such revision should give consideration to establishing additional design, development and/or redevelopment standards for the CBD. Examples of such standards include: revising setbacks (to create a district street edge), elimination of certain land uses (e.g., uses needing open storage areas), identification of desired building materials, integration of pedestrian elements (e.g., street furniture, sidewalks, trails), and integration of public spaces (e.g., gazebos and squares). The City recently adopted a Sign Ordinance for the Downtown area, which is an example of Terrell's recognition of the need to ensure a positive community image in this important historic area.

Commercial Land Use

*Accounts for 308 acres of existing land use.
Accounts for 1,814 acres on the Future Land Use Plan.*

Areas designated for commercial land use are intended for a variety of commercial uses including automobile-related services, large-scale retail trade, and establishments with outside storage, display and sales. As mentioned previously, one primary difference between retail and commercial uses is that retail uses tend to rely more heavily on *walk-in* business. Consequently, retail uses need the visibility that major thoroughfares provide. Commercial uses often locate along major thoroughfares not because they need the *visibility*, but because they need the *accessibility*. The challenge lies in the fact that

The Central Business District (CBD) land use designation is intended to help with revitalization efforts in the core area of Terrell by providing a concentrated, mixed-use focal point and center of business/government in the heart of the City.

commercial uses generally have a greater need for outside storage areas, and these areas tend to lessen the visual quality of major thoroughfares.

The Future Land Use Plan recommends that heavy commercial land uses be discouraged along the major thoroughfares within Terrell in order to ensure that a positive image is projected. Certain commercial uses may be appropriate (refer to **Illustration 5-1**) in some of these areas, if it is determined that the design of such uses would contribute to Terrell's image, or if open storage areas are not visible from the roadways. Terrell should consider establishing regulations related to aesthetics within its high-traffic corridors (I.H. 20, U.S. Highway 80, State Highway 34) through overlay districts or revised zoning districts. Within these proposed district areas, regulations that would apply commercial uses could include: 1) buffering and/or screening open storage areas from public view and from any adjacent residential uses, 2) using certain building materials, 3) constructing loading docks such that they are not visible to the public. These regulations would ensure that regardless of the land use, Terrell's image along major thoroughfares would not only be protected, but also enhanced.

Mixed Use

*Note: This is a new land use designation.
104 acres are designated as Mixed Use on the Future Land Use Plan.*

The *Mixed Use* land use designation is applied to a large area of land just north of the Terrell Municipal Airport. Development in this part of Terrell will likely be unique due to the diverse nature of the type of development that exists there today. The proximity of the airport makes this area conducive to industrial development, especially some type of industry that requires access to air transportation. However, this area is directly southeast of an existing residential neighborhood that would have to be taken into consideration by the City with any new development that is proposed. Therefore, land uses within the area designated as Mixed Use would have to be compatible with both residential uses and with the Terrell Municipal Airport. The Mixed Use designation is intended to give the City some flexibility in what type of development would be allowed and to encourage a Planned Unit development within this area. It is envisioned that the mixed use atmosphere within this area would be different than that which would likely occur in the Central Business Area, wherein development is now and will continue to be more dense. Uses developed within this area might include medium or high density residential, retail, office, business parks, and light industrial. Certain commercial uses may also be appropriate if their operations are contained within a building (i.e., no outside storage that would negatively affect adjacent residential uses).

Industrial Land Use

*Accounts for approx. 511 acres of existing land use.
Accounts for 2,151 acres on the Future Land Use Plan.*

The *Industrial* land use designation is applied to areas intended for a range of heavy commercial, assembly, warehousing, manufacturing and service-type uses. The *Future Land Use Plan* recommends an increase in the amount of industrial land use than what is currently utilized. Most of the land identified for industrial use is located in or in close proximity to areas currently used or zoned for industrial and heavy commercial uses.

Large tracts of land with easy access to major thoroughfares, air transportation, and/or railway transportation are becoming increasingly hard to find for the industrial business community. This gives Terrell an advantage; the City has several large vacant tracts of land in prime locations that are conducive to industrial development. It is recommended that the City concentrate on attracting businesses engaging in lighter industrial activity that would be contained within a building (i.e., a minimal amount of open storage), such as high-tech services, medical services, software manufacturing, and related assembly. Such light industrial businesses tend to have many of the advantages of industrial uses (i.e., employment, increased tax base) without the disadvantages often related to such uses (i.e., adjacency challenges, pollution). As land within the City and ETJ continues to develop, the City should ensure that the areas designated for industrial use are preserved for this purpose for future economic development opportunities.

Light industrial businesses tend to have many of the advantages of industrial uses (i.e., employment, increased tax base) without the disadvantages often related to such uses (i.e., adjacency challenges, pollution).

LAND USE IN TERRELL'S EXTRATERRITORIAL JURISDICTION (ETJ)

There are two primary reasons that cities in Texas are given the right to extraterritorial jurisdiction (ETJ). First, it gives cities statutory prohibition against another municipality annexing land that is within the ETJ of another city, thereby protecting the ability of cities to expand their land area and population. Cities can generally only annex land that lies within their own ETJ. Secondly, it allows cities to enforce their subdivision regulations within their ETJ, although they cannot enforce their zoning regulations. Subdivision regulation authority allows cities to protect the subdivision

Table 5-6
FUTURE LAND USE CALCULATIONS
City of Terrell's Extraterritorial Jurisdiction

LAND USE CATEGORY	Acres	Percent
Residential Use	14,055	76.9%
<i>Low Density Residential (Single-Family)</i>	13893	76.06%
<i>High Density Residential (Multi-Family)</i>	162	0.9%
Parks/Open Space	170	0.9%
Public/Semi-Public	255	1.4%
Retail	540	3.0%
Commercial	791	4.3%
Industrial	1,663	9.1%
TOTAL LAND ACREAGE⁽¹⁾	18,273	100.0%

⁽¹⁾ Rights-of-way are included as part of each land use.

Source: Dunkin, Sefko & Associates, Inc.

and development of land (especially the provision and construction of public improvements) that will likely become part of that city in the future.

By State law, a city of Terrell's size is allowed an extraterritorial jurisdiction (ETJ) of one mile around the entirety of the City; Terrell may annex any area that is contiguous with current City limits within that one-mile radius, with the exception of areas that fall within another incorporated community. As was discussed in the *Baseline Analysis* (Section 2), this exception does affect Terrell due to the fact that the City is directly adjacent to the Town of Oak Ridge, which is an incorporated municipality to Terrell's south. Other municipalities and their respective jurisdictional areas may eventually also affect Terrell with their future geographic growth (i.e., Mesquite's and Forney's ETJs, which are now approaching the vicinity of Terrell's ETJ).

Also by State law, cities can annex a maximum of 10 percent of their total land area each year, and a maximum of 30 percent within a three-year period⁵⁻³. There are currently approximately 18,273 acres in Terrell's ETJ area, almost 80 percent of which is designated for low density residential land use. Terrell has approximately 12,511 acres within its current City limits, and can therefore annex a maximum of approximately 1,251 acres per year. A maximum of approximately 3,753 acres can be cumulatively annexed over the next three years (30 percent), assuming that no land is voluntarily annexed into the City. If land is voluntarily annexed into Terrell, then the law allows the City to discount the voluntarily annexed acreage from the maximum amounts allowed. Consequently, Terrell could annex more than this number of acres, if desired, with voluntary annexations.

Table 5-6 shows the land use allocation that is recommended for the City's ETJ area. However, as previously mentioned, cities in Texas cannot zone land in the ETJ, and therefore, land uses are shown for two principal purposes. One, if and when Terrell annexes an area, the recommended use of the land is known and it can be zoned accordingly. Also, it is important to know the intended land use when engineering studies are conducted. Knowing whether an area is likely to develop as residential or nonresidential affects infrastructure such as roads and water and sewer lines.

Regular and continual assessment of areas outside the current City limits lacking public facilities and municipal services, and therefore which may be suitable for annexation, can be mutually beneficial for Terrell and for residents in need. Beneficial to residents in that services would be provided, and beneficial to the City in that sub-quality development would be less likely. An annual assessment should be conducted to determine how much land is being absorbed by development, how development is occurring in terms of proximity to

Terrell has approximately 12,511 acres within its current City limits, and can therefore annex a maximum of approximately 1,251 acres per year

Annexation into Terrell's City limits could be beneficial to residents in that services would be provided, and beneficial to the City in that sub-quality development would be less likely.

⁵⁻³ By Texas State law, if a city does not annex 10 percent of its land area in one year, the remaining percentage can be carried over to apply to annexations the next year.

existing services, and what impact it will have upon the City's budget; this will help Terrell to determine targeted annexation areas (refer to the *Implementation Strategies* section). The City can also then program the provision of facilities and services more efficiently. Terrell should consider annexing some areas to the west and should seek to enter into an ETJ agreement with the city of Forney (thereby protecting Terrell's area of future expansion). Further, it is recommended that the City develop a gradual and sustained annexation program (based on the City's ability to provide infrastructure) over the next ten years in order to ensure that: 1) there is ample land availability for market choice, both in terms of residential and nonresidential land use, 2) there is time to plan for, budget for, and construct the infrastructure systems within annexed areas necessary to support additional population, and 3) Terrell's ability to grow geographically is not adversely affected by the geographical growth of adjacent communities.

In addition, due to changes in State law pertaining to annexation in recent years, it is recommended that the City generally not extend utility services to new users outside of Terrell's corporate limits unless they request annexation (exemptions should be developed for those areas that may be appropriate for service but cannot be annexed due to special conditions or circumstances). The City should also equally apply its Subdivision Ordinance to the ETJ area. If the City chooses not to do this, it is creating incentives to develop in the ETJ and not in the City itself. As areas are annexed into the City and as related future development plans are refined, the *Future Land Use Plan* should be amended to reflect these changes.

Development proposals contrary to the Future Land Use Plan could be an improvement over the uses shown on the Plan for a particular area; if this is the case, such proposals should be approved.

