

Summary of the COMPREHENSIVE LAND USE PLAN for the City of ROCKWALL, TEXAS

Adopted 1995

Prepared by: The City Council and Planning and Zoning Commission of Rockwall
Assisted by: Planning Resources Group

INTRODUCTION

The purpose of the Comprehensive Land Use Plan is to give direction to future development in order to avoid unknowingly creating incompatible physical impacts.

Once a Comprehensive Land Use Plan is in place, proposed development can be evaluated based on the Plan. Requests for rezoning, site plan approval, and plat approval can be reviewed based on their compliance with the Comprehensive Land Use Plan.

This brochure plan is a summary of a document which represents the culmination of field studies, analysis, and recommendations regarding the nature of future development in Rockwall, Texas. The *Future Land Use Plan Map*, which provides a general visual picture of the future land use patterns for the City of Rockwall, is provided on the reverse side of this brochure.

LEGISLATIVE AUTHORITY

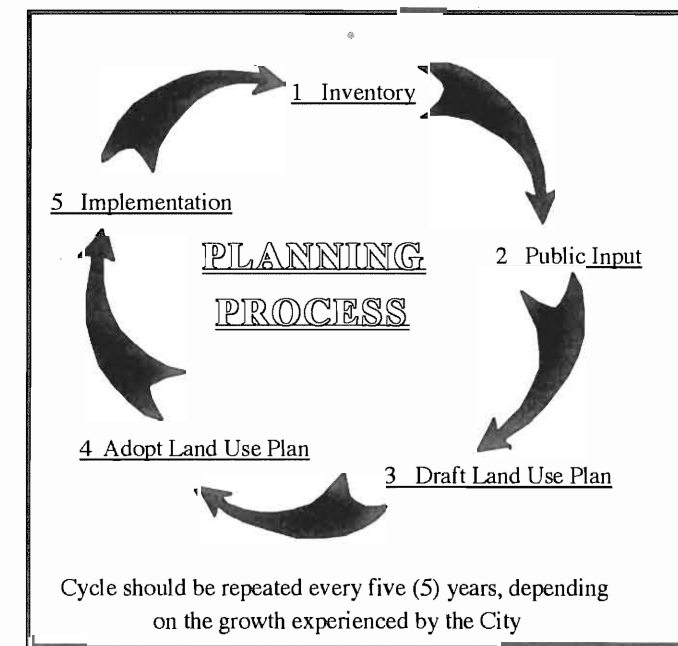
The legal authority for preparing a Comprehensive Land Use Plan is found in the state statutes that provide zoning authority. Section 211.004 of the Texas Local Government Code states that zoning regulations must be adopted in accordance with a comprehensive plan. As established by this legislation, the Comprehensive Land Use Plan provides guidance to the City in making zoning decisions in accordance with the long range plans of the City.

THE PLANNING PROCESS

Before planning for the future, it is important to have a sense of the present state of events and the probable future direction of development. This is obtained by gathering an inventory of existing conditions. The second step in the planning process is the formulation of goals and objectives. The community, staff, and elected and appointed officials develop the goals that represent a consensus of the desires of the community.

The third phase in the planning process is the formulation of the plan. Once a Plan has been drafted, the fourth phase of the process is to adopt the Comprehensive Land Use Plan.

Implementation is the fifth phase of the process. It is unlikely that the goals and objectives of the community will be realized, if strategies for implementation are not included in the Comprehensive Land Use Plan. The planning process is a continuous cycle. Reviewing the plan is important. All elements should be addressed at least every five years, depending on the growth rate of the City. A long-range plan generally covers a twenty year planning period and the plan should continue to change and evolve with each five year review.



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It is recognized that not all land uses are compatible with each other. Likewise, some land uses are more compatible with others. For example, an industrial land use is generally not considered compatible with a low density single family residential use. By limiting the number of areas where these incompatible land uses are located adjacent to each other, we recognize the interrelationship between land uses and avoid encroachment of non-residential uses into residential neighborhoods. In situations where incompatible land uses are developed adjacent to each other, it is important to provide either transitions or buffers to protect the less intense use.

