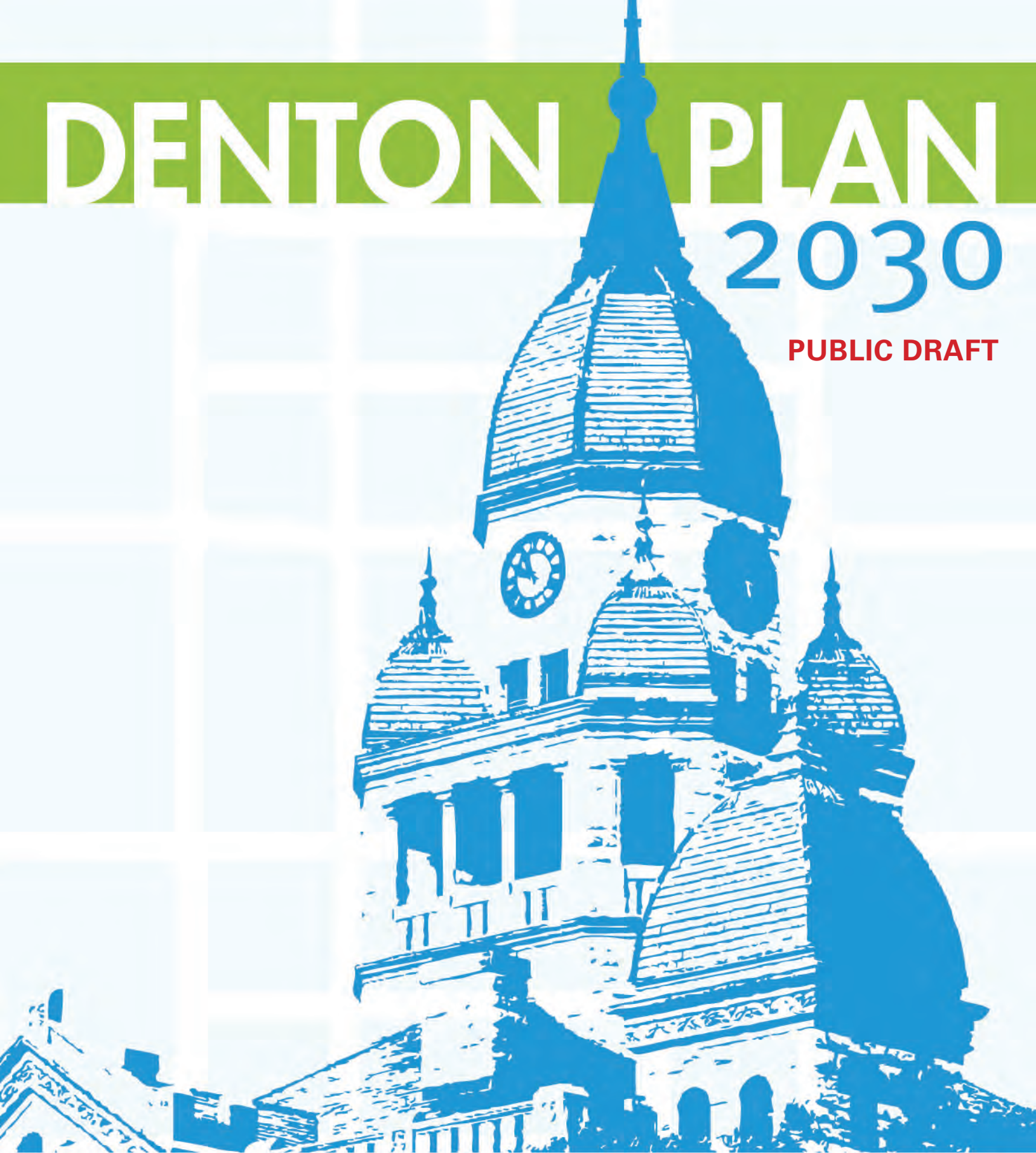


DENTON PLAN 2030

PUBLIC DRAFT



Denton Plan
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Our path to the future





PUBLIC DRAFT PLAN

AUGUST 29, 2014

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PURPOSE OF THE COMPREHENSIVE PLAN

Setting a Course for the Future

Denton Plan 2030 sets a course to manage growth, promote reinvestment, and improve quality of life for the next two decades, inspired and motivated by the citizen values and aspirations expressed in the Community Vision Statement. While many of the policies contained herein originated in the 1999 Denton Plan, Denton Plan 2030 establishes an optimal pattern of growth identified in a Preferred Growth Concept, based on fiscal, economic, environmental, and quality of life factors. Denton Plan 2030 also addresses new challenges and opportunities, including the influence of gas wells, shifting demographics, changing lifestyle and housing preferences, the interface with two major universities, and the opportunity to encourage long-term sustainability by promoting compact, purposeful growth in centers and along corridors.

Since the 1999 Denton Plan's adoption, Denton, as well as the entire DFW Metroplex, has experienced tremendous growth. Additionally, themes such as sustainability, climate awareness, and Smart Growth have emerged as important considerations affecting economic resilience and community health, along with a better understanding of their connection with land use. Denton and the DFW Metroplex will continue to lead the nation in growth in the coming decades, thus underscoring the need to put in place a framework that will ensure that the inevitable growth and change that will occur will strengthen the economy, enhance quality of life and livability, and positively affect the lives of the next generation to make Denton home. This Plan identifies a detailed Vision of what Denton should become by 2030 and proposes policies and actions that can be carried out in a rigorous implementation program to make the Vision a reality.

Denton Plan 2030 provides a guide for Denton to retain its character, define its identity, improve the quality of life, and enhance the economy. In addition to addressing the opportunities and challenges of the future, Denton Plan 2030 addresses present issues identified by stakeholders and the community. The community would like to retain its best and brightest youth, attract rewarding employment, and embrace growing diversity, all while balancing new development with reinvestment in its urban core and established neighborhoods. The Denton community has not always agreed on priorities, nor has it been unified by a shared Vision or a common sense of direction. Denton Plan 2030 provides a Vision created by the community that will allow Denton to face the future with confidence and optimism. Denton's future will be profoundly influenced by the degree to which this Plan is successful.

To more fully appreciate the significance of the challenge, it is appropriate to begin by considering the intent of Denton Plan 2030, the steps that led to its development, and how it will be used to achieve Denton’s shared Vision for the future.

Denton: Past and Present

The City of Denton is located approximately 40 miles northwest of Dallas, 38 miles northeast of Fort Worth, and 165 miles south of Oklahoma City. It lies on the northern edge of the DFW Metroplex, and is considered the pinnacle of the “Golden Triangle of North Texas” (Dallas and Fort Worth form the other two points). Denton’s location on Interstate 35 and within the DFW Metroplex accounts for much of its prosperity, and it has benefited from regional growth extending outward from Dallas and Fort Worth over the past decades.

A Brief History of Denton

Denton was founded in 1857 as the county seat of Denton County, which was established in 1846 when Texas became the twenty-eighth state. Denton’s location was chosen due to its

centrality and its access to Hickory Creek and Murphy Spring. Both the county and the city were named for John B. Denton, a preacher and lawyer. Denton’s development began centered on the area surrounding the Downtown Square, and at the time of its incorporation in 1866, totaled 100 acres of land with 361 residents. Growth initially came to Denton based on its role as an agricultural trade center, and later as a result of the arrival of the Texas and Pacific Railway in 1881. Denton was a primary north-south connection along the Texas and Pacific Railway, yet because it was not also an east-west connection for the Gulf, Colorado, and Santa Fe lines built in 1887, the city remained focused on light industry, such as mills and cottage industries, rather than attracting manufacturing and wholesale businesses like other industrializing cities in the area. The city continued to grow nonetheless, reaching a population of 2,558 by 1890.

Denton continued to flourish throughout the late nineteenth and early twentieth centuries, reaching 11,192 residents by 1940. Residential development began west of Downtown, where wealthy merchants built estates in what are now the Oak-Hickory



Foundation of Denton as the county seat of Denton County

Incorporation: Total land 100 acres

Arrival of Texas and Pacific Railway

Foundation of North Texas Normal College

City encompassed 2,051 acres



1857

1866

1881

1890

1945

and West Oak Area Historic Districts. Important commercial areas such as Fry Street emerged and institutions of higher education were established, first with North Texas Normal College (now the University of North Texas) founded in 1890, followed by the Girls' Industrial College (now Texas Woman's University) established in 1903. Growth during this era remained centered around Downtown, continuing the grid street system with buildings built to the street and a mix of uses. Denton kept this pattern through the next several decades, with growth extending north-south and east-west along corridors framing long, rectangular blocks. In 1945, the city encompassed 2,051 acres (3.2 square miles), the footprint of which is roughly equivalent to Denton's urban core.

The 1960s marked the beginning of a substantial boom for Denton. The completion of Interstate 35 connected Denton to Dallas, Fort Worth, and other communities, helping to create a true regional economy, in which Denton captured its share of the region's growth. While Denton's agricultural sector remained steady, its manufacturing sector grew enormously, with heavy manufacturing companies

like Victor Equipment Company and Peterbilt arriving in the 1970s. The arrival of these major employers brought about a substantial demand for housing for the city's expanding workforce. Adding to the boom was exponential enrollment growth at Denton's two universities, along with the opening of the Dallas-Fort Worth International Airport in 1974. Many airline employees and executives who traveled for major companies built homes in the southeastern portion of the city during this time. The opening of the Golden Triangle Shopping Mall in 1980 established Denton as a regional shopping destination, drawing shoppers from surrounding areas and strengthening the tax base.

During this latter growth period, the streets and block pattern began to deviate from the historic grid form. Development east of the railroad in particular started to take on a more suburban form during the 1960s, with single-use developments, corridors oriented to the car, and larger lots and setbacks. The City's land area more than tripled between 1960 and 1970 (from 5,901 acres to 18,749 acres) and added another 3,000 acres by 1980, reaching a total of 21,991 acres.





Oak Hickory Historic District - Denton



Quakertown Park - Denton

The City annexed large areas of land away from the Downtown core during this period, taking in newly-developed areas and those anticipated for future growth, precipitated by Interstate 35. This more suburban form of development has continued to the present day, and much of the land brought within the city’s corporate boundary in the late twentieth century remains undeveloped today. The progression of Denton’s footprint over time is illustrated in Figure 1.1: Historical Boundaries.

In the late-twentieth century, Denton began experiencing both redevelopment and conservation of its older areas, especially those near the Downtown and the two universities. Fearing the loss of significant historic resources, preservation advocates from Denton’s West Oak Street neighborhood helped establish the city’s Historic Landmark Commission in 1980, leading to the designation of the Denton’s three protected neighborhoods: the Oak-Hickory Historic District, the West Oak Area Historic District, and the Bell Avenue Historic Conservation District.

Denton Today

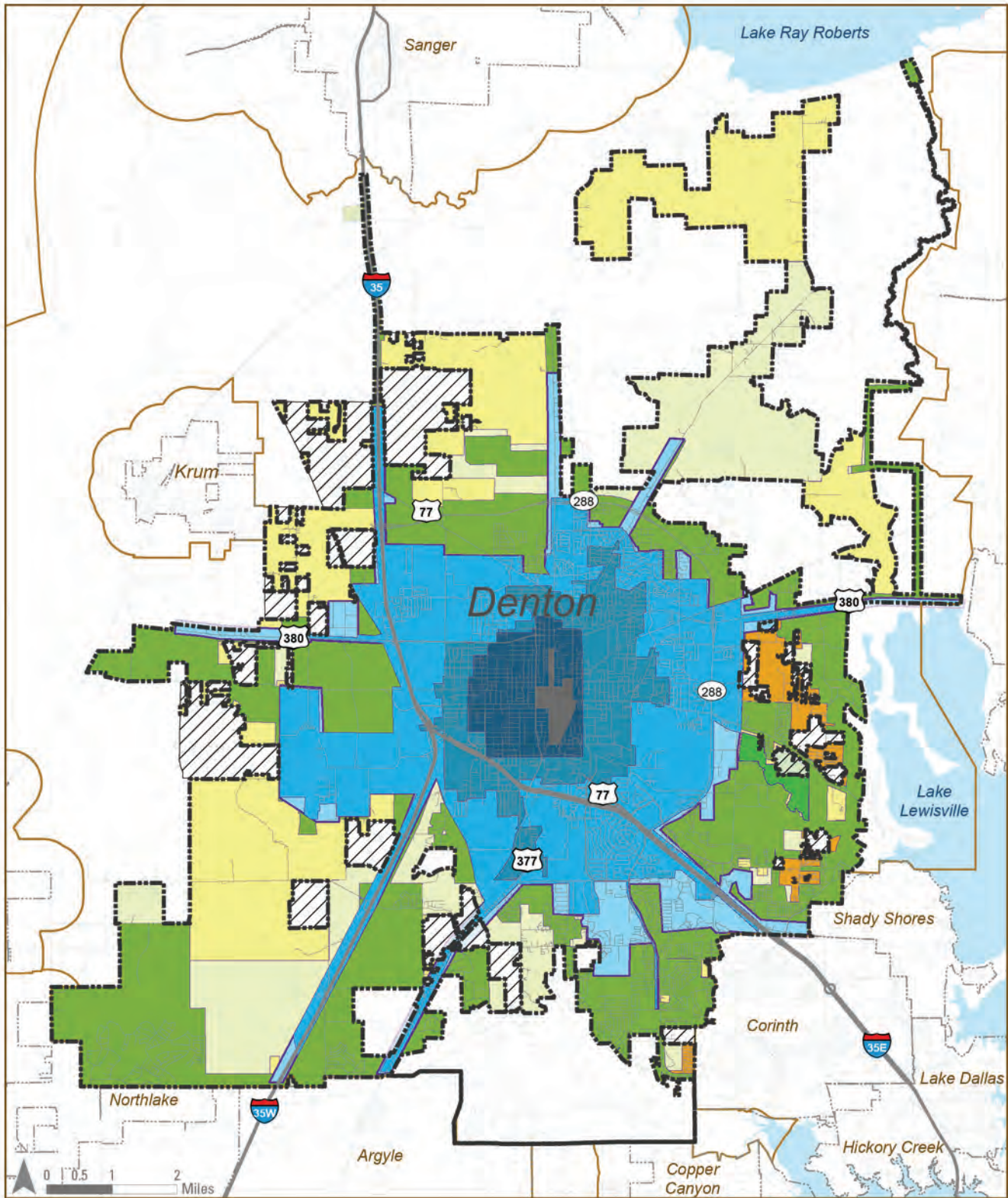
At the present day, Downtown continues to be the heart of Denton, functioning as the city’s cultural, social, and historic center. Denton continues to take pride in its prominent institutions: the University of

TABLE 1.1 Historical Population Growth, 1970-2011

YEAR	CITY OF DENTON		DENTON COUNTY	
	TOTAL POPULATION	PERCENT CHANGE	TOTAL POPULATION	PERCENT CHANGE
1970	39,874	-	75,633	-
1980	48,063	20.5	143,126	89.2
1990	66,270	37.9	273,525	91.1
2000	80,537	21.5	432,976	58.3
2010	113,383	40.8	662,614	53.0
2011	117,187	3.4	686,406	3.6

Source: U.S. Census Bureau

FIGURE 1.1: Historical Boundaries



Source: City of Denton

- CBD
- 1945 City Limits
- 1960 City Limits
- 1970 City Limits
- 1980 City Limits

- 1990 City Limits
- 2000 City Limits
- 2005 City Limits
- 2010 City Limits
- 2013 City Limits

- City of Denton
- ▨ Non-Annexation Agreement Areas
- ETJ

* Areas identified on the map may be annexed within the timeframe of the annexation plan

North Texas (UNT) and Texas Woman’s University (TWU), its large employers, its environmental resources, and its distinct character. Due to the variety of factors supporting its growth, the population of Denton has grown to 113,383, as of 2010, and is expected to nearly double by 2030. (See Table 1.1: Historical Population Growth). The DFW Metroplex, of which Denton is a part, is the fourth largest and fastest growing population center in the United States with nearly 6.5 million people. UNT, with an enrollment of nearly 40,000, is the fourth largest university in the state of Texas.

Due to the many factors that will impact Denton in the future, substantial growth is inevitable. Impacts of this growth on the local economy, community character, and livability will be seen through and beyond the Plan horizon. It is the need to anticipate, prepare for, and guide this growth that makes the Denton Plan 2030 so crucial. As a framework for sensible development, necessary infrastructure investments, and for purposeful re-investment in established areas of the community, Denton Plan 2030 helps maintain the Denton that is cherished today, while ensuring its livability, functionality, and economic competitiveness in the future.

Plan Development Process

Denton Plan 2030 was initiated in early 2012, drafted and reviewed in 2014, and completed and presented in final draft for review and adoption in late 2014. Denton Plan 2030 was developed in five phases, each of which included significant community involvement. The phases are illustrated graphically in Figure 1.2: Key Process Points.

A number of outreach activities were conducted to solicit input from the community throughout the planning process. Outreach was staged to occur at key decision milestones to establish policy

direction. Much of the initial outreach was focused on informing the Community Vision Statement and the Preferred Growth Concept. The various outreach methods that occurred during each phase are described below. The primary source of input was through the three series of Community Forums.

Denton Plan 2030 builds upon the foundation established by the 1999 Denton Plan by updating the challenges of managing growth and change over the next two decades, taking the new dynamics and sentiment of the community into consideration. During the Plan’s development input was gathered and analysis was conducted in phases to logically progress from feedback, to Vision, to goals, policies, and actions, to the actual Plan document.

The Plan process began with mobilization activities and the setting of key milestones for the development of Denton Plan 2030. At the outset, key groups were formed to provide guidance during Plan development. These groups included the Citizens Advisory Committee (CAC), Technical Advisory Committee (TAC), and Denton Plan Ambassadors (DPA), who served as the *Voices of the Plan* and are described below.

Voices of the Plan

- **Citizens Advisory Committee (CAC)**

The CAC consisted of 32 members appointed by City Council to represent a variety of community interest groups and constituencies. The CAC was established to advise the policy direction of the comprehensive plan from the perspective of key stakeholder groups within the community, building consensus among diverse constituencies throughout the planning process. The CAC met regularly to work with City staff and consultants to provide feedback and direction.

FIGURE 1.2: Key Process Points



- **Technical Advisory Committee (TAC)**

The TAC consisted of a group of approximately 20 senior staff of City of Denton departments, the services of which are affected by the comprehensive plan. These staff members provided technical advice throughout the planning process. City staff and consultants met with the TAC at key milestones and the TAC also reviewed all deliverables created throughout the plan development to ensure accuracy and feasibility.

- **Denton Plan 2030 Ambassadors (DPA)**

To give all community members the opportunity to serve as leaders and advocates for Denton Plan 2030, and to engage more neighborhood and interest groups, the Denton Plan Ambassador (DPA) program was established at the beginning of the planning process and was open to all community members as long as they agreed to attend the DPA meetings regularly. The group met every other month throughout the Plan's development to provide input and share information with the community groups they represented.

Phase 1

The community outreach process began by initiating the Denton Plan 2030 website and associated social media, followed by the Kickoff Open House to generate community awareness and interest in the planning process. Key community outreach events of Phase 1 are described below.

Website and Social Media

The Denton Plan 2030 website was created to serve as a primary source of information regarding the status, activities, and products of the planning process. The website was updated frequently throughout the planning process and

will continue to document progress through implementation of Denton Plan 2030. In addition to the website, EngageDenton.com was created to initiate conversation about Denton's strengths and weaknesses, and solicit creative ideas to move the community forward. The City also created a Facebook page specifically for Denton Plan 2030 and utilized the City's Twitter account to spread the word about Denton Plan 2030. The City also relied on email blast updates to keep the community informed and engaged throughout the planning process.

Kickoff Open House

On August 9, 2012, approximately 160 citizens participated in a public open house to formally start the update process. While the primary purpose was to raise public awareness of the importance of Denton Plan 2030 and the various opportunities for citizens to participate and provide input, participants were encouraged to express their likes and dislikes about Denton on notes attached to display boards. The input received at the Kick-off Open House set the framework for the more formalized prioritization of strengths, weaknesses, opportunities, and challenges during Community Forum 1, and this initial input was used as a reference throughout the planning process and posted at subsequent events.

Informational/ Mobile Meetings

Prior to the plan kickoff and continuing through Phase 1, city staff conducted several Informational Community Meetings and Mobile Meetings to provide information and answer questions about the Denton Plan 2030, and to get initial feedback on issues facing Denton's community members. These initial meetings were important for reaching out to key interest groups and establishing awareness and encouraging participation in the planning process for its duration.

Phase 2

The second phase of the plan development process focused on two parallel tracks: the analysis of existing conditions and trends and the surveying of community values and aspirations during Community Forum 1, which would inform the development of the Community Vision Statement. The analysis of existing conditions and trends, along with stakeholder and staff interviews, sought to portray “Where are we now and where we are headed?” The elements of Phase 2 are described in detail below.

Stakeholder Engagement

Stakeholder interviews were conducted with community groups, City departments and leaders, major employers, and civic organizations, capturing a broad cross-section of the community and key decision-makers. Other groups partnered with through the stakeholder feedback process were developers, real estate professionals, chambers of commerce, Denton Independent School District (DISD), Denton County, UNT, TWU, North Central Texas Council of Governments (NCTCOG), Denton County Transportation Authority (DCTA), North Central Texas College (NCTC), non-profit organizations, health care facilities, and surrounding municipalities. The interviews provided insight into the range of perspectives regarding key issues prior to Community Forum 1. The interviews laid the groundwork for involving partners in the planning process and, ultimately, furthering Plan implementation.

Community Forum 1: Issues and Aspirations

Community Forum 1, held in 2012 and 2013, consisted of facilitated small group discussions in which citizens were challenged to express their aspirations and concerns about the present and



Kick-off Open House



Kick-off Open House



Kick-off Open House

future of Denton. With the help of facilitators and scribes, participants were asked to share their ideas about the strengths, weaknesses, opportunities, and challenges in the city. These were recorded and summarized to identify consensus themes. To ensure maximum participation, forums were conducted over several months at multiple locations, days of the week, and times:

- November 1, 2, & 3, 2012
- February 7 & 9, 2013
- February 2, 2013 (For Spanish-Speakers)
- March 21 & 27, 2013 (at UNT)
- April 1, 2013 (at TWU)

The public input received from citizens who participated in the nine forums was the primary source for the creating the Community Vision Statement. After Community Forum 1, two community surveys were conducted to validate the input and confirm that the forum input was consistent with a broader spectrum of public opinion.

Community Survey

A survey was conducted to validate and expand upon the initial input received from Community Forum 1. A statistically valid telephone survey was conducted among 300 residents, identified randomly, to validate the input received from Community Forum 1. The Survey was also administered

*This is what we heard from the people who participated in **Community Forum 1**.*

TOP STRENGTHS:

1. The Character of Denton
2. University, Medical, and Educational Communities
3. The People of Denton
4. Downtown and Local Shopping
5. Location in DFW Metroplex, I-35 Corridor, and the Airport

TOP WEAKNESSES:

1. Traffic, Streets, and Mobility Options
2. Community Facilities and Infrastructure (Lack of/ Obsolete)
3. Government Regulation (Both Too Great and Too Little)
4. Lack of Diversity in Business Community/ Commercial Market
5. Need for More Housing Options and Social Services

TOP OPPORTUNITIES:

1. University, Medical, and Educational Communities
2. Attract Desired Development
3. Industrial Innovation, Entrepreneurship, and Job Growth
4. Mobility Options including Transit, Walkable Sidewalks, and Bicycle Infrastructure
5. Promote Image of the City to Encourage Residents, Businesses, and Events

TOP CHALLENGES:

1. Poor Development/ Lack of Managed Growth/ Loss of Character
2. Failure to Keep Up with Growth (through Planning, Funding, etc.)
3. Lack of Representative and Realistic Vision
4. Transportation and Mobility Improvement Needs
5. Competing for Business Recruitment and Retention, Innovation and Balance of Business Types

online, hosted on the Denton Plan 2030 website, and 175 people completed it. Both forms of the Survey went through Issues and Aspirations in which participants ranked the importance of factors considered community strengths, weaknesses, opportunities, and challenges, similar to the discussion had at Community Forum 1. While the relative rankings varied slightly, the Survey generally confirmed the input expressed during Community Forum 1. Among all sources of input, consensus strengths included the universities, downtown, the arts and music scene, and the character of the community. Consensus weaknesses included traffic, infrastructure, and unbalanced growth. Consensus opportunities included greater leveraging of higher education and the medical community, encouraging entrepreneurship, and improved mobility choices. Consensus challenges included an absence of vision and planning for growth, with poor development and a potential loss of character.

Phase 3

Phase three of the planning process focused on setting the stage for creating the direction of plan policies and strategies. The first key process point in Phase 3 was the refinement of the Community Vision Statement, as the mandate and the “destination” for Denton Plan 2030. Next came the development of land use scenarios including a Growth Trend Scenario that illustrated the “business as usual” form of development over the next two decades, and Alternative Growth Scenarios that depicted how growth might occur in patterns distinct from the Trend. At Community Forum 2, citizens provided input in comparing these alternatives, as well as gauging preferences for development priorities and community character. Citizen “votes” for their preferences produced a Preferred Growth Concept, which became the driver of the Future Land Use Map (FLUM). A Fiscal Impact Analysis was also



Community Forum 1



Community Forum 1



Community Forum 1

THE DENTON COMMUNITY VISION

Building on the foundation of the 1999 Denton Plan, our Vision of Denton in the year 2030 is one in which we are recognized as a vibrant community of choice. Denton is characterized by its two growing state universities, its friendly, small-town character, coupled with its big-city dynamism, its commitment to sustainability, and its culture of innovation, creativity, and authenticity. Our exceptional livability, the diversity of choices available to our people in employment, lifestyle, and neighborhood settings; and our North Texas values and culture define what Denton is and what we have to offer. We have realized our vision by respecting and building on our heritage, leveraging our assets, and making wise choices in guiding sound growth and investment, while balancing priorities for our four Strategic Directions:

- **The Character of Denton**
- **Our People, Institutions, and Government**
- **The Strength of Our Economy**
- **Sound Growth: Our Form and Function**

The Character of Denton

- Denton is **authentic**. Our **small-town charm** and, **North Texas heritage** are proudly embraced along with **positive change, smart and balanced growth, and high-quality development**.
- Denton is **consciously green**. We are a leader in our **commitment to sustainability** and we have a significant **tree canopy**, a network of **parks and greenways, stream corridors, and urban forests**.
- Denton is **safe and livable**, a **hospitable community** of friends and neighbors.
- Denton is fertile territory for **creativity and innovation** in our vibrant music and arts scene, **technology, business, and education**.

Our People, Institutions, and Government

- We retain our **sense of community** and **shared values**, while **welcoming** new arrivals and **celebrating** growing **diversity**.
- We are committed to **fairness** and **equitable access** to opportunity in education, community services, jobs, and government representation.
- All generations, of both natives and newcomers, are **deeply rooted** in the community and are actively engaged in its betterment through **volunteer participation** with faith-based, civic, and/or neighborhood organizations and service on local government boards and commissions.
- We cherish our **artists and musicians** and celebrate our community in local **events and festivals** that reflect the uniqueness of the community.
- The City of Denton is a healthy, **family-friendly** community which sees its **youth as its most valuable resource**; a resource worthy of investment in education, healthful **recreation**, and opportunities for challenging and rewarding **employment and engagement in civic affairs**.
- The City of Denton's institutions of higher learning, UNT and TWU, are **partners** with government, civic organizations, and local employers in initiatives to **foster creativity in the arts, innovation, a strong economy, life-long learning, and the retention of the best and brightest**.
- The City of Denton government is **customer-friendly** and prides itself on its **transparency and open communication, utilizing modern technology, its efficient provision of public services and facilities, and through its leadership** in seeking to **realize the Vision** of Denton's future.
- The City of Denton has **integrated, reconciled, and streamlined** its **plans, process, policies, and regulations** for **consistency, clarity, and effectiveness**.

STATEMENT

The Strength of Our Economy

- We **leverage** our strategic location, **universities**, and **medical institutions**, as a **national leader in technological and knowledge-based innovation**, allowing us to attract and retain a highly **educated and motivated workforce**.
- We **leverage** our **strategic location** and **multi-modal accessibility** in the Metroplex and capitalize on key assets such as **the Denton Enterprise Airport**.
- We value and support our **major manufacturing employers** and other responsible corporate citizens to **ensure their stability**, encourage their **commitment to Denton**, **facilitate their expansion**, and **leverage their presence** by **accommodating their suppliers**, **supporting businesses**, and workers.
- We **support and encourage** our **entrepreneurs** and small businesses with a **business-friendly attitude** and **efficient regulations** and permitting.
- We market our **Denton “brand,”** our unique, creative atmosphere and small town quality of life, which attracts a highly educated and motivated workforce and gives Denton a **competitive advantage** in attracting new investment, entities, and well-paying jobs.
- We attract corporations and businesses which have a strong sense of corporate responsibility to the environment, the community, and their governance and who take active roles as being excellent corporate citizens.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- **Managed, balanced, and sustainable growth** in high-quality, livable **urban, suburban, and rural places** which offer diverse **choices** among **neighborhood settings** while respecting private **property rights**.
- A **compact development** pattern which includes expanded areas of **mixed use**, a broad array of **housing** and **retail choices** responding to changing demographics and market preferences, and **re-investment** and **infill** in established areas of the city.
- An efficient **transportation system** with a safe and **well-connected road network** which accommodates a wide array of **mobility options**, including local and commuter rail **transit**, as well as accommodations for **pedestrians and cyclists**.
- Special attention paid to our major travel corridors (ex. I-35, US 380, and Loop 288), both aesthetically and functionally, representing Denton’s character, brand, and excellence.
- **Infrastructure** systems which have undergone **well-planned, staged expansion** to serve and **guide the city’s growth**.
- **Parks, greenways, stream corridors, tree canopy**, and other natural resources integrating into the **fabric of the community** and contributing to **healthy lifestyles**.
- **Environmental stewardship** through water conservation, positive contributions to regional air quality, sustainable development practices, green infrastructure, and **renewable energy**.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.
- **Established neighborhoods** where revitalization and compatible infill development **contributes to stable, livable, and historic character**, and fosters **neighborhood pride** and **homeownership**.
- **Thriving universities** where coordinated planning and collaborations between the City and the academic communities creates **mutually beneficial**, stable, and healthy neighborhood edges and where the non-academic community benefits from the vast **educational and cultural resources** in close proximity.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Contiguous, staged growth** which is **fiscally and environmentally sound, reduces fragmentation** and **sprawl**, discourages premature development, and conserves the City’s future growing room.
- **Conservation development** which **retains rural character, protects open space** and **greenways**, enhances **development value**, and provides **greater choices** to land owners.
- Potential **safety** and **compatibility** impacts presented by hazardous activities, such as gas well drilling and production, **mitigated** to protect neighboring persons and property.

prepared alongside these scenarios to provide a snapshot of the fiscal functioning of the city under each and informed the creation of policies impacting fiscal policy. The Community Vision Statement and Preferred Growth Concept were presented to and approved by City Council at the finalization of this phase. The elements of Phase 3 are described in detail below.

Development of the Community Vision Statement

The Community Vision Statement is an expression of the community's collective values and aspirations and a description of what the community wants to become in the future, answering the question "What do we want Denton to be in 2030?" As the "final destination" for Denton Plan 2030, the Community Vision Statement was developed early in the planning process in order to provide the central framework for guiding the development of policies and strategies. The Vision Statement was developed using the results of Community Forum 1 and information derived from supporting outreach activities (Kick-off Open House, stakeholder interviews, informational community meetings, mobile meetings, website, social media, and community surveys).

The Community Vision Statement is organized around four Strategic Directions, and is based on clear areas of citizen consensus. In each of the elements of the Denton Plan 2030, the phrases of the Vision Statement that specifically impact the policies of that element are restated in the introduction. It is important to note that throughout the Denton Plan 2030 document, each of the policies has its foundation in the Vision Statement, and by proxy, the voice of the community.

Future Growth Scenarios

Growth Trend Scenario

A key element of the existing conditions and trends phase was the development of the Growth Trend Scenario, a conceptual representation of the consequences of continuing down the path of "business as usual." Using baseline population projections, the model was prepared to depict what the city could look like in 2030, in terms of development, if the City and community does not change course. The Growth Trend Scenario illustrated how and where growth would likely occur in the absence of new directions from a comprehensive plan update and its respective implementation. The purpose of the Growth Trend Scenario was to illustrate the need for intervention and make the case for the new directions embraced in Denton Plan 2030. Several highlights that drove the development of this scenario were:

- Denton's population increased by 41 percent between 2000 and 2010, growing from 80,537 to 113,383 people. This was its most intense decade of growth since the 1960s.
- New projections forecast an additional 93,951 residents by 2030.
- Denton has a higher proportion of single-person households than Denton County and Texas as a whole. Thirteen percent of these were residents aged 65 or older. In the same year (2010), only 22 percent of Denton County's households and 25 percent of all households in the state of Texas were single-person households.
- The population of Denton is fairly young. The 18 to 24 age cohort comprised one quarter of the city's population in 2000 and 2010. However, the city's adult population has seen an increase in the number of older residents, generally due to the aging of the baby boomer generation.
- These demographic shifts involve changes in housing preferences that Denton's housing

By 2030, Denton will add approximately 94,000 people, requiring 37,000 additional new housing units...

TABLE 1.2 Population and Housing Growth

POPULATION	HOUSING GROWTH
2010 Population ⁽¹⁾	113,383
2010 Household Size ⁽²⁾	2.52
2011 Total Housing Units ⁽³⁾	43,755
2030 Population Projection ⁽⁴⁾	207,334
2011-2030 Population Change ⁽⁵⁾	93,951
2030 Housing Demand ⁽⁶⁾	37,282
Total Projected 2030 Housing Units ⁽⁷⁾	81,037

- (1) Source: US Census Bureau
- (2) Source: 2010 US Census
- (3) Source: American Community Survey 2007-2011 5-year estimates
- (4) Percent Annual Growth Source: University of North Texas Center for Economic Development and Research
- (5) 2030 population projection - 2010 population
- (6) 2011 -2030 population change / household size
- (7) 2030 housing demand + 2011 total housing units

Note: Population projections were derived from the report "Economic and Demographic Projections for the City of Denton: An Update," Prepared by Center for Economic Development and Research; University of North Texas. April 2011. Existing population and housing were based on the U.S. Census Bureau's American Community Survey, 2010.