DEALING WITH INCONSISTENCIES RELATED TO THE FUTURE LAND USE PLAN

Development Proposals & the Future Land Use Plan

At times, the City will likely encounter development proposals that do not directly reflect the purpose and intent of the land use pattern shown on the *Future Land Use Plan*. Review of such development proposals should include the following considerations:

- Will the proposed change enhance the site and the surrounding area?
- Is the proposed change a better use than that which is recommended by the *Future Land Use Plan*?
- Will the proposed use impact adjacent residential areas in a negative manner? Or, will the proposed use be compatible with, and/or enhance, adjacent residential areas?

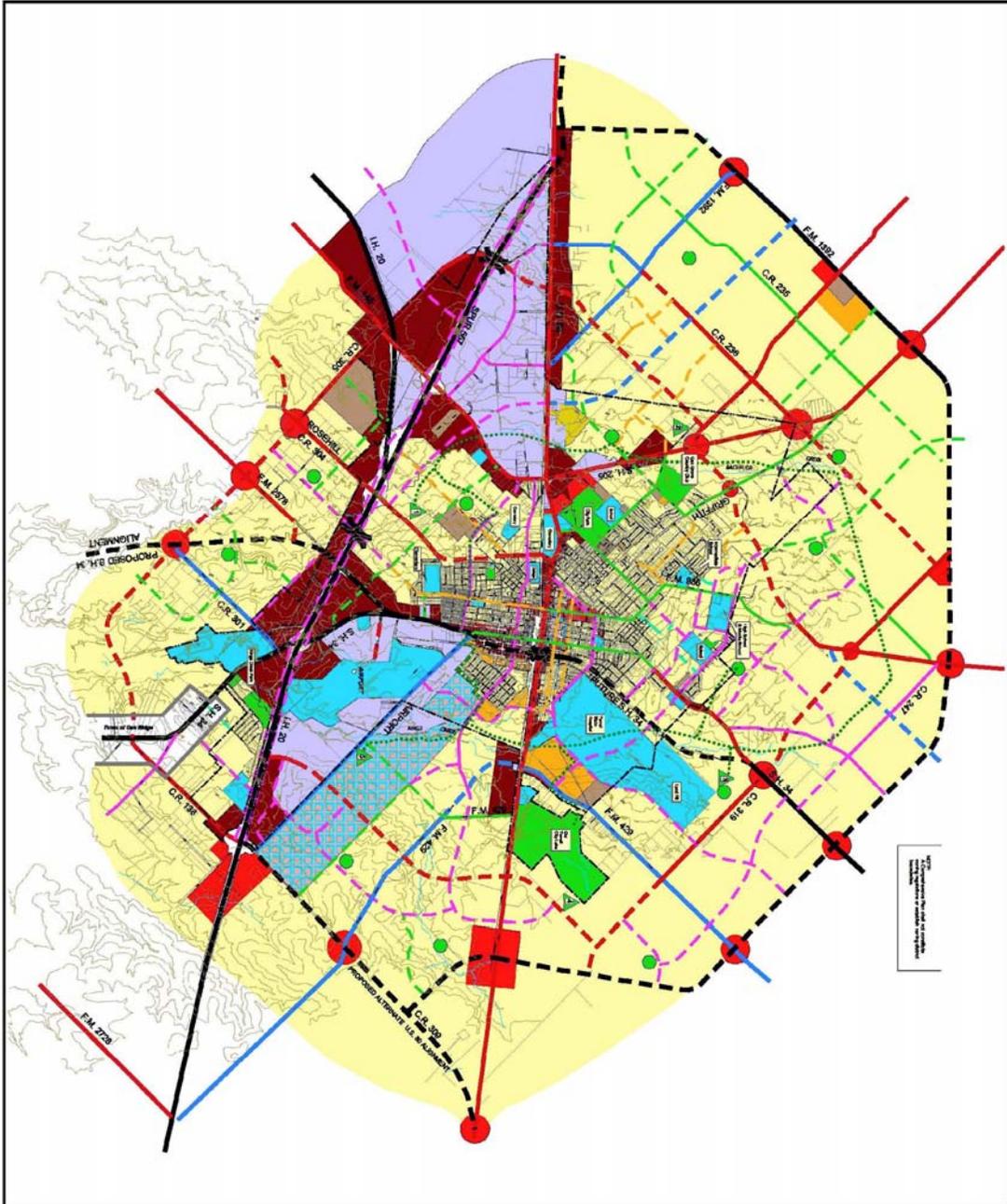


Plate 5-3
Future Land Use
Plan
 (City Limits and ETJ)
 City of Terrell, Texas

Future Land Use Legend

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Manufactured Homes
- Public/Semi-Public Uses
- Parks & Open Space
- General Business District
- Mixed Use
- Commercial
- Office
- Industrial
- Freight/Inland

Terrell City Limits

- Terrell E.T.J.

Thoroughfare Legend

- Type AA Major Arterial
- Type AA Proposed
- Type A Major Thoroughfare
- Type A Proposed
- Type B Major Thoroughfare
- Type B Proposed
- Type C Secondary Thoroughfare
- Type C Proposed
- Type D Major Collector Street
- Type D Proposed
- Type E Minor Collector Street
- Type E Proposed
- Type F Residential Street
- Type F Proposed

Future Parks Legend

- Neighborhood Park
- Community Park Alternatives (no priority coded)
- Proposed Trail System
- Existing Parks

DUNKIN SHERK & ASSOCIATES, INC.
 Adopted September 3, 2002

Scale: 0 2000 4000 6000 8000 Feet

North Arrow

- Are uses adjacent to the proposed use similar in nature in terms of appearance, hours of operation, and other general aspects of compatibility?
- Does the proposed use present a significant benefit to the public health, safety and welfare of the community? Would it contribute to the City's long-term economic well-being?

Development proposals that are inconsistent with the *Future Land Use Plan* (or that do not meet its general intent) should be reviewed based upon the above questions and should be evaluated on its own merit. It should be incumbent upon the applicant to provide evidence that the proposal meets the aforementioned considerations and supports community goals and objectives, as set forth within this Comprehensive Plan (refer to Section 3).

It is important to recognize that proposals contrary to the Plan could be an improvement over the uses shown on the Plan for a particular area. This may be due to changing market, development and/or economic trends that occur at some point in the future after the Plan is adopted. If such changes occur, and especially if there is a significant benefit to the City of Terrell, then these proposals should be approved, and the *Future Land Use Plan* should be amended accordingly.

Zoning & the Future Land Use Plan

Chapter 211 of the Texas Local Government Code states that "zoning regulations must be adopted in accordance with a comprehensive plan". Consequently, a zoning map should reflect the *Future Land Use Plan* to the fullest extent possible. Therefore, approval of development proposals that are

Policy #1	The City should use the moderate growth rate represented by Scenario B herein, specifically a compounded rate of 4.8 percent, for future planning purposes (i.e., for infrastructure planning, public facilities expansions, etc.)
Policy #2	The City should monitor population growth carefully, and should ensure that the City limits are expanded to accommodate such growth.
Policy #3	The City should strive to maintain the land use percentages recommended within this <i>Future Land Use Plan</i> (specifically in Table 5-5 and 5-6).
Policy #4	The City should encourage the location of nonresidential uses along major thoroughfares (as recommended within this <i>Future Land Use Plan</i>) in order to allow them high visibility and easy accessibility.
Policy #5	The City should protect optimal locations for nonresidential development; a piece of property should not be developed as residential when it has all the characteristics of a prime nonresidential location.
Policy #6	The City should require a minimum lot size for new development of 7,500 square feet. Smaller lot sizes could be approved as part of a Planned Development. This policy should be implemented through the City's Zoning Ordinance.
Policy #7	The City should review its existing Zoning Ordinance to ensure that the ordinance has allowed for adequate variation in terms of single-family lot sizes.
Policy #8	The City should allow a maximum of eight dwelling units per acre within designated medium density areas and within any Planned Development wherein medium density land uses are developed.
Policy #9	The City should require the average number of multi-family dwelling units to be 15 per acre, with a maximum of 21 dwelling units per acre. Density bonuses allowing additional units per acre could be used to encourage high density residential land uses to be developed to a high quality.
Policy #10	The City should ensure that the percentage of land used for manufactured housing developments not exceed one percent of the total land within the City limits.
Policy #11	The City should develop a comprehensive park master plan in the near future that can address specific park locations, local park and open space needs, park dedication, and other recreation-related issues.
Policy #12	The City should continue to maintain its existing land use percentage (i.e., not greater than one percent) and housing unit percentage (i.e., not greater than 14 percent) of high density residential use.

Source: Dunkin, Sefko & Associates, Inc.

inconsistent with the *Future Land Use Plan* will often result in inconsistency between the *Future Land Use Plan* and the zoning regulations. It is recommended that Terrell amend the *Future Land Use Plan* prior to or simultaneously to rezoning land that would result in such inconsistency. It should be noted that in order to expedite the process of amending the *Future Land Use Plan* to ensure zoning regulations correspond, the related amendment recommendation(s) may be forwarded simultaneously with the rezoning request(s). If a rezoning request *is consistent* with the Plan, the City's routine review process would follow. Staff recommendation of the project to the Planning & Zoning Commission or City Council should include notation in the staff report that the proposed rezoning request *is consistent* with the Plan. Other review criteria (i.e., traffic impact, compatibility with surrounding uses, etc.) should be applied as usual. It is recommended that the City of Terrell engage in regular review of the *Future Land Use Plan* to further ensure that zoning is consistent and that the document and the map reflect all amendments made subsequent to the Plan's initial adoption.