Because of this recognition of land use compatibility, it is desirable to transition from high intensity uses to the less intense uses. Usually this is considered to be from an industrial use on one extreme to low density residential use on the other extreme. The Comprehensive Land Use Plan uses commercial land use as a transitional use between industrial and residential. However, this transitional process should be ultimately refined through the zoning process.

Screening Walls and Buffers

When incompatible land uses are located next to each other, the appropriate action is to provide a means to soften the edge between the two uses. This may be accomplished in two ways: 1) by constructing screening walls; or 2) providing an area buffer between the two incompatible uses. The preferred option would be to have a significant open space area located between the uses. The next preferred option would be to have the combined use of a screening wall and landscaping.

Screening Walls: Walls used for the purpose of screening incompatible uses should be solid walls. Wooden fences are not recommended as screening walls, because they have a tendency to deteriorate over a short period of time. In addition, the properties of the wooden fence cannot offer an adequate barrier to offensive sounds from adjacent uses. For these reasons, it is recommended that all screening walls consist of solid masonry material. When combined with landscaping, the buffer provides an adequate barrier from visual and sound pollution from adjacent incompatible uses.

Screening walls placed adjacent to public roadways should always be combined with a variety of landscaping material. In addition, construction techniques should be used that provide for a visual variation in wall pattern and elevation. Alternating runs of masonry and wrought iron can provide a variety in the screening wall. When wrought iron is used, landscaping should be included to assure visual screening. In addition, instead of a straight alignment along the property line, a ten foot screening easement may be permitted adjacent to the property line to permit a curving in-and-out alignment within the easement.

Landscape Buffers: Incompatible land uses may be entirely screened by the use of landscaping material. There may be occasions where a six foot screening wall, while limiting access, does not provide adequate characteristics to prevent sound or visual buffers. This may occur, for example, when a more intensive use such as a commercial or industrial use is located on an elevation significantly above the less intense use such as a residential land use. Since it is unreasonable to expect a wall to be constructed that would be tall enough to accomplish the

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DEMOGRAPHICS

Existing Demographics

The data used to determine the demographic characteristics of the City of Rockwall included the 1990 U.S. Census and a field survey. The estimated 1994 population for the City of Rockwall is 12,973 persons. This population is distributed among various land uses as indicated in the *Analysis of Population Demographics According to Land Use* table.

Description	Persons	# of Units
Single Family	9,753	3,363
Moderate Density	1,392	480
High Density	1,709	947
Mobile Home	119	41
TOTAL	12,973	4,831

Residential Units

A summary of the housing unit types is provided in the *Summary of Housing Units* table. The majority of housing in Rockwall is low density housing.

Structure Type	# of Dwelling Units	% of Total
Low Density	3,843	79%
Mobile, Modular	41	<1%
High Density	947	20%
TOTAL	4,831	100%

Future Population

It was necessary to determine the "anticipated holding capacity" in order to obtain projected population estimates for the future of the City. The term holding capacity is used to describe the total number of persons that could reside in the City in the event that all available residential land is developed and occupied. It is the maximum amount of people that the land will hold.

The following methodology was used in developing the anticipated holding capacity. The percentage of residential land area for low density and high density residential uses was obtained from the *Future Land Use Plan Map*. The resulting anticipated holding capacity is approximately 74,006 persons. Using a computer program to project future population, it is anticipated that the holding capacity will not be reached until well beyond the planning period, which generally covers a time horizon of twenty years. Because projections made this far into the future are not realistic, it is important to update population projections periodically. The City will be able to anticipate and plan for the needs of future populations by updating the population projections periodically.

The Future Land Use Plan Map is a bubble-style map. The double black lines enclosing each bubble of color represent the general limits of the land use recommended for that general location. These lines do not represent streets. In addition, while it is recommended that zoning changes be made according to the Plan, this Plan does not indicate zoning. Unlike a zoning map, the edges of the colored areas do not follow exact districts or property lines. These areas are general guidelines for future development, not exact area dimensions or locations. The colors used on this map are standard land use colors and are identified in the legend of the map.