TABLE 1.3 Residential Demand by Type

	2011 Units ⁽¹⁾	% Of 2011 Units	Existing Dev. Residential Area (Ac) ⁽²⁾	Existing Density ⁽³⁾	Acres Per Unit ⁽⁴⁾	2030 New Units ⁽⁵⁾	New Residential Area (Ac) ⁽⁶⁾
1 unit detached (Residential Single-family)	23,548	53.818%	8,134	2.90	.35	20,064	8,663
1 unit attached, 2-4 units, other (Residential Other)	5,826	13.315%	1,024	5.69	.18	4,964	1,091
5+ units (Residential Multi-Family)	14,381	32.867%	963	14.94	.07	12,254	1,025
TOTAL:	43,755	-	10,121	-	-	37,282	10,779

- (1) Source: American Community Survey 5-year estimates
- (2) Source: City of Denton GIS
- (3) 2011 units / existing dev. residential acres
- (4) Existing residential acres / 2011 units
- (5) 2030 housing demand x percent of total units
- (6) Acres per unit x 2030 new units) + 25 percent of land area for roads and infrastructure

TABLE 1.4 Land Consumption

Total Acreage (1)	60,900
Dev. Residential Area (AC) (2)	10,121
Total Units (2011) (3)	43,755
Avg. Acres Per Unit (4)	0.23
New Projected DUs (5)	37,282
New Residential (AC) (6)	10,779
New Non-Residential (AC) (7)	5,282

(1) Total Municipal Acreage

(2) Existing residential acres

(3) Source: American Community Survey 5-year estimates

(4) Average acres per unit (developed residential area / total units)

(5) Projected new dwelling units (2011 -2030 population change / household size)

(6) New residential area = (average acres per unit x new dwelling units)

(7) New non-residential acreage estimated at 69 percent of new residential area

market does not meet today, such as more multi-family housing and units for singles, young families, and retired baby boomers.

The starting point for the development of land use concepts was the depiction of the Growth Trend Scenario – the likely pattern of growth and development in 15 to 20 years if there were no changes in policy to alter present trends. The method of developing the Growth Trend Scenario began with the projected future population growth, which was then translated into residential households (dwelling units) and further translated into the acreage footprint of new residential and non-residential development, including commercial, employment, and institutional land uses. Finally, the projected development footprint was “allocated” to the city’s land area based on factors such as zoning, proximity to roads, schools, and infrastructure and constraints such as floodplains. This process—the “Susceptibility to Change” analysis— is described in greater detail below.

Understanding population growth was the first step in developing the Growth Trend Scenario. As depicted in Table 1.2: Population and Housing Growth, the city’s population is expected to increase

by 93,951 to 207,334 by 2030, creating a demand for 37,282 additional housing units. In total, the developable area needed by the city by 2030 would be 10,779 acres of net new residential development (see Table 1.3: Residential Demand by Type) and 5,282 acres of net new non-residential development (see Table 1.4: Land Consumption).

The next step in building the Growth Trend Scenario was to consider the city’s present capacity to accommodate this growth and where new development was likely to take place. At present, Denton has a considerable amount of “growing room,” totaling approximately 20,000 acres of vacant land zoned and approved for residential use. Much of this acreage is located in areas zoned as Master Planned Communities, and is more than twice what is needed to accommodate the 8,663 acres of new single-family homes needed to house the additional population. This is largely due to the “aggressive annexation” policy recommended in the 1999 Denton Plan, the result of which gave the city more than enough room to grow for the next 40-50 years. A shift to a more conservative annexation mode is necessary to prevent additional adverse impacts to Denton’s growth and development. Likewise,

because much of the land within approved Master Planned Communities (MPCs) will likely not build-out in the next 20 years, or under present market conditions, the MPCs should be redesigned to adjust to changing real estate market conditions, consumer preferences, up-to-date planning practices, and, most importantly, what is contained in the updated Plan.

Understanding that Denton has more than enough acreage to accommodate necessary growth, where growth would likely go first was identified by applying the Susceptibility to Change Analysis. This analysis consisted of layering factors together that tend to attract development, . As a result, the Susceptibility to Change analysis allocated 16,061 acres (sum of New Residential and New Non-residential Development, Table 1.4) of new development in the areas that were most suitable based on the factors below:

- Existing land use
- Context evaluation using aerial maps
- Existing zoning
- Approved subdivisions
- Environmentally-sensitive areas
- Vacant or underutilized areas
- Areas adjacent to I-35 that could be affected by its widening
- Areas adjacent to corridors currently being upgraded (i.e. Teasley and Mayhill)
- Areas of gas well proliferation
- Areas otherwise likely to redevelop

The Growth Trend Scenario, informed by the Susceptibility to Change Analysis, illustrated a future Denton that located new development in a widely dispersed pattern, with the majority of residential development occurring at the periphery of the city in sprawling patterns. (see Figure 1.3: Growth

Trend Scenario) This depiction was a powerful tool in asking the question: “Is that what we want Denton to look like in 2030? Is it consistent with our vision?” The Community Vision Statement, which was finalized in Phase 3, based on the input collected at Community Forum 1, helped to compare and evaluate this Growth Trend Scenario to what the Community Vision Statement expresses about desirable development patterns, namely a preference for more compact growth, mixed use, and revitalization in the urban core. The Growth Trend Scenario was presented at Community Forum 2, alongside the Alternative Growth Scenarios developed during in Phase 3, to identify a direction for Denton’s growth that was more closely aligned with the aspirations of the community.

Alternative Growth Scenarios

Using input from Community Forum 1, conceptual approaches were developed to illustrate land use and development that reflected the values expressed in the Community Vision Statement with more compact patterns of growth. These alternatives were meant to contrast with the Growth Trend Scenario and provide the basis for guiding decisions at Community Forum 2. The city staff and consultants worked collaboratively to create three distinct scenarios: Centers, Corridors, and Compact, which were reviewed and approved by the CAC. These scenarios were developed to conceptually illustrate three discernible options that could reshape future patterns of development and investment.

Applying the baseline land use projections from the Growth Trend Scenario, it was ensured that the alternative scenarios had the adequate capacity to accommodate projected growth. However, the proportion of residential development types was adjusted to reflect changing preferences for housing types and for a more compact, walkable, development pattern. For example, each of

FIGURE 1.3 Growth Trend Scenario

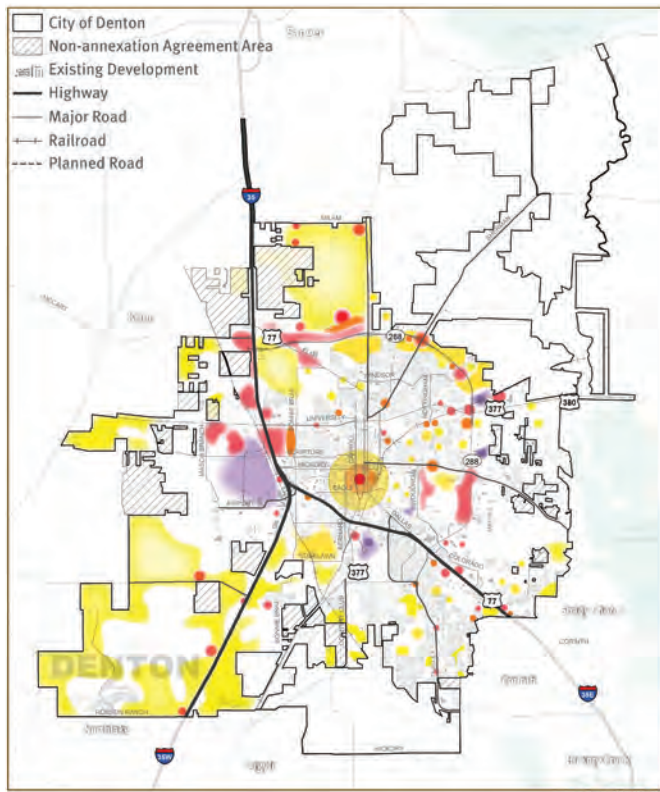


FIGURE 1.4 Corridors Growth Scenario

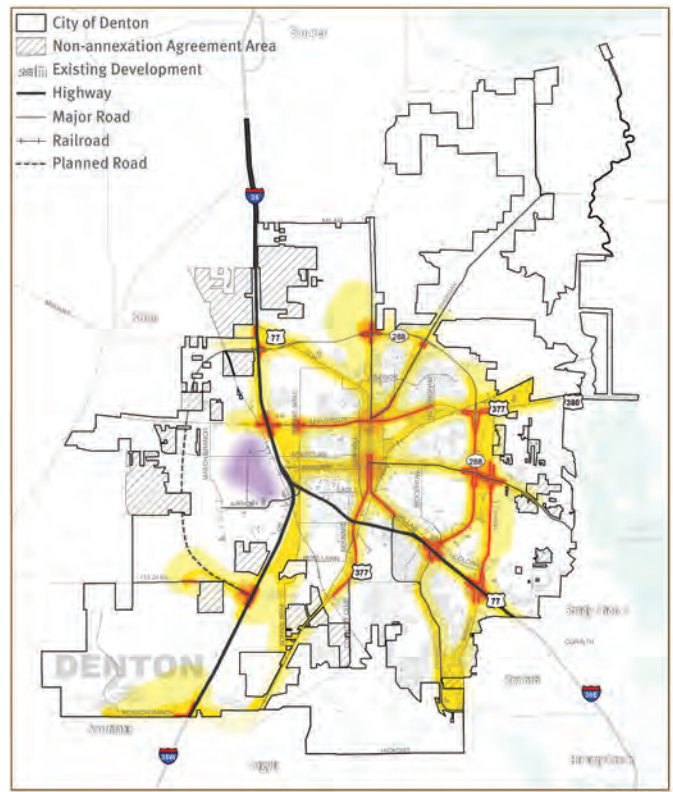


FIGURE 1.5 Centers Growth Scenario

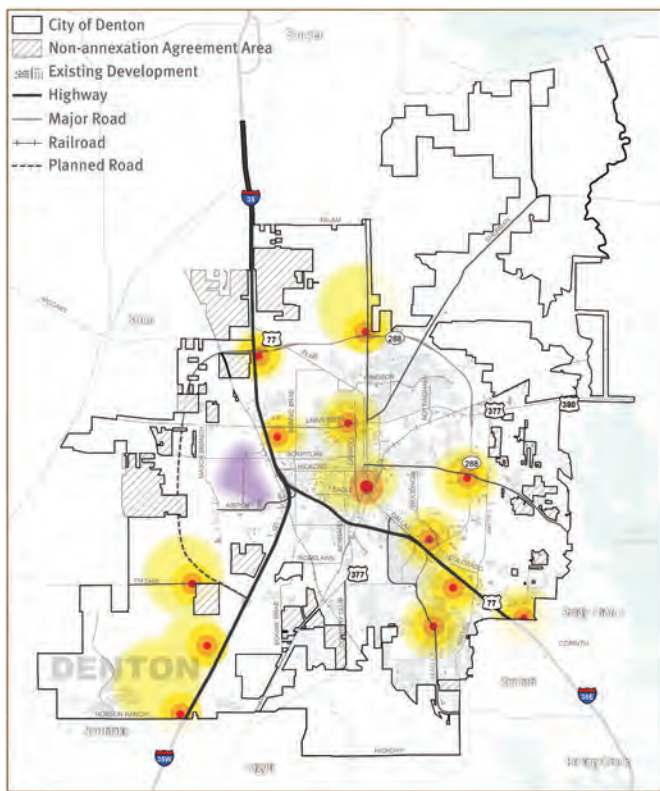


FIGURE 1.6 Compact Growth Scenario

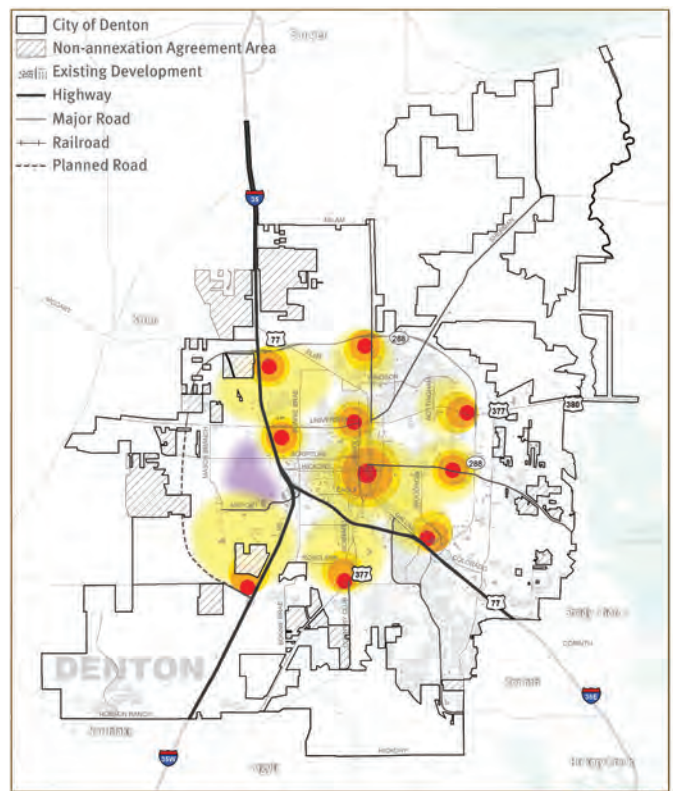


TABLE 1.5 Residential Land Uses Demand Per Scenario

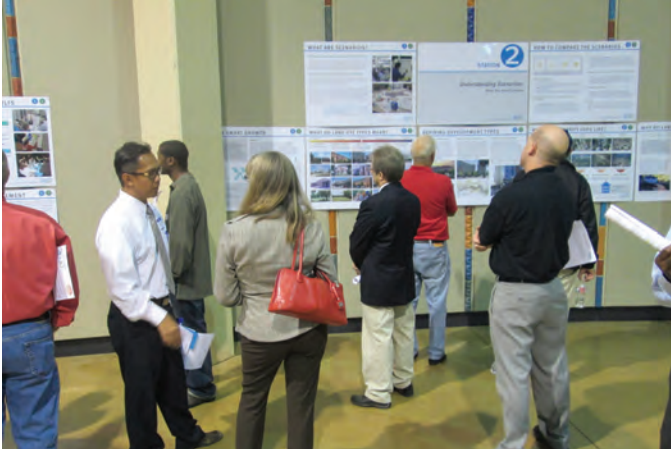
	Existing Density		Growth Trend			Centers & Corridors Alternatives*			Compact Alternative			
	Units per Acre	Acres per Unit	2030 new Units	%of Total	Acres Yield	2030 new Units	%of Total	Acres Yield	2030 new Units	%of Total	Acres Yield	
Single-family (Total)	2.90	0.35	20,064	53.82%	8,663	16,777	40%	6,439	7,456	20%	3,219	
Other Residential, (1 unit attached, 2-4 units)	5.69	0.18	4,964	13.32%	1,091	5,592	20%	1,639	7,456	20%	1,639	
Multifamily (5+ Units)	14.94	0.07	12,254	32.87%	1,025	14,913	40%	1,248	14,912	40%	1,248	
Multi-Family High Density	30	.03	0	0%	0	0	0%	0	7,456	20%	311	
Total Units			37,282	100%		37,282	100%		37,282	100%		
Total Acres						10,779			9,325			6,417

* Note: Assumptions identical for Centers and Corridors Alternative Growth Scenarios.

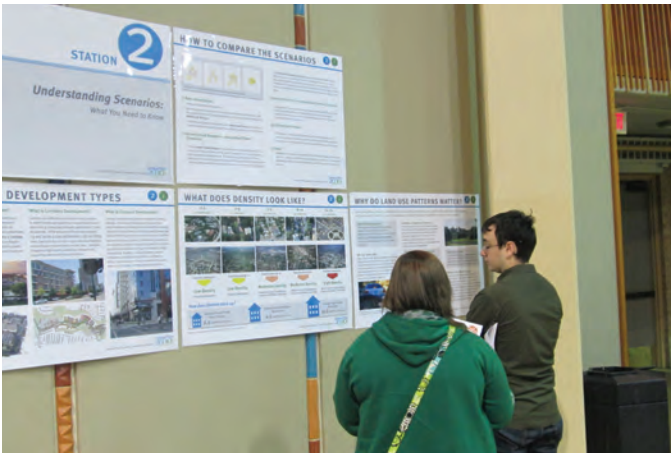
the alternative scenarios included an increased proportion of multi-family development relative to single-family development. The Compact Alternative added an additional higher-density land use in order to accommodate projected number of housing units within the most compact development form. These ratios are shown in Table 1.5: Residential Land Uses Demand per Scenario. Commercial, industrial, and institutional development proportions are unchanged from the Growth Trend Scenario, as the same amount would be needed to support the projected population among all scenarios. The development capacity studies for each scenario placed growth in the areas where it was most likely to occur based on factors such as land use, surrounding context, zoning, and environmental constraints used the Susceptibility to Change Analysis. Growth was placed first in vacant or undeveloped areas, and only then in land in the periphery of the city.

Scenarios were illustrated to depict where growth and intensity would occur, using consistent graphic vocabulary so that the scenarios could be easily compared against one another and the Growth Trend Scenario.

Land uses were grouped to show a range of density and “land use mixing” (meaning that as density increases, so does the amount of mixed use development) and to illustrate a range of potential uses. As an example, low-density residential areas could include single-family residential in addition to schools and parks. Similarly, commercial areas could include a range of retail types, offices, and employment locations. Land uses were illustrated generally so that the overall development footprint and intended patterns of development could be easily understood and distinguished. The scenarios and associated land uses are shown in Figures 1.3 – 1.6 and in Table 1.5.



Community Forum 2



Community Forum 2



Community Forum 2

Community Forum 2: Selecting Your Future!

Community Forum 2 gave the community an opportunity to vote on their preferred scenario for accommodating growth, development priorities, and for preferences regarding community character. Approximately 100 participants attended Community Forum 2 on the dates and at the locations listed below:

- Thursday, October 17, 2013 – Denton Civic Center
- Tuesday, October 29, 2013 - McConnell Hall, University of North Texas
- Wednesday, October 30, 2013 - Student Union Room #207, Texas Woman's University
- Saturday, November 9, 2013 – Martin Luther King, Jr. Recreation Center

At this event, the Growth Trend Scenario and the three Alternative Growth Scenarios were presented with explanatory text and a table of indicators (ex. percentage of jobs within ¼ mile of existing transit service) at a sequence of informative stations. Indicators included comparisons of environmental and fiscal impact that helped inform participants' decisions in voting for their preferred scenario. Participants were given background information on how to understand the scenarios, and the implications of their votes. The station concluded with a summary table of findings and an evaluation of each against the Community Vision Statement. Community members were asked to vote for their first and second choices for their future Denton. In addition to the growth scenarios, citizens voted on Development Priorities such as preferences for walkability, mixed use development, and proximity of jobs to housing. These provided additional context for the land use scenario votes, allowing a deeper understanding of the priorities of the community. Finally, potential Community Character Considerations were presented to accompany

the land use scenarios at Community Forum 2. These community character considerations were elements impacting the urban environment that would go beyond density and land use and could be implemented in any growth scenario. These included: Green Infrastructure, Multi-Modal Access, Placemaking and Urban Vitality, and Conservation. Community Character Considerations were voted on in the same manner as the Growth Scenarios. These votes helped to inform the creation of the Preferred Growth Concept, which would be the basis for the FLUM, as well as policies for Community Character and Urban Design, Mobility, and Parks, Conservation and Environment.

Preferred Growth Concept

The Preferred Growth Concept was developed to present a conceptual vision for the form, character, and general location of development for Denton that reflected the input and expressed preferences of the community. The general location of new development and areas for intensification was the basis for the development of the FLUM as shown in Figure 1.7. The Preferred Growth Concept was created by combining the most important aspects of each of the scenarios, development priorities and community character considerations that received the highest number of votes during Community Forum 2. The raw results of the votes from Community Forum 2 are contained in Appendix B: Community Forum Results and the overall voting trends are described below.

The Compact Scenario received the highest number of votes during Community Forum 2. As a result, this scenario provided a starting point for the development of the Preferred Growth Concept, incorporating elements of the Centers and Corridors Scenarios which were close behind in the public voting. The lowest voting for the Growth Trend

Scenario clearly indicated a preference for more compact and purposeful pattern of growth clustered around distinct locations.

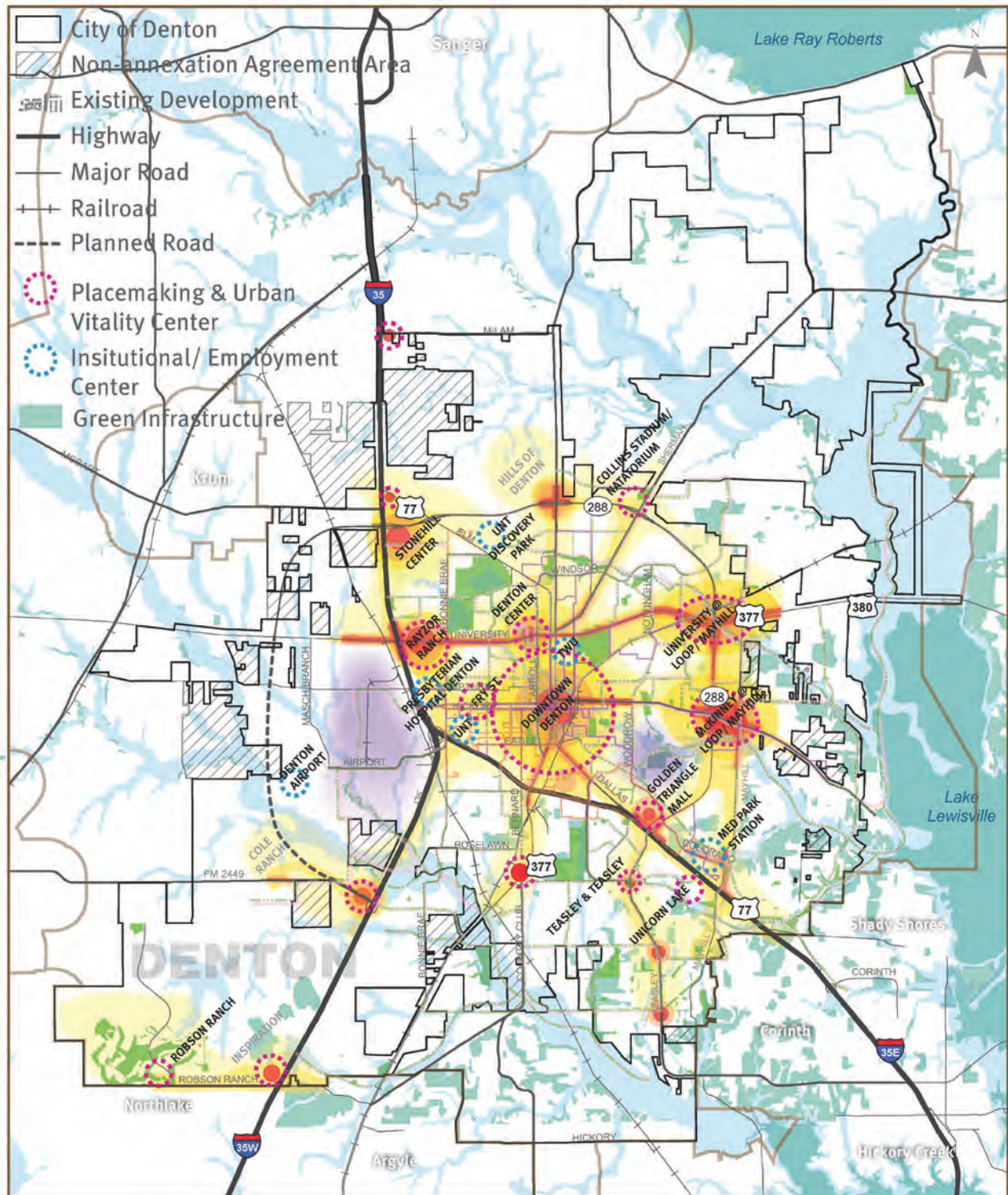
The Preferred Growth Concept also reflected priorities for development including increased walkability and trails, more mixed use, and jobs close to home and accessible by walking and transit. As a result, the Preferred Growth Concept encourages a shift towards more mixed use development, bringing together compatible residential, commercial, office, institutional, or other uses for increased pedestrian activity, reduced car trips, and expanded housing choices.

Community Character preferences further refined the Preferred Growth Concept, including in order of priority, placemaking and urban vitality, multi-modal access, green Infrastructure, and conservation. This underscores the importance of an appreciation for areas for community gathering to be distributed throughout Denton, a diversity of building types, and a sensitivity to the environment. Locations of existing and potential areas of urban vitality also help to refine the location and character of potential development areas illustrated within the Preferred Growth Concept as well as potential areas for multi-modal access, green infrastructure network, and conservation. As an overarching framework for development, the Preferred Growth Concept serves as the basis for the FLUM that is central to Denton Plan 2030.

Fiscal Impact Analysis

The formation of the Preferred Growth Concept was additionally informed by a Fiscal Impact Analysis (FIA) that was conducted concurrently with the scenario development process. The intent of the FIA is to guide policy decisions regarding levels of service and revenue enhancements by examining the costs to the city associated with the

FIGURE 1.7 Preferred Growth Concept



Source: City of Denton



provision of public services and facilities to serve new development. The FIA assessed all direct costs to the General Fund, General Debt Service Fund, Recreation Fund, and Street Improvements Fund associated with the new development defined through growth scenarios. Only revenues in these Funds increase due to growth. The FIA analyzed the potential fiscal impacts of the projected housing units, population, nonresidential building area, and jobs added during the plan horizon period based on their variation by type and location among the scenarios. The variations yielded differences in the costs necessary to provide service and facilities to new development at maintained levels of service. In general, the more compact the development, the less the costs of extending facilities and service coverage.

Based on preliminary review of the FIA, order of magnitude costs were shared with the community at Community Forum 2, corresponding to each scenario, providing additional information for scenario evaluation. The fiscal impact findings helped determine the scenario(s) that were most fiscally responsible, which served as an additional means of defining and directing the location of development and the Preferred Growth Concept. Following the identification of land uses according to the Preferred Growth Concept and the creation of the FLUM, the locations of these land uses and associated numerical values were incorporated into the final FIA, resulting in a picture of the City's fiscal profile for the plan horizon. Recommendations related to the major conclusions of the FIA listed below are included in the Fiscal and Economic Vitality Element (Element 3) of the Denton Plan 2030.

The Preferred Growth Concept yielded a cumulative net surplus to the City, when comparing available resources to projected costs over the plan horizon. This takes into consideration operating revenues and costs as well as capital revenues and costs,

and balances the results. Over the plan horizon, dedicated capital revenue generated by new development is not sufficient to cover the necessary capital expansions to maintain levels of service for new development, as the only dedicated revenue for capital needs in Denton is a portion of the property tax. Regardless of the deficit for capital needs, the cumulative fiscal impact of the Preferred Growth Concept is a surplus. See the Fiscal Impact Analysis report provided as a supplement to the Denton Plan 2030 for a complete understanding of the FIA results summarized below.

The following major conclusions were drawn from the FIA:

- **Local Revenue Structure.** The Preferred Growth Concept assumes that in the plan horizon period the city would add 93,951 new residents, which equates to 75 percent of its existing population, and would more than double the square footage of nonresidential development. This significant growth generates positive cumulative net fiscal results.
- **Levels of Service.** Capital expenditures are modeled based on maintaining citywide levels of service thresholds per capital investment, and levels of service by sub-area of the city. If excess capacity exists in an area, the analysis assumes the excess will serve some new growth before additional capital investments are made to meet growth demands.
- **Demographic and Market Characteristics of New Growth.** The results identify cost savings of increasing development densities. Cumulative operating and capital expenditures decrease as development density increases.

Phase 4

The fourth phase of the planning process involved developing and refining the plan document, consisting of goals, policies, and actions for each of eight topical Elements in addition to an Implementation and Monitoring Element providing protocols for plan compliance, monitoring progress, and for future plan revisions to ensure that the policies would be adhered to for the duration of the plan timeframe. This phase also included multiple meetings with the CAC and TAC, as well as several of the city’s boards and commissions, to gather input and advisement on the goals, policies and actions. Finally, during Community Forum 3, the draft document was presented to the community to receive input and feedback.

Community Forum 3: Reviewing the Draft Comprehensive Plan

The purpose of Community Forum 3 (CF3) was to unveil the Draft Denton Plan 2030 document and ensure that the policies affirm the direction for the city as directed by the citizens of Denton. The forum included a presentation of a synopsis of Denton Plan 2030, and provided a variety of opportunities for participation and input.

Phase 5

The fifth and final phase of the planning process involved incorporating input and feedback received from the community at Community Forum 3, as well as final refinements from city staff, the CAC, TAC, and DPA, Boards and Commissions, and City Council. The final Denton Plan 2030 document was then presented to the Planning and Zoning Commission and to City Council for final adoption.

Planning and Zoning Commission and City Council

At key decision milestones throughout the planning process the Planning and Zoning Commission and City Council were given the opportunity to review progress to date, to ensure that the process remained on track, and that there was a comfort level with the planning process before and during its development. These key milestones included the review and approval of the Community Vision Statement, Preferred Growth Concept and the Draft Denton Plan 2030 document. The Denton Plan 2030 was adopted by resolution by City Council following a public hearing, and a recommendation from the Planning and Zoning Commission.

Plan Themes

Denton Plan 2030 contains eight Elements that include the goals, policies, and actions that will implement the visions of the Denton Community.

Within the Plan Elements are themes that should not be “siloeed” into individual Elements, because they



impact a variety of policies and actions throughout Denton Plan 2030. These themes represent top priorities of the Denton community as well as City of Denton decision makers. Several of these occur as individual Elements, but are themes because they touch on topics throughout all Elements. Themes include: Sustainability, Community Health, Mobility, and Community Character.

The Denton Plan 2030 themes are described below.

- **The Sustainability Theme** 🌿

Sustainability is a topic that touches many of the policy elements throughout Denton Plan 2030. For that reason, it is not a stand-alone element, but rather a “theme.” Sustainability, by definition, is addressed in three “prongs”: social, environmental, and economic. As such, sustainability is addressed within elements focused on these topics, as well as alongside Mobility, Land Use, and Community Character. Sustainability is important to the Denton community and government, and the City proudly adopted its sustainability plan— “Simply Sustainable, A Strategic Plan for Denton’s Future” —in 2012, which has served as a guiding document in the creation of Denton Plan 2030



Sustainability Theme

- **The Community Health Theme** 🍏

Similar to sustainability, policies and actions influencing community health occur throughout Denton Plan 2030. For that reason, it is also a “theme.” Community Health includes policies that contribute to the physical health of the people of Denton, including access to healthy foods, recreation, and pedestrian and bicycle mobility and land use patterns that promote physical activity. Many communities are comprehensively addressing community health in the development of planning policy.



Community Healthy Theme



Mobility Theme



Community Character Theme

Community health is addressed throughout the Plan, particularly in Mobility, Land Use, and in Community Health and Safety.

- **The Mobility Theme** 

Mobility is a very important subject Denton as it looks forward to 2030. While there is a dedicated element for Mobility, which contains goals and policies specific to streets, the bicycle and pedestrian network, and transit—among others—mobility is important to address throughout the Plan. For that reason, it is also a “theme.” Mobility considerations and modal choice affects land use, community character, community health, and fiscal and economic vitality as it relates to the physical development of the city, physical activity, and the network to build a functional and healthy economy.

- **The Community Character Theme** 

Denton is a city built on character and the preservation of that character, in addition to creating new complementary development is central to the community’s goals as it moves forward. The Community Character and Urban Design element addresses specific goals and policies related to community character, yet the preservation, celebration, and creation character of Denton is an underlying theme in all of the Plan elements. Through the successful implementation of the Plan, Denton’s future will be realized as a community known for its charm and unique sense of place.

How to Use this Plan

The Denton Plan 2030 is organized to present the background information and goals, policies, and actions of the Plan Elements, in a streamlined, strategic, and user-friendly fashion. The Elements are grouped to contain categories of goals, policies, and actions organized by similar topics and according to the departments that will be responsible for their implementation. The Implementation and Monitoring Element brings all the Elements together to ensure recommended actions are followed.

Table 1.6 illustrates the components of the comprehensive plan and how the goals, policies, and actions relate to one another. There are numerous additional plans and studies called for throughout the actions of the Elements, including updates to many existing plans, studies, and manuals. While many of these themselves are large plans, they all fall under the framework, and guidance, of Denton Plan 2030, which acts as the voice of the community and the coordinated path forward until 2030. Each

Table 1.6 Comprehensive Plan Components

	Goals	Policies	Actions
Definition	Sets a general direction; an ideal future; long-range and comprehensive in nature; and used to describe a desired result or outcome	A specific statement that guides decision-makers; a commitment to a particular course of action; describe context and rationale of desired outcome, and are more specific than goals.	Actions or procedures that carry out a policy. Specific step to actually achieve the goals and policies identified in the comprehensive plan.
Example	<i>Goal LU-5: Grow with Character: Promote Development which Enhances Community Character and Functionality</i>	2.16 Revise development regulations and development review processes to facilitate and support desired forms of development and improved standards for urban design and place-making.	2.16.1 Adopt citywide design and development standards and guidelines specific to individual land uses and thoroughfares to improve development quality and functionality. (CC 4.9, M 6.1.1)

of these plans will look towards the comprehensive plans for policy direction and concepts.

As many policies and actions are reoccurring and reinforced in many of the Elements, policies and actions that overlap are cross-referenced in parentheses so that implementation policies and actions that address multiple goals may be accomplished through a single measure, e.g. (LU 2.6.1). Additionally, policies and actions that are being referenced as continuations of the 1999 Denton Plan are noted parenthetically, citing the page number of the previous Denton Plan, e.g. (DP p.122). This is to reinforce that the Denton Plan 2030 is an update of the 1999 Denton Plan.

Denton Plan 2030 Elements

The Denton 2030 Plan is comprised of the following Elements:

1 – Plan Framework begins with a summary of Denton’s history and where the City is today. It then describes the purpose of and process used to develop Denton Plan 2030. This includes the Community Vision Statement and an overview of the steps involved in analyzing the conditions that would drive the policy Elements of Denton Plan 2030.

2 – Land Use Element includes goals and policies necessary to ensure that the City will direct growth according to sound principles and to ensure that the balance of land uses matches the City’s needs for the future.

3 – Fiscal and Economic Vitality Element contains goals and policies related to the economic strength of the city and principles for growing in a fiscally healthy manner.

4 – Community Character and Urban Design Element includes goals and policies for maintaining the unique character of Denton and building upon its distinguishing characteristics. This element includes policies for placemaking, arts and culture, and historic preservation.

5 – Parks, Conservation, and Environment Element includes the policy framework for parks and open space, as well as policies to ensure protection of Denton’s unique environmental and natural resources.

6 – Mobility Element includes goals and policies for vehicular circulation and for the pedestrian, bicycle, and public transportation network. This element will serve as a policy framework for coordinating a comprehensive mobility network aligned with future land use and community character.

7 – Housing and Neighborhoods Element

provides the basis for ensuring housing options for all of Denton’s population in safe and livable neighborhoods, complete adequate community facilities to serve them. This element will ensure the conservation of Denton present neighborhoods, as well as the development of well-designed neighborhoods in the future.