FUTURE LAND USE PLAN POLICIES

The recommendations contained herein should guide Terrell's future land use planning and related policies. Recommended policies based on this *Future Land Use Plan* are contained within **Table 5-7** (beginning on page 5-21 and continued on page 5-22). The boundaries of land use categories as depicted on the official map should be used to determine the appropriate land use category for areas that are not clearly delineated on the smaller-scale *Future Land Use Plan* map contained within this Comprehensive Plan document. The official

Table 5-7 (Continued)
City of Terrell Future Land Use Plan
Recommended Policies

Policy #13	The City should remain aware of increases in the population and the resultant needs for additional public uses (also addressed in Section 6, the <i>Public Facilities Plan</i>).
Policy #14	The City should encourage new office uses to locate generally in the CBD and along major roadways, or to be incorporated as a transitional land use between residential and higher intensity land uses.
Policy #15	The City should encourage new retail uses to locate generally along major thoroughfares and at major intersections (i.e., retail nodes as shown on the <i>Future Land Use Plan</i> map).
Policy #16	The City should revise the Central Business District within the Zoning Ordinance, with consideration given to establishing additional design, development and/or redevelopment standards for the CBD, and should encourage a mixture of land uses, thereby helping to increase pedestrian traffic.
Policy #17	The City should establish regulations related to the aesthetics of permitted commercial use development within its high-traffic corridors (I.H. 20 and State Highway 34) through overlay districts or revised zoning districts.
Policy #18	The City should conduct an annual assessment of the ETJ to determine how much land is being absorbed by development, how development is occurring in terms of proximity to existing services, and what impact it will have upon the City's budget; this will help Terrell to determine targeted annexation areas.
Policy #19	The City should consider entering into ETJ agreements with adjacent cities, thereby protecting Terrell's area for future expansion.
Policy #20	The City should generally not extend utility services to new users outside of Terrell's corporate limits unless they request annexation.
Policy #21	The City should equally apply its Subdivision Ordinance to the ETJ area; not doing so encourages development outside of the City limits.
Policy #22	Development proposals that are inconsistent with the <i>Future Land Use Plan</i> should be carefully reviewed based upon their own merit, and approved only if it is proven that such a proposal contributes to the City's established goals and objectives.
Policy #23	The City should amend the <i>Future Land Use Plan</i> simultaneously with any rezoning land that would result in inconsistency between the <i>Future Land Use Plan</i> (map) and zoning (map).
Policy #24	The City should engage in regular review of the <i>Future Land Use Plan</i> to further ensure that zoning is consistent and that the document and the map reflect all amendments made subsequent to the Plan's initial adoption.

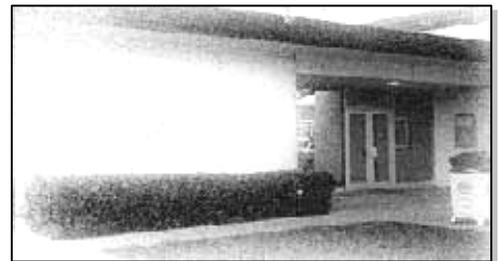
Source: Dunkin, Sefko & Associates, Inc.

copy of the *Future Land Use Plan* map is on file at Terrell's City Hall. It is important to note that the *Future Land Use Plan* is not the community's official zoning map. Rather, it is a guide to decision making in the context of the City's future land use patterns. The *Future Land Use Plan* should be used consistently and updated as needed, as coordinated, quality development continues in Terrell over time.



Comprehensive Plan 2002

Section 6: Public Facilities Plan





Comprehensive Plan 2002

Section 6: Public Facilities Plan

INTRODUCTION

The *Public Facilities* element of the Comprehensive Plan addresses the expectations that a community's residents have regarding public services and the facilities needed to provide these services. The *Public Facilities Plan* for Terrell focuses on both the building space and personnel needed to provide services such as police, fire, library, administration, and so forth for the City's residents. Public buildings that house the various governmental and service functions of a municipality are generally of two types: (1) those requiring a nearly central or a common location and that serve the entire municipal area, and (2) those serving segments of the community on a "service area" basis. Terrell's City Hall is an example of a governmental building that serves the entire community, while a fire station represents a public building that has a service area relationship with the community.

The demands for public building space at all levels of government usually increase as the population served grows and as the level of service expands. Terrell currently has 160 municipal employees serving a population of approximately 13,606 people (based on the 2000 U.S. Census). Within this *Public Facilities Plan*, a population growth rate of 4.8 percent has been used for planning purposes. This is consistent with the *Future Land Use Plan*, and would result in Terrell reaching a population of 36,430 people by the year 2021 (refer to the *Future Land Use Plan* element for details on population projections). Assuming a similar ratio of municipal service to population (as currently exists), approximately 430 employees will be required when the City reaches this projected population. New and/or expanded facilities will be needed to house the additional employees and to replace existing municipal facilities as the City grows in the future.

It should be noted that a *Space Utilization Study* was written for Terrell in October of 2000 by the firm of Ron Hobbs Architects. This *Public Facilities Plan* should be viewed in correlation with recommendations made within the *Space Utilization Study*.

Public buildings are generally of two types: (1) those requiring a common location that serve the entire municipal area, and (2) those serving segments of the community on a "service area" basis.

EXISTING CONDITIONS & FUTURE NEEDS

The public services provided by the City are divided into several separate departments; this makes it easier for Terrell to provide adequate and efficient facilities and services, as well as to plan for the work space and personnel that is needed to administer these services. The following sections describe these various departments by outlining their current conditions and by making recommendations correlated to Terrell's future growth potential.

The Terrell City Hall

The City Hall of Terrell was constructed in 1979 and has a total of approximately 12,000 square feet. There are several departments that operate within City Hall, including the police, fire and public works departments. The following specifically outlines each department and their respective number of employees:

- Administration: 4 people
- Police Department: 8 people
- Fire Department: 3 people
- Municipal Development: 7 people
- Engineering: 4 people
- Personnel: 2 people
- Public Works: 2 people
- Municipal Court: 2 people
- Municipal Billing: 9 people

Total Number of Terrell Employees Working in City Hall: 41 people

In general, between 20 and 25 percent of the total employees of a municipality office within the city hall facility. Currently, just over 25 percent of Terrell's employees are housed at City Hall. Given this percentage, for a population of 36,430 people in Terrell, approximately 110 employees would office within City Hall.

The existing City Hall space should be adequate for the near term. The City should refer to the recently completed *Space Utilization Study* for specific analysis regarding any needed alterations of City Hall.

41 people work out of the Terrell City Hall, which calculates into just over 25 percent of the total number of City employees.

The Service Center Facility

The City Service Center facility is located at 1100 Airport Road, and is approximately 25,000 square feet. There are four municipal employees that operate out of this facility. Based on population projections, there will need to be 11 employees in 2021 in order to provide the same level of service as is currently provided. There are no plans to expand the Service Center facility in the foreseeable future.

Animal Control Facility

The Animal Control facility is located at 2501 Highway 80 East, and is approximately 1,000 square feet. There are two municipal employees that operate out of this facility. Based on population projections, there will need to be 5 employees in 2021 in order to provide the same level of service as is currently provided. There are no plans to expand the Animal Control facility in the foreseeable future.

The Terrell Police Department

The total number of police personnel in Terrell is approximately 49 people, including administrative support and officers. As mentioned previously, Terrell's Police Stations operates out of City Hall, accounting for approximately 3,132 square feet of the City Hall building.

To maintain the present ratio of service availability, Terrell will need approximately 130 Police Department personnel when the local population reaches 36,430 people. It is also recommended that within five years, the police department space be increased as supported within the *Space Utilization Study*.

The Terrell Police Department will need to employ approximately 130 people when the population reaches its projected number of 36,430 in 2021 to maintain the present ratio of Police Department employees to population.



Plate 6-1
Public Facilities
Fire Station
Locations
 City of Terrell, Texas

Legend

-  Existing Fire Station (1.5 mile radius)
-  Proposed Fire Station (1.5 mile radius)
-  Existing Fire Stations
-  Proposed Fire Stations
-  Floodplain
-  Terrell City Limits
-  Terrell E.T.J.

DUNKIN SEPKO & ASSOCIATES, INC.
 Adopted September 3, 2002

2000 0 2000 4000 6000 8000 Feet

 N

The Terrell Fire Department

The Terrell Fire Department employs a total of 17 people, with approximately 4 people on shift at one time. There are two stations within Terrell. One fire station is attached to the Terrell City Hall at 201 East Nash Street, in approximately 5,270 square feet (including a fire bay area of 3,784 square feet). Another fire station is located at 225 Baker Street and is approximately 3,926 square feet.

Plate 6-1 shows several fire station locations distributed at the recognized service area radius of one-and-one-half miles. The City should carefully monitor developing areas and should refer to this map as a guide to locating fire sub-stations. It is generally in the City's best interest to pursue the purchase of land as soon areas in need become apparent and as budgeting allows for future stations, before costs increase due to development demand.

To maintain the present ratio of service availability with future growth, Terrell will need approximately 43 Fire Department personnel when the local population reaches 36,430 people.

The Senior Center

The Senior Center in Terrell is located at 115 North Adelaide, and is 5,000 square feet. This structure was previously used as the location for Terrell City Hall. The Senior Center is not in need of expansion at this time.

The Terrell Library

Library facilities are usually provided on an as-needed basis in response to community growth. The Terrell Library was constructed in the early 1980's, is located at 301 North Rockwall, and has approximately 9,315 square feet of space. The American Library Association (ALA) standard for library space in relation to population is 0.75 square feet per library patron. The U.S. Census 2000 estimated Terrell's population to be approximately 13,606 people. Based upon the standard of 0.75 square feet per person, the current ratio of library space to population is approximately 0.68 square feet, which is slightly below the ALA standard.

Recommendations for areas that may be in need of a fire station as the local population grows in the future are shown on Plate 6-1.

The City should explore the possibility of expanding the library in the near future. A library space of approximately 27,320 square feet will be needed to serve the future projected population of 36,430 people. In addition, with the rapidly changing and expanding technologies in the world today, it is becoming increasingly important for citizens to have access to computers and to the Internet, especially for research purposes. It is therefore recommended that when the City considers expanding the library, the potential need for a multi-purpose study/learning/resource space be considered and incorporated into any expansion effort.