Residential

The Comprehensive Land Use Plan addresses three residential categories: low density, high density, and mobile home residential. The low density residential category includes single family, duplex, triplex, quadplex and other similar attached units. The low density residential land uses have been located in accordance with the neighborhood concept, placing emphasis on creating neighborhoods that are buffered from the impacts of elements from outside the neighborhood system. The Plan indicates the location of low density residential land uses throughout the planning area. While this category includes several types of residential housing, the principles of the neighborhood concept dictate the appropriate locations for the differing intensity levels of low density residential. A transition using the high intensity single family uses would be a buffer between the low intensity single family and the nodes of commercial development at major intersections at the edges of neighborhoods. These high intensity low density residential land uses should also be located such that access is provided from collector or arterial streets. In addition, in locations where the topography or natural features such as large tree stands exist, a clustering of high intensity low density residential land uses may be utilized to preserve the natural characteristics of the land. There is a limited amount of high density residential land use indicated by the Comprehensive Land Use Plan. In fact, the only high density land use shown is currently existing in the City of Rockwall.

The Comprehensive Land Use Plan does not indicate any mobile home residential land use. While there is a limited area designated as mobile home residential currently existing in Rockwall, this area is not planned to remain or expand in the future.

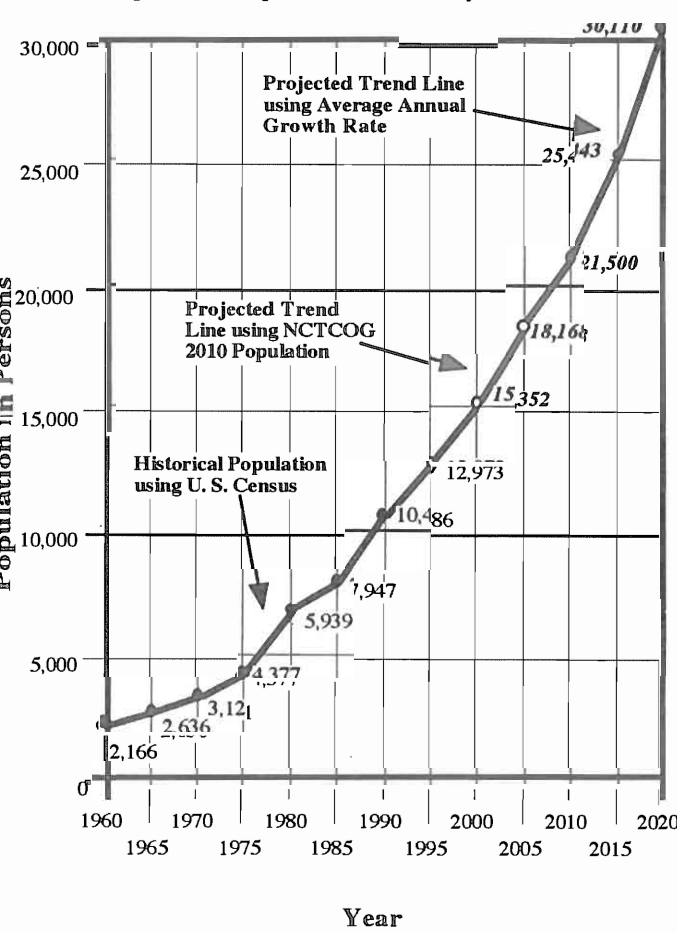
Commercial

Commercial land uses are generally located along thoroughfares in either a nodal pattern at intersections, or in narrow linear corridors along thoroughfares. In the central portion of the planning area along I. H. 30, Ridge Road (F. M. 740), and S. H. 205, the emphasis is on the corridor commercial concept. While in some of the older areas of the City, many of the existing commercial developments have not been developed according to planning principles, it is important that any proposed new development consider these principles.

In both the northern and southern portions of the planning area the nodal commercial concept is emphasized. High intensity uses, those having a substantial traffic impact which depend on high traffic volumes, were planned for the I.H. 30 corridor area. This corridor extends for several blocks on either side of

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Population Projections for the City of Rockwall



EXISTING LAND USE

It is important to have a sense of the present conditions within a city, before planning for the future. One of the efforts that is undertaken in the first phase of the planning process is the gathering of data on existing conditions.

