We envision Denton in the 21st Century as the North Star of Texas, a community of excellence in living, working, learning, & playing.

The Denton Plan 1999 - 2020

Comprehensive Plan of the City of Denton

Planning & Development Department
Comprehensive Planning Section
City of Denton, Texas

Merit Award

In April of 1999, the City of Denton's Comprehensive Planning Section of the Planning & Development Department, Hellmuth, Obata + Kassabaum, Inc., and Renee Perkins Jaynes, Planning Consultant, were presented a Merit Award from the Texas Chapter of the American Society of Landscape Architects in recognition of outstanding professional achievement for the City of Denton 1999-2020 Growth Management Strategy and Plan.

Acknowledgements

The creation of The Denton Plan was made possible by the cooperative efforts of elected and appointed officials, city staff and concerned citizens. It is the primary objective of any long-range plan to produce definable and attainable goals while providing glimpses of possible futures grounded in the realities of today.

The Comprehensive Planning Section of the City of Denton's Planning and Development Department wishes to thank the many people, organizations and departments for their efforts in providing historical data, direction, insight and constructive critisim in the production of The Denton Plan.

Special Recognition to the Citizens of Denton and Mayor & City Council

Mayor	Jack Miller	Mayor Pro-Tem	Roni Beasley
Council Member	Carl G. Young, Sr.	Council Member	Neil Durrance
Council Member	Mike Cochran	Council Member	Sandy Kristoferson
Council Member	Mark Burroughs	(Former)Mayor Pro-Tem	Euline Brock

Planning & Zoning Commission

Chair	Jim Engelbrecht	Vice Chair	Salty Rishel
Commissioner	Elizabeth Gourdie	Commissioner	Rudy Moreno
Commisioner	Perry McNeill	Commissioner	Susan Apple
Commissioner	Carl Williams	(Former) Chair	Ellen Schertz McFarling
(Former) Commissioner	Bob Powell	(Former) Commissioner	Carol Ann Ganzer

Last, but certainly not least, the following city staff and departments, for their collaboration, contributions and incomparable expertise, and without which The Denton Plan would not exist:

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Michael W. Jez, City Manager
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Jerry Clark, Director, Engineering & Transportation Department
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City Departments

City Manager's Office
Water and Wastewater Utilities
Engineering & Transportation Department
Economic Development Department
Solid Waste Department
Police Department
Fire Department
Facilities Management Department
Finance Department
Planning and Development Department
Environmental Management Department
Parks and Recreation Department
Drainage Department
Electric Department
Legal Department
Denton Libraries
Information Services
Purchasing Department

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- *David Hill, Assistant City Manager, Development Services*
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- *Mark Donaldson, (Former) Assistant Director, Planning & Development Department*
- *Nancy McBeth, Manager, Comprehensive Planning, Planning & Development Department*
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Appendix

The Appendix to this document is available separately and is updated to reflect changes in general conditions, analysis, population updates, and any additional data or information.

Introduction

Carl G. Young, Sr.
District 1

Neil Durrance
District 2

Mike Cochran
District 3

Sandy
Kristoferson
District 4

Mark
Burroughs
At-Large

Statement from the Mayor & City Council

Mayor
Jack Miller

Mayor Pro-Tem
Roni Beasley

Dear Fellow Citizens:

The Denton Plan is the first comprehensive plan developed for our community in more than twelve years. The Plan is the result of two years of long and hard work, many public meetings, and many citizens taking the time to participate in their future. Our city is about to embark upon a period of rapid growth and change, and the goals set forth in the Plan are intended to set the framework for improved quality of life, prosperity, and economic stability. The Plan is a statement of our investment in the future. We must have a clear vision of how our community will grow and to provide for future generations.

During the many public meetings held to discuss the Plan, the City Council, Planning and Zoning Commission, and staff were fortunate to have the input and guidance of more than a thousand concerned residents and property owners. Even when differences of opinion were expressed, each person spoke with conviction and sincere interest in assuring that Denton will continue to thrive and support its people. On behalf of all Council Members, I extend a special thanks to each person who took the time to participate in their local government and who helped to form the Plan.

The Denton Plan sets the framework for the organization of new development and land uses envisioned by current residents. Growth management is the central theme of the Plan, and all recommendations in the plan adhere to growth management principles. Essential services, such as clean water, good roads, and efficient wastewater and stormwater systems, are emphasized in the Plan. Other concerns, such as urban design, environmental quality, and parks receive equal attention as quality of life issues considered important to life in Denton.

The Denton Plan was developed to guide the next twenty years of community growth. We must not allow the plan to become a "shelf document" that is set aside and forgotten to collect dust. The Plan must be recognized as a guiding document for city actions, and as a dynamic statement that should be revised and updated on a regular basis. The Plan is not "set in stone"; we can and should change it when community sentiment warrants revisions. At a minimum, the Plan should be revisited every five years for possible updating.

My pledge, and that of the City Council, Planning & Zoning Commission, and city staff, is to use The Denton Plan to make our community a better place to "work, live, learn and play".

Sincerely,

Jack Miller, Mayor

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Introduction

Statement from the City Manager

City Manager
Michael W. Jez

Dear Fellow Citizens:

I am pleased and very proud to present to you The Denton Plan. I have witnessed first hand the hard work, devotion, and dedication of the many people that helped to produce the Plan. I also witnessed the debates and discussions that occurred regarding a wide range of topics, and know that some decisions made regarding plan recommendations required tough decisions and compromise. The prospect of rapid growth can be very disconcerting, but if we continue to plan together, everyone will benefit.

The City Council adopted The Denton Plan by ordinance on December 7, 1999. The Plan is now an official document of the City of Denton, and is available to anyone interested in the city's future. City staff has also posted the Plan on the City of Denton website. Amendments to the Plan must be formatted as ordinances, reviewed by the Planning & Zoning Commission, and adopted by the City Council. As an adopted policy document, The Denton Plan will affect citizens in many ways, and will serve to a certain extent as a work program for city staff. Development proposals will be strongly influenced by the Plan when the City Council makes zoning and land use decisions. New zoning and subdivision regulations are being drafted that are required by state law to be consistent with the plan. When master plans are developed or updated for water, wastewater, thoroughfares, transit, parks, bike and pedestrian trails systems, or to prepare the city's annexation strategy, The Denton Plan will guide our decision-making. Annual budget and capital improvement program decisions will also use the Plan to coordinate public expenditures with private development activity.

A community prospers when its citizens become active participants and partners in their local government. I urge you to become familiar with the Plan's contents. Denton's citizens should now continually monitor the Plan's effectiveness to determine if growth occurs as intended. Plan implementation will take many forms and will occur over a period of several years. Please continue to participate and let us know if you think our community is heading in the right direction.

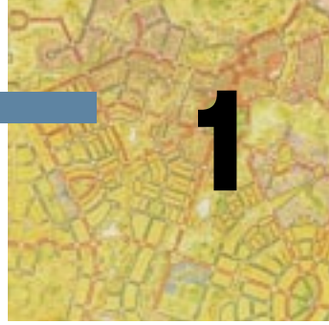
Very truly,

Michael Jez, City Manager
City of Denton

Plan Purpose

THE PLAN INCORPORATES THE FOLLOWING PURPOSES:

- *THE PLAN IS A STATEMENT OF POLICY, ADDRESSING THE COMMUNITY'S VISION AND GOALS.*
- *THE PLAN WILL BE IMPLEMENTED BY ADOPTING ZONING AND LAND DEVELOPMENT REGULATIONS.*
- *THE PLAN IS LONG-RANGE, EXPRESSING STRATEGIES THAT WILL SHAPE THE CITY FOR TWENTY YEARS AND MORE.*
- *THE PLAN COVERS AN AREA THAT DESCRIBES THE CITY'S SPHERE OF INFLUENCE, WHERE LAND-USE WILL IMPACT THE COMMUNITY.*
- *THE PLAN MAY BE USED TO MAKE A VARIETY OF LONG-RANGE DECISIONS THAT AFFECT THE COMMUNITY.*
- *THE PLAN INFORMS PROPERTY OWNERS AND POTENTIAL DEVELOPERS ABOUT THE COMMUNITY'S DESIRED FUTURE AND EXPECTATIONS REGARDING FUTURE DEVELOPMENT.*
- *THE PLAN GUIDES EVALUATION OF ZONING AND ANNEXATION PROPOSALS.*



1 Introduction

Statement of Purpose

The Denton Plan is intended to guide community growth and development for the next twenty years. The plan is the start of an enduring process to make life better for all citizens. During the next two decades, regional market forces may cause Denton's population to double or even triple. City limits may expand from fifty five to as much as 100 square miles. Thousands of investment decisions will affect the character of the city for years. Areas known for decades to be wooded tracts or pastureland will become part of Denton's urban environment, with lasting impacts that our grandchildren will inherit. The city faces many challenges to ensure that growth is positive.

The purpose of the comprehensive plan is to translate a vision statement and planning policies into meaningful actions to benefit the entire community. The plan describes the steps city government will take to protect public health and safety, to provide services efficiently and effectively, and to provide the quality of life that our citizens expect. The plan expresses community sentiments and values for all to see, and implementation success is dependent upon support and consensus. Potential investors, developers, businesspersons, and residents should use this document to learn more about the community that they may decide to join.

The land-use plan is intended as a guide to land-use decision-making by public officials, residents, and existing and potential property owners. This should help the city achieve its vision, meet its goals, and provide efficient and fiscally prudent services.

The plan is formatted with policies, followed by goals and strategies that lead to implementation statements (see Implementation Element). Special sections of the plan such as Land Use, The Street, Urban Design, Schools, and The Edge provide further information regarding design or other issues not covered specifically within the plan elsewhere. These sections are intended to give more specific direction or information than other sections of the plan. These sections may not be formatted exactly like the remainder of the document for this reason, although they generally follow the same pattern as the remainder of the plan.

The policies in the plan are the course of action that lead to the goals and strategies adopted and pursued by the city. The goals are the achievement toward which specific efforts are directed. The goals may cumulatively cover several policies. The strategies are the plan, method, or series of tactics used to obtain a specific goal or result.

Using the goals and strategies from each section of the plan, an implementation section has been prepared to create a work plan for the next few years. Its purpose is to lay the groundwork for future work and financial needs related to the plan. This section sets forth specific

1 Introduction

actions or tasks that can be completed to implement the policies and goals of the comprehensive plan. The implementation section will be reviewed periodically and updated to reflect progress and changes necessary to implement the plan. The implementation section is the last section of the plan and is intended to be replaced periodically, as updated. It is in table format, reflecting the intent of each plan section with specific implementation tools. This section also indicates related documents and master plans that fall under the umbrella of the comprehensive plan. It indicates, for the user's reference, other master plans that may provide specific information regarding a particular topic, such as parks or water services. Additionally, the implementation section describes plan performance measures and the amendment process.

The comprehensive plan is not cast in stone. Revisions will be made when warranted, and the plan will be formally updated every five to seven years. The plan will be continually monitored to track the extent to which the plan has been implemented, and to determine if plan implementation causes desirable results. An annual report will be prepared to track plan performance in this manner.

Amendments to the comprehensive plan must be approved by the City Council subject to Planning & Zoning Commission recommendation. For every proposed plan amendment, at least one public hearing must be conducted prior to the Planning and Zoning Commission's recommendation, and prior to consideration by the City Council. Should actions be contemplated regarding proposed zoning changes that would not be consistent with the comprehensive plan, an amendment to the comprehensive plan must be made prior to or concurrent with approval of the zoning change.

Vision Statement

Denton is a unique community whose diversity gives it strength. This uniqueness is a point of community pride, and it is the goal of The Denton Plan to insure that growth, development and the use of community resources foster, encourage, and promote the preservation of this vital quality. Although Denton is no longer a small town, there are certain qualities of small town life that our citizens hold dear.

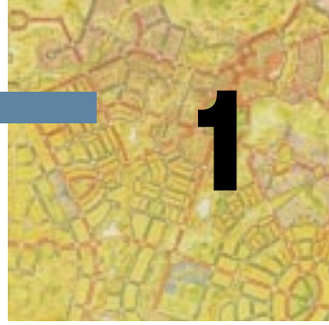
The proper stewardship of community assets, while managing the pressures of growth, is a balancing act that will require foresight, long-range planning, and a great amount of community involvement. The Denton Plan should represent the best of our collective community aspirations and, while preparing Denton for the 21st Century, should never lose sight of the fundamental qualities on which this town was built.

Denton's Vision

The Denton Plan should represent the best of our collective community aspirations, and while preparing Denton for the 21st Century, should never lose sight of the fundamental qualities on which this town was built.

Denton's VISION

The Denton community is committed to enriching the lives of its citizens - regardless of age, income, or ethnic background - through education, culture, recreation, and entertainment.



1

Introduction

Quality, diversity, and opportunity are key to the future success of our community. People with all kinds of different backgrounds are welcome to Denton where they can find a community that offers well-paying jobs, reasonably priced housing, good schools, and convenient parks. Distinct neighborhoods with homes of all types and sizes offer a choice of housing for everyone.

The historic downtown is the heart of Denton; the Square and surrounding streets are used every day and night as a gathering place for commerce, civic events, and entertainment. Growing numbers of downtown residents will increase the energy level of the downtown, while cultural events in Civic Center Park attract new visitors from throughout the region. The City of Denton is committed to historic preservation as a means of fostering community pride and encouraging one of our strongest assets.

To grow properly, Denton must nourish its university partnerships. The University of North Texas is a major Denton landmark. The Fry Street Area and Oak-Hickory Historic District are important physical and social links between the downtown and UNT. Texas Woman's University will also be a major contributor to Denton's distinction as a city. UNT, TWU, and the Square area will continue to develop as dynamic and lively areas, essential to the well being of the city. Working with city government and the business community, the two universities are good institutional citizens of Denton and are magnets for high-tech and research-oriented development.

The Denton community is committed to enriching the lives of its citizens - regardless of age, income, or ethnic background - through education, culture, recreation, and entertainment. Denton has a distinctive reputation as an arts city, and most especially a music city. Through public art, galleries, museums, theaters, and clubs; through our festivals, concerts, and stage shows - Denton is known throughout the region as a culturally attractive and innovative community.

Public natural areas are an essential part of a great city. Our built environment cannot remain healthy without properly managed land, air, and water resources; as we grow these resources will become even more precious. Proper planning will allow us to capitalize on our natural assets. Lake Ray Roberts and the Elm Fork Nature Conservatory will prove to be resources of incredible value as Denton becomes more urbanized. Floodplains and creeks, when developed as greenway corridors, will serve many needs, such as flood protection, recreation, tree preservation, and habitat support. Environmental planning must take its rightful place as an essential part of Denton's strategy to grow wisely.

Denton is strategically situated as a regional transportation hub by its position on Interstate 35 and its proximity to both Alliance and Dallas-Fort Worth regional airports. Managing and fos-

1 Introduction

tering this unique geographical position is a major goal of the comprehensive plan as we reap the benefits of our location.

Although we are a community that benefits from our various institutions, we should never lose sight of the fact that we are first a community of people: not just a collection of houses, roads, and buildings. Our sense of community in Denton is a delicate natural resource: a legacy from the past, which once lost cannot be regained. Therefore, the primary goal of the comprehensive plan should be to preserve and retain the qualities that make Denton the unique and prosperous place it is today and to help it develop into an even better city in the future.

Denton's Vision

Our built environment cannot remain healthy without properly managed land, air, and water resources: as we grow, these resources will become even more precious.

2

Public Involvement

Local procedures that extend beyond the minimums set by law need to be considered to meet citizen expectations.

Introduction

Public involvement is a cyclical process that includes three primary forms of communication – notification (we tell you about it), education (we explain the options to you), and participation (you tell us what you think about it). Cities have traditionally shown a tendency to concentrate efforts on notification and participation. As is true in many areas of specialization, city planning and development issues have become increasingly complex. Education has recently been recognized as a very important process if citizens are to be empowered to make well-informed comments and decisions.

Determining the appropriate level of public involvement for different planning processes is not always easy. State law requires the city to post meeting agendas, notify adjacent property owners, and hold public hearings to hear public comments before decisions are made. A legalistic view of public involvement is often too narrow to involve those affected by planning decisions. Local procedures that extend beyond the minimums set by state law need to be considered to meet citizen expectations.

For example, the city recently improved the process of notification for zoning-related public hearings. The law requires notification for zone changes and other similar matters to property owners within 200 feet of the subject property. The city has gone beyond this by notifying residents outside the required area as a courtesy and by posting signs on the property in question. This was done after evaluations of the benefits of improving the notification were in line with the cost of providing the notice. Other opportunities to improve public notification, education, and participation should be explored and developed.

Policies

POLICIES

- City of Denton stakeholders should be invited to participate in all stages of city planning processes. City staff will develop procedures that actively engage stakeholders in city planning. This approach should extend beyond planning into design and project-specific activities. Charettes, which are used to involve groups of people in project design, and demonstration projects should be considered to obtain citizen input before major projects are implemented or to introduce innovative design concepts.
- Public involvement should serve the planning process as an educational tool. The comprehensive plan is of only limited value if members of the community don't understand what it means. Development concepts can be highly technical and complex, and the plans should explain unusual concepts that may not be easily understood.

2 Public Involvement

- The city should find out which types of media will engage as many stakeholders in the planning process as possible. Television, newspapers, newsletters, meetings, speaking engagements, publications, resource centers, and other options should be used as appropriate to communicate with as many stakeholders as possible.
- The city must coordinate these efforts to avoid communication over-saturation.

Public Involvement Goals & Strategies

Public participation in planning involves people who are not professional planners or government officials. These citizens and other stakeholders review, discuss, debate, and influence the development of public plans, regulations, and development projects. Citizens in Denton do take part in decision-making. They have consistently shown interest in many community issues. Public involvement brings in individuals, interest groups, organizations, government agencies, and corporations.

Public Involvement Goals

GOALS

Citizens are invited to take part in planning for several reasons:

- Democratic government guarantees citizens the right to have a strong voice in all matters of public policy.
- Citizens often provide needed information to develop, maintain, and carry out effective public policies.
- Local officials need comments and ideas from those who will be directly affected by proposed policies.
- Citizen involvement educates the public about governmental issues. It creates an informed community which, in turn, leads to better decision-making.
- Giving citizens a sense of empowerment and ownership in the development of policies, plans, and projects creates a higher level of public participation and consensus in government decision-making.
- Citizen involvement is an important means of enforcing our land-use laws. Having citizens informed about laws that affect them and acknowledging their right of access to governmental processes ensures that the laws are applied properly.

The public involvement procedures for planning processes must be wide open to anyone who expresses interest. It is not enough to say that we will provide opportunities for all people to comment on planning issues.

2

Public Involvement

Creative methods must be employed to solicit, obtain, and record stakeholder comments. Public involvement is critical to the development of community consensus, without which, a plan will never suceed.

Public Involvement Strategies

STRATEGIES

Public Involvement Planning Strategies

The best way to have strong citizen involvement is to have strong planning for citizen involvement. A successful public participation procedure must be carefully designed and managed.

- Manage public involvement as a major element of planning.
- Provide a way for the public to take part in each major action and to address important community issues in land-use decisions.
- Develop and use formal procedures to make sure the public is notified and involved.
- Provide timely and accurate information to members of boards and commissions to improve the quality of public decision-making.
- Maintain a registry of stakeholders, interest groups, and individuals with expertise or interests in specific processes or areas. Make sure appropriate information is continually distributed regarding projects, plans and development codes.
- In recognition of the cost of public notification, education, or participation, the city should provide resources (staff and funds) to support new public involvement processes.
- The city should continue to recruit residents who express interest in serving as board or commission members. It should improve the process if needed. Such volunteers should continue to be recognized for their contribution of time and expertise.

Public Involvement Notification Strategies

The most common complaint from citizens about government is “Nobody told us!” In spite of city efforts, people do not always get the information they want. State law requires some forms of media, but these don’t always do a good job of getting the word out to the public. We should add to traditional notice and hearing procedures to let everybody in the community know about important matters.

2 Public Involvement

The following may make the message heard more widely:

- Information should be sent to the people most likely to be affected. This shouldn't be limited to the minimum requirements of state law.
- Notices should be posted in conspicuous places such as public buildings, community centers, public gathering places, the affected property, or any other location where many people can see them.
- Public information messages should be clear, simply stated, and supported with photos or illustrations when appropriate.
- Newsletters could be distributed regularly to report on community planning issues, major projects, upcoming meetings, and other matters of public interest.
- A speaker's bureau should be developed, listing city officials and other well-informed persons available to speak before service groups, clubs, and school classes.
- Newcomers to the city should learn immediately about how they can take part in public city activities. They could be reached by notices placed in high-visibility sites in high-traffic areas.
- City staff members should work actively to provide news media with information for the public.

Public Involvement Education Strategies

When major planning tasks arise, the city could should consider a special task force or an advisory committee. Resources should be adequate for the job, including city staff support.

The following are ways to educate the public:

- Briefings or roundtable discussions with key community leaders and stakeholders.
- Summaries of new policies and regulations for the people and groups who participate or testify in development process. Explanations of the findings made by decision-makers to help people understand conclusions.

Opportunities to improve public notification, education, and participation should be explored and developed outside of any traditional requirements.

Public Involvement

Education has recently been recognized as a very important process if citizens are to be empowered to make well-informed comments and decisions.

- Ask schools and teachers to help get students involved in planning and participation in government. Many very successful curriculum modules have been developed for use in classrooms of all ages and sizes.

- Develop specific materials, using a wide variety of media, to let citizens know more about planning and development. Use of the public-access cable channel for informational tapes on growth and development issues.

Public Involvement Participation Strategies

A common criticism of government is "You didn't listen to our concerns." Strategies should be used to get public comments so that we have clear communication and constructive use of the public's ideas.

- Public meetings in neighborhoods should be a requirement before scheduled public hearings for zoning changes.

- The public should be invited to meet in places that are clean, safe and secure, are handicapped accessible, and have plenty of off-street parking.

- Times of public hearings and neighborhood meetings should be chosen to keep from conflicting with other events as much as possible.

- Telephone surveys, mail surveys, or door-to-door interviews should be considered when community views are needed to gauge feelings about significant issues.

- Speakers from interest groups or other agencies should be invited to make presentations to the planning staff, public officials, council, boards, committees and commissions.

- Town hall meetings, workshops, charettes, and brainstorming sessions should be considered as alternatives to audience meetings when appropriate.

- Written records of public comments should be made part of the public record, and city staff should indicate a response to each comment.

3

Population Forecasts

For planning purposes, a study area that includes four land areas of importance to the ity were reviewed. The study area accounts for 29 percent of the 957 square miles within Denton County.

These include:

- *The area within the current city limits*
- *The area that is expected to become urbanized*
- *The area within the city's current 3-½ mile extraterritorial jurisdiction (ETJ)*
- *The area within the city's future 5-mile extraterritorial jurisdiction (ETJ) once a population of 100,000 is achieved within the city limits*

City Background

Denton is located about thirty five miles north of Dallas and Fort Worth where interstate highways 35 East and 35 West join. The Dallas-Fort Worth region, a sixteen county region known as the Metroplex, has grown substantially in recent decades, except during an economic downturn in the late 1980s. The regional economy diversified considerably since the 1980s, and sustained growth is expected.

The City of Denton is the seat of Denton County government and is located approximately in the geographic center of the county. Excellent highway and rail corridors serve the city. It is close to two major airports: Dallas-Fort Worth (DFW) International Airport, second only to Chicago's O'Hare Airport in passenger traffic, and Alliance Airport, the nation's first all-cargo airport.

Summary of Land Areas Used For Study

Area	Acres of Land	Square Miles of Land
City of Denton	39,475	61.68
Urbanizing Area	24,296	37.96
3-1/2 Mile Extraterritorial Jurisdiction	79,315	123.93
5 Mile Extraterritorial Jurisdiction	32,966	51.51
Total Study Area	176,051	275.08

Market Position

Three factors stimulate economic development and corresponding population growth within Denton County: proximity to air service, the highways linking the city with Dallas and Fort Worth employment centers, and the presence of major public institutions within the city. The University of North Texas and Texas Woman's University provide a significant economic base for the city and provide a skilled labor pool for local employers. Denton County, the City of Denton, several school districts, Denton State School, and the Federal Emergency Management Agency provide additional economic base.

Denton is located to take advantage of metroplex growth and development activities. Because of regional development patterns, real estate in the Denton area has become very desirable. Land in and around Denton is relatively inexpensive when compared to other rapidly developing areas of the metroplex such as southern Denton County and southern Collin County. Major

3 Population Forecasts

land developers are beginning to be attracted to the city. Rapidly growing communities such as Carrrollton, Flower Mound, Lewisville, Corinth, and Frisco in southeast Denton County and southwest Collin County have been experiencing annual growth rates throughout the 1990s ranging from ten to thirty percent.

Over time, Denton will most certainly become more densely populated. With only forty percent of the land area developed within the current city limits, significant tracts of land within the core area of the city, and at its periphery are not developed.

Holding Capacity

The latest data available (1995) from the North Central Texas Council of Governments projects Denton's current population density at approximately 1,220 people per square mile within the city limits. About forty percent of Denton land within the city is developed, with a density of 3,655 people per square mile. The average density observed for Metroplex cities is 2,461 people per square mile. This ranges from University Park at 6,162 per square mile to Rockwall at 826 people per square mile. Using the 100-square mile urbanizing area as Denton's build-out land area, the following table of holding capacities is derived:

Holding Capacity for the Denton Urbanizing Area Based on Various Population Densities

Description	Area in Square Miles	Population Density - People per Square Mile			
		1,300	1,750	2,250	2,640
Urbanizing	99.6	130,000	176,000	224,000	263,000

Source: The City of Denton Planning & Development Department, January 1999

Over time Denton will most certainly become more densely populated. With only forty percent of the land area developed within the current city limits, significant tracts of land within the core area of the city and at its periphery are not developed. These areas will probably be developed within the time frame of the population forecast. In addition, areas outside the current city limits will be annexed into the city and developed, primarily for residential uses. The best population estimate of the holding capacity of the urbanizing area is approximately 224,000, based on an average density of 2,250 people per square mile, less than the average for other metroplex cities. Within the current city limits of about 62 square miles, the population estimate of the holding capacity is 139,500 people.

3

Population Forecasts

Population Estimates:

- *The 1999 population forecast estimates a "most likely" population for the 275 square mile Denton study area of 215,100.*
- *The City of Denton is expected to grow to one hundred square miles with a population of 183,600, or eighty five percent of the study area population.*
- *In 1998 it is estimated that approximately eighty six percent of the study area population lived within the City of Denton.*
- *The population forecasts are only an estimate of the city's potential population growth.*
- *The estimates are used for planning purposes by the city to gauge services and development, which may occur in the future.*

Population Forecasts

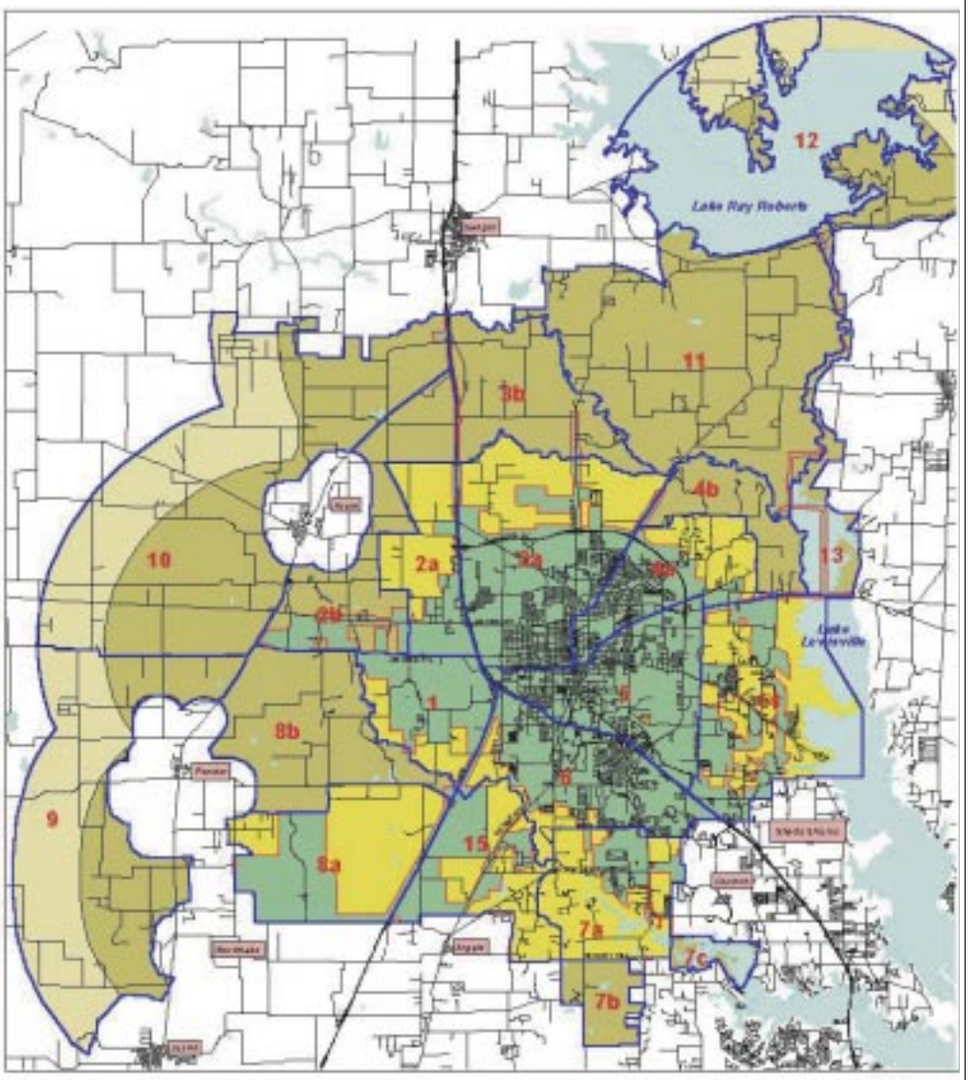
Denton Planning Area and City of Denton Forecasts of Additional Population and Land Area 1999 - 2020

		5-mile ETJ Study Area		City of Denton		
Year	Annual Percentage Growth	Annual Numeric Growth	Study Area Population	Population	Area in Sq. Miles	Density in Population per Sq. Mile
1999	3.0%	1,850	87,930	77,300	61.7	1,220
2000	3.0%	2,180	90,570	77,560	62.0	1,251
2001	3.0%	2,680	93,280	79,890	64.0	1,248
2002	3.0%	2,760	96,080	82,280	66.0	1,247
2003	3.0%	2,840	98,970	84,750	68.0	1,246
2004	5.0%	4,880	103,910	88,990	70.0	1,271
2005	5.0%	5,130	109,110	93,440	72.0	1,298
2006	5.0%	5,380	114,570	98,110	74.0	1,326
2007	5.0%	5,650	120,290	103,020	76.0	1,356
2008	5.0%	5,940	126,310	108,170	78.0	1,387
2009	5.0%	6,230	132,620	113,580	80.0	1,420
2010	5.0%	6,550	139,260	119,250	82.0	1,454
2011	5.0%	6,880	146,220	125,220	84.0	1,491
2012	5.0%	7,200	153,530	131,480	86.0	1,529
2013	5.0%	7,680	161,210	138,050	88.0	1,569
2014	4.7%	7,700	168,910	144,540	90.0	1,606
2015	4.5%	7,700	176,610	151,040	92.0	1,642
2016	4.3%	7,700	184,310	157,540	94.0	1,676
2017	4.1%	7,700	192,010	164,000	96.0	1,708
2018	4.0%	7,700	199,710	170,560	98.0	1,740
2019	3.8%	7,700	207,410	177,040	99.0	1,783
2020	3.7%	7,700	215,110	183,590	99.6	1,843
1999- 2020			+145%	+144%	+61%	+51%

3

Population Forecasts

Population Forecasts by Sub-Area Map



Legend

Land Area	*Square Miles*
Current Denton City Limits	61.68 square miles
Urbanizing Extraterritorial Jurisdiction	39.62 square miles
3-1/2 mile Extraterritorial Jurisdiction	122.27 square miles
5 mile Extraterritorial Jurisdiction	51.51 square miles
Total	275.08 square miles

Notes:

- *Subareas 7b and 7c are currently within Denton's ETJ, but are not considered as probable annexations into the city.*
- *All information reported on this map is accurate on the date of its creation.*
- *ETJ boundaries are estimated. Verification of actual ETJ has not taken place for all areas.*

By studying the natural and man-made opportunities and constraints to development in Denton, the growth management strategy capitalizes upon the city's assets. This approach helps guide growth where it is most appropriate, as well as preserve and protect environmentally sensitive areas.

3 Growth Management

Introduction

The growth management strategy and plan are part of the development of the overall comprehensive plan. The growth management strategy and plan were adopted in January of 1999. The strategy has been updated to reflect changes in strategy that occurred with the development of the comprehensive plan.

Process

The process of developing the growth management strategy and plan involved detailed investigations into the existing natural and man-made systems. Multiple methods were utilized to accomplish this investigation, including field surveys, satellite imagery, aerial photography, and "ground-truthing" (verifying data on-site).

Specifically, the following information was studied:

- Existing land use pattern
- Floodplains
- Soils
- Vegetation and tree cover

This information was assembled into a composite suitability map, which combined the various constraints to development and indicated portions of Denton that were more suitable, less suitable, or unsuitable for development.

By studying the natural and man-made opportunities and constraints to development in Denton, the growth management strategy capitalizes upon the city's assets. This approach helps guide growth where it is most appropriate, as well as preserve and protect environmentally sensitive areas. The development suitability was utilized in the development of the alternative development scenarios and growth management plan.

Composite Analysis

The analysis of the existing natural and man-made systems identified a number of opportunities for and constraints to development. When considered cumulatively, some areas become less desirable to develop than others:

3 Growth Management

- Existing Land Use Development Pattern

  The City of Denton has developed with a variety of residential uses, with most of the central portion of the city being developed. Retail and nonresidential development is generally located in the downtown area, along IH 35, along US 380, and along Loop 288.

- Floodplains

  Floodplains should be preserved as natural areas because of their important environmental function. It is recommended that floodplains not be developed.

- Soil Suitability for Urbanization

  Soils may increase the construction cost for structures and roadways, and are a moderate constraint to growth in some areas. Denton development has overcome these conditions in the past through site preparation and engineering.

- Trees

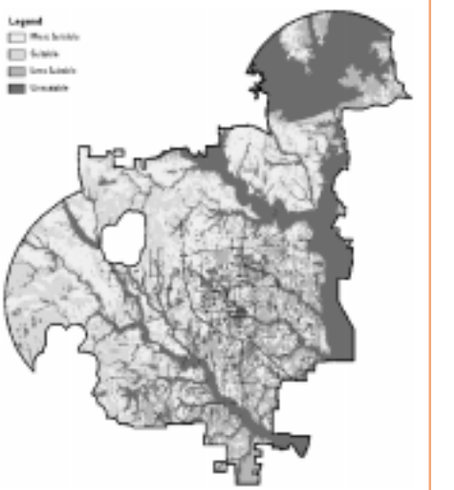
  The eastern half of Denton contains many mature forested and treed areas that add to the environmental quality of the city in the areas of air quality, drainage control, noise abatement, and aesthetic value. Future development should occur in a manner that preserves forested and treed areas, which in some areas may constrain growth, depending upon the allowable land uses in treed areas.

These factors were overlaid using ERDAS Imagine software to develop a composite opportunities and constraints map. Because of multiple factors associated with the 100-year floodplains, flooding, poor soils, adjacent steep slopes, and mature tree stands, it is recommended that these areas not be developed. Most of the rest of the city is suitable for some type of development with soils and vegetation placing less stringent limitations upon development.

Alternative Development Scenarios

To fully explore the options of growth management and land use, four varying alternatives were presented to exhibit the differences in how patterns of development could be applied. These alternative development scenarios are a series of maps and major implications of development that implementation would have on the city. The four hypothetical scenarios were developed to identify a physical form for the community; the potential implications related to development patterns, land use, transportation, environmental and urban design; and, the potential city policies that should be considered resulting in the development of the growth management strategy for the city. The purpose of these scenarios was to review overall impli-

Composite Suitability Map



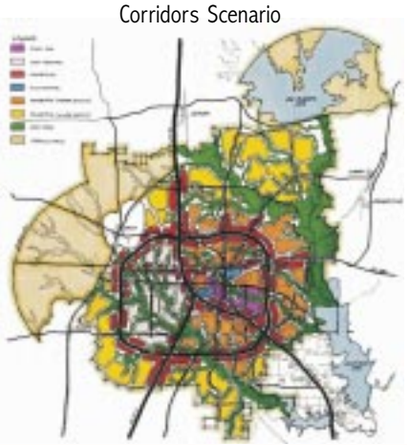
The Composite Suitability Map overlays various factors to produce "opportunities and Constraints" that exist in Denton.

These include:

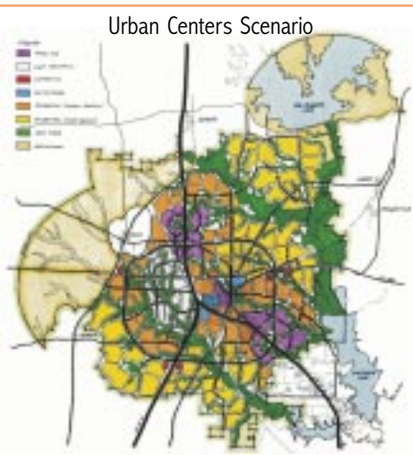
- *The man-made or built environment*
- *the 100-year floodplains and bodies of water*
- *Soil types and slopes*
- *vegetative coverage and related habitats*

Growth Management

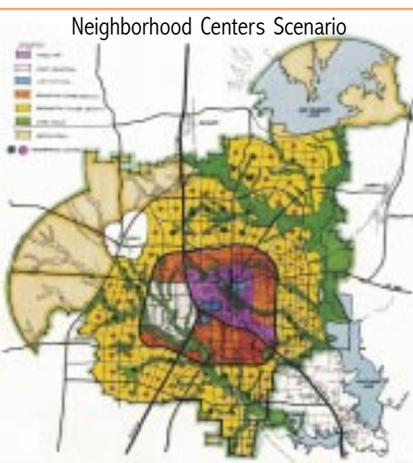
Corridors Scenario



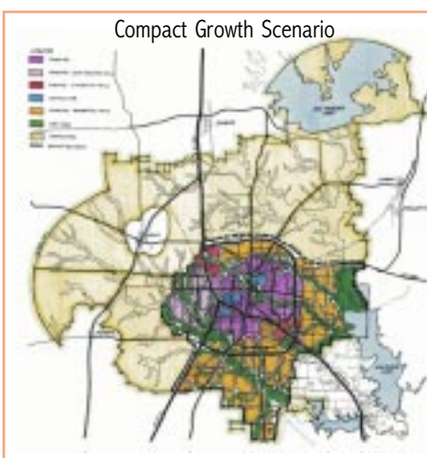
Urban Centers Scenario



Neighborhood Centers Scenario



Compact Growth Scenario



cations of different options for land use, as a guide for development of the comprehensive plan. All four scenarios are distinctly different, although there are many common elements among them. The four hypothetical scenarios that were explored include:

- Corridor Scenario

  The corridor scenario includes patterns of high intensity development occurring in patterns of bands along major thoroughfares and highways with limited reinvestment, redevelopment, or infill development. Overall a low-density land use pattern with highest densities occurs along the roadways. This scenario would increase the service area for public facilities, utilities, and transportation.

- Urban Centers Scenario

  A focus of mixed commercial, office and higher density residential land uses exemplifies the urban centers scenario. Growth would occur around designed centers within the city, downtown, northwest Loop 288, IH 35, and southeast Loop 288 and IH 35E, and an industrial node surrounding the Denton Municipal Airport. Strictly residential areas would remain similar to current patterns with a higher emphasis on transportation improvement.

- Neighborhood Centers Scenario

  Lower intensity and density of use contrasts the neighborhood centers from the urban centers scenario. Residential uses based on a gridded street network would center around local, limited-use retail, parks or schools. Residential developments occur within walking distances of the neighborhood center. Commercial and industrial districts exist.

- Compact Growth Scenario

  Growth would be accommodated within a limited area. This development pattern increases the city's use of redevelopment, reinvestment and infill development and higher densities in order to grow. It allows less investment in capital costs for public facilities and infrastructure and lends the ability to design more efficient public transportation systems.

Growth Management Strategy

The growth management strategy is a composite of the desirable elements exhibited in the four alternative development scenarios, and also reflects existing land use patterns within the city. The growth management strategy and plan are included in the comprehensive plan, and have been revised and supplemented as necessary.

3 Growth Management

Policies

POLICIES

Growth will continue to occur in Denton, and the rate of growth will likely accelerate in the near future. Proactive planning is considered the preferable approach, defining the rules by which growth will benefit the most people. Proactive planning requires preparation and an investment of resources in anticipation of growth. Public involvement is critical to plan success.

Anticipation of the adverse impact of growth is a key element in proactive planning. In reactive planning, preparation is not necessary. Without proactive planning, growth is solely driven by consumer demand, and planning for governmental services and utility systems is done after the fact. The less preferable alternative is to react to growth and its impacts as they happen. Preparation is not necessary. Consumer demand drives the location and type of new development, and governmental services and utilities systems are designed in response to growth trends. Adverse impacts are typically more expensive to fix than to prevent. Proactive planning is staying a step ahead of growth; reactions to growth are always a step behind.

The growth management strategy contains policies that keep Denton a step ahead. All other policies in the comprehensive plan must adhere to the growth management strategy.

- Essential services provided by government must be maintained at the highest levels of quality possible. City services intended to protect and preserve public health and safety must be provided to all existing and future Denton stakeholders.
- The growth management strategy should support the coordination of public services with private development. Development patterns that make the most efficient use of public services and infrastructure should be promoted. The true impact of private development should be accurately identified and assessed in proportion to public costs and benefits.
- The community should establish development rules that are clearly stated, administered efficiently, and enforced consistently. If development is proposed that does not satisfy all the rules, it should not be allowed.
- Land uses should be balanced to maintain quality of life, a diverse economy and a well-proportioned tax base. The city will provide opportunities for the development of a full array of land uses within the city.
- Areas of the city susceptible to environmental damage, where infrastructure systems are stressed, or where development would contradict city planning objectives should be identified and protected.

Development patterns that make the most efficient use of public services and infrastructure should be promoted. The true impact of private development should be accurately identified and assessed in proportion to public costs and benefits.

Growth Management

Zoning should be used to identify performance standards that allow land uses in defined districts based on their ability to mitigate potential negative impacts on neighboring properties.

- Zoning should be used as originally intended, to address extreme incompatibilities between land uses. Zoning should be used to identify performance standards that allow land uses in defined districts based on their ability to mitigate potential negative impacts on neighboring properties. A reexamination of the use of zoning as a planning tool should be conducted to reflect community values successfully.
- Development guidelines should be established to allow a wider range of land uses to coexist within close proximity to each other. Site design principles, aesthetic guidelines, and construction standards should be investigated as possible tools to promote land use compatibility and encourage developmental diversity.
- The location, placement, and design of public facilities such as parks, schools, fire stations, libraries, or human service facilities should be used to create neighborhood activity centers.
- Coordination of planning efforts between different units of local government should be encouraged to save money and yield greater benefits to residents.
- Residential development that establishes a variety of lot sizes, dwelling types, and housing prices should be encouraged.
- The city should be designed with all means of transportation in mind. As growth occurs, a variety of mobility systems should be given space to connect people to destinations that are important to daily functions. Public transit, bicycle, pedestrian linkages, and streets should be planned and implemented to serve daily transportation needs safely and conveniently.
- Denton's ability to grow and expand should be identified in the city's annexation strategy. City limits and extraterritorial jurisdiction (ETJ) boundaries should be clearly established, and relationships with other jurisdictions should be determined through interlocal agreements. The annexation strategy should also reflect the costs of service provision and external environmental impacts associated with land located in the ETJ.
- Four major growth aspects have been identified and are subject to the following management preferences:

  Quality - Quality of growth will be strongly managed.

  Quantity - Quantity of growth will be strongly managed through adequate public facilities requirements and proactive planned extensions of services.

  Location - Location of growth will be strongly managed through organization of broad land use patterns, matching land use intensity with available infrastructure, and by preserving floodplains as environmental and open space corridors.

3 Growth Management

Timing - Timing of growth will be strongly managed through tools such as adequate public facilities requirements, capital improvements programming, and phasing of utility extensions.

Growth Management Strategy Assumptions

The following growth management strategy and plan is the preferred alternative for future growth in Denton. The plan combines many of the concepts from the alternative development scenarios that received favorable responses at the community meetings, including the development of neighborhood centers, urban centers, and a strong industrial district within the city, while encouraging the restoration, redevelopment, and infill of parcels in the downtown area and adjacent to the University of North Texas and Texas Woman's University.

The following are the basic assumptions of the Growth Management Plan:

- The Planning Horizon is for the year 2020.
- The estimated population in the year 2020 will be 215,000 for the entire study area, which includes the City of Denton and its 5-mile extraterritorial jurisdiction (ETJ).
- The population of the City of Denton in the year 2020 will be 183,590, with an additional 45 square miles of ETJ expected to receive urban services and be considered for annexation.
- The city may accommodate the additional population that the market dictates.
- The mix of residential and commercial land uses will be approximately the same as currently exists; industrial land uses will be higher, and institutional uses will be lower.
- Within residential land uses, the percentage of multifamily to single-family uses will be less than exists today.
- The zoning mix in 2020 may or may not be the same as currently exists.
- Denton will continue to encourage a range in housing types and densities in order to respond to the needs and desires of its residents.
- Average residential densities will be the same as exist today.
- There will continue to be a citywide average of 2.8 people per single-family residential unit and 1.8 people per multifamily unit.
- The citywide average density for single-family development will be three units per gross acre.
- The citywide average density for multifamily development will be fourteen units per gross acre.
- The minimum lot size for single-family low-density development outside the urbanizing area will be based on Denton County requirements in order to support a septic system.

QUALITY, QUANTITY, LOCATION AND TIMING OF GROWTH WILL BE STRONGLY MANAGED.

GROWTH MANAGEMENT TOOLS MAY INCLUDE:

- *ADEQUATE PUBLIC FACILITIES REQUIREMENTS*
- *ORGANIZATION OF LAND USE PATTERNS*
- *PRESERVATION OF FLOODPLAINS*
- *CAPITAL IMPROVEMENTS PROGRAMS*
- *PHASING OF UTILITY EXTENSIONS*
- *DESIGN STANDARDS*

Denton will continue to encourage a range in housing types and densities in order to respond to the needs and desires of its' residents.

3 Growth Management

- Based upon the anticipated quantities and locations of future population, and the city's existing land use mix, the city will need to accommodate approximately 15,000 additional acres of single-family development, and 1,200 additional acres of multi-family development.
- Based upon the additional residential development and the existing land use mix, the city will need to accommodate approximately 3,000 acres of industrial development, 3200 acres of commercial development, and 2,700 acres of institutional development.
- The plan encourages infill development, restoration and redevelopment within the existing center city and surrounding the universities.

Specific Aspects of the Growth Management Strategy

- Anticipating and allowing growth along the southern borders of the city, provided development pays its own way, except in cases where the city wishes to provide incentives to encourage its desired urban form or corridors.

- Adopting an aggressive annexation policy in order to manage the density and quality of growth within current ETJ land, and to maintain the existing certificate of convenience and necessity (CCN).

- Using infrastructure master plans to develop expectations of adequate levels of public services. In areas where water and sewer services are provided, moderate density development can be accommodated. In areas where services are not available, low-density development will be necessary, using septic systems and wells.

- Single-family low-density residential uses will be allowed to develop in areas outside of the urbanizing areas. The size of the lots in those areas will be based upon the area required to support a septic system, and will vary based upon each location's soils. The remaining land within those areas would remain as agricultural uses.

- Within the urban and urbanizing areas, higher density residential patterns would be allowed to occur, if strict quality standards are observed, and:

    - These areas could be developed as neighborhood centers that are developed in an inwardly oriented manner with a focus upon the center of the neighborhood.
    - These developments should be established in a manner that locates the center of

3 Growth Management

The plan encourages infill development, restoration and redevelopment within the existing center city and surrounding the universities.

the neighborhood within a five to ten minute walking distance from the edge of the neighborhood.

- The center would contain uses necessary to support the surrounding neighborhood. These support uses could include service-oriented retail such as a small grocery, hair salon, dry cleaner, or small professional offices.
- Residential uses could occur at higher densities with town homes or residential flats above service oriented uses.
- Open space would be encouraged in neighborhood centers with park uses including central neighborhood "greens" and floodplain preservation.
- Civic uses such as fire stations, schools, libraries, and mass transportation nodes would be encouraged to be essential elements of neighborhood centers as landmarks that are a focus to the neighborhood.
- The mix of uses identified to support each neighborhood may be developed to incorporate shops on the ground floor and offices or residences on the upper floors.