Water and Wastewater Facilities

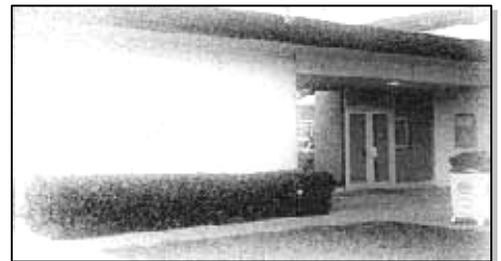
Another important municipal function is the provision of adequate infrastructure. The City has a 5,000-square-foot water treatment plant that is located at 2603 Highway 80 East. The City also has a 4,550-square-foot wastewater treatment plant that is located at 101 Mt. Hebron Road. More information on City infrastructure provision is contained within Section 7, *Infrastructure Systems*.

*More information on
City infrastructure
provision is contained
within Section 7,
Infrastructure
Systems.*



Comprehensive Plan 2002

Section 7: Infrastructure System Overview





Comprehensive Plan 2002

Section 7: Infrastructure System Overview

EXISTING UTILITIES AND INFRASTRUCTURE

The City of Terrell's Water Distribution Master Plan and Wastewater Collection System Master Plan were both prepared in 1988. The purpose of the plan was to develop a reliable utility service for the projected future population, based on trends of growth occurring at that time.

Water System

RAW WATER SUPPLY

The City of Terrell obtains most of its raw water supply from New City Lake located about six miles east of Terrell on Muddy Cedar Creek in Kaufman County. Records indicate the drainage area of the lake to be about 14 square miles. The City constructed the dam for the lake in 1955 and they were authorized to withdraw 6,000 acre-feet of water per year (5.36 m.g.d. average) for municipal purposes.

The City also owns rights to 10,000 acre-feet per year (9.0 m.g.d. average) in Lake Tawakoni. In recent years, the City has not utilized the Lake Tawakoni water with the exception of the summer of 1996.

The City maintains pumping capability at both locations. Water from Lake Tawakoni is pumped into New City Lake at a point about 2,400 feet upstream of the normal pool elevation of the lake. Water is then pumped from New City Lake to the City's water treatment plant (WTP) on the east side of the City. The pumping capacity for raw water is about 6.0 m.g.d. at New City Lake and 4.75 m.g.d. at Lake Tawakoni with one pump out of service. The City has pumped as much as 7.24 m.g.d. in August of 2000.

The overall rated capacity that can be pumped to the WTP is 6.0 m.g.d. since Lake Tawakoni pumps and sends water into New City Lake. As a result, the current situation is that water from Lake Tawakoni can be used to supplement drought conditions in the New

The City has a history of advance infrastructure planning. This section of the Comprehensive Plan is intended to be an assessment of the City's infrastructure systems.

City Lake watershed, but cannot be used to address demands due to growth beyond the 6.0 m.g.d. pumping limitation.

WATER TREATMENT FACILITIES

The City of Terrell owns and operates a WTP that was constructed in 1960 and upgraded in 1972. The design capacity of the plant is considered to be 5.0 m.g.d. The plant was evaluated in June 1993 by the U.S. Environmental Protection Agency (USEPA) as part of a pilot program. The major process units were evaluated using an instantaneous flow of 6.0 m.g.d. Under this scenario, the limiting process unit was disinfection with a rated capacity of 6.3 m.g.d. Records at the plant indicate ability to successfully treat water at a rate of 6.74 m.g.d.

The City of Terrell owns and operates a WTP that was constructed in 1960 and upgraded in 1972. Records at the plant indicate ability to successfully treat water at a rate of 6.74 million gallons per day.

WATER SYSTEM SERVICE AREA

The City of Terrell provides treated water to the area within the corporate city limits as well as to seven water supply corporations (WSC's). The WSC's are limited by individual contracts in the amount of water to be supplied to them by the City.

PROJECTED WATER SYSTEM DEMANDS AND HISTORICAL DATA

A review of the most recent water records for the City of Terrell (through August 2000) shows the largest daily demand of 6.74 m.g.d. has occurred on two dates. The first was on September 8, 1998 and the second on August 31, 1999. A total of 184.99 million gallons were treated in August 2000. This is the peak monthly amount of water treated at the plant for an average daily flow of 5.97 m.g.d. The peak hour demand occurred on August 31, 1999 at a rate of 8.52 m.g.d. This short duration demand condition is met by a combination of pumping capacity and elevated storage.

EXISTING WATER DISTRIBUTION SYSTEM FACILITIES

The City of Terrell meets its current water distribution system needs through an extensive network of water transmission facilities, distribution lines, ground storage tanks, pump stations, and elevated storage tanks. The City is served by one pressure plane. The City is currently evaluating its existing water distribution system, taking into account peak system demands, to determine if there are areas with inadequate pressure and flow. In addition to the underground piping, the components of the water distribution system are outlined in Table 7-1.

Table 7-1
THE WATER DISTRIBUTION SYSTEM
City of Terrell, Texas

Water Facility	Existing Capacity
Raw Water Pump Stations, Lake Tawakoni	4.75 m.g.d.
New City Lake	6.00 m.g.d.
Water Treatment Plant	6.30 m.g.d. (rated capacity)
Ground Storage Facilities, WTP Clearwell	0.5 million gallons
WTP Clearwell	2.0 million gallons
Elevated Storage Facilities, Ninth Street	0.5 million gallons
F.M. 986	1.0 million gallons

Wastewater System

SERVICE AREA AND GENERAL DESCRIPTION

The City of Terrell has an extensive wastewater collection system that serves a large portion of its current development area. Wastewater collected by the system is treated at the Kings Creek Wastewater Treatment Plant (WWTP) owned and operated by the City of Terrell. The City is currently installing a state-of-the-art Supervisory Control and Data Acquisition (SCADA) System at the Wastewater Treatment Plant (WWTP) and each of its lift stations.

WASTEWATER TREATMENT FACILITIES

The Kings Creek WWTP is located on Kings Creek about 2,600 feet west of State Highway 34. The plant was constructed in 1971 and was upgraded in 1987 and 1998. The treatment process is a trickling filter with anaerobic digester. The plant is designed to handle an average flow of 4.5 m.g.d. with a peak flow of 9.0 m.g.d. In 1999, the plant received an average of 2.4 m.g.d.

KINGS CREEK BASIN

The Kings Creek Basin serves the eastern two thirds of the City of Terrell through a system of gravity piping. A small lift station, the Industrial Boulevard Pump Station, transfers wastewater from a small portion of the basin through a 4-inch force main into the gravity system that runs directly into the Kings Creek WWTP. The pumping capacity of the lift station is 100 g.p.m.

BACHELOR CREEK BASIN

The Bachelor Creek Basin serves the western portion of the city with a system of gravity piping into the Rose Hill Pump Station. The water is lifted through a 10-inch force main into the Kings Creek Basin and it then flows by gravity to the Kings Creek WWTP. The capacity of the lift station is 461 g.p.m.

The City of Terrell is currently installing a state-of-the-art Supervisory Control and Data Acquisition (SCADA) System at its Wastewater Treatment Plant (WWTP) and each of its lift stations.

SERVICE TO FUTURE GROWTH AREAS

The City has developed a Comprehensive Plan showing the anticipated areas that will grow in the next 20 years. These areas are primarily southwest and north of the current population center. The Plan includes the recommended land use in each of the areas (refer to the *Future Land Use Plan*, Section 5).

These areas were drawn onto existing water and sewer system drawings to identify areas that would require additional water and sewer lines to support the growth. The estimated growth in population was estimated using the population projection information from the plan. Based on the density projected for each land use, the areas identified for the 20-year growth will be about 50% developed at the end of the 20-year period. The projected growth for the next 20-year period is from a population of 13,600 in the year 2000 to a population of 35,000 in the year 2020.

Recommendations within the Future Land Use Plan took into consideration the existing infrastructure within the City of Terrell.

Water Treatment and Distribution System Requirements

The City of Terrell will have an estimated population of 35,000 in the year 2020. In order to determine the future water needs of the City, the water demand for each type of land use is needed. As in all projections, it is difficult to determine the exact projected water usage for the population growth rate. However, past records indicate that the peak day water usage generally varies with size of lots, weather conditions, value of the houses, water availability, and water cost. Using the future growth under the land use presented in this comprehensive plan, the total number of houses was estimated for the City of Terrell through the year 2020. The peak day flow rates in each land use classification were used to calculate the rate of water required for the City (refer to **Table 7-2**).

A water distribution analysis was made for the peak day year 2020 growth. The results of the analyses are shown on **Plate 7-1**. The proposed improvements are shown on this plate with the proposed water lines

Table 7-2
WATER DISTRIBUTION ANALYSIS
City of Terrell, Texas

LAND USE	PEAK DAY FLOW RATE ⁽¹⁾
Low Density Residential	4,700 g.p.d./acre
Medium Density Residential	15,500 g.p.d./acre
High Density Residential	36,500 g.p.d./acre
Retail	2,600 g.p.d./acre
Park	3,250 g.p.d./acre
Public	3,250 g.p.d./acre

⁽¹⁾ Based on 0.4 g.p.m. per connection for residential uses, 3 connections per acre for LDR, 10 connections per acre for MDR and 21 connections per acre for HDR. Using the peak day flow rate and population growth criteria, the peak day flow rate will be 8,775 g.p.m. in the year 2020.

NOTE: Recommended land use within growth areas did not include any commercial or industrial land use; therefore, these land use types have been left out of this analysis.

Insert Plate 7-1: Future Water Improvements

indicated by heavy lines. The new water lines will range in size from 8-inches to 24-inches in diameter. The pressure, at peak day demands, is shown for each node. The pressures range from 40 pounds per square inch (psi) to 100 pounds per square inch (psi) at all locations. Texas Natural Resource Conservation Commission (TNRCC) Standards require that pressures be maintained at 35 psi or above at a peak day flow rate. Therefore, the proposed system will meet the TNRCC Standards for minimum pressure.

The proposed distribution system will also be adequate for fire protection coverage at the rate of 2,000 gallons per minute (g.p.m.) fire flow for commercial and 750 fire flow at a residential location in the City of Terrell for the areas of growth at a minimum pressure of 20 psi residual pressure.