8 – Community Health, Safety, and Services Element

includes goals and policies for maintaining a safe and secure environment for Denton residents as well as an overall healthy population. Goals and policies focus on environmental justice, social services programming, community health, resiliency, and hazard mitigation, as well as emergency services.

9 – Infrastructure and Utilities Element ensures the provision of adequate infrastructure and facilities that will complement the future growth of Denton. This includes water, wastewater, stormwater, solid waste, and electric. In addition to baseline service, strategies for sustainable practices such as sustainable energy and green infrastructure are included in this Element.

10 – Implementation and Monitoring Element sets the framework to ensure that policies and actions are applied in future development decisions and that progress in the implementation of Denton Plan 2030 is monitored over the course of the plan timeline. This Element sets guidance and benchmarks for measuring progress, protocols for amendments, internal city governance practices, and describes how Denton Plan 2030 interacts with other city, state, and county regulations.

Figure 1.8: Plan Hierarchy illustrates the Elements of Denton Plan 2030 and their relationship to one another within the framework of the Plan.

Through the goals and policies of Denton Plan 2030, the City of Denton will continue to develop proactively based on the firm foundation of the 1999 Denton Plan, revised in a manner that will continue and expand Denton’s status as a benchmark community in the Dallas Metroplex and nationally.

Figure 1.8 Plan Hierarchy

Denton Plan 2030, Denton’s comprehensive plan, serves as the overarching framework to guide specific actions for the City to undertake within the Plan horizon. This includes a number of plans for further study, and updates to existing plans. Examples of several of these plans are shown below.



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LAND USE OVERVIEW



Historically, Denton's land use pattern has evolved based on incremental growth and annexation, occurring largely as greenfield development, that is, the development of formerly agricultural lands and open space. Development has been driven primarily by market forces, with zoning and the construction of roads and infrastructure responding to, rather than proactively influencing growth and the resulting pattern of land use. The availability of rural raw land, coupled with an accommodating development approval process, has facilitated development that outwardly expanded the suburban fringe at a relatively low density and intensity. This trend has resulted in a land use pattern that has tended to further extend distances between where people live, work and shop, resulting in a rate of land consumption and "spreading out" which is faster than the underlying growth of the population, producing an unsustainable trend that is costly for the city and taxpayers alike. Meanwhile, considerably more vacant land exists within the present city limits, both unplatted and in already planned and approved Master Planned Communities (MPCs), than can be absorbed by the city's projected population growth over the next two decades and beyond. The consequences of this "spreading out" trend has been experienced in longer auto trip lengths, greater levels of congestion, strained environmental and fiscal resources, and challenges for public services and facilities to keep up with the demands of this rapidly enlarging development footprint. Consequently, the City's Annexation Plan, guided by the recommendation in the 1999 Denton Plan to adopt an "aggressive annexation policy," should be re-considered. By 2030, additional annexations are not necessary to accommodate growth and in fact may stretch the city's ability to provide infrastructure and public services.

At the same time that this suburban expansion has driven public and private investment into outlying areas, some more established, in-town neighborhoods and commercial areas have suffered dis-investment and decline and are in need of renewal. In response to the public input that led to the Community Vision Statement, it is the intention of the Land Use Element to reverse this trend by encouraging thoughtful and resourceful development and investment where it is needed for a fully functional and livable city. This means supporting more compact and interconnected land use patterns; placing housing, jobs and shopping in closer proximity, and providing greater opportunity for mixed-use and development designed for walkability – both for improved mobility, as well as for community health and sustainability.

LAND USE IN THE COMMUNITY VISION STATEMENT

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- **Managed, balanced, and sustainable growth** in high-quality, livable **urban, suburban, and rural places** which offer diverse **choices** among **neighborhood settings** while respecting private **property rights**.
- A **compact development** pattern which includes expanded areas of **mixed-use**, a broad array of **housing** and **retail choices** responding to changing demographics and market preferences, and **re-investment** and **infill** in established areas of the city.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.
- **Established neighborhoods** where revitalization and compatible infill development **contributes to stable, livable, and historic character**, and fosters **neighborhood pride** and **homeownership**.
- **Thriving universities** where coordinated planning and collaborations between the City and the academic communities creates **mutually beneficial**, stable, and healthy neighborhood edges and where the non-academic community benefits from the vast **educational and cultural resources** in close proximity.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Contiguous, staged growth** which is **fiscally** and **environmentally sound**, **reduces fragmentation** and **sprawl**, discourages premature development, and conserves the city's future growing room.
- **Conservation development** which **retains rural character**, **protects open space** and **greenways**, enhances **development value**, and provides **greater choices** to land owners.

While the Land Use Element does not seek to impede approved developments in outlying areas, it does support rational, staged development in the fringe and discourages approval of additional large scale planned developments until already approved developments approach build-out.

The Land Use Element has been developed to implement the long-range vision of the community in the comprehensive plan. The goals, policies, and actions of the Land Use Element focus on the use of land and future development within the City of Denton and the Denton urbanizing area.

The basis for the Land Use Element is the Future Land Use Map (FLUM). The FLUM was developed

through the exploration of the Alternative Growth Scenarios and the voting exercises at Community Forum 2, which led to the Preferred Growth Concept. The Preferred Growth Concept illustrates a land use pattern that clusters development around distinct locations (i.e. centers or corridors) in a compact pattern, with mixed-use development, walkable pedestrian networks, jobs and shopping located closer to homes, and balanced, mixed-use neighborhoods.

Existing Land Use

Overall the city's distribution of land uses can be thought of in three broad categories: where people live (residential uses), where people work and shop (nonresidential uses), and land which is undeveloped. Residential is the largest developed land use category, covering 10,081 acres, or about 18 percent of the city's land area. Of this, approximately 80 percent is single-family residential development, along with approximately 10 percent consisting of multi-family structures and another 10 percent consisting of other residential structures (including townhouses, duplexes, triplexes, condominiums, mobile homes, and assisted living/nursing care facilities). The largest segment of the city's land area, over 38 percent, consists of agricultural uses. Approximately five percent of the land area consists of farm and ranch uses, which

are typically residential with incidental agricultural activities. Parks, including recreational areas and protected open space, make up approximately three percent of the city's land area.

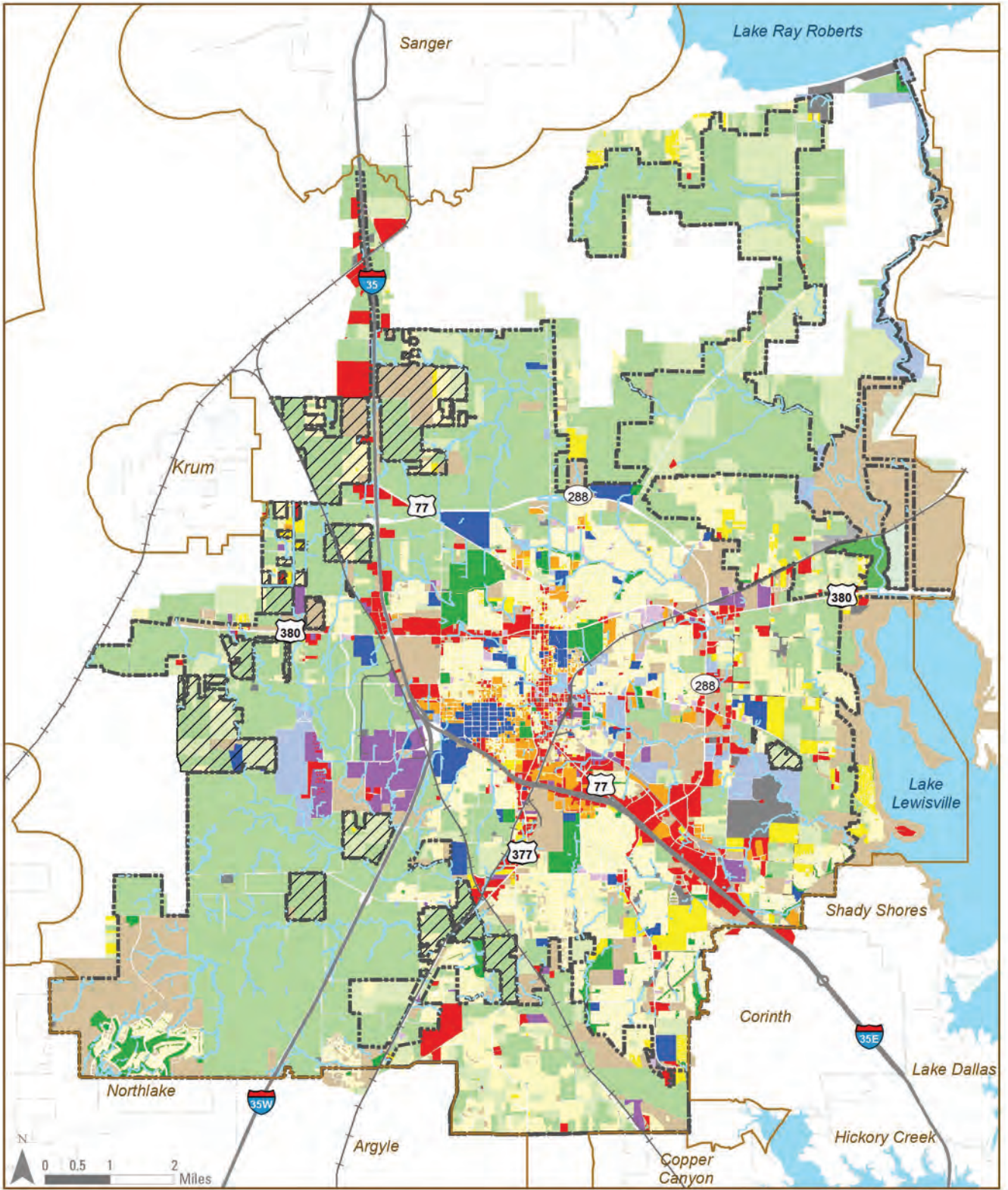
Five percent of the city's land area is devoted to commercial uses, which include retail, offices, restaurants, gas stations, hotels, etc. A significant amount of the city's commercial uses are located close to Downtown and along major corridors such as U.S. 380 and U.S. 377 and Interstates 35, 35E, and 35W. Industrial uses constitute just over two percent of the city's land uses. The majority of industrial uses are located west of I-35 and I-35W, near Denton Enterprise Airport. Government uses, including local and other administrative facilities, occupy just over two percent of the city's area. Religious uses, including buildings used for regular assembly for religious worship, cover a very small

TABLE 2.1 Existing Land Use

Land Use	Acres	% of City's Land Area
Agriculture	23,181.91	38.07%
Farm/Ranch	3,047.63	5.00%
Park	1,776.65	2.92%
Residential Single-family	8,091.70	13.29%
Residential Multi-Family	954.58	1.57%
Residential Other	1,034.76	1.70%
Government	1,372.08	2.25%
Institutional	1,478.14	2.43%
Religious	311.43	0.51%
Commercial	2,716.84	4.46%
Industrial	1,304.41	2.14%
Infrastructure	742.89	1.22%
Transportation	6,973.2	11.45%
Undeveloped	7,913.10	12.99%
TOTAL ACRES	60,899.32	100%

Source: City of Denton GIS, 2013. Note: Minor discrepancies may exist due to size and location of local roads.

FIGURE 2.1: Existing Land Use Map



Source: City of Denton GIS



portion (less than one percent) of the city's land area. Land used in the provision of infrastructure and transportation services accounts for 1.71 percent of the city's acreage. Finally, just over 14 percent of the city's land area was identified as "Undeveloped," that is land with no structures that does not have an associated use and is generally not protected from development. Existing land is depicted in Figure 2.1 and listed in Table 2.1.

Immediately apparent from the existing land use depiction is a clearly defined center of the city, with major highways radiating in all directions. Downtown is surrounded by established neighborhoods with an historic urban street grid, and the University of North Texas (UNT) and Texas Woman's University (TWU) campuses, other institutions, and some of the city's original industrial areas.

Beyond this urban core area, radiating corridors are less "mixed" in nature with low-density, single-family residential emerging as the predominant pattern, surrounding a suburban hierarchy of local streets and collectors rather than the street grid in the urban center. The location of commercial uses has been primarily influenced by highway access and interchanges, with commercial uses lining older highway corridors such as University Drive and Loop 288, and clustered in major concentrations such as the I-35E and I-35W. A similar pattern can be seen with industrial uses. Original industrial areas are clustered near the rail corridors east of Downtown, while newer, larger industrial areas are located primarily west of I-35 near the airport, reflecting changes in industrial transportation modes.

Growth Capacity

In considering the pattern and distribution of the city's existing land use, it is appropriate to consider its capacity to accommodate future growth and to compare it to the aspirations expressed for the city's growth summarized in the Community Vision Statement. As noted in Table 2.1 the city has over 34,000 acres of "growing room," comprised of land categorized as Agriculture, Farm/Ranch and Undeveloped. As shown in Table 1.4, the city's projected population growth through the 2030 plan horizon could require the development of approximately 16,000 acres of new residential and non-residential land uses. Thus, within the present city limits is more than twice the land area needed for growth through 2030. Or put differently, if the city's present growth rate were to continue indefinitely, the vacant land within the present city limits should be sufficient to meet the growth needs through 2050.

GOAL LU-1: Grow Compactly: Achieve sound, sustainable growth in compact development patterns with balanced land uses planned in coordination with transportation and infrastructure systems.

Policies and Actions

Future Land Use Map and Future Land Use Designations:

The single most important component of the Land Use Element is the FLUM (Figure 2.4). By depicting where broad categories of land use should occur, the FLUM serves as a guide in making development and re-zoning decisions. Maintaining the currency of existing land use is necessary in order to track land use trends which may influence policies for future land use. Principal among the new directions for land use as depicted on the FLUM and described in the future land use designations that follow, is the introduction of an array of new mixed-use districts to promote flexibility in encouraging development and redevelopment at the centers and corridors targeted for growth in the Preferred Growth Concept. These include Downtown Denton, the compatibility areas surrounding Downtown, and surrounding the campuses of the UNT and TWU, as well as a Business Innovation future land use designation.

2.1 **Maintain an updated Existing Land Use Map**

- 2.1.1 Using parcel level data, track land use changes associated with development and redevelopment and revise the exiting land use map annually.

2.2 **Utilize the FLUM to guide all development review and re-zoning actions within the plan horizon.**

- 2.2.1 Revise procedures for re-zoning decisions to require consistency with the FLUM.

- 2.2.2 Revise zoning districts for consistency with future land use designations.

2.3 **Provide expanded flexibility for mixed-use by the creation of mixed-use future land use designations that reflect the priorities of the Denton community and reflect current market conditions.**

- 2.3.1 Create additional mixed-use zoning districts and/or zoning overlay districts to achieve consistency with the mixed-use land use designations on the FLUM.

Plan and Policy Coordination:

Another important citywide land use consideration is to foster greater coordination between land use policies and policies for mobility and infrastructure. Denton Plan 2030 should become the key policy document to which future revisions of all plans and programs among all city department plans and policies should be revised for consistency, to ensure coordination of land use mobility and infrastructure planning. Also, other governmental entities should be requested to address the consistency of their future plans with the land use policies contained in Denton Plan 2030. In addition, other entities exert considerable influence on land use and growth dynamics in Denton, particularly the school siting decisions of multiple school districts and transit operated by Denton County Transportation Authority (DCTA). Clear procedures are called for to improve coordination.

2.4 *Revise the Denton Mobility Plan and Capital Improvement Plan (CIP) to coordinate mobility and infrastructure planning to be consistent with the Land Use Element and the Preferred Growth Concept. (FEV 3.9, M 6.1.1, IU 9.10.2)*

- 2.4.1 Revise the Mobility Plan to reflect the development intensity and areas of new growth illustrated in the Land Use Element. (FEV 3.8.2, M 6.1.1)
- 2.4.2 Update the Capital Improvement Plan (CIP) to prioritize the implementation of Denton Plan 2030. (M 6.2.1)
- 2.4.3 Update the *Transportation Criteria Manual* to reflect the policies of the Denton Plan 2030. (M 6.2.1)

2.5 *Improve coordination with other entities to implement the goals of the Denton Plan 2030.*

2.5.1 Jointly create procedures for communication and coordinated planning with:

- * School Districts concerning school siting and impact review
- * Denton County
- * Denton County Transportation Authority (DCTA)
- * Utility providers
- * Surrounding municipalities
- * Neighborhood groups
- * Local providers of higher education (UNT, TWU, and NCTC)
- * Federal agencies (ex. FEMA)
- * North Central Texas Council of Governments (NCTCOG)
- * Nonprofit and faith-based organizations
- * Denton State Supported Living Center

GOAL LU-2: Grow with Purpose: Achieve re-investment, revitalization, and redevelopment of key growth Centers and Corridors.

Policies and Actions

Downtown Investment:

A fundamental component of the Preferred Growth Concept, that was the basis for the FLUM, is to encourage compact growth in mixed-use centers and corridors. Principal among the city's centers is Downtown Denton. While the Downtown has been the subject of past planning efforts intended to promote growth and revitalization, most recently the Downtown Improvement Plan (DTIP) containing action recommendations to implement the Downtown Denton Master Plan adopted in 2002.

While certain recommendations have been acted upon, including drafting a Form-Based Code, solid waste, wayfinding, modifications to the Mobility Plan and Transportation Criteria Manual, more direct initiatives to stimulate redevelopment have not been implemented. Consequently, there may be a need to revisit the DTIP, and create a new set of priorities with an emphasis on the development of Downtown housing, both as new development and the adaptive re-use of underutilized buildings, and upper floors above commercial uses. Another priority for the Downtown is to strengthen the older neighborhoods and commercial areas immediately surrounding it.

To address issues such as parking, connectivity, and the compatibility of infill, a Downtown Compatibility Area Small Area Plan is needed, with implementation through the Downtown Compatibility Area future land use designation. Zoning for the Downtown and Downtown Compatibility Area would then be adjusted through a zoning district amendment or overlay district.

2.6 Promote further development, diversification, and intensification of Downtown Denton (DP p. 23).

- 2.6.1 Revise and update the *Downtown Implementation Plan (DTIP)* as necessary.
- 2.6.2 Create a *Downtown Compatibility Area Small Area Plan* that will identify the character and regulations of the Downtown Compatibility Area future land use designation.
- 2.6.3 Coordinate the revised DTIP and the Downtown Compatibility Area Small Area Plan to address common issues, such as preservation of historic structures and features, that are shared throughout the urban core.
- 2.6.4 Create regulatory incentives, such as density bonuses to expand housing in and adjacent to Downtown through adaptive re-use, utilization of upper stories and infill development.
- 2.6.5 Consider creation of new entities to promote, market and develop Downtown Denton, as identified in the DTIP, such as: (FEV 3.10.2)
- * Business Improvement District (BID)
 - * Downtown Development Corporation
 - * Downtown Parking Management Authority
- 2.6.6 Create development standards for urban design, streetscape, scale, and architectural character applicable for the Downtown Compatibility Area future land use designation based on the proposed *Downtown Area Small Area Plan*, the guidance of the general urban design principles and policies of the Community Character and Urban Design Element, and the proposed citywide *Urban Design Plan*. (LU 2.7.1; CC 4.11.1)

University Collaboration:

Downtown Denton, together with the campuses of UNT and TWU make up Denton's urban core. However, the neighborhoods surrounding the universities have been heavily impacted by student housing, parking overflows, and by university property acquisition for campus expansion. To address these issues, Neighborhood/ University Compatibility Area Small Area Plans are needed, with implementation through the Neighborhood/ University Compatibility Area future land use designation. These should be coordinated with the *Downtown Compatibility Area Small Area Plan* and any future revisions to the DTIP to address common issues such as conflicts in scale, use and intensity, parking and vehicular circulation, blighted properties, walkability, transit access, and coordination between city and university planning.

2.7 Encourage collaborative planning for development and redevelopment surrounding UNT, TWU, and other major institutions (DP p.23).

- 2.7.1 Create *Neighborhood/University Compatibility Area Small Area Plans* with UNT and TWU, and coordinate them with the *Downtown Compatibility Small Area Plan* and the updated



Neighborhood/ University Collaboration

- Downtown Implementation Plan* (HN 7.1.4)
- 2.7.2 Establish agreements for joint city – university planning, partnership, and collaboration within the Neighborhood/ University Compatibility Areas, focusing on issues such as: (HN 7.1.5)
- * Creation of redevelopment target areas surrounding blighted properties
 - * Regulation of on-street and off street parking (M 6.10.1)
 - * Pedestrian and bicycle facility improvement (M 6.14)
 - * Hazard mitigation (CHS 8.4)
 - * Housing
 - * Wayfinding (CC 4.2.1, M 6.1.9)
 - * Preservation of historic structures and features (CC 4.3.9)
- 2.7.3 Create development standards for urban design, streetscape, scale, and architectural character applicable for the Neighborhood/ University Compatibility Area future land use designation based on the proposed *Neighborhood/ University Compatibility Area Small Area Plan*,



Corridor Revitalization

the guidance of the general urban design principles and policies of the Community Character and Urban Design Element, and the proposed citywide *Urban Design Plan*. (LU 2.7.1; CC 4.11.1)

Encouraging Compact Growth at Centers and Corridors:

A fundamental component of the Preferred Growth Concept is the encouragement of a compact growth pattern oriented around mixed-use centers and corridors. Centers and corridors generally are proposed to allow mixed-use development that focus increased density and activity at key locations with radiating density extending outwards from the primary intersections or corridors. Centers and corridors were identified based on the locations within the city that are currently centers of activity and those that offer opportunity for future focus, either in the form of new development or redevelopment, and have the capacity to accommodate growth. While these areas have the capacity to accommodate growth, they must be closely evaluated in future development proposals to ensure that development achieves the vision of creating enhanced character and higher standards

of design and economic vitality throughout the city. The mechanism through which this is accomplished is the Small Area Plan, which is identified for key centers and corridors based on the Focus Areas Concept (Figure 4.1). The centers and corridors are consistent with the locations of concentrated development illustrated on the Preferred Growth Concept (Figure 1.7).

Once a Small Area Plan is prepared, an Overlay District may be established to create additional zoning standards which are applicable to the context of the proposed center or corridor. Small Area Plans may also establish specific standards and guidelines for public and private realm development and improvement, treatments for gateways, and other placemaking strategies. The Implementation and Monitoring Element contains guidance on how to create a Small Area Plan and an Overlay District, when it is determined that these are the chosen methods for guiding future development in specific areas.

2.8 Create incentives and regulatory tools to promote new development or redevelopment of priority centers and corridors.

- 2.8.1 Create Small Area Plans for priority centers and corridors, consistent with the Focus Areas Concept (Figure 4.1) (HN 7.1.6, CC 4.12.3)
- 2.8.2 Establish Overlay Districts or new zoning districts as a result of Small Area Plans that apply revised development standards tailored to specific centers and corridors. (CC 4.12.5)
- 2.8.3 Through the city's Capital Improvement Program (CIP), prioritize investments in designated centers and corridors based on mobility recommendations and street standards. (M 6.1.2)

GOAL LU-3: Grow our Assets: Maintain and Strengthen Neighborhoods, Commercial and Employment Areas.

Policies and Actions

Infill in Residential Areas:

As noted in Figure 2.1, single-family residential is the city's largest category of developed land use. Single-family housing and neighborhoods will remain a valuable resource, which should be protected from harmful influences, such as abrupt contrasts of scale and intensity. However, the City should take every opportunity to ensure that as gaps in the neighborhood fabric occur, infill development, that is development of vacant or deteriorated properties will be encouraged, complimenting the scale and

character of each neighborhood. Infill development also creates opportunities for more compact forms of development and affordable housing options. Types of residential products that could be suitable infill in single-family neighborhoods include well-designed townhomes, quad apartments, duplexes, and other types of low-moderate density housing which is potentially compatible within single-family neighborhoods. In addition, accessory dwelling units such as garage apartments and "granny flats" and a second small unit on a single-family lot could be considered. Some existing neighborhoods may tend to fear or resist the introduction of new housing

types and perceive them as threats to neighborhood stability. Such concerns must be addressed by carefully examining how and where such uses can be introduced carefully within neighborhoods and in transitional areas, particularly along higher volume roadway corridors where single-family homes are no longer desirable. For neighborhoods that show signs of distress and transition, including declines in physical upkeep and home ownership, neighborhood conservation strategies should be used to target interventions to contribute to neighborhood revitalization and stability. The Community Character and Urban Design Element and Housing and Neighborhood Element contain corresponding policies for achieving compatible infill and redevelopment.

2.9 *Promote the stability and livability of established neighborhoods through the creation of guidelines for compatible infill and the removal of impediments to redevelopment.*

- 2.9.1 Conduct an inventory to identify areas of the city with infill potential within established neighborhoods.
- 2.9.2 Establish criteria to identify the characteristics of compatible infill development, which would include guidelines to prevent impacts and encroachments of incompatible uses, development scales and intensities.
- 2.9.3 Identify and remove zoning and other regulatory impediments to compatible infill and redevelopment. (HN 7.8.4)
- 2.9.4 Enact standards in the Denton Development Code to ensure proper transitions and buffers between conflicting land use, scale, and intensities. (HN 7.8.6)



Infill in residential areas

- 2.9.5 Apply neighborhood conservation strategies such as targeted code enforcement, housing rehabilitation, and clearance of blighted properties. (HN 7.8.8)

Infill in Commercial and Employment Areas:

Similarly, in commercial and employment areas, change and obsolescence will occur as consumer preferences for retail change. Instances of underutilized parking lots and out-dated big box stores produce gaps in the activity pattern and may contribute to blight. To address this inevitable obsolescence, the city should facilitate non-residential adaptive re-use, infill and redevelopment, and take advantage of opportunities to apply innovative development standards as redevelopment occurs. The Community Character and Urban Design Element contains corresponding policies for achieving compatible infill and redevelopment.

2.10 *Promote the stability, quality, and functionality of commercial and employment areas through improved development standards and by addressing obsolescence.*

- 2.10.1 Create and maintain an inventory of underutilized and abandoned “big box” retail structures as potential adaptive reuse, infill, and redevelopment sites to be developed to fill gaps in commercial and employment areas.
- 2.10.2 Create and apply design and development standards to improve development quality and functionality of commercial and employment areas. (CC 4.16.10)



Infill in commercial areas

GOAL LU-4: Grow Resourcefully: Manage growth for wise use of land resources with staged, contiguous, and compatible development.

Policies and Actions

Growth and Annexation:

As noted in the description of the Growth Trend Scenario, the developable acreage within the present city limits and planned annexation areas is considerably more than will be needed to meet the growth needs of Denton through 2030. This situation is, in part, the result of the policy of “aggressive annexation” recommended in the 1999 Denton Plan. Although annexations provide a degree of control over what develops at the city’s edge, the amount of unnecessary annexations the city has initiated has also been made it vulnerable to fragmented, leap-frog development and the costs associated with a widely dispersed development pattern and population. While developers are expected to cover much, if not all, of the capital costs to serve growth, the City and school districts are obligated to cover the cost to deliver public services to this expanded

service area and to accept much of the maintenance costs on facilities built and financed privately, at taxpayer expense. Consequently, the City needs to slow its rate of annexation and apply strict annexation criteria based on need and fiscal impacts by applying adequate public facilities criteria for future annexations and development approvals.

While additional annexations are not needed to meet the city’s immediate growth needs, annexations may be needed in order to prevent development using municipal utility districts, through which the city would lose influence to manage growth within its ETJ. However, Denton should continue policies established in the Denton Plan for proactive growth management for a contiguous development patterns at the city’s edge.

Because much of the city’s present excess development capacity is within large planned

communities build-out will likely take longer than two decades to complete. Although developments such as Rayzor Ranch and Robson Ranch are well underway, other developments have little or no development activity. As a consequence, much of this development will occur well into the future when market conditions, consumer preferences, and development practices may be much different from today. At present, some areas zoned as Master Planned Communities (MPCs) are associated with development plans that may not reflect present-day or future needs and preferences. It is in the mutual best interest of the City and the owners and developers of the MPCs to anticipate and provide for flexibility in re-planning these developments. Future MPC plans should seek to introduce more innovative mixed-use and walkable development patterns with greater connectivity to the development pattern of the city, and alternative mixes and locations of residential, and centers for commercial development and employment.

2.11 Promote development of Master Planned Communities (MPCs) that is consistent with the long-term vision of the Preferred Growth Concept.

- 2.11.1 Establish a process to facilitate revisions to the land use mix and design of approved and future MPCs including:
- * Design that furthers the goals and policies of Denton Plan 2030 and the Preferred Growth Concept
 - * A mix of housing types to reflect changing demographics and housing preferences
 - * Appropriate siting of schools, civic buildings, and community amenities
 - * Adjacency to existing transportation infrastructure systems

- * Conservation development where appropriate
- * Incorporation of compact, mixed-use, and walkable development patterns
- * The integration of area-wide trails, greenways, and green infrastructure elements
- * Developable acreage that is in balance of overall development of the city

2.11.2 Consider adoption of an Adequate Public Facilities Ordinance to complement existing tools for growth management. This would enable the timing of development approvals to encourage development in areas contiguous with the city's current footprint and priority development areas consistent with the Preferred Growth Concept (DP p.22).

2.11.3 Use Small Area Plans to assess appropriate redesign of approved MPCs (LU 2.8.1)

2.12 Expand the city limits through annexations at a rate consistent with the city's growth rate and the demand for additional land, consistent with the City's fiscal capacity to expand facilities and services.

2.12.1 Revise the City's Annexation Plan and associated policies to reflect the sufficiency of undeveloped land within the present city limit, the need for a contiguous development pattern at the edge, and an assessment of the feasibility and cost-effectiveness of the provision of city infrastructure and services in various portions of the ETJ.

- 2.12.2 Base future annexations on considerations of fiscal impact, covering all public facilities and services, and on a determination of adequate public facilities (DP p.20).

Impact of Gas Wells:

Due to risks to public safety and groundwater, as well as livability impacts such as noise, fumes and truck traffic, Denton, like other communities with gas well drilling and production operations, imposes setback requirements to buffer gas wells from residential and other sensitive uses. Key facts and areas of concern regarding gas wells are as follows. Unconventional natural gas production is increasing, both nationally and locally, due to new technologies that enable exploration and development of what once was a hard-to-produce resource. Researchers continue to identify the costs and benefits associated with natural gas production.

The City can infer the following factors regarding future land use and development:

- Future development costs for structures, new roadways, and utility extensions near gas wells, oil wells, and pipelines may incur unforeseen expenses due to the potential need to develop around Drilling and Production Sites or pipelines, relocate or bore utilities around existing pipelines, perform environmental testing if the property is identified as a prior Drilling and Production Site, or clean up and mitigate contaminated, inactive sites.
- There are a significant number of gas wells in Denton and its ETJ, mainly west of I-35. Structures cannot be built over a plugged well and building siting must follow Fire Code requirements to locate in the vicinity of an active well.
- A significant number of product pipelines currently exist in Denton and its ETJ, mainly west of I-35. Since vertical construction cannot occur in a pipeline easement, future development potential is severely limited near pipelines. In addition, roadways cannot be constructed above

a pipeline unless the line is adequately located for structural stability and the easement allows such improvements. Municipal and franchise utility extensions and associated repairs must be performed at an appropriate depth or spacing to work around existing pipelines or find routes that do not conflict with existing pipelines.

- Municipal and franchise utility extensions and associated repairs must be at an appropriate depth to not conflict with associated gas well infrastructure. Where franchise utility extensions are proposed, the property owner or applicable easement controllers have the option to allow or prohibit such improvements.
- The operations performed at Drilling and Production Sites require heavy vehicle traffic to support the various activities. The increase in vehicle traffic can adversely impact associated roadways and traffic patterns around the Drilling and Production Sites. Dirt, dust, and debris associated with drilling and production activities can produce localized adverse effects which could make new development near them undesirable and unlikely.

While the 1,200 foot setback requirement of Denton's Gas Well Ordinance limits the placement of future gas wells, a minimum 250 foot setback applies to the separation of new protected uses from existing gas well drilling and production sites. While these setbacks serve to reduce risks to public safety, they also impact development and compromise land use efficiency. Two factors serve to exacerbate these impacts. The first factor is the wide scattering of isolated well sites throughout much of the western portion of Denton, generally west of I-35. In other communities, the clustering of multiple gas wells on consolidated drilling and production sites has served to mitigate these land use impacts. The second factor that impacts land use is the fact that the 250 foot minimum setback surrounding existing well locations is measured not from actual gas well locations, but rather from drilling and production site boundaries. While regulations were enacted in 2010

to limit gas well development plats to a maximum of five (5) acres, a number of pre-existing platted production sites exceed one hundred (100) acres and even include residential and other protected uses within drilling and production site boundaries. Thus, development of adjacent properties for residential and other protected uses is restricted by the application of setbacks to these non-drilling sites, regardless of proximity to well locations. In order to reduce these impacts on development, gas well clustering and downsizing of drilling and production sites surrounding actual gas well locations is encouraged.

Gas well pipelines throughout the western portion of Denton, many of which are as shallow as three (3) feet underground, could become a severe impediment to the construction of Loop 288 and other roads identified in the Denton Mobility Plan. While roads may be constructed over pipelines, those constructed close to the surface could be required to be relocated to greater depths, thus adding to roadway construction costs. Future updates to the Mobility Plan should examine the impacts of gas pipelines on the ability and cost to construct roadways, including the completion of the Loop. In addition, the means to “reserve” future roadway rights-of-way by requiring pipelines to either avoid crossing designated future road corridors, or be placed at an adequate depth, should be identified.

While such measures can serve to mitigate impacts on land use and the property tax base, the actual net effect of gas drilling and production on the tax base, and the off-setting positive contribution of gas drilling and production to the local economy has not been measured. In order to inform both positive and negative impacts, and to ensure that Denton is applying best practices in managing gas drilling and production, a comprehensive *Gas Well and Pipeline*



Impact of Gas Wells

Impact and Compatibility Study is recommended.

The presence of gas wells and pipelines is a significant impact to sound contiguous and compact development. Former buffer areas can be made available for development, however, necessitating the creation of development standards to address development around capped gas wells.

2.13 Create a framework to ensure compatibility of gas well production with development and community safety and livability. (CHS 8.4.3)

2.13.1 Prepare a *Gas Well and Pipeline Impact and Compatibility Study*, to address issues such as:

- * Impact of setbacks and pipeline placement on development capacity and road connectivity
- * Conflicts with sensitive proposed land uses in the FLUM
- * Impact on Mobility Plan and the completion of Loop 288
- * Fiscal and economic impacts
- * Best practices from peer communities in gas well management and regulation
- * How drilling and production sites

- should be identified, their limits, and maintaining associated, relevant data to address impact and compatibility
- * Periodic updates to reflect changing technologies and best practices
- 2.13.2 Identify regulations and/or incentive provisions for gas well clustering and to reduce the size of gas well drilling and production sites.
 - 2.13.3 Consider the impacts of gas drilling and production sites and the location of gas pipelines in the update of the Denton Mobility Plan. (M 6.1.1)
 - 2.13.4 Revise the City's Gas Well Ordinance to incorporate provisions for gas well clustering, drilling and production site re-platting and requirements and to incorporate other findings and recommendations of the *Gas Well and Pipeline Impact and Compatibility Study*.
 - 2.13.5. Create development standards to address development of the former buffer areas surrounding capped gas well, including requiring the design of adjacent developments to include street stub-outs for future extensions into the buffer areas.