Existing land use represents how the land is currently being used. This analysis provides the City officials with an opportunity to correct trends that may be detrimental to future development, and to initiate policies that will encourage development in accordance with goals and objectives desirable to the City.

A field survey was conducted in September 1994 to identify existing land use conditions. The area included in the field survey consists of the land which is currently within the corporate city limits of Rockwall. Of the approximately 9,481 acres that make up the city, 2,904 acres are developed as one of the following land uses listed in the *Summary of Existing Land Use*. This information provides the number of acres and the percentage developed as of September 1994. The Comprehensive Land Use Plan text document describes the existing land uses, their general locations, and relationships to each other.

The Interstate which would provide for secondary uses and adjacent access possibilities to the rear of commercial uses. Low intensity uses, those not generating significant traffic or dependent on high traffic volumes, are planned as commercial nodes. These commercial uses act as supportive uses for the general vicinity of the neighborhood. However, it is important that all commercial development be careful of encroachment into residential areas.

Industrial

The Comprehensive Land Use Plan proposes the continuation of industrial development in the area east of S.H. 205, south of the Aluminum Plant and Airport Road, north of S.H. 276 and west of the city limits line. Industrial land uses should be located such that they are near major arterials, preferably freeway systems, to provide easy access to semi-trailer truck vehicles. The presence of both I. H. 30 and the Union Pacific Railroad in the area designated for industrial development makes this area well suited for the proposed use. However, in many locations, areas designated for future industrial land uses are adjacent to uses that are typically incompatible. Defined edges need to be identified and industrial land uses should be contained within the identified boundaries shown on the *Future Land Use Plan Map*. If regulations regarding landscaping and performance standards are applied, future industrial land uses will be an asset to the City of Rockwall.

Public

Quasi-public uses are comprised generally of churches, hospitals and non-profit private organizations. While these quasi-public uses are typically a functional element of the neighborhood, their users are the public. The developers of such uses are not typically public entities, and therefore, their locations cannot be planned. Churches are protected with particular constitutional rights, and therefore, controlling their location is difficult. Their locations may be either within the neighborhood or along the perimeter edges. However, these uses should be located such that their traffic is oriented toward arterial streets, and at a minimum along collector streets.

Public land uses include municipal, county, and state governmental facilities, parks, recreational facilities, cemeteries, and schools. The recommended future public facilities are indicated on the *Future Land Uses Plan Map*. Public and quasi-public uses should be located in areas which are appropriate for the intensity and character of each use. The *Community Facilities* section of the Comprehensive Land Use Plan document includes analysis and recommendations regarding current condition, proposed locations, necessary square footage requirements, and improvements for the following facilities: City Hall, Police Station, Service Center, Animal Shelter, Fire Stations, and Community Center.

Parks and Recreation

The Future Land Use Plan proposes over 1,500 acres of parks and open space. The City of Rockwall has a substantial parks and recreational resource in Lake Ray Hubbard as well as a number of other water bodies located within the planning area. The Future Land Use Plan incorporates these water bodies and floodways into greenbelts and potential linkage between parks. There are several large community park and recreational areas indicated, and in addition, the Plan proposes neighbor-

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Summary of Existing Land Use

Land Use	Acres	Percent of Developed Area	Percent of City
Residential			
Low Density	1,343	46%	14%
Moderate Density	82	3%	1%
High Density	74	3%	1%
Mobile Home	8	<1%	<1%
Sub Total	1,507	52%	16%
Commercial / Industrial			
Service	102	3%	1%
Retail	107	4%	1%
Office	28	1%	<1%
Industrial	267	9%	3%
Sub Total	504	17%	5%
Public	287	10%	3%
Quasi-public	36	1%	1%
Sub Total	373	13%	4%
Parks & Open Space	341	12%	4%
Thoroughfares	179	6%	2%
TOTAL DEVELOPED	2,904	100%	31%
Undeveloped	6,577	---	69%
TOTAL	9,481	---	100%

Source: Planning Resources Group Field Survey September 1994

THOROUGHFARES

The transportation element of the Plan is coordinated with the Future Land Use Plan. It provides the city with the tools to develop a transportation system which can accommodate the needs of both existing and future development. The transportation system is based on assumptions and projections of future traffic levels to serve population and employment for the year 2010.