The water treatment plant will need to be expanded from the current 6.3 million gallons per day (m.g.d.) to 12.64 million gallons per day (m.g.d.) based on a 2020 peak day 1980 drought condition. The high service pumping facilities and raw water pumping facilities will also need to be increased to 12.65 m.g.d. with the largest pumps out-of-service. The City of Terrell will need to construct a 2.0 million gallon ground storage reservoir and a 500,000 elevated tank for the 2020 growth. This determination was based on having 54 gallons of elevated tank storage per person and 130 gallons of ground storage per person.

The City of Terrell will need to be expand the water treatment plant, and construct a ground storage reservoir and an elevated tank for the population growth projected by the year 2020.

WATER SYSTEM - COST ESTIMATES

The cost estimates for these water improvements are as follows:

Water Distribution Improvements	\$6,761,750
Water Treatment Plant Improvements	8,970,000
Elevated Tank	966,000
Ground Storage Reservoir	1,416,000

A detailed breakdown of the estimated costs is presented in *Appendix A* of this Comprehensive Plan.

Wastewater Treatment and Collection System Requirements

The projected areas to grow in the next 20 years will require significant improvements and upgrades of the existing system. Major development is anticipated to occur in the Bachelor Creek watershed currently handled by the Rose Hill lift station. That lift station will need to

be relocated several thousand feet downstream of its current location and the capacity will need to be increased from a peak flow of 0.66 m.g.d. to a peak flow of 5.0 m.g.d. The existing wastewater treatment plant is designed for an average daily flow of 4.5 m.g.d and a peak flow of 9.0 m.g.d. Based on a population of 35,000 people and 100 gallons per person per day, an average flow of 3.5 m.g.d. would be required, so treatment capacity may be sufficient to handle the projected growth. The City is in the process of evaluating the entire sewer collection system and the peaking factor for the system should be verified as part of that effort.

The new growth will require approximately 80,000 linear feet of 10-inch and larger sewer main. The majority of the lines will be needed in the Bachelor Creek watershed. The location of the proposed lines is shown on **Plate 7-2**. The growth areas are also shown in relation to the existing sewer collection system. The Kings Creek area is projected to grow, but no new main lines are anticipated for that area. It appears that the area can be served by extending the existing system into the new development areas.

WASTEWATER SYSTEM - COST ESTIMATED

The detailed estimated cost of the anticipated improvements is included in *Appendix A* of this Comprehensive Plan. The cost of sewer collection lines and force main is estimated to be \$6.2 million and the replacement of the Rose Hill lift station is estimated at \$1.2 million, for a total estimated cost of \$7.4 million. It should be noted that the proposed lines are sized to handle the estimated 20-year growth that, as previously noted, is only about 50 percent development of the area. Ultimately, the new lines added as part of this Comprehensive Plan will need to be upgraded.

THE DRAINAGE SYSTEM

In August of 1989, the City of Terrell contracted with Hogan and Rasor, Inc. to evaluate the existing storm drainage system and to project the improvements needed to meet existing conditions and future growth. The report includes a review of available drainage and an analysis of the drainage basins to determine the sizes and locations of drainage structures needed to meet a 50-year storm requirement. The growth projected in this Comprehensive Plan can be accommodated, in general, by following the existing drainage plan and by evaluating the impact of new development on the storm drainage system as it occurs.

Detailed cost estimates for both water and wastewater system expansions are included in Appendix A of the Comprehensive Plan.

Insert Plate 7-2: Wastewater System



Comprehensive Plan 2002

Section 8: Community Image Considerations





Comprehensive Plan 2002

Section 8: Community Image Considerations

INTRODUCTION

Traditionally, land use decisions have been based on a two-dimensional view: the *type* of land use and the *location* of that land use. However, in recent years, cities throughout Texas and the nation have begun concentrating on what may be considered the third dimension: that is, the *appearance* of that land use. Specifically, the spatial compatibility of land uses in a community through good urban design has become increasingly important.

Urban design principles strive to improve the quality of life, or "livability", within a city by enhancing the man-made environment and by creating new opportunities for social interaction among residents. Good urban design practices also help to create a legible development pattern, which in turn makes the community understandable to residents and visitors alike. They often deal with the sensory response of people to the community's physical environment: its visual appearance, its aesthetic quality, and its spatial character. Several major aspects of the City's physical or urban design that can enhance the land uses, and therefore, the image that the public has of Terrell, and that can contribute to making Terrell a better place to live, work, and play have been identified as follows:

- Gateway treatments;
- Existing and future neighborhood areas; and,
- Nonresidential development standards within major travel corridors, including
 - ◆ Screening (between land uses, along roadways, around accessory elements),
 - ◆ Building materials, and
 - ◆ Landscaping.

By considering the design of the City as a whole and by considering the design of specific sites or locations, enhancement of the overall image of the City can be achieved. The following discussion and recommendations address the physical components responsible for making positive changes in the appearance of the community, and for improving the community's image, land use compatibility and overall quality of life.

The type of land use and the location of that land use are of primary importance, but the appearance of that land use has become increasingly indicative of quality of a community.

The Community Image Guidelines for Terrell will discuss gateway treatments, existing and future neighborhood areas, and recommended nonresidential development standards.

GATEWAY TREATMENTS

Gateways, also known as entryways, can provide a strong sense of arrival to, as well as a sense of departure from, the community. They are the first thing visitors see when they come into a community and the last impression visitors have when leaving, and they can provide a strong indication of a community's image if they are well-designed and prominent. The design of gateways, or entry points, into Terrell should be guided by several factors. One of the most obvious factors is the number of people using a particular entry point. Out of all the roads that lead into Terrell, the three roadway facilities that are most heavily used are Interstate Highway 20, U.S. Highway 80, and State Highway 34. It is recommended that the City concentrate efforts for gateway construction along these major thoroughfares.



Illustration 8-1
Example of a Gateway Treatment
(Garland, Texas)

It should be noted that the design of gateways can be simple or complex, but the key is to develop an entry that provides a sense of identity for the City of Terrell that is distinct and unique. Terrell has an easily identifiable logo in which the City's theme, "Building a Better Community", is also incorporated. It is recommended that the City use its logo in the design of its gateway treatments. Further, landscaping, lighting, paving patterns, art/sculptural elements, and various types of earth forms can be used for enhancement. **Illustrations 8-1 and 8-2** show examples of different gateways that achieve the desired result of successfully announcing the community.



Illustration 8-2
Example of a Gateway Treatment
(Ennis, Texas)

EXISTING AND FUTURE RESIDENTIAL NEIGHBORHOODS

Existing Neighborhood Areas

Existing neighborhood areas are often characterized by large, mature trees and unique homes. These older neighborhoods are visible reminders of Terrell's past, and their history and character cannot be replicated. However, existing neighborhoods may require enhancement efforts in order to ensure that they are kept to a level of quality of which the City can be proud. There are several ways the City of Terrell, mainly through capital improvements, can direct such efforts.

The history and character of older neighborhood areas cannot be replicated, and therefore, the City should be involved in their maintenance as viable areas in which to live in Terrell.

One primary way is through the provision of pedestrian and biking facilities. If there is adequate right-of-way available, a combination bikeway-and-sidewalk can be constructed along the neighborhood roadways. If the roadways themselves were initially designed to be wide, bikeways can be incorporated directly within the existing roadway simply with a painted stripe. Another way in which the City can provide retrofitted pedestrian and bike facilities is through the construction of a trail in close proximity to the older neighborhood that the residents could easily access. A floodplain area or an existing City easement could be used for such a trail.

There are numerous capital improvements the City could initiate that would help maintain the quality and integrity of these older areas.

Other ways in which Terrell could help enhance existing neighborhoods include the following:

- Marking neighborhoods with gateways/ entrances;
- Planting trees and landscaping along residential streets;
- Constructing landscaped medians on residential streets or at the center of cul-de-sacs;
- Incorporating a cohesive street lighting system to enhance visual quality and security of older residential areas;
- Burying existing utility lines to reduce visual clutter;
- Concentrated improvement projects, such as park/recreation areas;



Illustration 8-4
Landscaped Median Within a Residential Street

Working with existing neighborhood associations, the City and neighborhoods can be mutually supportive in identifying problems and opportunities, and can work together to improve the community.

Neighborhood Design in Future Development

The design and character of residential neighborhoods is an important component of Terrell's overall quality of life. As more property is developed into residential subdivisions, such design factors as entry features into subdivisions, screening, lighting and landscaping, as well as the design layout of the subdivision itself, will be critical to the perception of Terrell's residential neighborhoods. While the City should provide developers with options appropriate to the marketing of their subdivisions, the City may also wish to maintain some continuity between different residential subdivisions, especially those located along major thoroughfares. Older residential neighborhoods may need gradual improvements in such necessities as street maintenance and code



Illustration 8-5
Example of a Simple Subdivision Entryway
(Residential Lots Front on a Street Perpendicular to the Major Thoroughfare)

enforcement, but newer residential subdivisions should include positive design elements that will add value, both aesthetic and monetary, to the homes constructed within them and to Terrell as a whole.

A major consideration for the City in reviewing new residential developments should be the location of the proposed developments. As mentioned in the *Thoroughfare Plan* element (Section 4), major roadways typically attract large volumes of traffic; therefore, it is not desirable to front residential lots directly onto these streets. Fronting residences on major thoroughfares will reduce efficiency of the thoroughfares due to the number of driveways, curb cuts and cross-streets, as well as the possibility of on-street parking in front of the houses. Also, when a subdivision's layout produces lots fronting onto a major thoroughfare, there is ultimately pressure later on to convert these residences into office, retail or commercial land uses.

Illustration 8-6 shows residential lot arrangements that are designed to protect not only the residences, but the capacity and function of the adjacent thoroughfares. One method of accomplishing a desirable thoroughfare/residential relationship is to design residential lots fronting onto a parallel residential street and backing onto the major thoroughfare (shown at top of illustration). Another method, also shown by **Illustration 8-6** (bottom), is to use short cul-de-sac streets to create lots that do not have direct access onto a major thoroughfare. Cul-de-sac streets can be efficient methods in developing land, and they are very desirable for residents due to minimal traffic flows. The use of cul-de-sac streets alternated with through collector streets that intersect with a major thoroughfare tends to yield an efficient lot layout design, and this practice also maximizes thoroughfare capacity and efficiency. It is recommended that the City establish a policy that residential lots may not front or have direct access onto a major thoroughfare.