Managing Growth at the Edge:

The 1999 Denton Plan contained a discussion of "The Edge" as a manner of managing the boundary between the developed and undeveloped portion of the city (DP p.27-30). Denton Plan policies for proactive, managed growth to develop a well-defined and contiguous edge, avoiding inefficient leapfrog development, remain applicable. Specific means to achieve sound edge conditions include the



Managing Growth at the Edge



Conservation development (Credit: Randall Arendt, Rural by Design)

City's water and wastewater CNNs (areas designated by Certificates of Convenience and Necessity), water bodies and watershed boundaries, and interlocal agreements with adjacent communities to define shared boundaries and the use.

As much of "The Edge" of Denton is characterized as rural land that possesses a character of Denton's past and natural environment that is cherished, conservation development is recommended as the primary means of managing the interface of The Edge. Conservation development is an approach to the design of rural residential subdivisions which is highly suited to agricultural fringe areas where

the retention of rural character and open space is desired. The concept is applied by permitting smaller, clustered lots, in return for the preservation of generous amounts of open space. The present RD-5 zoning district permits subdivisions consisting of five-acre residential lots, representing a gross density of .02 units/lots per acre. A conservation development alternative, as proposed in the Rural Area future land use designation, would allow for the same number of smaller lots at the same gross density. For example, on a 100-acre tract zoned RD-5, an owner could develop 20 five-acre lots, completely subdividing the property. Under a conservation development alternative, 20 lots would also be permitted, but as small as one acre, consuming only 20 of the 100 acres. The remaining 80 acres could remain as a farm, pasture, homestead estate, or as protected open space, thus more effectively retaining rural character. This approach is highly advantageous both to the public and to private developers. It reduces the costs of public services with more compact development and makes available protected open space with habitat, scenic, and recreational value at no public cost of acquisition. Conversely, advantages to developers

and property owners include improved development profitability by lowering development costs for roads and utilities, along with tax advantages from open space easements or dedications and higher the sales values of residential lots which abut permanently protected scenic open space, comparable to the premium sales values of lots along golf fairways.

2.14 Protect rural character and scenic open space at the city's Edge to promote the achievement of the Preferred Growth Concept.

- 2.14.1 Promote conservation (clustered) development in rural areas, with permanently protected open space in conservation easements, as an alternative to large lot development. (PCE 5.4.8)
- 2.14.2 Revise Rural Residential and Rural Commercial zoning districts to explicitly allow conservation development, including density and/or lot size incentives for open space protection.

Figure 2.2: Conventional Large Lot v. Conservation Development Alternative



*Conventional large lot rural subdivision
Credit: Randall Arendt, Rural By Design*



Conservation development alternative

- 2.14.3 Expand the network of protected rural open space including floodplains and stream corridors through open space in conservation easements and through land dedications, voluntary conservation easements, land trusts, and parks. Develop procedures for transfers of ownership and responsibilities for management of protected open space. (DP p.21)

Surrounding Municipality and Local Agency Coordination:

The City of Denton has a well-established, collaborative relationship with the North Central Texas Council of Governments (NCTCOG), the metropolitan planning organization (MPO) that coordinates planning in the region. Denton participates in several regional mobility and sustainability initiatives as part of NCTCOG, including the Trinity Trail System, Transit Oriented Development (TOD) initiatives, school siting coordination, complete streets standards, achieving regional air quality standards, and other sustainable development initiatives. Similar collaborative relationships should be sought with Denton County and adjacent municipalities concerning coordination of development standards, growth management policies, environmental protection, and coordinated development review of projects which impact multiple jurisdictions. The Parks, Conservation, and Environment and Infrastructure and Utilities Elements contain corresponding policies for furthering conservation goals, maintaining rural character, and the provision of facilities. These Elements will work in tandem with the Land Use Element to achieve this goal.

2.15 *Support greater intergovernmental coordination to address common issues of growth management and resource conservation and provision of public facilities and services.*

- 2.15.1 Continue and expand coordination with NCTCOG on issues of sustainable development, regional mobility, and stormwater management.
- 2.15.2 Expand engagement with Denton County and adjacent municipalities concerning coordinated planning and development review for projects with regional impacts and the application of innovative standards for roads, infrastructure, and development.

Development in the ETJ:

Currently, Denton maintains an ETJ, which is the unincorporated area contiguous to the city's corporate boundaries. The ETJ's distance from the city limits is determined by the city's population and offers an opportunity to manage growth at the city's edge. As a population greater than 100,000, Denton's ETJ extends five miles beyond the city's boundaries in all directions, and the city currently has the ability to monitor development that occurs within this area, but does not have substantial regulatory power. Since the ETJ is not the city proper, it does not have zoning and therefore not subject to development controls. In Denton County, the county has oversight over development in the ETJ. However, when property owners want to plat a tract of land or develop a subdivision they have to plat with the City. Currently Denton has an interlocal agreement with Denton County in which the City of Denton is involved in the approval process for development proposals in its ETJ. However, stronger

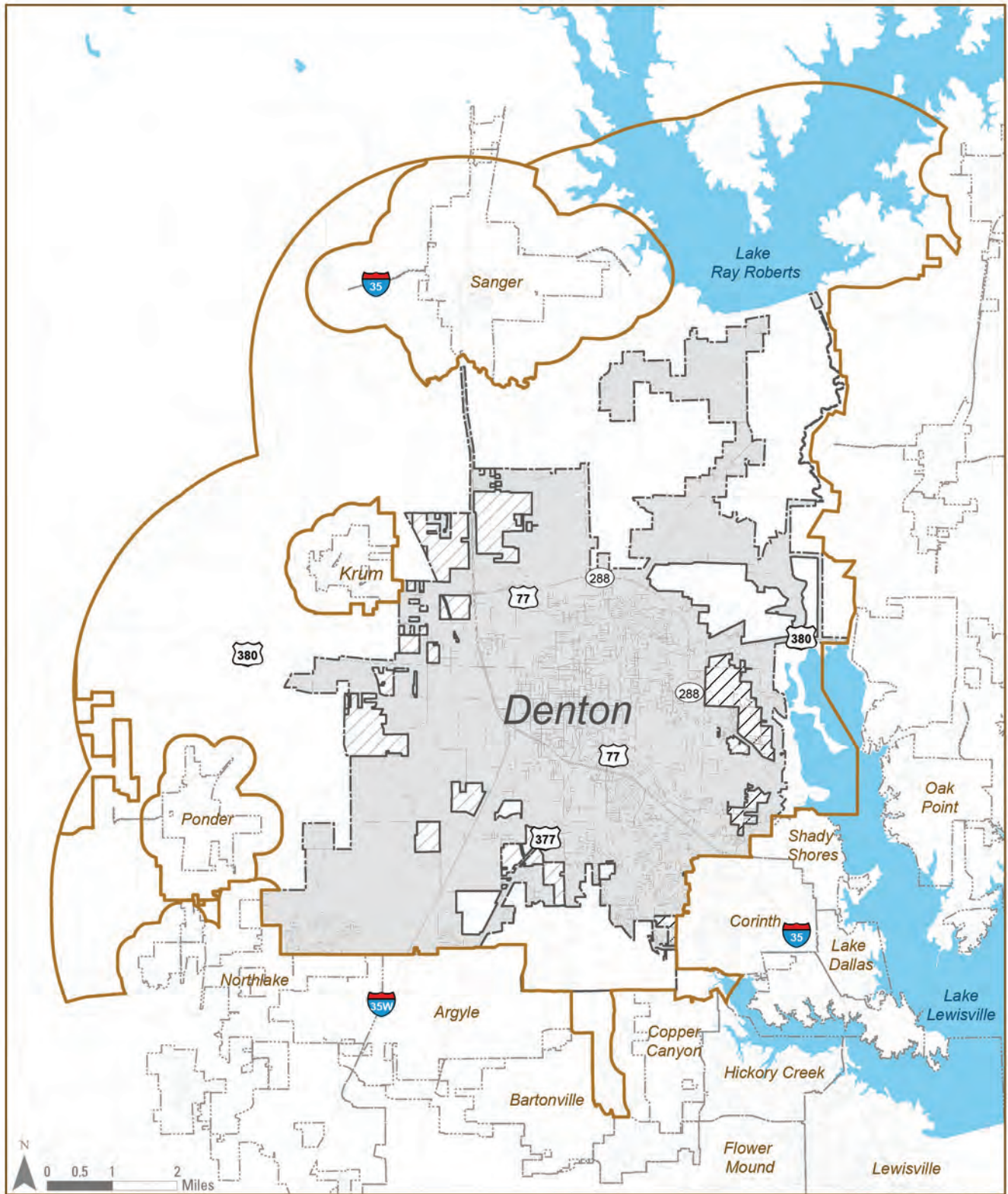
tools are needed to ensure that development conforms to the desired character that the City prefers to maintain in its rural areas. Similarly, location of gas wells should be reviewed alongside any development proposals in the ETJ to ensure that uses are complementary and infrastructure can be feasibly expanded. (See Policy 2.13 above)

At present, it is also possible to easily create Municipal Utility Districts (MUDs) for the provision of services in unincorporated parts of the county in order to bypass annexation and allow for fast-tracked development. The proliferation of utility districts has allowed for a non-contiguous growth in Denton County that is not overseen by any municipality. Having greater oversight given to the City of Denton to monitor the proliferation of MUDs will create more thoughtful development in the ETJ in the plan horizon, consistent with the compact manner of growth envisioned for the city's future.






2.16 *Strengthen City oversight in its Extraterritorial Jurisdiction (ETJ) to control the extent and character of development in the city's periphery.*

- 2.16.1 Continue to control growth in the ETJ by requiring City approval of subdivision plats and all related permits in its ETJ through the established interlocal agreement with Denton County.
- 2.16.2 Ensure that proposed development in the ETJ is consistent with the Preferred Growth Concept, established future land use designations and standards, and preserves rural character and natural environment.
- 2.16.3 Discourage the establishment of Municipal Utility Districts (MUDs) in Denton's ETJ without appropriate development review.
- 2.16.4 Coordinate with surrounding municipalities as part of the approval process for development proposals in Denton's ETJ where the proposed development is in close proximity or where a municipality shares a boundary.

FIGURE 2.3: Denton City Limits & ETJ



Source: City of Denton

-  Municipal Boundaries
-  2013 City Limits
-  Non-Annexation Agreement Areas
-  ETJ
-  Water

* Areas identified on the map may be annexed within the timeframe of the annexation plan

GOAL LU-5: Grow with Character: Promote Development which Enhances Community Character and Functionality.

Policies and Actions

Maintaining Character:

An important source of community pride in Denton is the fact that the city has historically maintained a separate and distinct identity and character, from other rapidly growing neighboring communities. To ensure that this distinct character is retained, this series of policies and actions proposes a comprehensive review of the city's development standards influencing both development quality and character, including architectural and landscape character. In addition, development standards influencing the city's functionality should be reviewed, including "complete streets" design standards to promote walking, bicycling and transit use, as well as auto traffic.

In addition, unique areas of the city require a unique set of standards, applied through new Small Area Plans. These may include areas that have a unique character or sensitivity, such as the city's entrances and gateways, environmentally sensitive areas, and uses that pose unique challenges of compatibility, such as travel centers, which can exert impacts associated with truck traffic. Finally, while additional standards would primarily influence private sector development practice, it is appropriate that the City models a high standard for the design of public buildings, parks, and civic spaces. The Community Character and Urban Design Element contains general guidelines for the provision of a vibrant public realm, quality urban design of buildings, and creation of distinct "places."

2.17 *Revise development regulations and development review processes to facilitate and support desired forms of development and improved standards for urban design and placemaking.*

- 2.17.1 Adopt citywide design and development standards and guidelines specific to individual land uses and thoroughfares to improve development quality and functionality, including but limited to guidelines for urban design, site design, landscaping, green infrastructure and access management. (CC 4.16, M 6.1.1)
- 2.17.2 Create and apply additional Small Area Plans to address unique character areas and development conditions. (CC 4.2.7, 4.17.1, 4.17.2, 4.17.3)
- 2.17.3 Identify procedures to streamline and reduce time in the approval process for developments demonstrated to be consistent with the FLUM and the policies herein.

2.18 *Set a high standard of quality in the design of the public realm to enhance appearance and functionality.*

- 2.18.1 Enhance design standards pertaining to aesthetics and complete streets for future construction of public rights-of-way and thoroughfares. (M 6.1.3)
- 2.18.2 Coordinate design guidelines with Mobility goals and policies to achieve a functional street network for a wide range of transportation options. (M 6.13.1)
- 2.18.3 Establish public realm design guidelines for buildings, streets, and public spaces that will achieve an aesthetically-pleasing interface between the public and private realm. (CC 4.7, 4.8)

GOAL LU-6: Grow with Balance: Establish land use designations that respond to the growing needs and character specifications of the Denton community.

Policies and Actions

Future Land Use Map and Land Use Designations

The desired pattern of future land uses is depicted in Figure 2.4: Future Land Use Map (FLUM). When compared to the Existing Land Use Map (Figure 2.1), it becomes evident that the planned land uses reflect new patterns designed not only to accommodate the projected growth in population, but also to do so in creative ways that result in a more sustainable pattern, including greater use of mixed-use and targeted re-use and revitalization of designated centers and corridors.

The purpose of the FLUM is threefold: first, to depict the intended long-term pattern of residential, commercial, employment, and other supporting land uses, as articulated in the Community Vision Statement and through the land uses goals, policies, and actions. Second, the FLUM establishes the basis for adjustments to zoning district changes, development review procedures and other tools, to achieve the desired pattern and quality of development. Finally, the FLUM guides coordinated transportation and utility planning in order to ensure that facility capacities are consistent with the demands from anticipated levels and intensities of development.

The FLUM, however, does not constitute zoning, nor does it establish zoning district boundaries. Instead, the FLUM reflects Denton Plan 2030's broad policy for future distribution of land uses to be achieved through by the year 2030, to be used in guiding future re-zoning and other development decisions. The goals, policies, and actions below establish general descriptions and intent that will aid in development review and

the revision of the Denton Development Code, which guides development approval.

2.19 Establish residential future land use designations as part of the FLUM to create places for the growth and expansion of places for people to live in Denton.

Three distinct residential future land use designations are shown on the FLUM. Characteristics and guiding policies are described as follows:

Rural Areas (up to 1 unit per 5 acres)

This category includes farms and ranches as the predominant use along with rural (very low density) residential and rural commercial including feed stores, farm equipment, etc. This land use may allow lots as small as one acre under the gross density provision to allow for conservation development which clusters smaller lots while permanently protecting scenic rural open space. This land use may also include single-family homes on large lots, which is suited for areas on the periphery of



Rural Areas (up to 1 unit per 5 acres)

the city that complement a more suburban type of development. Development in this future land use category will continue the present character of the rural areas of Denton with low-profile homes of no greater than two stories, generous lots and setbacks, and materials that complement the natural surroundings and ranch heritage.

- 2.19.1 Establish the Rural Areas future land use designation to allow for low density residential development.

Development criteria of the Rural Areas Land Use:

- a. Development may include single-family homes on large lots as well as farms and ranches.
- b. Lots as small as half an acre under the gross density provision may allow for conservation development, which clusters smaller lots while permanently protecting scenic rural open space.
- c. Lots as small as one acre may allow for conservation development.
- d. Agricultural production, nurseries, and agricultural related structures is allowed by right.
- e. The largely rural scenic character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Residential – Low Density (up to 4 dwelling units per acre)

This category includes the city's predominantly single-family neighborhoods, with lot sizes ranging from 1 (one) acre or more in rural fringe areas up to four units per acre gross density throughout many of the city's suburban subdivisions. Dwellings in this land use district are generally one to two stories with private driveways and open space, consisting of



Low Density Residential

privately-maintained tree canopy and front, back and side yards. Building and driveway orientation, the locations of private garages, building material, and the presence of sidewalks vary by neighborhood and the era of neighborhood development. Generally these types of single-family neighborhoods are developed as distinct subdivisions that are linked by internal circulation systems with limited access to local and connector roads.

- 2.19.2 Apply the "Low Density" future land use designation for the development of lower density residential development.

Development criteria of the Low Density Residential Land Use:

- a. Development may include single-family residential development on up to quarter acre (10,890 square feet) lots.
- b. Development should be contiguous with existing developed areas of the city and consistent with the Preferred Growth Concept.
- c. A variety of housing styles, types and prices with large, newly developed neighborhoods is encouraged.

- d. Within established residential areas, new development should respond to existing development patterns, and design standards.
- e. New residential development should be organized to promote walkability, access to parks, open space, and recreation amenities and ideally should locate all residences within a five to ten minute walking distance from neighborhood-serving retail and other amenities such as parks and school facilities.
- f. Compact developments that include clustered, small lots with substantial retained open space are encouraged.
- g. Urban agriculture is encouraged.
- h. Places of worship, parks, and open space are allowed by right.
- i. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Residential – Moderate Density (4-12 dwelling units per acre)

This category accommodates single-family detached housing on small lots, typical of Denton’s more compact, established single-family neighborhoods and low-rise multi-family dwellings and townhomes. This land use applies to areas within the central areas of Denton and transition areas between established single-family neighborhoods and mixed-use or commercial areas that can accommodate greater density, or adjacent to key corridors. Dwellings in this future land use category vary in scale and style and may contain a great deal of diversity by each street and block. Most areas are characterized by rectilinear lots with modest front yards. Most streets are lined by sidewalks, but this is not prevailing throughout. Development is linked by local streets and is most commonly accessed by multiple intersections and points of access. While the land use primarily includes single-family

dwellings, multi-family dwellings, and townhomes may be located in this land use as well. While the quality of multi-family dwellings and townhomes currently varies, in the case of future infill development, they should maintain a scale, style, and building orientation in order to complement the prevailing character of its surroundings.

- 2.19.3 Establish the “Moderate Density” future land use designation to allow for the type of neighborhood development found in Denton’s established single-family neighborhoods, compatibility areas, and adjacent to mixed-use and commercial areas.

Development criteria of the Moderate Density Residential Land Use:

- a. Development may include single-family residential development on small lots, duplexes, townhomes, and low-density multi-family dwellings.
- b. Development should be within and adjacent to Denton’s existing neighborhoods, consistent with the Preferred Growth Concept.



Moderate Density Residential

- c. Residential development with a variety of housing styles, types and prices that is compatible with adjacent development is encouraged.
- d. Infill development should respond to existing development with compatible patterns, and design standards.
- e. New residential development should be organized to promote walkability, including sidewalks, and ideally should locate all residences a five to ten minute walk from neighborhood-serving retail and other amenities such as parks and school facilities.
- f. Urban agriculture is encouraged.
- g. Places of worship, parks, and open space are allowed by right.
- h. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

2.20 Establish mixed-use future land use designations as part of the FLUM to encourage compact, efficient, and active land use patterns.

Seven distinct mixed-use designations are shown on the FLUM, and described as follows:

Downtown Denton

This designation allows for moderate and high density residential, commercial, office, entertainment, and other uses except industrial, tailored to encourage a greater level of activity in Downtown, while protecting the scale and strengthening the character of Downtown and Denton's historic core. Downtown Denton is focused on the blocks surrounding the Square and will include development that complements and is oriented to this historic grid pattern of this area. As Downtown Denton is characterized by a particular scale and character, it is important that this be



Downtown Denton

maintained in future development. However, as the cultural heart of Denton, it is also appropriate to allow for a variety of uses that can help foster the economic viability and evolution of Downtown to serve the community's current preferences and needs. As significant infill opportunities exist in Downtown, development is encouraged, and design review should ensure sensitive design based on the criteria below.

- 2.20.1 Establish the Downtown Denton future land use designation to create distinction in Denton's Downtown and establish a mix of uses to contribute to its sense of place and vitality.

Development criteria of the Downtown Denton Land Use:

- a. Development should contribute positively to the image of Denton while being sensitive to the scale and character of Downtown and historic resources.
- b. Development should preserve historic structures and features wherever possible.
- c. Development should build upon and enhance the city's regional draw and economic base.

- d. Typical downtown activities may include destination shopping, restaurants, local business, employment, entertainment venues, government and civic uses, schools, parks and open space and high-density residential.
- e. Vertical mixed-use that contribute to the prosperity of Downtown Denton's commercial district are encouraged.
- f. Development should address the public realm and contribute to a vibrant environment for pedestrians and bicycles.
- g. Urban agriculture is encouraged.
- h. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Downtown Compatibility Area

This designation applies to residential and commercial areas adjacent to the Downtown core that are affected by their proximity to Downtown. This designation serves to create compatible form and uses for the areas that serve to strengthen both the Downtown and adjacent neighborhoods. Development in this area currently is a mix of commercial, residential and some industrial uses. Due to a lack of overriding character, achieving a distinctive character in this area is a goal rather than an attribute to maintain. Significant infill opportunities exist in this area, and development is encouraged to help fill in and soften this transition area between Downtown and adjacent residential neighborhoods.

- 2.20.2 Establish the Downtown Compatibility Area future land use designation to provide compatibility between the intensity and activity of Downtown Denton and adjacent residential and commercial areas.



Downtown Compatibility Area

Development criteria of the Downtown Compatibility Area Land Use

- a. The Downtown Compatibility Area should allow for uses that provide a transition between Downtown and surrounding neighborhoods.
- b. Typical uses include moderate to high-density residential, neighborhood-serving retail, restaurants, commercial and office.
- c. Development should encourage uses that are in close proximity to one another so that all uses are accessible from a single stop or by walking or bicycling.
- d. Development should address the public realm and contribute to a vibrant environment for pedestrians and bicycles.
- e. Development should preserve historic structures and features wherever possible.
- f. Places of worship, schools, parks, and open space, are allowed by right.
- g. Urban agriculture is encouraged.
- h. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Regional Mixed-use

This designation applies to areas that serve as regional destinations within Denton. Development may include moderate and high density residential, commercial, office, entertainment and other uses except industrial, at the highest levels of scale and density within the city. Unique development standards are proposed to create the walkable urban character and day and nighttime activity of an urban center. Major medical and health care institutions and the areas of influence around them are included in this future land use designation. This designation is located primarily along I-35 interchanges and along primary arterials to encourage the greatest regional accessibility. Future development in Regional Mixed-use areas will complement and embrace existing, viable uses, and raise the standard of design to increase their regional draw, accommodate greater connectivity and mobility options, and create a sense of place. Focus areas in the Regional Mixed-use category may be the subject of Small Area Plans. (CC 4.12.1)

- 2.20.3 Establish the Regional Mixed-use future land use designation to encourage mixed-use development that serves the entire Denton community at large as well as draws from adjacent municipalities and within the DFW Metroplex.

Development criteria of the Regional Mixed-use Area Land Use

- a. 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.

- b. Allowable uses may include national retailers, employment, restaurants and entertainment venues, and high-density housing.
- c. Uses should create destinations and augment the regional draw and image of Denton.
- d. Commercial uses should be programmed appropriately to serve a regional market and to be compatible with adjacent land uses.
- e. Diverse uses should be located in close proximity to one another so that all uses are accessible from a single stop or by walking or bicycling.
- f. Development should be sited accessible to transit routes.
- g. Places of worship, schools, and parks and open space are allowed by right.
- h. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.
- i. Proposals should be presented and reviewed according to the degree to which they achieve the goals of the Regional Mixed-use land use and may be the subject of Small Area Plans, when significant developments are proposed.



Regional Mixed-use

Community Mixed-use

This designation is intended to promote a mix of uses, of which various commercial uses remain predominant, but where residential, service, and other uses are complementary. This land use applies to existing and future commercial areas in the city, where redevelopment to mixed-use is desirable. The intent is to encourage infill and redevelopment for a more diverse and attractive mix of uses over time. Examples include residential units over commercial uses or a wider array of economically viable uses to replace obsolete uses such as former car sales lots and vacated big box stores. Such areas also may represent opportunities for the introduction of higher density and mixed housing types, without impacting, nearby single-family neighborhoods. Future development in Community Mixed-use areas will complement and embrace existing, viable uses, and raise the standard of design to increase their economic viability, accommodate greater connectivity and mobility options, and create a sense of place to serve the local community. Focus areas in the Community Mixed-use category may be the subject of Small Area Plans. (CC 4.12.1)

- 2.20.4 Establish the Community Mixed-use future land use designation to encourage mixed-use development that serves the Denton community at large.

Development criteria of the Community Mixed-use Area Land Use

- a. Allowable uses may include shopping, services, recreation, employment, and institutional facilities that are required and supported by the surrounding community. Typical types of development may include a supermarket, drug store, specialty shops, service stations, midsize offices, employers, and high- to moderate density housing.
- b. Places of worship, schools, and parks and open space are allowed by right.
- c. Diverse uses shall be located in close proximity to one another so that all uses are accessible from a single stop or by walking or bicycling.
- d. Vertical and horizontal mixed-use is encouraged.
- e. Development should be sited accessible to transit routes.
- f. Commercial uses should be programmed appropriately to serve the local Denton community and to be compatible with adjacent land uses.
- g. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.
- h. Proposals should be presented and reviewed according to the degree to which they achieve the goals of the Community Mixed-use land use and may be the subject of Small Area Plans, when significant developments are proposed.



Community Mixed-use

Neighborhood Mixed-use

This designation applies to neighborhoods or districts where the predominant use is residential, but with a mix of compatible housing types and densities along with local-serving, non-residential retail and service uses. Such use mixes are typically found in established neighborhoods in the city's core that accommodate local services. This designation is also applied in areas of future development suited primarily to single-family development, but where neighborhood-serving retail and services are critical to achieving balanced, accessible neighborhoods. At these locations, a diverse mix of housing types and densities may also be accommodated. Ensuring that buildings are of the appropriate scale and intensity to complement the surrounding neighborhood and environment is critical. Future development in Neighborhood Mixed-use areas will complement and embrace existing, viable uses, and raise the standard of design to increase connectivity and mobility options, and create a sense of place to serve the neighborhood. Focus areas in the Neighborhood Mixed-use category may be the subject of Small Area Plans. (CC 4.12.1)

- 2.20.5 Establish the Neighborhood Mixed-use future land use designation to encourage mixed-use development that serves individual neighborhoods within Denton.

Development criteria of the Neighborhood Mixed-use Area Land Use:

- a. 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, daycare, and small offices.
- b. Development should be located close to existing or proposed residential development at a scale that can promote walking and bicycling.
- c. Vertical and horizontal mixed-use is encouraged.
- d. Moderate to high density residential use is allowed.
- e. Commercial uses should be programmed appropriately to serve a neighborhood-serving market and to be compatible with adjacent land uses.
- f. Development should be sited accessible to transit routes.
- g. Places of worship, schools, and parks and open space are allowed by right.
- h. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.
- i. Proposals should be presented and reviewed according to the degree to which they achieve the goals of the Neighborhood Mixed-use land use and may be the subject of Small Area Plans, where necessary.



Neighborhood Mixed-use

Business Innovation

This designation is intended for large tracts of land that are appropriate for well-planned, larger scale office and employment parks with supporting uses such as retail, hotels, and residential. Primary uses include office, research and development, and light manufacturing. The primary uses should be developed in a campus-like or corporate park setting that may include generous, linked open space to maximize value and to promote visual quality and compatibility with the surrounding area. This designation is proposed throughout the city in areas that are in close proximity to commercial use areas and employment hubs in the city, so that future development may build from this proximity and create a critical mass for economic development. The mixed-use nature of these areas will ensure that employment areas will benefit from complementary retail and services throughout the day.

- 2.20.6 Establish the Business Innovation future land use designation to encourage locations for traditional and innovative office developments.



Business Innovation

Development criteria of the Business Innovation

Land Use:

- a. Typical uses may include office parks and flexible office space to encourage the establishment of research and development enterprises, start-ups, and opportunities for business innovation.
- b. Supporting and complementary retail and services are allowed by right.
- c. Publicly-accessible parks and greenways and continuity with the pedestrian and bicycle network is encouraged.
- d. Development should be sited accessible to transit routes to encourage taking transit to work.
- e. Development should be sited nearby to existing residential areas to encourage jobs located close to employment centers.
- f. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Neighborhood / University Compatibility Area

This land use designation applies to residential and commercial areas adjacent to University of North Texas (UNT) and Texas Woman's University (TWU) that are affected by their proximity to the university. Currently these areas are characterized by university buildings abutting, in many cases, single-family neighborhoods. As the universities are projected to increase in enrollment, which will require additional facilities and student housing, this designation is to create compatible form and land uses for the areas that serve both the established neighborhoods and the universities.

- 2.20.7 Establish the Neighborhood / University Compatibility Area future land use designation to allow for appropriate and high quality development adjacent to Denton's universities.

Development criteria of the Neighborhood / University Compatibility Area Land Use:

- a. The Neighborhood / University Compatibility Area should provide a gradual transition in scale, use, character, and intensity between the universities and surrounding neighborhoods.
- b. Typical uses include moderate density residential, neighborhood-serving retail, restaurants, commercial and office, that can serve both students and neighborhood residents and university students.
- c. Uses that may result in noise or traffic impacts on residential neighborhoods should be located strategically to minimize conflicts.
- d. The university master plans and facilities departments should be consulted for any new development occurring in these areas.
- e. Development should encourage uses that are in close proximity to one another to encourage walking and bicycling.
- f. Development shall address the public realm and contribute to a vibrant environment for pedestrians and bicycles.
- g. Development should preserve historic structures and features wherever possible.
- h. Places of worship, schools, and parks and open space are allowed by right.
- i. Proposals should trigger coordination between the university entity, City of Denton, and affected community residents in order to ensure that future development is sensitive to the goals of the community, the university, and the overarching goals of Denton Plan 2030.



Neighborhood / University Compatibility Area

- j. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

2.21 Establish Non-Residential future land use designations as part of the FLUM. Characteristics and guiding policies are described as follows:

Non-Residential

Four distinct, non-residential future land use designations are shown on the FLUM, and described as follows:

Commercial

This designation applies to concentrations of commercial uses, including regional, community, and neighborhood shopping centers. Such properties may not be expected to undergo redevelopment or a change in use over the Plan horizon, and the immediate areas in which they are located may not be suitable for the introduction of mixed-uses. While some new commercial centers are anticipated, in general new retail and commercial service uses are encouraged within more diversified

mixed-use centers. Future commercial areas are maintained to accommodate existing viable commercial uses, as well as commercial uses that may not be appropriate to be located in a mixed-use format, such as auto-oriented uses, and stand-alone commercial uses to serve outlying areas of the city.

- 2.21.1 Establish the Commercial future land use designation to allow for commercial development.

Development criteria of the Commercial Land Use:

- a. The amount of commercial development should be balanced appropriately with existing and proposed residential land use.
- b. Commercial development should be compatibly designed with adjacent neighborhoods, or in the case of new development, address the street, and create an active public realm and sensitivity to the natural context.
- c. Mixed-use designation with coordinated access management along Denton's arterial streets, collectors, and highways is encouraged (DP p.42.)
- d. Stand-alone big box stores are discouraged.



Commercial

- e. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Government/ Institutional

This designation applies to government-owned land, university and college campuses, and similar large-scale institutional activity centers. Development in these land use areas is typically subject to particular guidelines and therefore outside of the oversight of development review. It is important, however, that transitions to adjacent land uses are considered in the development of future government and institutional-related uses. In the case of universities, these are addressed within the Neighborhood / University Compatibility Area future land use district. Coordination on future development will ensure that these land uses are appropriately designed. Besides their function in delivering governmental service, government and institutional use include structure that often become architectural and visual landmarks which adds to the community's sense of place and identity. Consequently development of future governmental and institutions uses should recognize principles of place-making. (LU 2.4.1)

- 2.21.2 Establish the Government/ Institutional future land use designation to include government-owned land and institutional uses.

Development criteria of the Government/ Institutional Land Use:

- a. Development should include buildings and sites meant to serve a particular service need to the City of Denton, such as the City landfill, water and wastewater facilities, Denton Municipal Electric facilities, Denton Enterprise



Government/ Institutional

Airport, and entities that are self-governing, such as the universities and the DISD.

- b. Development should be organized to enhance key corridors, and create landmarks and a sense of place in Denton.
- c. Development should be located to provide shared facilities and the most efficient use of land.
- d. Potential nuisance development should be sited to avoid conflicts with sensitive land use.
- e. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Industrial Commerce

This designation applies to areas where the predominant use include both light and heavy industrial uses, such as manufacturing, assembly, fabrication, and wholesaling and distribution may be introduced to replace underutilized, heavy industrial uses or house future industrial development. This designation is located primarily west of I-35W near the Denton Municipal Airport. It is important in



Industrial Commerce

future development that transitions to adjacent sensitive land uses are considered.

- 2.21.3 Establish the Industrial Commerce future land use designation to allow for industrial development.

Development criteria of the Industrial Commerce Land Use:

- a. Uses may include manufacturing, warehousing and distributing, and a wide range of industrial operations.
- b. Complementary and supporting uses such as convenience shopping and child care centers are allowed.
- c. Development should be sited to avoid conflicts with sensitive land uses.
- d. Future development should include a variety of transportation options for access, including links to transit, bicycle, and pedestrian facilities.
- e. The character of this area should be maintained by ensuring that new development is sensitive to the surrounding built and natural context in scale and form as described above.

Parks and Open Space

This designation applies to existing large scale parks and protected open spaces of citywide significance which are expected to remain as open space in perpetuity. These are illustrated on Figure 5.1: Parks. Potential future large-scale park acquisitions, as well as smaller neighborhood parks and recreational uses, are not illustrated, as they may be included in a variety of future land use districts as allowable uses. The Conservation and Environment Element contains guidelines pertaining to parks and open spaces.