- Future residential development within established residential areas would be developed in a manner that responds to the existing residential development with compatible land uses and development patterns. Existing neighborhoods within the city will be protected and preserved.

- The center of the infill development would be in the downtown district where preservation, restoration, redevelopment and infill would be the focus. Also, it is recommended that the city consider creating "University Districts" at UNT and TWU. These districts would focus on developing compatible, supporting land uses adjacent to the universities.

- Accommodate multifamily residential development in a variety of forms. Many of the deteriorating apartments adjacent to the universities could be renovated or redeveloped as new student housing in order to better support the needs of UNT and TWU. Additionally, other types of attached residential development such as townhomes should be considered. It is recommended that multifamily development be located in areas that provide transitions between lower and higher intensity uses, and in a manner that will not negatively impact surrounding uses. Additionally, multifamily uses should be located in small groupings around the city in a manner that provides a mix of uses and densities, rather than concentrating all multifamily uses in one area which can have negative impacts upon the city.

- Accommodate future commercial uses at key nodes throughout the city. It is recom-

Within the urban and urbanizing areas, higher density residential patterns would be allowed to occur, if strict quality standards are observed. Multifamily uses should be located in small groupings around the city in a manner that provides a mix of uses and densities, rather than concentrating all multifamily uses in one area ... of the city.

mended that commercial uses not be located continuously along corridors in a "strip" manner.

- Accommodate businesses in several activity centers. At the intersection of Loop 288 and IH 35, the plan calls for an activity center. This center would be a mixed-use center containing office, retail, and high-density residential uses. This center could also include some research or technological uses that would be compatible with the activities at the universities. A second activity center south of the intersection of Loop 288 and IH 35E could contain medically related offices with a mix of supporting uses. A third activity center on the south side of town would be located at the city's ETJ along IH 35 W. This center would probably develop after the first two activity centers and could support general office uses or activities supporting Alliance Airport.

- In order to support the proposed activity centers, and to provide additional support for the universities, the city should consider extending the existing runway at the airport to 7,500 feet in length in order to accommodate business jets. Areas immediately adjacent to the airport would be reserved for industrial uses. Industrial uses are typically very compatible with airports due to noise restrictions. These could include light manufacturing uses, distribution centers, or other industrial uses that are compatible with the city's environmental quality policies. Existing floodplains in this area could provide a very effective visual buffer between industrial uses and other surrounding uses.

- Locate future parks and institutional uses as required to support future residential development. These uses will be located in a manner that encourages developing a sense of community within neighborhoods. The layout of neighborhoods should incorporate these facilities, with strong pedestrian links from the surrounding neighborhoods, and with links to the city's regional pedestrian and transportation systems.

- In all areas, preserve the 100-year floodplain in order to provide adequate drainage systems, preserve wildlife habitats, for passive recreational uses, for the development of trails systems, and for providing buffers between incompatible land uses.

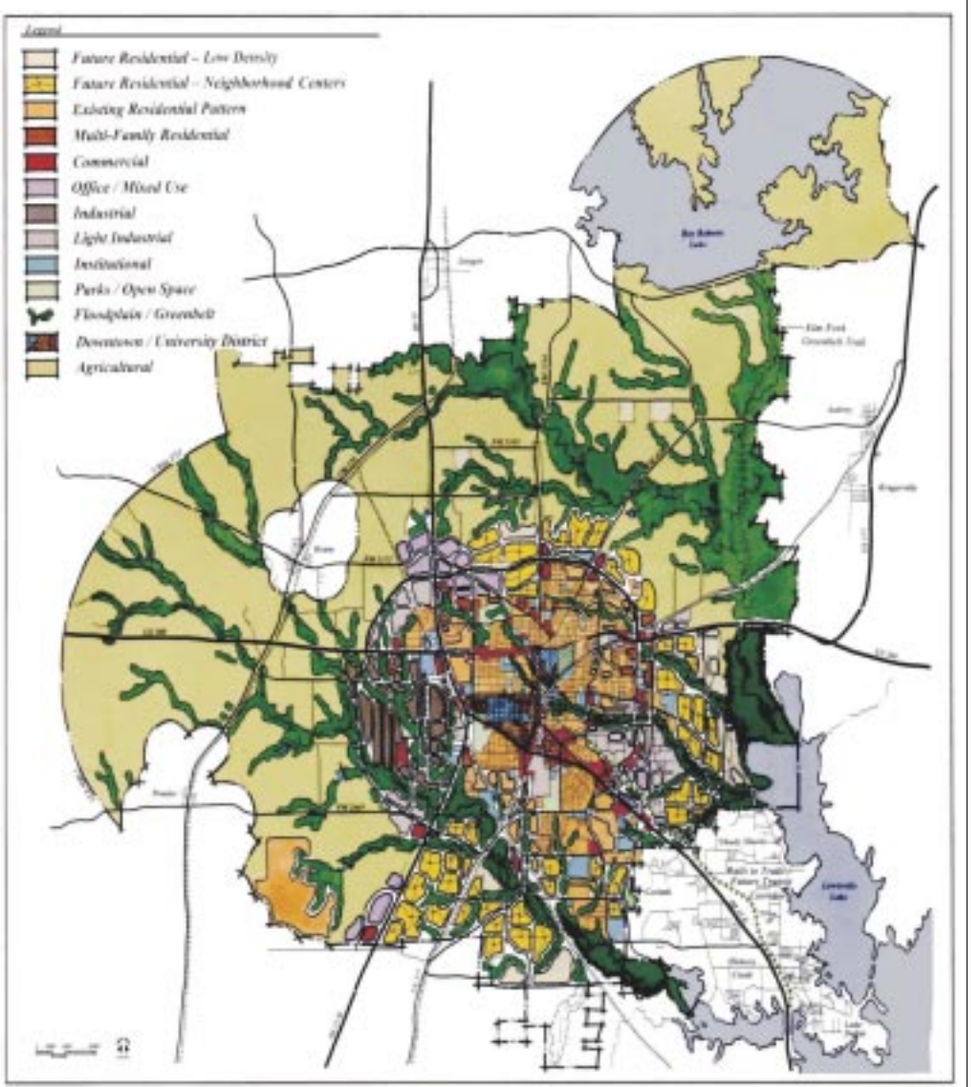
- Evaluate the value and function of the natural environment within the study area to identify areas with unique ecological significance for consideration on a more site-specific basis.

- The city's urban design objectives will be considered on a more site-specific basis in the comprehensive plan. Adopt design standards for all types of development.

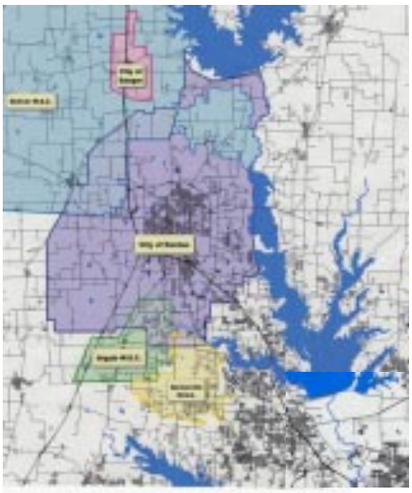
3

Growth Management

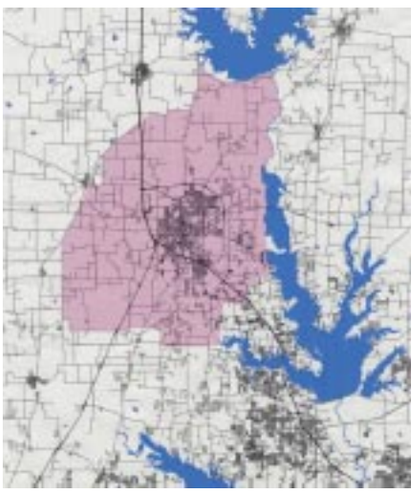
Growth Management Plan



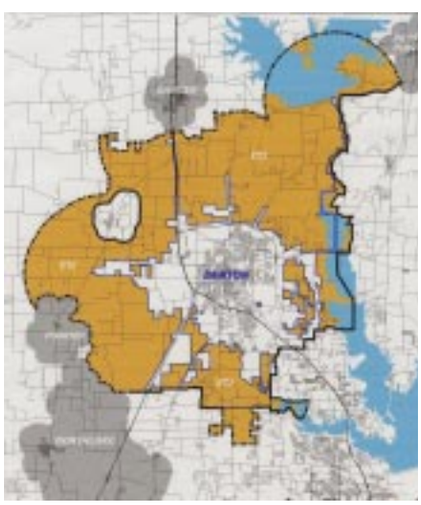
The layout of neighborhoods should incorporate parks and institutional uses, with strong pedestrian links from the surrounding neighborhoods, and with links to the city's regional pedestrian and transportation systems.



Water CCNs



Wastewater CCNs



Interlocal Agreements

3

The Edge

Introduction

The edge addresses the relationships between the developed parts of the city and its undeveloped edges. A period of rapid growth is projected, and significant challenges will be faced regarding Denton's edges during the next twenty years. The city currently holds about 77,000 people. By contrast, areas on the perimeter of Denton will accommodate 110,000 additional persons by the year 2020. Not all of the areas that will grow are inside the city at this time. A 3-1/2 mile extraterritorial jurisdiction, or ETJ, extends outward from the city limits, which can be annexed and made part of the city if municipal services are made available to the annexed properties. Another important boundary at the city's edge is the (CCN) certificate of convenience and necessity. CCNs arecertified by the Texas Natural Resources Conservation Commission (TNRCC) for water, wastewater, or other utility services. The city water and wastewater CCNs grant exclusive authority to provide these services within specific boundaries.

Many cities grow from the center outward, through annexation, by extending utilities and services incrementally from existing points of service. As a member of the Dallas Fort Worth metroplex region, extending water and sewer lines is very expensive and a "leapfrog-effect" occurs when thousands of acres of undeveloped land are bypassed. Police and fire protection, solid waste collection, and other services likewise experience stress when "urban sprawl" occurs. Should the City of Denton decline requests to provide services to properties within its ETJ, particularly for water and wastewater services, other providers such as Municipal Utility Districts could serve ETJ areas in place of city government. Development would then be exempt from zoning and building code requirements, creating an environment of uncertain density, land use patterns, and unmanaged growth.

As a member of the Dallas-Fort Worth metroplex, Denton must also consider the impact of edge development on neighboring municipalities. Several interlocal agreements have been made with other cities such as Argyle, Corinth, and Shady Shores, and help to define boundaries between municipalities to the benefit of property owners near city borders.

When Denton's population surpasses 100,000, the ETJ will extend five miles from city borders. This would raise Denton's ETJ from 161 square miles to 213 square miles. State annexation statutes will be reflected in any annexation plans for the city.

3 The Edge

Policies

POLICIES

Proactive planning is considered the preferable approach, and proper edge planning is important to define a growth management strategy that will benefit the most people. Proactive planning requires preparation and an investment of resources in anticipation of growth. Public involvement is critical to plan success. Anticipation of potential adverse impacts of unmanaged growth is a key objective. The less preferable alternative is to react to growth and its impacts as they happen. Adverse impacts are typically more expensive to fix than to prevent. Proactive planning is staying a "step ahead" of growth; reactions to growth are always a step behind. The edge policies are intended to keep Denton a step ahead.

Denton should endeavor to set finite boundaries that make sense, rather than allowing annexations to set arbitrary ETJ edges. ETJ edge areas that are isolated or pose accessibility problems should be carefully evaluated to determine if service provision can occur on a cost effective basis. Political subdivisions adjacent to Denton, such as Argyle or Corinth, are obvious hard edges to Denton's jurisdiction. Geographic boundaries can also be used advantageously – water bodies such as Lewisville Lake and Lake Ray Roberts represent natural barriers that define Denton's current edges. Watershed delineation is another method useful to determine the feasibility of jurisdiction extensions, because watersheds define directional gravity flow for sewerage and drainage systems to a common point and water quality objectives can be addressed within individual basins. The Hickory Creek watershed (to the west) and Clear Creek watershed (to the north) represent two edge basins that may help to define jurisdiction expansion objectives. Proactive planning should be utilized to perform cost-benefit analysis whenever edge expansions are considered.

- Zoning should be used as originally intended, to address extreme incompatibilities between land uses. Zoning should be used to identify performance standards that allow land uses in defined districts based on their ability to mitigate potential negative impacts on neighboring properties. A reexamination of the use of zoning as a planning tool should be conducted to reflect community values successfully.
- Development guidelines should be established to allow a wider range of land uses to coexist within close proximity to each other. Site design principles, aesthetic guidelines, and construction standards should be investigated as possible tools to promote land use compatibility and encourage developmental diversity.
- The location, placement, and design of public facilities such as parks, schools, fire stations, libraries, or human services facilities should be used to create neighborhood activity centers.
- Coordination of planning efforts between different units of local government should be encouraged to save money and yield greater benefits to residents. Residential

Policies include:

- *Essential services provided by government must be maintained at the highest levels of quality possible. City services intended to protect and preserve public health and safety must be provided to all existing and future Denton stakeholders.*

- *The growth management strategy should support the coordination of public services with private development. Development patterns that make the most efficient use of public services and infrastructure should be promoted. The true impact of private development should be accurately identified and assessed in proportion to public costs and benefits.*

The Edge

Policies include:

- *The community should establish development rules that are clearly stated, administered efficiently, and enforced consistently. If development is proposed that does not satisfy all the rules, it should not be allowed.*

- *Land uses should be balanced to maintain a diverse economy and a well-proportioned tax base. The city will provide opportunities for the development of a full array of land uses within the city.*

development that establishes a variety of lot sizes, dwelling types, and housing prices should be encouraged.

- The city should be designed to accommodate people rather than automobiles. As growth occurs, a variety of mobility systems should be given space to connect people to destinations that are important to daily functions. Transit, bicycle, and pedestrian linkages should be planned and implemented to serve daily transportation needs safely and conveniently.
- Denton's ability to grow and expand should be identified in the city's annexation strategy. City limits and extraterritorial jurisdiction (ETJ) boundaries should be clearly established, and relationships with other jurisdictions should be determined through interlocal agreements. The annexation strategy should also reflect the costs of service provision and external environmental impacts associated with land located in the ETJ.
- Denton will endeavor to protect the integrity of neighboring communities where development in Denton occurs adjacent to those communities.

Strategies

STRATEGIES

- The city will prepare an annexation plan, in accordance with state legislation and with a minimum three year time horizon, to coordinate the availability of municipal services with areas likely to experience development pressure at urban densities. The city annexation plan will be considered a master plan that requires coordination with other master plans that address water, wastewater, drainage, transportation, parks, libraries, capital improvement programs and other improvements.

- The city will not encourage development at the edges of its ETJ, in recognition of the higher costs of "leapfrog" development and haphazard urban sprawl. An estimated sixty percent of the land area within the city remains undeveloped, and services are for the most part reasonably available to vacant land inside Denton. Incentives encouraging infill development will be implemented, particularly within existing city limits.

- The city will proactively annex land within its southern ETJ and other urbanizing areas that become attractive for urban development due to availability of municipal utilities, and due to location within close proximity to areas being subdivided and developed. Proper management of development in the urbanizing areas depends upon annexation and application of zoning regulations that support the recommended land use plan. Pending anticipated changes in state law regarding municipal

3 The Edge

annexation authority and the vested rights statute, the city annexation plan will identify areas that should be annexed, by priority, to ensure that zoning regulations will govern proposed subdivision plats and subsequent development.

- The city will work with adjacent municipalities to determine shared boundaries, and will execute interlocal agreements based upon mutual agreement that will benefit affected property owners. The municipalities along the western edge of the ETJ – Northlake, Ponder, and Sanger – will be approached to determine if jurisdictional boundaries can be determined through the negotiation of interlocal agreements.

- The ETJ area that extends south from Hickory Hill Road, toward Bartonville and Copper Canyon, will not be annexed by the city. The city will provide wastewater services in this area, and will relinquish its ETJ authority to other interested municipalities that are prepared to provide full services required by state annexation law. Hickory Hill Road will be considered the southernmost boundary of ETJ that will be eventually considered for annexation.

- The ETJ area that extends east from Hickory Hill Road, toward Lewisville Lake between Highland Village and Corinth, will not be relinquished by the city unless all water quality concerns are addressed with respect to Denton's raw water supply, stormwater quality, and other environmental objectives. This area is not likely to be annexed due to the extent of floodplain land under the jurisdiction of the U.S. Army Corps of Engineers.

- The extent of westward ETJ expansion will be analyzed in the city annexation plan. Consideration will be given to the environmental management objectives being formulated for the Hickory Creek watershed, and the feasibility of extending ETJ jurisdiction into other watersheds. Additional research will be devoted to the policy choices involved in extending ETJ boundaries to the west side of Krum, Justin, Northlake, and Fort Worth, where access to ETJ areas will prove difficult.

- The northern edge of Denton ETJ will be determined through examination of the extent of the Clear Creek watershed, the jurisdiction governed by Sanger, and the impact of Highway I-35N. Lake Ray Roberts is a significant resource and geographic barrier to the northeast. The Lake Ray Roberts district plan will contain analyses as needed to prepare edge recommendations in the northeast corner of the city's ETJ.

The city annexation plan will be considered a master plan that requires coordination with other master plans that address water, wastewater, drainage, transportation, parks, libraries, capital improvement programs and other improvements.

3

Land Use

Introduction

The City of Denton land-use plan has been developed to implement the growth management strategy and long-range vision of the community in the city's comprehensive plan. The land use plan focuses on the use of land and future development within the Denton planning area and the Denton urbanizing area. All parts of the land use plan should work together to achieve the vision statement adopted by City Council in 1998.

Vision Cabinet:

A visioning effort, recently conducted over several years, sponsored by the City of Denton, Denton Chamber of Commerce, Denton Independent School District, Denton Record-Chronicle, Texas Woman's University, United Way of Denton County, and the University of North Texas resulted in "A Vision For Denton – the 21st Century."

Policies

POLICIES

In 1999 the City Council adopted the Denton plan policies and growth management strategy that outlined many elements that are directly applicable to the proposed land-use plan.

The vision statement included these concepts:

- Denton is a unique community whose diversity gives it strength. … It is the goal of the Denton plan to insure that growth, development and the use of community resources foster, encourage and promote the preservation of this vital strength.
- Quality, diversity and opportunity are the keys to future success. People with all kinds of different backgrounds …. Houses of all types and sizes … Neighborhood centers will contain small shops and stores that are designed to harmonize with surrounding homes and provide daily necessities for the neighborhood. Residents will be able to walk … bike … use transit … or drive to many destinations throughout the city. There must be a place in the city for all types of development.
- The downtown is and always will be the heart of Denton … Growing numbers of downtown residents will increase the energy level of the downtown … The UNT – downtown – TWU corridor will achieve its full potential as a dynamic and lively area, essential to the well being of the city.
- We need nature as much in the city as in the countryside. Our built environment cannot remain healthy without properly managed land, air and water resources … Lake Ray Roberts and the Elm Fork Nature Conservatory … will prove to be resources of incredible value … Floodplains and creeks will emerge as greenway corridors that serve many needs.

3 Land Use

Key Planning Principles

PRINCIPLES

During development of the Denton plan policies and growth management strategy, four planning principles that captured the essence of citizens' comments were identified and defined. Understanding each principle and their interrelationships are a important to understanding the vision of Denton citizens and the way we can achieve that vision.

Principle of Inclusion:

- The plan vision states that Denton is a city for all types of people and all types of uses. Participants throughout the plan process reiterated this principle. Denton is a city, and a city creates opportunities for all types of people and businesses. To accommodate all types of people, a city must allow all types of housing. And to accommodate a complete range of business opportunities, the city must organize those uses to minimize land use conflicts and must define performance requirements that require property owners to perform to community standards.

Principle of Sustainability:

- Community sustainability can be defined as the ability of a community to use its resources to ensure that its members can attain a high degree of health and well-being, economic security, and a say in shaping their future. This is done while maintaining the integrity of the ecological systems upon which all life and production depends. This implies a sense of fairness and justice within the community, across generations, and across communities. The citizens of Denton stated that they wish to live in a community that is sustainable on all levels.

Goals & Strategies

Within the land use plan framework of neighborhood, community, and regional classifications are found the more traditional residential, commercial, and civic land uses. In addition, the plan also establishes several districts that are of special interest to the community:

- The Downtown University Core District
- Ray Roberts Lake
- The Denton Municipal Airport
- Industrial districts
- Employment districts
- The city's undeveloped 100-year floodplain area

Principle of Balance:

Balance is the condition of stability and cohesion within the systems of governments, residents, organizations, and the environment. A community in balance is resilient and sustainable. The practical aspect of land use balance is reflected in the ratio between residential and nonresidential uses and the relationships among residential and nonresidential land uses. The city must also be aware of the financial implications of its land use plan. The citizens of Denton asked that the city organize its land to accommodate a balance of land uses.

Principle of Maintenance:

A city must allow development to occur that provides the resources to maintain its infrastructure and public facilities. In a community that has a high percentage of public lands, it may be advantageous to create a tax base with multiple revenue sources. The citizens of Denton have asked that the city maintain and enhance the opportunities to expand the tax base of the community and that adequate resources are made available to maintain and enhance public lands and facilities.

3

Land Use

Sprawling and Isolated development patterns result in:

- *Increased vehicle miles traveled to and from home and work, play, school and shopping*
- *Increased number of vehicle trips because there are no opportunities to walk to and from destinations*
- *Increased congestion as traffic from isolated residential development is fed onto limited and constrained paths to other destinations*
- *Increased pollution and noise due to increased traffic*
- *Increased crime due to the isolated nature of residential development*
- *Loss of open space that is available to the public*
- *Destruction of natural and agrarian views*

A summary of developed, undeveloped, and zoned land in the city follows:

1995 Summary of Developed Land Uses

Land Use	Developed Area in Acres	Percent of All Developed Area	Percent of All Area in City
Residential	6,679	50.6%	19.6%
Commercial	1,235	9.4%	3.6%
Industrial	1,167	8.8%	3.4%
Civic	4,086	30.9%	12.0%
Under Construction	17	0.0%	0.0%
Total Developed	13,184	100%	38.8%
Total Undeveloped	20,818		61.2%
Total Area	34,002		100.0%

North Central Texas Council of Governments, 1995 Land Uses

1998 Summary of Zoning Classifications

Zoning Classification	Area in Acres	Percent of All Zoned Area
Agricultural (A)	14,150	39.6
One-Family Dwelling (SF-16)	1,076	3.0
One-Family Dwelling (SF-13)	8	0.0
One-Family Dwelling (SF-10)	2,042	5.7
One-Family Dwelling (SF-7)	3,630	10.2
Two-Family Dwelling (2F)	241	0.7
Multifamily Restricted (MF-R)	44	0.1
Multifamily Dwelling-1 (MF-1)	772	2.2
Multifamily Dwelling (MF-2)	792	2.2
Parking (P)	7	0.0
Office (O)	158	0.5
Neighborhood Service (NS)	15	0.0
General Retail (GR)	433	1.2
Commercial (C)	1,546	4.3
Central Business (CB)	54	0.2
Light Industrial (LI)	4,448	12.4
Heavy Industrial (HI)	117	0.3
Planned Development (PD)	6,209	17.4
TOTAL	35,742	100

City of Denton GIS Zoning Coverage, October 1998

3 Land Use

RESIDENTIAL

Residential Land Uses

Residentially Developed & Zoned Land

A summary of residentially developed land, land uses, and zoned land in the city follows:

1995 Developed Residential Land Uses					
Type of Residential Land Use	Area Developed		Number of Housing Units		Density or Units per Developed Acre
	Percent	Acres	Percent	Acres	
Single-family	82%	5,504	48%	14,387	2.61
Multifamily	8%	547	45%	13,476	24.64
Other Residential	9%	628	8%	2,323	3.70
Total Residential		6,679		30,186	4.52

North Central Texas Council of Governments, 1995 Land Use and 1998 Current Housing Estimates

1995 Developed Residential Land Uses as a Percent of All Developed Land		
Type of Residential Land Use	Area Developed in Acres	Percent of All Developed Area
Single-Family Residential	5,504 Acres	41.7 %
Multifamily Residential	547 Acres	4.1 %
Other Residential	628 Acres	4.7 %
Total Residential Developed Area	6,679 Acres	50.6%
All Developed Area	13,184 Acres	100 %

North Central Texas Council of Governments, 1995 Land Use and 1998 Current Housing Estimates

Definitions:

- *Single Family means one-family detached unit and duplexes*
- *Multi-Family means structures with three or more separate units such as apartments, townhouses and condominiums*
- *Other Residential includes mobile homes inside mobile home parks and free standing units outside parks. Also includes group quarters or nursing homes, orphanages, college dormitories, jail, and military base personnel quarters*

Notes:

- *MF-2 is the zoning classification used for land owned and developed by the University of North Texas and Texas Woman's University, including their golf courses.*

Land Use

Primary Residential Land Use Principles:

- *Preserve Neighborhoods:* *The preservation of existing and future neighborhoods can be achieved by demanding high-quality development and establishing design and construction standards that are fair and evenly applied.*

- *Promote a Diverse Housing Stock:* *The residential component of the land-use plan allows all types of people to live in Denton by allowing a variety of housing types, sizes and prices. The housing stock should reflect the demographics and economic structure of the community.*

- *Limit Sprawl:* *The residential component of the land-use plan should guide development of housing patterns that limits sprawl, accommodates projected housing demand, and allows quality high density development where it is close to jobs, shopping, schools, and transit.*

1998 Residential Zoning Classifications

Zoning Classification	Straight Zoned Area in Acres	Planned Development Zoned Area in Acres	Total Zoned Area in Acres	Percent of All Zoned Land
Agricultural (A)	14,149.8	5.2	14,155.0	39.6
One-Family Dwelling (SF-16)	1,076.1	41.3	1,117.4	3.1
One-Family Dwelling (SF-13)	7.8	25.3	33.1	0.0
One-Family Dwelling (SF-10)	2,042.3	385.4	2,427.7	6.7
One-Family Dwelling (SF-7)	3,629.7	1,053.5	4,683.2	13.1
One-Family Dwelling (Smaller)	0.0	204.8	204.8	0.5
Two-Family Dwelling (2F)	240.7	122.6	363.3	1.0
Multifamily Restricted (MF-R)	44.3	267.7	312.0	0.8
Multifamily Dwelling-1 (MF-1)	771.6	813.0	1,584.6	4.4
Multifamily Dwelling-2 (MF-2)	792.3	0.0	792.3	2.2
Total Residential	22,754.6	2,918.8	25,673.4	71.8
Total Zoned Area	29,532.5	6,209.4	35,741.9	100

City of Denton GIS Zoning Coverage as of October 29, 1998

Housing Target Densities

DENSITY

Housing should be allowed within all land-use districts except for industrial districts. However, long-term care facilities and boarding and rooming houses may be feasible in some cases within the industrial district. The residential densities within Denton will be in accordance with the growth management strategy, as follows:

- There will continue to be a citywide average of 2.8 people per single-family residential unit and 1.8 people per multifamily unit.

- The citywide average density for single-family development will be three units per gross acre.

- The citywide average density for multifamily development will be fourteen* units per gross acre.

3 Land Use

- The minimum lot size for single-family low-density development outside the urbanizing area will be based on Denton County requirements in order to support a septic system.

  **NOTE: Retirement homes, manufactured homes, group quarters, and other housing types were included in this calculation.*

Further definition of residential land use classifications that differ by type, density, and geographic location will be included in the revised development code and citywide zoning map. Four evaluation criteria will be taken into account to determine appropriate site-specific residential densities:

- Design quality
- Adequacy of public facilities
- Amenities provisions
- Compatibility with existing neighborhoods

The elements identified above cannot and will not be separated from each other when relative zoning densities are assessed. Development standards addressing design quality, adequacy of public facilities, and amenities provision will be codified and applied to all development. The rationale governing the regulation of residential density include the following points:

- Dense development can magnify negative impacts if improperly constructed.
- Denton has experienced first hand the detrimental effects of high-density development that have caused resident concern.
- As density increases, the expectations of quality and assurance of proper regulation must increase.
- As density increases, requirements to provide higher quality and more amenities per dwelling unit increases. The city will use these opportunities advantageously.
- Density increases can be used advantageously to protect or acquire lands that are environmentally sensitive or of significant value to the city.

The recommended land use plan identifies the areas that will be treated as separate character areas.

Increased levels of home ownership is an objective that has been determined to provide many potential community benefits, and serves an important public purpose. Different regulatory options will be considered to facilitate the implementation of the stated objective: to achieve a sixty percent single family – forty percent multifamily ratio of residential development over the next twenty years.

Elements of Sprawl

Characteristics of sprawl & those found in Denton:

- *Low residential density. Denton's overall pattern of development is very low density.*
- *Unlimited outward extension of new development. In all directions, Denton is surrounded by undeveloped land.*
- *Spatial segregation of different types of land uses through zoning regulations. Denton's 1969 zoning regulations are traditional Euclidean separation of uses.*
- *Leapfrog development. Recent & past Denton development has been allowed to leapfrog over undeveloped land.*
- *Centralized ownership of land or planning of development. Only in rare circumstances have areas of Denton been master planned.*
- *Transportation dominated by privately owned motor vehicles. The single-occupant vehicle is the norm in Denton. Options are currently limited.*

Land Use

Elements of Sprawl

Characteristics of sprawl & those found in Denton:

- *Fragmentation of governance authority over land use between many local governments. Denton's ETJ has no land use controls and shares common boundaries with several cities.*
- *Great variance in fiscal capacity of local governments within the region. Adjoining and adjacent cities are significantly smaller than Denton.*
- *Widespread commercial strip development along major roadways. The historic commercial development since the 1950s has been strips along major roadways.*
- *Major reliance on the trickle-down process to provide housing for low-income households. There is little new housing dedicated to ownership by low-income households.*

Robert W. Burchell, Naveed A. Shad, et al. The Costs of Sprawl - Revisited. Transit Cooperative Research Program, 1998.

Residential Land Use Classifications

RESIDENTIAL

❑ Existing Residential / Infill Compatibility

Within established residential areas, new development should respond to existing development with compatible land uses, patterns, and design standards. The plan recommends that existing neighborhoods within the city be vigorously protected and preserved. Housing that is compatible with the existing density, neighborhood service, and commercial land uses is allowed.

❑ Neighborhood Centers / New Neighborhoods

Within the undeveloped urban and urbanizing areas of the city, new neighborhoods may develop in traditional patterns. Mixed-use and mixed housing types will be allowed to develop in a pattern of 'neighborhood centers'. These are oriented inwardly, focusing on the center of the neighborhood. These neighborhoods will exemplify the interrelationship between quality of development, density, services and provision for adequate facilities. These developments should locate the center of the neighborhood within a five to ten minute walking distance from the edge of the neighborhood. The center contains uses necessary to support the surrounding neighborhood. These support uses could include service-oriented retail such as a small grocery, hair salon, dry cleaner or small professional offices. Residential uses may occur at higher densities with townhomes or residential flats above service oriented uses. Open space occurs in neighborhood centers with park uses including central neighborhood "greens" and floodplain preservation. Civic uses such as fire stations, schools, libraries, and mass transportation nodes are encouraged to be essential elements of neighborhood centers as landmarks that are a focus to the neighborhood. Limited multistory development in the neighborhood may be developed to incorporate shops on the ground floor and offices or residences on the upper floors.

❑ Large-Lot Rural

Single-family large-lot residential uses will be regulated. Outside of the urbanizing areas the size of the lots will be based on Denton County requirements. The remaining land within these areas would remain as agricultural uses.

❑ Other Residential

Residential uses will occur within the downtown university core, community mixed-use centers, regional mixed-use center, and employment centers. Some areas of the downtown university core may not be appropriate for residential uses. Multistory structures may develop uses

3 Land Use

other than residential such as office, retail, and service uses. Uses may occur in separate structures but follow a pattern of development that focuses on the mixed-use center.

Residential Land Use Goals & Strategies

GOALS

Balancing Residential Land Use Goals

Accommodate balanced future residential developments:

- Between residential and nonresidential land uses.
- Among the various types, styles and prices of housing.
- Maintain about fifty percent of the developed land area within the city as residential land uses. Increase the percentage of owner-occupied housing to sixty percent by the year 2020.
- Revise the zoning regulations and consider requirements for a variety of housing types in new development.

STRATEGIES

Balancing Residential Land Use Strategies

Revise the zoning and subdivision regulations to affect desired residential land use including:

- For land that has been developed, maintain minimum residential lot sizes in the zoning code to protect existing neighborhoods.
- For undeveloped land, take into account both minimum residential lot size and density ranges that are consistent with the principles and concepts of the growth management strategy and plan.
- Establish design standards for all housing according to housing type.
- Encourage a variety of housing styles, types and prices with large, newly developed neighborhoods.
- Provide adequate pubic facilities for all development.

NEIGHBORHOOD CENTERS DEVELOPMENT IS REQUIRED TO ASSURE A MIX OF A VARIETY OF HOUSING WITHIN ANY NEW DEVELOPMENT. TYPES OF HOUSING THAT MAY BE CONSIDERED IN THESE AREAS INCLUDE:

- *STANDARD LOT SINGLE-FAMILY DETACHED DWELLINGS*
- *SMALL LOT SINGLE-FAMILY DETACHED DWELLINGS*
- *ACCESSORY DWELLING UNITS*
- *TWO-FAMILY DWELLINGS*
- *SINGLE-FAMILY ATTACHED DWELLINGS*
- *MIXED-USE DWELLING UNITS*
- *SMALL STRUCTURE MULTIFAMILY DWELLINGS*

Land Use

Neighborhood Centers Development contains uses other than residential that serve the neighborhood and may include:

- *School uses*
- *Civic uses*
- *Post offices*
- *Parks, open space, and floodplains*
- *Mass transportation hubs*
- *Limited service oriented retail & office*
- *Eccumenical & service organizations*

GOALS

Projected Demand for Residential Land Use Goals

- Meet projected demand. Over the period from 1999 to 2020, if growth projections are accurate, nearly 50,000 additional housing units are needed in the city to accommodate projected demand.

STRATEGIES

Projected Demand for Residential Land Use Strategies

- Accommodate 27,000 single-family homes and 18,000 multifamily units by the year 2020 to bring the ratio of single to multifamily housing from 51:49 in 1998 to 59:41 in 2020.
- Establish land use plan density criteria in the development code for all housing according to the growth management strategy.
- Establish mixed-use development areas that allow housing in regional, community, and neighborhood centers and the downtown university core district.

GOALS

Residential Land Use Location Goals

- Increase housing opportunities in the core of the city.
- Accommodate urban-style-housing units in the university areas by 2020.
- Accommodate owner-occupied (condominiums, townhouses, duplexes and single-family detached) housing units inside the loop (Loop 288, I-35 and I-35E).
- Revise the development regulations and allow urban-style housing in mixed-use districts.
- Preserve existing single-family housing stock within the city.

3 Land Use

STRATEGIES

Residential Land Use Location Strategies

- ❑ Define a downtown university core district and develop small area plans that identify specific housing opportunities and goals.
- ❑ Establish a variable-rate impact fee for water distribution and wastewater collection lines that encourages development in the center of the city.
- ❑ Establish criteria for evaluating residential zoning changes to assure consistency with the growth management strategy and Denton comprehensive plan policies and consistency with area plan recommendations.
- ❑ Encourage all new development to be contiguous to existing development.
- ❑ Establish regulations that allow neighborhood-oriented, nonresidential land uses in neighborhood centers.
- ❑ Allow higher-density, single and multifamily housing along major arterial roads and near intersections of arterial and collector roads.

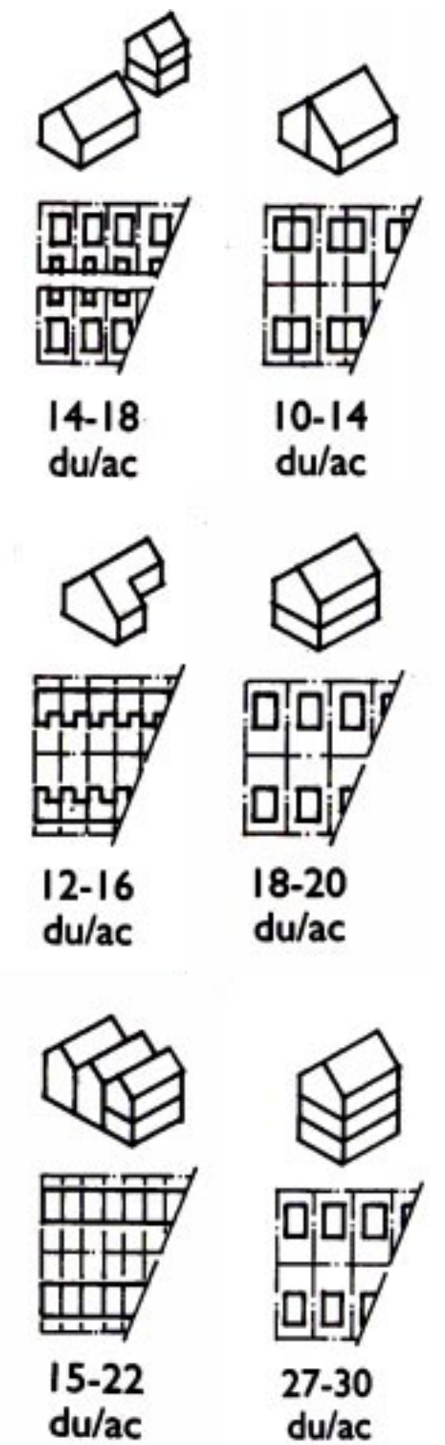
GOALS

Residential Land Use Density Goals

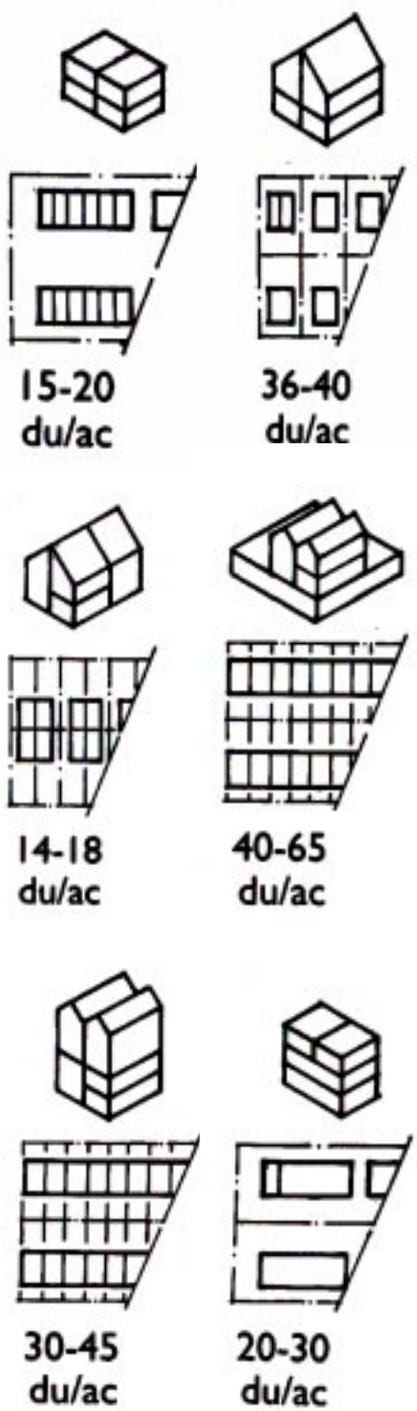
- ❑ To achieve environmental goals, deliver urban services efficiently and allow lower densities elsewhere, higher residential density occurs in regional, community, and neighborhood activity centers, where it makes sense.
- ❑ High densities should be concentrated where infrastructure can support them and near jobs, schools, shopping, and cultural centers.
- ❑ Increase the number of housing units and achieve higher housing densities in the downtown university core and mixed-use centers.
- ❑ Enable the creation of moderate housing densities within neighborhood centers in a mixed-use setting.

Establish regulations that allow neighborhood-oriented, nonresidential land uses in neighborhood centers.

Examples of What Moderate to High Density Looks Like



Examples of What Moderate to High Density Looks Like



STRATEGIES

Residential Land Use Density Strategies

- Allow high-density urban-style housing in appropriate areas within the downtown university core and other activity centers.
- Adopt minimum density standards in activity centers.
- Require adequate levels of service and public facilities prior to residential development. Adequate public facilities shall be a criterion by which zoning is granted.
- Determine the appropriate methods to prevent development in the 100-year floodplain.

Commercial Land Uses

The role of commercial activity in the city is to provide convenient and available retail, service, and office opportunities to residents of the Denton market area. Commercial activity provides return on investment for business and property owners, employment opportunities for local residents, and an economic base for local taxing entities. Commercial activity generally supports community residential activity, but certain aspects of the retail, service, and office uses such as big-box retail, and service and office headquarters may be more regionally oriented and act as basic elements of the economy.

A summary of commercially developed and zoned land in the city follows:

1995 Developed Commercial Land Uses

	Commercial Developed Area	All Developed Area	Percent of All Developed Area
Acres	1,235	13,184	9.4 %

North Central Texas Council of Governments, 1995 Land Use
Definitions: Commercial includes all office structures and retail buildings, such as department stores, repair shops, supermarkets and restaurants, as well as hotels and motels.

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1998 Commercial Zoning Classifications		
Zoning Classification	Area in Acres	Percent of All Zoned Land
Office (O)	158.3	0.4
Neighborhood Service (NS)	14.9	0.0
General Retail (GR)	432.9	1.2
Commercial (C)	1,545.6	4.3
Central Business (CB)	54.5	0.1
Planned Developments	1,739.9	4.8
Total Commercial	3,946.1	11.0
Total Zoned Area	35,741.9	100

City of Denton GIS Zoning Coverage as of October 29, 1998 and City of Denton Planning Dept.; Planned Development Summary; March 1998

Primary Commercial Land-Use Principles

PRINCIPLES

❑ Maintaining Balance

It is the desire of the residents of Denton to maintain and enhance the balance between residential and commercial land uses and assessed values in Denton.

❑ Limiting Strip Development

One of the overall goals of the land use plan is to limit the amount of strip commercial development along Denton's arterial streets, collectors, and highways.

❑ Demanding Quality

The quality of development, particularly commercial development along the city's corridors, is a significant factor in the quality of neighborhoods, the urban environment, and the sustainability of structures. Adequate public facilities shall be a criterion by which zoning is granted.

Commercial land use issues:

- *Inappropriately located commercial uses & strip commercial adversely impact adjacent residential areas as they do not contribute to improved service & function of the residential living areas*
- *Most commercial areas lack a full complement of activity center uses thereby diminishing the role of the center as a meaningful focal point to support community identity*
- *Many commercial centers built under less restrictive standards are unable to meet current standards for parking, landscaping, site design, and other design issues*
- *Stronger design requirements are needed to maintain individual town character & to restore focus on the pedestrian through designs with human-scale orientation*

Land Use

COMMERCIAL PROJECTS SHOULD ADDRESS:

- *BUILDING DESIGN, HEIGHT & MASS*
- *ARRANGEMENT & SITING OF STRUCTURES*
- *DESIGN COMPATIBILITY*
- *ADDRESS THE STREET & PROVIDE FOR PUBLIC SPACES*
- *TREES, LANDSCAPING & NATURAL ENVIRONMENT*
- *YARDS & SCREENING*
- *VISUAL IMPACTS*
- *NOISE & LIGHT IMPACTS*
- *ROADWAY DESIGN CRITERIA*
- *PARKING CRITERIA*
- *PEDESTRIAN & BICYCLE ACCESS & CONNECTIONS*
- *TRANSIT ACCESS & CONNECTIONS*

Commercial Land-Use Classifications

COMMERCIAL

❑ Regional Mixed-Use Activity Center

For a regional activity center, the focus area contains the shopping, services, recreation, employment, and institutional facilities supported by and serving an entire region. A regional activity center could include a regional shopping mall, a number of major employers, restaurant and entertainment facilities, a large high school or community college, and high-density housing. A regional activity center is considerably larger and more diverse in its land uses than any other activity center. It includes vertically integrated uses where different uses may occur on each floor of the building.

❑ Community Mixed-Use Activity Center

The focus area of a community activity center contains the shopping, services, recreation, employment, and institutional facilities that are required and supported by the surrounding community. Thus, a community activity center could contain a supermarket, drug store, specialty shops, service stations, one or more large places of worship, a community park, midsize offices, and employers, high- to moderate-density housing, and perhaps an elementary or middle school. It includes vertically integrated uses where different uses may occur on each floor of the building.

❑ Neighborhood Mixed-Use Activity Center

The focus area of a neighborhood center contains facilities vital to the day-to-day activity of the neighborhood. A neighborhood center might contain a convenience store, small restaurant, personal service shops, church or synagogue, daycare, individual office space, a small park, and perhaps and elementary school. These diverse facilities are ideally located in close proximity to one another in the center, so that all the essential neighborhood facilities are in one convenient location, accessible in a single stop or by walking or biking. It includes vertically integrated uses where different uses may occur on each floor of the building.

❑ Downtown University Core District

Specified commercial areas of the downtown university core district should be places of great vitality, with a mix of educational, residential, retail, office, service, government, cultural, and entertainment development. The health and vitality of the area can contribute in a major way to the city, its local and regional image, and quality of life. It is a place where residents can live, work, learn, and play in the same neighborhood. It includes different uses which may occur on each floor of the building.

3 Land Use

Characteristics of Commercial Development in Mixed-Use Activity Centers			
	Neighborhood Mixed-Use Activity Center	Community Mixed-Use Activity Center	Regional Mixed-Use Activity Center
Purpose	To provide convenience shopping for goods & services to an individual neighborhood.	To provide convenience and comparative shopping for goods & services to an individual neighborhood as well as a number of nearby neighborhoods.	To provide convenience & comparative shopping for goods & services to an individual neighborhood as well as the entire city & surrounding area.
Typical Land Area	Up to 10 acres.	Up to 30 acres.	More than 30 acres
Typical Service Area & Population	Up to 1 square mile & 5,000 people	Up to 8 square miles and 40,000 people	Multi-county area & up to 250,000 people.
Typical Retail Tenant	Convenience grocer	Specialty stores, grocer, drug, hardware	Malls, Big Box Retail & Superstores
Typical Store Size	Less than 4,000 square feet.	Less than 100,000 square feet	More than 100,000 square feet
Typical Purchase Type	Convenience & Services	Convenience & Comparative	Comparative
Typical Shopping Expenditure	Low	Medium	High
Typical Shopping Frequency	High	Medium	Low
Typical Service Types	Personal Services	Automotive Services	Automobile Dealers
Typical Office Types	Individual Office Spaces	Small Office Buidings or Mixed-Use Buildings	Large Office Buildings or Mixed-Use Buildings
Typical Housing Types	Moderate density, small apartment buildings and town homes, housing above commercial/retail uses.	High & moderate density, medium size mixed-use apartment buildings, housing above commercial/retail uses.	High density, large mixed-use apartment or condominiumbuildings, housing above commercial/retail uses.
Local Example	Bell Place	Denton Town Center	Golden Triangle Mall

NOTE: Local examples listed in this table represent aspects of land area, square footage and typical service areas. These examples do not necessarily represent design criteria for architecture or site design.