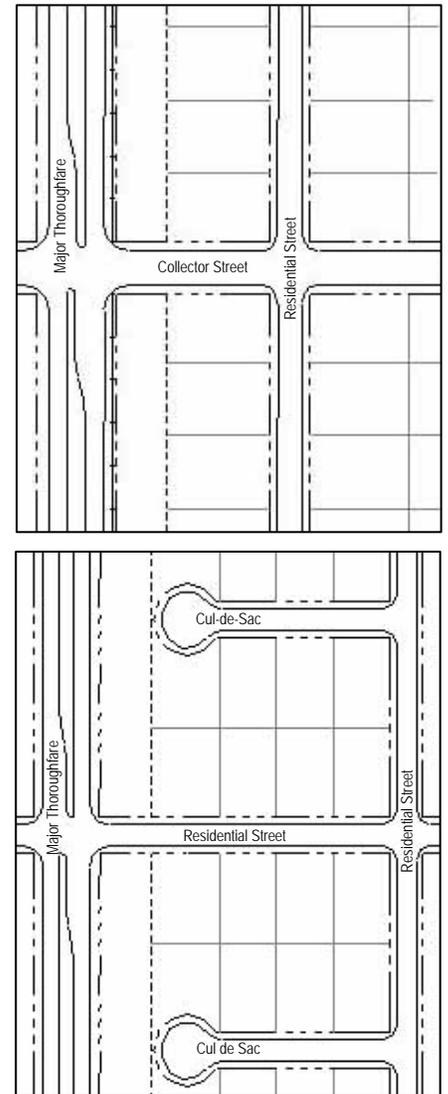


Illustration 8-6
Lots Backing and Siding Onto a Major Thoroughfare

NONRESIDENTIAL DEVELOPMENT STANDARDS WITHIN TRAVEL CORRIDORS

The importance of travel corridors cannot be overstated. It is within these corridors that people will make assessments of the City of Terrell, especially its attractiveness and related quality of life. Also, people that find the City attractive will be more likely to want to stop and experience what the City has to offer in terms of retail goods and services (instead of simply continuing through Terrell), resulting in higher tax revenues for the City. As was mentioned

in the *Future Land Use Plan* (Section 5), most of the land uses that have been recommended for location within Terrell's main corridors, specifically Interstate Highway 20, State Highway 34, and U.S. Highway 80, are retail and industrial land uses. One of the primary reasons for this recommendation is that retail land uses tend to be more attractive than commercial land uses, which generally tend to require open storage areas and loading areas. Another reason for recommending retail within these areas is to provide such uses with the visibility they need to draw consumers. Other uses, however, may be acceptable for development along these roadways if proper design techniques are utilized. In addition, new industrial areas can be very attractive, especially the light industrial business parks that are increasingly characterized by computer-related businesses, such as those in the Austin area; these types of business parks are what are envisioned for the designated industrial areas visible along Interstate Highway 20, State Highway 34, and U.S. Highway 80.



Illustration 8-7
Example of a Wide Setback and Trees Creating a Positive View From the Road

Numerous design items can be addressed by the private sector; this can be encouraged by the City, but can also be required through adopted ordinances. Often, much of what creates a better view from the road is simply better site design. The following are examples of site design elements or construction material usage that could enhance all types of future nonresidential development in Terrell. These examples are intended for use along the major thoroughfares within Terrell, specifically Interstate Highway 20, State Highway 34, and U.S. Highway 80. Further, these examples are written with the intent that they could be easily incorporated into the City's Zoning or Subdivision Regulations, as appropriate, or could be established within an overlay zoning district(s).

Buffering and Screening Between Residential and Nonresidential Uses

Purpose:

- Ensure that nonresidential areas do not have a negative impact upon adjacent residential areas/uses.
- Ensure compatibility between residential and nonresidential uses.

Guidelines for Consideration:

- Require additional setbacks and landscape treatments when commercial or industrial uses are adjacent to residential areas.



Illustration 8-8
Example of a Positive Relationship Between a Nonresidential Use (to the left) and a Residential Use (to the right)

- Develop standards for quality treatment of all sides of nonresidential buildings that are adjacent to residential areas.
- Require architectural elevations.
- Require screening walls and landscaping, if necessary.



Screening and Location of Outside Storage Areas

Purpose:

- Improve appearance of Terrell from public streets and neighboring properties.
- Limit the view of storage areas from public places.
- Prevent public access to storage areas.



Illustration 8-9
Examples of Outdoor Storage Areas That Are Not Properly Screened

Guidelines for Consideration:

- Outside storage areas should not face onto or be visible from a major thoroughfare, wherever possible.
- Outside storage areas should not be placed in front of buildings, unless screening devices are used.
- When outside storage areas are located within a front or side yard, they should be screened from adjacent properties and public rights-of-way with a screening device (e.g., either brick/masonry walls, earth berms, mature landscaping, etc.). A six-foot minimum height is recommended for screening devices. Chain link fencing should not be allowed for use as a screening device.
- Where possible, screening should match the predominant exterior finish material(s) used for the primary structure on the lot.
- Relocation of existing outside storage areas that are currently visible from a major thoroughfare should be encouraged, whenever possible.

The nonresidential development standards discussed herein should be applied to Interstate Highway 20, U.S. Highway 80, and State Highway 34, due to the fact that these are the major transportation corridors within and through the City.

Screening and Location of Loading Areas

Purpose:

- Improve appearance of the community from public streets and neighboring properties.
- Limit the view of loading areas from public places.
- Prevent public access to loading areas.

Guidelines for Consideration:

- Loading areas should not face onto or be visible from a major thoroughfare, wherever possible.
- When loading areas are located within a front or side yard, they should be screened from adjacent properties and public rights-of-way with a screening device (e.g., either brick/masonry walls, earth berms, mature landscaping, etc.). A six-foot minimum height is recommended for screening devices. Chain link fencing should not be allowed for use as a screening device.
- Where possible, screening should match the predominant exterior finish material(s) used for the primary structure on the lot.



Illustration 8-10
Example of a Loading Area That Has Been Properly Screened



Illustration 8-11
Example of a Loading Area That Has Not Been Properly Screened

Screening of Refuse Containers

Purpose:

- Improve the appearance of the community from public streets and neighboring properties.
- Limit the view of refuse containers and related unsightly material from public places.
- Prevent public access to refuse containers (i.e., dumpsters and recycling containers).

Guidelines for Consideration:

- Refuse containers should not face onto or be visible from a major thoroughfare, wherever possible.



Illustration 8-12
Examples of Refuse Containers That Have Been Properly Screened

- Refuse containers should not be placed in front of buildings, unless screening devices are used.
- Refuse containers should not be placed within required parking spaces.
- Refuse containers should be located away from adjacent residential areas.
- When refuse containers are placed where they are visible from a major thoroughfare, they should be screened from adjacent properties and public rights-of-way with a screening device (e.g., either brick/masonry walls, earth berms, mature landscaping, etc.) A six-foot minimum height is recommended for screening devices. The screening should provide complete enclosure of the refuse container on three sides. A securable gate to control access to the receptacle should also be provided. Chain link fencing should not be allowed for use as a screening device.
- Where possible, screening should match the predominant exterior finish material(s) used for the primary structure on the lot.
- Relocation of existing refuse container areas that are currently visible from a major thoroughfare should be encouraged, whenever possible.



Illustration 8-13
Example of a Refuse Container That Has Been Screened, But Is Not Enclosed With a Securable Gate

Landscaping Around Nonresidential Structures and Within Parking Areas

Purpose:

- Enhance the view and image of the community from major thoroughfares;
- Contribute to the overall quality and visual appearance of individual developments;
- Reduce glare from paved surfaces, and break up large expanses of paving;
- Replenish oxygen supply and provide natural air conditioning; and
- Provide visual relief and open space within urbanized developments.

Guidelines for Consideration:

- A landscaped edge should be incorporated adjacent to any street right-of-way and adjacent to an existing or planned residential area.
- A minimum of 10 or 15 percent of the front yard should be landscaped area.

Landscaping can be maintained by civic-minded organizations, such as the Boy Scouts, the Lions Club, the Kiwanis Club, and various fraternities; the City should investigate this possibility in conjunction with adoption of any landscaping requirements.

- All landscaped areas should be protected by a raised, monolithic curb and should remain free of trash, litter and car bumper overhangs.
- Landscaped areas within parking lots should generally be at least one parking space in size, with no landscaped area less than fifty (50) square feet in area. The total landscaped area within a parking lot should be equal to at least sixteen (16) square feet per parking space.
- One shade tree should be provided for every twelve parking spaces within parking lots that contain twenty (20) or more parking spaces. Up to 25 percent of the required trees should be allowed to be planted within the landscaped edge.
- A bonus for the protection and preservation of existing trees should be provided. The City should give credit toward the total number of trees required to developments that preserve and protect existing trees.
- Plants used should be drought-resistant, if possible, and xeriscape techniques should be used.
- A listing of appropriate plant materials for use within required landscaped areas should be provided by the City. Use of plants not specified should be subject to approval.

Landscaped Medians

Purpose:

- Contribute to the visual appearance of the City;
- Increase the safety of local thoroughfares by limiting the number of left turns allowed (thereby helping traffic flow).

Guidelines for Consideration:

- Landscaped medians should be incorporated into targeted thoroughfares, Interstate Highway 20, U.S. Highway 80, and State Highway 34, wherever and whenever possible, perhaps as part of a widening/construction process.
- Whenever significant new roadways are constructed, landscaped medians should be incorporated as part of the initial construction.