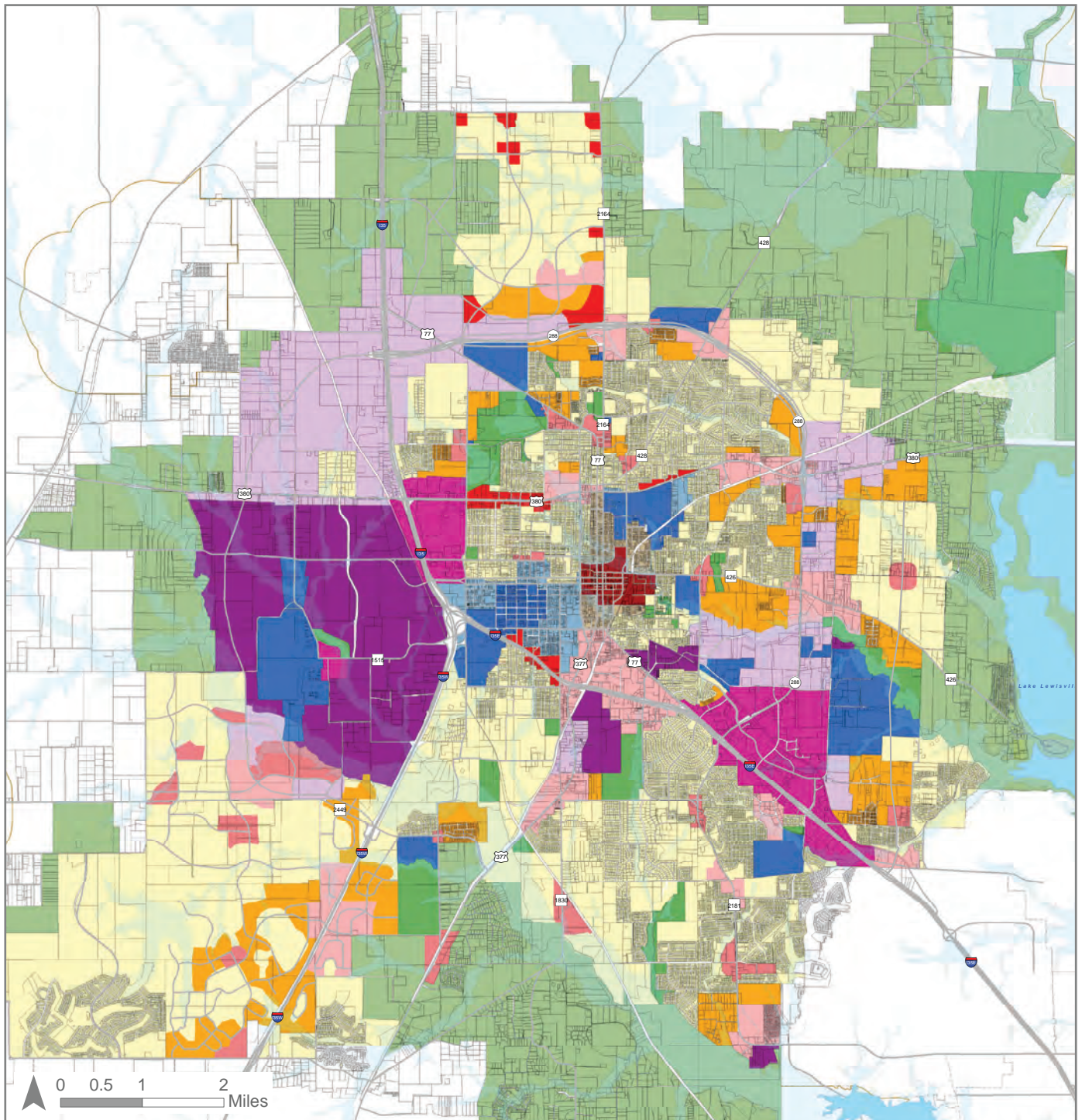
- 2.21.4 Development in the Parks and Open Space future land use designation should be subject to the goals, policies and actions of the Parks, Conservation, and Environment Element and the *Parks, Recreation and Trails System Masterplan*. (PCE 5.1.2)



Parks and Open Space

DRAFT

FIGURE 2.4: Future Land Use Map



Source: City of Denton, GIS; WRT, August 29, 2014/

LEGEND

<ul style="list-style-type: none"> Parcels Future Roadway Major Roads Proposed Lakeview Post Oak Lakes 	<p>Future Land Use Designations</p> <p>Residential</p> <ul style="list-style-type: none"> Rural Areas Residential - Low Density Residential - Moderate Density <p>Mixed Use</p> <ul style="list-style-type: none"> Downtown Denton 	<ul style="list-style-type: none"> Downtown Compatibility Area Regional Mixed Use Community Mixed Use Neighborhood Mixed Use Neighborhood/University Compatibility Area Business Innovation 	<p>Non-Residential</p> <ul style="list-style-type: none"> Commercial Industrial Commerce Government / Institutional Parks and Open Space 	<p>FEMA Floodplain</p> <ul style="list-style-type: none"> 0.2 PCT 1 PCT A AE X X PROTECTED
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3) FISCAL AND ECONOMIC VITALITY

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FISCAL AND ECONOMIC VITALITY OVERVIEW

The goals, policies, and actions necessary to ensure the sustained vitality of Denton must celebrate Denton's strengths, support the community and welcome visitors, grow the economy, and ensure an infrastructure system capable of evolving with growth. The Fiscal and Economic Vitality Element provides information needed to address the impacts of new and different development in Denton, and provides a framework for budgeting for the financial implications of growth.

This Element explores approaches available to Denton to provide fiscally responsible infrastructure and public facilities necessary to support the community and economic development goals put forth throughout Denton Plan 2030. Results of a Fiscal Impact Analysis (FIA) that was conducted by TischlerBise concurrently with the scenario development process inform the economic and fiscal policy and action recommendations of this Element. The methodology used in, and major conclusions of the FIA are best understood in the Fiscal Impact Analysis report provided as a supplement to the Denton Plan 2030. The FIA used the development assumptions of each scenario and the Preferred Growth Concept to project a fiscal picture for the City through the Plan horizon (2030). The FIA evaluated both cumulative fiscal impacts over the Plan horizon, as well as on an annual basis. Order-of-magnitude fiscal impacts of each growth scenario were shared with the community at Community Forum 2, and informed the formation of the Preferred Growth Concept, and subsequently, the FLUM.

Fiscal impact analyses enable a city to estimate the difference between the costs of providing services for new development and the taxes, user fees, and other revenues generated by new development. The intent of a FIA is to guide policy decisions regarding revenue enhancements, and maintaining community facilities and services in keeping with population growth, otherwise known as levels of service. Major conclusions of the FIA inform the Fiscal and Economic Vitality Element through policy and action recommendations to use on current strengths to diversify the economy, explore opportunities for revenue enhancement, and encourage a development pattern that maximizes existing infrastructure. The Fiscal and Economic Vitality Element discusses why it is important for Denton to:

- Implement the Denton Plan 2030 policies and actions as a means to spur economic growth.
- Implement policies and actions to ensure the City's long-term fiscal sustainability.
- Establish and maintain levels of service for infrastructure and public facilities through the annual Capital Improvement Plan.
- Conduct additional fiscal impact analyses and revenue enhancement strategies.

FISCAL AND ECONOMIC VITALITY IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is fertile territory for **creativity** and **innovation** in our vibrant music and arts scene, **technology**, **business**, and **education**.

Our People, Institutions, and Government

- We cherish our **artists and musicians** and celebrate our community in local **events and festivals** that reflect the uniqueness of the community.
- The City of Denton is a healthy, **family-friendly** community which sees its **youth as its most valuable resource**; a resource worthy of investment in education, healthful **recreation**, and opportunities for challenging and rewarding **employment** and **engagement in civic affairs**.
- The City of Denton's **institutions of higher learning**, UNT and TWU, are **partners** with government, civic organizations, and local employers in initiatives to **foster creativity in the arts, innovation**, a strong **economy**, **life-long learning**, and the retention of the best and brightest.

The Strength of Our Economy

- We **leverage** our strategic location, **universities**, and **medical institutions**, as a **national leader in technological and knowledge-based innovation**, allowing us to attract and retain a highly **educated** and **motivated workforce**.
- We **leverage** our **strategic location** and **multi-modal accessibility** in the Metroplex and capitalize on key assets such as **the Denton Enterprise Airport**.
- We value and support our **major manufacturing employers** and other responsible corporate citizens to **ensure their stability**, encourage their **commitment to Denton**, **facilitate their expansion**, and **leverage their presence** by **accommodating their suppliers, supporting businesses**, and workers.
- We **support and encourage** our **entrepreneurs** and small businesses with a **business-friendly attitude** and **efficient regulations** and permitting.
- We market our **Denton "brand,"** our unique, creative atmosphere and small town quality of life, which attracts a highly educated and motivated workforce and gives Denton a **competitive advantage** in attracting new investment, entities, and well-paying jobs.
- We attract corporations and businesses which have a strong sense of corporate responsibility to the environment, the community, and their governance and who take active roles as being excellent corporate citizens.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- A **compact development** pattern which includes expanded areas of **mixed-use**, a broad array of **housing** and **retail choices** responding to changing demographics and market preferences, and **re-investment** and **infill** in established areas of the city.
- An efficient **transportation system** with a safe and **well-connected road network** which accommodates a wide array of **mobility options**, including local and commuter rail **transit**, as well as accommodations for **pedestrians** and **cyclists**.
- **Infrastructure** systems which have undergone **well-planned, staged expansion** to serve and **guide the city's growth**.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Contiguous, staged growth** which is **fiscally** and **environmentally sound**, **reduces fragmentation** and **sprawl**, discourages premature development, and conserves the City's future growing room.

Economic Vitality

A strong and diverse economy is fundamental to achieving the Denton Plan 2030 vision. The economic and workforce development policies and actions ensure that Denton continues to be a community of choice, specifically for the new graduates entering the workforce, and growth-oriented businesses in need of skilled talent. The economic base envisioned by the Denton Plan 2030 capitalizes on local competitive advantages, focuses on the export of products and services, and the importing of income and discretionary dollars.

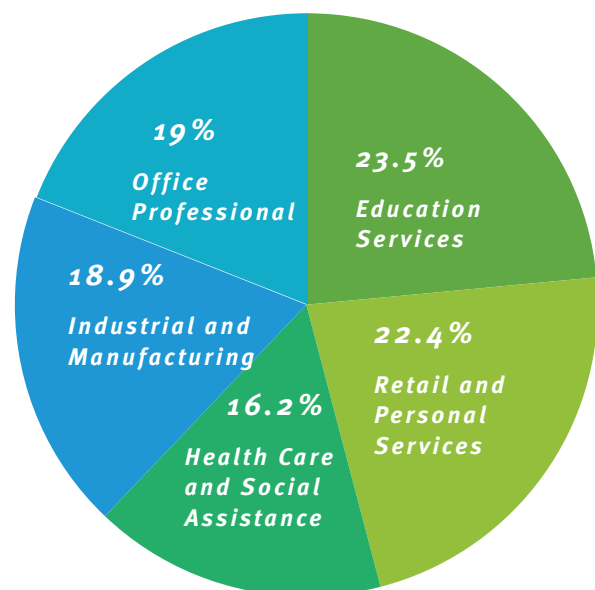
It is through a growing economy that the City of Denton will drive the private and public investments necessary to improve the quality of life and place desired by the community. For example, the two growing universities are economic engines in their own right, and the student bodies are a significant asset for the city. The universities serve as economic building blocks from which research partnerships can emerge, employers can staff jobs, and entrepreneurial start-ups can spin off. According to 2011 data from the U.S. Census Bureau (the most recent data available), nearly a quarter (23 percent) of the jobs located in Denton are in Education Services. These jobs are disbursed in all levels of education, and demonstrate a concentrated investment in workforce development. As the universities evolve their educational programs to prepare new graduates to fill well-paying jobs offered by jobs offered by growing industries, the City can strengthen its position as an education hub.

As a core city, Denton hosts a large share (22 percent) of the region's commercial, retail, and personal services jobs. While not growth-oriented industries, a strong commercial sector increases vibrancy of the city and imports dollars from the surrounding region as visitors shop, dine and enjoy entertainment in the city. Denton also benefits from a strong Health Care and Social

Assistance industry, hosting 16 percent of 2011 jobs in Denton. These companies help to increase the quality of life for Denton's citizenry and serve as an economic building block both as employers and by generating revenue from patients and visitors coming to the city to access services.

Denton benefits from having a diverse industry base. Economic diversity creates a stable base, able to weather the ups and downs of any specific industry sector with less interruption to the city's economy. The remaining 39 percent of existing jobs are distributed across the other major industry sectors. These jobs include activity in the industrial zone surrounding the Denton Enterprise Airport, which is one of Denton's most crucial competitive advantages. Denton Plan 2030 protects the airport as an economic asset, by providing policies and actions designed to recruit growth-oriented business dependent on a diverse and reliable transportation network, and provides direction to use the asset to increase export-oriented industrial activity.

Figure 3.1: City of Denton Industry Employment



Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination 2011 Employment Statistics: Denton Work Area Profile All Jobs, and Home Area Profile All Jobs

GOAL FEV-1: Ensure the long-term financial stability of the city with fiscally responsible policies and actions.

Policies and Actions

Economic Development and Land Use:

Denton hosts two growing universities, a thriving music scene, a growing high-tech industry sector, and a high capacity municipal airport with opportunities for expansion. Denton Plan 2030 identifies strategies to celebrate the unique character of Denton, by encouraging complementary development, environmental stewardship, and economic diversification. It looks to use the built environment to retain and attract professional, creative, and entrepreneurial talent looking for economic success and quality of place. As the development pattern shifts to more compact development, land use regulations will be used to encourage the development/redevelopment of underutilized areas. These may include, but are not limited to, reduced parking requirements in exchange for increased density allowances or multi-modal infrastructure investments, or scaled impact fees in core service areas.

3.1 Use the Future Land Use Map (FLUM) to ensure adequate development areas exist to support a self-sustaining economy with a diversity of live/work/play development opportunities.

- 3.1.1 Ensure adequate land for future economic growth, particularly in the Industrial and Business Innovation future land use categories, providing a sufficient buffer zone between protected land uses.
- 3.1.2 Partner and collaborate with developers to provide sufficient workforce housing to meet market demands and diversify housing choices.

- 3.1.3 Incentivize the development or redevelopment of mixed-use projects that provide flexible space for commercial, office, and residential use.
- 3.1.4 Develop a strategy for evaluating zoning and comprehensive plan amendments for long-term fiscal impacts.

3.2 Ensure the development of new workplaces that are close to and complement surrounding residential, civic, and recreational land uses. (DP p.50)

- 3.2.1 Use the FLUM as the guide to all future development, which as an extension of the Preferred Growth Concept places jobs and residences in close proximity where appropriate. (LU 2.2)

Economic Development and Partnerships:

Denton is part of a larger economic region that radiates out from Dallas and Fort Worth. Denton's economic growth depends on the growth of the larger region. Therefore, it is important for Denton to be an active member of regional economic development organizations such as Chambers of Commerce and Convention and Visitor Bureaus. Affiliations with these types of organizations can help the City monitor economic trends, understand the needs and opportunities associated with target industries, recruit new businesses, retain or expand existing companies, and develop targeted workforce training partnerships.

Target industries are those with high growth potential. They are identified based on their potential to provide the greatest number of well-paying jobs and economic growth. The target industries should include those already identified as important

and growing industries in Denton like arts and entertainment, and the high-tech sector.

3.3 Update the City's economic development strategy to identify and recruit target industries.

- 3.3.1 Conduct a market feasibility study to identify target industries, and establish procedures to reevaluate the study regularly.
- 3.3.2 Work with the regional Chambers of Commerce and Convention and Visitors Bureaus to increase Denton's visibility among the identified target industry employers and their trade organizations.
- 3.3.3 Build partnerships between industry, local K-12, and post-secondary institutions (specifically TWU and UNT) to design training programs to provide the workforce for the identified target industry employers and entrepreneurs (DP p.51).
- 3.3.4 Actively recruit new business to the Denton Enterprise Airport, EcoWorks, and UNT's Discovery Park area.
- 3.3.5 Develop public private partnerships to ensure adequate space for the growth of small businesses, entrepreneurs, and spin-off local businesses of the target industries' larger employers.
- 3.3.6 Identify development design standards for greenfield and infill development to streamline the development review process for future applicants.



Denton Enterprise Airport



Downtown Denton

GOAL FEV-2: Improve the City's job-to-worker ratio by increasing the number of jobs available to the resident workforce and local graduates.

Policies and Actions

Workforce Development:

According to 2011 Census Bureau data (the most recent data available), the city's residential labor force is over 80,000 but only 50,652 city residents are employed. Economic development programs specifically designed to attract growth industries may help raise the city's jobs-to-population ratio, and provide more employment opportunity for city residents. The at-place job/worker ratio is an indication of how well the residential workforce of an area meets the needs of the industries present in the area. Table 3.1 shows an estimate of jobs located in Denton in 2011, and an estimate of employed residents of the city. A job/worker ratio higher than one means there are more local jobs in a particular industry than there are residents employed in the industry, suggesting an opportunity for the city to facilitate conversations with the local higher education institutions to provide workforce development programs specific to local industry demands. For industries like Manufacturing and Health Care and Social Assistance, which have more jobs located in the city than there are employed residents in the industries, Denton should support workforce development programs designed to train the needed workers for these important industries.

From an economic development standpoint, ratios less than one present opportunities for business recruitment by demonstrating a residential workforce with specific industry experience. For the growth-oriented industries including Information, and Professional, Scientific and Technical Services Denton can demonstrate a ready workforce to serve incoming or start-up businesses.

Any strong economic development strategy for the City must include a workforce training component to ensure new graduates and all residents have the skills needed to serve the local industries. A well-educated labor force is critical for successful business attraction and retention. Developing an educated labor force begins with early education for city youth, and continues on to serve all age and skill levels of the labor pool. In addition to working with public and private education institutions to provide high-quality targeted education programs, the economic development strategy encourages regional connections to create opportunities for local industries to partner directly with the education institutions to develop workforce training curricula designed to feed the tiered skill demands of local employers.

- 3.4 *Improve the workforce opportunities for the resident labor force and local university graduates.***
- 3.4.1 Facilitate partnerships between private industry, the public and private schools, and industry and trade groups to support business recruitment and expansion efforts.
 - 3.4.2 Strengthen partnership and collaboration with the universities to grow workforce development opportunities between the educational programs, the Denton Enterprise Airport, and the aviation/aerospace industry.
 - 3.4.3 Recruit highly skilled talent and high-growth businesses to grow as a high-tech hub.
 - 3.4.4 Partner and collaborate with UNT, North Central Texas College (NCTC), and TWU to connect employer needs with degrees and programming.

Table 3.1: City of Denton Employment Profile

Count of Jobs & Workers for each industry present in Denton			
Industry Sector	City of Denton		
	Jobs	Workers	Job/Workers Ratio*
All Jobs	57,521	50,652	1.14
Agriculture, Forestry, Fishing and Hunting	51	138	0.37
Mining, Quarrying, and Oil and Gas Extraction	601	455	1.32
Utilities	386	377	1.02
Construction	1,595	2,125	0.75
Manufacturing	5,747	3,885	1.48
Wholesale Trade	1,574	2,540	0.62
Retail Trade	6,094	5,792	1.05
Transportation and Warehousing	915	1,837	0.50
Information	479	1,055	0.45
Finance and Insurance	1,257	2,169	0.58
Real Estate and Rental and Leasing	730	912	0.80
Professional, Scientific, and Technical Services	2,310	2,930	0.79
Management of Companies and Enterprises	963	552	1.74
Administration & Support, Waste Management and Remediation	1,843	3,150	0.59
Educational Services	13,498	8,334	1.62
Health Care and Social Assistance	9,311	5,838	1.59
Arts, Entertainment, and Recreation	203	688	0.30
Accommodation and Food Services	5,368	4,834	1.11
Other Services (excluding Public Administration)	1,240	1,336	0.93
Public Administration	3,356	1,705	1.97

* A job/worker ratio higher than one means there are more local jobs in a particular industry than there are residents employed in the industry.

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination, 2011

Employment Statistics: Denton Work Area Profile All Jobs, and Home Area Profile All Jobs



University of North Texas

GOAL FEV-3: Increase Denton's tourism and entertainment potential.

Policies and Actions

Tourism and Entertainment in Denton:

Denton is a growing city with “small town” charm and hospitality. Organizations like the Denton Main Street Association (DMSA) have a focused mission to preserve the historic charm, and to support the small, often locally owned, businesses that define Downtown as a destination for shopping, dining, and entertainment. As the economic and workforce development goals seek to grow Denton's population and economic activity, it is important to support efforts to preserve the heritage and economic activity that define the small town character celebrated by Denton's citizenry.

As host to two growing universities and a high capacity municipal airport, Denton has a higher than average visibility outside its immediate economic region. The city captures national attention as a high-tech hotspot, and for a flourishing music entertainment scene. These are unique assets for the city. They provide excellent opportunity for the City to market itself as a tourist destination. As part of a comprehensive economic development strategy, the national attention provides an opportunity to grow the economy.

Tourism is about attraction and retention. Lake Ray Roberts, Lake Lewisville, the Greenbelt Corridor, and annual events and festivals play an important role in attracting visitors to Denton. Every effort should be made to preserve these amenities, and to build links between recreation, entertainment, and economic activity in Denton to attract more visitors and extend their time spent in the city. Capitalizing on Denton's unique assets will require a well-designed branding and marketing campaign to

attract visitors. Once attracted, it is equally important for the City to implement a placemaking strategy to help define and celebrate Denton's character, while helping visitors navigate the city and experience as much as possible. A well-designed placemaking strategy is one component of a comprehensive economic development strategy and an external marketing campaign. It uses the City's marketing and branding imagery to celebrate Denton's amenities and help visitors navigate the city. It will support the mission of key organizations by highlighting the diversity of retail, dining, and service offerings. It will improve circulation by highlighting the options for pedestrians and cyclists, which also supports vibrancy of commercial activity.

As the future land use development pattern evolves to create multiple district centers in Denton, it will be important for a well-designed branding and placemaking strategy to help define districts with unique character while unifying all of Denton under a larger marketing campaign.

3.5 **Create a Citywide Branding and Placemaking Strategy. (CC 4.2.1)**

- 3.5.1 Use innovative placemaking, wayfinding, and gateway strategies to define the City and welcome visitors, with the goal to extend time spent in the City.
- 3.5.2 Market, promote, and support the diversity of industry presence in Denton and the opportunity for industry cluster growth.
- 3.5.3 Market, promote, and support the Arts, Music, and Recreation industries. (CC 4.7.1, 4.8.5, PCE 5.4.5)



Tourism and entertainment in Denton - Thursday Night Tunes

- 3.5.4 Implement the *Pedestrian and Bicycle Linkage Component of the Mobility Plan* to increase access and visitation to recreation, retail, and entertainment districts (M 6.14).
- 3.5.5 Develop and implement a strategy to centralize and coordinate (not standardize) communication and marketing efforts among all City departments and entities.
- 3.5.6 Identify different communication and marketing efforts among all City departments and entities and determine how they relate to each other.
- 3.6 ***Work with organizations to design, promote, and advertise events for Downtown.***
 - 3.6.1 Support efforts to preserve and promote the history of Downtown.
 - 3.6.2 Work to support the small, local businesses that create vibrancy in the Downtown and serve as destinations within the city.
 - 3.6.3 Actively promote historic preservation as a means to increase economic, cultural, and educational diversity (DP p. 96).

Fiscal Vitality

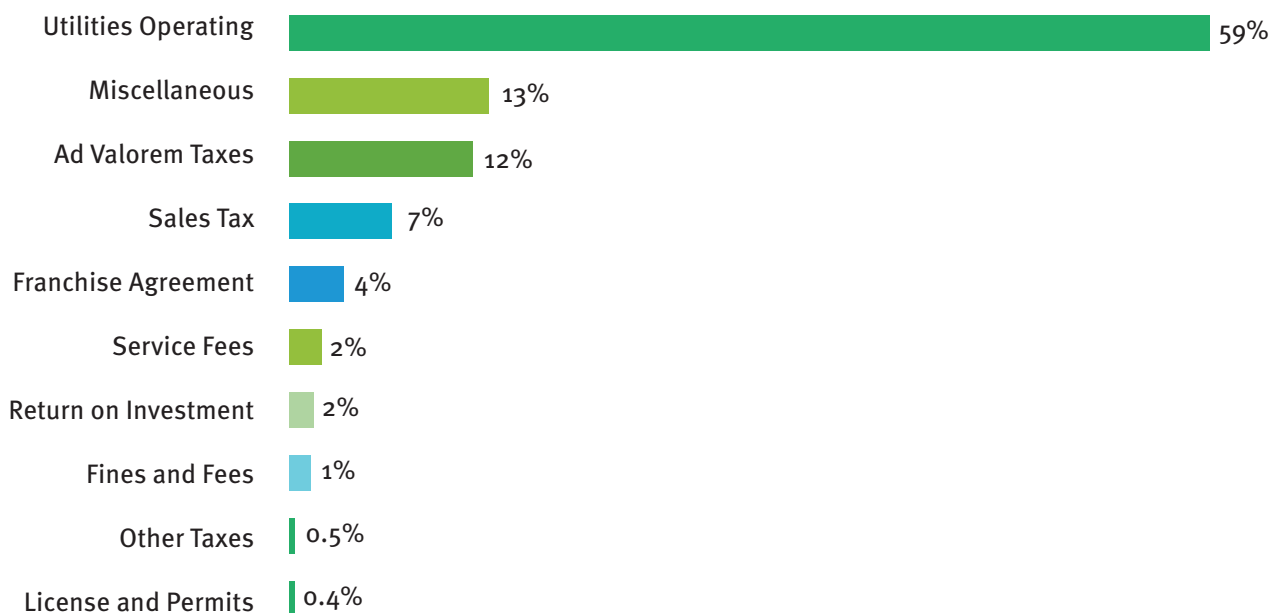
Fiscal Impact Analysis:

The Denton Plan 2030 update included a fiscal impact analysis which informed the formation of the Preferred Growth Concept, and the Future Land Use Map (FLUM), as described in the Plan Framework. The Fiscal Impact Analysis (FIA) used development assumptions to project a fiscal picture for the City through the Plan horizon (2030), and was used to frame the policies and actions of this Element. The FIA evaluated both cumulative fiscal impacts over the Plan horizon, as well as on an annual basis. Order-of-magnitude fiscal impacts of each growth scenario were shared with the community at Community Forum 2, and informed the formation of the Preferred Growth Concept, and subsequently, the FLUM.

Fiscal impact analyses enable a city to estimate the difference between the costs of providing services for new development and the taxes, user fees, and other revenues generated by new development. The intent of a FIA is to guide policy decisions regarding revenue enhancements, and maintaining community facilities and services in keeping with growth, otherwise known as levels of service.

The FIA examined revenue generation, and operating and capital costs to Denton associated with the provision of public services and facilities to serve the new residential and nonresidential development projected by each growth scenario. It includes all direct revenues and costs associated with each growth scenario. All General Fund, Debt Service Fund, Recreation Fund, and Street Improvement Fund revenues were evaluated. Only revenues in these funds increase due to growth and were, therefore, included in this analysis. The FIA showed direct revenues and costs from new development only and did not include revenues or costs generated

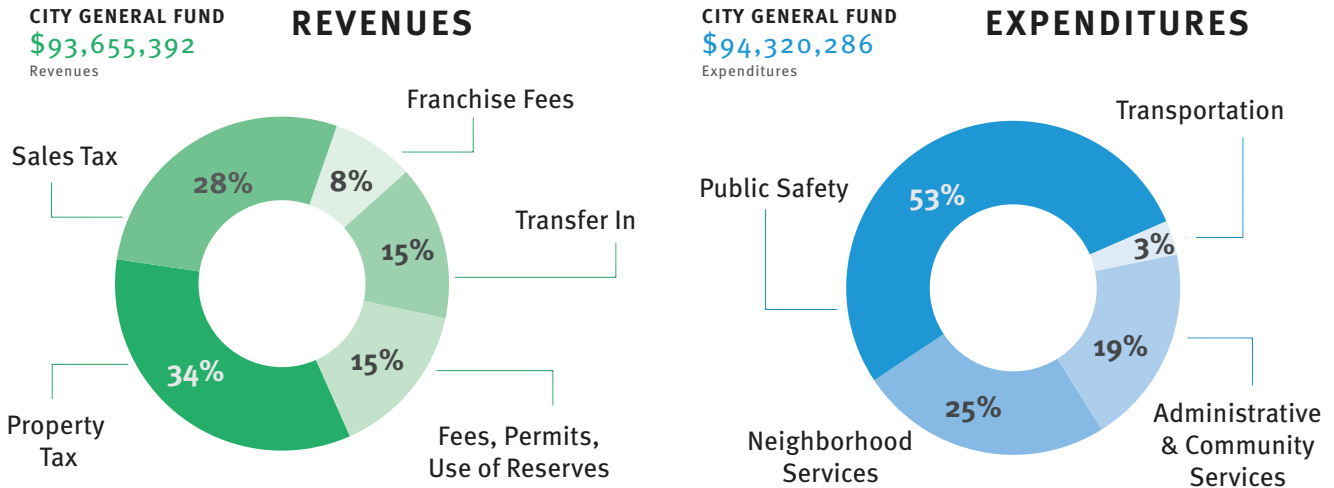
Figure 3.2: FY12-13 Summary of Revenues



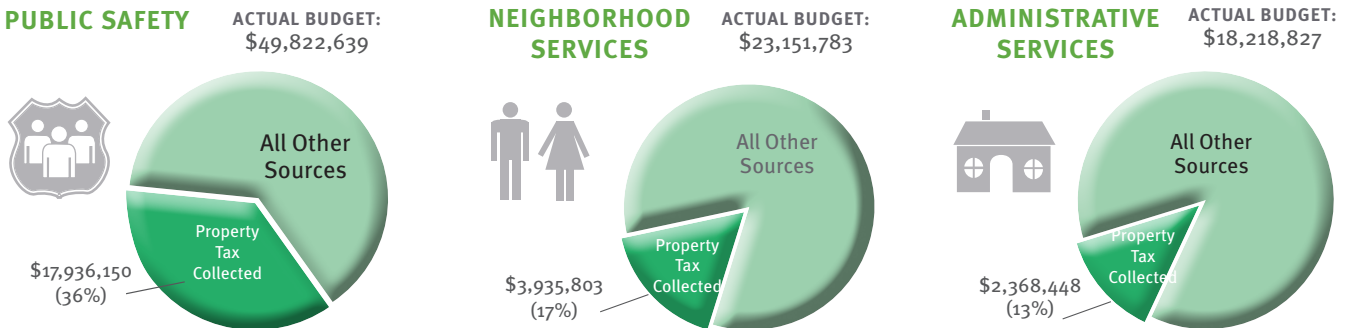
Percent of Total City Revenue

Source: City of Denton, Fiscal Year 2013 Adopted Budget.

Figure 3.3: FY12-13 General Fund Revenues and Expenditure



City Service Budget & Funding



Source: City of Denton, Fiscal Year 2013 Adopted Budget.

from existing development. The methodology used in, and major conclusions of the FIA are best understood in the Fiscal Impact Analysis report provided as a supplement to the Denton Plan 2030.

The first step in creating a fiscally sound future is to understand the existing financial structure of the City. In order to complete the analysis, the consultant team gathered information from the City of Denton’s Annual Budget as well as via meetings with departmental staff. The understanding of the City’s revenue sources and financial structure are described below.

Local Revenue Structure:

Denton provides and maintains an extensive capital inventory, including public facilities for government, parks and recreation, public safety, utilities, and roads. The ability of the City to continue to maintain and expand these services and facilities to serve growth—known as levels of service—depends on a pattern of development that maximizes efficiency and revenue available for continued investments. A diverse revenue structure sufficient to meet the needs, and flexible enough to advance the community and economic goals of the City is important to achieving fiscal vitality.

Budget and Financing:

In order to finance all facilities, infrastructure, and services, the City must budget for all expected expenditures based on annual revenues and any fund balances carried over from the previous fiscal year. The budgeted annual revenues for the City in FY12-13 totaled \$746 million, of which almost 60 percent is from utility user rates, as shown in Figure 3.2.

The balance of revenues to expenditures is a complex process of extensive scope, the details of which are best reviewed in either the City's annual budget or comprehensive financial annual reports.

Sources of Revenue:

The General Fund is the primary mechanism to manage operations in the City. For FY12-13 the General Fund budget was \$94,320,286, of which 34 percent is generated from the city's Ad Valorem (property) tax. Figure 3.3 shows additional sources of revenue for the General Fund including building, permit, inspection, and other service fees assessed to offset the operational costs of its Neighborhood Services Departments.

Cities in Texas have an array of revenue sources available to them, the most substantial of which are usually sales tax, utility revenue, service fees, and property taxes. When levied and allocated in a fiscally responsible manner, these and other revenue streams can help Denton advance the economic and community development goals identified in Denton Plan 2030. The balance of tax, fee, and user rates is a complex process of extensive scope, the details of which are best reviewed in either the City's annual budget or comprehensive financial annual reports. A brief discussion of the City's current rates follows.

Property Tax

Home-rule cities, like Denton, with a resident population of 5,000 or more, have the statutory authority to levy property tax of up to \$2.50 per \$100 of assessed value.

- The FY12-13 adopted Ad Valorem tax rate for Denton was \$0.68975 per \$100 valuation. Denton allocates 68 percent of Ad Valorem revenue to the General Fund. The remaining 32 percent supports the General Debt Service Fund.

According to 2013 data provided by the Texas Comptroller of Public Accounts, a quarter of the over 1,200 municipalities tracked by the state office have higher property tax rates than Denton.

Sales and Use Taxes

Cities may impose a sales and use tax rate of one (1) percent, which can be used for any purpose except securing the payment of bonds or other indebtedness. Most incorporated cities may impose a sales tax for property tax relief. Revenues are deposited into a City's general revenue fund and the local sales tax must reduce the effective property tax rates within the City.

Many cities also impose additional sales taxes, known as "dedicated taxes" in varying amounts of up to one cent for specific purposes, such as mass transit, street maintenance, economic development, and sports venues. However, each municipality is restricted to a maximum combined sales and use tax rate of two (2) percent.

- The FY12-13 adopted sales and use tax rate for Denton is 2 percent, and includes 1 percent for general revenue, 0.5 percent to reduce property tax, and 0.5 percent for mass transit.

Incorporated cities may create special districts and use sales taxes to fund them. Special districts include a crime control and prevention district; a fire control,

prevention, and emergency medical services district; a municipal development district; and a municipal management district.

Municipal Development District - Municipalities in Texas, subject to the Texas Local Government Code, may establish a municipal development district to plan, acquire, establish, develop, construct, or renovate one or more development projects beneficial to the defined district. A district may perform any act necessary to the full exercise of the district's powers; accept grants and loans; acquire, sell, lease, convey, or otherwise dispose of property or an interest in property, including a development project, under terms and conditions determined by the district; and employ necessary personnel. To fund the district, a sales and use tax can be levied, subject to voter approval and subject to the limitation that all local taxes may not exceed two (2) percent. Additionally, a district may issue bonds, including revenue bonds and refunding bonds, or other obligations to pay the costs of a development project.

- As Denton evolves towards a compact development pattern, a municipal development district, or other special taxing district may be a fiscally responsible mechanism for raising revenue for necessary capital expansions to accommodate growth. (FEV-5 3.13.4)

Other Taxes

Cities have authority to levy a tax on a person who pays for a room at a hotel. These funds may only be used for specific purposes defined by statute. Other taxes available to cities include mixed beverage tax, a cemetery tax, a coin-operated machine tax, and venue taxes.

- The FY12-13 adopted budget includes Mixed Beverage Tax and Bingo Tax revenues allocated to the General Fund, and a Hotel Occupancy Tax allocated to the Tourist and Convention Fund.