Bicycle and Pedestrian

Although the automobile is the predominant form of transportation in Rockwall, planning for bicycle and pedestrian access is becoming increasingly important. Rockwall has begun the process of planning for a series of bikeways and trails that will link parks and greenbelts within the city.

Sidewalks, pathways, and crosswalks are all a part of a pedestrian system. While there are areas of Rockwall that have existing sidewalks, they have not always been required as part of development plans. Nevertheless, sidewalks should be considered as an important element in the transportation plan in the future.

Major Streets Plan

Existing roadways needing improvements were identified through the analysis of existing traffic count data. In addition, observation of traffic flows during various times of the day were considered.

The 1984 Thoroughfare Plan for the City of Rockwall and the year 2010 travel forecast prepared by the North Central Texas Council of Governments (NCTCOG) were used in conjunction

with the goals and objectives identified by the city as the basis for updating the transportation element of the Comprehensive Land Use Plan.

In updating the transportation plan, the population and employment forecasts used by NCTCOG were reviewed, and were found to be consistent with the growth forecasted for the Comprehensive Land Use Plan. This indicates that the 2010 NCTCOG travel forecast provides a reasonable estimate of the traffic expected to use the thoroughfare system during the planning period.

- to promote economic development;
- to create a focal point within the City;
- to maintain a government presence by providing suitable office space/buildings within the CBD;
- to reuse vacant structures for activities or business;
- to attract tourists/tourism to the City;
- to promote commercial and residential mixed uses in the same building;
- to increase and/or improve entertainment of various types in the CBD;
- to create a pedestrian-oriented Downtown Square combined with parks, green space, and pedestrian linkages between services; and
- to provide a unified architecture and street-scape "identity" that will distinguish the Downtown Area from the rest of the City.

The perceived amenities and liabilities, an analysis of land use, a determination of historical significance, a traffic analysis, and a Plan for the Historic Downtown Core have been included in the Comprehensive Land Use Plan document.

Physical Elements

Lake Ray Hubbard
The proximity of the Lake adjacent to the City of Rockwall can only be considered a great asset. However, its location does have a definite impact on all development within Rockwall. The City has taken steps to take advantage of this asset by adopting design guidelines for a Scenic Overlay District.

These guidelines were developed by the Architectural Board of Review and approved by the Rockwall City Council for use by developers and builders for development within the Scenic Overlay District. This district is a specialized zoning district along F. M. 740 which was identified in the Comprehensive Land Use Plan adopted in 1986 as a scenic thoroughfare. The identified scenic aspects of F. M. 740 include views of the Lake, existing natural topography, and existing natural landscaping. The District was established to protect scenic or historic qualities through the use of additional development criteria, and by requiring uses compatible with both existing uses and with the visual environment. By continuing to enforce these regulations, the assets provided by Lake Ray Hubbard can be protected.

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density residential land uses may be used as a buffer between commercial and low density residential. Commercial land use within a neighborhood unit should be limited to retail sale of goods and personal services primarily for persons residing in the adjacent residential areas. These commercial uses should be located on the periphery of the neighborhood at intersections of arterial streets. The use of buffer yards and/or screening fences between residential and commercial uses is recommended.

Additional criteria for lot design should also be considered. Lots adjacent to arterial streets and corners should be deeper and wider, with larger rear and side yard setbacks to facilitate sight distances at street intersections. Low density residential lots should not have direct access to adjacent arterial streets.

Typically, larger neighborhoods should also provide for the locations of schools and community facilities such as parks and fire stations within the area. These characteristics and criteria, as well as those mentioned previously, function collectively to protect the integrity of the neighborhood from external pressures and enhance its identity.

Specific issues, recommended changes to the 1984 Thoroughfare Plan, capacity protection and improvements, recommendations for additional study, and a street improvement program are discussed in detail in the text document of the Comprehensive Land Use Plan.