Illustration 8-14
Example of a Landscaped Edge Between a
Nonresidential Development and a Major Thoroughfare

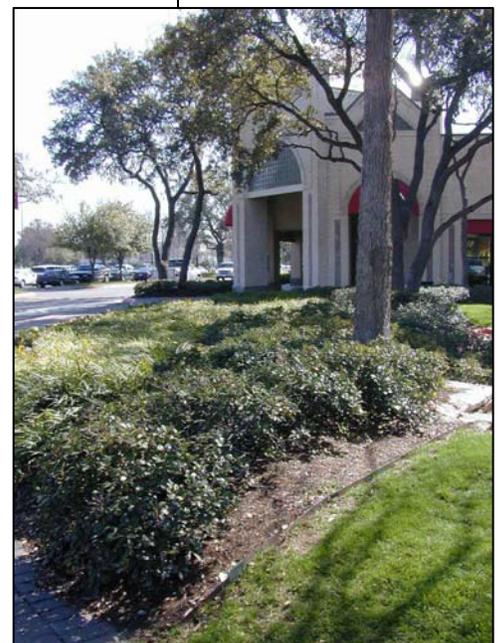


Illustration 8-15
Example of a Landscaped Edge Around a
Nonresidential Structure



Illustration 8-16
Example of Landscaping Incorporated Into a
Parking Lot Area

- When roadways with state designations are targeted for improvement (i.e., widening), the Texas Department of Transportation (TxDOT) should be lobbied to help improve the visual quality of these state roadways. Funding for landscaping can often be provided as a percentage of the overall cost of the roadway improvement.



Illustration 8-17
 Example of Landscaping Elements Integrated Within a Highway Corridor

COMMUNITY IMAGE POLICIES

The visual image of a community can greatly impact the way in which a community is perceived by both visitors and citizens. Much of the discussion within this section pertains to Terrell's major transportation corridors; these are especially significant to how the City is viewed by people traveling to and through Terrell. The recommendations contained within this section are intended to help Terrell maintain and enhance its overall character so that the City will continue to be recognized as a community of quality in the future. **Table 8-1** contains the specific policies related to the recommendations contained herein.

Table 8-1
City of Terrell Community Image Considerations
Recommended Policies

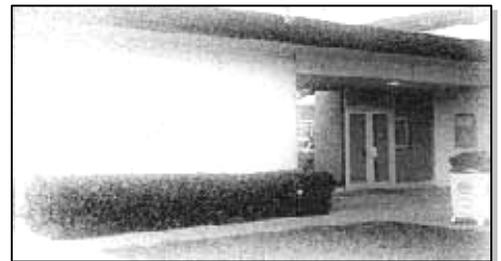
Policy #1	Terrell should use its logo, in which the City's theme, "Building a Better Community", is also incorporated, in the design of its gateway treatments.
Policy #2	The City should concentrate efforts for gateway treatment construction along three major thoroughfares: Interstate Highway 20, U.S. Highway 80, and State Highway 34.
Policy #3	Terrell should fund capital improvements, whenever financially feasible, within older neighborhoods to ensure their continued maintenance and viability as attractive places to live.
Policy #4	The City should establish limited design guidelines for the future development of residential areas, possibly including requirements for entryways, lighting, trees, etc., to ensure that the quality of such areas endures over time.
Policy #5	The City should not permit residential lots to front onto or have direct access onto a major thoroughfare.
Policy #6	The City should establish design guidelines for nonresidential development within major local transportation corridors, specifically Interstate Highway 20, State Highway 34, and U.S. Highway 80; this could be achieved through the City's Zoning Ordinance, Subdivision Ordinance, or through a special overlay district or districts.

Source: Dunkin, Sefko & Associates, Inc.



Comprehensive Plan 2002

Section 9: Implementation Strategies





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Section 9: Implementation Strategies

THE IMPORTANCE OF COMMUNITY INVOLVEMENT

Citizens of a community are generally interested and informed about local issues. Community involvement in Terrell during the comprehensive planning process was an integral part of the process. The needs and desires of the public, represented by the Comprehensive Plan Steering Committee, were considered and addressed during the drafting of this Plan. As the Plan evolves over the next few years, citizen involvement should be sought in order to ensure that the Plan reflects citizen needs as accurately as possible. *Terrell should encourage as many forms of community involvement as possible as the City implements its Comprehensive Plan. The Comprehensive Plan Steering Committee, in its role as a liaison between the general public and the City government, should consider meeting annually to assess the implementation of the Plan.* Questions could include whether specific recommendations have been followed, whether certain elements of the Plan should have an increased focus, whether there are specific areas of the City that need more in-depth analysis, and so on. This assessment would help to establish City staff's priorities, and may help the City to focus on new or different issues.

As Terrell's Comprehensive Plan evolves over the next few years, citizen involvement should be sought in order to ensure that the Plan reflects citizen needs as accurately as possible.

THE ROLES OF A COMPREHENSIVE PLAN

The Plan as a Supplemental Tool, Not an End-Product

In the *Overview* section, the reasons for a long-range planning effort were discussed and the related objectives were outlined. The result of this effort is this document, Terrell's *Comprehensive Plan 2002*, which is intended to guide the City in the years to come. However, this Comprehensive Plan should never be considered a finished product, but rather a broad guide for community growth and development that is always evolving and changing in scope.

Terrell's Comprehensive Plan should never be considered a finished product, but rather a broad guide for community growth and development that is always evolving and changing in scope along with the City.

Terrell's Comprehensive Plan 2002 should not be viewed as the end-product to long-range planning in Terrell, rather it should be recognized as a supplemental tool – a tool that can be continually changed and molded so that it provides the City with the guidance it needs to make sound planning decisions.

Comprehensive Plan Amendments

Plan amendments will have to be made to respond to the needs of Terrell on an ongoing basis. However, an amendment should be made only after thorough analysis of short-term and long-term effects, both positive and negative. City staff will perform an important role in helping appointed and elected officials determine whether proposed Plan amendments are beneficial for the long-term health and vitality of Terrell. *The Terrell City Council and other Terrell officials should then consider each proposed amendment carefully to determine whether or not it is consistent with the Plan's goals and policies, and whether it is in the best interest of the City to accept the proposed amendment through its inclusion in the Comprehensive Plan.* As is discussed later within this section, if a proposed development is inconsistent to the Comprehensive Plan (resulting in a Plan amendment if approved), the burden of proving that the proposed development would be more beneficial to Terrell than what is recommended by the Comprehensive Plan should be the responsibility of the developer.

Each proposed amendment to the Comprehensive Plan should be carefully reviewed and considered on its merits, but also in relation to the Goals, Objectives, Recommendations and related Policies contained herein.

Periodic Review

At one- to three-year intervals, a periodic review of the Comprehensive Plan with respect to current conditions and trends should be performed. *It would be appropriate to devote one annual meeting of the Planning and Zoning Commission to reviewing the status and continued applicability of the Plan in light of current conditions, and to prepare a report on these findings to the City Council.* Those items that appear to need specific attention should be examined in more detail, and changes and/or additions should be made accordingly. By such mandated, scheduled reevaluations, the Plan will remain functional, and will continue to provide effective guidance. Periodic reviews of the Plan should include consideration of the following:

The City's progress in implementing the Plan.

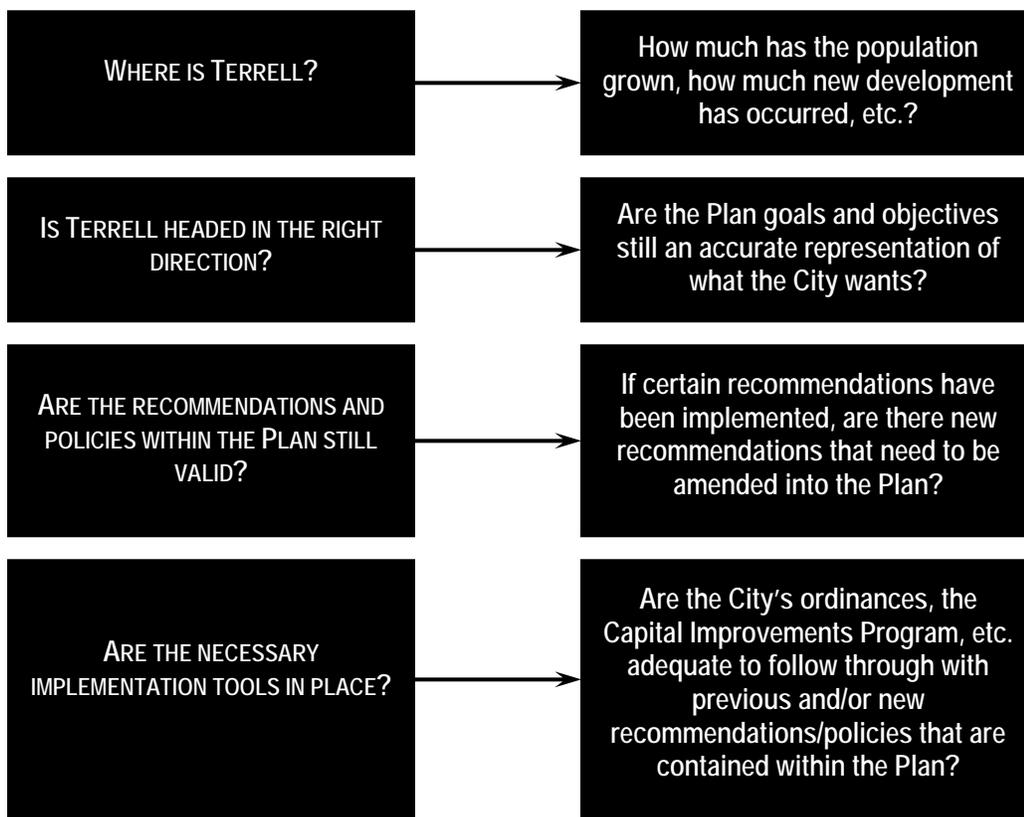
Changes in conditions that form the basis of the Plan.

Community support for the Plan's goals, objectives & policies.

Changes in State laws.