Franchise Fees

Cities may collect fees from private utilities and other industries for the use of city property necessary to distribute their services. Examples include electric, gas or water, cable and video, or telecommunications franchise fees.

- Beginning in FY12-13 Denton established the Street Improvement Fund to provide a dedicated mechanism to manage street maintenance and improvement activities. Of the \$14,154,609 in Franchise Fee revenue budgeted for FY12-13, \$6,562,039 is directed to the Street Improvement Fund. The remaining \$7,592,570 supports the General Fund.

User Fees

Cities may collect user fees, which are charges collected for the use of city services, including city facilities and building permits.

- User Fees are designed to offset the operating costs associated with providing certain municipal services like building inspection and permitting, and recreation programs. They are allocated to the General Fund. For FY12-13, User Fee revenue represented only two (2) percent of all revenue generated for the City.

Utility Fees

Cities may collect utility fees, which are charges collected for utility service. Denton provides water, sewer, electricity, and solid waste services for the City.

- For FY12-13 the projected \$234 million in utility fee revenue represented almost 60 percent of all revenue to the City.

Impact Fees

Cities may require new development to make a one-time payment necessary to fund system improvements needed to maintain current levels of service. An impact fee represents new

growth's fair share of capital facility needs. By law, impact fees can only be used for capital expansions, not operating or maintenance costs. Impact fees are subject to legal standards, which require fulfillment of three key elements: need, benefit, and proportionality. First, to justify a fee for public facilities, it must be demonstrated that new development will create a need for capital improvements. Second, new development must derive a benefit from the payment of the fees (i.e., in the form of public facilities constructed within a reasonable timeframe). Third, the fee paid by a particular type of development should not exceed its proportional share of the capital cost for system improvements.

- The City of Denton assesses a parks and recreation impact fee, and utility impact fees for Water and Wastewater facilities.
- In 2014, the City commissioned a study to explore the feasibility of establishing a road impact fee necessary to fund planned expansions of the city-maintained road network necessary to accommodate additional vehicle miles of travel (VMT) generated from new development.

Fiscal Impact Analysis Results:

Using the financial assumptions described above, the FIA evaluated the Alternative Growth Scenarios (described in Plan Framework) to understand the potential benefits and costs of different land use patterns. Each growth scenario evaluated a consistent projection of housing units, population, nonresidential building area, and jobs through the year 2030. The location and types of residential and nonresidential development were varied by growth scenario to illustrate the possible future development pattern for the City and its impact to fiscal operations. Following the creation of the Preferred Growth Concept, it was similarly evaluated to determine its potential fiscal impact. As a

representation of the community's preferred growth pattern, and a conceptual depiction of the FLUM, the Preferred Growth Concept provides a lens into the actual fiscal implications to the City's future, and thus provides a means for determining policies and actions for fiscal sustainability.

The Preferred Growth Concept yielded a cumulative net surplus to the City, when comparing available and projected resources to projected costs over the plan horizon. This takes into consideration operating revenues and costs as well as capital revenues and costs, and balances the results. Over the Plan horizon, dedicated capital revenue generated by new development is not sufficient to cover the necessary capital expansions to maintain levels of service for new development, as the only dedicated revenue for capital needs in Denton is a portion of the property tax. Regardless of the deficit for capital needs, the cumulative fiscal impact of the Preferred Growth Concept is a surplus.

Annual fiscal impacts were also evaluated to reflect revenues and expenditures each year during the analysis period. Each year reflects total revenues generated minus total expenditures incurred in the same year, including both capital and operating costs. By showing the results annually, the magnitude, rate of change, and timeline of deficits and revenues can be observed over time. Data points above the \$0 line represent annual net surpluses; points below the \$0 line represent annual net deficits. Each year's net surplus or deficit is not carried forward into the following major conclusions were drawn from the FIA:

- **Local Revenue Structure.** The Preferred Growth Concept assumes that in the plan horizon, the City would add 93,951 new residents, which equates to 75 percent of its existing population, and would more than double the square footage of nonresidential development. This significant growth generates positive cumulative net fiscal

results. Revenue generated by the Preferred Growth Concept includes significant sales tax revenue projected based on the amount of retail square footage.

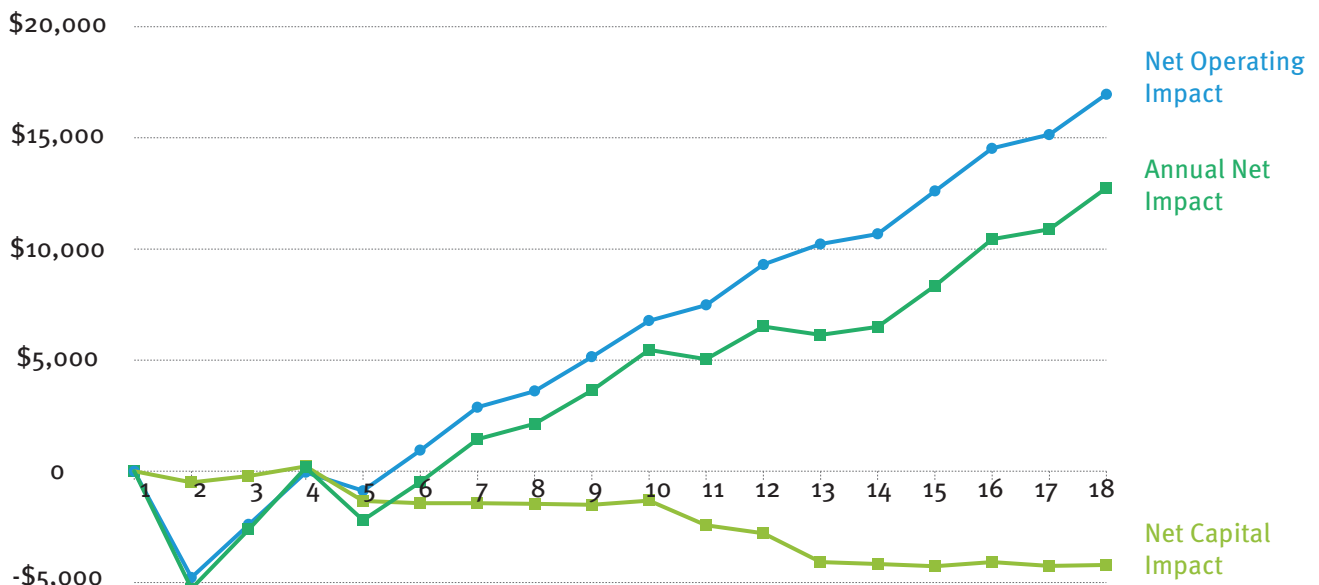
- Levels of Service.** Capital expenditures are modeled based on maintaining citywide levels of service thresholds per capital investment, and levels of service by sub-area of the city. If excess capacity exists in an area, the analysis assumes the excess will serve some new growth before additional capital investments are made to meet population demands. For example, the Preferred Growth Concept takes advantage of existing parkland with the capacity to serve some new development located nearby, therefore requiring fewer new acres for City Park and Community Park development to serve the compact development pattern. Road construction was projected using a marginal approach, based on the average capacity of city-maintained arterial roadways and vehicle miles of travel (VMT) generated from new growth. Road expansion projects represent the largest cumulative

capital expense category, but savings are achieved by the compact development pattern, based on the assumption that density will increase the market feasibility of multi-modal options.

- Demographic and Market Characteristics of New Growth.** The results identify cost savings of increasing development densities. Cumulative operating and capital expenditures decrease as development density increases. The ability to utilize excess capacity in existing capital facilities before building or acquire new infrastructure results in significant capital savings. Accordingly, some operating expenditures, like additional Personal Services, are not incurred at the same rate as when development expands to the periphery.

The policies and actions of this Element were informed by the conclusions of the Fiscal Impact Analysis, which are geared to create a more fiscally sustainable future for Denton and ongoing fiscal and economic vitality.

Figure 3.4: Annual Net Fiscal Impact Results– Preferred Growth Concept



Source: TischlerBise. Fiscal Impact Analysis City Growth Scenarios City of Denton, Texas. 2014.

GOAL FEV-4: Establish and maintain a fiscally responsible revenue and expenditure balance.

Policies and Actions

Revenue Enhancement:

The city is fortunate in that it has three significant growth-related revenue sources (1) property tax, (2) sales tax, and (3) franchise fees, from which to fund services and facilities. The City benefits further from the generation of sales tax revenue not only from retail development, but also from office and industrial space.

According to the FY12-13 budget, sales tax (i.e., Other Local Taxes) revenue is 28.1 percent of revenue directed to the General Fund. The development pattern of the Preferred Growth Concept is designed to create vibrant live/work/play districts. As more residents, workers, and visitors spend time in

the City there will be an increased demand for commercial establishments including retail, dining, hotel, arts and entertainment venues. This increase in potential sales tax revenue, along with the Ad Valorem property tax revenue potential from new development, and increases in franchise fees demonstrates how the land use pattern directly affects the revenue stream to the City.

3.7 *Maintain a balance of revenue sources that supports desired levels of service, while remaining inviting to development.*

- 3.7.1 Conduct a revenue enhancement analysis that identifies available revenue and explores the opportunities and risks involved in maximizing use of each revenue source.

GOAL FEV-5: Design a fiscally advantageous land use pattern paired with fiscally responsible infrastructure management and investment.

Factors Influencing the Fiscal Sustainability of Land Use

In addition to the local revenues discussed above, other factors influencing the fiscal results of different development patterns in the City include:

- Demographic and Market Characteristics of New Growth,
- Fiscal Hierarchy of Land Use,
- Services Provided and Levels of Service, and
- Capacity of Existing Infrastructure.

Demographic and Market Characteristics of New Growth

Next to a community's revenue structure, no other factor has as great an impact on the net fiscal results as the demographic and market characteristics of different land uses. Examples of demographic and market variables for residential development include average household size, market value of housing units, trip generation rates, density per acre, and average household income. Important demographic and market characteristics for nonresidential development include square feet per employee, trip generation rates, market values per square foot, and floor area ratio.

Fiscal Hierarchy of Land Use

Examples of the revenue and expenditure balance of land uses in Denton include:

- The City collects property tax and sales tax from retail establishments, but of the nonresidential land uses, retail typically has the highest operating and capital demands. Retail generates the highest number of vehicle trips, stressing the street infrastructure, and has higher rates of public safety calls compared to other nonresidential land uses.
- Low-density residential generates higher property tax revenues per unit, but requires extension and maintenance of streets, water, and utilities to reach greater distances than higher density clustered development. Sprawling, single-family residential development generates more and longer vehicle trips per housing unit than multi-family residential; and on average has more persons per household than multi-family development, generating more demand for public safety, parks, libraries and other city services.
- A large proportion of current demand for police services is generated from multifamily residential development, which generates the least per unit tax revenue.

On average, no single land use provides a strictly positive fiscal result. The Preferred Growth Concept seeks to encourage a balanced development pattern to mitigate the financial implications of each land use type.

Levels of Service

The current or planned levels of service (LOS) provided to the community for various operations and infrastructure have a significant fiscal impact on Denton. Existing levels of service are facility or service standards currently being maintained and funded through the budget (e.g., park acres per capita, or lane miles of roadways per vehicle miles of travel). This is an important factor since levels of service generally vary from city to city, by community, and over time, and can therefore affect development patterns and

fiscal sustainability. Variations in LOS result from both natural fluctuations in new development and capital improvement programs, or by direct action to accept a lower LOS (e.g., municipal staff layoffs) or planned action to invest in a higher LOS (e.g., adding sufficient lane miles to raise the system-wide LOS).

Table 3.2 shows a sampling of capital facilities, vehicles and equipment currently maintained by the City of Denton, and the level of service for each component.

Capacity of Existing Infrastructure

The capacity of existing infrastructure in Denton has implications for the fiscal sustainability of new development. While the roads in the developed core are reaching capacity, those extending out to the periphery have excess capacity available to serve new growth. In comparison, there is existing park acreage available to serve growth in the developed core, but insufficient land to serve development in the periphery. In either of these situations, and others like them, understanding the abilities and constraints of existing infrastructure is important to crafting a fiscally sustainable growth plan. For example, for FY12-13 the City identified \$4 million of maintenance projects for the existing road network, but identified an annual demand in excess of \$10 million (and up to \$13 million as of 2014), necessary to ensure the system does not degrade below the current level of service.

During the Denton Plan 2030 community outreach process, the community expressed concern about the decreasing level of service of existing roadways in the development core, meaning vehicle miles of travel on the existing roadways is increasing faster than new lane miles of capacity are being added. The City maintains 170 lane miles of minor arterial roadways. Based on vehicle miles of travel (VMT) generated from existing development, the current level of service is 0.14 lane miles per 1,000 VMT.

This is the established level of service for the entire system; however, the City recognizes specific areas of the City, like the developed core, host a larger share of VMT per lane mile than roadways along the periphery. In response to community feedback, Denton Plan 2030 presents policies and strategies to provide a better and more uniform level of service for all city roadways.

Infrastructure Investment – Levels of Service:

The Preferred Growth Concept depicts the outward expansion of the city's development. While this is necessary to provide the diversity of development options desired in the community, it requires costly capital expansion of infrastructure and services. Denton Plan 2030 identifies financial policies, like adopting additional development impact fees, to ensure those requiring the expansions of services are bearing the cost to provide a consistent level of service to all development in the city. For example,

Table 3.2: Established Levels of Service for Growth-Related Capital Facilities

Facility	Current Inventory	Current LOS
General Government Facilities (sf)	175,810 Sq. Ft.	0.92 SF per POP and Job
Sedan/SUV/Truck (unit)	42 Units	0.22 Units per 1,000 Pop and Job
Heavy Truck (unit)	6 Units	0.03 Units per 1,000 Pop and Job
Equipment (unit)	16 Units	0.08 Units per 1,000 Pop and Job
Parks - City Parks (ac)	570 Acres	4.59 Acres per 1,000 Persons
Parks - Community Park (ac)	160 Acres	1.29 Acres per 1,000 Persons
Multi-use Trails (miles)	20 Miles	0.16 Acres per 1,000 Persons
Recreational Center (sf)	56,513 Sq. Ft.	0.46 SF per Person
Service Center/Equipment Yard (sf)	13,800 Sq. Ft.	0.11 SF per Person
Library - Facilities (sf)	86,887 Sq. Ft.	0.70 SF per Person
Library - New Facilities Holdings (sf)	122,830 Units	0.99 Units Per Person
Library -Electronic Holdings (unit)	12 Units	0.10 Units per 1,000 Persons
Library -Vehicles (unit)	2 Units	0.02 Units per 1,000 Persons
Police - Patrol Vehicles (unit)	129 Units	0.85 Car per Officer*
Fire - Stations (sf)	61,930 Sq. Ft.	5.86 SF per calls for Service
Fire - Engines (unit)	6 Units	0.57 Units per 1,000 Calls
Fire - Medic Units (unit)	5 Units	0.47 Units per 1,000 Calls
Fire - Ladder Truck (unit)	1 Units	0.09 Units per 1,000 Calls
Roads - Arterials (lane miles)	170 Ln Mi	0.14 Ln. Mi. per 1,000 VMT
Public Works Facilities (sf)	128,517 Sq. Ft.	0.67 SF per POP and Jobs
Truck (unit)	22 Units	0.07 Units per 1,000 Trips
Heavy Truck (unit)	14 Units	0.67 Units per Field Crewmember
Equipment (unit)	31 Units	0.10 Units per 1,000 Trips

* Includes Captain, Lieutenant, Sergeant; Officer

public safety response times are an important indicator of service delivery and capital needs. As development in Denton expands outward, the Denton Fire Department will require new stations and capital equipment to maintain levels of service. Therefore, as development intensities shift, citywide levels of service must be constantly monitored to ensure the efficient use and allocation of all capital infrastructure and equipment.

Sprawling growth patterns require large capital investments to add new miles of utility and roadway infrastructure, and additional public safety facilities and equipment to maintain established response times. On the other hand, increased intensity of development in the city core makes use of existing infrastructure's excess capacity, and the ability to share facilities like developing schools next to parkland. The compact development pattern of the Preferred Growth Concept balances needs for capital expansion, maintenance, and service delivery with the development options desired in the community. It encourages a development pattern that will achieve cost savings by maximizing existing capital facilities, generate revenue from new commercial activity and a diverse housing stock, and increase the market feasibility of multi-modal circulation.

To achieve the built environment envisioned by the community, the City must be proactive in the design of new development to ensure the fiscal sustainability of new growth. For example, the development pattern proposed by the Preferred Growth Concept results in some capital savings as a result of a decrease in vehicle trips as density increases. Given the location of proposed residential development in the Preferred Growth Concept, the City can maximize the use of already developed City and Community parks, therefore necessitating fewer new acres than would be required to maintain the LOS to serve the current growth pattern.



Fire ladder trucks are an example of a growth-related capital facility

3.8 Integrate land use and infrastructure investment decisions to maximize utilization of existing infrastructure.

- 3.8.1 Explore adequate public facilities requirements in coordination with land use policies and open space conservation. (LU 2.11.2, DP p.104)
- 3.8.2 Implement the Mobility Plan to improve multi-modal circulation as an alternative to increasingly costly auto-oriented capital investments. (M 6.1.1)
- 3.8.3 Implement the *Pedestrian and Bicycle Linkage Component of the Mobility Plan* to lessen the impact of urban center development on existing street facilities and to increase access to existing park and recreational facilities with capacity to serve new growth. (M 6.14.4)
- 3.8.4 Use Denton Plan 2030 to inform the City's CIP and other infrastructure master plans regarding adequate levels of service. (LU 2.4.2)

3.8.5 Encourage more dense development where water/sewer infrastructure has existing excess capacity, and define what level of development can be served by septic and well infrastructure. (DP p.23, IU 9.7.1).

Improvement Program, can extend the life of existing transportation infrastructure by providing alternative circulation options to both existing and new development. The desired development pattern will not design away the automobile, but rather provide an alternative for short distance trips.

Infrastructure Investment – Planning and Financing:

The continual need to improve the roadway network remains the largest single capital issue faced by the City. The City will work with all internal departments, regional partners, and private parties to identify the most cost effective balance of system expansions and maintenance. For example, the *Denton Mobility Plan*, updated in 2014, identifies opportunities to create “complete streets” concepts that if implemented, through the Capital

A focus on multi-modal infrastructure and Context Sensitive Solutions will reduce demand for the construction of new lane miles, add more and wider sidewalks, and use landscaping, roadway marking, textured crosswalks, and dedicated bike lanes to calm traffic. Planning for multi-modal and Context Sensitive street design in defined districts will complement the distinctive character of the neighborhood while providing easy connections to other areas of the city (DP p.77). The City will work with developers to secure necessary rights-of-way

What services does the City of Denton provide?

The following are services that the City of Denton provides and maintains:

- 30 Parks with 1,210 Park Acres
- 3 Libraries
- 7 Fire Stations
- 1 Police Station
- 6,998 Street Lights
- 1,249 Lane Miles of Streets
- 565 Miles of Water Mains
- 501 Miles of Wastewater Mains
- 6.8 Billion Gallons of Water Production
- Solid Waste and Electric Service
- 1,405 Full-Time Equivalent Employees



Governmental Services:

- Library
- Electric Operations
- Environmental Services
- Water/Wastewater Utilities
- Parks & Recreation
- Planning & Development
- Fire
- Police
- Solid Waste Operations
- Transportation
- Airport
- Economic Development

Water/ Wastewater Utilities includes:

- Water Operations
- Wastewater Operations
- Drainage
- Streets
- Traffic/Street Lighting
- Engineering

Planning & Development Includes:

- Building Inspection
- Code Enforcement
- Community Development
- Planning
- Gas Well Inspection

Police includes:

- Animal Services

Solid Waste Includes:

- Landfill
- Recycling
- Residential Collections
- Commercial Collections

Sources: City of Denton Annual Program of Services, 2012-2103. Tischler Bise.

and to construct portions of the network through all new development according to these standards (DP p.136).

The City is severely constrained as to the amount of revenue available for support of capital improvements needed to serve new development. The City's primary funding source for capital infrastructure is General Obligation bonds, which are financed over a period of 20 years, and paid back through property tax revenues. The only other sizable source of funding for infrastructure needs is the dedication of franchise fees revenue to the Street Improvements Fund. However, these funds go to maintenance services necessary to provide a safe and reliable existing transportation system. Because the current revenue sources available to the City to fund capital improvements to serve new development are so limited, the City should continue to consider and move forward with alternative financing sources such as impact fees for growth-related infrastructure, particularly for roads, new facilities, and parks and recreation.

3.9 Update the Capital Improvement Plan (CIP) annually to prioritize the implementation of Denton Plan 2030 (LU 2.4.2).

- 3.9.1 Evaluate existing levels of service for all capital infrastructure to identify existing deficiencies and excess capacities.
- 3.9.2 Maintain public facilities and services to provide established levels of service to new development.
- 3.9.3 Implement the policies and actions of the Mobility Plan to transition to a multi-modal transportation network as a means to balance demands on

existing infrastructure and extend the life of transportation infrastructure.

- 3.9.4 Develop, fund, and implement the annual CIP consistent with the *Parks, Recreation and Trail System Master Plan*. (PCE 5.1.6, LU 2.4.2)
- 3.9.5 Regularly evaluate Public Safety response times to ensure efficient distribution of necessary public services. (CHS 8.6.1, 8.6.4)
- 3.9.6 Use the CIP to prioritize and fund capital expansions necessary to accommodate the preferred development pattern, including Context Sensitive street design. (LU 2.4.2, M 6.1.2)
- 3.9.7 Engage the Bond Committee in the annual CIP update process.
- 3.9.8 Explore the feasibility of establishing or increasing impact fees for necessary public services including roads, public safety, parks and recreation, libraries, and general government.
- 3.9.9 Utilize Denton Plan 2030 to determine which improvements should take priority for the CIP.

Future Fiscal Impact Analyses:

Denton Plan 2030 emphasizes the community benefits achieved from re-investment, revitalization, and redevelopment of key corridors and centers. There are structural entities available to help manage implementation of the City's vision of a vibrant developed core, including special taxing districts, development corporations, and authorities (LU 2.6.5). However, there are important financial implications

to each type of implementation mechanism. Future fiscal impact analyses would assist the City in understanding the fiscal implications of creating any new entity, and of development in a designated focus area of the City.

3.10 Utilize fiscal tools that incentivize development while offsetting its cost to the community.

- 3.10.1 Establish procedures to conduct fiscal impact analyses to evaluate the potential short and long-term impacts of future annexations and other land use decisions.
- 3.10.2 Conduct fiscal impact analyses to ensure the fiscal benefit or neutrality of future tax abatement agreements and special districts (LU 2.6.5).
- 3.10.3 Use the benefits of economic incentives to direct continued investments at the Denton Enterprise Airport and surrounding industrial district.
- 3.10.4 Evaluate the possibility of establishing Municipal Development District(s) and Economic Development Districts.

Infill Development/ Redevelopment:

Denton Plan 2030 identifies a community desire to encourage infill development and redevelopment as a means to slow outward growth, to create vibrancy in commercial districts, and to reinvest and stabilize certain districts and neighborhoods. This concept is first and foremost an issue of land use, but elements of creating infill are found throughout the Plan. With respect to fiscal impact, infill development takes advantage of existing public infrastructure like parks, streets, water, and utilities by focusing growth in vacant or underutilized property. Infill

absorbs growth in already built districts close to services and amenities, requiring that fewer facilities be built in the future. Properly designed infill and redevelopment projects restore continuity to a neighborhood, often increasing property values of adjacent properties and surrounding neighborhoods.

3.11 Adopt land use regulations to support infill development and redevelopment efforts in the developed core.

- 3.11.1 Reference the Denton Plan 2030 Fiscal Impact Analysis (FIA) to demonstrate the fiscal impacts of development as prescribed by the Preferred Growth Concept (LU 2.3.1, DP p.122).
- 3.11.2 Encourage high-quality infill development and redevelopment in potential development sites where infrastructure exists (LU 2.9, 2.10).

Residential Diversity:

The Denton Plan 2030 update process identified a tolerance for more intensity of development in identified areas with the capacity to absorb such growth. Denton Plan 2030 presents strategies to introduce a more diverse mix of land uses, which may balance revenue sources, and demands on necessary public services. For example, encouraging smaller residential units built closer to existing services and amenities lessens the need for costly capital expansion, and provides a better array of housing options for the growing workforce. Increasingly the workforce is looking for smaller units in live/work/play districts providing direct access to the cultural amenities of vibrant communities.

The existing housing stock of Denton is dominated by single-family units, and aging multi-unit structures. With two growing universities, Denton's

housing stock must accommodate a young and mobile population with affordable housing options (DP p.123). Increased residential diversity, as discussed in the Housing and Neighborhoods Element, will increase residential densities where appropriate to increase neighborhood vibrancy. Residential policies seek to increase residential variety and market range by encouraging development of smaller single-family houses and townhomes, and residential areas in mixed-use structures. Based on a sample of residential development in the last decade, the housing stock is already improving. As the Denton Plan 2030 vision materializes, and the development pattern evolves to be more compact with multi-modal circulation options and live/work/play diversity, the FIA assumes market and assessed values of new development will increase over existing values. The City must actively collaborate and partner with developers to provide market feasible projects that offer the range of housing, workspace, and community options desired by the community and workforce, while ensuring at least fiscal neutrality.

3.12 Encourage more dense development to increase market feasibility and create vibrancy.

- 3.12.1 Reference the Denton Plan 2030 Fiscal Impact Analysis (FIA) to direct a residential development pattern that is at least fiscally neutral (LU 2.2.2, DP p.122).
- 3.12.2 Work with developers to increase the stock of owner-occupied smaller residential units.
- 3.12.3 Make multi-modal infrastructure investments to lessen the need for parking facilities and auto-centric circulation improvements.
- 3.12.4 Use existing and new public facilities such as parks, schools, and libraries as neighborhood anchors and activity centers (DP p.21).

Development Partnerships and Coordination:

The Land Use Element describes how the community could develop over the course of build-out, which is not expected for several decades. The Land Use Element describes potential increases in allowable development densities as reflected in the Preferred Growth Concept, and the land use districts identified in the FLUM. The Preferred Growth Concept seeks to use areas of Denton with the infrastructure capacity to absorb additional development to support increased density, potentially creating a more fiscally balanced or profitable land use mixture. Given the revenue structure and capital demands of land uses in the City, the best means to maintain fiscal sustainability is to diversify and intensify the developed core.

The Preferred Growth Concept and FLUM seek to maximize the use of available land in such a way as to efficiently use non-revenue generating land uses including federal, state, county, school district, city facilities, and social and community service organizations. Even though these land uses do not produce property taxes, these important entities and land uses serve the Denton citizenry, and play an important role in the community and in the economy. It is important that new development integrates with the existing community fabric, while helping to balance the fiscal impacts of all development. Denton Plan 2030 identifies strategies to improve coordination with other governmental entities with a physical presence in the city, and/or with authority to affect change in the City.

3.13 *Improve partnerships and collaboration with other governmental entities to implement the goals of the Denton Plan 2030 (LU 2.5.1).*

- 3.13.1 Ensure maximum efficiencies of all government facilities to minimize the use of land by non-revenue generating development (HN 7.13).
- 3.13.2 Require that plans for new park facilities are coordinated with planning

for other government facilities, and vice versa. Identify opportunities for clustering multiple public facilities together with parks and recreation facilities, including libraries, fire stations, and school sites (PCE 5.3.1, HN 7.13).

GOAL FEV-6: Ensure that new development pays its fair and proportionate share of the cost to maintain current levels of services such as public safety, parks and recreation, streets, and utilities.

Policies and Actions

Standards for Future Development:

A primary goal of the Denton Plan 2030 is to increase the standard and quality of future development throughout the city. While much of this depends on the role of the public sector and investment in public facilities, a great deal is influenced by private development. The character of private development is overseen by the development regulations and design review process within the City. In order to ensure that development meets the standards envisioned, the necessary zoning requirements and transportation criteria manuals must be updated to require the provision of facilities that support complete streets, multi-modal transportation, and public realm enhancements. Through this mechanism, developers will help contribute to necessary public service investments.

3.14 *Work with developers to share the cost of necessary public service investments.*

- 3.14.1 Establish multi-modal requirements for all new development to increase the share of pedestrian, bicycle, and transit infrastructure over personal automobile infrastructure (M 6.14.1, CC Table 4.1).
- 3.14.2 Partner with developers to adopt regulations that implement streetscape design features like minimal curb cuts, buffered on-street parking, larger sidewalks with bump-outs, and on-street striping of bicycle lanes and cross-walks, to create vibrant and safe development districts (M 6.10.1, M 6.14.1, CC Table 4.1).

- 3.14.3 Partner with developers to adopt regulations that secure parks and open space in all new residential and commercial centers to ensure adequate green space and multi-modal connections between developments (PCE 5.2.3).

Impact Fees:

Development impact fees are a land use regulation mechanism available to municipalities, which allow municipalities to require new development to make a one-time payment necessary to fund system improvements needed to maintain current levels of service. Impact fees are the tool used to ensure that new development pays its fair share of capital facility needs. Currently, Denton has an impact fee for water and wastewater facilities, and is currently (2014) studying the feasibility of a road impact fee. The Denton Plan 2030 recommends the completion of this study as well as the consideration of future impact fees.

3.15 *Establish dedicated revenues to fund necessary expansions of capital infrastructure to accommodate growth.*

- 3.15.1 Complete and implement the Road Impact Fee feasibility study. (M 6.7.1)
- 3.15.2 Explore the feasibility of establishing additional or more comprehensive impact fees for necessary public services including public safety, parks and recreation, libraries, and general government.

4) COMMUNITY CHARACTER & URBAN DESIGN

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COMMUNITY CHARACTER AND URBAN DESIGN OVERVIEW

Denton's unique community character is what sets it apart from neighboring communities. Denton prides itself on its iconic courthouse and Square, its welcoming and walkable Downtown core, its historic areas with turn-of-the-century estates, its diverse neighborhoods, and its funky, artsy culture in areas such as Fry Street and its arts and entertainment scene. Due to its history, location, and the influence of its universities, together with an artistic, musical, and entrepreneurial culture, Denton has become a destination within the DFW Metroplex and Texas for those in search of an authentic, diverse, affordable, and livable place. Denton also is home to many special events and cultural draws that attract thousands to visit the city, providing a thriving economic engine. Additionally, Denton is surrounded by a scenic rural setting and natural environment that speaks to the early days of North Texas, where agriculture and access to natural springs gave rise to the communities of today.

This mix of elements provides the setting that makes Denton a unique place and is important to both retain and celebrate as Denton grows and moves forward into the next generation. As future development comes to Denton, it must be sensitive, adapting to the context of the community. Simultaneously, it must incorporate into new development the elements that will contribute to memorable places in the future, providing places for community gathering and future landmarks. In addition, it must identify opportunities for redevelopment that will revitalize the economic strength of the community, while maintaining those areas that are important to Denton's past and the character of its people.

The Community Character and Urban Design Element has been developed to implement the long-range vision of the community with respect to identifying, preserving, maintaining, and creating character areas in the city. The intentions of the policies within this Element are to further the aspirations of the community, expressed throughout the outreach process and articulated in the Community Vision Statement. Policies and actions apply to all development within Denton and its urbanizing area, as well as any future programming that the City of Denton may undertake as a result of the implementation of Denton Plan 2030. The policies of this Element will work in conjunction with all other Elements of the Plan focusing on:

- Identifying and preserving distinctive neighborhoods, places, and historic resources in the city in order to celebrate their presence and ensure their long-term protection;
- Promoting the character of Denton through expanded arts and culture programs and opportunities for placemaking and community interaction;
- Encouraging high quality development that will respect and enhance the character and pride of Denton.

COMMUNITY CHARACTER AND URBAN DESIGN IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is **authentic**. Our **small-town charm** and, **North Texas heritage** are proudly embraced along with **positive change, smart and balanced growth, and high-quality development**.
- Denton is fertile territory for **creativity** and **innovation** in our vibrant music and arts scene, **technology, business, and education**.

Our People, Institutions, and Government

- We cherish our **artists and musicians** and celebrate our community in local **events and festivals** that reflect the uniqueness of the community.
- The City of Denton's **institutions of higher learning**, UNT and TWU, are **partners** with government, civic organizations, and local employers in initiatives to **foster creativity in the arts, innovation, a strong economy, life-long learning, and the retention of the best and brightest**.

The Strength of Our Economy

- We market our **Denton "brand,"** our unique, creative atmosphere and small town quality of life, which attracts a highly educated and motivated workforce and gives Denton a competitive advantage in attracting new investment, entities, and well-paying jobs

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- **Managed, balanced, and sustainable growth** in high-quality, livable **urban, suburban, and rural places** which offer diverse **choices** among **neighborhood settings** while respecting private property rights.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.
- **Established neighborhoods** where revitalization and compatible infill development **contributes to stable, livable, and historic character**, and fosters **neighborhood pride and homeownership**.

Character Areas in Denton

Distinctive Places in Denton

There are a number of vibrant centers, cultural and shopping destinations, thriving universities and medical centers, as well as renowned entertainment events throughout Denton that contribute to the character of the city. These aspects of urban life add value to Denton's sense of place and contribute to the quality of life enjoyed by residents. As Denton grows and matures, protecting and enhancing these important areas, as well as encouraging future development that will contribute to urban vitality and create memorable places, is essential to the continuation of its unique identity. This includes maintaining the strength of Denton's universities and medical centers and establishing focus areas for their continued expansion sensitive to surrounding uses.

Distinctive places can take a number of forms. Any well-known area, landmark, or neighborhood can constitute a distinctive place or character area. In many instances, these are associated with historic areas, but do not have to be. Some character areas that were identified in the planning process include: Downtown Denton, the Denton County Courthouse, the Civic Center area, the Oak-Hickory Historic District, UNT and TWU, the Morrison's Corn-Kits building in Southeast Denton, Unicorn Lake, Robson Ranch, Rayzor Ranch, Denton Enterprise Airport, Texas Health Presbyterian Hospital Denton, Denton Regional Medical Center, and MedPark Station, Golden Triangle Mall, and neighborhoods including Denia and homes near Teasley.

Identifying character areas is important because it helps pinpoint the areas that make Denton the community it is today and aids in understanding how to make memorable and enduring places for

the future. Denton Plan 2030 recommends several actions that will help identify and understand the key distinctive areas in the city.

Historic Resources

Historic resources are beloved features of the City of Denton, prized by the community, and key elements in Denton's sense of place. The continuation of the identification, restoration, and preservation of unique and distinctive cultural, historical, and architectural features of Denton remains a priority as Denton grows.