Typical Neighborhood Mixed-Use Activity Center

Typical Community Mixed-Use Activity Center

Typical Regional Mixed-Use Activity Center

3

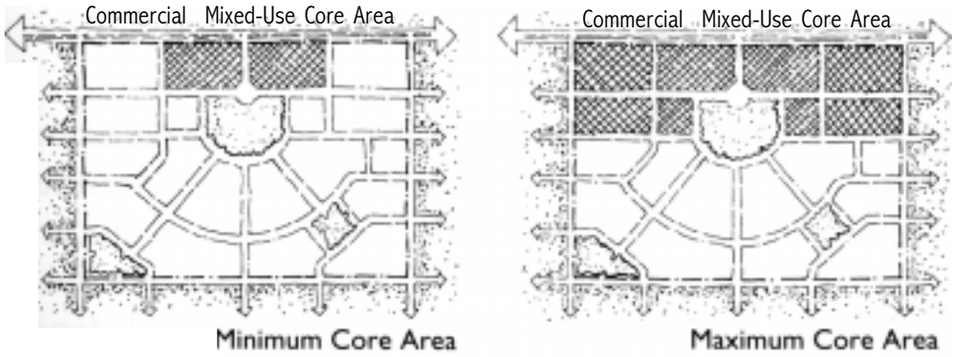
Land Use

WITHIN THE DOWNTOWN UNIVERSITY CORE DISTRICT, THERE ARE MANY SUBAREAS THAT DESERVE SPECIAL ATTENTION, THE FOLLOWING IS A SAMPLE OF THIS AREA:

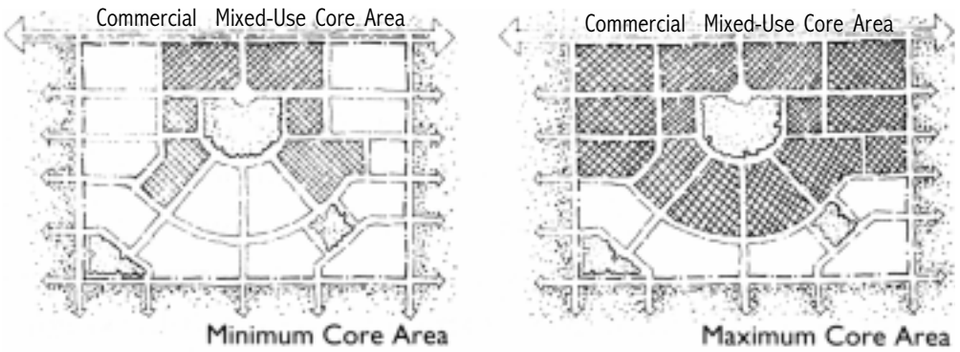
- *THE DOWNTOWN CORE*
- *THE FRY STREET AREA*
- *THE OAK-HICKORY HISTORIC DISTRICT*
- *THE AREA NORTH OF CONGRESS STREET TO UNIVERSITY DRIVE, BETWEEN CARROLL BOULEVARD AND TWU IS A SPECIAL MIXED-USE DISTRICT*
- *THE AREA BOUNDED BY SOUTH CARROLL BOULEVARD (WEST), SOUTH ELM (EAST), WEST SYCAMORE (NORTH, AND EAGLE DRIVE (SOUTH) IS A SPECIAL SUBAREA WITH HISTORIC RESIDENCES*
- *UNIVERSITY OF NORTH TEXAS*
- *TEXAS WOMAN'S UNIVERSITY*

Typical Mixed-Use Center Land-Use Configurations

Neighborhood Center / New Residential Mixed-Use Centers



Community & Regional Mixed-Use Centers



Commercial Goals & Strategies

GOALS

Organization of Commercial Land Use Goals

- To provide for reasonable amounts and distribution of various types of commercial land use in attractive and well-located settings.
- To provide for commercial activities in planned activity or neighborhood centers, rather than on scattered sites or highway strips.
- To develop activity centers where commercial uses, professional offices, and public facilities are located near residential development, while providing safe and convenient pedestrian access.
- To maintain, intensify, and/or expand existing commercial areas, where appropriate, while removing commercial uses from, and stopping intrusions into, areas not appropriate for commercial use.
- To locate neighborhood-oriented, commercial activities conveniently to dwelling units in order to minimize the need for frequent automobile trips for everyday household needs.
- To encourage the location of daycare centers, housing, churches, social clubs, and other quasi-public uses within or adjacent to activity centers in order to share public facilities and help establish these areas as focal points.

3 Land Use

STRATEGIES

Organization of Commercial Land Use Strategies

- As commercial areas are developed, redeveloped, or expanded, the provision of multiple-use activity centers, as identified in the plan, is developed in lieu of development as single-function shopping areas.

- Commercial activity or neighborhood centers are the preferred location for retail, commercial, and community services and encroachment of these uses into other areas is discouraged.

- Commercial development occurs only in activity centers that are appropriate to its service and trade area and that are compatible with adjacent existing and proposed land uses and with existing and programmed public services and facilities.

- Service-commercial establishments locate in appropriate activity centers, rather than at haphazardly chosen locations that contribute to the formation of strip or spot commercial development.

- The location and size of neighborhood centers areas relate to the character and needs of the specific residential development these centers are intended to serve.

GOALS

Commercial Land Use Design Standard Goals

- To provide for convenient, aesthetically pleasing, and environmentally sound commercial opportunities that are easily accessible to the existing transportation network.
- To encourage and provide for the upgrading and maintenance of commercial corridors.
- To develop and maintain a healthy, vital downtown.

Commercial activity or neighborhood centers are the preferred location for retail, commercial, and community services and encroachment of these uses into other areas is discouraged.

Land Use

Neighborhood centers may include uses specifically supportive of the neighborhood, uses in scale with residential structures, ... when the design demonstrates adequately that these uses and structures will be compatible with both the neighborhood center and the surrounding neighborhood.

STRATEGIES

Commercial Land Use Design Standard Strategies

❑ Redeveloped and expanded commercial areas are subjected to high standards of site design and designed in relation to surrounding areas so as to provide safe, visually pleasing vehicle and pedestrian access without compromising the character and appearance of the built and natural environments.

❑ Activity centers are integrated with surrounding streets and uses, where appropriate, by means of landscaping, berms, fencing, and the siting of structures. Facades, architectural screening (walls, fences, parapets, etc.) and a unified landscape treatment is consistent and creates an identifiable activity center.

❑ Neighborhood centers may include uses specifically supportive of the neighborhood, uses in scale with residential structures, and service-oriented uses such as daycare centers, dry cleaners, corner stores, civic structures, and moderate-density housing, when the design demonstrates adequately that these uses and structures will be compatible with both the neighborhood center and the surrounding neighborhood.

❑ Renovation and reuse of downtown buildings will be appropriately scaled, high-quality design, and maintenance is necessary to bind the downtown into a quality environment.

❑ Buildings are designed to be compatible with the established character and built form, or with surrounding development.

GOALS

Commercial Land Use Diversity Goals

❑ To maintain a diversity of uses in the community.

❑ To create job opportunities and enhance the economic base of the planning area and the county, by focusing on retaining and attracting commercial uses, in particular retail and service-oriented business, in addition to focusing on industrial economic development activities, and by developing an up-to-date inventory of all businesses and buildings within the planning area.

❑ Information on size, average rents, property values and amenities, traffic counts, and estimated sales of existing businesses should be included. A breakdown of the categories for types of businesses will also be useful.

3 Land Use

STRATEGIES

Commercial Land Use Diversity Strategies

❑ The amount and type of proposed retail-commercial uses permitted in an activity center is based upon an analysis of the potential market generated by the size and type of population that will live within the center's market area. The analysis should also take into consideration all other nearby existing or approved commercial uses and the possibility of overlapping service areas.

Industrial Land Uses

The role of industry in Denton is relatively new. Two historic industries date back to before the turn of the century: Morrison's Milling, a processor and manufacturer of food products located near downtown Denton, and Acme Brick, a manufacturer of building products located south of I-35E, east of Fort Worth Drive. Denton's economy has been more dependent upon government, education, and retail activities for its base. In the past several decades, many additional manufacturing entities have made their home in Denton, broadening the employment base in a time when most communities are becoming less dependent upon industrial jobs.

Denton currently has approximately 5,098 acres (nearly eight square miles) of industrially zoned land located throughout the city. Depending upon site and infrastructure needs, prospective businesses are presented with several options as to location, price of land, and degree of infrastructure in place. Internal existing infrastructure varies as well as direct/indirect highway access. It is very important that opportunities for public/private development partnerships be formed to identify and encourage addressing specific infrastructure needs within the industrial and employment centers.

A 1998 land use inventory indicates that there are approximately 1,167 acres of developed industrial land use, less than twenty four percent of the industrially zoned land within the city. The developed industrial land represents sixteen acres per thousand population.

Community goals should be incorporated into industrial recruitment and expansion programs. Therefore, a primary goal of economic diversification is to attract and recruit industries that

Industrial Centers:

The land use plan identifies four industrial centers. Denton is strategically located at the junction of U.S. Interstate 35, 35East, and 35West, providing excellent transportation of goods from Mexico to Canada. In addition, State Highway 380 establishes access to east and west markets. All industrial zoning districts are located along these major thoroughfares or are connected via Loop 288.

▶ *Western Industrial Center*

Denton's largest industrial area is located in western-most Denton, with the Denton Municipal Airport as its central focus. It is bordered by U.S. Interstate 35 on the east, by the proposed extension of Loop 288 on the west, and by U.S. Highway 380 on the north.

Land Use

Industrial Centers:

- *Acme Industrial Center*
  This center is located in south central portion of Denton between US 377 and Teasley Lane. Mission Road provides the southern boundary.

- *Southeast Industrial Center*
  This center is located in the southeast portion of the city with Loop 288 providing the northwestern boundary and the abandoned railroad providing the southwestern boundary.

- *Northeast Industrial Center*
  This industrial center is located on the north side of U.S. 380, immediately east of Loop 288 in the northeast portion of the city. The Union Pacific Railroad runs along the northern boundary of the area.

use high-quality environmental practices, bring new capital into the economy, and provide higher-than-average wage jobs. Just as important as the make-up of industry within Denton is its location. The land use plan focuses on designated locations for certain types of industrial uses with large manufacturing facilities locating in industrial centers and light manufacturing facilities in both industrial centers and employment centers. Current development standards and permitted uses should be reviewed to ensure compatibility within the centers and surrounding land uses. A summary of industrially developed and zoned land in the city follows:

1995 Developed Industrial Land Uses

	Industrial Developed Area	All Developed Area	Percent of All Developed Area
Acres	1,167	13,184	8.8

North Central Texas Council of Governments, 1995 Land Use Definitions: Industrial includes manufacturing plants, warehouses, office showrooms, etc.

1998 Industrial Zoning Classifications

Zoning Classification	Area in Acres	Percent of All Zoned Land
Light Industrial (LI)	4,448.5	12.4
Heavy Industrial (H)	116.5	0.3
Planned Developments	532.7	1.4
Total Industrial	5,097.7	14.2
Total Zoned Area	35,741.9	100

City of Denton GIS Zoning Coverage as of October 29. 1998
City of Denton, Planned Development Summary, March 1998
Note: Planned development (PD-139) had a classification of "Business Park" that allowed commercial and industrial uses. For the purposes of these tables, business park has been included in commercial land uses.

Primary Industrial Land Use Principles

PRINCIPLES

Organizing to Minimize Conflicts

It is the desire of the residents of Denton to organize industrial and employment land use districts so as to minimize conflicts with adjoining land uses and to most efficiently utilize the existing transportation systems.

Developing Performance Standards

Just as the quality of commercial development is important to Denton residents, the performance standards of industrial and employment development is critical to the health, safety, and welfare of the community, its environment and its security.

3 Land Use

Industrial Land-Use Classifications

INDUSTRIAL

❑ Industrial Centers

Industrial centers are intended to provide locations for a variety of work processes and work places such as manufacturing, warehousing and distributing, indoor and outdoor storage, and a wide range of commercial and industrial operations. The industrial centers may also accommodate complementary and supporting uses such as convenience shopping and child-care centers. There will most likely be instances where residential uses will be incompatible with industrial and manufacturing processes used in industrial centers. Adequate public facilities shall be a criterion by which zoning is granted.

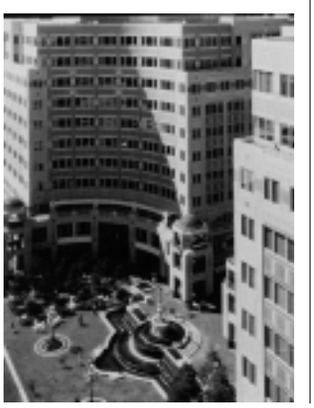
❑ Employment Centers

Employment centers are intended to provide locations for a variety of workplaces, including limited light manufacturing uses, research and development activities, corporate facilities, offices, and institutions. Employment centers are also intended to accommodate secondary uses that complement or support the primary workplace uses, such as hotels, restaurants, convenience shopping, and child-care. Adequate public facilities shall be a criterion by which zoning is granted.

Additionally, employment centers are intended to:

- ❑ Encourage the development of office and business workplaces in close proximity to housing, civic, and recreational uses;
- ❑ Promote excellence in the design and construction of buildings, outdoor spaces, transportation facilities, and streetscapes;
- ❑ Direct the development of workplaces consistent with the availability of public facilities and services; and,
- ❑ Continue the vitality and quality of life in adjacent neighborhoods.

The land use plan identifies four employment centers:



- ❑ Northwest Employment Center

  The Northwest Employment Center is located to the west of U.S. Interstate 35 and to the south and east of the proposed Loop 288 extension. The Kansas City Southern Railroad bisects the area running from the northwest to the southeast.
- ❑ Southwest Employment Center

  The Southwest Employment Center is located south of

Description of Industrial Uses

▶ Industrial uses could be described as those engaged in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or a use engaged in storage of, or manufacturing processes using flammable or explosive materials, or storage or manufacturing processes that potentially involve hazardous conditions.

▶ Industrial would also include those uses engaged in the cleaning of equipment or work processes involving solvents, solid waste or sanitary waste transfer stations, recycling establishments, and transport terminals (truck terminals, public works yards, container storage).

▶ Industrial uses would be allowed in industrial centers as designated on the land use plan.

Description of Light Industrial Uses

- Light industrial uses could be described as those engaged in the manufacture, predominantly from previously prepared materials, of finished products or parts, including processing, fabrication, assembly, treatment, packaging, incidental storage, sales, and distribution of such products.

- Further, light industrial would include the manufacture of electronic instruments, preparation of food products, pharmaceutical manufacturing, research and scientific laboratories, and similar uses.
Light industrial uses would not include mining and extracting industries, petrochemical industries, rubber refining, primary metal and related industries.

- Light industrial uses would be allowed in industrial centers and employment centers as designated on the land use plan.

- Heavy industries will not be permitted in industrial areas.

the Western Industrial Center on the west side of I-35W. The proposed Loop 288 extension defines the western boundary of the center.

- East Loop 288 Employment Center
This center runs along both sides of the easternmost portion of Loop 288 from McKinney north beyond Mingo Road.
- North Texas Research Park Employment Center
This center is located in the southeast portion of Denton. The center extends past Woodrow Lane on the west and past Mayhill on the east. Spencer Road provides the southern boundary. The northern boundary is formed by the floodplain between Woodrow and Loop 288.

Industrial Goals and Strategies

GOALS

Industrial Goals

- When appropriate, the city should form public/private partnerships to meet infrastructure needs within the industrial districts. Development that complements existing businesses in the district should be encouraged.
- The economic development partnership formed by the City of Denton and the Denton Chamber of Commerce should work closely with property owners within each industrial district to market land to businesses identified as appropriate for each district.
- The University of North Texas, Texas Woman's University, and North Central Texas College should be considered a vital part of the marketing program.

STRATEGIES

Industrial Strategies

- Considerations should be given to businesses that are in line with economic diversification and environmental policy statements.
- Create a target list of businesses suitable for each district to be included in the overall marketing plan.
- Consider public/private partnerships to stimulate location and expansion of businesses within the districts.
- Continue to develop partnerships with the higher education institutions, focusing on the development of research activities, training, and entrepreneurial opportunities.
- Assist the higher education institutions in creating links with private industry.

3 Land Use

Civic Land Uses

Civic land uses are lands that are public or quasi-public in nature, including but not limited to:

- Lands owned and utilized by public agencies or governments for the public good;
- Lands dedicated as parks, drainage facilities or open space; and,
- Lands that are owned and operated in a quasi-public manner such as churches or private schools.

The adjacent table summarizes developed civic land:

In addition to the local municipal government, Denton is home to the University of North Texas, Texas Woman's University, the Denton State School, Denton County, and the Federal Emergency Management Administration, all of which have significant land holdings. In addition, within Denton there are two major interstate highways, two major railroad rights-of-way, and numerous other state highways.

1995 Developed Civic Land Uses

Types of Use	Area Developed in Acres	Percent of All Developed Land
Institutional	1,062	8.0
Infrastructure	1,838	13.9
Dedicated	1,060	8.0
Water	126	0.3
Total Civic	4,086	30.9

North Central Texas Council of Governments, 1995 Land Use

Civic land uses should be used to the maximum extent possible to lead and guide development. The community should invest in civic development that serves as local landmarks. Civic land uses can be organized to provide focus for regional, community, and neighborhood activity centers. Civic land uses can be located to provide shared facilities and most efficient use of land. Civic land uses can be used to prevent strip commercial development along the regional and community highway system.

Role of the Universities and Schools

Collectively, the University of North Texas, Texas Woman's University, the Denton State School, and the facilities of the Denton Independent School District comprise a significant, but not large, portion of Denton's developed land area. These institutions are major employers in the community and are the most significant economic engine in Denton. Within these lands are recreational facilities, golf courses at the two universities, and open space and park lands at many schools, that have community-wide benefits.

Definitions:

- *Institutional includes uses such as churches, government facilities, museums, schools, hospitals, medical clinics, libraries, and military bases.*
- *Infrastructure includes all roads, airports, (including terminals and runways), railroads, radio and television communication stations, truck terminals, sewage treatment and power plants, power line easements, pump stations, water treatment plants, and water systems, etc.*
- *Dedicated Land includes all public and private parks, golf courses, cemeteries, tennis courts, swimming pools, amusement parks, sanitary landfills, land applications and similar waste management facilities. Also included are major flood control structures, levies and flood channels.*
- *Water includes all water bodies.*

Land Use

Primary Civic Land Use Principles:

- *Providing Adequate Public Facilities*
  One of the primary functions of civic land uses is to support existing and proposed development with adequate public facilities. Adequate public facilities shall be a criterion by which zoning is granted.

- *Building Landmarks*
  A measure of the identity of a community is its enduring landmark buildings and places. Most of these are civic in nature, public or quasi-public places that enhance the quality of life for all residents.

- *Enhancing Corridors*
  Civic land uses, including the city's corridors themselves, can be enhanced to distinguish and encourage the beautification of the non-civic land uses along these corridors.

Impact on Tax Base

The tax base of the community has historically been thought of as "taxable property", but since the advent of the additional ½ cent sales tax in Denton, total city sales taxes collected are now greater than the total city property taxes. The dominant tax base in Denton is now taxable expenditures.

Even though public institutions do not appear on the property tax rolls, their impact on the city's tax base is significant. Institutional expenditures and payroll spent locally are an important component of local sales taxes collected. The more administrators, teachers, and students that live and make expenditures in Denton, the greater their impact on the local tax base. Utility revenues derived from the universities are an important benefit to the city.

Less significant is the role of these civic land uses on the tax base of the local school district and Denton County. These entities do not have the ability to collect sales taxes and therefore are limited to local property taxes and intergovernmental transfers for revenues. The impact on county and school tax bases is secondary in nature, depending upon the investment of employees in their housing and the investment of community commercial entities seeking to capture the expenditures of the institutions and their employees.

Civic land uses include lands owned by public or private nonprofit entities that are accessible to the general public and contribute to the civic fabric of the community. This uses include the streets, parks and public buildings maintained by the city, county, state and federal governments, as well as privately-owned and maintained institutions such as churches and private schools. Civic land uses make up a significant share of the total developed land in the city.

Summary of Estimated Land Use by Civic Category

Category	Estimated Land Area in Acres
Transportation Right-of-Way	4,152
Institutional	2,503
Parks and Open Space	1,264
Total	7,919

City of Denton Planning & Development Department, January 1999

3 Land Use

Municipal Facilities

Denton's city government is obligated to provide high quality public facilities while, at the same time, limiting the financial burden of these facilities as much as possible. The availability of an array of public facilities relates strongly to the quality of life for residents. These facilities can be centralized or decentralized and they are managed based on performance standards related to growth, new development, service standards, and convenience. The development and implementation of goals and policies help the city to ensure public facilities will be available to serve new development. They also support the city's efforts toward in-fill development and redevelopment by ensuring that development away from the city core does not deprive in-fill and redevelopment activity because of inadequate facility capacity. These policies should be coordinated with the city's overall program for scheduling and funding capital facilities.

In addition, other levels of government maintain comparable public facilities. Denton County maintains its general government, courts and jail facilities. The State of Texas maintains many general government offices as well as Texas Department of Transportation (TXDOT) maintenance facilities. The federal government also maintains many facilities in and around Denton.

Categories of Service

Public facilities may be centralized or distributed around the city. Many services, such as administration, customer service, code enforcement, building inspections, engineering, and planning are developed as centralized manner. These offices are located towards the center of the city to provide equal access to all the residents. Other public facilities are located throughout the community. Parks, fire stations, schools, and even some police facilities are located in many different areas.

Municipal Facilities Goals & Strategies

GOALS

Municipal Facilities Goals

- ❑ To provide municipal facilities adequate to support the future development of Denton.
- ❑ To organize civic land uses into regional activity centers.
- ❑ Locate major recreational activity centers within or adjacent to regional activity centers, industrial, or employment districts.
- ❑ To organize civic land uses into community activity centers.
- ❑ To organize civic land uses into neighborhood centers.

PUBLIC FACILITIES INCLUDE A VAST NUMBER OF LOCAL GOVERNMENT BUILDINGS, FACILITIES, AND PLACES, INCLUDING:

- *STREETS*
- *UTILITIES*
- *POLICE FACILITIES*
- *FIRE FACILITIES*
- *PARKS & RECREATION FACILITIES*
- *LIBRARIES*
- *AIRPORT*
- *GENERAL GOVERNMENT FACILITIES SUCH AS THE SERVICE CENTER, CITY HALL, CITY HALL EAST & CITY HALL WEST*

Land Use

Churches, service clubs, and other quasi-public uses are encouraged to locate within appropriate activity centers, to help establish these areas as focal points and to provide for the sharing of parking and other facilities.

- To develop civic landmarks.
- To utilize civic land uses to lead and guide other development.

STRATEGIES

Municipal Facilities Strategies

- Identify thresholds of development that require civic support and investment in civic facilities.
- Combine civic uses for the most efficient use of resources – for example, the location of city parks adjacent to school facilities.
- Locate major recreational activity centers within or adjacent to regional activity centers, industrial, or employment districts.
- Locate high school and school athletic facilities within or adjacent to regional activity centers.
- Consolidate university land uses within the downtown university core area.
- Locate major local government facilities within the downtown area.
- Locate middle schools within or adjacent to community or regional activity centers.
- Churches, service clubs, and other quasi-public uses are encouraged to locate within appropriate activity centers, to help establish these areas as focal points and to provide for the sharing of parking and other facilities.
- Locate elementary schools within neighborhood centers.
- Provide a budget for exemplary architectural details when constructing community facilities.
- Develop civic landmarks that lead by example.
- Locate civic facilities along major corridors to prevent strip commercial development.
- Implement the parks and recreation master plan to provide a system of parks and greenways.

3 Land Use

Special Districts

Small area plans will be used to develop distinctive and specific plans for special districts or areas of the city that require specific treatment because of that area's uniqueness or specific issues that should be used.

These special districts help knit the components of the community into a place that has unique identity and special character. They are important destinations for living, working, shopping, and playing, and become focal points of the city. These districts represent the opportunity and potential to achieve the cohesiveness of a city rather than a collection of individual neighborhoods and subdivisions.

The Downtown University Core District

Residents will continue to view the downtown university core as a unique and dominant area in the heart of the city that merits special planning attention. A comprehensive downtown revitalization program, based on the strategies of the Texas Main Street program, should be implemented to maintain the momentum created by recent successes and improvements. It is important to encourage the broadest mix of activities and greatest intensity of development within the entire downtown university core. To promote the continued vitality of the downtown area, particular attention should focus on the retail core, including encouragement of hospitality uses.

Denton's image is strongly influenced by its universities, and efforts should be made to enhance their appearance and connectivity to the community whenever possible. The city should strive to encourage more community interaction with the universities by linking physical access between university and public property. In support of a vision for Denton 2001 proposal, the city allocated funds to begin the connectivity process. Street and landscape improvements are being designed to improve downtown and begin the creation of an "arts corridor" linking the Visual Arts Center with the courthouse square.

The uniqueness of the downtown university core areas create a set of special needs specifically for those areas. Further study should investigate zoning, parking, special mixed-uses, density, and the creation of tax increment financing or other special improvement districts. Consideration of a historic district for downtown and conservation districts along Congress and Elm/Locust should be investigated. Small area plans should be used to delineate special needs areas within the district.

WITHIN THE PLANNING AREA, SEVERAL SPECIAL DISTRICTS WARRANT ADDITIONAL ATTENTION BECAUSE OF THEIR UNIQUE CHARACTER, SPECIAL ROLE IN LAND USE PATTERNS, OR UNIQUE OPPORTUNITIES FOR THE COMMUNITY. THEY INCLUDE:

- *THE DOWNTOWN UNIVERSITY CORE DISTRICT*
- *THE RAY ROBERTS LAKE DISTRICT*
- *THE DENTON MUNICIPAL AIRPORT AREA*
- *THE UNDEVELOPED 100-YEAR FLOODPLAINS & ENVIRONENTALLY SENSITIVE AREAS*

3

Land Use

Located twelve miles north of the city and forty-five miles from the heart of the metroplex, Ray Roberts Lake not only supplies Denton and Dallas with a significant raw water source, but also offers an outdoor recreation experience rarely found so close to a large urban area.

The Ray Roberts Lake District

Perhaps the greatest environmental, economic, and recreation asset of the city, as well as North Central Texas, is Ray Roberts Lake. The less obvious but nonetheless primary purpose of the reservoir, however, is its use as a crucial raw water supply for the cities of Dallas and Denton. Balancing these competing interests – recreation/development uses and environmental concerns, especially water quality issues – is a primary concern for the city. Because of the many unique aspects and opportunities this reservoir offers, the city considers it a special district within the comprehensive plan.

Located twelve miles north of the city and forty-five miles from the heart of the metroplex, Ray Roberts Lake not only supplies Denton and Dallas with a significant raw water source, but also offers an outdoor recreation experience rarely found so close to a large urban area. The dam that creates the lake is on the Elm Fork of the Trinity River, thirty miles upstream from the Lake Lewisville dam. The Elm Fork watershed above the lake has a total drainage area of 692 square miles. The conservation pool is 29,350 acres at an elevation of 632.5 feet. In addition to a large water surface area, 19,216 acres of recreation and wildlife management area are associated with the lake. The authorized purposes of the lake are water supply for Dallas and Denton, recreation (specifically parks, boat ramps, camping sites, and trails), and fish and wildlife conservation and enhancement.

The Denton Municipal Airport

The economy plays a major role in the health and vitality of the aviation industry and is reflected in the amount of hangar and business development at municipal airports throughout the nation. Aviation development at the Denton Municipal Airport was nearly nonexistent during the 1980s – a low point in the nation's aviation economy. However, the city has witnessed a significant increase in airport development in the last three years. It is important that expansion and capital improvements continue to be coordinated with the Federal Aviation Administration and Texas Department of Transportation Aviation Division, and the existing partnership must be nurtured in order to ensure adequate facilities for future growth.

It will be necessary to take a close look at unique development opportunities for the Denton Municipal Airport in its relation to the growth of the city and the industrial base nearby. The small area plan process should also be implemented at the airport in order to provide appropriated regulations where special circumstances warrant variation from or supplementation of standard zoning and building provisions (e.g., landscape ordinance,, fire, and building codes).

3 Land Use

Floodplains/Environmentally Sensitive Areas

Among the most dominant physical features of the planning area are the floodplain areas of Clear Creek, Cooper Creek, Pecan Creek and Hickory Creek. Within the planning area, these floodplains encompass sixty five square miles, or nearly a fourth of the entire land area. Only about five percent of the floodplain area within the planning area have been reclaimed by development, about ninety five percent of the floodplain area remains in undeveloped, natural condition.

Additionally, sites have been identified on the land use plan that have significant environmental sensitivity. Areas of environmental sensitivity will be protected from development impacts. Environmentally sensitive areas will be further identified in the land development code's environmental regulations. Environmentally sensitive areas should be an overlay district to all land use designations. There may be some uses allowed within some areas and none in others, dependent on the environmental analysis.

The undeveloped floodplain areas represent a unique opportunity to preserve an important natural feature of the community while meeting significant community goals.

Preservation of floodplain offers these benefits:

- Prevents development in the floodplain subject to flooding
- Protects adjoining and downstream property from impacts of eroding
- Conserves natural habitat for wildlife
- Maintains the quality of the city's water supply
- Provides vital open space for recreation opportunities
- Provides important corridors for pedestrian and bicycle trails linking neighborhoods together
- Enhances values of adjoining property
- Creates a "green" identity for Denton

Regulations that preserve to the maximum extent possible these floodplain areas in their natural condition should be developed and implemented through the land development codes of the city.

CONSERVATION OF ENVIRONMENTALLY SENSITIVE AREAS IS IMPORTANT FOR THE COMMUNITY FOR A VARIETY OF REASONS:

- *PREVENTS DEVELOPMENT IN AREAS OF ENVIRONMENTAL SENSITIVITY*
- *PRESERVES QUALITY ENVIRONMENTAL FEATURES OF THE AREA*
- *PROTECTS WILDLIFE HABITATS EVIDENT IN THESE AREAS*
- *PREVENTS DESTRUCTION OF NATIVE VEGETATION*
- *PROVIDES VITAL OPEN SPACE, PEDESTRIAN & BICYCLING CORRIDORS THAT LINK NEIGHBORHOODS*
- *CONSERVES GEOGRAPHICALLY IMPORTANT LANDMARKS*
- *ENHANCES THE VALUE OF ADJACENT PROPERTIES*

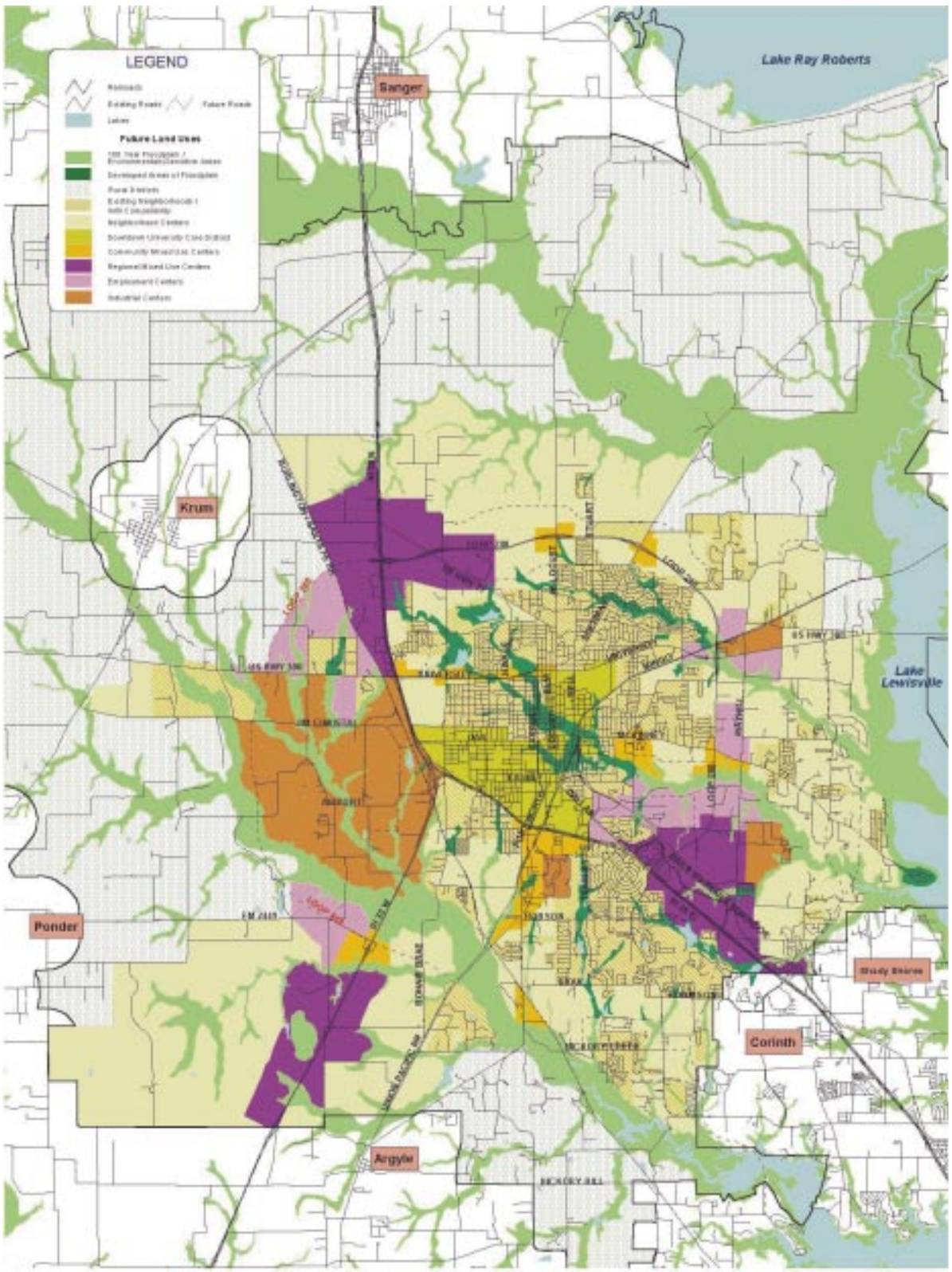
Texas Local Government Code 215.005:

A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

3 Land Use

Land Use Plan

December 1999



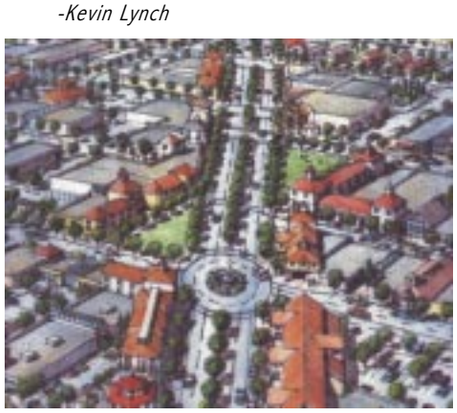
4

Urban Design

DEVELOPMENT REGULATIONS MUST BE REVISED TO PLACE GREATER EMPASIS ON THE IMPORTANCE OF URBAN DESIGN, WHICH IS DEFINED AS:

- *THE RELATIONSHIP BETWEEN DIFFERENT BUILDINGS*
- *THE RELATIONSHIP BETWEEN BUILDINGS & THE STREET, SQUARES, PARKS, WATERWAYS, & OTHER SPACES WHICH MAKE UP THE PUBLIC DOMAIN ITSELF*
- *THE RELATIONSHIP OF ONE PART OF A VILLAGE, TOWN, OR CITY WITH ANY OTHER PARTS*
- *THE PATTERNS OF MOVEMENT & ACTIVITY WHICH ARE THEREBY ESTABLISHED*
- *IN SHORT, THE COMPLEX RELATIONSHIPS BETWEEN ALL THE ELEMENTS OF THE BUILT & UNBUILT SPACE*

-Kevin Lynch



Introduction

Urban design is a term used to define how a community manages the physical and visual character of its built environment. Urban design has become an increasingly dominant issue in Denton in response to growth in development and construction activity. The design quality of the built environment can have a profound effect on the economic and social health of a city. The quality of the surroundings where people work, live and play affects Denton's image and attractiveness to developers searching for high quality business and residential locations. By contrast, a poorly designed urban environment can be a barrier to investment and economic development. A high quality environment is a fundamental requirement to attract long-term, high-quality investment. The issue of urban design must be addressed rigorously if Denton is to achieve the quality of development that most citizens desire.

The urban design strategy aims to substantially raise the quality of Denton's urban environment. As the twenty-first century approaches, expectations of quality will be raised. Denton will take an urban design leadership role within the region. A quality-based philosophy will be adopted and embraced. Urban design should receive equal consideration alongside concurrent objectives related to environmental quality, social equity, economic stability, and long-term prosperity.

Policies

POLICIES

Properly developed urban design policies need to acknowledge economic realities and functional necessities. Different areas in the city serve different purposes, so district-oriented urban design strategies are appropriate. Practical and reasonable expectations require that urban design efforts are concentrated on the "public environment," a term that refers to an area that is either physically accessible or visually prominent to members of the general public. Denton seeks to maximize both public and private benefits by improving visual quality and perceptions of our image.

- ❑ Visual quality objectives and a healthy business climate should not be considered mutually exclusive. Urban design concepts should be incorporated into private development plans early into the review process.
- ❑ The impact of public features such as signage, electric lines, valve boxes, solid waste receptacles, streets, curbs and gutters, sidewalks, buildings, parking lots, and parks should be recognized as important factors in affecting community appearance. City government will exert a leadership role in following the principles of good urban design.

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Urban Design

- The city's urban design strategies will be guided by the principle that the spaces between buildings are just as important as the buildings themselves. The form of public spaces should support their intended functions, and their visual qualities should communicate the values we feel are important.
- Concern for community appearance should be addressed in a comprehensive manner. Such an approach provides the opportunity to integrate urban design objectives with other planning mechanisms, such as land use, zoning, subdivision regulations, historic preservation, economic development, and environmental protection.
- Architectural diversity and creativity should be encouraged to avoid homogeneity and sterility. Contrast and variety contribute strongly to visual interest and viewer perceptions of quality. Implementation of design standards by the city will pay strong attention to avoid regulations that promote sameness and stifle individuality.
- Urban design principles should be emphasized in neighborhood revitalization plans, and residents should help to determine social and cultural values that are reflected visually. Infill development should be evaluated carefully to promote compatibility with existing structures. New development can provide contrast yet complement older structures.
- Opportunities for the display of public art and practice of the performing arts should be provided in a variety of public property venues, including parks, street rights-of-way and public buildings.
- The unique and distinctive cultural and architectural features of Denton should be identified, restored, preserved and maintained through a partnership between the city and private interests, in keeping with the historic preservation plan.
- Development along major entranceways influences first impressions and the image of Denton. Good urban design should be encouraged and promoted to enhance the appearance and perception of quality along thoroughfare corridors.
- The City of Denton's image is strongly influenced by its universities, and efforts should be made to enhance their appearance whenever possible. The city should strive to encourage more community interaction with the universities by linking physical access between these institutions and public property.
- The value of trees and landscaping should be recognized as important features that strongly influence the aesthetics and environmental quality of the city. This recognition of value will be reflected in all development standards.
- The city will continue to view the downtown as a unique and dominant area that merits special attention. A comprehensive downtown revitalization program, based on the strategies of the Texas Urban Main Street Program, will be pursued to maintain the momentum created by recent improvements.

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Urban Design

Urban Design Principles

PRINCIPLES

Urban design policy implementation will be guided by several principles. Proper consideration of these principles will be achieved using regulations, flexible guidelines, or conditional funding. The urban design principles address, on a policy and/or detailed level, the following issues:

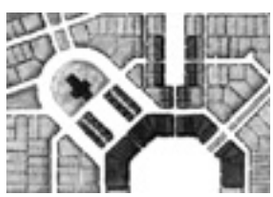
Accessibility

This is the ease with which people can access a full range of facilities such as shops, leisure, employment and other public areas. Accessibility is affected by the location and distribution of uses; transportation choices, including facilities for less mobile people; the physical design of spaces and pedestrian circulation systems. New development will be accessible to the widest range of people both in terms of its location and the physical design of spaces and buildings.

Health & Safety

A well designed built environment can help to improve safety and security. An unsafe environment can discourage human activity and render a site useless. Good lighting and proper site design are also important factors. Efficient transportation design can contribute to reduce air pollution emissions. Strategically placed landscaping and careful architectural design can reduce energy consumption and save money. Designers will be expected to demonstrate that the health and safety of the city has been a factor in producing new development schemes.

Permeability



The number of alternative ways through an environment is a measure of an area's permeability. New development should maximize permeability both within the site and in the neighborhood. Site design must be based on efficient use of existing paths and patterns of movement. New development is designed to complement the existing network and maximize the choice of movement within and through the site. Paths into a site connect rather than forming a series of dead-ends. New development will be expected to take advantage of opportunities to improve choice and convenience of movement.

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Durability & Endurance

Durability and endurance are very important factors in achieving a sustainable built environment. The use of high-quality materials for surfaces should be a priority. The resistance of materials to wear is important if they are to last and not require excessive maintenance. Flexibility and adaptability in the design and layout of space are also important factors to accommodate changing demands and a variety of activities in coming decades.

Legibility

Legibility refers to the ease with which people can understand and are comfortable with the organization of a place. Good legibility is important because it allows people to find their way around the city. Development schemes will be expected to complement and reinforce the urban character of:

- Paths that help define proper routes for movement
- Districts that are recognized as areas of similar character, with unified features such as land use, density, architectural style, scale, or construction age
- Landmarks that provide specially recognized feature unique to the city
- Edges that indicate distinctions between different neighborhoods or land use districts
- Nodes that are created at the juncture of paths or are created as special activity centers

Architectural Quality

The impact of architectural quality will strongly influence the quality of growth during the next twenty years. The following architectural principles shall be used to guide decisions regarding design of structures:

- New buildings should demonstrate thorough knowledge of historical architectural information and context, but should not imitate older buildings.
- High-quality architectural design should be encouraged. Innovation, creativity and originality are considered to be primary ingredients of high-quality architecture. Radical or challenging design solutions will be welcomed. Such buildings are individualistic, provide contrast, and in these ways create local identity and contribute to local distinctiveness.

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Urban Design

Design Context:

Site analysis will be considered an important aspect during the development of design and construction proposals, and will include, but not be limited to:

- *Paths in & around the site*
- *Change in levels*
- *Behavior patterns in & around the site*
- *Urban form*
- *Views into & out of the site*
- *Relationship to existing structures*
- *Vistas*
- *Enclosure of streets & spaces*
- *Topography in & around the site*
- *Diversity of use*
- *Sunlight*
- *Landmarks*
- *Orientation*
- *Strategic qualities of the site*
- *Native & existing habitats*
- *The nature of boundaries*
- *Proximity to others*
- *Public transportation routes*
- *Riparian & floodplain protection*
- *Climate*

- Careful consideration of proportioning, detailing and context is important in designing buildings adjacent to landmark buildings by providing variety and defining space.
- Architectural design will be used to integrate the functions of buildings with public spaces, adding to interest and vitality. The impact of architecture on public spaces must be considered. Main frontages and corners should include major entrances, windows, or other features to create activity and visual interest at the ground floor level.
- Design materials will be used and expressed authentically and appropriately.
- The city will partner with developers on development projects and will actively explore the use of competitions in the development of significant publicly owned sites as a means of encouraging more distinctive design. Calls for design and programs for development related to projects that demonstrate consistency with the comprehensive plan may be explored by the city in partnership with potential developers and design professionals.

Transportation Infrastructure

The design of transportation systems strongly influences the form of the built environment and the quality of life for its users. The city will take steps to reduce the negative impact of motor vehicles on the quality of the urban environment. Transportation infrastructure principles include:

- Location

  Mixed-use and urban village developments of appropriate scale and compatible design are encouraged. Isolated nonresidential land uses will be discouraged if they

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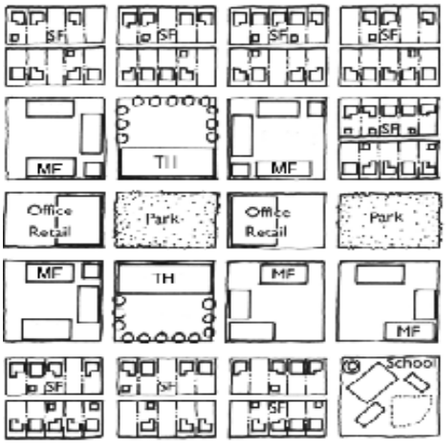
generate excessive vehicular travel or are not well served by public transportation. Use of transit-oriented design (TOD) is encouraged.

- Transportation Priority and Choice

  Integration of pedestrian and public transportation systems with new development is encouraged. This includes consideration of the approaches and access to development, and the arrangement of spaces within the site. Developers should contribute funding for public transportation improvements where warranted, accompanied by a reduction in off-street parking requirements.



- Parking Standards

  Off-street parking requirements should reflect respect for environmental quality considerations. Parking location and associated landscaping should be carefully regulated to avoid unacceptable expanses of pavement. Large parking lots should be broken into smaller sub-lots. Parking standards should be carefully set to avoid unnecessary pavement. Shared use parking facilities should be encouraged.

- Car-Free Development

  Experimental residential developments on inner-city/university center sites, in which no car-parking provision is made, should be encouraged. Where innovative vehicles (ie. electric cars, etc.) are used, this parking restriction is lifted and parking is allowed on the street for these vehicles. Such developments will cater to noncar owners, or as otherwise stated and will be in locations with good access to public transportation and to a range of facilities such as shops. It will be necessary for the occupancy to be limited to noncar owners or innovative vehicle owners.

- Design of Bridges and Transportation Structures

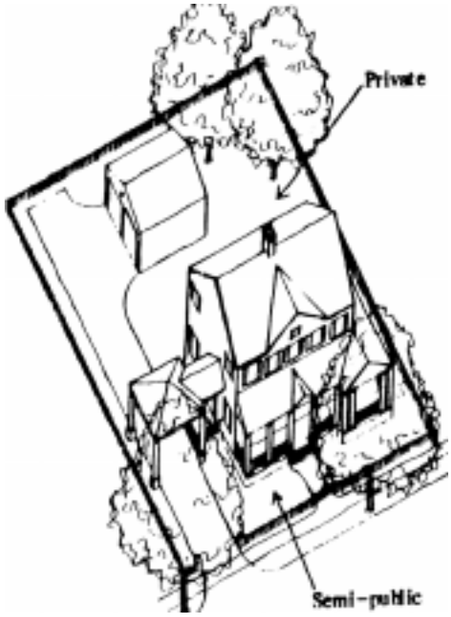
  Qualified and creative engineering input should be used in the design of transportation infrastructure, with interesting structural solutions, rather than the addition of decorative detailing to a standard structure.

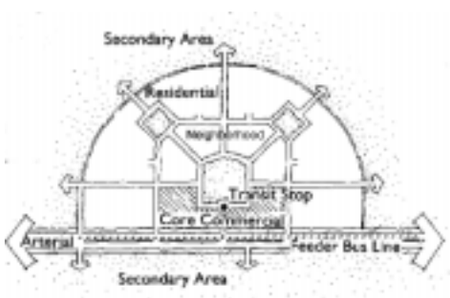
- Solid Waste

  Solid waste containers should be located out of public view on private property, in areas specially designed to accommodate truck maneuvering. The use of innovative technologies to reduce the visibility of solid waste operations should be encouraged. Small area plans should contain strategies for solid waste improvements in existing developed areas.

- 100-year Floodplain

  Roadways should be located parallel to, and outside of, the 100-year floodplain limits





to establish green space between the road and the floodplain to serve as open space, limit flood exposure, and facilitate channel maintenance.

- Street Trees and Landscaping

  Trees and landscaping will be designed as a crucial component of all roadway networks. Trees and other plantings will be properly coordinated with utilities to avoid conflicts and competition for limited underground space on city-owned properties and right-of-ways. The city will fully consider the significant value of trees and the urban forest when resolving infrastructure conflicts; and select and plant appropriate tree species on public rights-of-way that maximize planting potential while protecting the safety of the public.

New Neighborhood Districts & Mixed-Use Design

The following principles are intended to apply to new neighborhoods and activity centers with a variety of densities. The pattern of development described has been called variously the urban village, new urbanism, neo-traditional planning, traditional neighborhood development, and transit-oriented development.

- The Planning Unit

  The basic unit of planning is the neighborhood.

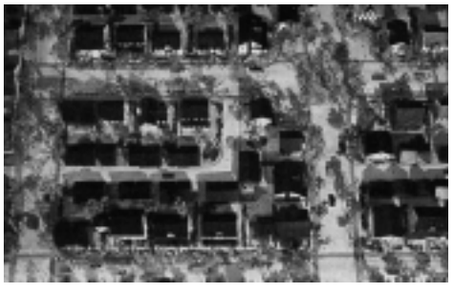
- The Neighborhood Size

  A neighborhood is limited in physical size, with well-defined edges and a focused center. The size of a neighborhood is defined as a five minute walk or one-quarter mile from the neighborhood edge to its center and a ten minute walk edge to edge. Human scale is the proportional standard for all structures and accessory components. Automobiles are allowed within the neighborhood but do not take precedence over the pedestrian or human needs, particularly the aesthetic functions that include a "sense of place". These neighborhoods will typically contain transit stops and will utilize transit-oriented design.

- Corridors and Districts

  Corridors form the boundaries between neighborhoods, both connecting and defining them. Corridors can incorporate natural features like streams and hillsides. They can take the form of parks, nature preserves, travel corridors, or railroad lines. A neighborhood or part of a neighborhood can compose a district. Districts are made up of streets or ensembles of streets where special activities are emphasized. A corridor can also be a district such as a major shopping avenue that connects neighborhoods.

4 Urban Design



❑ Mixed Use and Compatibility

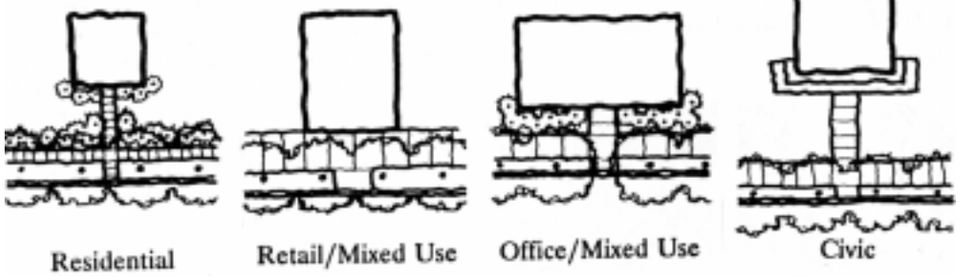
Mixed use that meets predetermined standards may be permitted within the neighborhood and provides a variety of housing for people with various incomes. Buildings may have a variety of functions but must be compatible with one another in size and their relation to the street. Uses may change within a building both vertically and horizontally. Neighborhood services should be accessible within the five-minute walk. Retail is integrated with residential, commercial and even some types of manufacturing use, though not typically on the same street in a given neighborhood. Apartments are also permitted over stores and offices. Forms of housing may include apartments, duplex, townhomes, and single-family homes, accessory apartments, and outbuildings. Multifamily development is typically in smaller, human-scale buildings on separate lots.