Five-Year Review and Update

In addition to periodic reviews, the *Comprehensive Plan 2002* should undergo a complete, more thorough review and update every five years. The review and updating process should begin with the establishment of a citizen committee similar to the one appointed to assist in the preparation of this Plan (the Comprehensive Plan Steering Committee), thereby encouraging citizen input from the beginning of the process. Specific input on major changes should be sought from various groups, including property owners, neighborhood groups, civic leaders and major stakeholders, developers, merchants, and other citizens and individuals who express an interest in the long-term growth and development of the City. This will allow the City to engage in a condensed comprehensive planning process. That is, Terrell should attempt to answer similar questions to those that were asked during this planning process:



The Plan as a Guide for Diverse Challenges

Terrell will have to deal with many diverse challenges year after year – some will be ongoing that the City will have continually address (i.e., through establishing ordinances or regulations), others will be one-time issues that the City will have to resolve. This Comprehensive Plan is intended to aid the City in every type of challenge. However, although the Plan specifically discusses issues the City is currently faced with, what the future holds is debatable and difficult to decipher. Consequently, *as changes occur and new issues within the City become apparent, the Plan should be revised rather than ignored.* This will enable the Plan to remain an effective planning tool in meeting the City's decision-making needs regarding growth and development.

As changes occur within the City and new issues become apparent, the Comprehensive Plan document, including related maps, should be revised rather than ignored.

The Plan as a Guide for Daily Decision-Making

Although the Plan is termed a long-range planning tool, the basic Plan recommendations and policies set forth are intended to be helpful to the City on a daily basis. For example, the *Thoroughfare Plan* shows general alignments for new roadways. Any development proposal that is submitted to the City should be viewed in the context of how it fits into the overall *Thoroughfare Plan*. That is, if a roadway connection needs to be made through the area covered by the development proposal, the Plan should serve as a guide for the necessary right-of-way dedication. It should be noted that the *general* concept of a roadway connection is what is significant, and not the specific alignment as shown on the *Thoroughfare Plan* map. It is *this balance between the general guidelines and recommendations contained within the Comprehensive Plan and the specific daily decisions made that will enable the City to use the Comprehensive Plan to its full potential.*

It is not simply a smart planning concept that dictates that the Comprehensive Plan should be used on a daily basis; it is actually Texas state law. As was noted in the *Future Land Use Plan*, Chapter 211 of the Texas Local Government Code states, "zoning regulations must be adopted in accordance with a comprehensive plan". Every decision made, whether it is regarding a plat, a roadway, or area for park dedication, while it may not be *specifically addressed* within the Comprehensive Plan should be *consistent* with the Plan.

Chapter 211 of the Texas Local Government Code states, "zoning regulations must be adopted in accordance with a comprehensive plan".

Administrative Processes Involved in Daily Use of the Comprehensive Plan

The usual processes for reviewing and processing zoning amendments, development plans, and subdivision plans provide significant opportunities for daily implementation of the Comprehensive Plan. Each zoning, development and subdivision decision should be evaluated and weighed against applicable recommendations and policies contained within the Plan. As was the intent of the state law mandating a comprehensive plan, Terrell will be able to review proposals and requests in the context of an officially prepared document adopted through a sound, thorough planning process. *If decisions are made that are inconsistent with Comprehensive Plan recommendations, then actions to modify or amend the Plan should be taken accordingly in order to ensure consistency and fairness in future decision-making.*

IMPLEMENTATION METHODS

Any implementation activity regarding Comprehensive Plan recommendations can be described as either proactive or reactive. *Proactive methods can generally be described as activities that the City engages in without any initiation from the development community. Reactive methods can generally be described as activities that the City engages in at the request of the development community.* One cannot be used to the exclusion of the other; both must be used in conjunction with one another.

Proactive Implementation

Most of the recommendations made within the Comprehensive Plan are representative of proactive implementation, because the Plan does not generally attempt to predict what the development community will want. While the Plan is intended to be responsive to market needs, it is a document that reflects what is in the public's best interest. Most of the recommendations that have been made within the Comprehensive Plan involve action on the part of the City. Such City-initiated actions represent proactive implementation measures. Other examples of proactive methods include the enforcement of the local Building Code, and establishment of new requirements within the Subdivision Ordinance. In addition, capital improvements programming (CIP) and city-initiated annexation/growth management controls, as discussed below, are examples of proactive implementation measures.

Proactive implementation of the Comprehensive Plan involves activities initiated by the City.
Reactive implementation of the Comprehensive Plan involves activities initiated by the development community.

CAPITAL IMPROVEMENTS PROGRAMMING

Capital improvements are integrally linked to the City's Comprehensive Plan, Zoning Ordinance, and Subdivision Ordinance. A capital improvement such as a water treatment plant illustrates this concept. The Comprehensive Plan recommends areas for a particular type of development, the Zoning Ordinance reinforces Plan recommendations with applicable zoning districts consistent with that type of development, and the Subdivision Ordinance regulates the facilities (e.g., utility extensions, roadway widths, etc.) necessary to accommodate that type of development. The type of development that is recommended by the Comprehensive Plan and that is regulated and approved in accordance with the Zoning and Subdivision Ordinance dictates the water treatment plant's size and capacity.

The Comprehensive Plan makes recommendations on the various public improvements that will be needed to accommodate the growth and development envisioned for the City. The proactive implementation of such recommendations will involve monetary expenditures. The City should invest in physical improvements and maintenance at consistent, regular intervals (e.g., adding a traffic lane to a roadway to accommodate traffic growth), rather than undertake large improvement-type programs at lengthy intervals (e.g., waiting until traffic growth becomes unbearable, resulting in an entirely new roadway). Expending a moderate amount of money on a regular basis (annually, every three years, etc.) on prioritized items in accordance with Plan recommendations will produce better results for Terrell than will large, one-time expenditures.

ANNEXATION AND GROWTH MANAGEMENT

Cities in Texas are given the right to annex areas within their extraterritorial jurisdiction by Chapter 43 of the Texas Local Government Code, which prescribes the annexation process for cities of various sizes. Annexation is essential to the efficient and logical extension of urban services; it is also essential to ensuring that development occurs in a quality manner. Because the City of Terrell is a home-rule municipality, it can annex land on a non-consensual basis. However, it should be noted that non-consensual annexation has become more difficult for cities in Texas due to recent changes in state law; the Texas State statute has established service and other requirements to keep home-rule municipalities from misusing their annexation power. Regardless of the challenges involved, annexation is an important tool for proactively implementing the Comprehensive Plan.

The *Future Land Use Plan* recommends an annual assessment of the amount of developing land within the ETJ, and the expected impact of such development on Terrell, especially in terms of service and population. Also, the altered ETJs of expanding surrounding cities

Capital improvements are integrally linked to the City's Comprehensive Plan, Zoning Ordinance, and Subdivision Ordinance.

Annexation is essential to the efficient and logical extension of urban services; it is also essential to ensuring that development occurs in a quality manner.

must be evaluated and included in these analyses. The importance of annexation lies primarily in the City's ability to apply its zoning regulations to the land after annexation. In essence, the proactive implementation of Comprehensive Plan recommendations in the City's current ETJ area may begin with annexation.

Reactive Implementation

The general absence of recommendations within the Comprehensive Plan that are reactively implemented do not make reactive methods any less valid as a way in which to ensure that the Plan is utilized effectively. As previously stated the Plan is intended to be responsive to the development community, and no part of the Plan should be considered unalterable. For example, while the Plan may recommend low density residential use for a particular piece of property, if a developer comes to the City with a proposal for high quality retail use for that same piece of property, Terrell staff and officials will have to decide whether the developer's request actually represents a better use for that property, and for the City as a whole, than does the Comprehensive Plan. If, in fact, the City finds that the developer's proposal is preferred, an amendment to the Plan should be made, and a rezoning of the property should follow. This developer-initiated change in regulation represents a reactive implementation measure.

Due to the fact that the Comprehensive Plan was amended in this example to allow the proposed development may make it seem that the Plan was not implemented as intended; however, what is significant is that the Plan was used as a guide to assess what was most beneficial for the City. It should be noted (as previously mentioned) that the "burden of proof" that would result in reactive implementation of the Comprehensive Plan should lie on the development community – that is, it should be the responsibility of the developer to convince Terrell that the proposed development is in fact better for the community than what is recommended in the Comprehensive Plan.

SPECIFIC RECOMMENDATIONS FOR IMPLEMENTATION

Implementation is probably one of the most important, yet most difficult, aspects of the comprehensive planning process. Without viable, realistic mechanisms for implementation, the recommendations contained within the Comprehensive Plan can never be realized. **Table 9-1** specifies ways in which to implement the various recommendations within the Plan.

No part of the Comprehensive Plan should be considered unalterable.

A developer-initiated change in zoning represents an example of a way in which to reactively implement the Comprehensive Plan.

Table 9-1
City of Terrell Implementation Strategies
Recommended Specific & General Actions

Specific Action #1	Prioritize the recommendations and policies within the Comprehensive Plan.
Specific Action #2	Fund capital improvements recommended within the Comprehensive Plan based on prioritization.
Specific Action #3	Amend the City's Zoning Ordinance text and map to implement the guidelines, proposals, and standards recommended within the Comprehensive Plan.
Specific Action #4	Amend the Terrell Subdivision Ordinance text to implement the guidelines, proposals, and standards recommended within the Comprehensive Plan.
General Action #1	Offer short courses and other educational classes or seminars concerning planning and zoning procedures to the City Council, the Planning and Zoning Commission, and other interested Terrell staff.
General Action #2	Implement a Capital Improvements Program (CIP) for the purposes of funding necessary projects and improvements within the City of Terrell. Such projects should be prioritized and reviewed on an annual basis.
General Action #3	Prepare an annual report, authored by the Planning and Zoning Commission or Terrell staff, recommending any changes or amendments to the Comprehensive Plan, and identifying items for implementation or further study.

Source: Dunkin, Sefko & Associates, Inc.



Comprehensive Plan 2002

Appendix A: Infrastructure System Overview Supplemental Information

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