URBAN DESIGN CRITERIA

The practices and techniques used in shaping and forming the physical development of a city are the "urban design criteria". These criteria enable city planners to create the form of the city. The "Urban Form" is generally interpreted to mean the physical pattern and form that cities take as land is developed. There are primarily three "urban form" models that have been applied to the Comprehensive Land Use Plan: (1) the neighborhood concept; (2) the corridor development form; and (3) the nodal development form.

Neighborhood Concept

The neighborhood concept is one of the oldest and most widely used and accepted practices in urban land use planning. This concept helps to create quality spaces for people to live. The concept places primary emphasis on creating neighborhoods that buffer the impacts of high intensity elements from outside the neighborhood system.

The well-designed neighborhood concept considers the location of different land uses within and on the periphery of the neighborhood. Low density housing should typically be located in the interior of the neighborhood close to the schools, parks, and other community facilities. Moderate density housing, as well as high density housing, may be located near the periphery and on collector streets. High density and moderate

The elements identified as assets to be protected in the Scenic Overlay District are also assets which are located in other areas of the City and could be applied to those areas. For example, the corridors of I.H. 30 and Horizon Road. The goals and objectives identified the desire of the citizens to protect and preserve the natural environmental elements of the City. This includes topography and natural landscaping such as trees. In addition, there are floodplain and flood prone areas which may be utilized as green belts and parkways within the City.

Other Lakes

In addition to Lake Ray Hubbard, Rockwall has many smaller lakes scattered throughout the planning area. The Future Land Use Plan has incorporated these water bodies into the parks and recreation system proposed for Rockwall.

Interstate Highway 30

A roadway of the size of Interstate Highway 30 (I. H. 30) has a definite impact on adjacent land uses. Due to the frontage road providing continuous access to land along I.H. 30, this corridor lends itself to corridor commercial development. However, the Texas Highway Department controls curb cuts and access to the frontage road, and would likely discourage numerous curb cuts intersecting the frontage road. The corridor commercial development concept also discourages numerous curb cuts and multiple drive entrances. Therefore, the Plan encourages circulation for entrance and exit to business along the I. H. 30 corridor through rear and side entry as well as shared drives to limit the number of curb cuts along the frontage road. The commercial corridor indicated on the *Future Land Use Plan Map* provides enough depth to allow for these alternative ingress and egress functions.

Union Pacific Railroad

Rockwall has a man made barrier in the form of the Union Pacific Railroad. Railroads impact land uses because of their noise and visual presence. Also, they impact land uses by their obvious character of transportation that attracts industrial uses. Industrial uses have been correctly located along the railroad in Rockwall. The critical issue regarding future land uses will be to contain the industrial activity adjacent to I. H. 30 and the railroad. All industrial or commercial uses should be oriented toward the railroad or highway, and should have access to major arterials.

The railroad acts as a significant barrier to north and south access to Rockwall. There are relatively few crossings of the railroad by north and south roadways. With the exception of S.H. 205, all of these roadways are grade crossing roadways. It is conceivable that significant delays could occur if these roadways were blocked by train traffic. Therefore, at least one additional grade separation crossings are recommended for safety reasons. The likely location is along the S.H. 205 Bypass. This roadway provides direct access to two future fire station sites.

Adopted Policies
It is recommended that the following policies be adopted in order to provide guidelines to assist the staff, and appointed and elected officials in following through with the adopted goals and objectives of the City:

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Commercial Nodes Development Form
High intensity commercial uses are typically located at the intersection of arterial streets. Less intense commercial uses, such as professional offices, may then be located between the high intensity commercial uses and the residential land uses located in the interior of the neighborhood. In addition, in areas where unique or special conditions exist, such as the scenic overlay zone, additional design guidelines and standards may be necessary.