❑ Definition of Public Space

Buildings should be sited carefully to create defined public space. Build-to lines should be utilized to establish a consistent series of building facades, and to promote regular alignment. The street is an important form of public space, and the buildings that define it should be expected to reinforce and enhance the streetscape corridor.

❑ Street Pattern

The neighborhood street pattern should be gridded. Parks, squares, diagonals, T-intersections, rotaries, landmarks, and other devices should be used to relieve the visual monotony of the grid system. The range of street type is limited, from mixed-use neighborhood collectors to narrow lanes and alleys. Limited access highways may only exist within a corridor. Cul-de-sacs are discouraged except under extraordinary circumstances, such as cases where rugged topography requires them or large lot uses occur.



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Urban Design

❑ Civic Buildings and Open Space

Civic buildings, such as city halls, churches, schools, libraries, fire and police, post offices, and museums, should be placed in prominent locations. Potential sites include the frontage of squares, in neighborhood centers, and where street vistas terminate in order to serve as landmarks and reinforce their importance. Buildings should define parks and squares, which are distributed throughout the neighborhood and appropriately designed for a range of neighborhood functions. Design and scale should be compatible with surrounding structures. Open space is a required component of the neighborhood. Public open space is a necessity that links different parts of the neighborhood and establishes a sense of place for residents.

❑ Architecture

Architectural guidelines may be required for neighborhoods to establish unity with respect to massing, facade details, materials, and roof pitch, although many variations would be possible. Such architectural guidelines would be neighborhood-specific and would supplement citywide design standards.

❑ Street Walls and Basic Design Components

In order for a street to achieve the intimate and welcoming quality of an outdoor room, the buildings along it should compose a suitable street wall. Building height should be sized in proportion to the width of the street. Build-to lines should be used to determine how close buildings will stand to the street. If parking lots are necessary, they should be located behind or to the side of buildings. Resiential garage structures will be located to the rear of the lot with alley access or employ shared driveways from public street frontages where there is no alley access. Garage entrances facing the street or those with side garage entrances accessed from a shared drive are set well back from the front facade so as to obscure views of the garage entry. Additional standards may be employed to govern recess lines for upper stories, and transition lines, which denote a distinction between ground floors used for retail and the upper story floors for offices and apartments.

4 Urban Design

Urban Design Goals & Strategies

Urban Design Standards Goals & Strategies

The most significant improvement to be made regarding Denton's urban design policies is to incorporate regulatory standards into the development code that address aesthetics and visual quality.

GOALS

Urban Design Standards Goals

- ❑ Develop urban design standards to be included as part of the city's development code.
- ❑ The standards may vary in application to different parts of the city, but in all instances, the requirements should be tied to a legitimate public purpose and consistently applied to all properties of similar nature.
- ❑ Specific attention should be paid to urban design elements.

STRATEGIES

Urban Design Standards Strategies

- ❑ Revise the city development code to include urban design standards. Use land use classifications to impose appropriate standards upon different types of development.
- ❑ Require the consideration of design standards at the earliest possible stage in the development review process.
- ❑ Incorporate design standards that may be unique to specific geographic areas, such as transportation corridors or redevelopment districts, as appropriate during the development and adoption of small area plans.
- ❑ All proposed development in the city will undergo some form of site plan and design review. Review complexity should be proportional to the potential visual impact of the proposed project.
- ❑ Determine in advance the design standards that will apply to any given property, and differentiate between the qualitative standards that will require discretionary review and approval versus quantitative standards that can be measured and administered equitably.
- ❑ Detailed design standards will be developed for new neighborhood centers. The rela-

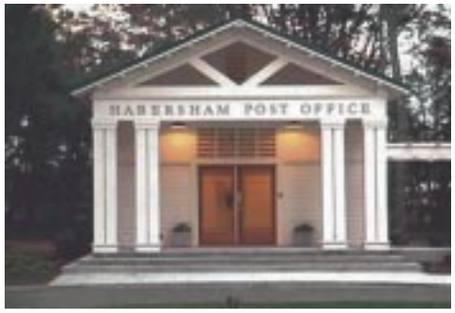
SPECIFIC ATTENTION SHOULD BE PAID TO URBAN DESIGN ELEMENTS. INCLUDING, BUT NOT LIMITED TO:

SITE DESIGN
- *SUBDIVISION DESIGN*
- *STREET LAYOUT*
- *SITE LAYOUT*
- *COMPATIBILITY WITH NEIGHBORING PROPERTIES*
- *OPEN SPACE*
- *OUTDOOR STORAGE*
- *PARKING PLACEMENT*

ARCHITECTURAL DESIGN
- *BUILDING HEIGHT AND BULK*
- *BUILDING PLACEMENT*
- *BUILDING ORIENTATION*
- *GARAGE ORIENTATION*
- *BUILDING MATERIALS*

SITE ELEMENTS
- *FENCES AND SCREENING DEVICES*
- *LIGHTING*
- *BUFFERING OF ADJACENT PROPERTIES MECHANICAL EQUIPMENT, DUMPSTERS, AND UTILITIES*
- *LANDSCAPING*
- *SIGNAGE*

Urban Design

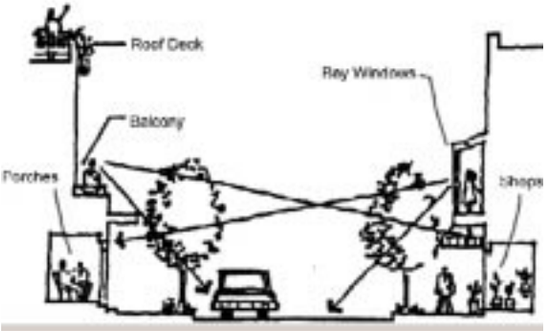


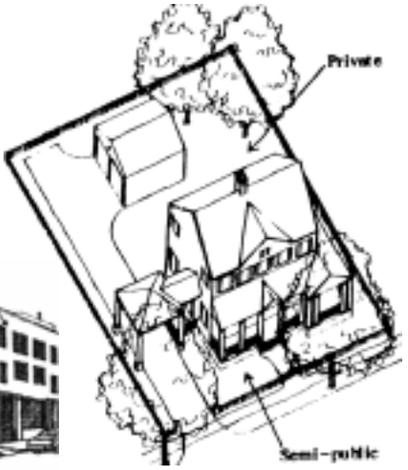
tionships between permitted density, mix of uses, adequacy of services, and amenities will receive special attention. The issue of buffering between existing neighborhoods and new neighborhood centers will be also be addressed.

- ❑ Develop street tree standards for adoption as part of the development code once proper alignment of streetscape infrastructure has been resolved in revisions to the city's subdivision regulations.

- ❑ Develop a design strategy intended to coordinate public improvements such a sidewalks, signage, utility poles, utility lines, valve boxes, and solid waste receptacles.

- ❑ Adopt specific urban design review processes that apply to city and other governmental development projects.





4 Urban Design

Variety & Distinctiveness Goals & Strategies

New development should be allowed the opportunity for site specific design solutions. Development that complements and reinforces local distinctiveness stimulates visual interest and enhances the urban character of an area. Replication of structural styles and detailing becomes monotonous and is less appealing than compatible variety.

GOALS

Variety & Distinctiveness Goals

- ❑ Development proposals that require discretionary review should contain site-specific design solutions, based on an understanding of the character of the surrounding area, and should reinforce and enhance Denton's distinctiveness.
- ❑ Developers should be encouraged to utilize and invest in architectural design services that promote individualistic, creative and distinctive design.
- ❑ The city and other governmental entities should also adopt such an approach.

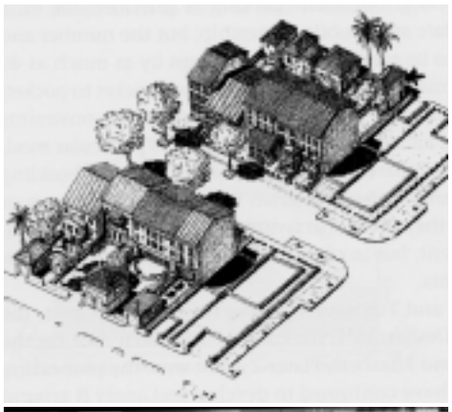
STRATEGIES

Variety & Distinctiveness Strategies

- ❑ Project design concepts should be identified and explained as important criterion for consideration during discretionary review processes. The appearance of proposed development and its relationship to its surroundings should be properly communicated and considered prior to project approval. Poor designs should be improved to acceptable standards or rejected.

- ❑ The city will undertake urban design studies and analyses to develop guidelines that promote variety and distinctiveness. Different character areas within the city should be specifically identified, and a broad-based urban design approach that treats all properties the same should be avoided.

- ❑ Design review processes shall be structured to provide opportunities to demonstrate alternative compliance within a reasonable period of time.



Urban Design

Visually Sensitive Locations Goals & Strategies

Visually sensitive locations include unique natural or manmade areas considered to be important community places, historic areas, special open spaces, key entryways into the city, or other locations that merit special consideration due to public visibility.

GOALS

Visually Sensitive Locations Goals

- In sensitive locations, new development will be expected to demonstrate high standards of architectural and urban design in a manner that complements or enhances the urban context.
- Architectural style, site design, and impact on surrounding properties should be carefully examined when development is proposed in a sensitive location.
- Demolition in sensitive locations should also be reviewed to determine the impact of both removal and replacement features.

STRATEGIES

Visually Sensitive Locations Strategies

- Visually sensitive locations should be identified, geographically defined, and protected through formal Council action.

- Development and demolition review and approval will be required for visually sensitive locations, and will require discretionary review based on predetermined standards.

- The impact of sensitive location designation on private property should be assessed and evaluated to determine the appropriate use for the site.

4 Urban Design

Public Art Goals & Strategies

Public art provides a number of benefits to the city. It can create interest, create local distinctiveness, provide a memorable image associated with the city or certain districts within the city, lend character to urban spaces, and make the urban environment more attractive.

GOALS

Public Art Goals

- ❑ The provision of public art will normally be expected as part of any large development scheme.
- ❑ Public art should be considered as an integral part of the design of spaces in and around development.
- ❑ Encouragement is given to the involvement of commissioning experts, so that opportunities are available to a wide range of artistic talent.

STRATEGIES

Public Art Strategies

- ❑ Public art should be encouraged as part of public and private projects.
- ❑ Potential funding mechanisms should be explored to develop a public art program.
- ❑ Temporary displays of public art should be encouraged to increase awareness of its effect and benefits.
- ❑ Public art should be located in suitable locations that include city entryways, gateways, urban open spaces, areas of high visitation, pedestrian areas, and other locations. Public art should be used in strategic locations to provide emphasis to places that should be memorable.
- ❑ Public art should be used to complement design features of the specific location in which it is placed.
- ❑ Practical issues should be considered in the design of public art such as maintenance, durability, and safety.

4

Urban Design

Urban Design Plan Goals & Strategies

GOALS

Urban Design Plan Goals

❑ A citywide urban design plan will be developed that describes the Denton community's approach to visual quality and image.

❑ The plan should be used as policy document to describe ongoing efforts to coordinate urban design objectives with other public concerns such as utilities, streets, environmental management, or parks, and should be used to critically examine areas in need of improvement or protection.

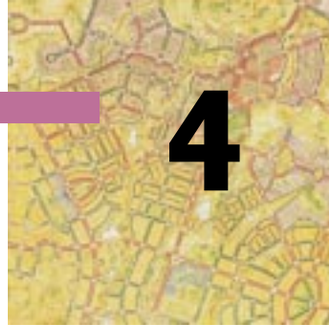
STRATEGIES

Urban Design Plan Strategies

❑ The urban design plan should be used to formally identify visually sensitive sites and locations.

❑ The urban design plan should be used to identify and map the city's character areas that will be treated separately. Features that are significant, such as transportation corridors, waterways, activity and mixed-use centers, large open spaces, major development sites, historic areas, or conservation areas should be considered in terms of visual impact and attractiveness.

❑ The urban design plan should be used to rate and prioritize the sensitivity of



4

The Street

Through better distribution of costs per household, the cost-benefit of these new street requirements outweigh the initial costs and in fact the unit cost is lower than conventional development.

Introduction

The street can be defined as the most important, enduring public space that determines our urban environment. The street should be comfortable and enjoyable, as well as provide efficient movement of people and goods.

- The street is the single largest public space in the city and should be acknowledged on that level.
- The street should complement the distinctive character of the neighborhood or district while providing connections to adjoining neighborhoods.
- Formation of the street will include prescriptive standards, which specify exactly how a facility is to be built, and performance standards that describe the objectives a facility will meet. Our streets need to be aesthetically and environmentally pleasing and sensitive to local situations and needs.
- Costs should be based on consideration of life cycle costs, level of service, and level of risk and impact of facility failure.
- The street has a major impact on creating development that is sustainable, facilitating a walkable community, and creating a pleasant and nurturing environment for our citizens.
- Reductions in residential speed limits are included benefits along with reductions in street pavement widths, strengthened pedestrianism, traffic calming usage, and safety factors.

In recent history, Denton has developed exclusively on the back of the single occupant vehicle. Suburban sprawl has impacted our highways and city roadways as people find their way through Denton on regional trips or into Denton from outlying areas. The largest single issue we face is reducing the need to continually expand the transportation roadway system. The best available solution is to embrace development concepts, where trips are satisfied internally using a variety of transportation modes.

4

The Street

Street Development

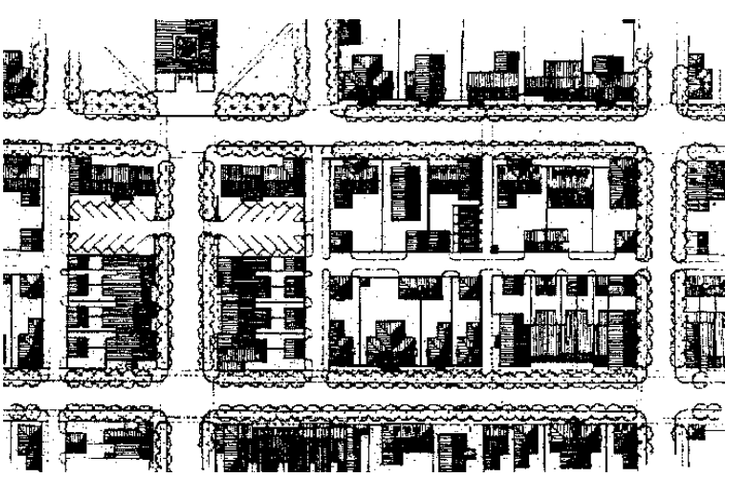
Streets are generally classified into freeways, major arterials, secondary arterials, collectors and residential streets. Each of these roadway classifications has unique street sections, amenities and associated infrastructure. The development of these sections needs to provide the basis for sustainable development.

Neighborhood Streets & Alley

Neighborhood streets should be designed in an interconnected or grid system with smaller blocks and more dense development. The interconnected system provides multiple routes that diffuse automobile traffic and shorten walking distances. The pattern keeps local traffic off of regional roads and regional traffic off of local streets. The streets in a neighborhood need to be designed to provide equitably for pedestrian comfort and automobile movement. Slowing the automobile and increasing pedestrian activity encourages the casual meetings that form the bonds of a community. Traffic calming as referenced in the traffic calming policy should be designed into new subdivisions

This proposal addresses the separation caused by the conventional "ranch home" or "estate lot" concept by moving the home toward the street using build-to lines from the right-of-way. Build-to lines require structures to be set at a specific line parallel to the street. The existing setback criteria are not compatible with the creation of interaction because of the separation of the home from the street.

Special residential lot conditions at block ends may not require street frontages where the front yard faces onto a green or community space and there is alley access to the property. Supplemental parking is required in this instance within the block.



The functional classificational heirarchy of streets:

- *Service Streets*
  - *Residential Alley*
  - *Commercial Alley*
- *Neighborhood Streets*
  - *Residential Lane*
  - *Residential Street*
  - *Rural / Suburban Street*
  - *Courtyard Street*
- *Collector Streets*
  - *Residential Avenue*
  - *Main Street / Mixed-Use Collector*
  - *Commercial / Mixed-Use Center Collector*
- *Arterial Streets*
  - *Primary Arterial*
  - *Secondary Arterial*

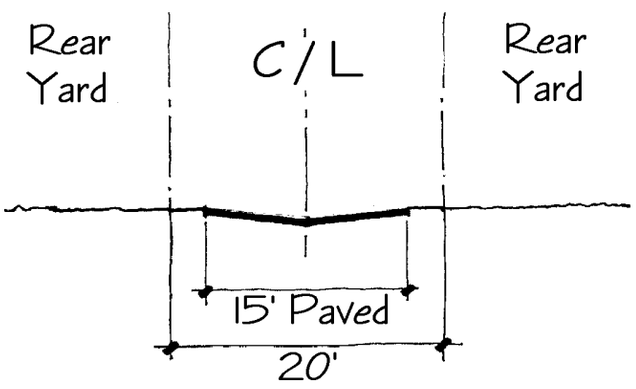
Residential Alley:

- *Use with lots 7,000 SF or less*
- *Service access from rear lot lines*
- *Recreational vehicles should be stored off-street in rear yards or within separate recreational vehicle storage facilities*
- *Supplemental parking insets within the block or block ends*
- *No parking allowed within alley right-of-way*

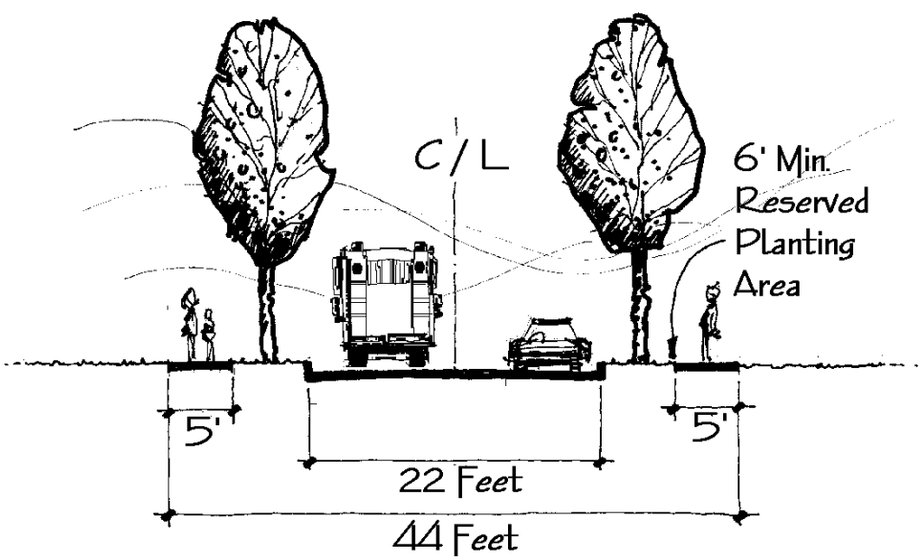
Residential Lane:

- *Alleys required*
- *Use with lots 7,000 SF or less*
- *Access from rear lot lines*
- *Parking allowed one side*
- *Recreational vehicles should be stored off-street in rear yards or within separate recreational vehicle storage facilities*
- *Supplemental parking insets within the block or block ends*

New neighborhoods and districts with lots7,000 square feet or less can use public alleys for secondary access. The alley will be dedicated to the public. Solid waste service will work to serve from the alley. The alley also serves as fire protection access.



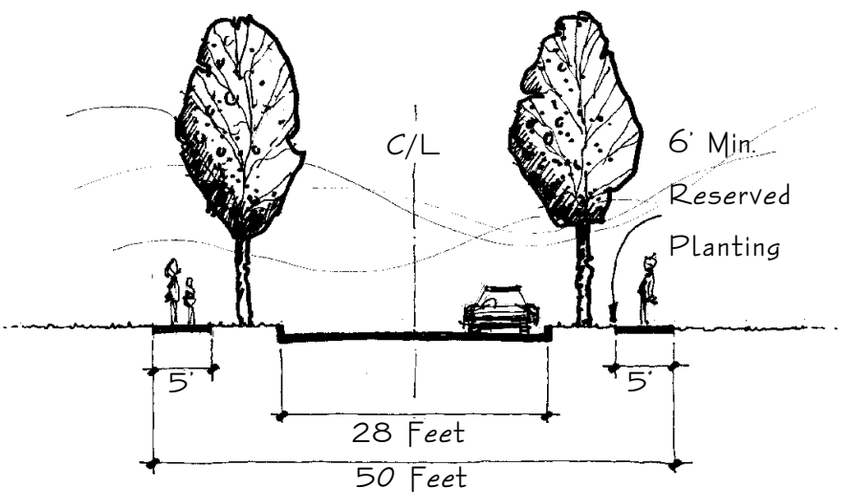
This street is designed to reduce the impermeable area from current standards while providing for basic access needs. This residential lane or the residential street may be used at the discretion of the designer.



4

The Street

This street is designed to reduce the impermeable area from current standards while providing for basic access needs . This section has a wider right-of-way requirement and a narrow pavement section to allow all utilities within this right-of-way. This street section or the residential lane may be used at the discretion of the designer. Use of pervious materials for private-car storage and shared driveways is favorable.



Residential Street:

- *Use with lots greater than 7,000 SF*
- *Parking allowed both sides*
- *No alleys*
- *Access from shared driveways*
- *Recreational vehicle storage needs occur in separate lots for that purpose*

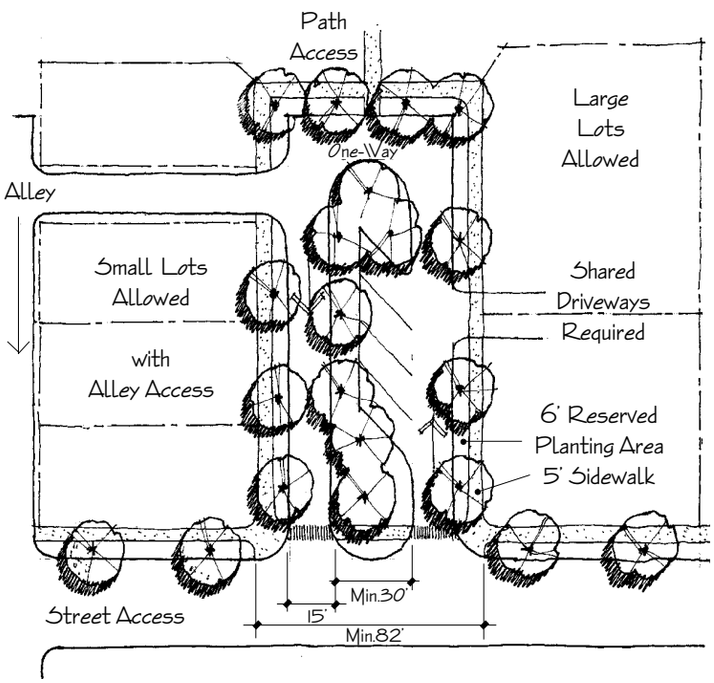
On the outskirts of the city's urbanizing area, this street section will be used for properties subdivided into one acre or more. This section will is designed with 24 feet of pavement and borrow ditches along either side of the pavement.

Rural/Suburban Street:

Courtyard Street:

- *One-way street section*
- *Alley used for small lots*
- *Ingress & egress from shared driveways at large lots*
- *Supplemental parking required*
- *Access to path system required at courtyard end*
- *No private lot frontage at the end of a courtyard will prevent pedestrian linkage*

The courtyard street is designed for use with either small or large-lot development. The courtyard street block length is no more than 150 feet to facilitate fire service. No lots will have frontage at the ends of the courtyard so that clear pedestrian passage and view corridors can be used to connect to these systems.



Cul-de-sac:

- *Access from shared driveways at large lots*
- *Access from alleys with use of the residential lane*
- *Supplemental parking required*
- *Access to path system required at cul-de-sac end*

Use of cul-de-sacs in functional street design reduces the ability for interconnectivity to neighborhoods, isolates lots, allows for only one way of ingress and egress from a lot and emergency access is less accessible. New street designs with cul-de-sacs will be limited in length to match that of a courtyard street. An alternative to the cul-de-sac is the courtyard street. The cul-de-sac is designed for use with large lot development. No lots will have frontage at the ends of the cul-de-sac so that clear pedestrian passage and view corridors can be used to connect to these systems. A vegetative island is centered within the cul-de-sac while maintaining land with criteria and thereby reducing the quantity of impervious surface within the right-of-way. The cul-de-sac will be used only where alternative options are not available.

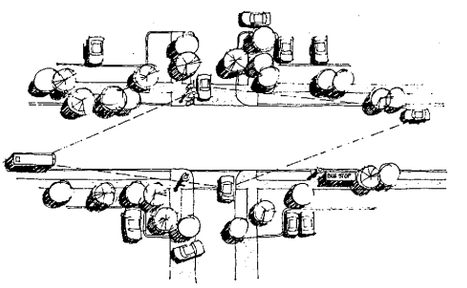
4 The Street

Neighborhood Sidewalks, Landscaping, and Visibility

The sidewalk section for all residential cross sections will be five feet to allow two persons to walk together. Sidewalks and crosswalks will include alternative paving materials such as concrete and pervious paver materials that blend into the neighborhood concept versus the starkness of concrete. The sidewalk section will be placed at the right-of-way line to separate pedestrians from vehicles and to aid in connecting the residential structures. The residential sidewalks are expected to connect to other sidewalk systems and trails.

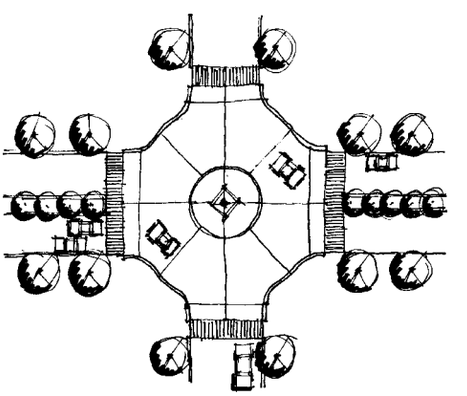
All of the proposed residential sections will provide a minimum six feet landscaped area between the sidewalks and the curb. Street trees will be placed in this area along with other neighborhood specific landscaping to establish the character or theme of that district.

Corner clips for residential streets will be fifteen feet.



Collector Streets and Alley

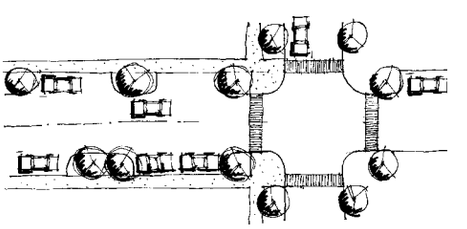
Collector streets will have multiple functions, all of which are different than residential streets. Collectors have to play a major part in establishing coordinated transportation systems. The collector has to provide equal or better aesthetic features to maintain the character established in the residential areas. Larger corner clips of twenty five to fifty feet will be provided at intersections to encourage lines of sight, landscaping, and adequate room for utility transitions. The residential collector collects the traffic from residential streets and takes it to minor destinations or to arterial streets. The lane width will be at the minimum allowed to promote slower speeds. The collector streets complete the overall system connections of the grid patterns defined in the residential streets. The shorter block lengths and features such as traffic circles will reduce speeds to encourage the feeling of safe interactions between the modes of transportation.



Traffic calming design techniques will be used on the residential collectors. Access management techniques like shared access, driveway separation, and corner clearances to maximize street capacity while improving the aesthetic characteristics.

▶ *SLOW TRAFFIC, ADD INTEREST AND SET A CORNER INTERSECTION BY CREATING A SENSE OF PLACE*

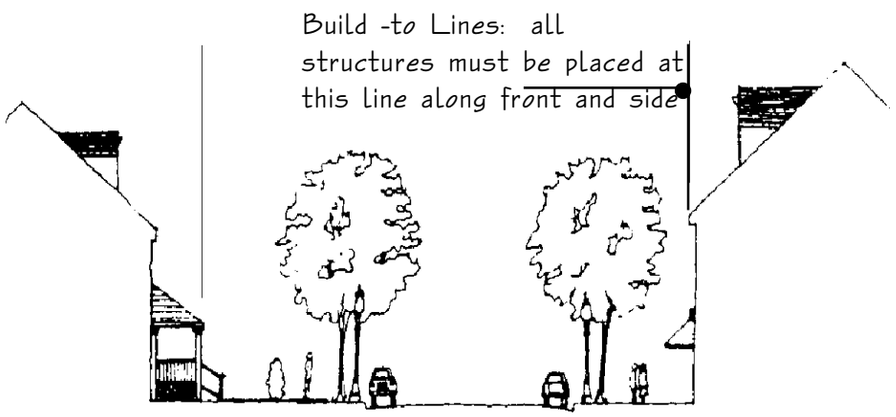
Right-of-way for the residential collectors will provide adequate lines of sight and promote vertical sight clearance levels for landscaping. Special right-of-way flares are encouraged to create special design features such as seating areas, landscaping features, or public art along the linear sections.



The Street

Build-To Lines:

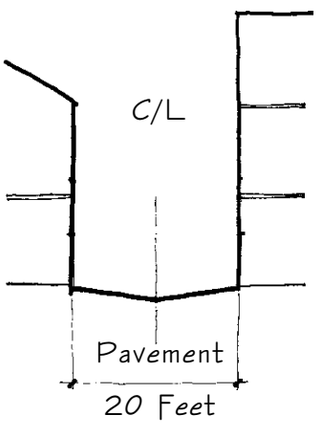
The urban village concept moves residential, retail, and commercial structures to a determined line offset from the street right-of-way edge which becomes the build-to line requirement.



Commercial Alley:

- *Use with all commercial service access such as loading, trash, and utility service*
- *Use for additional fire access*
- *separates truck and pedestrian traffic*
- *No parking allowed*

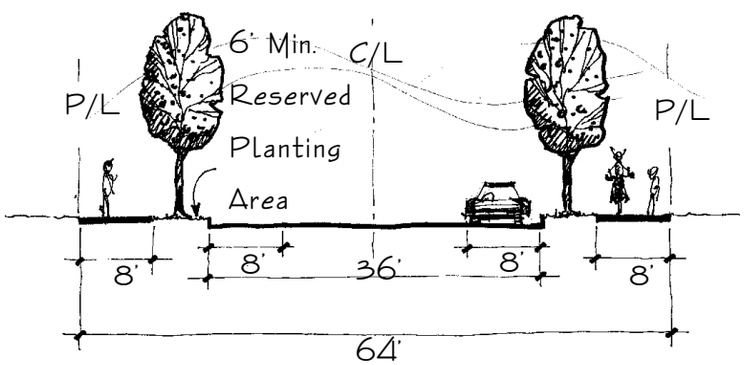
The commercial alley section will be used to promote better view lines, servicing, parking access and to separate the truck traffic from the mixed-use customers. The alley also serves as additional fire access around the commercial structures.



Residential Avenue:

- *Parking both sides of the street*
- *No single family front or rear yard frontages*
- *Access from the rear at the alley*

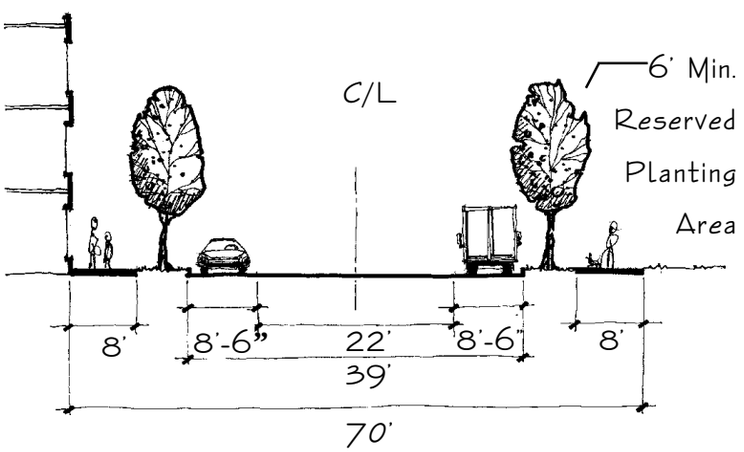
The residential avenue will provide for an outside lane on each side for parking use and two travel lanes in the middle. No single family access will occur along this collector street. Driveway access will be to the rear along the residential alley where attached housing or other uses occur along this street. Attached or multi-family uses are appropriate along this street.



4

The Street

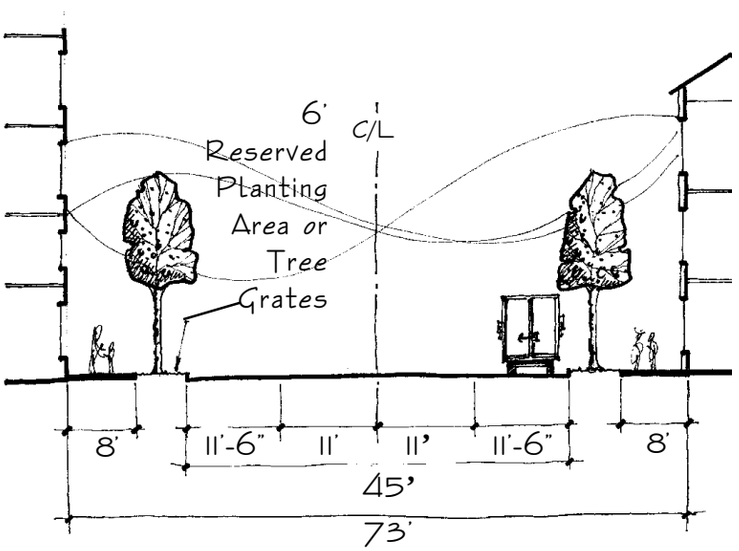
The main street/mixed-use collector will have standard lane widths to promote the flow of traffic and blend the neighborhood commercial / mixed-use center traffic. Access management regulations will apply to improve capacity and sight lines.



Main Street / Mixed-Use Collector:

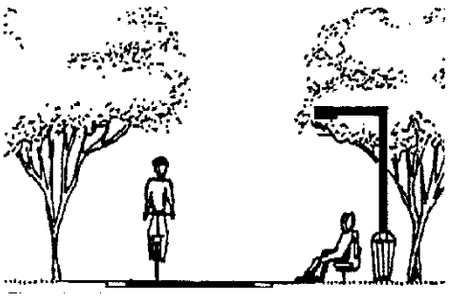
- *Parking on both sides*
- *Single family residential front and rear yard frontages not allowed*
- *Secondary access from the rear at the alley*

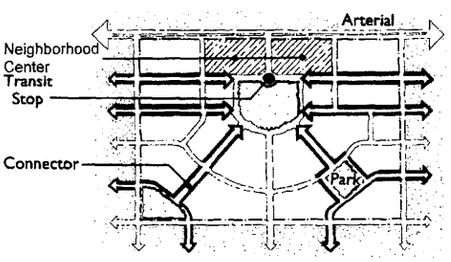
Commercial / Mixed Use Center Collectors will be provided in commercial/mixed use centers to provide increased capacity, trucks, and the interaction of all transportation modes. These roadways will provide four standard-size lanes with no parking allowed at intersections with arterials. The right-of-way should be expanded to provide adequate space for right-turn lanes on and off the arterial. Alleys will be utilized for servicing, parking access, and to separate truck traffic from the typical user.



Commercial / Mixed-Use Centers Collector:

- *Two travel lanes with parking or four lanes with no parking allowed*
- *Single family residential lots front and rear yard frontages not allowed*
- *Secondary ingress and egress from the rear at the alley*





Miscellaneous Collector Issues

Sidewalks will be eight feet wide, placed on both sides to create Class II paths that would blend pedestrians and bicycle traffic. Since one of the functions of the class II paths is to carry bicycle traffic, the main surface of the walk should be concrete. Concrete pavers or other like surface materials may be used when commercial/mixed-use structures abut the right-of-way line in neighborhood or commercial mixed-use centers.

Pavers, other similar paving materials, and those with rough textures that cause tire vibration will be used to enhance the aesthetic features at intersections, areas of interest, special nodes and corridors, at crosswalks, at parks, and transit areas, to alert the driver that the vehicle is in an intersection and warning drivers to slow their vehicles.

Transit-oriented design will be incorporated into the overall design of collectors. Transit-oriented design (TOD) features will be considered essential for high-density attached housing, mixed-use, and commercial or employment activity centers.

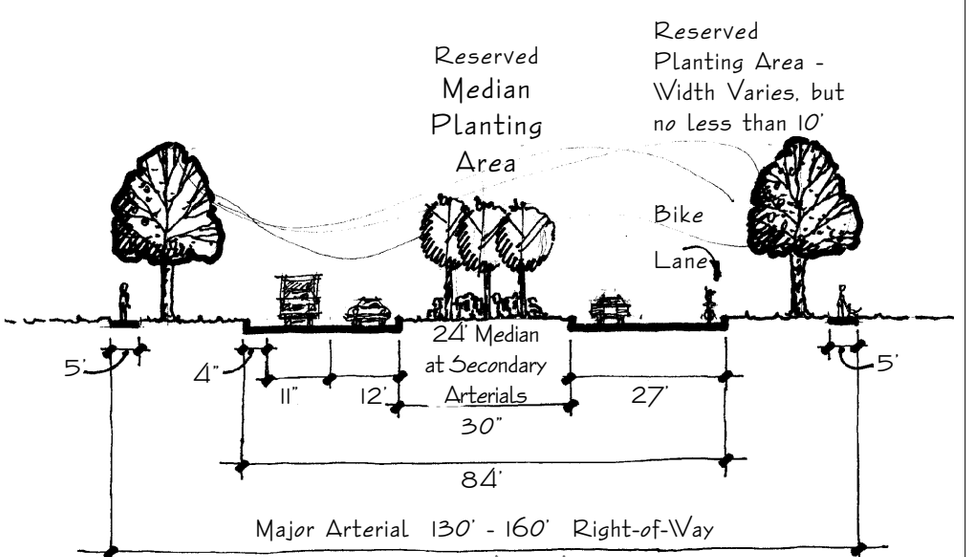
Collector streets will also integrate a reserved planting area to provide opportunities for landscaping and greenery for district themes.

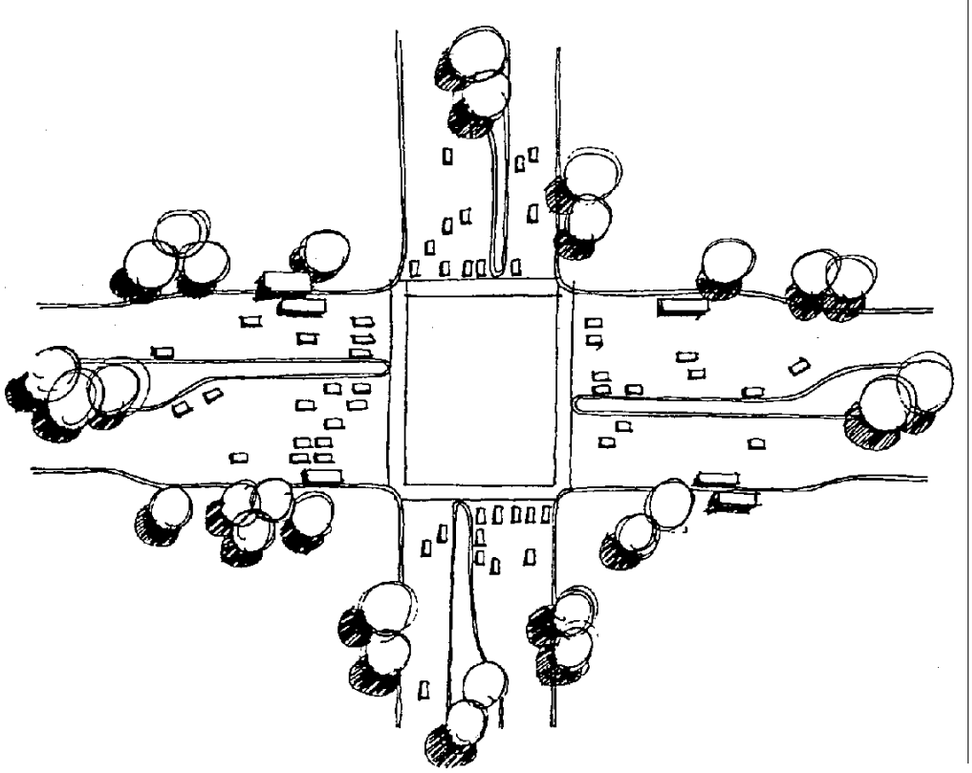
4

The Street

Arterial Lanes & Access Management

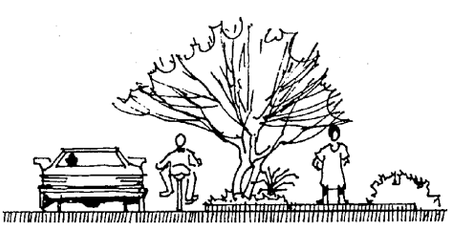
Arterials are classified into primary (major) and secondary. Arterials are designed to carry traffic across a district of town (secondary) or to provide major north-south or east-west routes across the city (major). All arterial streets should be divided with a median.





Arterials:

- No parking allowed
- Reserved planting in the median and along both sides of paved lanes
- Limited ingress and egress through shared drives and connecting streets
- Off-street parking to side or rear of structures
- No residential front or rear yards adjacent to arterials



The Street

Arterials:

- *Bike lanes required*
- *Transit nodes and bus queue jumpers*
- *Park & Rides*
- *Transit Oriented Design appropriate*
- *Transit shelters & furniture*
- *Special features to increase awareness of transportation corridors & nodes with special features and design*

Primary arterials will have six lanes and secondary will have four lanes. The lanes shall be standard width except the outside lane on each side will provide an integrated bike lane. The design of the intersection will blend the various nodes so that transfers and interactions occur safely and efficiently. Access management tools will serve to direct the traffic at collector connections with arterials and some minimized shared driveway connections.

Retrofit and Reconstruction

When improvements, repair, or reconstruction of streets are planned, every effort will be made to reduce the amount of pavement, use traffic calming devices to slow traffic, update sidewalks or build new ones, and furnish landscaping where applicable. Sidewalks and planting areas may be established in the interim taking into account future plans that include such features. Traffic calming devices may be used to reduce traffic speeds with techniques such as reduced travel lane striping or marking, and rough pavement texture insets at intersections and along the street. Use of new street standards is implicit where redevelopment, retrofit of existing neighborhoods, or reconstruction occurs and it will not have an adverse impact on an existing neighborhood or historically sensitive area.

Utilities in the Street and Alley

All utility systems will be designed with the original subdivision so that they can be constructed prior to placing the paving course on the s treet or alley.

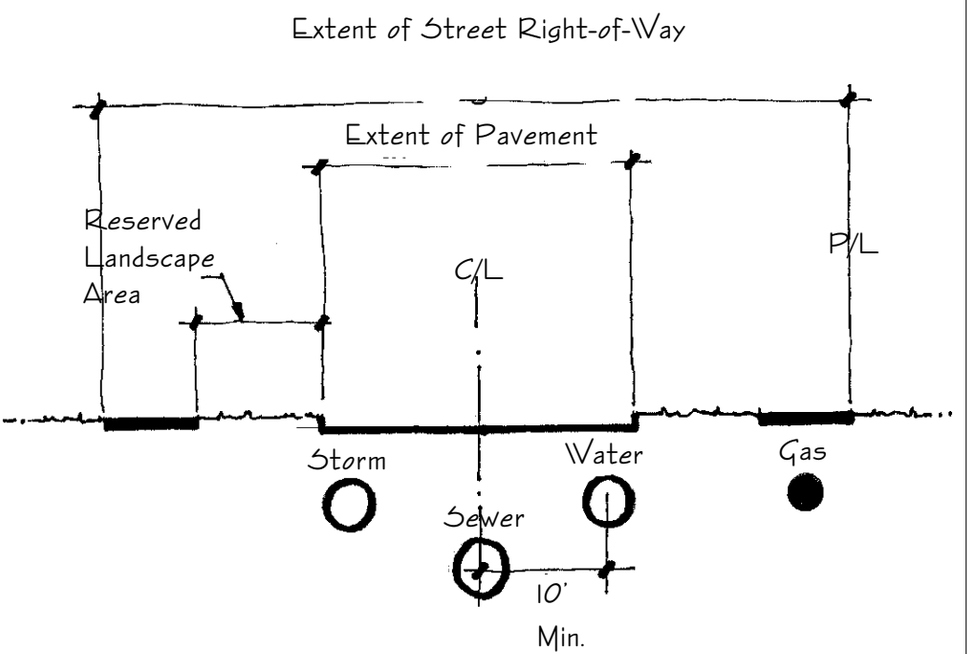
Neighborhood Streets

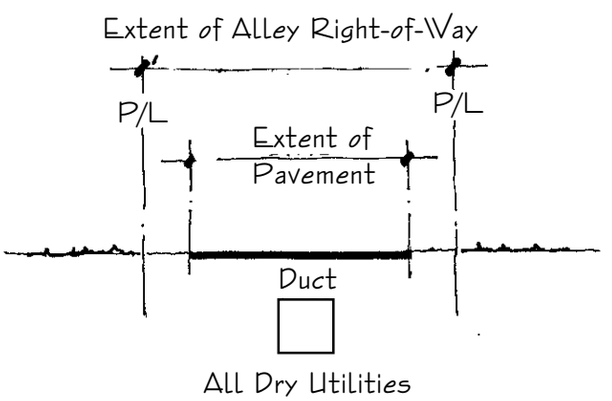
New neighborhoods with alleys allow the design of wet utilities under the street and dry utilities under the alley. Utilities are not to be placed in the reserved landscape or planting area. All utilities, other than transmission and feeder lines, will be underground. Standards will be developed that locate all utilities in a manner that coordinates design, installation and overall construction of a development.

4 The Street

Typical Utility Conditions

Sewer lines may be placed at the centerline of the street with water lines on one side and storm sewers on the other side depending on site-specific conditions.





All Dry Utilities

Electric, telephone, cable TV, fiber optics, and other similar utilities may be placed in a duct system where some reserves are made for future expansions by new companies or reworks/ upgrades by existing companies.

Wet Utilities:

- *Sewer lines may be placed at the centerline of the street with water lines on one side and storm sewers on the other side depending on site-specific conditions.*
- *Encourage the placement of water on the north and east sides where possible.*
- *Gas would be placed under the sidewalk on the north or east side.*

Dry Utilities:

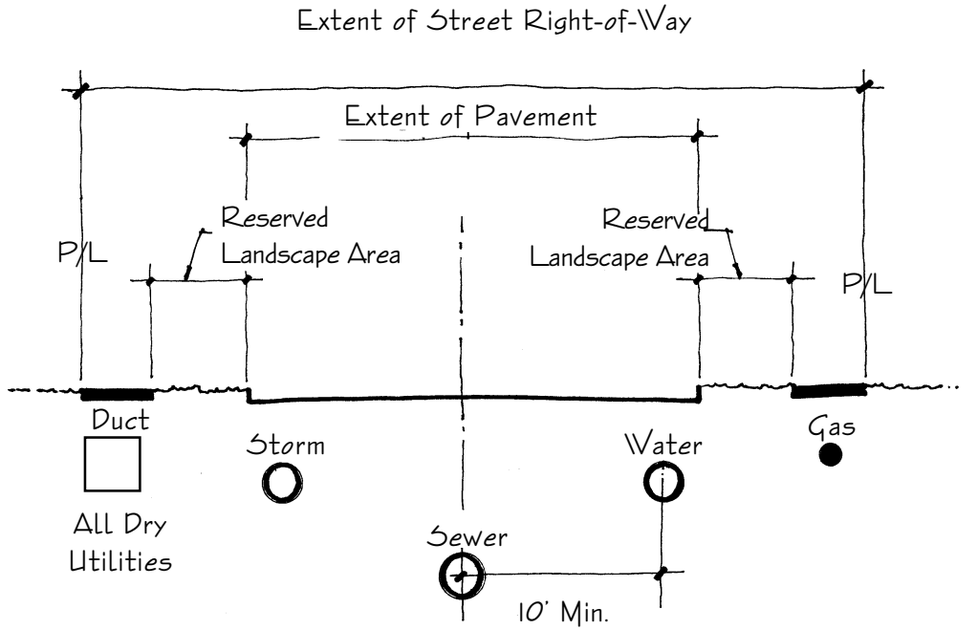
- *Service connections may be consolidated except in extreme circumstances or where there are an odd number of structures being served. This may require use of joint trenches and placing lines within a set prescribed area instead of the continuous separation across the entire lot. This is particularly critical for small-lot, attached housing, clustered, and compact developments.*
- *Street lights will be coordinated with all other utilities and construction.*

Special Lot Conditions:

- *The wet utilities will be placed like the small lot blocks and neighborhoods.*
- *The dry utilities will be placed in a duct bank (with expansion room) under the sidewalk opposite the gas line.*
- *Service lines will be consolidated as much as possible to maximize the area for undisturbed landscaping and aesthetic improvements.*
- *All utilities, other than transmission and feeder lines, will be underground.*
- *Street lights will be coordinated with all other utilities and construction.*

Special Utility Conditions

Large-lot districts and neighborhoods without alleys will have all utilities in the street right-of-way.