Denton has a multitude of historic resources that are acknowledged by three mechanisms: the National Register of Historic Places, the State Register, and the local register. The Denton County Courthouse and the Denton County Courthouse Square Historic District are both on the National Register of Historic Places. The Courthouse Square Historic District is bounded by Pecan, Austin, Walnut and Cedar Streets. The Gregory Road Bridge at Duck Creek, the Rector Road Bridge at Clear Creek, and 19th Century Pottery Kilns of Denton County are also on the National Register. At the state level, the Texas Historical Commission holds several historic inventories: Recorded Texas Historic Landmarks, State Antiquities Landmarks, and Historic Texas Cemeteries. The Texas Historical Commission



Oak-Hickory Historic District - Denton

awards Recorded Texas Historic Landmark designation to buildings at least 50 years old that are judged worthy of preservation for their architectural character and/or historical associations. Listing in the National Register is a prerequisite for State Antiquities Landmark designation of a building or structure. Denton contains several of these designations throughout the city and surrounding county.

Denton contains both historic districts and a conservation district. Historic districts are areas in which historic buildings and their settings are protected by law and a public review process, designed to protect the most significant buildings and districts in the city. Inclusion in a historic district signifies that a property contributes to an ensemble that is worth protecting by virtue of its historic importance or architectural quality. Conservation districts are areas containing groups of buildings that are together architecturally and historically distinctive. The establishment of a conservation district recognizes the design and architectural qualities of key neighborhoods and encourages their protection and maintenance for the benefit of the entire city. Guidelines for a conservation district are less stringent than those for a historic district. Denton's three neighborhoods that receive historic protection are the Oak-Hickory Historic District, the West Oak Area Historic District, and the Bell Avenue Historic Conservation District. While these districts are successful, development pressure adjacent to Downtown and the universities continues to threaten historic resources in Downtown and established residential neighborhoods.

There are many other historic buildings and neighborhoods that have historic character and integrity in the city. In order to ensure that these resources are protected for the future, additional inventories and protection are required and are recommended in Denton Plan 2030.

Denton Main Street Program

Downtown, one of Denton's prized historic resources and distinctive places, is protected and enhanced through the work of the Denton Main Street Program. The Main Street Program is a worldwide program to revitalize downtown areas. The Denton Main Street Program began in 1989, building from the model of the program, and since that time, there has been marked physical and financial improvements in the area, as well as accolades. 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.

The Denton Main Street Association (DMSA) was established as a 501(c)(6) non-profit organization to lead the program. Denton's Economic Development Partnership (DEDP) works in cooperation with the DMSA, and promotion, advertising and events for Downtown are funded by the private sector through sponsorships and DMSA memberships. Denton's Main Street Program was made possible through the Texas legislature-allocated funding for an Urban Main Street Program, making it possible for cities with populations of more than 50,000 to participate in the State program. Since 1989, DMSA membership has increased over 400 percent, demonstrating broad-based community support. Additionally, the DEDP has a Downtown Task Force subcommittee, whose primary role is to further the development goals of Downtown as a whole.

The Denton Main Street Program works to preserve and market the Downtown, focusing on historic preservation, continuing reinvestment, and developing heritage tourism—or tourism oriented towards the cultural heritage of a location. The DMSA also maintains an online inventory of destinations and events in Downtown Denton. The preservation and celebration of Downtown through the DMSA is a key element of the identification of the historic character of Denton.



Downtown Denton



Denton Courthouse



Morrison's Corn Kits- Southeast Denton

GOAL CC-1: Identify Character: Protect Denton's historic character areas through thoughtful preservation and integration of new development.

Policies and Actions

Identification of Historic Resources:

Identifying Denton's historic districts, landmarks, and character areas is an important step in continuing to ensure the longevity of the city's character and the strength of its economy. Protection of existing neighborhoods and the promotion of historic elements throughout the city will also be furthered by the policies and actions of this Element, the Land Use Element, and the Housing and Neighborhoods Element. Historic resources may be preserved by creating additional historic districts, and conservation districts as well as providing additional programs for preserving additional structures within the community. Historic districts are adopted into the Denton Development Code as overlay districts, intended to protect overriding and intact architectural character and scale. The expansion of historic resources inventorying is a key component of Denton Plan 2030.

4.1 *Expand Denton's evaluation of historic landmarks, districts, neighborhoods, and resources.*

- 4.1.1 Continue updating the Historic Resources Survey to identify potentially historic resources for possible zoning protection.
- 4.1.2 Identify and recommend areas within the city limits that qualify for historic districts based on distinctive character, scale and overriding, intact, architectural character. Historic districts will receive appropriate zoning

classification to enforce and ensure preservation of structures within the district. (DP p. 96)

- 4.1.3 Identify and recommend areas within the city limits that qualify for conservation district designation to protect distinctive character and scale with overriding, intact, architectural character. (DP p. 96)
- 4.1.4 Create a *Historic Preservation Plan* for Denton to identify historic resources that should receive local protection and state and national recognition by 2030.
- 4.1.5 Work with community and neighborhood groups to identify and understand areas that have significant community support for the formation of historic and conservation districts to aid in prioritization.

Placemaking and Urban Vitality in Denton:

Placemaking is a key element of implementing Denton Plan 2030 in terms of harnessing and celebrating Denton's sense of place. Placemaking is oftentimes associated with the design of public gathering places, with particular attention to the ways that the community values and uses public spaces. Placemaking also refers to creating or highlighting unique places that already exist in an urban area to enhance the appreciation and encourage use of a space, district, or neighborhood. In this way, understanding buildings and key areas as discernible landmarks in the city will help foster



Denton Plan Ambassador (DPA) “Denton in One Word” Exercise

community pride and continue to put Denton on the map for tourism, events, and as a place where people choose to live and work, or a community of choice. In addition to creating and maintaining these places, the Denton community also wishes to infuse “urban vitality” throughout. This means that the places and spaces throughout Denton, no matter the size, are filled with people, around the clock and throughout the week, enjoying and taking pride in the city, and sharing with fellow community members. This sense of community already exists in Denton and it is an ambiance that residents want to sustain and enhance into the future.

Denton has an incredible wealth of cultural draws and special events that contribute to local character. The goal of the City in the coming years in regards to placemaking and urban vitality will be to harness this energy to enhance the built environment and create

new centers of development, reflecting Denton’s unique culture and diversity. A key implementation measure to achieve a coordinated approach to this strategy is the creation of a *Citywide Branding and Placemaking Strategy*. This will identify the key areas that are important within Denton and provide a coordinated program to link them together. Creating a clear wayfinding strategy may be a component of this, which would include establishing a consistent palette of directional signage to be used throughout the city, indicating how to navigate to key destinations in the city from a variety of points of origin. Wayfinding also reduces visual clutter and promotes walking, bicycling, and use of mass transit. Identifying gateways, or those areas influencing first impressions and the image of Denton, is especially important to highlight and enhance to welcome visitors to the city.

During the Plan development process, identifying branding stations—or areas to highlight Denton’s character in the physical environment—was a focus of the Plan advisory committees, including DPA and the CAC, among others. Community members worked together to highlight locations in the city that were suitable to mark Denton’s character, or provide a welcome, in the form of signage or public art. Several themes to be incorporated into these elements included: “arts,” “green,” “education,” “parks,” “music,” “medical,” “jazz,” “historic tradition,” “community,” “courthouse,” and “friendly.” Community members believed these themes captured the essence of Denton and could be used in branding and marketing the City, and enhance the physical environment. This built on the previous work of the DPA to identify character in the “Denton in One Word” Exercise.

Gateways and Branding Stations would be further studied by working with the community and stakeholders in the formation of a *Citywide Branding and Placemaking Strategy*. Potential Gateways and Branding Stations are illustrated on Figure 4.1 and listed below:

Gateways:

- I-35 and Highway 77
- I-35E at Shady Shores Road
- East University (U.S. 380) at Lake Lewisville
- West University (U.S. 380) at Nail Road
- Robson Ranch Road at I-35W
- Fort Worth Drive (U.S. 77) at Hickory Creek
- Sherman Drive (FM 428) at Warschun Road

Branding Stations:

- Denton Center (University Drive/ U.S. 380 and Carroll Boulevard)
- Denton Enterprise Airport (Airport Road)
- I-35E at Loop 288
- Intersection of I-35W and potential Loop 288 extension
- I-35 at University Drive (U.S. 380)
- University Drive (U.S. 380) and Mayhill Road

Placemaking and urban vitality will further be aided by coordination with plans that will augment the public realm and create networks within the city, such as the *Pedestrian and Bicycle Linkage Component of the Mobility Plan* and coordination with Denton County Transportation Authority (DCTA), which will be crucial not only for providing access throughout the city, but for helping to promote the Denton brand. The creation of complete neighborhoods and centers, and the opportunity for creating places for community gathering therein, will also contribute to enhancing Denton’s identity now and in the future.

4.2 *Identify the unique areas within the city that highlight Denton’s sense of place and urban vitality.*

- 4.2.1 Partner and collaborate with the community and stakeholders to prepare a *Citywide Branding and Placemaking Strategy* that identifies gateways and branding stations and links together existing character areas through a wayfinding program by using a combination of environmental graphics, print materials, and web-based information. Coordinate with mobility planning so that motorists, bicyclists, pedestrians, and transit users can easily locate destinations

- throughout Denton. (M 6.14.5, 6.21.1, 6.10.5, 6.1.9, FEV 3.5.1)
- 4.2.2 Map historic resources as part of *Citywide Branding and Placemaking Strategy* to highlight their role in understanding and appreciating Denton.
- 4.2.3 Further the policies of the *Pedestrian and Bicycle Linkage Component of the Mobility Plan* by ensuring that existing and future urban centers in Denton are accessible via walking and bicycling. (M 6.14)
- 4.2.4 Work with DCTA and other transit-oriented organizations to further the expansion of transit links throughout Denton and to ensure that existing and future urban centers in Denton are accessible via transit. (M 6.19.1)
- 4.2.5 Encourage mixed-use development through zoning and land use regulations that creates complete neighborhoods and centers, including ground floor, walkable retail and places where Denton residents can live, work, and shop in the same location. (LU 2.3.1)
- 4.2.6 Establish standards for gateways and as part of future development to highlight community points of entry and promote the Denton brand and its quality of life: (CC 4.6.3)
- * Gateways should provide a sense of transition and arrival, and should be designed to make a strong and positive visual impact.
 - * Gateways should employ special design treatments for identified gateways as public realm and public art pieces.
 - * Gateways should be uniquely Denton, drawing upon historic features, precedent, and community character.
 - * Gateway design should be highlighted in the *Urban Design Plan* (CC 4.11.1) so that distinctive building features, such as accented corners and open space features as part of private development can augment gateway locations.



Denton gateway



Gateway monument example

- * Utilize gateways to market the city as a community of choice and as a tool for economic development and to encourage business attraction. (FEV 3.5.2)

- 4.2.7 Establish standards for branding stations as part of *Citywide Branding and Placemaking Strategy* and coordinate with overall marketing strategy administered by the Public Communications Office of Denton.

Preservation and Maintenance

The preservation of historic resources is a top priority for the Denton community. As stated historic resources are recognized on three levels—the National Register of Historic Places, the State Register, and the local register—however only one provides true protection: the local register. The National Register designation enables these properties to be eligible for tax credits, but does not provide any direct protection of the properties unless they undergo alteration, they must adhere to standards. On the state level, only State Antiquities Landmarks have legal protection. Protection from demolition comes from the local code. Therefore, action on the local level is the most important for actively preserving resources, in the form of landmarks and historic districts. Conservation districts, while important for recognizing character, do not offer significant architectural protections.

Locally, historic preservation is overseen by the Historic Landmark Commission. The Historic Landmark Commission recommends to the Planning & Zoning Commission and City Council those buildings, structures, sites, districts, and areas in the city that the Commission has determined should be preserved and designated as historic landmarks.

The Commission, along with City staff, regulates design review for designated properties and districts. Any exterior or hardscape modifications that are visible from the public right-of-way to structures located in any of these districts require a Certificate of Appropriateness (COA). The Historic Preservation Officer may administratively approve a COA for work that is considered ordinary maintenance or minor alteration. All other COAs are processed and heard through a public hearing process with the Historic Landmark Commission.

In addition to providing just protection, or “sticks,” a successful preservation strategy must also include incentives or “carrots,” to encourage preservation or reuse of historic structures and areas. Financial incentives such as tax credits, façade improvement grants, and property tax abatements in the form of Tax Increment Financing Districts (TIFs) are several options to achieving this goal.

Maintenance of historic resources and other properties is also a concern of the community and especially City of Denton decision-makers, including City Council. Property maintenance is important because it affects the outward appearance of the city, and reflects on the community and its identity. Maintenance refers to both the physical upkeep of buildings, but also day-to-day maintenance of private yards and the public realm. Maintenance standards for the City are currently contained in the Property Maintenance Code, updated in 2010, and are jointly handled by the City and individual property owners. Maintaining a pleasant physical environment throughout the city is the responsibility of the entire city and should be addressed in the action of Denton Plan 2030 for long-term implementation.

GOAL CC-2: Preserve and maintain the unique character of Denton for long-term sustainment of community character.

Polices and Actions

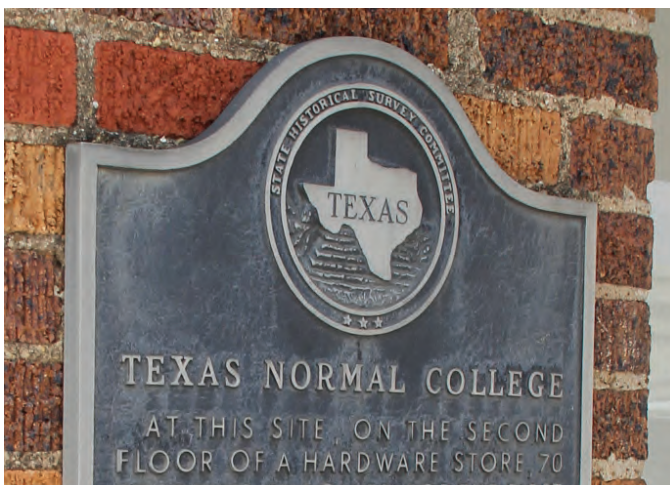
Preservation of Historic Resources:

Protecting Denton’s historic districts, landmarks, and character areas is essential to ensuring the longevity of the city’s character and the strength of its economy. Therefore, continued protection and enhancement of historic resources is a key component of Denton Plan 2030. Protection of existing neighborhoods and the promotion of historic elements throughout the city will also be furthered by the policies and actions of the Land Use Element, as well as the Housing and Neighborhoods Element. Historic resources can be preserved by adopting additional historic districts, and conservation districts as well as providing additional programs for preserving additional structures within the community. Historic resource protection should be evaluated as part of other plan implementation actions, as noted herein. In addition to the need to preserve historic districts, policies and tools to ensure compatible infill development are needed to protect the character and scale of neighborhoods which do not qualify for historic district designations. Where present

zoning may not ensure compatible infill development, neighborhood stabilization overlay districts may apply. These zoning overlays would modify underlying zoning requirements for such factors as front and side setbacks, garage placement and building height.

4.3 *Actively preserve and maintain Denton’s existing and future identified historic resources.*

- 4.3.1 Implement recommendations for historic landmark, historic district, and conservation districts per updated historic resources survey to ensure consistent protection.
- 4.3.2 Encourage voluntary landmark designation as a vehicle to protect sites with historical significance. (DP p.96)
- 4.3.3 Establish the *Downtown Compatibility Area Small Area Plan* to coordinate preservation within the Downtown and ensure that the character, aesthetic and scale of Downtown are maintained. (DP p.96, LU 2.6.2)



Historic landmark designation



Historic district designation

- 4.3.4 Coordinate preservation regulations to be consistent with the Arts and Entertainment Overlay District. (CC 4.7.2)
- 4.3.5 Coordinate preservation regulations to be consistent with expansion plans for local institutions, such as UNT, TWU, DCTA, Denton County, and DISD. (HN 7.11.1)
- 4.3.6 Work with private landowners with historic sites to ensure public access to and preservation of the sites according to applicable standards.
- 4.3.7 Establish partnerships among private interests to support historic preservation in Denton. (DP p.61)
- 4.3.8 Encourage adaptive reuse of historic structures to ensure their long-term preservation, while allowing for repurposing and economic diversity. (HN 7.12.3)
- 4.3.9 Ensure that historic resource preservation is incorporated into Neighborhood/ University Compatibility Area Small Area Plans. (LU 2.7.1, 2.7.2)

Financial Incentives:

As preservation of existing buildings can be financially challenging, many communities have successfully encouraged adaptive reuse of historic buildings and historically-sensitive upgrading of residential structures by providing local incentives. At present, many of the historic regulations in Denton are characterized as protection, rather than incentives. Providing robust local programs that provide financial incentives to property owners will help to encourage preservation of historic resources and character.

4.4 *Provide local financial incentives for historic preservation in Denton.*

- 4.4.1 Consider creation of a local program in which property owners of designated individual sites or sites within historic or conservation districts may receive an incentive in the form of a 50 percent exemption from City taxes for 15 years. (DP p.96)
- 4.4.2 Continue to coordinate with the Denton Main Street Association (DMSA) to provide and enable funding of district-wide improvements and incentives, such as façade improvement grants, to encourage preservation. Expand reach of DMSA beyond existing boundaries if feasible.
- 4.4.3 Coordinate with other financial incentives that may support historic resource preservation such as the Downtown TIF. (FEV 3.10.4)
- 4.4.4 Explore the creation of a local incentive, tax credit, or grant to encourage the preservation and reuse of historic structures.

Property Maintenance:

An important element of maintaining community character is ensuring that the quality of the physical environment is enhanced and maintained. This is a factor in all properties, not just historic resources or areas of distinctive character. It is especially important for historic resources to be properly maintained, regardless of their ownership, so that they may last for posterity. The City must take a lead in setting standards for maintenance to ensure that Denton's physical appearance and long-term viability is held to the highest standards.

4.5 *Ensure proper and sustained maintenance of Denton's historic resources, neighborhoods, and community centers.*

- 4.5.1 Update the Property Maintenance Code every five years.
- 4.5.2 Establish a program to support the maintenance of areas having historical or cultural significance.
- 4.5.3 Create an anti-graffiti program to be administered by the City to protect elements of the public and private realm from vandalism and detracting of character requiring that property owners abate graffiti on property within a set period of time.
- 4.5.4 Offer financial incentives for the abatement of graffiti or other vandalism impacts on private property.
- 4.5.5 Create an ordinance prohibiting storage of furniture outdoors which detracts from property appearance.

Arts, Culture and Community Character

A key feature of Denton's character is its robust culture of visual and performing arts, entertainment, and its distinctive community that is unique within the Metroplex. Denton boasts an authentic, small-town charm and North Texas heritage supported by a community of artists and musicians, businesses and institutions, and friends and neighbors who appreciate the high quality of life available in the city and opportunities for community interaction and celebration. As Denton grows and develops, it is essential that this community character is



Denton Community Market



Mini A-Kon - Denton

retained, celebrated, expanded and shared in order to encourage a widespread appreciation of its uniqueness and charm.

There are several mechanisms that are proposed to promote community character throughout the city. This includes a program for public art to celebrate the Denton community and provide opportunities for artists to share their work with the public. Public art also enhances the physical appearance and beautifies the city. Secondly, the already robust arts and music scene is a key mechanism for promoting and expanding community character. This includes providing additional spaces for both the visual and performing arts and events in the city, as well as promoting those events more widely, so that the region at large is drawn to Denton to take advantage of these great assets. Denton's historical charm also provides a regional draw to the city and is representative of community character. A comprehensive approach to heritage tourism is

crucial for ensuring that the preservation of historic resources is linked to strategies for placemaking, community branding, and programs that bring people into Denton to live, work, and recreate. Finally, Denton's unique brand and character can be highlighted locally through promoting its sense of place on a neighborhood and site scale by creating and highlighting areas for community gathering. Denton currently has several great community gathering places, such as the Downtown Square and Quakertown Park. Other potential types of community gathering places include city streets, parks, which may be public or privately managed, and plazas within private development. As Denton moves towards its future, it is essential to keep its character alive and well in each and every neighborhood, in commercial and institutional areas, and through the preservation of its built environment and the culture of its people. The policies and actions of Denton Plan 2030 will ensure that this goal is met.

GOAL CC-3: Promote Denton's character through public art, arts and culture, heritage tourism, and places for community interaction.

Policies and Actions

Public Art in Denton:

Public art is an excellent tool for the promotion of community identity. Denton currently has a public art program that is overseen by the City Council-appointed Public Art Committee and the Parks and Recreation Department. Additionally, the City has a combination of public and private funding sources to fund public art. A two percent allocation for art dedication is required as part of all Capital Improvement Projects and 2.4 percent of the Hotel Occupancy Tax (HOT) is allocated towards public art in the city. Tax abatements are also

offered to developers that include publicly accessible art as a significant component of a development. Private funding for public art is also pursued independently through the Parks and Recreation Department and through individuals and businesses. These fund dedications are important for the establishment of public art, however a coordinated effort is necessary to expand the program and highlight the character of Denton. A *Public Art Master Plan* is recommended in order to identify strategic locations and themes for the inclusion of public art. Such a plan would also ensure that public art was coordinated between organizations such as

DCTA, Denton County, and DISD, and placed equitably throughout the city and in locations that would have the greatest amount of public benefit.

4.6 Promote a sense of urban vitality throughout Denton by providing opportunities for public art.

- 4.6.1 Encourage the use of public art to highlight neighborhood identity in Denton's existing and future neighborhoods through a *Public Art Master Plan* for Denton (DP p.74)
- 4.6.2 Integrate public art into the planning and design for City and County-owned public facilities, parks and trails, and other publicly-funded projects and projects on City-owned land (DP p.74, HN 7.15.3)
- 4.6.3 Install art at suitable locations that including community gateways, branding stations, parks, key corridors, and other memorable places throughout Denton. (DP p.61, 74, CC 4.2.7)
- 4.6.4 Create a program to investigate the temporary reuse of vacant and/or underutilized parcels and building facades for art exhibitions and murals. (DP p.74, CC 4.7.5)
- 4.6.5 Create a partnership with local artists, through schools and institutions, to employ local artists in the creation of public art in Denton.
- 4.6.6 Partner and collaborate with DCTA, UNT, and TWU to install public art at transit facilities and on the university campuses. (M 6.21)



Public art in civic spaces - example



Fine Arts Theater - Denton



Center for the Visual Arts - Denton



Twilight Tunes Tuesday - Denton



First Friday Denton

- 4.6.7 Ensure that opportunities for public art are included in the Capital Improvement Plan (CIP) and revisited on an annual basis. (LU 2.4.2)
- 4.6.8 Evaluate opportunities for public art to be included as part of the I-35 expansion and potential highway underpasses and overpasses.
- 4.6.9 Engage the community through a public involvement process to identify locations and designs for public art.

Arts and Music Venues:

Denton is well-known for its performing and visual arts culture, and music scene, and its draw within the region for special events. Outside of major events, Denton could enhance its regional role as a place to go for entertainment on a year-round basis, however this needs to be planned to ensure that the appropriate regulations are in place to allow such development. Certain regulations need to be adjusted in some areas, such as signage standards, hours of operation, regulations for building design and renovation, and parking standards in order to allow for the types of arts and entertainment uses

that are desired. To achieve this goal, an Arts and Entertainment Overlay District is suggested for Downtown and related areas that are appropriate for this type of use. This overlay could include the modification of development regulations tailored to entertainment uses and establish design guidelines suited for entertainment use areas, or a by right allowance of these uses in a new zoning district. Additional studies, such as a *Special Events Integrated Transportation Plan*, and coordination with transit and public art programs, could further enhance the viability and functionality of arts and entertainment in Denton, contributing to its economic vitality and sense of place.

4.7 Promote a sense of urban vitality throughout Denton by providing venues for performing and visual arts and music events.

- 4.7.1 Identify opportunities to incorporate arts and music venues in future development, including Downtown and in Regional Mixed-Use Centers.
- 4.7.2 Study the viability of an Arts and Entertainment Overlay District—or new zoning district—in Downtown Denton, and other strategically located

- areas, with appropriate regulations for hours, lighting, and design, sensitive to surrounding uses.
- 4.7.3 Explore the possibility of requiring a baseline percentage of ground-floor retail that should be occupied by tenants related to the arts and culture industry within the Downtown or a future Arts and Entertainment Overlay District.
- 4.7.4 Study where opportunities for arts and music venues could be created in vacant or underutilized sites, adjacent to Downtown and the Downtown Denton Transit Centers, that can be supported by the A-Train.
- 4.7.5 Work with the public arts programs to formally demarcate arts and music venues and event locations through permanent or temporary public art and public realm improvements. (CC 4.6.4)
- 4.7.6 Study the use of tax incentives and subsidies to attract arts and music organizations and private investors.
- 4.7.7 Work with City departments, such as Parks and Recreation, to ensure that events do not overly burden City staff capacity and/or facilities.
- 4.7.8 Create a *Special Events Integrated Transportation Plan* that studies opportunities for shared parking, transit, shuttles, and available parking facilities to accommodate local and regional travel to and from events and venues in Denton, without overly burdening Denton's facilities and highlighting use of alternative transportation modes. (M 6.21.2)
- 4.7.9 Create a program to temporarily rent areas to display art, including, but not limited to, sculptures in City facilities, on City property, and in local businesses and developments, such as art storefronts and sculptures on loan.
- 4.7.10 Identify opportunities to host performing arts events in publicly-owned areas including parks, streets, and public buildings. (DP p. 61)

Arts and Music in the Economy:

Denton's rich offering of arts and music is a great contribution to the character, as well as the economy, of the city. It is important to retain this important economic base as development goes forward into the next generation. To this end, the City should work with key regional organizations, such as the Greater Denton Arts Council, to promote the arts and administer tools, such as tax abatements, for the establishment of arts-related business and developments. Additionally, partnership with local schools and institutions to support vocational programs and arts education will help keep artists in Denton and maintain the important impact that this community has on the city.

4.8 Bolster the role of arts and music in Denton's economy.

- 4.8.1 Partner with the Greater Denton Arts Council on all programs related to promoting arts in the community.
- 4.8.2 Create and enhance programs for arts education through local schools and institutions that will lead to local job growth.



Downtown Denton



Denton Arts & Jazz Festival

- 4.8.3 Conduct a study to understand the current and future economic development value of music and the visual and performing arts in Denton.
- 4.8.4 Administer tools, such as incentives, start-up loans, live-work dwellings, and art incubators, to encourage artists and musicians to live and work in Denton.
- 4.8.5 Promote the arts and music through regional Convention and Visitors Bureaus, Chambers of Commerce, the universities and schools, and

local promotion groups to highlight Denton's role in arts and music in the DFW Metroplex for both visitors and residents.

- 4.8.6 Encourage private funding for arts and music by reaching out to private sector organizations in Denton and the DFW Metroplex.
- 4.8.7 Explore opportunities for donations and grants to assist art and music-related efforts in Denton.
- 4.8.8 Partner and collaborate with UNT, TWU, and NCTC to coordinate art and music-related efforts.
- 4.8.9 Coordinate City departments, such as Police, Fire, and Parks and Recreation, to ensure appropriate and feasible in-kind donations of services are offered to facilitate the development of live events and their associated economic and fiscal impacts for the city.

Heritage Tourism:

As noted previously, the Denton Main Street Program is a successful program in the city that currently focuses on preservation, revitalization, and promotion of the Downtown. Denton's Main Street Program began in 1989 and has received broad community support. It is managed by the Denton Main Street Association (DMSA).

In addition to its work to preserve and market the Downtown, focusing on historic preservation and reinvestment, DMSA also works to develop heritage tourism in the city. DMSA maintains an online inventory of destinations and events in Downtown Denton. The preservation and celebration of Downtown through the DMSA is a key element of the promotion of the historic character of Denton.

The historic character of Denton is one of the attributes that makes the city unique and contributes to its economic stature. This should be evaluated and made public so that it further encourages the preservation of historic resources and character and is integrated into plans to celebrate Denton's sense of place and urban vitality. To achieve this, policies and actions for historic preservation go beyond protection and suggest mechanisms for integrating historic resources into cultural tourism, creating centers of community, and contributing to placemaking and urban vitality.

4.9 Promote the historic identity of Denton as an economic asset and tourism potential.

- 4.9.1 Promote preservation as a means to increase economic, cultural, and educational diversity within the community. (DP p.96, FEV 3.6.3)
- 4.9.2 Include the location of historic landmarks, historic districts, conservation districts, and a wayfinding plan within the *Citywide Branding and Placemaking Strategy* as a mechanism for heritage tourism generation. (CC 4.2.1)
- 4.9.3 Incorporate historic elements into placemaking and community gathering spaces where landmarks exist. (CC 4.4.4)
- 4.9.4 Coordinate with the DMSA for promotion of heritage tourism.
- 4.9.5 Partner and collaborate with local agencies and institutions to engage the community in education regarding the historic identity of Denton and the historic resources Denton has.

Community Gathering Places:

Places for community gathering are a central element in placemaking and urban vitality and celebrate the essence of Denton and its community members. Examples of such spaces, which may be of public or private ownership, include parks of various sizes, plazas, and areas within the public right of way where people gather. Recently, temporary community gathering places have become common with the emergence of "pop-up" parks and events. With the updates to mixed-use land use designation and the significant amount of future development that will occur in the form of Regional, Community, and Neighborhood Mixed-Use Centers, a great opportunity exists to provide more places for community gathering in new development. In addition, as established neighborhoods and developed areas of the city are being studied for potential infill and redevelopment, opportunities for community input and the design of spaces that reflect existing neighborhood character and pride are available. Community involvement and the Parks and Recreation Department should be central to the design of community gathering spaces, which should be coordinated into the design process for future mixed-use and infill development.

4.10 Provide places for community gathering, the expression of individual neighborhood diversity, and Denton's unique character throughout the city.

- 4.10.1 Conduct a study of existing community gathering spaces and their use and suitability for various activities and events throughout Denton and highlight these through Discover Denton and other online outlets.
- 4.10.2 Include a zoning requirement to include public community gathering



Better Block Denton



Community Gathering Place example

space within mixed-use developments and centers. Establish regulations and procedures for the design, installation and maintenance of community gathering spaces, as well as regulations for noise and time of use for privately-owned and operated community gathering spaces, consistent with underlying and surrounding land use. (CC 4.7)

- 4.10.3 Engage with residents in adjacent neighborhoods to provide input into

the design and function of community gathering spaces.

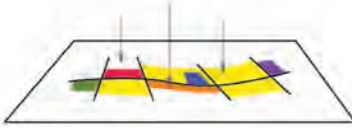
- 4.10.4 Create design standards for the creation and redesign of community gathering spaces in Denton in new and existing centers. Ensure that gathering spaces are accessible and defensible through Americans with Disabilities (ADA) compliant design and using Crime Prevention through Environmental Design (CPTED) principles.
- 4.10.5 Ensure that provision of shade, water fountains, appropriate lighting, and trash receptacles are provided in community gathering spaces where feasible.
- 4.10.6 Coordinate with programming for mobile food vendors to enliven community gathering places for special events.

Urban Design and Community Character

Urban design refers to the physical and visual character of the built environment, as well as the composite form and function of a city. It is among the most significant contributors to community character in the city. Urban design has emerged to be a very important consideration in planning throughout the country, as communities have realized the value of a quality environment in creating resilient, memorable communities. This is increasingly important in a city like Denton that has a lot of growing room and a regulatory system that allows development to be almost entirely market-driven. Denton Plan 2030 calls for a framework for

Land Use v. Urban Design

Land Use



Land use determines the location, use and function of land, and what is and is not permitted by right.

Urban Design



Urban design refers to the physical form of development and the city as a whole. Regulations and guidelines determine the appearance and shape of development.

guiding and supporting development which makes it easy to do the “right thing” when it comes to creating new, enduring development and making Denton a desirable place to live, work, and play for the long-term.

High-quality urban design is a fundamental requirement to attract long-term, high-quality investment and jobs. The quality of the physical environment and sense of urban vitality affects Denton’s image and attractiveness to developers searching for high quality business and residential locations. The issue of urban design, including the design of streets and publicly-visible areas—otherwise known as the public realm—must be addressed rigorously if Denton is to achieve the quality of development that most citizens desire. (DP p. 61)

Denton’s development character is influenced by the Denton Development Code (DDC) and the Future Land Use guidelines, and urban design recommendations of Denton Plan 2030. Denton’s Site Design Criteria Manual also provides details on the standards of the DDC for easier interpretation.

Denton Plan 2030 calls for a framework for guiding and supporting development which makes it easy to do the “right thing” when it comes to creating new, enduring development and making Denton a desirable place to live, work, and play for the long-term.

This manual functions as an extension of the DDC. The DDC has the greatest impact on urban design in the community since it contains requirements that must be followed. Future land use designations provide guidance as to the nature of the land use, and the guidelines of the comprehensive plan provide general guidance as to the character of development. Regulations for density of residential land uses are also found in the DDC.

An update to the DDC has been an ongoing priority of the City. Concurrently with the Denton Plan 2030, the City conducted an evaluation of the DDC to inform its updating. The study made three significant recommendations for revisions to the DDC:

1. Create a more user-friendly Code,
2. Streamline the development review process,
3. Establish tailored standards for infill and redevelopment projects.

Once the City undertakes the revision of the DDC, these recommendations, along with the recommendations for land use and urban design will be reflected in the DDC and aligned with the goals and policies of Denton Plan 2030.

Urban design guidelines and recommendations have been created for Denton and the region that influence new development. The 1999 Denton Plan included urban design policies and design guidelines that remain applicable today. These are contained in Table 4.1, shown later in this Element.

In addition, regional plans have already established urban design frameworks for the planning of transit-oriented development (TOD) and mixed-use centers, such as *Vision North Texas*, prepared by the North Central Texas Council of Governments (NCTCOG). This guidance is important for Denton to incorporate so that new development is not only consistent and coordinated with regional goals, but economically competitive with neighboring communities and contemporary development products. The guidelines for the development of mixed-use centers as directed by NCTCOG are illustrated in Table 4.2, shown later in this Element as guidance for the development of mixed-use centers.

The policies and actions that follow are intended to establish general guidance for new development and for particular land uses. As stated, the Denton Development Code and Site Criteria Manual need to be updated in concurrence with these recommendations, as well as coordinated with

the land use guidelines, in order to achieve the highest quality and intended character of design. The policies and actions that follow provide an overarching framework for an *Urban Design Plan*, which would provide land use and area-specific guidelines for future development, as well as opportunities to create Small Area Plans for key areas in the city that may include neighborhoods or areas ripe for future development or redevelopment. This mechanism allows for the creation of guidelines that are specific to each neighborhood and take into account a finer grain of character. Through these implementation actions, the type of quality development imagined for Denton's future, to create areas of lasting character throughout the city, can be realized.

Urban Design Principles, contained in Table 4.1, provide guidelines that apply to all land uses, and are adapted from the 1999 Denton Plan.

GOAL CC-4: Create Character: Achieve exemplary urban design in future and existing development throughout Denton's neighborhoods, centers, and land uses.