Commercial Corridor Development Form

The corridor form is characterized by high intensity commercial uses that are located near the intersections of major arterials, with less intense commercial uses located along the arterial between the intersections. It is important to generally limit commercial development along the corridors to depths not exceeding 300 to 400 feet. Deeper development will create possible conflicts in land uses and potentially land-lock some properties. If commercial development along corridors is not controlled and developed according to the commercial corridor concept, it is likely that development of a "strip commercial" nature will occur. The characteristics of strip commercial which should be avoided include the following:

Additional criteria for lot design should also be considered. Lots adjacent to arterial streets and corners should be deeper and wider, with larger rear and side yard setbacks to facilitate sight distances at street intersections. Low density residential lots should not have direct access to adjacent arterial streets.

Typically, larger neighborhoods should also provide for the locations of schools and community facilities such as parks and fire stations within the area. These characteristics and criteria, as well as those mentioned previously, function collectively to protect the integrity of the neighborhood from external pressures and enhance its identity.

- Show lots, usually between 100 and 200 feet deep;
- Numerous small ownerships;
- Numerous curb cuts for entrances;
- Numerous small buildings with no architectural unity;
- Little or no landscaping in and around the parking lots;
- Limited parking usually restricted to the front setback area or along the street; and
- The lack of landscaping or other buffers, especially in the rear, with the adjacent residential areas exposed to a blighting influence.

The purpose of these design guidelines is to encourage the development of well planned commercial corridors along Rockwall's major thoroughfares. In addition, some of these areas may need more detailed studies in order to develop the most desirable land use patterns along these corridors. For example, it is recommended that the views along I.H. 30, F.M. 740 and Horizon be protected through the application of appropriate design guidelines.

Edges and Transitions

Well defined edges and gradual transitions in land uses are both important to the function of the land use plan. Edges are well defined boundaries of land uses, which clearly indicate the beginning and termination of a land use type. Edges are used in the Comprehensive Land Use Plan to clearly establish the limits of industrial growth.

These edges are generally recognized as physical elements such as Airport Road and High School Road. It is important to establish these edges for industrial uses because the tendency in municipalities has been to gradually expand industrial uses into adjacent neighborhoods, which are adversely impacted by the industrial uses. The effect is that residential property values diminish in the area, and any neighborhood that is established tends to become unstable and often becomes transitional in nature. Therefore, it is recommended that the limits, or edges, of industrial land uses be clearly defined by the Comprehensive Land Use Plan.