Commercial / Mixed-Use Center Collector Utilities

Utilities in the collector street right-of-way will be placed as described in residential streets. Utilities are not to be placed in the landscape or planting area. All utilities, other than transmission and feeder lines, will be underground.

Arterial Utilities

Many arterials will have to provide adequate room for transmission or feeder lines. A specific location will be provided for these on major and secondary arterials. The right-of-way will contain the landscape reserve and sidewalk reserve on each side and additional landscape reserve within the median. The variable width will be based on the need for turn lanes and for placement of utility transmission lines. Utilities are not to be placed in the landscape reserve area. All utilities, other than transmission and feeder lines, will be underground.

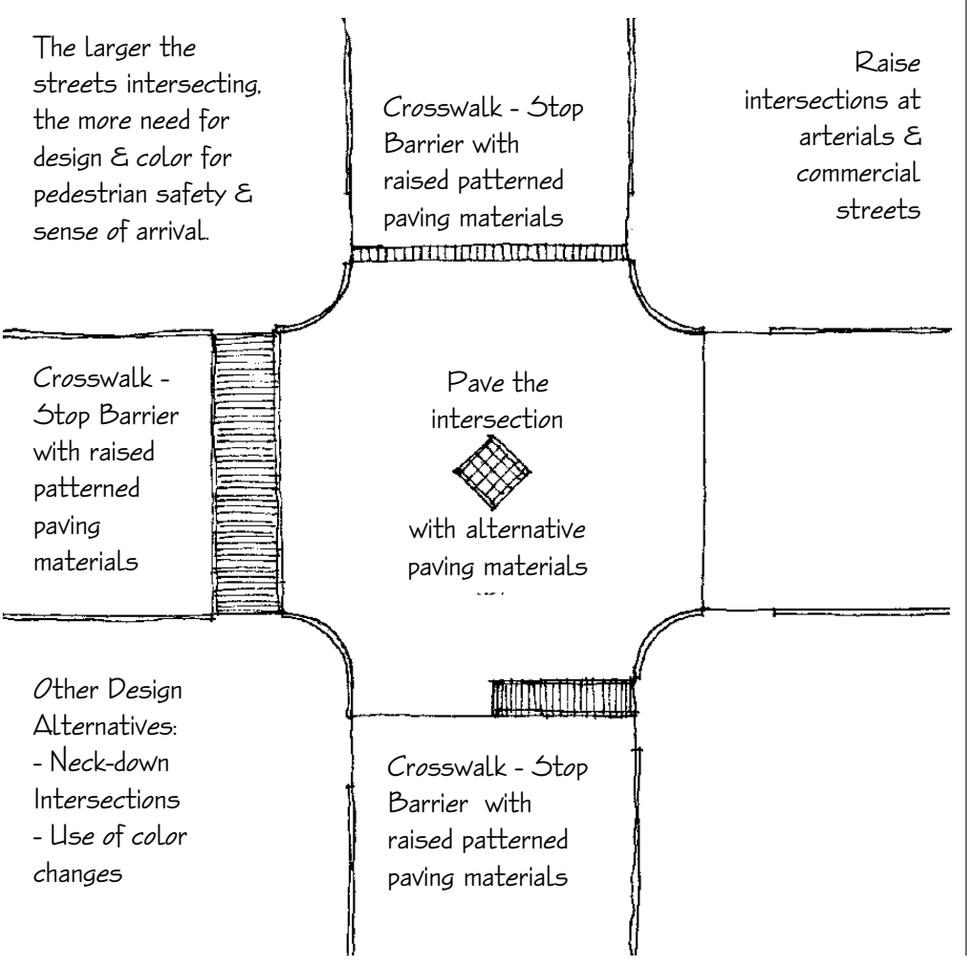
4 The Street

Shared Duct Banks

Developers will be responsible for working with all utility companies providing service to the neighborhood in order to address technical issues for shared dry utility duct banks. Specific routings, termination points, and methods must be identified to accommodate utilities. Duct banks will provide a minimum of four reserved ducts for future expansion, upgrades, or replacement and will be provided by the developer.

Street Aesthetics

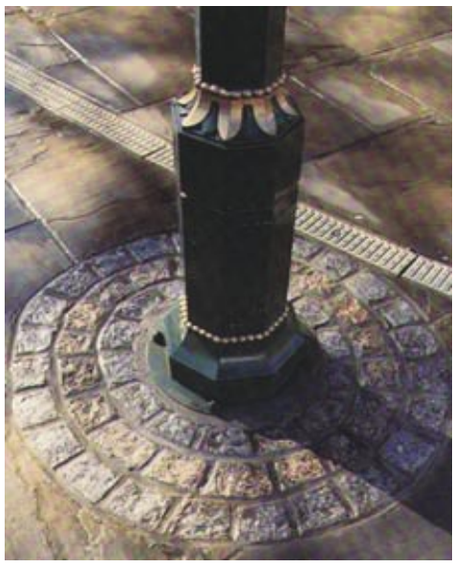
The street is more than just a place to move people and stow utilities. As the most intensively used public space in the urban landscape, the street should also be recognized as a social space, a thread that can knit together neighborhoods, institutions and business. It's design and appearance should reflect the importance of this space and the desired image of the



Materials

- *Require the use of alternative paving materials, including the use of different textures, patterns, colors and permeability, to delineate pedestrian and bicycle paths, crosswalks, transit stops, other non-vehicle spaces, and at major intersections.*

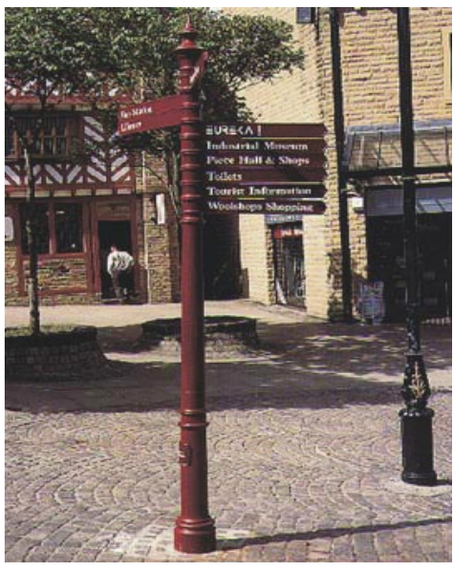
The Street



community. Elements of this aesthetic image include street trees and other plants, colors and textures used on paved surfaces, lighting, signage, public art, and site furniture. These elements can be woven together to create a comfortable and pleasing space through which people in vehicles, on bicycles, on skates, on foot or in strollers, and the handicapped may travel.

Lighting

Adopt standards for street and security lighting that are consistent with urban design, environmental, public safety and transit objectives.



Signage

Design and adopt directional and informational signage schemes that are effective, attractive and reinforce a desirable image for the city.

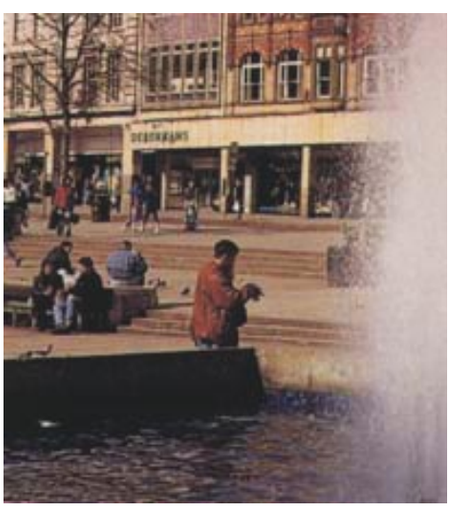
Landscape Design

Adopt landscape design standards that achieve urban design objectives, while allowing for variation in style and design along different corridors, nodes and gateways and on adjacent private property.

4 The Street

Furniture

Use site furniture (benches, planter seating, trash containers, drinking fountains, and other features) to create gathering places for pedestrians within the street right-of-way.



Transit

Adopt design standards for transit stops and bus shelters that are consistent with urban design objectives and transit-oriented design.

4

The Street

Information Systems

Use information kiosks at strategic focal points and gathering places along the street to communicate community news and events.

Public Parking

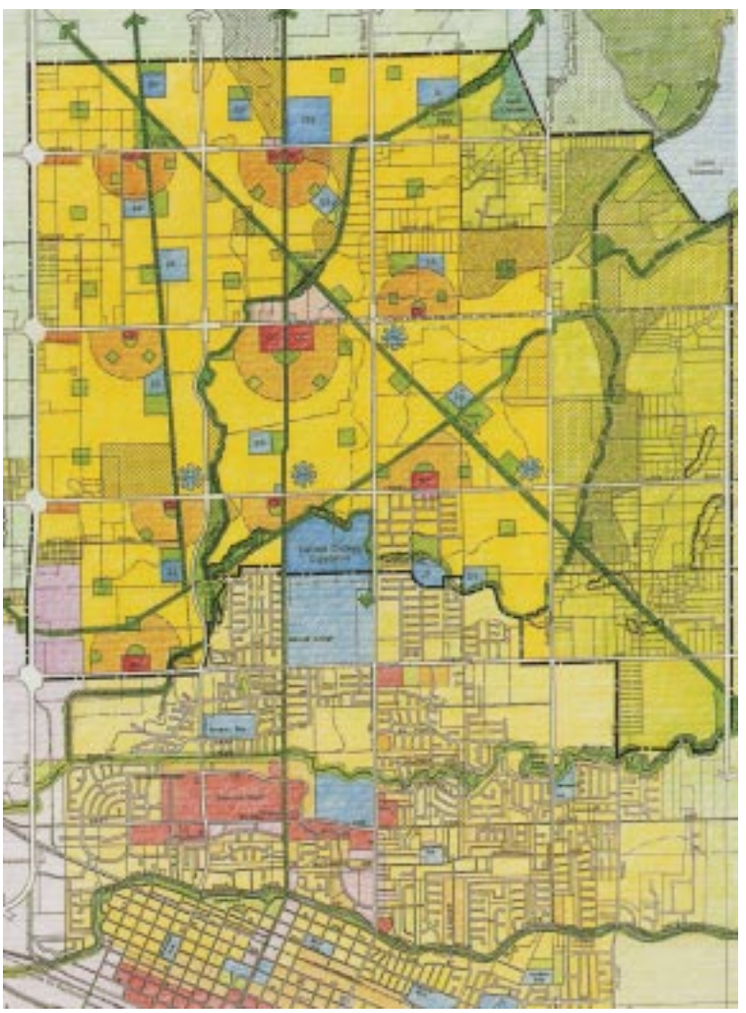
Apply adopted design standards for paving, lighting, signage, and landscaping to public parking spaces.

Public Art

Adopt standards to guide placement of art in public places, such as landmarks, view corridors, pockets, traffic circles and other locations of prominent stature.

4

The Street



Urban Design

- *Use the urban design criteria to create relationships between the street and the structures built adjacent to the right-of-way line that exemplify quality design and sustainability.*

In 1999, the City of Denton recieved the National Trust for Historic Preservation's "Great American Main Street Award".

4

Historic Preservation

Introduction

Denton received designation as a Texas Historical Commission Outstanding Urban Main Street City in 1989 and received the National Trust for Historic Preservation "Great American Main Street Award" in 1999. In addition, Denton's downtown received State approval as a district on the National Register of Historic Places in 1999, having more than 120 renovated structures in the downtown area. The unique and distinctive cultural, historical, and architectural features of Denton should be identified, restored, preserved, and maintained through a partnership between the city and private interests, in keeping with the historic preservation plan.

Policies

POLICIES

- Existing neighborhoods should be protected and preserved.
- The city will continue to view the downtown as a unique and dominant area that merits special attention. A comprehensive downtown revitalization program, based on the strategies of the Texas Urban Main Street program, will be pursued to maintain the momentum created by recent improvements.

Historic Preservation Goals & Strategies

Historic Preservation Goals

GOALS

- Identify and create additional historic and conservation districts.
- Enhance the historic tourism potential of historic districts.
- Protect individual sites or aspects of areas identified as being of historical significance.
- Protect remaining archeological resources.

4 Historic Preservation

Historic Districts Strategies

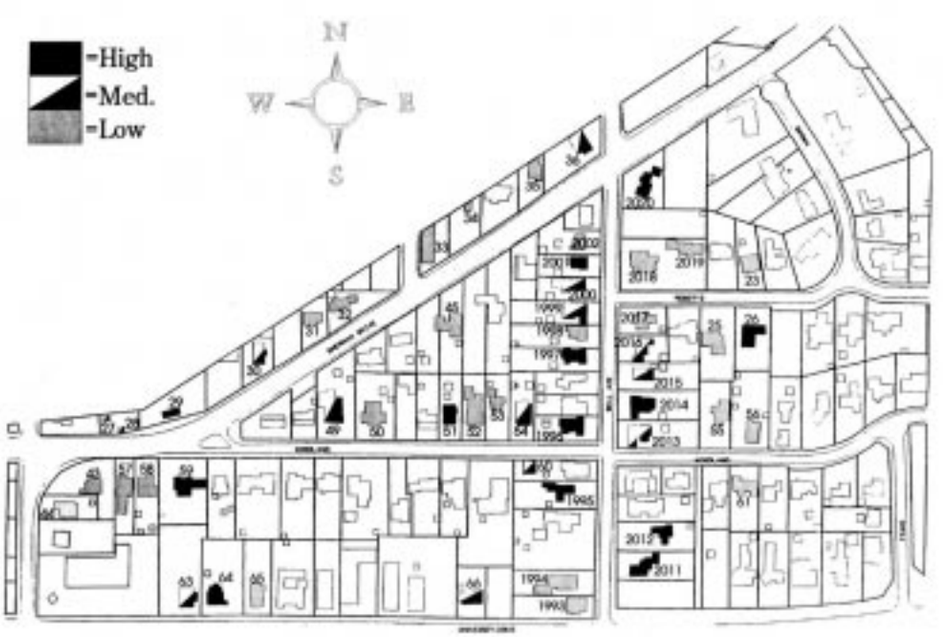
STRATEGIES

- The Historic Landmark Commission and city preservation officer will identify and recommend areas within the city limits that qualify for historic district designation. Historic districts receive appropriate zoning classification in order to enforce and ensure preservation of structures within the district. Potential historic district sites currently under consideration are Courthouse Square District and Congress School District.

- The Historic Landmark Commission and city preservation officer will identify and recommend areas within the city limits that qualify for conservation district designation. Potential conservation district sites currently under consideration are Austin-Locust Conservation District and Bell Avenue Neighborhood Conservation District.

- The Historic Landmark Commission and city preservation officer will educate property owners of historic district benefits and encourage participation in district development.

- The city will designate structures having historic or cultural significance. Property owners of designated individual sites may receive an incentive in the form of a fifty percent exemption from city taxes for fifteen years. The Historic Landmark Commission will review plans within the historic districts.



Bell Avenue Neighborhood Conservation District Proposal

Historic Tourism Strategies:

- *The city will actively promote preservation as a means to increase economic, cultural and educational diversity within the community.*

- *The city will support and encourage the restoration, preservation and maintenance of areas having historical or cultural significance.*

Historic Sites Strategies:

- *The city will encourage voluntary landmark designation as a vehicle to protect sites with historical significance.*

- *In those cases where structures located in the downtown area do not qualify for historic designation, The city will encourage use of property appearance guidelines when renovating, to maintain a consistent and aesthetic atmosphere.*

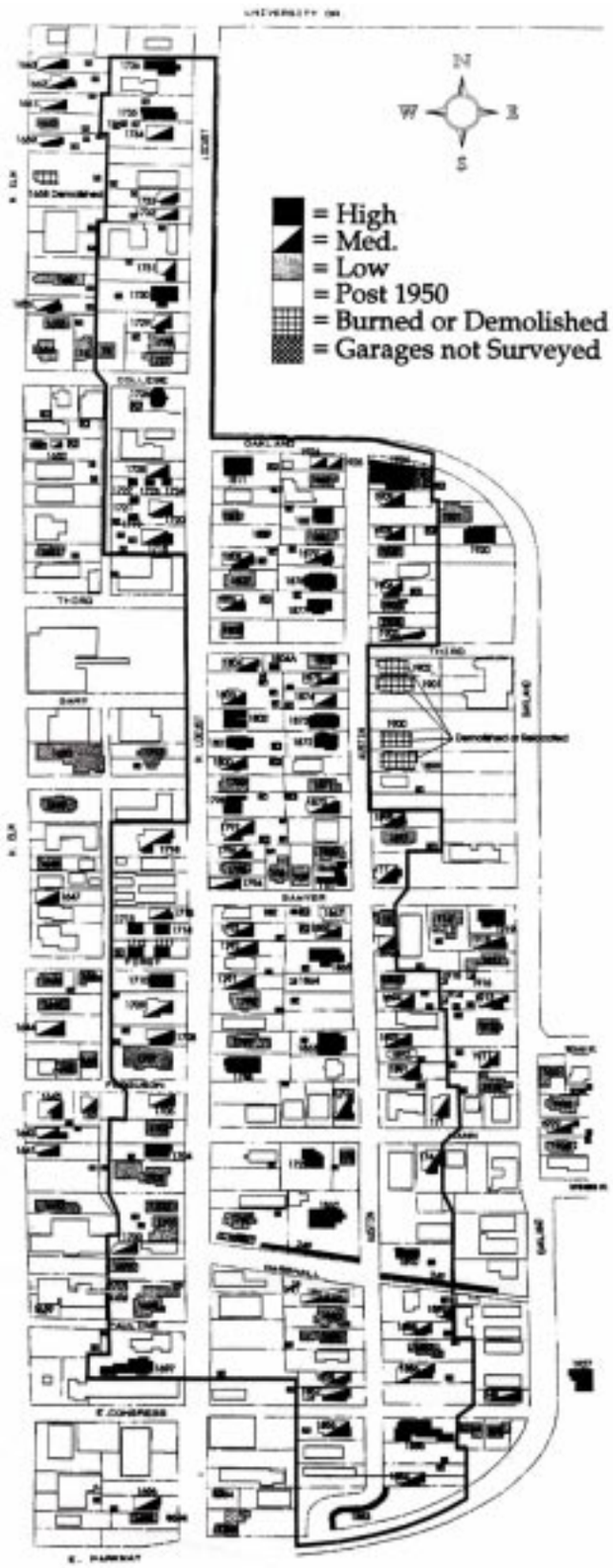
- *When improving infrastructure within historic districts, efforts will be made to identify and preserve historically significant features.*

Historic Preservation

- *Infrastructure construction will be reviewed by participating departments prior to performing work.*

Archeological Resources Strategies:

- *Steps should be taken to ensure that important remains and artifacts are not disturbed whenever possible. In some instances, mitigation may be achieved simply through documentation rather than complete preservation.*



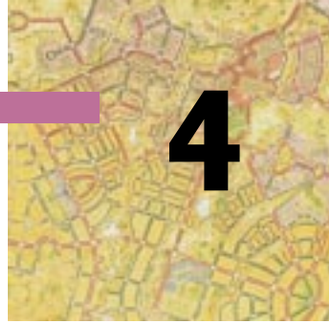
Austin - Locust Street Conservation District Proposal

4

Historic Preservation

Congress School Historic District Proposal

Courthouse Square Historic District Proposal



4

Maintenance & Enforcement

Enforcement Priorities:

- *Tall grass & weeds*
- *Trash, debris & illegal dumping*
- *Abandoned buildings & hazardous structures*
- *Junked & abandoned vehicles*
- *Unscreened outside storage*
- *Vehicles parked in undesignated parking spaces, such as front yards*
- *Illegal dumping in storm drainage system*
- *Graffiti*
- *Odors*

Introduction

The image of a community—its viability as a place to live, work and prosper—is to a great extent determined by the condition and appearance of both public and private properties and structures. The degree of care applied to public and private buildings, roads, sidewalks, parks, utilities, trees, landscaping, signage and other urban features reflect directly the vision and values Denton's residents hold for their city.

Policies

POLICIES

- ❑ All paved surfaces, including streets, alleys, parking spaces, ramps, and sidewalks within the public right-of-way will be developed and maintained in accordance with adopted standards.
- ❑ All signage, lighting, site furniture and transit-related improvements within the public right-of-way will be developed and maintained in accordance with adopted standards.
- ❑ The city will adopt maintenance standards for public and private facilities that enhance and support Denton's image and appearance.
- ❑ Provide a level of enforcement that ensures the standards are applied uniformly to all areas and structures in the city and that ensures the standards are not used as an instrument for harassment of any person.

Maintenance & Enforcement Goals & Strategies

Maintenance & Enforcement Goals

GOALS

- ❑ Maximize the service life and performance of paved surfaces by maintaining them in accordance with adopted standards and practices. Maximize the life and protect the investment value of trees and other landscape placed in the public right-of-way.
- ❑ Promote community pride and economic values while curtailing the expansion of urban blight. Establish measurable goals based on identified community needs. Pursue violations actively rather than reactively. Remember that compliance is the primary objective while penalties and/or punishment are secondary.
- ❑ Routinely assess results for effectiveness by determining whether regulations are understandable and readily enforceable. Educate the community of ordinances to prevent future violations.

4 Maintenance & Enforcement

Maintenance & Enforcement Strategies

STRATEGIES

- ❑ Develop and implement alternative funding strategies in order to defray maintenance costs.
- ❑ Adopt and implement pavement design and materials specifications that meet cost and performance objectives.
- ❑ Ensure that paved surfaces are constructed to meet city standards by implementing strict quality control measures.
- ❑ Adopt maintenance schedules and budgets to achieve performance specifications and desired design life cycles.
- ❑ Adopt and implement landscape design and materials specifications, including tree species and irrigation systems, that meet urban design, performance and life cycle objectives.
- ❑ Implement landscape system installation and maintenance requirements to ensure that city standards are achieved.
- ❑ Ensure that all property fences are maintained in sound condition and good repair at all times.
- ❑ Sidewalks and driveways on private property should be maintained to be safe, free of holes, and significant breaks, cracks or changes in grade.
- ❑ Inspect all off-street parking areas to ensure that they are maintained in good repair to be free of holes, significant breaks or changes in grade.
- ❑ On private structures, the city should ensure that every foundation, exterior wall, roof, window and all exterior surfaces are maintained in good repair and maintain the structural integrity as exhibited at the time of original construction or comply with current standards, whichever is least restrictive. Repairs on private structures should be made with materials of like kind as the original construction or better.

STRATEGIES:

- ▶ *Initiate a program to inspect all apartment complexes on a yearly basis.*
- ▶ *Evaluate enforcement issues during the drafting of ordinances.*
- ▶ *Evaluate all available enforcement options and resolve enforcement cases effectively.*
- ▶ *In an effort to remove visual blight and public nuisances throughout the City of Denton, specific areas will be targeted. The targeting of these areas will be limited to an increase in officers assigned to the area due to the number of violations. Additional target areas may be added, as determined by the city and based on the needs of the community.*
- ▶ *In order to educate the community of code violations, each year officers will provide property owners and tenants with a brochure of the most common violations. This will provide the community with proactive versus reactive enforcement.*

5

Environmental Management

THE CONCERN FOR THE ENVIRONMENT BY THE CITIZENS OF DENTON ECHOES HENRY DAVID THOREAU'S 1861 OBSERVATION IN THE JOURNAL:

"WHAT ARE THE NATURAL FEATURES WHICH MAKE A TOWNSHIP HANDSOME? A RIVER, WITH ITS WATERFALLS AND MEADOWS, A LAKE, A HILL, A CLIFF OR INDIVIDUAL ROCKS, A FOREST AND ANCIENT TREES STANDING SINGLY. SUCH THINGS ARE BEAUTIFUL; THEY HAVE HIGH USE WHICH DOLLARS AND CENTS NEVER REPRESENT. IF THE INHABITANTS OF A TOWN WERE WISE, THEY WOULD SEEK TO PRESERVE THESE THINGS, THOUGH AT A CONSIDERABLE EXPENSE; FOR SUCH THINGS EDUCATE FAR MORE THAN ANY ....RECOGNIZED SYSTEM OF SCHOOL EDUCATION. I DO NOT THINK HIM FIT TO BE THE FOUNDER OF A STATE OR EVEN OF A TOWN WHO DOES NOT FORESEE THE USE OF SUCH THINGS, BUT LEGISLATE CHIEFLY FOR OXEN, AS IT WERE.

IF WE HAVE THE LARGEST BOULDER IN THE COUNTY, THEN IT SHOULD NOT BELONG TO AN INDIVIDUAL, NOR BE MADE INTO DOORSTEPS."

Introduction

Environmental protection is one of the most significant ongoing concerns expressed by our community. During the public review process for development of the growth management strategy and plan, citizens repeatedly questioned the existing quality of their environment and the means the city could use to protect and manage it.

Environmental protection encompasses a host of issues: water quality, air quality, soil erosion, habitat preservation, public health, conservation, compatible development, wetlands protection, retention and enhancement of urban forests, floodplain protection, open space designations, etc. Management of these issues is extraordinarily challenging. To successfully address all of these issues, a holistic approach, aimed at balancing a myriad of values and interests, must be utilized. The city is committed to a built environment that protects the health and safety of its citizens.

The City of Denton recognizes the need to value its environmental resources appropriately. By identifying, protecting, and preserving those areas with significant ecological value, further loss of our natural heritage can be avoided. Minimizing environmental degradation and pollution is an associated priority. With environmental concerns reaching out far beyond our city limits, any successful program addressing these issues must determine the value these resources hold for our local community, our regional community, and our global community. Our responsibility lies finally to this not-so-infinite planet on which nothing less than our very survival depends.

5 Environmental Management

Policies

POLICIES

- Development policies will emphasize environmental awareness, promote the ethical use of natural resources, and encourage the preservation of native habitat.
- Environmental protection will be an integral consideration in the development of policies concerning economic growth and community development.
- The city will evaluate the value and function of the natural environment and identify areas with unique ecological significance.
- Appropriate protection measures and management techniques will be used to minimize harmful discharges directly to the environment.
- Site-specific pollution control techniques will be based on the environmental significance of the area and the pollution potential of the development.
- Environmental mitigation, or lessening of the force or intensity of developments will be considered for development in areas of ecological significance or sensitivity.

- Development policies will establish the equitable distribution and use of natural resources. For example, provide floodplain and open space access as a recreational resource for the community instead of singular ownership by one person or a single neighborhood.
- The city will take a leadership role in shaping and implementing federal regulations and programs for air and water quality issues including stormwater discharge and erosion control.

Environmental Management Goals & Strategies

Ecosystem Management Goals & Strategies

Denton will be a responsible steward of the natural environment by improving air quality, water quality, conserving resources (land, water, etc.), and reducing solid wastes. The city will consider environmental impacts of proposed plans, programs, and regulations and work with regional, state and federal agencies and neighboring jurisdictions to improve the quality of the city's and region's natural environment.

Denton will develop and implement strong resource conservation programs for energy, water, native, and restored wildlife habitat areas, sensitive lands, and urban forests. Green energy will be an important component in our management programs, including conservation of electricity, natural gas, coal, and other forms of fossil fuels, and encouraging alternative sources of energy such as solar. Preservation and restoration of our sensitive lands and habitats requires

Environmental Management

strong governance. Conservation of these areas will be promoted through education programs, incentives, design standards and regulations.

GOALS

Ecosystem Management Goals

Develop conservation and development priorities by:

- ❏ Providing city planners and decision makers with a method to systematically identify, evaluate, and synthesize various environmental attributes.
- ❏ Using assigned ecological values to determine what type of growth is compatible with each habitat area.
- ❏ Acquiring and preserving open spaces considered to be of high value by the city.
- ❏ Requiring proposed developments to protect the natural resources associated with the development site to the greatest extent possible.
- ❏ Encouraging "Green Builder" standards.
- ❏ Expanding the public education program.

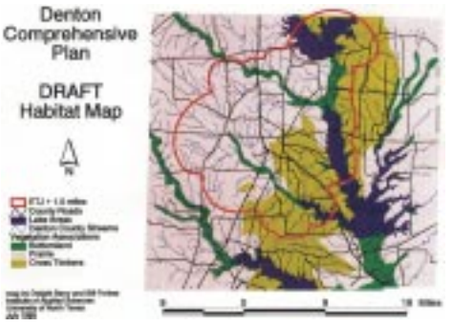
STRATEGIES

Ecosystem Management Strategies

The City of Denton contracted with the University of North Texas (UNT) to develop descriptions, rating criteria, functions, and values for local and regional habitats. The objective of this ecological values project is to provide the city with a method for systematically identifying, evaluating, and synthesizing the various environmental attributes associated with a particular piece of land. The project considers ecological resources including air quality, water quality, stormwater treatment/flood control, recreation/trails, wildlife habitat, native species, core habitat, connectivity habitat, restoration, fisheries, municipal economic benefits, and rehabilitation needs. The city will utilize aerial photographs developed in January 2000 at a one-foot resolution to identify these areas. Once criteria and values are assigned, the city can identify what areas are appropriate for what types of development, conserving the most critical environmental resources while permitting more intensive development of lower prioritized resources.

- ❏ Utilize the extensive databases developed by the Environmental Protection Agency, the U.S. Army Corp of Engineers, the Texas Natural Resource Conservation Commission, and other environmental agencies, the scientific and technical expertise of UNT and other universities, literature related to ecological valuation (particularly on the city and county government level) and develop a framework for identifying and prioritizing various habitats.

5 Environmental Management



- Utilizing this approach, development will be integrated into the natural landscape by directing it away from sensitive natural areas by applying innovative planning, design and management practices. Sensitive natural areas can be protected when development occurs in close proximity.

- Relate ecological values to the growth management and land use plan to determine what areas are appropriate for what type of growth.

- The city will develop effective partnerships with the county, other governmental agencies, and the private sector for the protection and preservation of important natural areas.

- Establish values and rating criteria for various ecological functions associated with a specific area. Rate each habitat area based on site characteristics and values of those characteristics. Develop associated geographic information system layers indicating different ecological values to determine the most suitable area for development. By adding these different criteria layers together, habitat value can be immediately identified for any piece of property within Denton County.

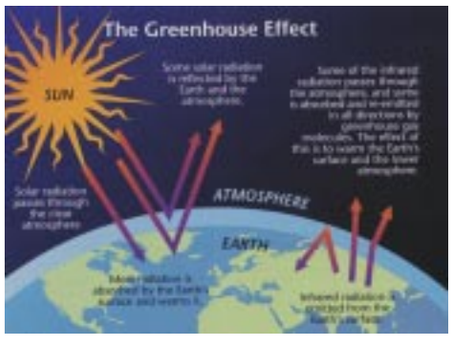
- Make broader use of mitigation banks to facilitate market-based compensation to landowners that choose to help protect environmentally sensitive lands.

- Facilitate wise real estate development, especially in difficult economic times. Real estate developers and lenders need to know that certainty of approval and availability of infrastructure, rather than speculative leapfrogging, will reduce costs and processing time. Therefore, new real-estate developments can be brought to market more quickly and inexpensively within areas where effective plans for growth management tied to conservation and urbanized development have been created.

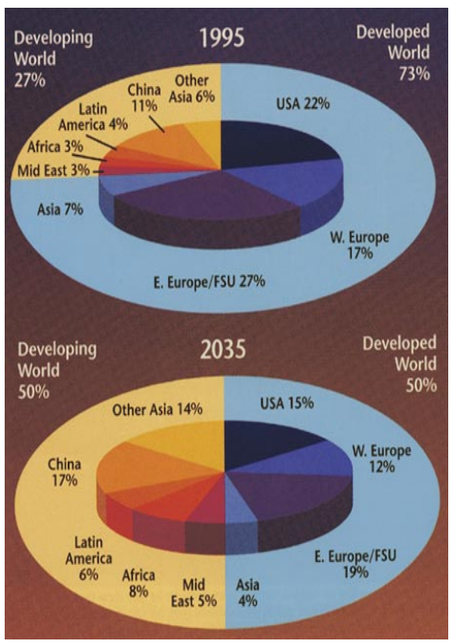
- Implement adequate public facilities requirements.

- Require an environmental impact analysis for development sites. For developments in areas with high ecological values(environmentally sensitive areas), require appropriate management practices including any necessary mitigation actions.

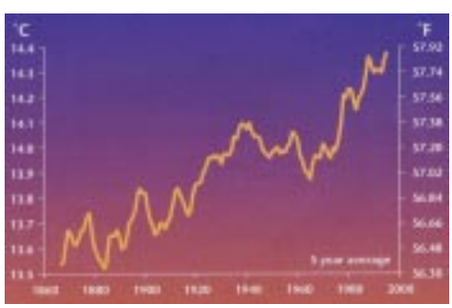
- Enhance clearing and grading requirements to minimize erosion, eliminate clear-cutting, reduce sedimentation, and reduce fugitive dust (airborne particles).



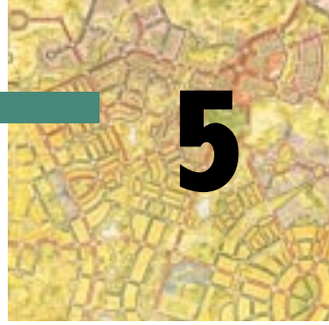
The Greenhouse Effect (EPA)



Ozone Contribution (EPA)



Global Warming Trend (EPA)



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Environmental Management

Air Management Goals & Strategies

Denton will continually improve its air quality as the city grows through comprehensive programs, policies, and implementation. Effective strategies will be applied to address the following issues: motor vehicle emissions, commercial and industrial pollution, wood-smoke emissions, street dust, indoor air quality, and visibility. The city shall endeavor to minimize the amount of allowable particulate emissions, as well as odorous, noxious, and toxic matter into the air.

GOALS

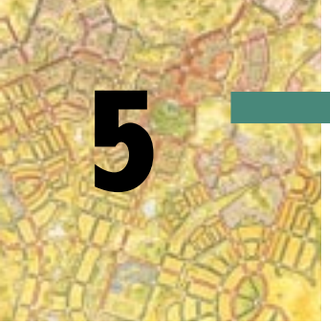
Air Management Goals

- Encourage public transportation systems and efficiencies.
- Develop policies to reduce ozone concentrations from mobile and stationary sources.
- Improve air quality throughout the DFW-Denton airshed.

STRATEGIES

Air Management Strategies

- Develop pedestrian transportation routes such as a "velo-web" to encourage bicycle commuting and connected trails to encourage walking.
- Enhance public transportation alternatives.
- Protect existing tree canopies.
- Continue to work with the NCTCOG to address air pollution on an airshed basis.



5 Environmental Management

Water Management Goals & Strategies

The value of tributaries and watersheds, until recently, has regrettably been overlooked. An innovative, comprehensive approach to water quality will be utilized to conserve stream corridors and other water bodies as natural and managed ecological systems and as critical wildlife habitat. Water quality will be protected and monitored to ensure high standards, addressing all forms of water resources such as drinking water, streams and water bodies, stormwater runoff, ground water, and wastewater treatment.

GOALS

Water Management Goals

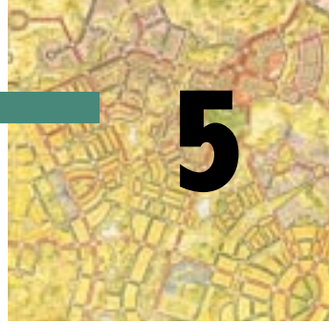
- ❑ Preserve floodplain areas to improve water quality and maintain floodplain habitat.
- ❑ Preserve wetlands.
- ❑ Preserve stream buffers and the bottomland hardwood habitat associated with such areas.
- ❑ Protect the water quality of our water supply reservoirs.

STRATEGIES

Water Management Strategies

- ❑ Implement and enforce floodplain-zoning restrictions, including development restrictions and use of greenbelts and other low-intensity land uses.
- ❑ Apply comprehensive guidelines and policies to manage existing and proposed development adjacent to floodplains or bodies of water, to minimize impacts on and restore the riparian ecology and to minimize hazardous conditions associated with flooding.
- ❑ Expand the city limits to include the entire greenbelt corridor and 1135 project area.
- ❑ Acquire and preserve the 100-year floodplain and necessary conservation easements.
- ❑ Coordinate development of greenways and trails along the floodplain and tributaries.
- ❑ Use measures to minimize stormwater runoff that significantly improve environmental impacts.
- ❑ Limit impervious surface areas.

The intrinsic value of free-flowing rivers and streams enhances the quality of life for present and future generations of Texans. Although Texas has 3,700 named streams and rivers, very few can be considered free-flowing. Every major river basin in Texas has been impounded. Impoundments block many aquatic organisms' innate requirement for upstream and downstream migration; act as heat, sediment, and nutrient sinks; alter downstream water quality and structural characteristics of stream channels; and fragment aquatic habitats, isolating aquatic populations and making them more susceptible to ecological disaster. Instream flow and instream uses and resources dependent on these flows would be best served by recognizing the value of approaching water resouce develeopment on a watershed basis.



5 Environmental Management

Land & Soil Management Goals & Strategies

GOALS

Land & Soil Management Goal

- ❏ Encourage preservation of open spaces.
- ❏ Reduce erosion and sedimentation caused by development in areas with highly erodible soils.

STRATEGIES

Land & Soil Management Strategies

- ❏ Because open spaces have been recognized as a requisite to a healthy community, Denton will continue to acquire and manage land and water to preserve, protect, and enhance important natural areas.

- ❏ Create an integrated system of publicly owned natural areas to protect the integrity of important conservation sites, protecting corridors between natural areas, and preserve outstanding examples of our diverse natural environments.

- ❏ Administer a program to acquire and manage important natural areas that preserve wildlife habitat and native landscapes, while providing opportunities for education, scientific research, nature interpretation, art, fishing, relaxation, wildlife observation, hiking, and other activities which do not require a motorized vehicle. Actively protect, manage, and enhance our natural stream corridors and other waterways as natural ecological systems, important wildlife habitat, and accessible recreational areas.

- ❏ Develop creative approaches to conservation of other habitat and open space, such as prime agricultural land.

- ❏ Adopt guidelines for erosion and sedimentation controls for construction sites.

Soil Texture Classes in Northwest Denton

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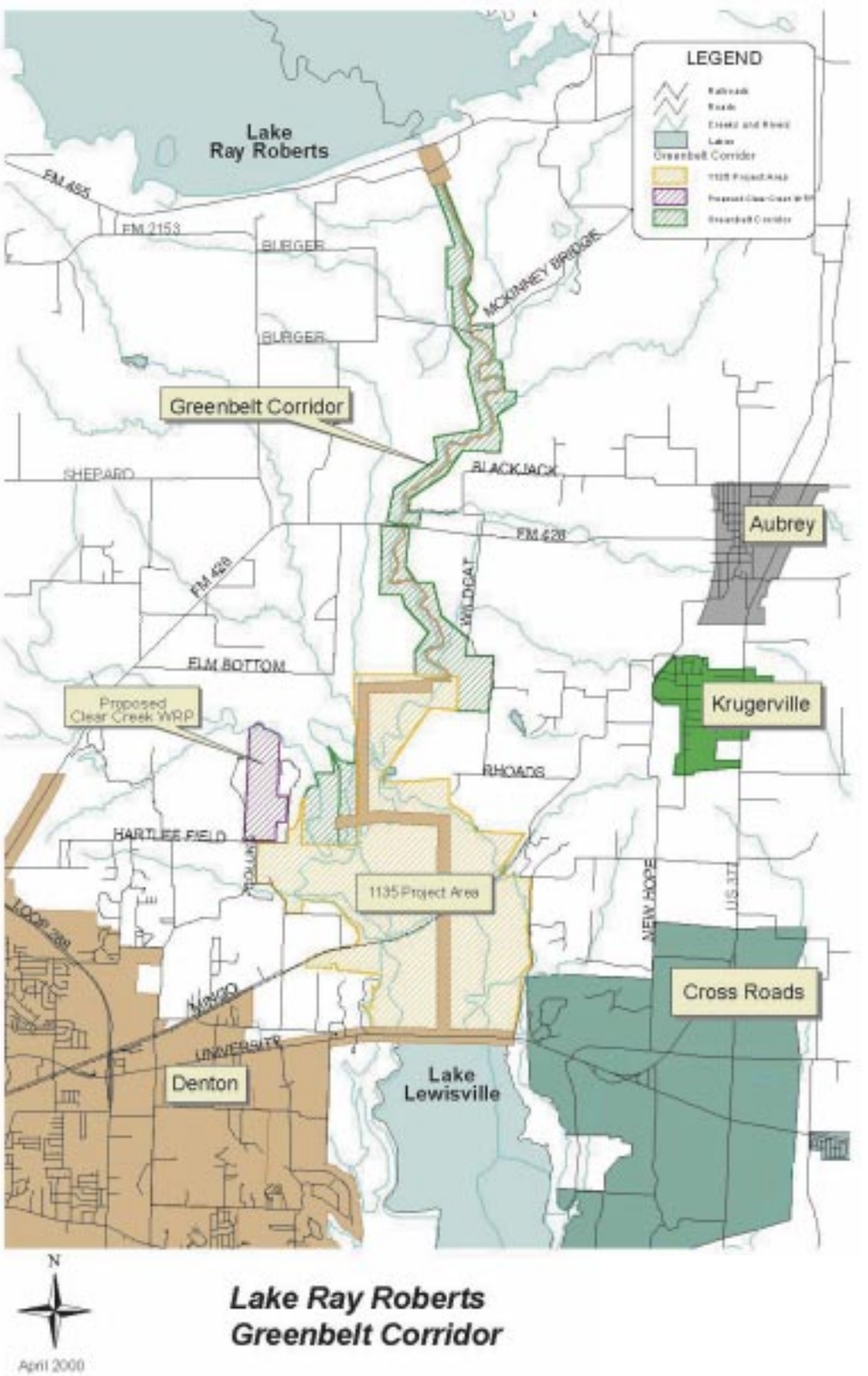
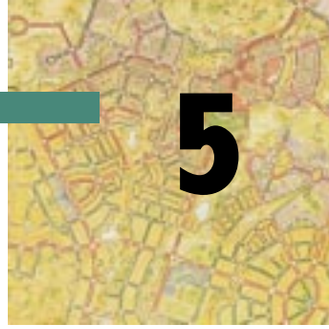
Environmental Management



The Greenbelt Corridor-10-mile hike, bike, canoe & equestrian wildlife trail.



5 Parks, Recreation & Open Space

Introduction

Urban open-space lands may be publicly or privately owned, developed with recreation facilities or a preserved natural landscape, as small as a house lot or as large as thousands of acres. While private open space and recreation facilities are important elements of urban design, this chapter addresses only the public system of parks, recreation facilities, and open space.

Attractive, safe and well-maintained public parks, open spaces, and recreation facilities are essential elements of Denton's image and quality of life. If strategically placed and equitably distributed, they can provide a wide array of opportunities for both individual and community enrichment. In addition, parks and open spaces may serve to protect environmentally sensitive lands from potentially harmful effects of urban development, while preserving their recreation and transportation benefits.

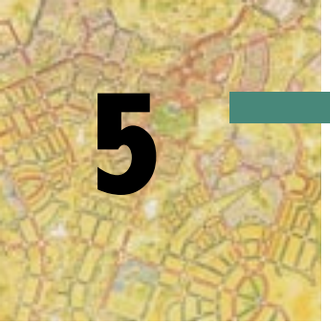
Parks and open spaces are places to play, to relax, to enjoy the natural environment, and to connect socially with others in the community. They can define a neighborhood and provide a cultural and historical focal point, as does Fred Moore Park. If properly designed and maintained, parks can enhance the economic value of nearby properties. Linear open spaces can be used to knit together neighborhoods with other important elements of the city's fabric, including schools, government service centers, and commercial developments. Such lands can also serve as an effective buffer between incompatible land uses.

In short, public parks and open spaces help to protect the social, economic, and aesthetic qualities that Denton values. In order to preserve these qualities, the city will continue to expand its award-winning parks system as the community grows.

POLICIES

Policies

- A wide array of parks and recreation opportunities should be equitably distributed and accessible to all Denton residents. Park and facility locations will be determined in accordance with the parks and recreation strategic plan and the parks, recreation, and open-space master plan.
- Parks and open spaces should be located in or adjacent to floodplains, where possible, to aid in floodplain conservation efforts and to enhance recreation opportunities. Such areas may be developed with recreation facilities or set aside as open space to preserve sensitive areas.
- The city should acquire and develop parks in combination with other public



5 Parks, Recreation & Open Space

facilities to provide the most cost-effective public services. Park property could be developed jointly with new schools, storm water detention basins, drainage channels, fire and police stations, or libraries. This policy should not contradict the spatial distribution objectives of the parks and recreation strategic plan and the parks, recreation, and open-space master plan.

- To ensure the reasonable distribution of public parks in accordance with plan objectives, residential developers should provide in their projects land for neighborhood parks sufficient to meet the needs generated by their development or provide an alternative strategy to satisfy this demand.
- The city should be responsible for the acquisition and development of community- and city-wide parks.

Goals & Strategies

Distribution of Parks Goals & Strategies

GOALS

Distribution of Parks Goal

- Ensure the adequate and equitable distribution of parks, open space, and recreation facilities.

STRATEGIES

Distribution of Parks Strategies

- Complete a new parks, recreation, and open space master plan that addresses public needs in all park and open space categories and meets the city's urban design, transportation, drainage, and environmental conservation objectives.

- Based on service standards for each park category; acquire and maintain sufficient land to keep pace with Denton's population growth.

- Develop, fund, and implement future capital improvements programs consistent with the parks, recreation and open-space master plan.

Implications of the Growth Management Strategy:

Denton's population is projected to reach 183,500 by 2020, most of which will reside in planning subareas 3a, 4a, 6, 7a, 8a, 14 and 15. Approximately 2,400 acres of neighborhood, community- wide parkland will be needed, an increase of 1,588 acres. Growth in these areas will require public investment in the acquisition and planning of community parks, multipurpose centers, and athletic facilities primarily in the south and far-east parts of the city. Park dedication requirements should help the city keep pace with the need for neighborhood parks as new subdivisions are platted and homes are built.

▶ *Park dedication may be used to acquire ownership of lands along drainage corridors to preserve environmentally sensitive lands and recreation opportunities. However, substantial public investment will be required to unite these lands into the continuous greenbelt and trail system envisioned in the Growth Management, Storm Water, Parks and Transportation elements of the Comprehensive Plan.*

5 Parks, Recreation & Open Space

- *To provide efficiently for public services, the city should work with the Denton Independent School District and other school districts to consolidate lands for parks, libraries, fire stations, and school sites. To achieve the objectives of the transportation system, these facility clusters could be linked by the greenbelt system to residential areas, major commercial centers, and the universities.*

- *A new parks and recreation master plan is needed to guide the acquisition and improvement of new parks, greenbelts, and other significant natural and historic resources. The master plan should be completed and adopted in 2000, and should be updated at least once every five years.*

- *The rapid growth of Corinth and other surrounding communities may present opportunities for cooperative ventures with Denton and should be mutually explored.*

Park and Open Space Acquisition Goals & Strategies

GOALS

Park & Open Space Acquisition Goal

❑ Achieve urban design, transportation, drainage, and environmental conservation objectives through park and open-space acquisition

STRATEGIES

Park & Open Space Acquisition Strategies

❑ Identify land and easements necessary to establish a unified greenbelt and trails system that achieves recreation and transportation system objectives.

❑ Identify significant scenic, historical, and environmentally sensitive lands, and determine strategies to preserve them.

5 Parks, Recreation & Open Space

Financial Effectiveness Goals & Strategies

GOALS

Financial Effectiveness Goal

- ❑ Ensure the cost-effective provision of parks, open-space, and recreation facilities.

STRATEGIES

Financial Effectiveness Strategies

- ❑ Working with city departments, area school districts, and developers, identify opportunities for clustering multiple public functions with parks and recreation facilities into neighborhood service centers. Develop appropriate planning policies, development regulations, and implementation strategies.

- ❑ Research the need for and feasibility of developing specialized parks and recreation facilities that can function as profit centers, which reduce the dependency on property tax revenue and generate profits to underwrite other recreation facilities and services.

Responsiveness Goals & Strategies

GOALS

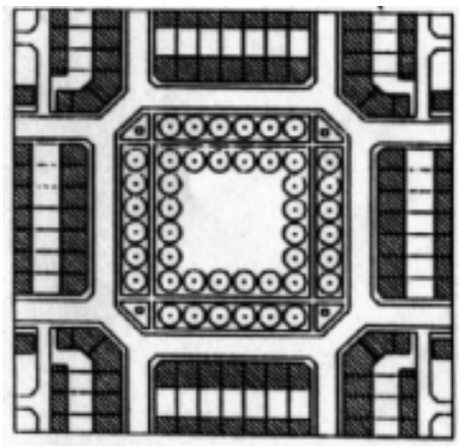
Responsiveness Goal

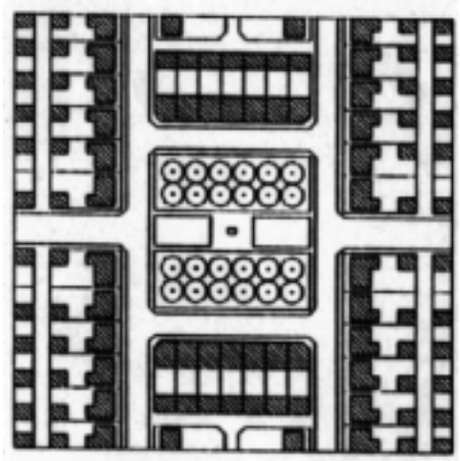
- ❑ Ensure that future parks and recreation improvements are responsive to the changing needs of Denton's citizens

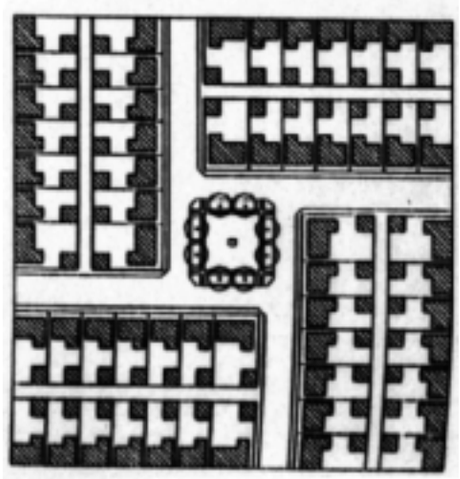
TRENDS MUST BE RECOGNIZED IN PLANNING THE TYPE & LOCATION OF PARKS & RECREATION FACILITIES & SERVICES:

- *SERVICE DELIVERY & LOCATION SHOULD BE INFLUENCED BY THE NEEDS OF SENIORS FOR SOCIAL ACTIVITY THAT IS AFFORDABLE, CONVENIENT & ACCESSIBLE.*
- *DESIGN FACILITIES & SERVICES TO MEET THE UNIQUE NEEDS OF ALL POPULATION GROUPS.*
- *PARKS & RECREATION SPACES WILL BECOME MORE IMPORTANT AS ELEMENTS OF AIR & WATER POLLUTION MANAGEMENT AS WELL AS AN IMPORTANT TOOL IN BUFFERING INCOMPATIBLE LAND USES AND CONTROLLING URBAN SPRAWL.*
- *THE DEMAND FOR UNIQUE, MORE COMPACT & INTENSE EXPERIENCES MAY RESULT IN OPPORTUNITIES FOR "PROFIT CENTER" FACILITIES.*
- *CHANGES IN FAMILY STRUCTURE, EMPLOYMENT, TECHNOLOGY & OTHER FACTORS SHOULD BE ACCOUNTED FOR IN PROGRAM & VENUE DESIGN.*
- *AS IMPROVEMENTS ARE FUNDED, IT IS CRITICAL TO CONSULT WITH THE APPROPRIATE STAKEHOLDERS REGARDING DESIGN & LOCATION OF PARKS.*

5 Parks, Recreation & Open Space







STRATEGIES

Responsiveness Strategies

❑ Periodically survey the wants and needs of Denton's citizens for their parks and recreation system. Incorporate this information into revisions of the strategic plan, annual action plans, and updates of the parks and recreation master plan.

❑ Update the parks, recreation, and open-space plan at least once each five years.

Park Classifications & Standards

Open Space Preserve

❑ No standards apply. Land acquired and managed in accordance with land use, preservation, environmental, and urban design objectives.

Urban Open Space

Service Standard

❑ None

Size

❑ Typically 2,500 square feet to 1 acre.

Service Area

❑ Immediate area, less than 1/8 mile radius. Public or private park.

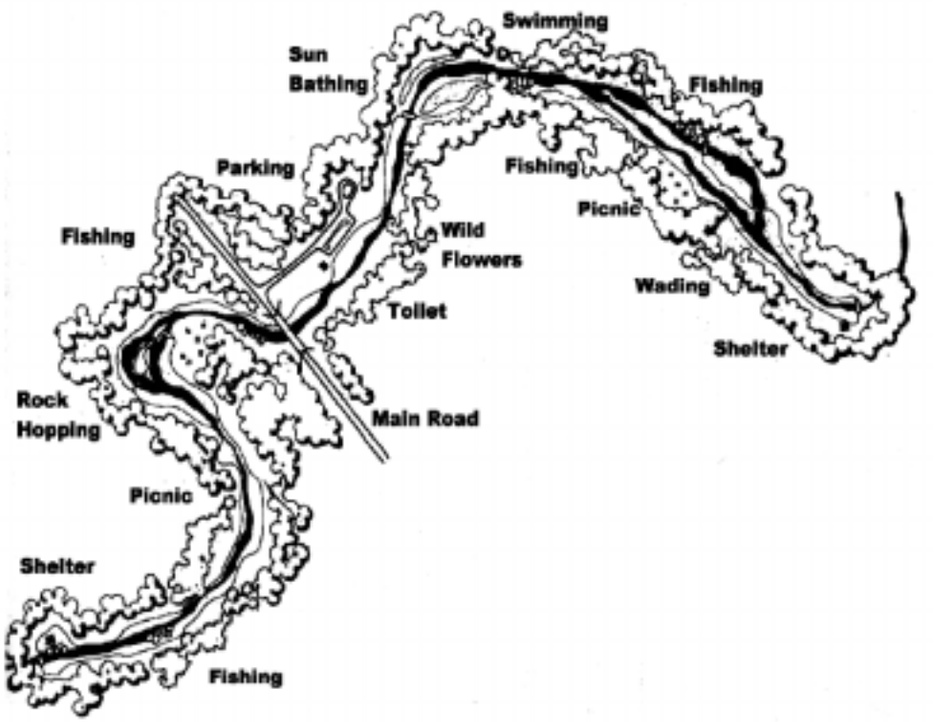
Typical Develeopment

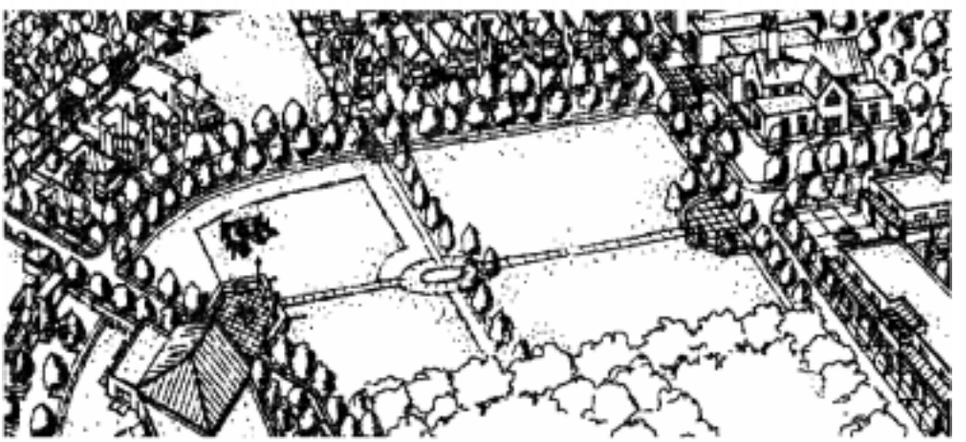
❑ Used to address limited, isolated or unique needs.

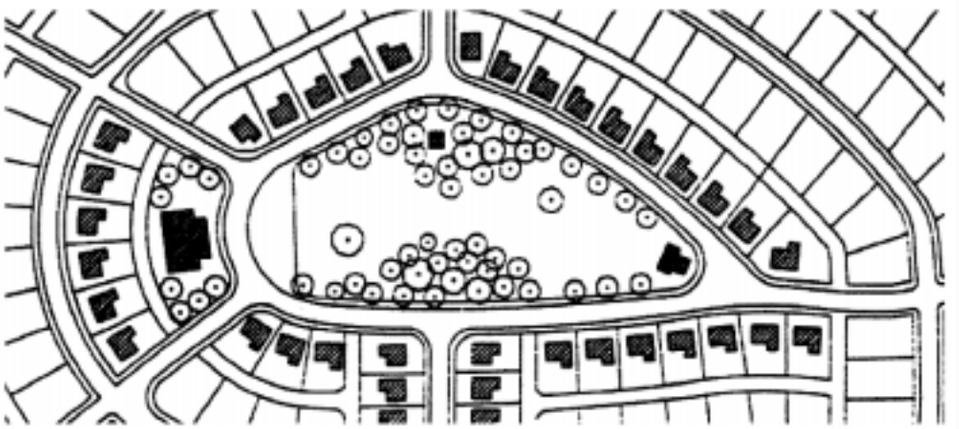
❑ Typically for passive use, may include very limited recreation.

❑ May include squares, plazas, gardens, urban pavements, formal spaces such as fountains and public art, and may be at the intersection of streets.

5 Parks, Recreation & Open Space







Linkages & Greenways:

- *Service Standard:* No standard
- *Size:* No standard
- *Service Area:* Typically links several neighborhoods. Ideally serves the entire jurisdiction
- *Typical Development:* Hard & soft surface trails for hiking, biking, skating, horseback riding. Connects neighborhood areas to schools, parks, civic buildings, other communities

Neighborhood Park:

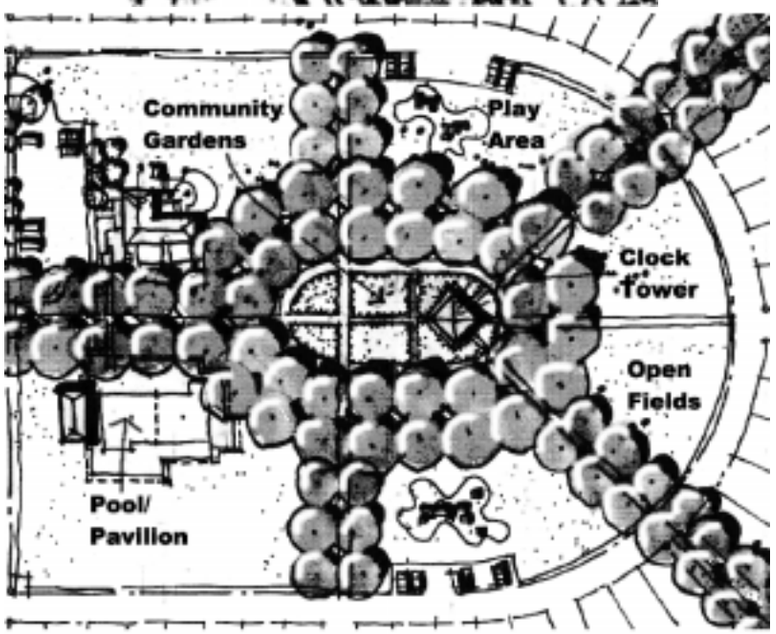
- *Service Standard:* 2.5 acres per 1,000 residents
- *Size:* Typically from 5 to 20 acres; may be larger depending on natural features& topography
- *Service Area:* 1/2 mile
- *Typical Development:* Playground, picnic area, court games, trails, minimal parking. At least 50% of the site is set aside for passive recreation activities and / or conservation area. Often located next to elementary schools

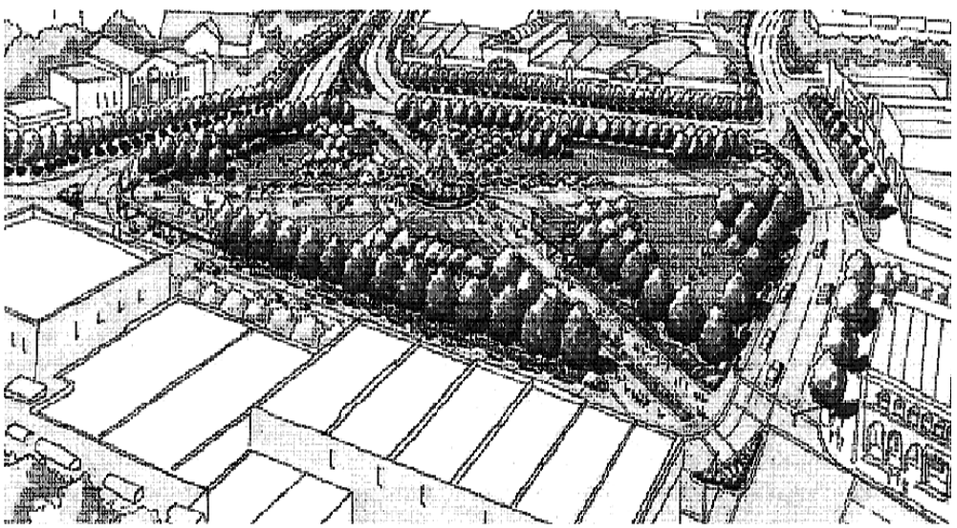
Community Park:

- *Service Standard:*
  3 acres per 1,000 residents
- *Size:*
  Typically 30 to 50 acres; may be larger depending on conservation areas
- *Service Area:*
  2 miles
- *Typical Development:*
  serving several neighborhoods, these parks include "drive to" recreation facilities, as well as facilities found in neighborhood parks. Recreation-Multi-purpose centers, competitive sports fields, & swimming pools. May serve as the "trailhead" for community-wide greenwway systems

Citywide Park:

- *Service Standard:*
  7 acres per 1,000 residents
- *Size:*
  50 acres plus, typically several hundred acres
- *Service Area:*
  Entire jurisdiction & beyond
- *Typical Development:*
  Unique, "one-of-a-kind" facilities, such as garden centers, water parks, outdoor theatre, civic center, fitness center, model airplane field, multi-field athletic complex, nature center, Likely to include significant conservation areas





Economies develop due to simultaneous interactions among increasing population, increasing numbers of employers and workers, and increasing numbers of businesses that provide goods and services for local consumption as well as for export.

6 Economic Diversification

Introduction

In the broadest sense, economic development refers to the changes in an economy over time that occur because of the formation of population centers such as towns and cities. Economic development usually has a connotation of growth. Economies develop due to simultaneous interactions among increasing population, increasing numbers of employers and workers, and increasing numbers of businesses that provide goods and services for local consumption as well as for export.

Economic diversification refers to a more directed type of economic development resulting in a more stable and resilient economy, which provides high-quality jobs in businesses acceptable to Denton. Diverse and developed economies are characterized by many different types of industries and interlinked by mutual suppliers and consumers. These economies often export goods and services to other population centers. Such an economy will be more resilient, stable, and self-sufficient, thus being less vulnerable to the national and regional economic fluctuations caused by federal and state policies over which local governments have little control.

A healthy economy is important to all city functions. Major issues that must be addressed include job creation, business recruitment, business expansion, and small business formation. A number of elements merit consideration, including job quality, environmental impacts, public resource demands, quality of the location (inside or outside of the city), and quality-of-life prospects. All are important in determining strengths and weaknesses of a healthy business climate.

Policies

POLICIES

- The city should encourage a strong, diversified, and self-sustaining economy, creating a wide range of employment opportunities, enhancing local ownership opportunities, and expanding and balancing the tax base of the city.
- Local business ownership and small business creation should be considered high economic diversification priorities.
- Development incentives should be considered to encourage industries and businesses to expand or relocate within the city. A cost/benefit analysis should be performed to define and measure short-and long-term benefits prior to granting incentives. Incentives should be considered only when proposed development is consistent with community plans. Projects involving retention or expansion of existing businesses should be given the highest priority.
- Development incentives may vary by size and type of establishment and by

6 Economic Diversification

initial and potential capacity as a generator of employment and other economic gains. Priority may be given to basic industries that are clean and that will make a significant contribution to Denton's employment or its tax base.

- ❑ Consideration of site planning, urban design, or neighborhood compatibility objectives will be included in the eligibility requirements for business retention, expansion, or recruitment incentives.

Economic Diversification Goals & Strategies

Economic Diversification Strategies

STRATEGIES

- ❑ Sustain and support business development activities to retain, expand, and recruit businesses.
- ❑ Encourage investment in the development, redevelopment, rehabilitation, and adaptive reuse of land and buildings for employment opportunities.
- ❑ Support community-based economic development initiatives consistent with this comprehensive plan and compatible with neighborhood livability.
- ❑ Promote and enhance the special character and identity of designated commercial areas.
- ❑ Promote a business environment within designated industrial areas that is conducive to the formation, retention, and expansion of industrial businesses.
- ❑ Promote a variety of efficient, safe, and attractive industrial and mixed employment areas in Denton.
- ❑ Foster a positive entrepreneurial environment for business incubation and small business growth.
- ❑ Encourage development of university-related efforts into independent entrepreneurial spin-off businesses.
- ❑ Seek ways to assist clusters of related businesses to collaborate more closely with one another and to market themselves as magnets for capital, research talent and high-skill manufacturing jobs.

Economic Diversification Goals:

- ▶ *The city should encourage a strong, diversified, and self-sustaining economy, creating a wide range of employment opportunities, enhancing local ownership opportunities, and expanding the tax base.*
- ▶ *Local business ownership and small business creation should be considered high economic diversification priorities.*
- ▶ *To ensure a skilled, diversified workforce for existing and future employers, the city will encourage employers, employee organizations, and education and training institutions and agencies to provide training and retraining opportunities to Denton citizens.*
- ▶ *Development incentives should be considered to encourage industries and businesses to expand or locate within the city.*

6

Economic Diversification

Economic Diversification Goals:

- *To diversify the existing tax base, economic development programs will focus industry recruitment and marketing efforts on businesses that are compatible with community, workforce, and economic development goals.*

- *Recruitment activities should be defined in a targeted marketing plan. Strategies should focus on identified markets. As conditions within the community change, target markets should be reassessed.*

- ❑ Support the retention of existing business and major institution base.

- ❑ Support Denton's artists, art organizations, and institutions because of their significant contributions to the city's healthy business climate, their role in creating a cultural environment that attracts high-wage employers to the region, and the substantial benefits they provide to residents.

- ❑ Promote close working relationships between financial institutions and the business community. Where appropriate, promote the development of new initiatives and innovative programs (e.g. Denton Community Development Corporation, loan packaging for SBA, loan guaranties, Industrial Development Bonds) to lower the cost of borrowing or to assist small business growth through increased access to capital.

- ❑ Where appropriate, support efforts to assist small business through technical assistance for business start-up and expansion.

- ❑ Seek ways to improve the environment for small businesses to thrive in Denton where consistent with the goals and policies of the plan.

- ❑ Encourage increased linkages between community job access and information systems and training programs.

- ❑ Increase access to literacy development and English-as-Second Language (ESL) programs to help overcome literacy and language barriers to employability.

- ❑ Work closely with school districts to identify and achieve basic competencies needed by young people who enter the workforce upon graduation.

- ❑ Offer apprenticeship and other workplace learning opportunities with the City of Denton and Denton industries.

- ❑ Site planning, urban design, and neighborhood compatibility objectives will be included in the eligibility requirements for business retention, expansion, or recruitment incentives.

- ❑ Incentives should be considered only when proposed development is consistent with community plans. Development incentives should focus on businesses that:
    - Provide higher-than-average wage levels
    - Bring new capital into the economy

6

Economic Diversification

- Have good future growth prospects
- Involve a cluster of businesses engaging in similar activities
- Use quality environmental practices
- Diversify the economic base
- Keep their workforce in Denton

- Incentive agreements will require businesses to meet specific thresholds or performance standards in order to receive benefits (e.g., capital investment, employment, and payroll).

- Identify existing and prospective industry workforce needs and enlist the resources of the University of North Texas (UNT), Texas Woman's University (TWU), North Central Texas College (NCTC), and local school districts to develop customized training programs as part of a marketing strategy.

- Target those industries that require an educated workforce. Match existing degree programs at UNT, TWU, and NCTC to businesses that require a significant workforce in these fields.

- Foster a positive environment for international trade.

- Recognize and support environmental conservation and enhancement activities for their contributions to the local economy and quality of life for residents, workers, and ecosystems of the city.

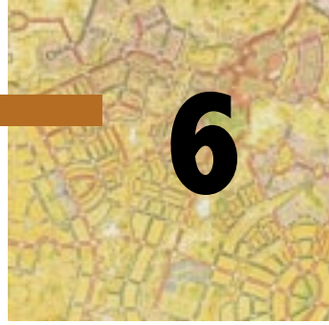
- Encourage new commercial businesses to locate in established commercial/mixed use activity centers. Where suitable sites in those areas are not available, encourage those businesses to locate in other designated commercial areas.

- Encourage development that attracts a diversity of employment opportunities.

- Promote public/private partnerships for the development of infrastructure to foster economic development.

- Seek ways to assist related technology-oriented businesses to locate in close proximity to one another and near research institutions. Promote the development of technology by connecting research institutions, hospitals, and manufacturing companies.

Facilitate the creation of coalitions of business with the University of North Texas, Texas Woman's University, North Central Texas College, & local school districts to develop competency-based education and training programs for community members that are targeted to the needs of business. This may include vocational training programs, apprenticeship programs, entrepreneurial skills training, customized on-site training, & technical & vocational preparatory programs at the high school level.



6

Housing

Housing has different meanings to different people. Some people envision a farm with acreage, while others think of an apartment on the square. Home ownership continues to be an important element of the American dream. Housing construction and land costs have made this goal of many households much more difficult to achieve, and growth intensifies the competition and demand for existing homes.

Introduction

Housing is the predominant land use in Denton. Housing and residential land use is one of the most important factors considered in the comprehensive plan. Housing is important, not only in its own right, but also because it strongly influences the size of the population and its balance of demographic factors, such as household size, age, and income.

Housing has different meanings to different people. Some people envision a farm with acreage, while others think of an apartment on the square. Home ownership continues to be an important element of the American dream. Housing construction and land costs have made this goal of many households much more difficult to achieve, and growth intensifies the competition and demand for existing homes. Homes that are similar to each other tend to be concentrated in one area, a phenomenon that creates neighborhoods based on income. Development and lending practices are market-driven, and construction that is affordable for low- and moderate-income households is becoming more and more rare. Because of their potentially greater impact on infrastructure, large expanses of higher density apartments and manufactured housing should be located with great care.

Neighborhoods can be defined in many ways, but for the purposes of the comprehensive plan, they are viewed as clusters of residential development that share a variety of functional and social ties. Neighborhoods form the background of Denton's citizenry; these areas are where people live. Neighborhoods are expected to be safe and secure, places of quality where families thrive and children go to school and play.

Neighborhoods face challenges as well. Low-income and minority neighborhoods need revitalization assistance. Other neighborhoods feel overwhelmed by traffic congestion and development that outstrips the city's ability to provide schools and other services. An increasing body of knowledge indicates that large-lot, single-use neighborhood subdivisions contribute to urban sprawl, causing city infrastructure systems to be stressed and inefficient. When services are inefficiently provided, tax dollars are not spent wisely. A recent series of national debates has also focused on the relationship between neighborhood design and quality of life. Current zoning trends tend to separate land uses from each other, increasing the need to travel and promoting social isolation for the less mobile members of the community, primarily the young, the elderly, and the disabled. These subdivision practices have been found to contribute to greatly increased vehicle use, vehicle speeds, and thoroughfare traffic congestion. These issues must be understood as Denton's future is planned.

6 Housing

Policies

Housing Policies

POLICIES

- ❑ Alternative types of housing that respond to the differing economic and individual life-styles of Denton's citizens that should be developed in all areas of the city to achieve balance and diversity.
- ❑ Homes that vary in lot size, building size, and cost may be permitted in new development.
- ❑ Existing housing stock, particularly for affordable housing, should be protected and preserved to avoid the loss of dwelling units that are unlikely to be replaced.
- ❑ Incentives should be investigated to encourage infill housing construction, especially in conjunction with neighborhood revitalization plans.
- ❑ Design and construction quality expectations should not be relaxed in order to meet affordable housing objectives.
- ❑ City review and inspection fees should be reviewed to determine if changes could be made to ease affordable home construction costs. Such a program should be undertaken only if benefits are passed on to low- and moderate-income homebuyers.
- ❑ The need to provide enough land to meet housing demand should be balanced by the desire to maintain unique urban patterns, character, and neighborhoods of the city.
- ❑ The range of housing types available for the specialized needs of the elderly, disabled, low-income, students, single-person, or female-headed households should be acknowledged as part of a strategy to diversify the city's neighborhoods.
- ❑ Areas where higher housing densities are allowed should be supported only after the availability of employment, commercial services, schools, public utilities and facilities, and transit, pedestrian, and bicycle systems has been addressed.

Neighborhood Policies

- ❑ All neighborhoods shall be served by adequate infrastructure and shall have adequate access to public and community facilities.
- ❑ Land use policies that encourage a mix of uses should be investigated to offer a range of benefits to residents and the entire city. Standards could ensure well-designed mixed-use projects for undeveloped property, including the mitigation of any potential adverse impacts on existing neighborhoods.
- ❑ Existing neighborhoods should be protected and preserved.
- ❑ Bicycle and pedestrian traffic within and between neighborhoods should be encouraged to promote public safety and reduce vehicle use.

Incentives should be investigated to encourage infill housing construction, especially in conjunction with neighborhood revitalization plans.

Housing

Land use policies that encourage a mix of uses should be investigated to offer a range of benefits to residents and the entire city. Standards could ensure well-designed mixed-use projects for undeveloped property, including the mitigation of any potential adverse impacts on existing neighborhoods.

- Discussions should be initiated to determine how neighborhoods can be designed to promote social contact and civic responsibility. The mobility-impaired citizens of the city, including the elderly, young and disabled, should be provided affordable and timely access to stores, libraries, parks, amusements, and other facilities that promote social well-being.
- A forum should be developed to address neighborhood quality-of-life issues, avoid competition for resources among neighborhoods, and ensure that the larger community interests are not sacrificed for the interests of a single neighborhood. The City of Denton will designate a "single point of contact" staff liaison to provide information and support to neighborhood groups.

Existing Situation

Denton's single-family homes come in many styles, sizes, and ages. In the much-admired, historic core of the community, older bungalows and larger estate-style homes exist side-by-side. Many dwellings in the older part of Denton would today be classified as accessory dwellings: dwellings such as an apartment above a garage or at the rear of a home that is secondary to the primary residence on the property.

The University of North Texas and Texas Woman's University play a significant role in the demand for housing in the city. Because of a relatively young, transient, and very mobile university-related population, Denton has a greater percentage of multifamily dwelling units that any other community in the Dallas Fort Worth metroplex. There is a wide variety of rental multifamily housing types, ranging from duplexes to large apartment complexes that offer many amenities, such as clubhouses, pools, and security.

Denton's existing housing situation is strongly influenced by the same regional forces that affect the local economy. Denton is primarily a free-standing community with a balance of work, live, play and learn opportunities, yet is linked to the DFW metroplex and to the surrounding rural countryside. A significant number of people who work in other places within the Dallas-Fort Worth area choose to make Denton their home, while a large number of those who work in Denton choose to live in outlying communities or rural areas. On any given day commuters leave Denton and come to Denton for work opportunities.

6 Housing

The nearly equal mix of single- and multifamily housing in Denton produces household characteristics that are very unusual. Denton has an unusually large number of households that have only one or two people, resulting in an average household size of 2.3 persons per household which is about 20 percent less than the average elsewhere in the region.

Population & Density 1945 to 1999

Year	Area in Square Miles	Population	Density (Population per Square Mile)
1945	3.21	16,282	5,072
1960	9.22	26,844	2,911
1970	29.30	39,874	1,361
1980	34.26	48,063	1,399
1990	51.93	66,270	1,276
1999	61.70	77,300	1,252

City of Denton Planning & Development Department, 1999

Denton Planning Area & Denton Urbanizing Area Estimates of Population & Required Housing Units

	Denton Planning Area	Denton Urbanizing Area	Denton City Limits
1999 Population Estimate	87,930		77,300
1999 Area (Square Miles)	275		61.7
1999 Population per Sqaure Mile	320		1,252
2020 Population Estimate	215,110	183,590	
2020 Area (Square Miles)	275	99.6	
2020 Population per Square Mile	782	1,843	
Change in Population	127,180	106,290	
Percent Change 1998-2020	145%	144%	
Change in Single-Family Population	94,100	73,340	
Change in Multifamily Population	33,080	32,949	
Required Single-Family Units	33,600 (65%)	26,193 (59%)	
Required Multifamily Units	18,400 (35%)	18,305 (41%)	

City of Denton, REI Population Forecast, 1999

General Housing Issues:

Housing and residential land use issues include the following:

- *Neighborhood protection*
- *Housing density*
- *Walkable neighborhoods and convenient neighborhood services*
- *Housing affordability*
- *Housing accessibility*
- *Sprawl and inefficient provision of urban services*
- *Manufactured housing siting*

6 Housing

Issues

Role of Manufactured Housing (issues):

- *Current zoning in Denton allows manufactured housing in parks on less land per unit than conventional single-family housing. This is possible with an approved specific use permit within the agricultural, commercial, light industrial and multifamily-two zoning districts.*
- *Manufactured housing offers to low- and moderate-income households an alternative to rental apartments.*
- *Strict design and compatibility standards must be strengthened and maintained for manufactured housing.*

Downtown University Core Housing

The historic downtown area of Denton offers unique opportunities for housing a growing segment of the community: small, non-family households for those who want to live near where they work, play, or go to school. The area generally bounded by Carroll Boulevard, Eagle Drive, Bell Avenue, and Congress Street has several stable and affordable single-family neighborhoods that need to be preserved.

Throughout the United States, downtown housing is booming. Cities are reversing a long, steady decline in the number of housing units in their core areas. In Denton, this phenomenon is occurring at a very small scale. Housing units are being created above stores a few units at a time. The Pecan Place senior housing project is the largest recent downtown housing project.

High-density, urban-style housing should be encouraged in the downtown area through mixed-use types of projects. The city can do this by:

- Offering convenient transit service connecting to universities, job centers, and shopping areas.
- Providing streets with safe, pleasant pedestrian connections from downtown to both universities.
- Keeping major city institutions such as the library, city halls, and police departments in the downtown area.

Collectively, the University of North Texas and Texas Woman's University had a 1998 enrollment of about 34,000 students. It is estimated that less than half the enrolled students live in the city. If more students lived on the campuses or adjacent to the campuses, many positive impacts on the community would be created:

- Opportunities for transit, bicycle and pedestrian travel between home, work, play, and school would be greatly enhanced.
- Pressure on parking in and around the campuses would be greatly reduced.
- Pressure on the roads of the city and the surrounding area would be greatly reduced.
- More disposable income would be captured in the city.

University students live in unique households with unique transportation demands. The demographics of university-oriented households tend to be either small households or larger households made up of several unrelated individuals. As a result, many of these households could be

6 Housing

accommodated with relatively high density in proximity to the two campuses. The area along the I-35E corridor between Carroll Boulevard and Avenue D, northward to Mulberry is an ideal location for university-oriented, high-density housing.

Variety of Housing in Neighborhoods

One of the adopted policies related to housing is to encourage a variety of housing types, styles, sizes, and prices within the same neighborhood. Neighborhood stability could be enhanced by allowing households to stay within the same neighborhood as households and housing needs change. A newly-wed couple does not need the same size house as a two-parent, two-child family, or an empty-nester household or a widowed grandparent. The current zoning ordinance and prevailing development patterns often cause families to move from one neighborhood to another as their housing needs change.

Attainable Housing

Housing in Denton must be attainable to those who work or attend school in Denton and want to live in Denton. Attainable housing is housing that is available, accessible, and affordable.

- Availability
  The demand for housing in Denton is currently very high relative to its supply. This is true for university student housing, new types of housing for changing household characteristics, and conventional single-family housing.

- Accessibility
  In general, housing in Denton is becoming less accessible to jobs, shopping, schools, and other activities. New single-family residential subdivisions are often located on the fringe of the community, isolated from work places, stores, and schools that are centrally located. In-fill residential development that is accessible to other community facilities and activities should be encouraged. In the downtown university core area and community and regional activity centers, some types of housing can be encouraged in close proximity to other activities.

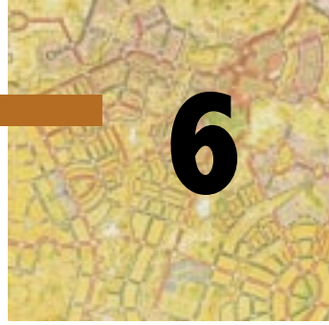
- Affordability
  Housing demand has led to rapidly increasing housing prices. This pressure tends to produce new housing only at the upper end of the housing cost spectrum. For most members of the community, living in new housing is less and less likely. A full range of housing should be available in Denton so that all members of the community that want to can live here. This housing should be accessible to work, play, education, and shopping.

Variety of Housing

Traditional neighborhood mixed-use development encourages a variety of housing types within a new development. Types of housing that may be considered in traditional neighborhood or mixed-use neighborhood development include:

- *Standard lot single-family detached dwellings*
- *Small lot single-family detached dwellings*
- *Accessory dwelling units*
- *Two-family dwellings*
- *Single-family attached dwellings*
- *Mixed-use dwelling units*
- *Small multifamily dwellings*

Encourage the development and preservation of affordable housing for low- and moderate-income households. Housing must be made available and affordable for those who work in the city.



6 Housing

Housing Goals & Strategies

Housing Goals

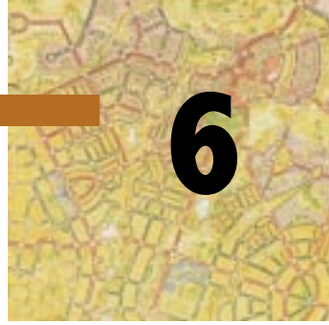
GOALS

- One of the housing component goals is to encourage the development and preservation of affordable housing for low- and moderate-income households. Housing must be made available and affordable for those who work in the city. Work with agencies to increase owner-occupied affordable housing.
- One of the best ways to assure that some affordable housing remains available for those with low and moderate incomes is to maintain the existing housing stock in good condition. As new housing is created, households move-up, leaving behind an existing housing unit that is usually available at less cost than new housing.
- Attainability is the confluence of availability, accessibility, and affordability. The housing needs of the existing and projected population must be met.

Housing Strategies

STRATEGIES

- Add housing units at the same rate of growth as that of job growth.
- Maintain existing housing stock which is usually more affordable than new housing.
- At least sixty percent of new housing should be owner-occupied.
- Allocate up to fifty percent of community development block grant (CDBG) funds annually to housing assistance programs for low- and moderate-income households.
- Use incentives, bonuses, and public-private partnerships to develop housing for low- and moderate-income households in areas accessible to jobs, education, and civic facilities.
- Structure an impact fee for new development to discourage sprawl and the long extension of utilities. Encourage the development of affordable housing where infrastructure capacity already exists.
- Revise the development codes to allow residential and nonresidential land uses within the same zoning districts.
- Use incentives such as residential density bonuses and allow accessory dwelling units where appropriate.



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Schools

The establishment of school siting guidelines will help ensure that future elementary and secondary campuses are located, designed, and built in the most efficient manner possible. They will also enable the city to work more closely with all its school districts for the reservation and acquisition of adequate school sites and the integration of future schools with other city services, such as transit systems and parks facilities.

Introduction

Whenever values are discussed within a community, the quality of education is consistently mentioned as a priority of the residents. The City of Denton is fortunate to be served by several comprehensive and innovative independent school districts. The school districts are challenged with continuing their level of service to area students in a climate of population growth and increasing responsibility mandated by the State of Texas.

Recent residential development activity within the City of Denton planning area has been located primarily within the Argyle and Denton Independent School Districts. These two districts contain almost all of the urbanizing areas and are expected to experience most of the projected residential growth over the next several years. As development continues to move from the southern portion of the planning area to the north, the remaining districts are also expected to receive a share of this significant residential activity.

Needs Assessment

The estimated addition of 33,600 single family and 18,400 multifamily dwelling units over the next 20 years will have a significant impact on the districts located within the study area. This residential development is projected to add another 28,800 students to area schools – 15,300 elementary, 6,500 middle, and 7,000 high school students. The urbanizing sub-areas are expected to generate eighty five percent of the projected student growth, a total of 24,500 school-age children – 13,000 elementary, 5,500 middle, and 6,000 high school students.

School Siting Guidelines

The establishment of school siting guidelines will help ensure that future elementary and secondary campuses are located, designed, and built in the most efficient manner possible. They will also enable the city to work more closely with all its school districts for the reservation and acquisition of adequate school sites and the integration of future schools with other city services, such as transit systems and parks facilities.

Requirements for each school site will vary by the intended use and physical characteristics of the property being analyzed. The specifications outlined here are intended as general guidelines for the identification, evaluation, and acquisition of appropriate school property. Siting guidelines may be expressed in three categories – physical characteristics, service area, and locational criteria.

6 Schools

Physical Characteristics

The following are general guidelines to develop schools in Denton. Each school district has its own standards for development.

School Acreage Guidelines by Type of Facility

SchoolFacility Type	Required Acreage	Ideal Site	Additional Issues
Elementary	12 to 17 acres	15 acres	Must accommodate separate parent and bus/service traffic. Must accommodate off-street traffic circulation and parking.
Middle	25 to 35 acres	30 acres	
High	45 to 55 acres	50 acres	

Locational Criteria

Educational facilities should be located appropriately according to their intended uses and anticipated impacts on adjacent property. Elementary, middle, and high schools each serve significantly different populations and provide significantly different services and should be located accordingly.

ELEMENTARY

❑ Neighborhood Schools

Elementary schools are intended as neighborhood-oriented facilities and should be closely tied, internal to or immediately adjacent to the residential areas they serve. Every effort should be made to incorporate them with neighborhood facilities such as neighborhood parks and community centers.

❑ Land Use Relationships

Elementary schools should be immediately abutting and/or within residential developments.Primary access to each elementary site should be from a residential collector.Bus service access should be separated from primary access – preferably from a secondary site access (i.e. side street).

Acreage:

▶ *The types of proposed schools and their planned capacities will determine minimum acreage requirements.*

Topography:

▶ *School sites should not have any slope less than two percent nor greater than ten percent. Furthermore, the natural grade should not exceed five percent at all building and paving areas.*

Drainage and Easements:

▶ *Preferred sites should be primarily free from floodplain and drainage areas.*

▶ *Outdoor play areas may be located within floodplain areas pending city approval of site plans; however, all permanent structures will be located well outside floodplain areas.*

▶ *The interiors of proposed sites should be clear of easements. Utility easements may be located along the perimeter of a site.*

Schools

Service Area Guidelines:

- *Service areas vary by the type of educational facility and the density of the residential area served.*
- *Service area guidelines help ensure an equitable distribution of school facilities throughout the planning area.*

Service Area Guidelines			
School Facility Type	Maximum Service Area	Maximum Walking Distance	Maximum Commute Time*
Elementary	4.0 mile radius	2 miles	30 minutes
Middle	8.5 mile radius	2 miles	45 minutes
High	9.5 mile radius	2 miles	60 minutes
* The maximum time a student should spend on a district school bus.			

MIDDLE

❑ Community Schools

Middle schools are intended as community-oriented facilities since they are intended to serve several neighborhood areas. Middle school sites also contain outdoor facilities – tracks, football/soccer fields, baseball diamonds, and tennis courts – that may be incompatible with lower density residential land uses.

❑ Land Use Relationships

Adequate buffers are recommended between immediately adjacent single-family land uses. Appropriate buffers include parkland, green belts, streets, etc. Primary access to each middle school should be from a residential or commercial collector. Adequate separation is recommended between primary and secondary access – preferably from a secondary site access (i.e. side street).

HIGH

❑ Regional Schools

High schools are located centrally to a region of the district in which they are located. They should be incorporated with community or regional facilities like community parks, regional parks, or university facilities.

❑ Land Use Relationships

Due to noise, traffic, odor, light, and other similar impacts, high schools are typically considered less compatible with single-family land uses. High schools should be generally located at the fringe of commercial centers with direct connectivity to the residential areas they serve, via the thoroughfare network, transit connections, and/or bicycle/pedestrian systems. Primary access should be from com-

mercial collectors. Adequate spacing should be provided between primary and secondary access – preferably from a secondary site access (i.e. side street).

Schools Goals & Strategies

Adequate School Facilities Goals and Strategies

GOALS

Adequate School Facilities Goal

- Adequate school facilities should be planned and constructed to accommodate anticipated student growth.

STRATEGIES

Adequate School Facilities Strategies

- The city should share development proposal information at the earliest possible stage to allow school districts to facilitate school district-developer contact and allow time for discussion and mitigation of school impacts, and develop a process to expedite implementation of this strategy. School districts may provide their specific standards at the time of development proposals.

- The city and the school districts will mutually analyze student impacts of proposed residential developments at the pre-design, zoning, and plat phases. Assess and determine the adequacy of schools as an important infrastructure component necessary to serve a proposed development. Develop a consistent approach to evaluate the impact of proposed development.

- Encourage developers to donate and reserve adequate school sites.

- Partner with school districts to support state legislation that would allocate adequate funding for mandated programs.

- Promote economic diversification in the form of commercial and industrial tax base to increase available funding for future school facilities.

Policies

- *The city should strive to facilitate the establishment and growth of high-quality public school systems.*

- *Intergovernmental coordination should be facilitated to the maximum extent possible, regardless of jurisdiction or service responsibilities. Efforts should be made to share resources whenever possible, and redundancies or duplication of effort should be eliminated.*

- *Government & school projects should comply with the same regulations that are imposed on private development within the community. Every effort should be made to ensure compliance on the part of city, school district, and county projects.*

Policies

6 Schools

▶ *The impact of residential development on school district facilities shall be evaluated to measure anticipated student enrollment impact; to facilitate the reservation and donation of adequate sites for future educational facilities; and to integrate school sites with other public facilities including, but not limited to, neighborhood parks, pedestrian/bicycle systems, and transit systems. Municipal development decisions should consider the adequacy of school facilities as an important criterion during the evaluation of infrastructure capacity.*

Land Use Compatibility Goals & Strategies

GOALS

Land Use Compatibility Goal

❑ A network of educational facilities should be developed that provides the greatest benefit to the residential areas they serve.

STRATEGIES

Land Use Compatibility Strategies

❑ Coordinate with school districts to site future schools in areas that are best equipped to accommodate residential growth.

❑ Work with school districts to design school site access plans that mitigate negative traffic impacts. Develop typical site designs to help ensure consistency of design and compatibility with adjacent neighborhoods.

❑ Create connectivity between schools and immediately adjacent residential areas. Elements to achieve include comfortable pedestrian and landscape systems, reliable and efficient bus systems, and integrated school and parks/recreation facilities.

❑ Meet architectural and urban design criteria set by the city.

Adequate School Infrastructure Goals & Strategies

GOALS

Adequate School Infrastructure Goal

❑ Properly timed transportation, utility, and parks infrastructure improvements should be planned and integrated to serve school facilities adequately.

6 Schools

STRATEGIES

Adequate School Infrastructure Strategies

- Develop a school site selection, assessment, and acquisition system that allows school districts to protect confidential acquisition plans, allows assessment of impacts on city infrastructure prior to acquisition, enhances the city's and school districts' ability to coordinate capital improvements, and facilitates the pursuit of an early site acquisition program. An interlocal agreement should be considered to identify the terms under which confidential information will be shared.

- Coordinate city capital improvements programs with school district bond programs to coordinate the provision of adequate infrastructure to serve all school sites.

- Assist school districts with the evaluation of future school locations that conform with and take full advantage of the city's long-range parks, transportation, and utility master plans.

City School District Relationship Goals & Strategies

GOAL

City School District Relationship Goal

- Engage in collaborative projects with the various school districts to maximize public funds and the functionality of public places.

STRATEGIES

City School District Relationship Strategies

- Coordinate city capital improvement programs and district bond packages for the joint purchase and acquisition of publicly held land that may be used for city and school district uses and development of collaborative projects like public libraries, pools, playgrounds, athletic facilities, and education centers.

- Maximize the use of existing city and school district facilities for multiple uses – i.e. after school action sites, community education programs.

COORDINATE CITY CAPITAL IMPROVEMENTS PROGRAMS WITH SCHOOL DISTRICT BOND PROGRAMS TO COORDINATE THE PROVISION OF ADEQUATE INFRASTRUCTURE TO SERVE ALL SCHOOL SITES.

ELEMENTS TO ACHIEVE INCLUDE:

- *STREET IMPROVEMENTS IMMEDIATELY ADJACENT TO AND WITHIN CLOSE PROXIMITY TO EACH SCHOOL SITE*
- *SIDEWALK CONSTRUCTION AND REHABILITATION IMMEDIATELY ADJACENT TO AND WITHIN CLOSE PROXIMITY TO EACH SCHOOL SITE*
- *WATER AND WASTEWATER LINE UPGRADES AND EXTENSIONS TO EACH SCHOOL SITE*
- *ELECTRIC LINE UPGRADES AND EXTENSIONS TO EACH SCHOOL SITE*
- *WHERE POSSIBLE, THE DEVELOPMENT OF PARKS AND RECREATION FACILITIES THAT ARE INTEGRATED WITH AN EXISTING OR FUTURE SCHOOL SITE*

7 Transportation

Roads within Denton under Texas Department of Transportation (TXDOT) jurisdiction:

- *Interstate 35 (all)*
- *Loop 288*
- *US 380 (University dr.)*
- *US 377 (Ft. Worth, ELM, Locust & University dr.)*
- *US 77 (Elm, Locust, & Dallas Dr.)*
- *FM 2181 (Teasley Ln.)*
- *FM 1515 (Airport Rd.)*
- *FM 1830 (Country Club Rd.)*
- *FM 426 (East McKinney)*
- *FM 428 (Sherman Dr.)*
- *FM 2164 (N. Locust)*
- *FM 1173*
- *FM 3163 (Milam Rd.)*
- *FM 156*

Introduction

As the binding force of the city, Denton provides and maintains transportation, water, wastewater, solid waste, stormwater drainage and electrical infrastructure system services. This section details the policies and the direction in which these vital services will grow through 2020. Franchise services such as gas, telephone, and cable television are addressed within the street section of this document. An approach that coordinates several transportation alternatives, such as transit, bicycle, and pedestrian systems has been found to cost less, work better, and improve the city's appearance. Denton must handle interstate and regional traffic with innovative solutions that meet or exceed local needs using appropriate and coordinated state-of-the-art transportation systems.

Policies

POLICIES

- ❑ Denton shall use access management practices to make the investment in the roadway infrastructure as cost efficient as possible. These practices include placement of curb cuts, median opening spacing, and parallel access roads (public and private).
- ❑ Residential streets shall be designed to include traffic calming practices that promote the use of collectors and arterials for trips that are not locally oriented.
- ❑ The transportation network shall be designed to optimize emergency routes for police and fire operations and promote efficient delivery of services such as mail and solid waste.
- ❑ The city should plan, design, and build a network of freeways, arterials (major and secondary), and collectors that provide acceptable levels of service while complementing the land-use decisions in the comprehensive plan. The Denton transportation system must be compatible with regional plans including the mobility 2020 plan, the regional thoroughfare plan (NCTCOG), and the Denton County thoroughfare plan.
- ❑ The city shall use the thoroughfare plan to plan and design transportation improvements, program capital improvement plan projects, and guide development review decisions. Many of the arterials in Denton are state roadways, so cooperation with the Texas Department of Transportation (TXDOT) is essential to the construction and operation of the city's transportation system.
- ❑ All freeways shall be designed with limited access that includes frontage or parallel access roads. Loop 288 between US 380 and IH 35 East shall be upgraded in this way to the extent possible.

7 Transportation

- Major arterials are intended to carry traffic across town and between major intensity centers. These facilities shall be divided by landscaped medians. Minor arterials should be at least four lanes, with left-turn lanes provided at all major intersections. Collectors shall have at least one full lane in each direction to carry traffic to the arterial system.
- A transportation lobbying campaign should be conducted to ensure participation in federal, state, and regional infrastructure funding decisions. Local funding participation in priority projects should be considered for inclusion in the city's capital improvement program.
- The public transportation system shall provide services to all citizens at a reasonable cost, using routes that maximize service delivery and that meet the needs of the mobility impaired. The system shall be compatible with eventual connection to regional systems such as Dart, the "T", DFW Airport, and other future systems.
- The Denton trails plan should be adopted and the network of sidewalks, bike trails, and greenbelt paths should be included in the CIP for funding. Developers shall aid this network by dedicating rights-of-way and constructing portions of the network across their properties. Linkages to daily destinations that serve daily needs should be emphasized to reduce use of automobiles.
- The Denton Airport shall be a key component in the multi-modal transportation system. Denton Municipal Airport is effectively located to optimize the movement of goods and services throughout the metroplex.
- The city will promote the use of roadways parallel to and outside the limits of the 100-year floodplains to provide a natural riparian environment by establishing green space between the road and the floodplain. Green space is required even if the channels are improved so that the limits of the parallel roadways may be dedicated to the city to serve as open space, limit flood exposure, and facilitate channel maintenance.