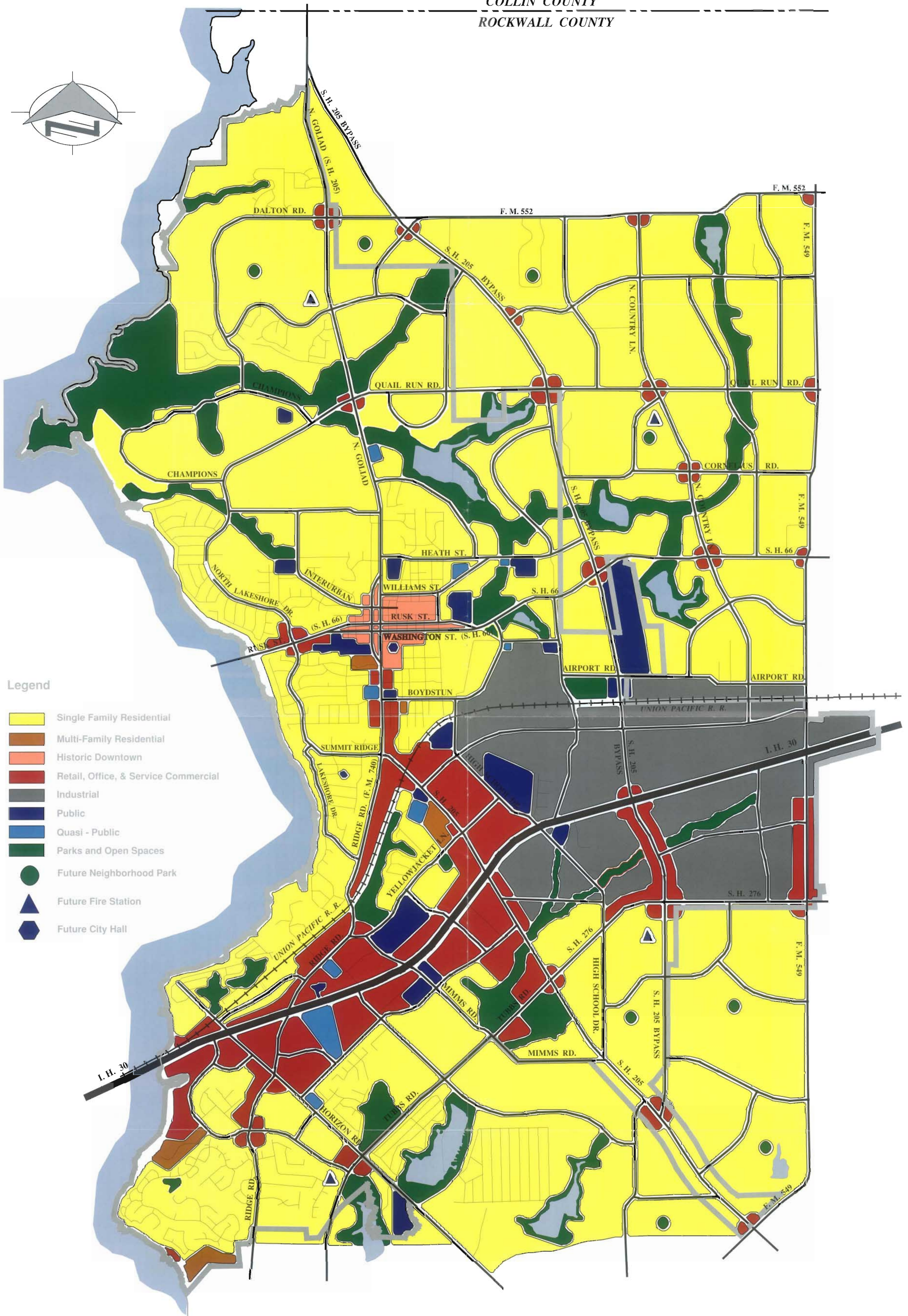
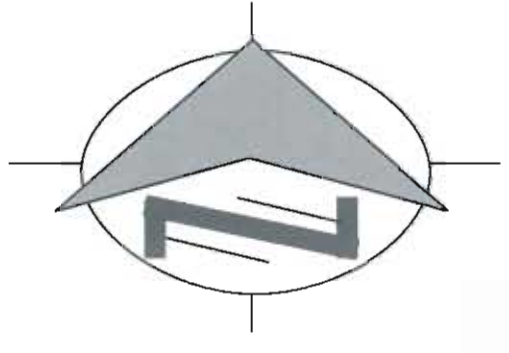
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Neighborhood Concept



While the above criteria applies mainly to the planning of new neighborhoods, these concepts can also be applied to older areas of town, where development has already occurred. Planning principles addressed by the neighborhood concept should be applied to older neighborhoods with flexibility as these areas are revitalized and redeveloped.

Land Use Type	Number of Acres		Total Acres	Percentage		Total Percentage
	Within City	Within ETJ		Within City	Within ETJ	
Residential						
Low Density	4,703	4,495	9,198	49%	82%	61%
High Density	74	0	74	1%	0%	<1%
Mobile Home	0	0	0	0%	0%	0%
Commercial/Industrial						
CBD	92	0	92	1%	0%	<1%
Commercial	1,130	130	1,260	12%	2%	8%
Industrial	1,204	77	1,281	13%	1%	9%
Other						
Public	311	12	323	3%	<1%	2%
Quasi-Public	72	0	72	1%	0%	<1%
Parks/Open Space	1,131	429	1,560	12%	8%	10%
Thoroughfares	764	353	1,117	8%	6%	7%
TOTAL	9,481	5,496	14,977			



Legend

- Single Family Residential
- Multi-Family Residential
- Historic Downtown
- Retail, Office, & Service Commercial
- Industrial
- Public
- Quasi - Public
- Parks and Open Spaces
- Future Neighborhood Park
- Future Fire Station
- Future City Hall

CITY OF ROCKWALL
FUTURE LAND USE PLAN MAP