The public transportation system shall provide services to all citizens at a reasonable cost, using routes that maximize service delivery and that meet the needs of the mobility impaired. The system shall be compatible with eventual connection to regional systems such as Dart, the "T", DFW Airport, and other future systems.

Goals and Strategies

Environmental Stewardship Goals & Strategies

Increased trips by motor vehicles, increased travel time, congestion, and longer trips all contribute to deteriorating environmental quality. Policies in other parts of the plan (environmental management, urban design, and growth management strategy) and elsewhere in the transportation element are key to reducing transportation-related environmental impacts. These reduce single-occupant vehicle (SOV) use, support transit, and encourage walking and bicycling. In addition, the strategies below address specific air, water, and noise environmental impacts.

7

Transportation

Increased trips by motor vehicles, increased travel time, congestion, and longer trips all contribute to deteriorating environmental quality.

GOALS

Environmental Stewardship Goal

- Reduce and mitigate air, water, and noise pollution from motor vehicles. Promote energy-efficient transportation.

STRATEGIES

Environmental Stewardship Strategies

- Identify, evaluate, and fully consider environmental impacts of transportation investments and operating decisions.
- Pursue transportation projects, programs, and investment strategies consistent with noise reduction, air quality, and water quality objectives.
- Encourage travel demand management (TDM) initiatives including but not limited to park-and-ride sites, adjustments to work schedules, ride-sharing initiatives, and improved bicycle/pedestrian facilities.
- Continue air-quality mitigation procedures as recommended by the North Central Texas Council of Governments (NCTCOG).

Changing & Managing Travel Demand & Travel Behavior Goals & Strategies

To slow the trend of increasing single-occupant vehicle (SOV) use, the city must provide alternatives and must change the way people think about and act upon travel choices. Transportation alternatives to the SOV should respond to people's needs for mobility, privacy, comfort, safety, and convenience. The city recognizes that transportation needs and travel choices will change over time as alternatives to SOV travel become more viable.

GOALS

Changing & Managing Travel Demand & Behavior Goals

- Meet the current and future mobility needs of residents, businesses, and visitors with a balanced transportation system.
- Provide a range of viable transportation alternatives, including transit, bicycling, and walking.
- Reduce use of the SOV's over time or maximize occupants per vehicle. Invest in transit planning and transit systems

7 Transportation

STRATEGIES

Changing & Managing Travel Demand & Behavior Strategies

- Educate the public, especially youth, about the individual and societal benefits of alternatives to SOV's. Encourage incentives and support efforts to induce future generations to become regular users of transit and nonmotorized modes of travel.

- Initiate and support public awareness campaigns. Focus attention on the societal and environmental impacts and costs of travel choices. Inform people of the range of travel choices available. Inform those who now commute by single-occupant vehicle about the economic, societal, and environmental costs of their choices. Support federal, state, and other efforts that increase the single-occupant vehicle driver's share of the true cost of SOV use.

- Support and promote commuter trip reduction (CTR) programs, telecommuting, electronic communications, variable work-weeks, and flex-time. Travel demand management (TDM) strategies to reduce the number and length of SOV trips and increase transportation efficiency. Develop and implement a coordinated program of incentives, alternative travel options, land-use measures, innovative design, regulations, services, and marketing strategies. Allow developers to choose among TDM strategies. Where appropriate, pursue TDM strategies at the regional level. Support implementation of advanced transportation and communications technologies, such as intelligent vehicle, highway, arterial, and transit systems.

- Evaluate the success of the city's and the region's land-use strategies, and transportation systems and programs, in reducing single-occupant vehicle use.

Land Use & Transportation Goals & Strategies

Land use and transportation are fundamentally interrelated. That is why the growth management strategy focuses development in concentrated rather than linear patterns, directs transit investments to link pedestrian-oriented activity centers, and provides more opportunities for walking and bicycling. Low-density development spreads the city over a greater area, causing the need to construct more miles of roads. Increased amounts of pavement lead to higher initial capital improvement costs and continuous maintenance costs. Development patterns with more density together with gridded street networks can allow for transit-oriented design and a diffusion of traffic along many different routes. However, the city recognizes that auto access will continue to be a key element in accommodating growth in activity centers and neighborhoods.

Inform those who now commute by single-occupant vehicle about the economic, societal, and environmental costs of their choices.

7

Transportation

Seek to provide transit services and walking and bicycling opportunities so that activity centers and neighborhoods will minimize single-occupant vehicle travel.

GOALS

Land Use & Transportation Goal

- Ensure that land use and transportation decisions, strategies, and investments are coordinated, are complementary, and support the growth management strategy.

STRATEGIES

Land Use & Transportation Strategies

- Provide transportation facilities and services to promote and accommodate growth and change in activity centers, neighborhoods, and industrial centers. Seek to provide transit services and walking and bicycling opportunities so that activity centers and neighborhoods will minimize single-occupant vehicle travel.

- Promote the use of the thoroughfare master plan and capital improvement program as tools to achieve desired land-use patterns.

- Build transportation facilities to reflect the character of the surrounding neighborhood, and be accessible, comfortable, and safe. Make the scale of transportation facilities consistent with surrounding land uses.

- Involve the public in identifying needs for transportation facilities, programs, and services. Encourage and provide extensive public involvement opportunities, both for city decisions and for those of other agencies. In this process, address the special needs of low-income people, children and youth, the elderly, people with disabilities, businesses, and residents.

- Minimize direct vehicular access from developments facing arterial streets.

- Avoid through-traffic within industrial and commercial developments to reduce conflicts between automobiles and commercial vehicles except within the downtown university core and activity centers.

- Limit new traffic demands on local streets through residential neighborhoods. Large-scale multifamily uses generally should not take primary access through a lower-density residential neighborhood unless it is by way of a collector or arterial street. Traffic to and from a commercial land use should not be routed through a residentially zoned area unless it is by way of an arterial or collector street.

7 Transportation

- Require new subdivisions to be designed so that the internal local street system provides access to collector streets. Whenever possible, access to arterial streets is limited to collector and arterial street intersections.

Use of the Street Goals & Strategies

The city has a limited amount of street space, and is unlikely to expand this space significantly. Thus this space must be carefully allocated among competing uses.

GOALS

Use of the Street Goals

- Make the best use of the city's limited street capacity, and seek to balance competing uses.
- Ensure adequate capacity on the street system for transit and other important uses.
- Support a shift towards transit, carpools and vanpools, bicycling, and walking.
- Support efficient freight and goods movement.
- Differentiate among the various functions of city streets.
- Protect neighborhood streets from through traffic.
- Design residential streets that will promote safe driving speeds and turning movements.

STRATEGIES

Use of the Street Strategies

- Designate principal arterials, a transit priority network, and major truck routes to identify the key functions of these streets. Make operating, design, access, and service changes to enhance the key functions of these streets when congestion significantly hinders the key functions. Changes to these streets should take into consideration the expected type and volume of traffic, safety, accessibility, and for pedestrians walking along and crossing a street.

- Designate roadway classifications as shown in the roadway component of the Denton mobility plan.

- Coordinate with the Texas Department of Transportation and adjacent jurisdictions to discourage diversion of traffic from regional roadways and principal arterials onto lesser arterials and local streets.

Design residential streets that will promote safe driving speeds and turning movements.

Transportation

Transportation modeling is the key component for measuring level of service and development impacts, designing future arterials, and providing quantitative measurements of cause and effects to elected and appointed officials, citizens, and regional entities.

- Use neighborhood traffic control devices and strategies to protect local streets from through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts. Use these devices and strategies on collector arterials where they are compatible with the basic function of collector arterials. Expand the traffic calming policy to accommodate more variety in street designs and traffic calming techniques. Use traffic calming techniques in both existing and new neighborhoods and activity centers.

- Use an inter-connected transportation system to increase traffic flow, reduce traffic congestion, increase emergency access, and provide increased transportation system routes.

Level of Service Goals & Strategies

GOALS

Level of Service Goals

- Use level-of-service standards to judge the performance of the arterial, collector, and transit system. Develop and maintain a transportation model for the city.

STRATEGIES

Level of Service Strategies

- Consider development of adequate public facilities standards as a tool that would allow for transportation needs (LOS) to be addressed when land uses are considered for development.

- Transportation modeling is the key component for measuring level of service and development impacts, designing future arterials, and providing quantitative measurements of cause and effects to elected and appointed officials, citizens, and regional entities.

- Define arterial level-of-service (LOS) to be the volume-to-capacity ratio (v/c) at designated locations. Measurements will be provided using the highway capacity manual, traffic simulation programs (Tran-SIMS), and the TRANPLAN programs. Measure p.m. peak hour directional traffic volumes on the arterials crossing at each location to calculate the LOS. To judge the performance of the arterial system, compare the calculated LOS for each location with the LOS standard for that location. Develop a LOS map for locations to be calculated.

7 Transportation

- Define transit level-of-service (LOS) to be the volume-to-capacity-ratio (v/c) at designated locations. Measure p.m. peak hour directional traffic volumes on the arterials crossing each location to calculate the LOS. To judge the performance of the transit system, compare the calculated LOS with the LOS standard for that location.

- When the calculated LOS approaches the LOS standard (Level of Service D), pursue strategies to reduce vehicular travel demand and/or increase the operating capacity.

Parking Goals & Strategies

Long or short-term parking is part of every single-occupant vehicle (SOV) trip and is a key factor in the choice of mode for a trip. The availability and price of parking influences people's choices about where to live, work, shop, and conduct personal business. Parking policies can influence SOV use. The challenge is to provide enough parking to meet mobility and economic needs while limiting supply to encourage people to use non-auto modes.

GOALS

Parking Goals

- Reduce use of cars over time, particularly for commuter trips.
- Make the best use of the city's limited street space, seek balance among competing uses, and protect neighborhoods from overflow parking.

STRATEGIES

Parking Strategies

- Consider establishing maximum parking limits for long and short-term off-street parking to be provided by new nonresidential development tied to the changing availability of non-auto modes in a particular area. Review minimum parking requirements and maximum limits periodically as conditions change, such as land-use mix, land-use density, and the availability of transit and other non-auto modes.

- Consider the development and use of off-site and shared parking for high density areas, such as the downtown university core, Fry Street area and the developing activity centers. Coordinate parking areas with access to the public transportation system.

Consider development of adequate public facilities standards as a tool that would allow for transportation needs ...to be addressed when land uses are considered for development.

Transportation

Consider the development and use of off-site and shared parking for high density areas...

- Balance the removal of long and short-term on-street parking over time with the availability of non-auto modes and with the availability of off-street parking, in part to preserve the vitality of commercial areas.

- Allow long-term parking on most collectors and local streets, limited only by safety, street design, and property access needs. Use strategies such as parking duration, time-of-day limits, or restricted parking zones (RPZs), to keep parking in commercial or activity centers from spilling over onto residential streets.

- Allow flexibility in meeting long-term parking needs in commercial areas, activity centers, and neighborhood centers, such as discouraging long-term accessory parking for single-occupant vehicles while allowing principal-use parking.

- Emphasize short-term parking over long-term parking in commercial areas, both on-street and off-street.

- Establish or maintain minimum long-term and/or short-term off-street parking requirements for new development for special vehicles and purposes. This could include carpools, vanpools, bicycles, zero-emission vehicles, and vehicles for persons with disabilities.

Transit Goals & Strategies

Provide a special lane or other priority treatment for transit to help people move around the city and the region. The transit system will need to change so it can respond to people's behavior and travel needs. A major investment will be needed to provide more innovative transit service, along with related land-use changes and capital facilities. These policies will guide city decisions to enhance transit, and guide decisions of other agencies that operate transits to, from, or within Denton.

GOALS

Transit Goal

- Provide mobility and access with public transportation for the greatest number of people to the greatest number of services, jobs, educational opportunities, and other destinations.

7 Transportation

STRATEGIES

Transit Strategies

- ❑ Designate the transit priority network. Monitor bus speeds and operations along the transit priority network and, where needed, pursue measures to increase bus speeds and reliability and to plan future rail corridors.

- ❑ Strive to maintain at least the minimum goals for bus speeds and making changes as warranted to city street design and operations. Focus on designated segments of the transit priority network, monitoring average p.m. peak period directional bus speed, excluding dwell time (time stopped for loading/unloading passengers).

- ❑ Work with small area planning to develop specific area transit solutions for high-density areas such as the downtown university core. Ensure connection of the smaller system is integrated with the city-wide transit system.

- ❑ Work actively toward a citywide transit system, the local initiative for neighborhood circulation (LINC). This includes two types of services: 1) limited-stop, frequent service connecting activity centers, neighborhood centers, and industrial centers; and, 2) intracommunity feeder service connecting homes and businesses with neighborhood transit facilities. The intracommunity service may include small vehicles, flexible routes, demand-responsive or dial-a-ride service, subsidized taxis, night shuttles, or other types of service.

- ❑ Work with the transit provider(s) to offer transit service that is within 1/4 mile of at least 90 percent of the city's residences and businesses; connects activity centers and neighborhood centers; is competitive with auto travel; operates reliably; is convenient, safe, secure, and comfortable; and, has affordable fares and an integrated fare system.

- ❑ Integrate transit stops, stations, and hubs into existing communities and business districts to make it easy for people to ride transit and to reach local businesses. Provide adequate lighting, security, pedestrian amenities, and weather protection. Minimize the negative impacts of transit service and facilities on surrounding areas.

- ❑ Work actively to obtain convenient connections to regional transportation services such as commuter rail services to Dallas and Fort Worth.

Work actively to obtain convenient connections to regional transportation services such as commuter rail services to Dallas and Fort Worth.

Transportation

Create desirable, safe, convenient environments that are conducive to walking and bicycling.

Pedestrian & Bicycle Goals & Strategies

With supportive land use and transportation policies, walking and bicycling can be practical alternatives to driving (especially for short trips), contribute greatly to the quality and vitality of the street scene, and help achieve environmental goals. Pedestrian and bike improvements to intersections, sidewalks, and other facilities can improve access and safety, and are particularly important for children, senior citizens, people with disabilities, low to moderate income residents, and people who choose to use this mode of transportation.

GOALS

Pedestrian & Bicycle Goals

- To increase walking and bicycling. Create desirable, safe, convenient environments that are conducive to walking and bicycling.

STRATEGIES

Pedestrian & Bicycle Strategies

- Create an urban trails system to facilitate walking and bicycling as viable transportation choices, provide recreational opportunities, and link major parks and open spaces with Denton neighborhoods.

- Integrate pedestrian and bike facilities, services, and programs into both city-wide and regional transportation systems.

- Provide these features: pedestrian amenities and weather protection; safe and convenient pedestrian and bike access to transit stops, centers, and stations; adequate lighting, security, and other improvements for persons with disabilities and special needs bike capacity on buses, rail, and other modes; and covered, secure bicycle parking at transit centers and stations.

- Recognize the importance of walking and the contribution it makes to personal mobility and to the environment. Improve the pedestrian environment throughout the city.

- Designate key pedestrian streets within the highest-density portions of activity and neighborhood centers. Design and operate these streets to be safe and attractive for pedestrians, improve access to transit, encourage street-level activity, and facilitate social interaction. Integrate pedestrian facilities into improvements on these streets.

7 Transportation

- Accelerate the improvement of pedestrian facilities and develop new ones throughout the city. Increase pedestrian activity, enhance pedestrian safety, and promote a pleasant walking environment. Provide recommended school walking routes, access to transit, access for people with disabilities, and access to and within activity and neighborhood center environments.

- Maintain direct, continuous bicycle routes, and make all appropriate streets bicycle-friendly. Accelerate development of bicycle facilities in, around, and between mixed-use centers, neighborhood centers, and other key locations. Facilitate bicycling, where appropriate, with separate trails or bicycle lanes.

Moving Goods & Services Goals & Strategies

Commercial transportation mobility and access are critical to Denton's economic development.

GOALS

Moving Goods & Services Goal

- Preserve and improve commercial transportation mobility and access.

STRATEGIES

Moving Goods & Services Strategies

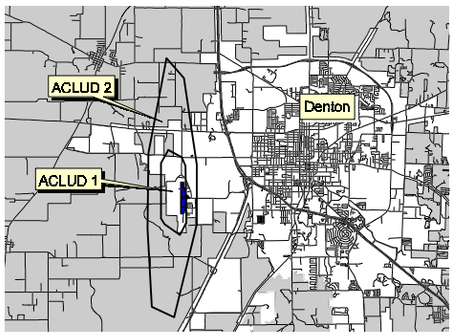
- Designate major truck routes. Monitor these streets and make operating, design, access, and/or service changes, as well as capital investments, to accommodate trucks.

- Support efficient movement of commercial goods by rail where appropriate. Promote continued operation of existing rail lines.

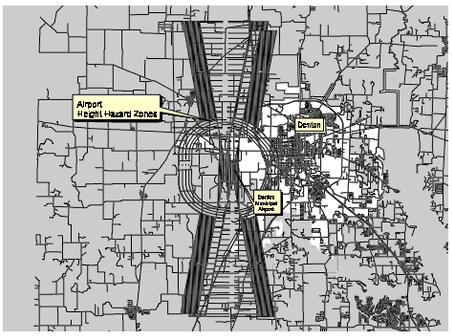
- Coordinate commercial transportation by rail, trucks, and air. Work toward improved connections between modes of transportation.

Designate major truck routes. Monitor these streets and make operating, design, access, and/or service changes, as well as capital investments, to accommodate trucks.

Denton Municipal Airport



ACLUD Map



Hazard Map

7 Transportation

- Consider the needs for delivery and collection of goods at businesses by truck when making street operating decisions, and when developing projects and programs for highways, streets, and bridges. Consider at least these features: access to freeways; street width, turning radii, and overhead clearance; railroad crossings; and traffic congestion and conflicts with cars, bicycles, and pedestrians.

Municipal Airport Goals & Strategies

The Denton municipal airport is an important link in Denton's highway, rail, and aviation transportation systems. The airport will continue to meet current and future aviation growth trends. This proactive approach will maintain the airport as an asset to the community and those conducting business in the region.

GOALS

Municipal Airport Goal

- Provide aviation facilities that will integrate with the various coordinated transportation systems.

STRATEGIES

Municipal Airport Strategies

- Maintain and improve airport infrastructure to promote additional development through high-quality service and to reduce costly reconstruction.

- Coordinate with the Federal Aviation Administration (FAA) and State Aviation Division to determine likely funding of proposed airport improvements. Get in queue for runway extension, air traffic control tower, and terminal expansion/reconstruction.

- Plan active property acquisition to avoid inflated real estate costs. Investigate joint use of low-impact land usage (open space, nature areas, maintenance depot, etc.).

- Maintain a development pattern consistent with the airport master plan. Work with neighboring and affected property owners to ensure airport consolidated land-use districts (ACLUD) are effective. Maintain integrity of airport height hazard district and ACLUD.

7 Transportation

- Investigate public-private partnership agreements to assist with infrastructure and facility development.
- Establish a formal western entranceway into the airport when Loop 288 is completed to the west side of the airport. Design transportation routes to maximize truck, auto, and aircraft mobility.
- Since the airport is located in the industrial centers within population subarea 1, it will support activities in the movement of goods and services of city businesses.

Intelligent Transportation Systems (ITS) Goals & Strategies

GOALS

Intelligent Transportation Systems Goal

- Develop intelligent transportation systems for freeway management, incident management, traffic signal control, electronic toll and transit fare payment, transit management, highway-rail intersections, emergency management, and regional transportation systems traveler information.

STRATEGIES

Intelligent Transportation Systems Strategy

- To initiate investments that integrates intelligent transportation systems into the transportation infrastructure. These systems reduce investments to enlarge capacity by maximizing the existing infrastructure.

Develop intelligent transportation systems for freeway management, incident management, traffic signal control, electronic toll and transit fare payment, transit management, highway-rail intersections, emergency management, and regional transportation systems traveler information.

Transportation

Require new developments to provide or share the cost of transportation improvements including pavement, traffic control, parking, public transit, and bicycle and pedestrian facilities.

Transportation Financing Goals & Strategies

GOALS

Transportation Financing Goal

- To use available financial resources to implement transportation goals.

STRATEGIES

Transportation Financing Strategies

- Emphasize investments for maintaining existing transportation facilities; safety; transit priority improvements; and transportation system facilities and programs to stimulate a shift towards transit, carpools and vanpools, bicycling, and walking; freight and goods movement; supporting the growth management strategy; and complying with level-of-service standards.

- Identify funding sources and strategies, including contributions from those that benefit from an investment, such as property owners near an investment; grants from local, regional, state, and federal funding sources; contributions from the region for investments that serve regional destinations and investments in regionally-designated activity centers; growth-related revenues where consistent with economic development policies; and, new locally-generated revenues for expanded local transit services.

- Maintain sufficient flexibility so the city can take advantage of new funding opportunities and maximize competitiveness for funding.

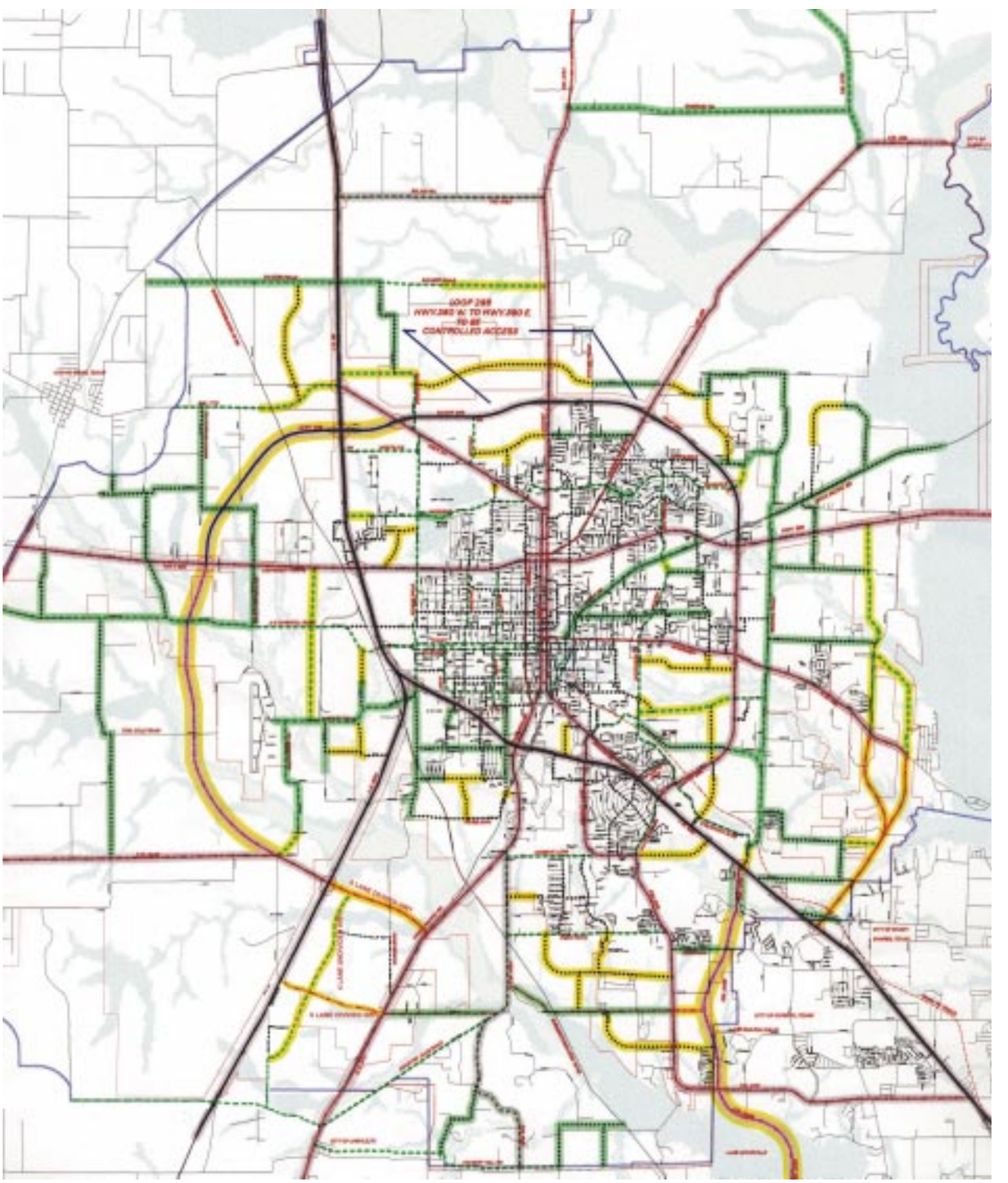
- Require new developments to provide or share the cost of transportation improvements including pavement, traffic control, parking, public transit, and bicycle and pedestrian facilities.

- Consider operating and maintenance costs associated with improvements when making transportation capital investment decisions.

- Coordinate debt-financing strategies with other jurisdictions in the region.

- Use any funds or grants for transportation improvements as they become available.

Roadway Component of the Mobility Plan



MAJOR FREEWAYS
PRIMARY MAJOR ARTERIALS
SECONDARY MAJOR ARTERIALS
COLLECTOR (INVESTIGATE FOR CURRENT EXISTING INFORMATION)
RAILS TO TRAILS

STUDY AREA BOUNDARY
CITY LIMITS BOUNDARY
RAIL ROADS
SECONDARY MAJOR ALT.
PRIMARY MAJOR ALT.
FR FRONTAGE ROAD

INTERCHANGES ON CONTROLL ACCESS
ROADS DO NOT EXIST - FUTURE
EXISTING ROADS - NOT TO CLASSIFICATION STANDARDS
ROADS MAINTAINED BY TXDOT

7

Water Services

The city will develop and operate a water infrastructure system that is safe, reliable, cost-effective, environmentally sensitive, and sufficient to meet future demands in cooperation with other entities.

Spencer Water Treatment Plant

Introduction

Across Texas, establishing new water supplies is becoming increasingly difficult. The city's first priority is to ensure that its citizens-customers have a sufficient source of raw water. Through existing and future surface water rights, contracts with other entities, and careful conservation, the city can provide sufficient water to meet Denton's population projections through the year 2015. New sources will have to be established, either through contracts or construction, to meet the projected long-term demand.

Policies

POLICIES

- The city will develop and operate a water infrastructure system that is safe, reliable, cost-effective, environmentally sensitive, and sufficient to meet future demands in cooperation with other entities.
- Developments will be constructed and property owners will maintain their properties and private infrastructure so they do not compromise public health, endanger public drinking supplies, or pollute the environment.
- Water facilities should be located in areas that meet engineering criteria and are compatible with adjacent properties to the greatest extent possible.
- Generally, infrastructure extensions to residential and commercial development will be the responsibility and expense of the developer. The city will follow development as determined by the private sector or as directed by the governing body by oversizing lines and upgrading trunk system. The city may also extend infrastructure to certain areas targeted for growth in the growth management plan.
- Promote infill infrastructure improvements over new line extensions that expand the geographic coverage of the city's infrastructure systems.
- Evaluate the use of impact fees to fund additional infrastructure to accommodate system growth and help manage utility rates.
- Use adequate public facilities criteria or other tools to influence compact versus satellite growth policies.

7

Water Services

Develop long-term water supply contracts to ensure an adequate water supply.

Water Services Goals & Strategies

Water Services Goals

GOALS

- ❑ Develop long-term water supply contracts to ensure an adequate water supply.
- ❑ Expand water treatment capabilities and provide additional overhead storage to meet anticipated increase in demand. Design the water distribution system to provide flexibility in the refilling of tanks, providing sufficient water to meet average-day, peak-day, and peak-hour demand conditions as well as emergency fire conditions.
- ❑ Construct improvements to the transmission and distribution systems to accommodate population growth demands.
- ❑ Maximize raw water supplies and increase wastewater reuse to extend existing water supplies.

Water Services Strategies

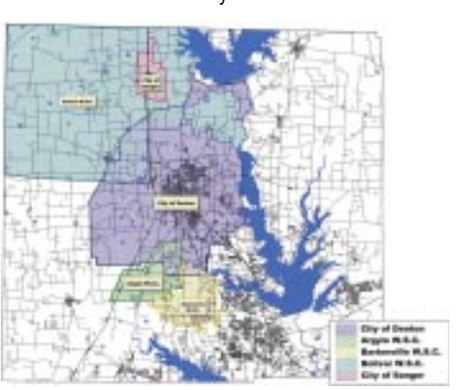
STRATEGIES

- ❑ Renew the city's untreated water supply contract with the City of Dallas. Based on recent population projections, Denton may need to purchase additional water supplies from the City of Dallas beginning in 2012 through 2015. The most significant issue to be renegotiated is the renewal/expiration terms. Denton has historically been an untreated water supply customer of the City of Dallas and wants to reaffirm this relationship and commitment for a long-term water supply.

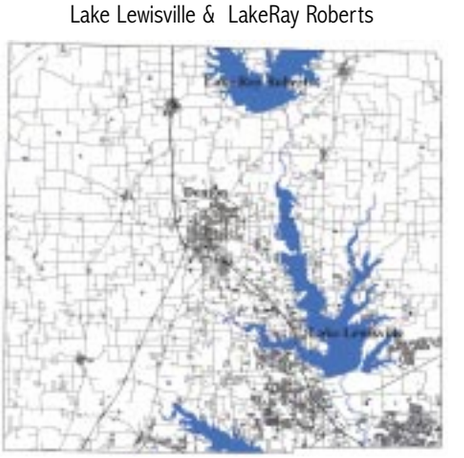
- ❑ Follow the provisions of SB1, passed by the Texas Legislature in 1997, as a comprehensive approach to water planning. Among other issues, SB1 provided a framework for the state to develop a state-wide drought contingency plan that incorporates water planning through the year 2050. Denton County falls into Region C, along with fourteen other counties. Because growth within Region C will demand more water supply than the region can provide, negotiations for possible future interbasin transfers from Region D are beginning.

- ❑ Build an additional water treatment plant to improve the city's ability to manage non-essential water demands during periods of supply shortages, equipment failures or related emergencies. Build the plant at the Lake Ray Roberts site with a twenty MGD (million gallons per day) capacity.

Selected Denton County Water CCN Boundaries



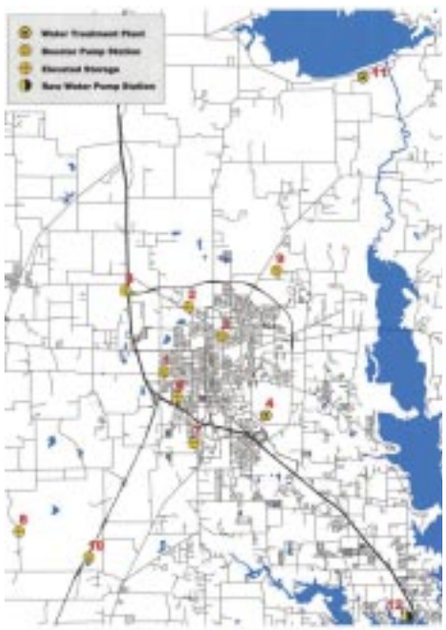
Lake Lewisville & LakeRay Roberts



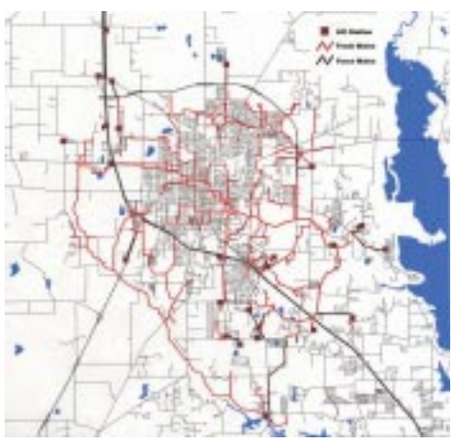
Water Services

Utilize the Denton Water Conservation and Drought Contingency Plan to help reduce per capita water use during peak summer months.

Present & Proposed Water Facilities



Water Lines 12" & Larger



- Build additional elevated storage over the next twenty years to accommodate future water needs. The locations should include an additional one MG storage tank in the upper plane area for the northwest, a 1 MG elevated tank for the upper plane area for the southwest, an additional 1 MG elevated tank in the lower plane and two, two MG tanks in the middle plane area. Phase the existing Peach Street tank out of service because of age, location, and limited capacity. Convert the McKenna Park standpipe to serve a ground storage role for the upper pressure plane. Regain credit for the existing elevated storage by modifying the boundaries of the upper plane in a manner that satisfies regulatory criteria for elevated storage.

- Construct two new booster pump stations (the Hartlee Field booster pump station and the high school booster pump station) and increase ground storage capacity to 12 MG.

- Build a new booster pump station at the Ray Roberts water treatment plant site to bring water into the middle and lower planes of the Denton system. This facility will provide for needed expansion of ground storage and high service pumping for the lower pressure plane on the east side of Denton as well as for the upper pressure plane on the northwest side of the city. Build three million gallons of additional ground storage for the initial phase of the Ray Roberts ground storage and booster pump station facility. This will serve as a remote ground storage and high service pump station for the new water treatment plant at Lake Ray Roberts. A total capacity of twelve MG of ground storage is ultimately planned at this location.

- Construction of a high school booster pump station will help supply the upper plane area.

- As Denton grows, the infrastructure must be upgraded to provide for the transportation of treated water from the plant and storage facilities through the existing system into newly developed areas; and, proper balancing of new elevated storage tanks to the existing elevated storage tanks and allow for adequate refill rates.

- Utilize the Denton Water Conservation and Drought Contingency Plan to help reduce per capita water use during peak summer months. The conservation plan strongly encourages the use of drought tolerant/native species for landscaping, reduction in lawn grasses, low water-use plumbing fixtures, increased public awareness through public education, and provides for both internal and external water audits.

7 Water Services

- The city currently operates a wastewater reuse program for supplying treated wastewater effluent for cooling tower use at the Spencer Power Plant. The existing program should be expanded to serve other customers. The expansion of this system would extend the existing capacity of the water supply, treatment, and transmission systems and lower operating costs for high-volume water users.

The city currently operates a wastewater reuse program for supplying treated wastewater effluent for cooling tower use at the Spencer Power Plant.

Oversee the development and operation of wastewater infrastructure so that it is safe, reliable, cost effective, environmentally sensitive, and sufficient to meet future demands in cooperation with other entities.

7 Wastewater Services

Introduction

For wastewater services, the city's purpose is to provide effective collection, transmission, and treatment of wastewater generated in Denton with minimal impact to the environment. Though simplistic by description, this mission is challenging in the face of a rapidly growing population and in the midst of an ever-increasing body of environmental regulations.

To meet these challenges, the city recognizes the need to modernize and expand the wastewater treatment plant, increase the biosolids management (composting) program, enhance the industrial pretreatment and stormwater program, expand the laboratory facilities and services, and intensify efforts to upgrade and maintain lines and lift stations. In an effort to maximize existing water supplies for a growing population, the current beneficial use of wastewater effluent must also be expanded.

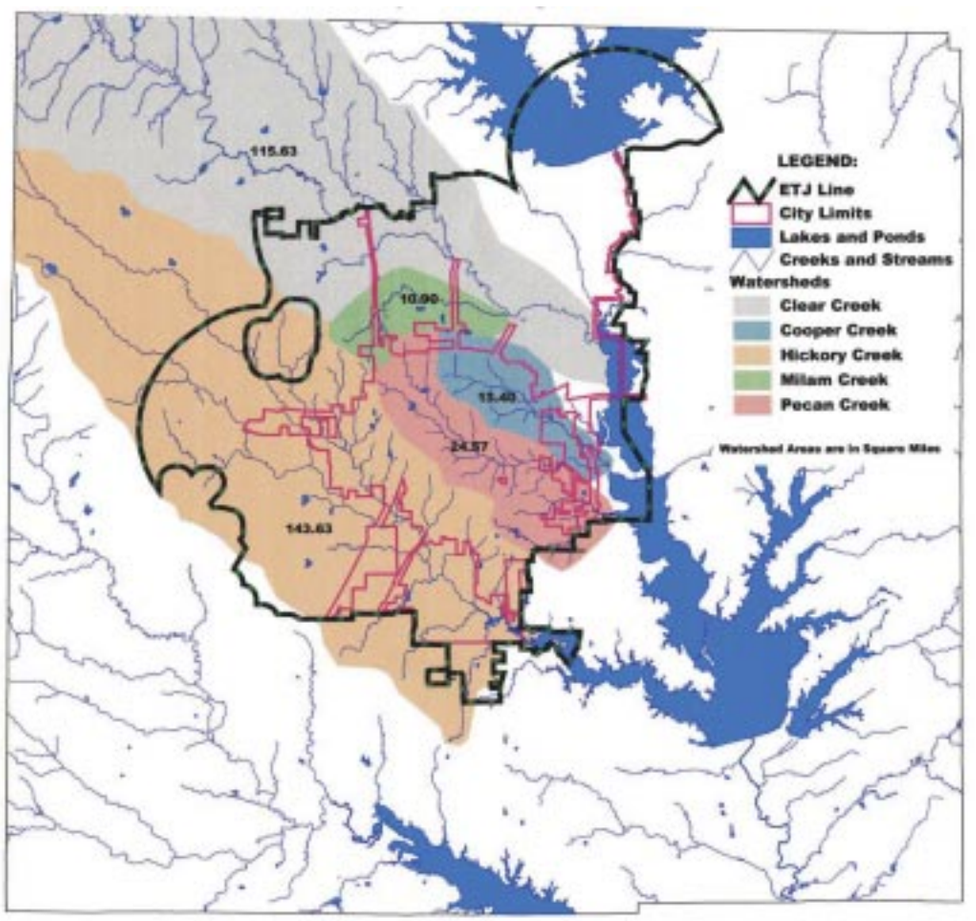
Policies

POLICIES

- Developments will be constructed and property owners will maintain their properties and private infrastructure in such a manner that will not compromise public health, endanger the public drinking supplies, or pollute the environment.
- Wastewater facilities will be located in areas that meet engineering criteria and are compatible with adjacent properties to the greatest extent possible.
- Oversee the development and operation of wastewater infrastructure so that it is safe, reliable, cost effective, environmentally sensitive, and sufficient to meet future demands in cooperation with other entities.
- Generally, wastewater collection infrastructure extensions to residential and commercial development will be the responsibility and expense of the developer. The city will follow development as determined by the private sector or as directed by the governing body by oversizing lines and upgrading trunk system. The city may also extend infrastructure to certain areas targeted for growth in the growth management plan.
- The city may participate in the cost of oversizing wastewater lines to meet future development, subject to fund availability and approval by City Council.
- The city will promote inflow/infiltration infrastructure improvements over new line extensions that expand the geographic coverage of the city's infrastructure systems.
- In order to help finance improvements necessary to serve population increases, the State Legislature enacted legislation enabling cities to charge a Capital Impact Recovery (IMPACT) fee to each new commercial and residential development.
- The city reserves the right to prohibit any connection to the city sewer system when it is determined that a line or the system is overloaded.

7 Wastewater Services

In order to help finance improvements necessary to serve population increases, the State ... enacted legislation enabling cities to charge a Capital Impact Recovery (IMPACT) fee to each new commercial and residential development.



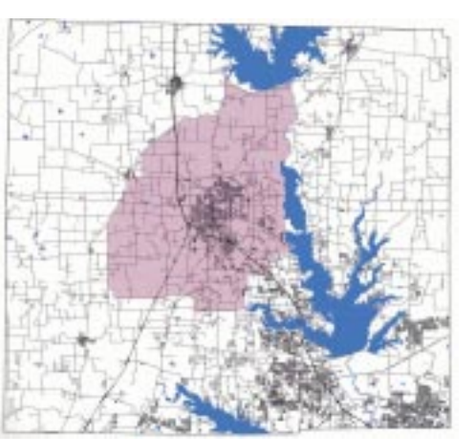
Major Denton County Watersheds that Impact the City of Denton

Wastewater Services Goals & Strategies

Wastewater Services Goals

GOALS

- Protect surface and groundwater supplies from contamination by inadequately treated wastewater, wastewater system overflows and/or on-site sewage systems.
- Expand on the current recycling and reuse programs by increasing compost production, increasing the marketability of the products, reduce the cost of managing biosolids and wood waste, and prolong the life of the landfill.
- Expand beneficial use of wastewater effluent, reducing the demand for raw water supply and treatment while at the same time decreasing the cost of water to certain large customers.



Wastewater CCN

Wastewater Services

Expand beneficial use of wastewater effluent, reducing the demand for raw water supply and treatment while at the same time decreasing the cost of water to certain large customers.

Wastewater Services Strategies

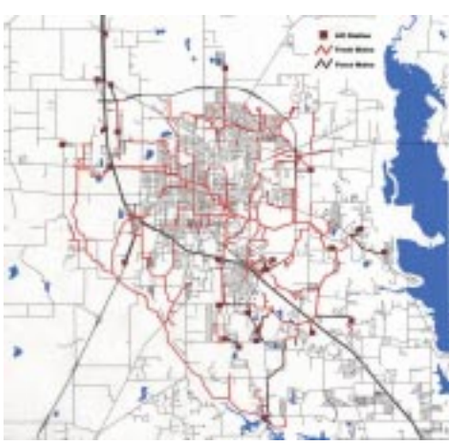
STRATEGIES

- Provide wholesale wastewater services to entities outside the Denton area in the Hickory Creek watershed to protect the city's drinking water intake from wastewater pollutants. Because the city's intake for drinking water is located on the Hickory Creek arm of Lake Lewisville, it is imperative to prevent contamination of this water supply. By providing wastewater services to entities outside of the Denton area but located in the Hickory Creek basin, the city can limit the number of wastewater discharges to Hickory Creek.

- It is anticipated that the rural areas and a few small communities will continue to use septic tanks beyond the year 2010. All communities in areas around Lakes Lewisville and Ray Roberts must establish effective collection and treatment systems to alleviate potential water quality problems. Active permitting, monitoring, and enforcement will be required.

- Beneficial use of treated wastewater involves using the reclaimed water (effluent) as it leaves the Pecan Creek WRP. The effluent water, while not drinking water quality, is of high enough quality to be safely used for a number of purposes. An effluent reuse system is already in place providing cooling tower water for the Spencer Power Plant. Components of this system can be utilized to expand the capabilities of providing effluent to the industrial and commercial sectors as well as parks and golf courses for irrigation purposes. By using wastewater effluent for non-drinking water applications, costs for treating raw water to drinking water standards can be avoided. This would make cheaper water available to large users, cut down on the amount of water treated at the water production plant, and help meet water conservation standards currently being implemented.

- As population continues to grow, raw water is quickly becoming the most valuable commodity in the North Texas area. Because treatment technology is rapidly evolving and regulatory requirements are becoming more stringent, the quality of effluent is improving dramatically. With the cost of developing new raw water sources becoming astronomical, direct reuse of wastewater effluent will soon become the economic alternative.



Wastewater Lines 10" & Larger with Lift Stations

7

Wastewater Services

- Mixing wood chips and biosolids produces compost. Wood construction debris and yard waste provides the source for the wood chips. The sludge used for the composting program comes from the Pecan Creek WRP secondary biosolids. The secondary biosolids account for only one-half of the total biosolids ultimately planned for the composting operation. Primary biosolids are presently land applied/injected. The composting program permits citizens to participate in the city's largest recycling program with trees and wastewater *from* citizens to produce compost *for* citizen and consumers.

- The city began compost-marketing activities in 1997. Customers currently pick up compost material in bulk at the compost site, but plans are under way to develop a bagging facility for wholesale distribution.

As population continues to grow, raw water is quickly becoming the most valuable commodity in the North Texas area.

The city recognizes the value of keeping the floodplain intact, maximizing the city's ability to manage storm events. By promoting this basic approach to stormwater management, the city will be able to effectively address the challenges of managing storm events in the face of significant growth.

7

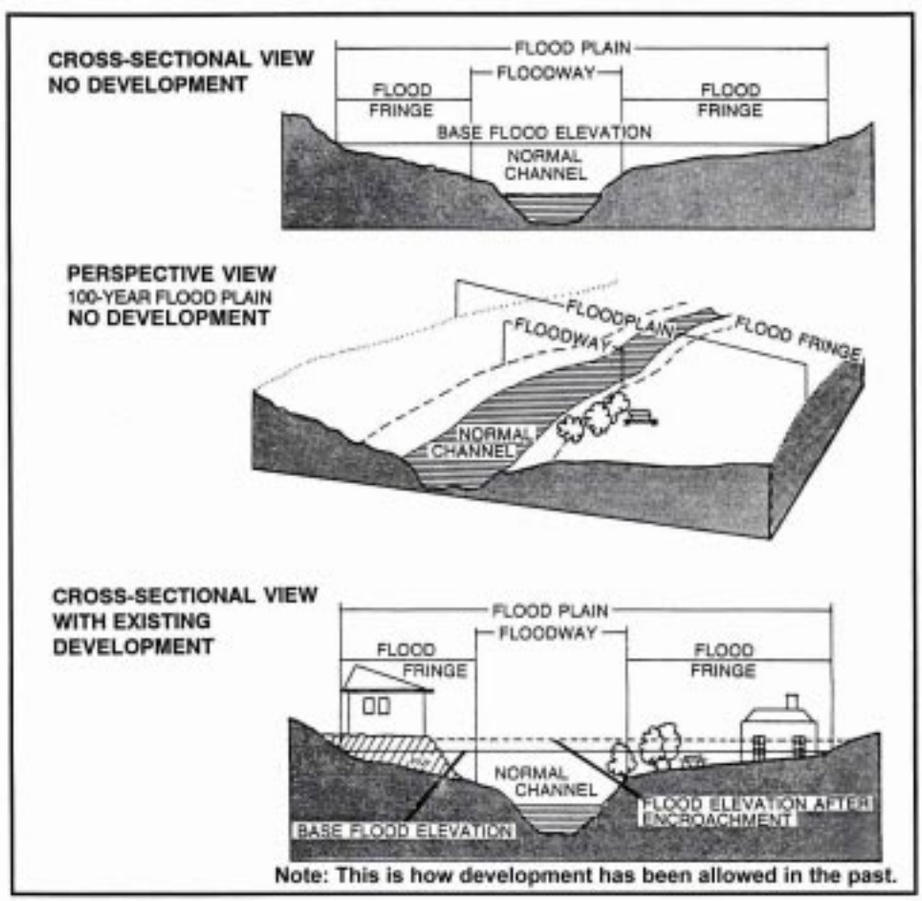
Stormwater Drainage

Introduction

The stormwater drainage system is responsible for conveying all runoff in the city from each storm event through a network of street inlets, underground pipes, culverts, improved channels, and natural channels. The runoff is eventually discharged into Lake Lewisville. The drainage system uses a 100-year flood as the design storm. In the 1950s, Denton experienced a flood close to this magnitude. One-half to two-thirds of the town flooded.

The lack of a devastating storm in recent history and memory has given homeowners and developers a false sense of security. Construction within the 100-year floodplain is prevalent, leaving little floodplain and floodplain fringe to mitigate the effects of a significant storm. As the city has grown and watersheds have become more developed, runoff has increased accordingly. Relatively small ten-year floods are becoming a challenge to manage, as floodplain area becomes a scarce commodity. Flooding during these events is the direct result of inadequate drainage design, poor construction techniques, an increase in impervious surfaces, and lack of undeveloped floodplain area.

Cross-Section of a Typical Floodplain



7 Stormwater Drainage

Over time we have observed the value of the floodplain area with respect to flood control. Areas with the floodplain left in a natural state absorb flooding events and provide water quality improvements far more successfully than areas where the floodplain has been filled and modified. By filling and developing floodplain areas, protecting property during flood situations became more difficult and expensive.

The city recognizes the value of keeping the floodplain intact, maximizing the city's ability to manage storm events. By promoting this basic approach to stormwater management, the city will be able to effectively address the challenges of managing storm events in the face of significant growth.

Policies

POLICIES

- Preserve, protect and, where possible, dedicate floodplains to the city in accordance with the city's watershed management plans and the parks and recreation plan. Floodplains should perform multiple functions for flood conveyance, transportation (trails), recreation and open space, habitat protection, and environmental preservation.
- As infill and redevelopment occur inside the developed portions of the city, existing substandard drainage systems must be reconstructed in a cost-effective manner to limit impacts on the adjacent developed properties.
- Drainage infrastructure for development shall conform to approved watershed management plans that address both water quality and quantity issues, including giving guidance on where natural versus improved channels and rural versus urban drainage systems should be located.
- Implement regional detention ponds rather than onsite detention ponds, according to the approved watershed management plans. The city and private developers will form partnerships to satisfy regional detention plans.
- Minimize the number of channel crossings to reduce potential restrictions and safety hazards and replace the existing box culvert crossings with clear spans that will bring the roadways out of the 100-year floodplain.
- Minimize erosion occurring during the physical construction of infrastructure and private improvements of developments using adopted best management practices and necessary enforcement, where appropriate. These practices should reduce the potential of erosion during and after construction.
- Endeavor to protect the life and property of its citizens from the 100-year storm by requiring that all built structures be above the 100-year flood level and removing those structures in the 100-year flood level as opportunities develop.

Implement regional detention ponds rather than onsite detention ponds, according to the approved watershed management plans. The city and private developers will form partnerships to satisfy regional detention plans.

Detention Pond

Stormwater Drainage

Minimize the number of channel crossings to reduce potential restrictions and safety hazards and replace the existing box culvert crossings with clear spans that will bring the roadways out of the 100-year floodplain.

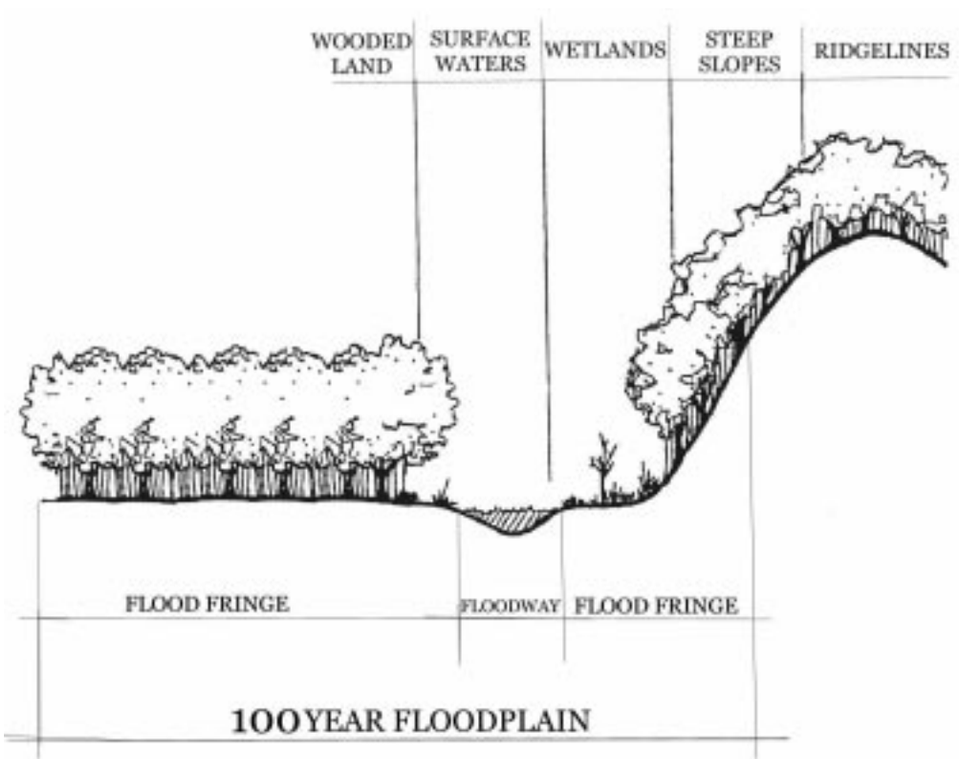
- Provide and oversee a safe, effective drainage system that respects both the natural and urban environment within the city limits.
- Address stormwater issues on a watershed-wide basis.

Stormwater Drainage Goals & Strategies

Stormwater Drainage Goals

GOALS

- Prevent the addition of new structures in the floodplain to reduce flooding and improve water quality.
- Limit the amount of reclamation of floodplain property to protect water quality.
- Correct the deficiencies associated with street flooding, inadequate channel capacity, and the existence of an estimated 1,000 structures currently located in the 100-year floodplain.
- Protect the water quality of streams and lakes from stormwater runoff through enhanced monitoring, enforcement, and public education programs.



Blocked Storm Channel Culvert

7 Stormwater Drainage

Stormwater Drainage Strategies

STRATEGIES

- Revise the current ordinance to prevent any new structures from being constructed in the 100-year floodplain. The ordinance would allow the floodplain property to be dedicated to homeowners' associations or directly to the city as a park or open space area. The property would be dedicated as one lot, preventing individual homeowners from constructing structures at the back of their lots in what has traditionally been floodplain easement.

- Develop new drainage regulations that require a new or existing development to make floodplain improvements in or adjacent to a floodplain to meet the 100-year floodplain restrictions. Provide drainage facilities by reserving a sufficient amount of land for landscaping, green space, or other permeable areas based on fully developed watershed conditions in developments.

- Promote open space and buffer zones to enhance water quality.

- Focus on the development of an organized, systematic and documented approach to operation and maintenance through a focused operational objective; a definable schedule of operation and maintenance activities; a measure of continuous operational and productivity improvements; and, documents that can educate the public in duties and responsibilities of the drainage operation, resources required to maintain the system, and problems preventing efficient progress.

- Increase channel capacity, enlarge creek crossing structures, and purchase some properties to accommodate larger channel designs. Remove existing structures from or adjacent to the 100-year floodplain as opportunities develop.

- Adopt a more aggressive capital improvements program (CIP) for stormwater facility upgrades and the necessary funding mechanisms to support the additional expenditures.

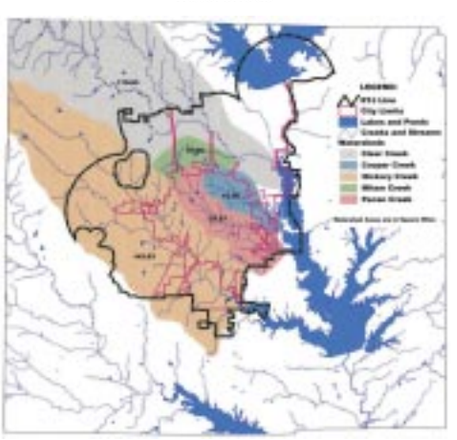
- Acquire the necessary property to develop regional versus site-specific detention ponds.

- Upgrade the flood monitoring system to include predictive flooding condition capabilities.

- Provide criteria with a balance among the value of multiple uses, and low maintenance life-cycle costs.

Revise the current ordinance to prevent any new structures from being constructed in the 100-year floodplain. The ordinance would allow the floodplain property to be dedicated to homeowners' associations or directly to the city as a park or open space area.

Watersheds



Stormwater Drainage

Develop an active role in monitoring and enforcement of all construction activities, establishing the control agency for the program at the local level and requiring and enforcing pollution prevention plans for construction activity.

- Develop methods to eliminate excess dirt, leaves and construction debris from entering the stormwater network, restrictions concerning excess water runoff, and removal of soil and leaves from construction sites. Methods of erosion control will be explained through public education programs.

- Develop an active role in monitoring and enforcement of all construction activities, establishing the control agency for the program at the local level and requiring and enforcing pollution prevention plans for construction activity.

- Develop an education program for citizens regarding potential problems that result from throwing grass clippings, leaves, and tree limbs into drainage channels. The program will address the common desire of citizens to have trees and other large vegetation remain in the channels as a "natural habitat," when such practice only increases flooding problems.

- Establish natural channels with appropriate vegetation toimprove water quality and maximize management opportunities.

- Propose pretreatment of water before disposal at each industrial site. Regulate surface runoff and control pressure washing of industrial and commercial parking lots.

- Increase street sweeping activities to pick up pollutants before they get into the storm system.

The city approaches waste disposal with a priority towards reducing waste at its origin and recovering recyclable materials.

7

Solid Waste Services

Introduction

The City of Denton recognizes the absolute necessity to protect public health by the responsible collection and disposal of the waste generated by the community. No modern community can remain healthy, desirable, or economically attractive without adequate collection and disposal of its waste stream.

The city approaches waste disposal with a priority towards reducing waste at its origin and recovering recyclable materials. The city is minimizing the amount of waste which must be landfilled by providing recycle material collection, separate collection of yard waste, composting of biosolids waste, recycling discarded appliances and bulky items, collection and disposal of household hazardous waste, and providing waste education programs to the public. The landfill itself will soon collect and use methane gas generated by decomposing waste as another example of resource recovery.

A well-operated solid waste management system ensures waste minimization, resource recovery, environmental protection, and disposal capabilities to meet future demands.

Policies

POLICIES

- Protect public health by the consistent and efficient removal and disposal of trash and rubbish from each residence, business, and institution.
- Support cost-effective recycling programs through policies that encourage public education, waste minimization, materials reuse, and environmental stewardship.
- Promote effective and efficient solid waste collection and recycling services planning during the development process.
- Site planning for all residential and commercial development will promote efficient, on-site access for solid waste collection.
- Promote efficient onsite solid waste collection access for all residential and commercial developments.

Denton Landfill

7

Solid Waste Services

Protect public health, reduce litter and fugitive trash, and enhance community appearance by the efficient, cost-effective collection of solid waste.

Solid Waste Goals & Strategies

Solid Waste Goals

GOALS

- Ensure that the environment is adequately protected through the proper collection and disposal of solid waste.
- Encourage waste minimization and maximize material recovery and reuse.
- Protect public health, reduce litter and fugitive trash, and enhance community appearance by the efficient, cost-effective collection of solid waste.

Solid Waste Strategies

STRATEGIES

- Utilize groundwater protection and monitoring systems, methane collection and monitoring for off-site methane migration prevention, collection and treatment of leachate, and management of stormwater to ensure that the landfill is operated without harm to the environment.

- Site design for commercial, multifamily, industrial, and institutional land uses will require construction of revetments (typically vertical screening, ramps, platforms and gates) to house containers (both dumpsters and/or compactors) for fully automated collections. Specifications will be developed for revetments and for the paving of the surface on, and leading to, the container sufficient to withstand the weight of the collection vehicles. The collection of bulky items will be addressed to reduce the appearance of these items at the curb. The city will continue to support community efforts to remove litter and fugitive trash.

- Construct a materials recovery facility (MRF) adjacent to the landfill. Development of a MRF would accelerate the achievement of the Plan's waste diversion goals and recycling volumes. This in turn would extend the life expectancy of the landfill and offer other opportunities for the city to offset some of its capital and operating costs by taking in waste from outside the city.

- Evaluate the waste minimization benefits of charging solid waste customers for volume-based, containerized collection services.

Citizen Drop-off

The city will promote the use of municipal lighting fixtures that direct illumination efficiently, reduce potential nuisance lighting problems, and enhance views of the nighttime sky.

7

Electric Services

Introduction

Denton Municipal Electric (DME), the City of Denton's power company, provides electricity to more than 35,000 customers. By generating and purchasing power, providing transmission, and maintaining customer service through an expanding distribution system, DME is able to meet the power demands of a growing population in a cost-effective, service-oriented manner.

At the street level, maintaining and developing an infrastructure that is safe, reliable, and environmentally sensitive is a top priority. Long-term plans focus on securing future sources of wholesale power to meet projected demand as the city continues to grow.

Electric power is a vital component of the community, and DME will expand the electric services it offers as the city grows.

Policies

POLICIES

- Electric service to all new commercial and residential developments will be installed underground.
- Electric service providers and the city will work together to achieve the goal of installing electric utilities underground along and adjacent to major entranceways.
- New electric feeder lines to major load centers may be installed overhead except in specially designated areas or where existing electric, communications and cable facilities have already been converted to underground facilities.
- Electric service initiatives will continue to fund the conversion of existing overhead electric facilities to underground on a fiscally responsible basis.
- All tree trimming or other removal of vegetation to clear electrical lines will be in compliance with existing city policies and ordinances.
- The city will promote the use of municipal lighting fixtures that direct illumination efficiently, reduce potential nuisance lighting problems, and enhance views of the nighttime sky.

7 Electric Services

Electric Service Goals & Strategies

Electric Service Goals

GOALS

- Provide safe and reliable electric utilities that will meet future demands.
- Ensure that electric utility installation and operation is environmentally and aesthetically sensitive.
- Use cost-effective methods to develop and maintain the electric system.

Electric Service Strategies

STRATEGIES

- Provide cost-effective purchase power through wholesale electric providers, to achieve the best customer rate for energy generation in a deregulated market place.

- Electric service providers will continue to expand the installation of underground distribution facilities to ensure the reliable delivery of electric services to a growing population. Electric service to all new commercial and residential developments will be installed underground. Electric service providers and the city will work together to achieve the goal of installing electric utilities underground along and adjacent to major entranceways.

- The utility will provide efficient and effective customer services by maintaining rapid response times (less than fifteen minutes) to customer outages, enhancing communication systems, developing automated meter reading capabilities and improving system automation and analysis capabilities.

- Underground electric utility service to developments is important to promote good urban design and enhance the aesthetic quality of the developing neighborhoods. The city will continue to encourage service providers (cable, telephone, electricity, data communications) in the city to cooperate with initiatives to convert existing overhead facilities to underground. The city will adopt and promote the same service criteria (through ordinance development, etc.) utilized by Denton Municipal Electric for all providers related to overhead versus underground conversion, tree trimming and planting requirements and new service installations.

Electric Service Strategies:

- *All street light fixtures in new developments will be in compliance with city specifications. The city will use municipal lighting fixtures that direct illumination efficiently, reduce potential nuisance lighting problems, and enhance views of the nighttime sky.*

- *A cooperative effort between local government and the private sector is required to provide electric facilities in a cost-effective manner. Both public and private interests will base policies related to electric service on fair and equitable participation in the costs.*

8

Implementation

Introduction:

- *This implementation section is intended to guide the city by using tools and projected timeframes to implement sections of the comprehensive plan.*
- *This section includes the means the city will use to track, protect, and implement the plan.*
- *The implementation schedule is set up to reflect the general components of each comprehensive plan section with a list of tools that can be used for that framework.*

Plan Performance

Benchmarks & Indicators

Benchmarks and indicators tell us where the comprehensive plan is, has been and what direction it is taking the city. For example, these indicators may come from assessments of growth trends, built environments in the recent past, taxing abilities and ratios, and how often the plan is amended. Typically, a major assessment of the comprehensive plan will take place every five to seven years. Where assessments indicate failures within the plan or changes in direction from the adopted comprehensive plan, a potential update of the plan is foreseen.

In an effort to track the comprehensive plan's performance, an annual report will be prepared with updates of all statistical data and recommendations for revisions to the plan if necessary. The recommendations within the plan guide the development of implementation tools. As these tools are produced, this will be updated and amended where new implementation priorities or tools are recommended.

Comprehensive Plan Amendments

The comprehensive plan amendment process is a new tool to track the viability of the comprehensive plan and allow the city to review potential amendments to the plan, whether the amendment is viable or not. The process is established to protect the plan from misuse, keep the plan a living document, protect the will of our citizenry, and potentially allow change to the comprehensive plan where the viability of that proposed amendment meets the intent of the plan.

The amendment process will be part of the zone change process within the development regulations. An amendment to the comprehensive plan will require a public hearing, a recommendation from the Planning & Zoning Commission, and City Council approval prior to any action. In this way, the city can track changes to the comprehensive plan and note potential problem areas or areas of the plan that may need to be amended. The amendment, where approved, would automatically update the land use plan should it be affected by the amendment. Amendments to the comprehensive plan may occur at predetermined times during a given year, based on a schedule prepared by the director of planning and development. Project applications for comprehensive plan amendments that are denied amendments by the City Council may not apply for another amendment to the plan on that property for one year from the date of denial.

8 Implementation

Implementation Framework & Tools

Element 2: PUBLIC INVOLVEMENT			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Planning: ▪ Design a public participation procedure. ▪ Create a database of interested persons. ▪ Provide staff & funding resources. ▪ Public service recruitment. ▪ Public Notification: Add to traditional notification & hearing requirements to get the word out. ▪ Public Education: Create task forces/ committees to help educate the public. ▪ Public Participation: Clearly communicate & have constructive use of the public's ideas.	**Develop/Use/Implement:** ▪ Public Participation Program ▪ Notification Strategy ▪ Speakers Bureau ▪ Workshops ▪ Media Packets ▪ Public Information Resources ▪ Development Process	Planning & Development Utilities Transportation Economic Development Parks & Recreation Community Development City Managers Office	1999-2005 General Fund

Implementation

Element 3: GROWTH MANAGEMENT			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Quality of Growth: ▪ Strongly manage quality of new development. ▪ Protect environmentally sensitive areas. ▪ Retain quality of life & unique character.	**Develop/Use/Implement:** ▪ Growth Management Strategy & Map ▪ Comprehensive Plan ▪ Small Area & Corridor Plans ▪ Capital Improvement Program ▪ Infrastructure Master Plans ▪ Adequate Public Facilities Policies ▪ Incentives to Encourage Infill & Redevelopment Activity ▪ Incentives to Accomplish Comprehensive Plan Objectives ▪ Zoning Ordinance & Map, Subdivision Regulations, & Site Plan Review Process ▪ Joint Planning & Inter-local Agreements with Other Governmental Agencies	Planning & Development Utilities Environmental Management Transportation Engineering Economic Development Parks & Recreation City Manager Office	1999-2005 General Fund CIP Grants TXDOT State & Federal Funds
Quantity of Growth: ▪ Strongly manage quantity of growth to ensure that adequate public facilities exist to service the growth & that new development meets community standards.	**Develop/Use/Implement:** ▪ Growth Management Strategy & Map ▪ Comprehensive Plan & Land Use Plan ▪ Small Area & Corridor Plans ▪ Capital Improvement Program ▪ Infrastructure Master Plans ▪ Adequate Public Facilities Policies ▪ Impact Fee Program ▪ Annexation Plan ▪ Incentives to Encourage Infill & Redevelopment Activity ▪ Incentives to Accomplish Comprehensive Plan Objectives ▪ Zoning Ordinance & Map	Planning & Development Utilities Environmental Management Transportation Engineering Economic Development Parks & Recreation City Manager Office	1999-2005 General Fund CIP Grants TXDOT State & Federal Funds

Element 3: GROWTH MANAGEMENT (continued)			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Location of Growth: ▪ Strongly manage location of growth. ▪ Support mixed-use in appropriate locations. ▪ Encourage infill development. ▪ Preserve existing neighborhoods & downtown. ▪ Encourage nonresidential growth that enhances the city and schools districts tax bases.	**Develop/Use/Implement:** ▪ Growth Management Strategy & Map ▪ Comprehensive Plan & Land Use Plan ▪ Small Area & Corridor Plans ▪ Capital Improvement Program ▪ Infrastructure Master Plans ▪ Adequate Public Facilities Policies ▪ Impact Fee Program ▪ Annexation Plan ▪ Incentives to Encourage Infill & Redevelopment Activity ▪ Incentives to Accomplish Comprehensive Plan Objectives ▪ Zoning Ordinance & Map, Subdivision Regulations, & Site Plan Review Process	Planning & Development Utilities Environmental Management Transportation Engineering Economic Development Parks & Recreation City Manager Office	1999-2005 General Fund CIP Grants TXDOT State & Federal Funds
Timing of Growth: ▪ Control the timing of growth to ensure the adequate provision of city services & facilities. ▪ Stimulate growth in desired areas.	**Develop/Use/Implement:** ▪ Capital Improvement Program ▪ Infrastructure Master Plans ▪ Adequate Public Facilities Policies ▪ Revised Utility Participation Policies ▪ Impact Fee Program ▪ Annexation Plan ▪ Incentives to Encourage Infill & Redevelopment Activity ▪ Incentives to Accomplish Comprehensive Plan Objectives ▪ Zoning Ordinance & Map	Planning & Development Utilities Environmental Management Transportation Engineering Economic Development Parks & Recreation City Manager Office	1999-2005 General Fund CIP Grants TXDOT State & Federal Funds

Implementation

Element 3: THE EDGE			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
The Edge: ▪ Prepare for current & future patterns of growth. ▪ Coordinate with adjacent communities & determine service areas for city growth.	**Develop/Use/Implement:** ▪ Comprehensive Plan ▪ Growth Management Strategy & Plan ▪ Adequate Public Facilities Policies ▪ Annexation Plan ▪ Interlocal Agreements ▪ Water Master Plan ▪ Drainage Master Plan ▪ Wastewater Master Plan ▪ Environmental Standards ▪ Lake Ray Roberts District Plan	Planning & Development City Managers Office	1999-2005 General Fund CIP Smart Growth Program & Initiatives

8 Implementation

Element 3: LAND USE			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Residential: ▪ Accommodate balanced future residential developments. ▪ Meet the projected demand for residential with a maximum threshold for MF. ▪ Establish density criteria. ▪ Establish mixed-use development criteria in neighborhood & activity centers. ▪ Increase housing in the core of the city. ▪ Establish high densities where infrastructure can support them. ▪ Establish moderate densities in neighborhood centers. ▪ Establish compatibility standards in existing neighborhoods. ▪ Use adequate public facilities as a criterion for zone changes.	**Develop/Use/Implement:** ▪ Zoning Ordinance & Map, Subdivision Regulations, & Site Plan Review Process ▪ Architectural & Site Design Standards ▪ Single-family & Multifamily Tracking Program ▪ Incentives to Encourage Infill & Redevelopment Activity ▪ Small Area Plans ▪ Adequate Public Facilities Policies	Planning & Development	1999-2005 General Fund CIP Grants State & Federal Funds CDBG Smart Growth Program & Initiatives
Commercial: ▪ Organize commercial land uses. ▪ Develop design standards. ▪ Establish mixed-use development criteria in neighborhood & activity centers. ▪ Encourage reuse and redevelopment in the DUCD. ▪ Establish compatibility standards in existing neighborhoods.	**Develop/Use/Implement:** ▪ Zoning Ordinance & Map, Subdivision Regulations, & Site Plan Review Process ▪ Architectural & Site Design Standards ▪ Incentives to Encourage Infill & Redevelopment Activity ▪ Small Area Plans	Planning & Development	1999-2005 General Fund CIP Grants State & Federal Funds Smart Growth Program & Initiatives

Element 3: LAND USE (continued)			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Industrial & Employment Centers: ▪ Form public/private partnerships to meet infrastructure needs. ▪ Market businesses in appropriate districts. ▪ Develop partnerships with the universities. ▪ Organize land use to avoid land use conflicts. ▪ Develop standards to protect the health, safety & welfare of the community. ▪ Use adequate public facilities as a criterion for zone changes. ▪ Establish mixed-use development criteria in employment centers. ▪ Compatibility with adjacent neighbors. ▪ Promote excellence in design & construction of buildings, outdoor spaces, transportation facilities, & streetscapes.	**Develop/Use/Implement:** ▪ Zoning Ordinance & Map, Subdivision Regulations, & Site Plan Review Process ▪ Architectural & Site Design Standards ▪ Performance Standards ▪ Incentives to Encourage Development & Redevelopment Activity ▪ Small Area Plans ▪ Adequate Public Facilities Policies ▪ Marketing Programs ▪ Educational Partnerships Program	Planning & Development Economic Development	1999-2005 General Fund CIP Grants State & Federal Funds Smart Growth Program & Initiatives

8 Implementation

Element 4: URBAN DESIGN			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Urban Design Standards: ▪ Standards of development for all types of development. ▪ Design standards considered early in planning stages. ▪ Standards for unique areas. ▪ Compatibility & buffering issues. ▪ Neighborhood centers design parameters. ▪ Variety & Distinctiveness: Reinforce & enhance neighborhood character. Promote individualistic, creative & distinctive design. Government facilities should meet design criteria. ▪ Visually Sensitive Locations: Demonstrate high standards of architectural & urban design to complement or enhance sensitive locations. ▪ Public Art: Create interest, local distinctiveness, & memorable image of the city in public & private developments. ▪ Urban Design Plan: Describe Denton's approach to visual quality & image. Coordinate urban design objectives with other public concerns. Examine areas of the city in need of improvement or protection.	**Develop/Use/Implement:** ▪ Comprehensive Plan ▪ Development Code ▪ Subdivision Regulations ▪ Site Design Standards ▪ Architectural Design Standards ▪ Site Element Requirements ▪ Neighborhood Centers Standards ▪ Development Review Process ▪ Urban Design Review Process ▪ Small Area Plans ▪ Compatibility Standards ▪ Buffering Standards ▪ Street Tree Standards ▪ Public Improvements Strategy ▪ Urban Design Studies & Analysis ▪ Alternative Compliance Standards ▪ Sensitive Locations Identification, Designation & Protection Criteria & Process ▪ Public Art Criteria ▪ Urban Design Plan & Policies Document ▪ Urban Design Plan Monitoring	Planning & Development Main Street Parks & Recreation	1999-2005 General Fund Grants State & Federal Funds Smart Growth Program & Initiatives

Element 4: THE STREET			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Street Development: ▪ Create streets & alleys that are designed to meet criteria for sustainable development. ▪ Create neighborhood streets & alleys that are interconnected/ grid systems with smaller blocks that diffuse traffic & shorten walking distances. ▪ Use build-to lines for structures. ▪ Create streets with multiple functions. ▪ Promote the use of alleys. ▪ Use sidewalks appropriate to the street type. ▪ Use transit-oriented design. ▪ Design on-street parking requirements. ▪ Street trees requirements along all streets.	**Develop/Use/Implement:** ▪ Subdivision Regulations & Criteria Manual ▪ Development Code ▪ Urban Design Standards ▪ Neighborhood Centers Standards	Planning & Development Utilities Transportation Parks & Recreation	1999-2005 General Fund Smart Growth Program & Initiatives State & Federal Funds

8 Implementation

Element 4: HISTORIC PRESERVATION			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Historic Districts: ▪ Identify & create additional historic districts. ▪ Historic Tourism: Enhance historic district tourism. ▪ Historic Sites: Protect sites or areas of historical significance. ▪ Archeological Resources: Protect remaining archeological resources.	**Develop/Use/Implement:** ▪ Historic Districts Plans ▪ Development Code ▪ City Historic District & Landmarks Designations ▪ State & Federal Designations & Programs ▪ Education Program ▪ Enforcement Provisions ▪ Incentive Provisions ▪ Property Appearance Guidelines ▪ Infrastructure Preservation Guidelines ▪ Archeological Protection & Mitigation Guidelines	Main Street Planning & Development	1999-2005 Private Sector Funds Hotel-Motel Funds Certified Local Government Grant General Fund Grants

Element 4: MAINTENANCE & ENFORCEMENT			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Public Assets: ▪ Maximize the service life of paved surfaces. ▪ Maximize the life & value of trees & landscaping on public properties. ▪ Inspection & Enforcement: Promote community pride & economic values. Curtail urban blight. Assess results for effectiveness. Educate the community to prevent future violations.	**Develop/Use/Implement:** ▪ Street Maintenance Program ▪ Street Maintenance Standards ▪ Funding Strategies ▪ Pavement Design & Materials Specifications ▪ Construction Standards ▪ Landscape Design & Materials Specifications ▪ Landscape Systems Installation & Maintenance Requirements/Schedules ▪ Educational Programs ▪ Small Area Plans ▪ Redevelopment Programs ▪ Inspection/Violation Programs	Planning & Development	1999-2005 General Fund Building Inspections & Code Enforcement Funds

Element 5: ENVIRONMENTAL MANAGEMENT			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Ecosystem Management: ▪ Develop conservation & development priorities. ▪ Air: Encourage public transportation systems & efficiencies. Develop policies to reduce ozone concentrations. ▪ Water: Preserve floodplain & maintain floodplain habitat to improve water quality. ▪ Land: Encourage preservation of open spaces.	**Develop/Use/Implement:** ▪ Environmental Overlay & Standards ▪ Ecological Values & Rating Criteria & Plan ▪ Land Acquisition Program ▪ Floodplain/Sensitive Lands Protection Regulations ▪ Green Builder Standards ▪ Public Education Program ▪ Clearing & Grading Standards ▪ Drainage Regulations ▪ Velo-web Transportation System Plan ▪ Public Transit Systems ▪ Urban Trails Plan & Strategy ▪ Regional NCTCOG Air Quality Programs ▪ Floodplain Zoning Restrictions ▪ Floodplain & Riparian Ecology Restoration Projects ▪ Greenbelt & 1135 Project ▪ Publicly Owned Conservation Lands Program	Environmental Management Utilities UNT Planning & Development Parks & Recreation	1999-2005 Utilities Funds General Fund CIP Grants State & EPA Funds Federal Funds

Element 5: PARKS, RECREATION, & OPEN SPACE			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Distribution of Parks: ▪ Ensure adequate & equitable distribution of facilities. ▪ Parks & Open Space Acquisition: Achieve comprehensive plan objectives through acquisition programs. ▪ Financial Effectiveness: Ensure cost-effective provision of facilities. ▪ Responsiveness: Ensure facilities are responsive to changing needs.	**Develop/Use/Implement:** ▪ Parks, Recreation, & Open Space Master Plan ▪ Park Acquisition & Development Plan ▪ Civic, School & Park Siting Coordination Strategy ▪ Profit Center Planning ▪ Annual Action Plan ▪ Strategic Plan ▪ Citizen Surveys	Parks & Recreation Planning & Development School Districts	1999-2005 General Fund General Obligation Bonds, Revenue Bonds, Certificates of Obligation Park Dedication Funds CIP Grants State & Federal Funds

8 Implementation

Element 6: ECONOMIC DIVERSIFICATION			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Employment Opportunity: ▪ Encourage a strong, diversified & self-sustaining economy. ▪ Create a wide range of employment opportunities. ▪ Enhance local ownership opportunities. ▪ Expand the tax base. ▪ Local & Small Businesses: Support local business ownership & small business creation. Support Denton's cultural activities. Work with financial institutions & the business community. Provide technical assistance for business start-up & assistance. ▪ Workforce: Ensure a skilled, diversified workforce. Work with educators to provide education & training programs. Offer apprentice /workplace learning opportunities. ▪ Development Incentives: Establish mixed-use development criteria in neighborhood & activity centers.	**Develop/Use/Implement:** ▪ Comprehensive Incentive Package to Encourage Business /Industry Development/Investment with Guidelines ▪ Targeted Marketing Plan ▪ Marketing Strategies & Materials ▪ Small Loan Packaging Opportunities ▪ Coalition of Educators & Industry Representatives	Economic Development	1999-2005 General Fund CIP Grants State & Federal Funds Private Sector Contributions Utility Fund Local Bank Funds CDBG

Implementation

Element 6: HOUSING			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Affordable housing: ▪ Encourage development & preservation of affordable housing. ▪ Add housing units at the same rate of growth to job growth. ▪ 60% of housing should be owner-occupied. ▪ Conserve housing: ▪ Maintain existing housing in good condition. ▪ Allocate funds to housing assistance programs. ▪ Attainable housing: ▪ Meet housing needs of the existing & projected population.	**Develop/Use/Implement:** ▪ Zoning Ordinance & Map, Subdivision Regulations, & Site Plan Review Process ▪ CDBG Funds ▪ Small Area Plans ▪ Community Development Programs/Assistance ▪ Incentive Programs	Planning & Development	1999-2005 General Fund CIP Grants State & Federal Funds CDBG

8 Implementation

Element 6: SCHOOLS			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Adequate School Facilities: ▪ Adequate school facilities should be planned & constructed to accommodate anticipated student growth. ▪ Evaluate the impact of proposed development. ▪ Encourage donations & reservations of school sites. ▪ Support state legislation that allocates adequate program funding. ▪ Promote economic diversification that increases school funding. ▪ Land Use Compatibility: Plan & integrate transportation, utility & park projects with school facilities. ▪ City-School District Relationship: Engage in collaborative projects to maximize funds & public space function.	**Develop/Use/Implement:** ▪ Schools Siting Guidelines ▪ Development Review Committee ▪ School Impacts Analysis Model & Strategy ▪ Incentive Program ▪ Economic Marketing Programs ▪ School Site Selection, Assessment, & Acquisition System ▪ Interlocal Agreements ▪ Coordinated Funding Packages ▪ Joint Use Plans	Planning & Development Utilities Transportation Economic Development Parks & Recreation Community Development City Managers Office	1999-2005 General Fund School District Contributions

Implementation

Element 7: TRANSPORTATION			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Environmental Stewardship: ▪ Reduce & mitigate air, water & noise pollution. ▪ Promote energy efficient transportation. ▪ Travel Demand/Behavior: Meet current & future mobility demands. Provide transportation alternatives. Reduce the use of SOVs. Invest in transit planning & systems. ▪ Land Use & Transportation: Coordinate land use & transportation systems. ▪ Use of Streets: Make best use of street capacity. Ensure street capacity for all transportation uses. Support use of transit & other modes of travel. Differentiate between street functions. Design streets to promote safety.	**Develop/Use/Implement:** ▪ Transportation & Operation Impact Evaluation ▪ Travel Demand Management & Incentives ▪ Air Quality Mitigation Procedures ▪ Public Education & Public Awareness Campaign ▪ Transit & Non-motorized Vehicle Use Incentives ▪ Commuter Trip Reduction Program ▪ Advanced Transportation & Communication Technologies ▪ Mobility Plan ▪ Transportation Design ▪ Access Management ▪ Land Use & Street Relationships ▪ Interconnected Transportation Systems ▪ Street Classification System ▪ Traffic Control Devices ▪ Traffic Calming Policies & Techniques ▪ Street & ROW Sections ▪ Land Use Map ▪ Subdivision Regulations	Transportation Planning & Development Environmental Management	1999-2005 General Fund CIP Grants TXDOT CMAQ State & Federal Funds NCTCOG Transit Program Smart Growth Program & Initiatives FAA Developer Funds

8 Implementation

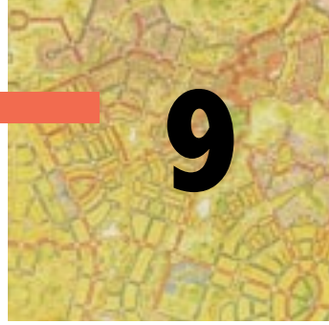
Element 7: WATER SERVICES			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Water Services: ▪ Ensure an adequate water supply. ▪ Meet anticipated increase in water demand. ▪ Provide flexibility for refilling tanks, meeting peak demands & emergency fire conditions.	**Develop/Use/Implement:** ▪ Water System Master Plan ▪ Long-term Water Supply Contracts ▪ Water Conservation & Drought Contingency Plan ▪ Wastewater Reuse Program	Utilities	1999-2005 Water Fund Rates determined by purchase agreement with City of Dallas. Cost determined pending program design.

Element 7: WASTEWATER SERVICES			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Wastewater Services: ▪ Protect water supplies from on-site sewage system contamination. ▪ Expand beneficial use of wastewater effluent. ▪ Expand on recycling & reuse programs.	**Develop/Use/Implement:** ▪ Wastewater System Master Plan ▪ Wholesale Wastewater Services (outside of Hickory Creek) ▪ Permitting, Monitoring & Enforcement Programs ▪ Effluent Reuse System ▪ Composting Program ▪ Tree Farm	Utilities	1999-2005 Wastewater Revenues Revenue Producing

Element 7: STORMWATER DRAINAGE			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Stormwater: ▪ Reduce flooding & improve water quality. ▪ Correct deficiencies in street flooding, inadequate channel capacity, & the 1000± structures in the floodplain. ▪ Limit floodplain reclamation.	**Develop/Use/Implement:** ▪ Floodplain Development Criteria ▪ Monitoring, Enforcement & Public Education Programs ▪ Regional Detention Facilities Planning ▪ Drainage Regulations ▪ Water Quality Planning ▪ Industrial Pretreatment Requirements ▪ Open Space & Buffer Zone Requirements ▪ Operations & Maintenance Plan ▪ Watershed Planning	Utilities	1999-2005 Water/Wastewater Revenues General Fund State & Federal Funds

Element 7: SOLID WASTE SERVICES			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Solid Waste: ▪ Protect public health, reduce litter & fugitive trash, & enhance community appearance. ▪ Ensure the environment is protected. ▪ Encourage waste minimization. ▪ Maximize material recovery & reuse.	**Develop/Use/Implement:** ▪ Solid Waste Collection System ▪ Monitoring & Protection Systems ▪ Materials Recovery Facility (MRF) ▪ Revetment Specifications	Planning & Development Utilities Transportation Economic Development Parks & Recreation Community Development City Managers Office	1999-2005 Operating Budget Revenue Producing

Element 7: ELECTRIC SERVICES			
Framework	**Implementation Tool**	**Primary Responsibility**	**Schedule & Funding Source**
Electric: ▪ Provide safe & reliable electric services. ▪ Meet future demands. ▪ Ensure system is environmentally & aesthetically sensitive. ▪ Maintain & develop in a cost effective method.	**Develop/Use/Implement:** ▪ Electric Services Plan ▪ Purchase Power through Wholesale Providers ▪ Expand Underground Distribution System ▪ Maintain Rapid Response Times ▪ Convert Overhead Utilities to Underground Systems ▪ Street Light Specifications ▪ Light Ordinance	Municipal Electric	1999-2005 Operating Budget



9

Glossary of Terms

100 Year Storm

The one hundred year storm is a flood event which is determined to happen within a 100 year cycle. It is determined by use of periodic flood measurements of past storm events, actual flood tables, water flow, and other means.

Access Management Practices

The use of engineering practices which determine site distances, vehicular speed, and other methods to calculate the maximum access points allowable at any given section along a roadway. Curb cuts are limited so that congestion occurs primarily off the roadway.

Alternative Development Scenarios

A series of maps, descriptions and development implications used to examine the differences in how patterns of development could be applied to the City.

Annexation

The incorporation of land area into an existing community resulting with the change in the boundaries of that community.

Average City-wide Density

The overall average density of all single-family or multifamily uses within the city's planning area. The average citywide density is applied only to the planning area as a whole to track growth management objectives..

Capital Improvement Program

A program that forecasts infrastructure improvements to the City using a set timeline and financing methodology.

Certificate of Convenience and Necessity (CCN)

CCN boundaries refer to an area certified for a certain type of service provision within a given area. The Texas Natural Resources Conservation Commission (TNRCC) is the state agency responsible for making CCN designations. Denton water and wastewater CCN boundaries, which extend beyond city limits, exclude other service providers, such as Fresh Water Supply Districts (FWSD's) from competing with city systems. Electric CCNs can be obtained by more than one service provider. Upon refusal to provide services, Denton's CCN areas are subject to "decertification" and reassignment to a different service provider.

Charette

A group design process usually utilizing the skills of design professionals, city officials, citizens, and other interested parties. The "Charette" is accomplished over a predetermined time period regarding a specific land area, or a larger overall plan area as a design tool. This process is also used as a forum for ideas and goal setting.

City Limits

In Denton, the city limits are about 55 square miles in area. Property owners inside the city pay city taxes, and a full range of city services is available, including police protection, fire protection, emergency medical services, solid waste collection, streets, utilities, and parks. City residents have the right to vote in all city elections. When property is developed inside the city, all city regulations are applicable, and compliance with subdivision, zoning and building codes is required.

9 Glossary of Terms

Commercial Mixed Use Centers

An area of mixed residential and commercial uses that has a high level of transit service, are compact and dense developments and will eventually serve thousands of people. They provide shopping and employment opportunities within a local market area as well as some specialty attractions and regional interest.

Compatibility

The characteristics of different uses or activities or design which allow them to be located near or adjacent to each other in harmony. Some elements affecting compatibility include height, scale, mass, and bulk of structures. Other characteristics include pedestrian or vehicular traffic, circulation, access, and parking impacts. Other important characteristics that affect compatibility are landscaping, lighting, noise, odor and architecture. Compatibility does not mean "the same as." Rather, compatibility refers to the sensitivity of development proposals in maintaining the character of existing development.

Corridor

Land area surrounding a public road within the City.

Density

The overall average number of dwelling units located on the gross acreage contained within the development and calculated on a per acre basis.

Denton Planning Area

The area bounded by a projected 5-mile Extra Territorial Jurisdiction based on City of Denton City Limits as of December 1999.

Detention

A method of detaining or delaying the flow of water or runoff, and eventually releasing the water at a slower rate of flow. Another storm water control option, called retention, captures water and creates a ponding effect.

Dry Utilities

Utilities which do not consist of water, such as electric, cable, telephone, gas.

Dwelling Unit

A structure or portion thereof which is used exclusively for human habitation.

Ecosystem

The natural systems of our environment, including air quality, water quality, plant and wildlife habitats, soil stability and other systems of our habitat.

Extraterritorial Jurisdiction (ETJ)

The City of Denton is "home-rule" city according to state law, and because it has a population between 50,000 and 100,000, the city's ETJ extends 3½ miles from the city limit line, unless another city's jurisdiction is already in place. Denton's ETJ currently encompasses about 220 square miles on the perimeter of the city limits. When the city's population surpasses 100,000 people, the ETJ extends five miles from the city limits, which is the farthest extension allowed by state law. Some properties may have access to city utilities, but most ETJ development does not benefit from city services. Density is limited due to dependence on well-water and septic sys-

Glossary of Terms

tems. Residents within the ETJ do not vote in city elections. When property is developed in the ETJ, city subdivision regulations must be followed, but zoning and building codes do not apply.

Floodplain

The channel and area adjoining the channel of a natural stream or river which has been or may be covered by floodwater.

Floodway

The channel of a natural stream or river and portions of the floodplain adjoining the channel, which are reasonably required to carry and discharge the floodwater or flow of any natural stream or river.

Functional Street Classification

System which classifies how roads move vehicles, bicycles and pedestrians. The system is based on variables including, length, speed, accessibility and capacity of the roadway.

Granny Flat / Accessory Dwelling Unit

Separate living quarters built on the same lot as the main residential structure. These may be attached or detached from the main building.

Greenbelt

An open space which may be cultivated or maintained in a natural state surrounding development or used as a buffer between land uses which may be used for recreational or non-vehicular transportation purposes.

Groundwater

The supply of freshwater under the surface in an aquifer or soil that forms the natural reservoir for potable water.

Growth

The term growth refers to the natural increase in population of a given area. Population growth occurs as a function of birth rate subtracting death rate plus migration.

Growth Management Strategy

An overall statement of policies and strategies which exemplify how the City should develop. Elements of quality, quantity, location and timing of growth determine the level of control placed on growth in the City.

Habitat

The sum total of all the environmental factors of a specific place that is occupied by an organism, a population or a community.

Holding Capacity

The computed amount of population the City could accommodate at total land build out assuming current zoning remains the same and land use ratios remain constant.

Impact Fees

Single payments required to be made by builder or developers at the time of development approval and calculated to be the proportionate share of the capital cost of providing major facilities (water, wastewater, etc.) to that development.

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Infill Development	The planned conversion of empty lots, underused or rundown buildings, and other available space in densely built-up urban and suburban areas for use as sites for commercial or residential buildings, frequently as an alternative to overdevelopment of rural areas.
Infrastructure	Public facilities that support the City such as water mains, sewer mains, streets, sidewalks, parks, public facilities, wastewater treatment plants, storm water, electric facilities, and solid waste disposal.
Intelligent Transportation Systems	Technological information systems which may monitor, survey, alert, and inform vehicular traffic of current, changing, and future traffic and road conditions.
Main Street	A street having a mix of attached residential and neighborhood commercial areas along it or at an intersection with good transit service, and having a unique character that draws people from outside the area. Main streets have an intense mix of pedestrian scale uses, including residential, good transit service and pedestrian facilities.
Master Plan	A master plan is a tool used for planning future land use, transportation, water, sewer, parks and other city facilities. These plans allow the City to forecast future costs and infrastructure needs. Some of the plans in this document include the Parks and Recreation Strategic Plan, the Thoroughfare Master Plan and others.
Multifamily	A dwelling containing more than two dwelling units.
Multi-modal	The coordination of a variety of transportation devices, such as, vehicles, bicycles, transit, and pedestrian systems.
Neighborhood	A neighborhood is an area that may be bounded by natural or engineered barriers and is approximately one-quarter of a mile radius. Neighborhoods include a variety of uses.
Neighborhood Mixed-Use Centers / Town Centers	An area of mixed residential and commercial use that may eventually serve thousands of people and is easily accessible by different types of transit. Mixed-use centers are the focus of compact development, redevelopment, and transit and pedestrian improvements.
Open Space	A parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment, or for the use and enjoyments of owners and occupants of land adjoining or neighboring the open space.
Parks:	
Neighborhood Park	Local parks ranging in size from 5 to 20 acres. Typical developments include playground, picnic area, court games, trails minimal parking. At least 50% of the site is set aside for passive

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	recreation activities and/or conservation area. Often located next to elementary schools.
Community Park	Typically 30 to 50 acres, but may be larger depending on conservation areas. Serving several neighborhoods, these park include "drive to" recreation facilities, as well as the facilities found in Neighborhood parks. Recreation/multipurpose centers, competitive sports fields, and swimming pools are typical. May serve as the "trailhead" for community-wide greenway systems.
City Park	Unique, "one of a kind" facilities, such as a garden center, water parks, outdoor theater, civic center, fitness center, model airplane field, multi-filed athletic complex, nature center. Likely to include significant conservation areas. Could be of a size of 50 acres or greater (typically several hundred acres.)
Performance Standards	A set of criteria or limits relating to nuisance elements which a particular use or process may not exceed.
Policies	Statements of consensus adopted by the City Council as base direction from which decisions regarding challenges to the city are made.
Regional Detention	A series of large basins, publicly owned, that are designed to hold stormwater and release it slowly to avoid channel overflow or drainage system failure.
Right-of-way	A public or private area that allows for the passage of people or goods. Right-of-way includes passageways such as freeways, streets, bikeways, alleys and walkways. A public right-of-way is dedicated to the public for its use and under the control of a public agency.
Riparian	A term used to describe areas or features on or near a bank of a river, pond, or small lake.
Stakeholder	Interested parties or groups and organizations with a share or interest in a property, community or city.
Single-family Dwelling Unit	A building containing one dwelling unit.
Single-Occupant Vehicle (SOV)	Any truck, car, van or personal vehicle in active use of transporting one person.
Streetscape	The architectural, landscape architectural and engineering design of a public right-of-way.
Street Tree	Any tree growing within the public right-of-way.

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Sub-area	Regions of the City of Denton Planning Area bounded by US Census tract boundaries and Traffic Serial Zones used to identify areas of population and housing unit growth.
Subdivision	The division of a lot, tract, or parcel of land into two or more lots, tracts, parcel or other divisions of land for sale, development or lease.
Sustainable	To maintain and support a system or lifestyle without detrimental harm or overburdening of the community or system. Includes a broad-based economic process through a system that protects and restores the quality of life for individuals, the quality of the natural environment, and broadens the prospects for future generations. The merging of economic and environmental goals is a concept of sustainable development.
Thoroughfare	A roadway that serves as a link between major activity centers within an urban area.
Transit-Oriented Development (TOD)	A mix of residential, retail, and office uses and a supporting network of roads, bikeways, and walkways focused on a major transit stop and designed to support a high level or transit use. The key features of transit oriented development include: • A mixed use center at the transit stop, oriented principally to transit riders and pedestrian and bicycle travel from the surrounding area; • High density residential development proximate to the transit stop sufficient to support transit operation and neighborhood commercial uses within the TOD; • A network of roads, bikeways, and walkways to support high levels of pedestrian access within the TOD and high levels of transit use; and, • A lower demand for parking than auto-oriented land uses.
Transportation Accessibility	A combination of the distribution of land uses and the characteristics of the transportation networks. The measure for success for accessibility are: • The number of job opportunities within 30 minutes from a major residential sector by the fastest mode during peak hours. • The number of jobs accessible by transit within 30 minutes from those subareas having a higher than average number of transportation disadvantaged persons. • The percentage of total regional population having access to a regional shopping area within 15 minutes by fastest mode during off-peak hours. • The population within 15 minutes of travel time of selected major regional shopping locations, by fastest mode and during off-peak hours. • The off-peak travel time from major freight distribution centers to the nearest freeway interchange using a route compatible with surrounding land uses.
Transportation System Management (TSM)	Engineering designs, programs and principles which are geared to reduce traffic and single-occupancy vehicles. Programs may include roadway design, traffic light timing, high-occupancy

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	vehicle lanes (HOV), incorporated transit and bicycle design.
Travel Demand Management (TDM)	Policies and programs designed to allow greater choice of transportation alternatives and reduce single-occupant vehicle use. TDM programs include ridesharing, carpool, vanpool, flexible work hours, telecommuting, mass transit assistance incentive programs, and other similar policies.
Urban Design	Development regulations must be revised to place greater empasis on the importance of urban design, which is defined as the relationship between different buildings, the relationship between buildings & the street, squares, parks, waterways, & other spaces which make up the public domain itself, the relationship of one part of a village, town, or city with any other parts., the patterns of movement & activity which are thereby established, in short, the complex relationships between all the elements of the built & unbuilt space.
Urbanizing Area	Any area outside of current City limits, but within the Denton Planning Area that may be considered for annexation within the next twenty years.
Urban Sprawl	The uncontrolled spread of development into neighboring regions.
Urban Village & Mixed-Use Development	Development which is designed with an emphasis primarily on the street sidewalk and on pedestrian access to the site and building, rather than on auto access and parking areas. The building is generally placed close to the street and the main entrance is oriented to the street sidewalk.
Walkable Communities	Integration of land use, transportation, parks and other urban design elements which enables connectivity between different areas of the city to pedestrians.
Watershed	An area of land that eventually drains to a single destination, through surface runoff, a series of streams, or a drainage system.
Wetlands	Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions and the wildlifecommunities that use the habitat.
Wet Utilities	Water-based utilities segregated from other utilities such as water distribution, wastewater and stormwater drainage.
Zoning	City-maintained and enforced set of laws which regulate the use of publicly or privately owned property.

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