Policies and Actions

Urban Design in Future Development

Denton's identity will be strengthened in the future by enhancing the aesthetic qualities of its built environment, public realm, and creating distinction among places and neighborhoods. The key to establishing superior urban design throughout Denton is through the creation of an *Urban Design Plan* for the city. Denton Plan 2030 provides overarching policies and actions intended to guide

new development and land uses. A focused *Urban Design Plan* would provide specific design regulations that apply within the city. Such a plan would provide additional specificity on the design for centers and corridors that can be applied to Small Area Plans, overlay districts, infill developments, and the updating of the DDC. The Plan would identify visually distinct areas and would include design guidelines for the public and private realm. Finally, the Plan would also unite overarching policy created by the NCTCOG and ensure that future development is consistent with regional direction and coordinated plans.

Key centers and corridors were established in the creation of the Preferred Growth Concept based on the location of important community identifiers, a concentration of employment or community hubs, or opportunities for densification, public realm improvements, and infill development. These areas were further refined in the creation of the Future Land Use Map (FLUM). Other focus areas include gateways, branding stations, and travel centers, which themselves are unique and thus require specific attention. Due to the differences among these focus areas, it is recommended that those that are a priority should be the subject of Small Area Plans to identify unique recommendations for land use, urban design, circulation and public realm improvements, and development programming, representing the diversity of Denton's neighborhoods. Following the preparation of the Small Area Plans, it may be appropriate to adopt corresponding Overlay Districts to apply particular development standards to key centers, corridors and infill areas that will be administered through the DDC. The guidelines of this Element will serve to create consistency and a foundation for the development of those specific regulations. All Focus Areas are illustrated on Figure 4.1: Focus Areas Concept and discussed below.

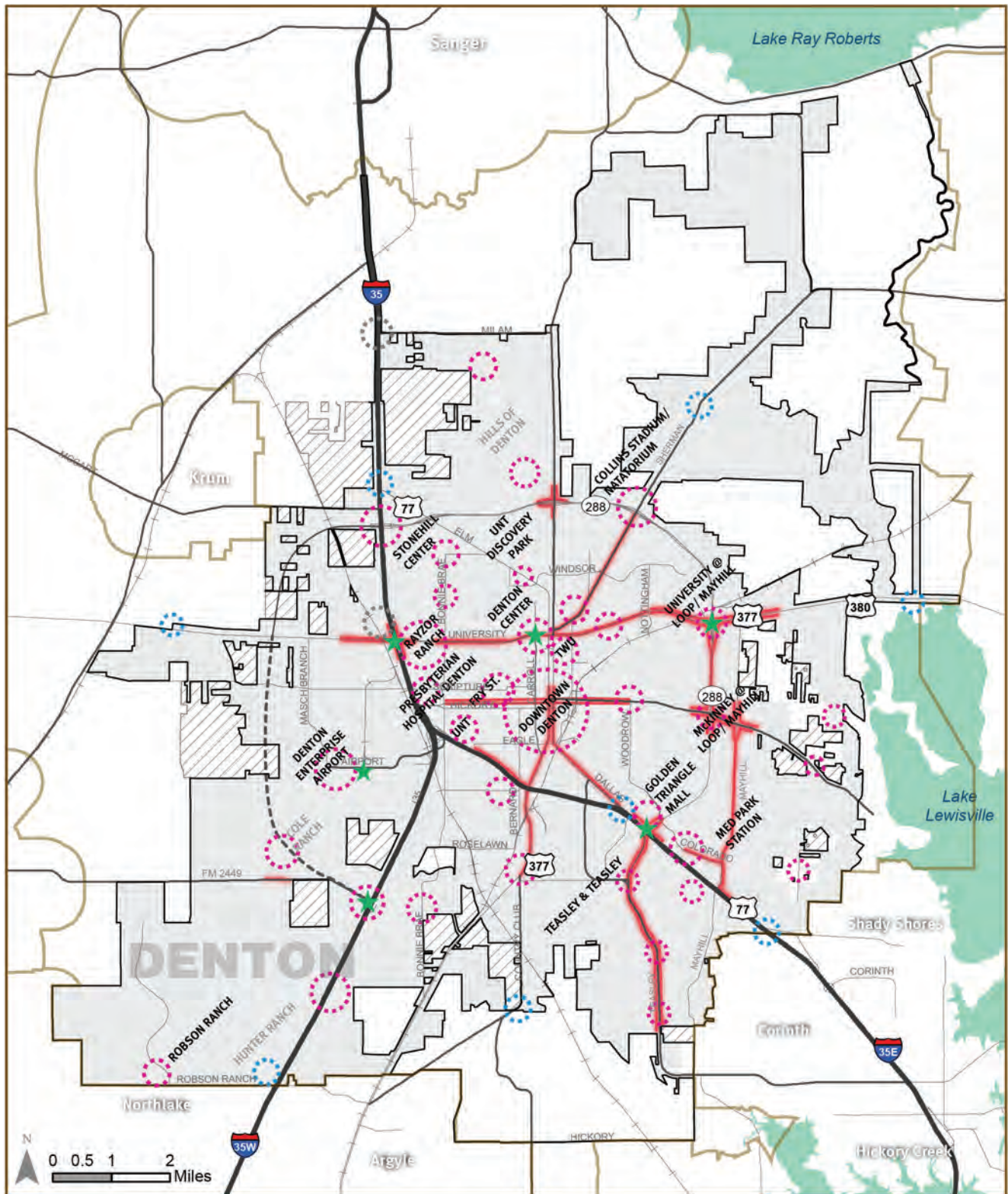
4.11 Create new guiding policy to integrate urban design objectives with other planning mechanisms, such as land use, zoning and subdivision regulations, historic preservation, economic development, and environmental protection. (DP p. 61).

- 4.11.1 Prepare an *Urban Design Plan* for Denton that is consistent with revised future land use designations and urban design goals and that provides a citywide approach to visual quality and image (DP p. 75). Incorporate

policies from Denton Plan 2030 as the framework for this Plan.

- 4.11.2 Revise the Denton Development Code to be consistent with Denton Plan 2030, the *Urban Design Plan*, and the recommendations of the Denton Development Code Assessment to ensure that new developments and projects adhere to citywide urban design policies and that the development review process is streamlined.
- 4.11.3 Include urban design review early in the development review process. Ensure that City government will exert a leadership role in ensuring adherence to the principles of good urban design as essential for economic development. (DP p.61)
- 4.11.4 Work with DCTA and other transit-oriented organizations to further the expansion of transit links throughout Denton, and for the creation of station area plans. (M 6.19.2)
- 4.12 Elevate community character in Denton by creating focused plans for areas undergoing new development, in need of revitalization, and established neighborhoods.**
- 4.12.1 Create Small Area Plans for established neighborhoods and future development areas to ensure adherence to urban design policy and preserve and enhance the character of distinct areas.
- 4.12.2 Create a *Downtown Compatibility Area Small Area Plan* and *Neighborhood/University Compatibility Area Small*

FIGURE 4.1: Focus Areas Concept



Source: City of Denton

-  Center Focus Area
-  Corridor Focus Area
-  Gateway Focus Area
-  Travel Center Focus Area
-  Branding Station
-  Municipal Boundaries
-  City of Denton
-  ETJ

Area Plans to ensure that urban design principles are followed in development projects within those areas. (DP p.62, LU 2.6.2, LU 2.7.1)

- 4.12.3 Partner with and collaborate with the community in the formulation of Small Area Plans to ensure their reflection of neighborhood character and priorities in future development. (LU 2.8.1, LU 2.17.2, DP p.62)
- 4.12.4 Create a prioritization of centers, corridors, and other focus areas to streamline and direct the process of creating Small Area Plans. Prioritization should be based on ripeness of development potential, level of community support, existence of threatened historic resources, economic development catalysts, and other sensitive issues.



Focused urban infill and revitalization, Dallas

- 4.12.5 Adopt Overlay Districts following the creation of Small Area Plans as needed to ensure that appropriate guidelines are followed. (LU 2.8.2)

Design of the Public Realm:

“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. (DP p.62)”

The community’s development fabric is composed of two distinct, yet inter-related components: the “public” realm and the “private” realm. The public realm consists primarily of the publicly-owned street rights-of-way and other publicly accessible open spaces such as parks, squares, plazas, courtyards, and alleys. The private realm consists of privately-owned areas, in large part developed with buildings and associated improvements, and is more limited in its accessibility to the public.

The public realm plays a critical role in an area’s character and function, serving overlapping roles, including circulation and access, development framework, public open space, and visual interest.

The aforementioned guiding policy documents, such as the *Urban Design Plan*, updated DDC, and Small Area Plans will include recommendations and requirements for the public realm. In addition,



Design of the public realm



Public realm connections - UNT



Design of the public realm

coordinating with other regulating policy is important to ensure that urban design guidelines are consistent and also feasible. The updated Mobility Plan will put forward concepts for street design that promote Complete Streets and Context-sensitive Solutions, as well as connectivity recommendations for the pedestrian and bicycle network. This is very important for ensuring a public realm that is complementary to the elevated character of urban design that is envisioned through Denton Plan 2030. Additionally the *Parks, Recreation and Trails System Master Plan* contains recommendations for the design of parks and trails, which are also an important component of the public realm. An update to this plan should include standards for the design of parks and open spaces consistent with the *Urban Design Plan* and the urban design principles of the Community Character and Urban Design Element. Coordination among these various policy documents is necessary for achieving a consistent approach to the design and maintenance of the public realm within the city.

4.13 Elevate the appearance of the public realm in Denton through high-quality urban design guidelines for the public rights-of-way and spaces.

- 4.13.1 Update the Mobility Plan to incorporate Complete Streets and Context-sensitive Solutions. Refer to “The Street” discussion of the 1999 Denton Plan where applicable. (LU 2.4.1, M 6.6.1, DP p.77)
- 4.11.2 Further the policies of the *Pedestrian and Bicycle Linkage Component of the updated Mobility Plan* to ensure that existing and future urban centers in Denton are accessible via walking and bicycling. (M 6.14.1)

4.13.3 Revise the *Parks, Recreation and Trail System Master Plan* to incorporate citywide urban design guidelines for the public realm and design of recreational facilities structures. (PCE 5.1.2)

4.13.4 Ensure that trees and landscaping are included in all roadway standards and site design criteria to recognize their aesthetic and environmental contribution to the city and enhancement of the tree canopy. (DP p.61, PCE 5.5, IU 9.5.6)

4.14 Link Denton’s public realm together through a unified network of public spaces.

4.14.1 Provide a mechanism for coordination between the *Parks, Recreation and Trails System Master Plan*, revised Mobility Plan, *Urban Design Plan*, and Small Area Plans to ensure that the design of the public realm creates a cohesive network of public spaces in Denton.

4.14.2 Ensure that new development addresses established pedestrian and bicycle networks and provides for additional connectivity to further foster pedestrian and bicycle mobility, and other alternative transportation modes throughout Denton.

4.14.3 Through partnership and collaboration with UNT and TWU and creation of Neighborhood/ University Compatibility Area Small Area Plans, encourage more community interaction with the universities and the City by linking physical access

between these institutions and public property. (DP p.61)

Guidelines for Specific Future Land Use Designations:

Creating the type of character in Denton that will complement the city and create the high-quality development is an important goal of Denton Plan 2030. The Plan recommends the creation of several plans to further the goal of achieving high-quality design. In addition, Denton Plan 2030 includes recommendations to achieve desired character to guide all future planning.

Overarching guidelines for all development can be found in Table 4.1: Urban Design Principles. These principles are adapted and updated from the 1999 Denton Plan, providing guidance to achieve high quality design in the future, and as a foundation for preparing an *Urban Design Plan*. Further design guidelines may be prepared as part of Small Area Plans and incorporated as zoning overlay districts. The following policies and actions provide general guidance to achieve high-quality development throughout Denton based on future land use types. When applied generally, it is important to maintain flexibility in these recommendations to allow for a diversity of building types and architectural styles, preserving the distinctive and diverse quality of Denton.

4.15 Establish Urban Design Principles to guide all future development in Denton:

4.15.1 Ensure that the Urban Design Principles of Denton Plan 2030 are used to evaluate all future development projects in Denton.

4.15.2 Update the DDC and corresponding Site Design Criteria Manual to include Urban Design Principles.



Downtown Denton



Residential land use



Residential land use

4.15.3 Incorporate Urban Design Principles into all future plans related to urban design, including the *Urban Design Plan* and Small Area Plans.

4.16 Include additional guidelines for specific land uses, in addition to overarching Urban Design Principles (Table 4.1), to ensure desired community character is achieved with variations for use.

4.16.1 Employ the following guidelines in the design of new Rural Area land uses:

- * Development should be low in profile and use architectural design and materials that contribute to the preservation of rural character at the urban edge.
- * Development should comply with policies for conservation development where appropriate (LU 2.14.1).

4.16.2 Employ the following guidelines in the design of new Residential land uses:

- * Create architectural guidelines and requirements for single and multi-family residential areas to establish unity and distinctive architecture with respect to massing, facade details, materials, and roof pitch, although many variations would be possible. (DP p.69, HN 7.7.1, 7.7.2)

4.16.3 Employ the following design principles in the design of new development in the Downtown Denton land use:

- * Street design and architectural standards created as part of the *Downtown Implementation Plan* (DTIP) and any updates to that plan preside in future

development review within the Denton Central Business District. (LU 2.6.2)

- * Development should echo and complement the historic character of Downtown, including materials, fenestration, scale, height, roof pitch, and street orientation.
- * Development should contribute to the energy and character of Downtown through encouraging development types that contribute to a vibrant district throughout the day.

4.16.4 Employ the following guidelines in the design of new development in the Downtown Compatibility Area land use:

- * Future developments proposed in areas of the Downtown Compatibility Area, that are located within the Denton Central Business District, should abide by the street design and architectural standards of the *Downtown Implementation Plan* (DTIP) and any updates to that Plan. (LU 2.6.1, LU 2.6.2)
- * Development should echo and complement the historic character of Downtown, including materials, fenestration, scale, height, roof pitch, and street orientation.
- * Future development that is adjacent to other land use districts should be sensitive to the scale, massing, and character of existing development in adjacent land use districts (e.g. residential, institutional).

4.16.5 Employ the following design principles in the design of Regional, Community, and Neighborhood Mixed-use land uses:



Regional Mixed-use Center



Community Mixed-use Center



Neighborhood Mixed-use Center

Table 4.1: Urban Design Principles (DP p.63-69)

The following principles are a guide for all future development in Denton, including new site development as well as infill and adaptive reuse. The goals and policies of this Element call for the development of an *Urban Design Plan* that will include specific guidelines for the design of buildings and the public realm in Denton that will include these basic principles.

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, the physical design of spaces and buildings, and its accessibility via transportation modes including bicycle, pedestrian, and transit.

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 unusable. 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. Encourage self-policing and discourage crime by incorporating Crime Prevention through Environmental Design (CPTED) strategies into building and site design.

Connectivity: The number of alternative ways people are able to move through a community is a measure of its connectivity or permeability. New development should maximize permeability both within the site and in the neighborhood. Site design must be based on the promotion of walkability and modal choice, including access to bicycle, pedestrian and transit networks and efficient use of existing paths and patterns of movement. New development is designed to complement the existing street grid 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. Cul-de-sacs are generally discouraged except under circumstances, such as the presence of topography, stream corridors or other barriers. New development will be expected to take advantage of opportunities to promote walkability and modal choice, including access to bicycle, pedestrian and transit networks.

Neighborhood Scale: A neighborhood is limited in physical size, with well-defined edges. The size of a neighborhood is generally 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.

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.

Variety: Architectural diversity and creativity should be encouraged to avoid homogeneity and sterility, while still mandating high-quality and sustainable construction. 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.

Sustainability: Sustainability is a theme of Denton Plan 2030, as well as a priority for Denton. As such building and neighborhood designs should strive to achieve the highest possible standards for sustainability. In the design process, rating systems such as LEED for New Construction, LEED for Neighborhood Development, and Green Built™ Texas should be consulted as a reference with the intent of incorporating as many green building elements as feasible. (PCE 5.9)

Table 4.1: Urban Design Principles (DP p.63-69)

Legibility: Legibility confers a sense of orientation, in 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; and
- 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. High-quality design and materials in all future development that will create attractive business destinations and encourage economic development for the future. The following architectural principles shall be used to guide decisions regarding design of structures:

- High-quality architectural design should be encouraged. Innovation, creativity, and originality are considered to be primary ingredients of high-quality architecture. Unique 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.
- Careful consideration of proportioning, detailing, and context is important in designing buildings adjacent to historic buildings and within historic areas of the city 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 with the use materials and design features indigenous to the region. Use high-quality, durable materials to ensure long-term quality and appreciation of local design.
- The City will partner with developers on development projects and will actively explore the use of competitions in the development of significant public buildings 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.

Historic Precedent: Development should echo and complement the historic character of Denton's past, including materials, fenestration, scale, height, roof pitch, and street orientation. New buildings should demonstrate thorough knowledge of historical architectural information and context, but should not imitate older buildings. In the case of infill, materials, fenestration, scale, height, roof pitch, and street orientation should complement the character of the existing area. Consider the adaptive reuse of existing buildings and warehouse for all types of uses.

Building Scale and Orientation: Buildings should be oriented to address primary streets or thoroughfares in order to create a sense of presence on the street and create a strong street wall. 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 and to the surrounding context of the neighborhood or block. 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. 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. Building massing and façade articulation should contribute to a fine-grained, pedestrian scale environment at the street level that promotes walkability.

- **Definition of Public Space:** Buildings should be sited carefully to create a defined public realm. Build-to lines should be utilized to establish a consistent series of building facades and to shape outdoor spaces, including the street and areas for community gathering, including plazas, courtyards, and parks. 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.

Table 4.1: Urban Design Principles (DP p.63-69)

<ul style="list-style-type: none"> • Mobility Choice: Integration of pedestrian and public transportation systems within new development is encouraged. Development should encourage bicycle and pedestrian access that contributes to efficient and safe travel for all modes. 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.
<ul style="list-style-type: none"> • Entrances: Primary street entrances of all building types should front onto the primary street. In multi-family residential developments, ground-floor units should front onto and access the street, rather than having a shared entry and access from interior corridors.
<ul style="list-style-type: none"> • Location of Parking: Residential garage structures should 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.
<ul style="list-style-type: none"> • 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 and screened with planting.
<ul style="list-style-type: none"> • Car-Free Development: Mixed-use development in the Downtown core and adjacent to universities should not require off-street parking, but rather should rely on on-street and shared parking along with transit, bicycle, and pedestrian use.
<ul style="list-style-type: none"> • Service Areas: 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.
<ul style="list-style-type: none"> • Lighting: Install adequate and sufficient lighting throughout the area for added safety, visibility, and comfort. Lighting should complement the overall character and design of a building or neighborhood and not be visually intrusive to neighbors or the night sky. Lighting should be energy efficient.
<ul style="list-style-type: none"> • Landscaping: Incorporate distinctive landscaping into the design of buildings when feasible, contributing a vibrant, inviting setting. Accentuate key focal points, entrances, gateways, and corners of a development with accent plant materials and trees. Use local planting materials and those requiring minimal maintenance to contribute to their long-term health and upkeep.
<ul style="list-style-type: none"> • Signage: Design high quality signage that contributes to community identity, improves wayfinding, that is highly visible and legible. Require all signs within and around a development to be high quality, professionally designed, and creative symbols of community character. Limit attached and detached signage to achieve private advertisement and wayfinding but not clutter corridors and detract from community aesthetics.
<ul style="list-style-type: none"> • Provision of Onsite Open Space: In commercial, multi-family residential, and mixed-use development, ensure the provision of shared open space and amenities in a central gathering location that is safe, well-lit, and accessible. Use shared open space as opportunities for community gathering, events (depending on the size), public art, and expression of community character.
<p>Elements of the Public Realm: In addition to the built environment, elements of the public realm are an essential element of the character of a city. The design of the public realm includes streets, sidewalks, parks and open space, and bridges and transportation structures. These elements should be designed to address their adjacent uses, be well appointed and maintained, and facilitate safe and accessible function for all modes.</p>
<ul style="list-style-type: none"> • Design of Bridges and Transportation Structures: Qualified and creative engineering input should be used in the design of mobility infrastructure, with interesting structural solutions, rather than the addition of decorative detailing to a standard structure.

Table 4.1: Urban Design Principles (DP p.63-69)

- Street Trees and Landscaping:** Trees and landscaping will be designed as a crucial component of the public realm. Trees and other plantings will be properly coordinated with utilities to avoid conflicts with maintenance of the public right-of-way and competition for limited underground space. 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. Landscaping shall promote low-impact design, including water-efficient irrigation practices, the use of drought-tolerant planting materials, and permeable paving to promote the sustainable design of the public realm.
- Adaptation to the Natural Environment:** Development should complement natural topography and respect natural systems, including tree canopy. Development should be located outside of, the 100-year floodplain, including roadways. Rather developments adjacent to floodplains should establish green space between the road and the floodplain to serve as open space, limit flood exposure, and facilitate channel maintenance. Development should not remove valuable tree canopy, but rather contribute additional trees to the urban forest.



Orientation to the public realm



Durable materials



On-site open space



Connectivity



Lighting



Historic precedent



Incorporation of multi-modal elements



Signage



Sustainable materials

Table 4.2: Mixed-use Development Criteria (based on NCTCOG’s Vision North Texas)

Typologies/ Districts	Mix of Uses	Employment Intensity	Residential Density	Scale	Height	Mobility Integration
Regional Mixed-use	Office, retail, MF residential, light industrial and entertainment; includes mixed-use. Emphasis on employment uses	100-200 jobs	Over 12 units/acre	600 – 1,000 acres	5 to 20 stories	All modes of transportation, public transit including DCTA local bus routes and A-Train. Served by multiple major highways and arterials. Specific parking guidelines, and commuter parking may be included.
Community Mixed-use	SF and MF residential and retail; includes mixed-use	30-50 jobs/ acres	4-12units/ acre	20-100 acres	1 to 5 stories	Served by local roads and located on an arterial network. Served by a local DCTA transit route providing connections to at least one Regional Center.
Neighborhood Mixed-use	Mix of uses at a neighborhood scale	20-30 jobs/ acre	4-12 units/ acre	10-50 acres	1 to 5 stories	Served by local roads and arterials. Served by local transit with connections to nearby Community and Regional Mixed-use areas.

Note: Transit-Oriented Development (TOD) projects may occur within any of these

- * New mixed-use development should include buildings that are in compatible to one another in size, scale and their relation to the street.
- * Architectural guidelines may be required for mixed-use areas to establish unity with respect to massing, facade details, materials, and roof pitch, although many variations would be possible. (DP p.69) These would be established through Small Area Plans.
- * Use standards for mixed-use centers proposed by NCTCOG as a basis for creating mixed-use developments, and in Small Area Plans. This will align the type of development occurring in Denton with standards for the region in order to maintain economic competitiveness and quality of development. (See Table 4.2)

4.16.6 Employ the following guidelines in the design of Business Innovation land uses:

- * Encourage the development of office and business workplaces in close proximity to housing, civic, and recreational uses. (DP p. 50)
- * Design office facilities (whether free standing or related to manufacturing uses) to address the street frontage at a pedestrian scale.
- * Orient and design business park structures around shared outdoor gathering spaces (rather than parking lots) to reinforce a sense of community and improve the quality of life of workers.
- * Consider the adaptive reuse of existing warehouse buildings in the area for

non-industrial uses, such as office or community facilities.

- * Use varying building heights and setbacks to define different functions, such as offices and warehousing.
- * Screen all loading docks, platforms, and overhead bay doors from public view. Loading function should be located away from front streets and should be designed or screened in such a way as to reduce their visibility.

4.16.7 Partner and collaborate with UNT and TWU to create Neighborhood/ University Compatibility Area Small Area plans to establish specific planning guidelines for areas adjacent to UNT and TWU. (See LU 2.7.1)

4.16.8 Employ the following guidelines in the design of Commercial land uses:

- * Consider two-story, “tall box” retail in lieu of one-story, “big-box” retail, and within key corridors, and take advantage of the height to make a statement at critical intersections in the community.
- * Discourage use of the parking area as primary frontage area within and around the property.
- * Where a single-story commercial development is proposed, provide additional height to help mark the corner and make a significant statement on the street.
- * Discourage taking truck access directly off key corridors. Encourage truck access and servicing in the rear of primary buildings.



Commercial use

4.16.9 Employ the following guidelines in the design of Government/Institutional land uses (properties not within the City’s zoning jurisdiction, such as UNT or TWU, are encouraged to follow these principles):

- * Institutional and governmental buildings, such as city facilities, places of worship, schools, libraries, Fire and Police, post offices, and museums, should be placed in prominent locations. Potential sites include the frontage of plazas, in neighborhood centers, and where street vistas terminate in order to serve as landmarks and reinforce their importance. (DP p.69)
- * Buildings should define parks and plazas, which are distributed throughout the neighborhood and appropriately designed for a range of neighborhood functions. Design and scale should be compatible with surrounding structures. (DP p.69)

4.16.10 Employ the following guidelines in the design of Industrial Commerce land uses:

- * Minimize conflicts with adjoining land uses and efficiently utilize existing transportation systems. (DP p. 49)
- * Locate development in a manner that does not compromise health, safety, and welfare of community. (DP p. 48, CHS 8.3.2)
- * Design all facilities (whether free standing or related to manufacturing uses) to address the street frontage at a pedestrian scale.
- * Consider the adaptive reuse of existing warehouse buildings for non-industrial uses, such as office or community facilities.
- * Use varying building heights and setbacks to define different functions, such as offices and warehousing.
- * Screen all loading docks, platforms, and overhead bay doors from public view. Loading function should be located away from front streets and should be designed or screened in such a way as to reduce their visibility.

Guidelines for Focus Areas:

The establishment of Focus Areas is an important element of ensuring quality development in key areas of Denton. Focus areas include Centers, Corridors, Gateways, Branding Stations, and Travel Centers that are located at key intersections and destinations throughout the city and were identified as part of the Plan development process. Due to their prominent locations—either currently or envisioned for the future—they warrant special design scrutiny that will result in perceivable distinction in design, urban vitality, and potentially increased development

The goal for identified Focus Areas is to create Small Area Plans that examine the areas to develop context-specific guidelines and land uses that go beyond the general recommendations of the Urban Design Principles and land use guidelines.

intensity in the future. Focus areas—Centers, Corridors, Gateways, Branding Stations, and Travel Centers—are not land use types, rather they are types of development that may occur within specified areas, allowable in the underlying mixed-use land use designation. The goal for identified Focus Areas is to create Small Area Plans that examine the areas to develop context-specific guidelines and land uses that go beyond the general recommendations of the Urban Design Principles and land use guidelines. If necessary, these plans could then be incorporated into the zoning code as overlays. The guidelines for Focus Areas add specificity to the Regional, Community, and Neighborhood Center Mixed-use land use designations for use in guiding the development types that may occur in those areas.

Potential Focus Areas are listed below and illustrated on Figure 4.1: Focus Areas Concept. These focus areas were developed in the creation of the future land use alternatives in Phase 3 to illustrate potential areas of intensification, based on input from City staff. These areas are reflected in the Future Land Use Map (FLUM) as areas for intensification or the creation of new development. Additional areas could be added as a result of prioritization or development momentum (CC 4.12.4). Those areas located within approved MPCs are shown for illustrative purposes and are liable to be changed based on potential redesign of MPCs based on alignment with Preferred

Growth Concept (i.e. compact development). (LU 2.11.1) These will not warrant Small Area Plans to be initiated by the City.

Focus areas shown on Figure 4.2 include the following centers, corridors, and travel centers- a type of center geared towards freight use. Locations of Gateways are discussed in policy 4.2.6.

Centers

- Cole Ranch (intersection of potential Loop 288 extension and I-35W)
- Cole Ranch (FM 2449) Highway 377 and Country Club Road
- Denton Center (University Drive/ U.S. 380 and Carroll Boulevard)
- Denton Enterprise Airport (Airport Road)
- Denton Natatorium and surrounding area (Loop 288 and Sherman Drive/ FM 428)
- Downtown Denton (see Downtown Small Area Plan)
- Elm and Windsor
- Fry Street
- Golden Triangle Mall
- Hills of Denton (intersection of Loop 288 and Locust Street)
- Hills of Denton (south of Milam)
- Hunter Ranch (corner of I-35W and Crawford Road)
- McKinney at Loop 288/ Mayhill
- McKinney at Trinity
- McKinney at Woodrow
- MedPark Station (Mayhill north of I-35E)
- Presbyterian Hospital Denton (I-35 at Scripture)
- Rayzor Ranch (Town Center South)
- Robson Ranch
- Stonehill Center (at I-35 and Loop 288)
- Teasley and Teasley
- Teasley at Robinson
- Trinity North of McKinney



Center Development



Center Development



Corridor Development

- Trinity South of McKinney
- Unicorn Lake
- University at Loop 288/ Mayhill
- UNT's Discovery Park (N. Elm and surrounding area)

Corridors

- Dallas Drive (I-35 to Eagle Drive)
- Fort Worth Drive (I-35 to Country Club Road)
- Fort Worth Drive/Carroll Boulevard (I-35 to Eagle Drive)
- I-35 Frontage Road North and South (Fort Worth Drive to North Texas Boulevard)
- Mayhill Road (I-35 to University Drive)
- Sherman Drive (Locust Street to Loop 288)
- Teasley Lane (Lillian Miller Parkway to Dallas Drive)
- Teasley Lane (I-35 to south city limits)
- University Drive (I-35 to Loop 288)
- University Drive (Loop 288 to east city limits)
- University Drive (I-35 to west city limits)

Travel Centers

- I-35 and Milam Road
- I-35 at West University Drive (U.S. 380)

4.17 Establish design guidelines for Focus Areas to aid in design review for key intersections and destinations in Denton, with the intention of creating Small Area Plans and corresponding Overlay Districts: (LU 2.8.1, 2.8.2)

4.17.1 The following design principles should guide the design of Center Focus Areas:

- * Design and development intensity of Center Focus Areas will be determined by underlying land use

shown in the FLUM and development regulations of underlying zoning districts.

- * New development in Center Focus Areas should adhere to general urban design guidelines and policies of the Community Character and Urban Design Element. (Table 4.1)
- * Coordinate designs for Center Focus Areas with best practices of NCTCOG, Project for Public Spaces, and other national resources.
- * Center Focus Areas should be included in the *Citywide Branding and Placemaking Strategy*. (CC 4.2.1)
- * Center Focus Areas that are located adjacent to key entry points to the city may employ guidelines for Gateways (CC 4.2.6).
- * Buildings in identified Center Focus Areas should be oriented along streets, plazas, and pedestrian ways.
- * Building facades in Center Focus Areas should create an active and engaging public realm and encourage walking and alternative transportation. Amenities for public transit and bicycle infrastructure should be included at key intersections/ focal points.
- * All modes of transportation should be accommodated to the greatest extent possible to contribute to efficient and safe travel for all modes.
- * Transitions between building intensity should be established between large-scale and small-scale development. The relationship can be improved by designing larger buildings to reduce their apparent size and recessing the upper floors of the building to relate to the lower scale of the adjacent, lower-density buildings.
- * Center Focus Areas that are within existing developed areas should complement the scale and architectural features of surrounding development.

- * Encourage parking structure designs that include landscaping and other aesthetic treatments to minimize their visual prominence. Parking structures should be lined with active and visually attractive uses to lessen their impact on the streetscape.
- * Parking standards should be reduced in centers to further principles for transit-oriented design. Buildings set back behind parking lots are discouraged.

4.17.2 The following design principles should guide the design of Corridor Focus Areas:

- * Design and development intensity of Corridor Focus Areas will be determined by underlying land use shown in the FLUM and development regulations of underlying zoning districts.
- * Promote high quality development along corridors to improve aesthetics, enrich neighborhoods, and encourage reinvestment. Design of new development should contribute to the overall visual quality of the corridor and define the streetscape.
- * Highlight important intersections and access points along key Corridor Focus Areas through enhanced architectural design features, streetscape treatments, or traffic-calming elements such as roundabouts to mark transitions and define character.
- * Apply zoning standards to discourage strip commercial shopping centers and auto-oriented development in Corridor Focus Areas. Buildings set back behind parking lots facing key corridors are discouraged.
- * In urban contexts and where Corridor Focus Areas intersect with Center Focus Areas, encourage development to create

continuous facades built to activate the street wall, provide a sense of enclosure and improve pedestrian comfort.

- * Corridor Focus Areas that are within existing developed areas should complement the scale and architectural features of surrounding development.
- * Create visually cohesive Corridor Focus Areas using a variety of techniques including landscaping, undergrounding of utilities, and other streetscape improvements along key corridors.
- * Corridor Focus Areas that are located adjacent to key entry points to the city may employ guidelines for Gateways (CC 4.2.6).

4.17.3 The following design principles should guide design within Travel Center Focus Areas:

- * Special signage and gateway treatment should be applied in order create a distinctive entry point into the city in Travel Center Focus Areas.
- * Land uses should be appropriate to support freight industry in Denton and recognize the importance of Denton as the first destination on I-35 from points northward.
- * Landscape screening should be employed in parking areas.
- * Development should be oriented in a manner that reduces conflicts with adjacent sensitive uses, such as residential uses.
- * Buffering techniques should be employed to minimize impacts to adjacent sensitive uses, such as residential uses.

5) PARKS, CONSERVATION & ENVIRONMENT

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PARKS, CONSERVATION & ENVIRONMENT OVERVIEW

As the population grows and development expands over the Plan horizon, providing parks and open space and the conservation of natural resources is essential for maintaining the quality of life and character of Denton. The policies that follow address the provision of new parks and open space resources, and resource conservation policies, addressing the following primary considerations, and are integrated into goals throughout Denton Plan 2030:

- An integrated green infrastructure network created by the linking of parks and natural resources together through parks, trails, contiguous open space, and natural systems.
- Coordination with regional goals for holistic open space and recreation planning and ecosystem-wide conservation strategies.
- Provision of a variety of park types and amount of park land to match population growth and different community contexts.
- Creation of park lands and recreational facilities that incorporate elements of Denton's natural environment.
- Prioritization of conservation strategies that achieve integrated conservation objectives, including: protecting air quality, ecosystems and habitat, water body and watershed conservation and quality, and protection of rural, agricultural character.
- A framework for environmental policies that affect the built environment and city functioning.
 - An overarching vision for an update to Denton's sustainability Plan: *Simply Sustainable: A Strategic Plan for Denton's Future (2012)*, including proactive policies for green building and solid waste recovery.
 - An overarching vision for an update to the *Parks, Recreation and Trail System Master Plan*.

A robust system of parks, open space and recreational resources are important for creating and sustaining memorable, livable neighborhoods, places to work, a balance of land uses, and places of distinction throughout the community. Denton's natural environment is an essential element of the city that is important to character community as a whole, but is fundamentally tied to regional and global goals for environmental stewardship and sustainability, affecting the quality of life of Denton residents, the health of region, and beyond. Incorporation of considerations of open space and natural resource protection into every land use decision, from the smallest urban park to a regional land conservation strategy, is necessary for a plan of this scale to address natural resources adequately.

PARKS, CONSERVATION AND ENVIRONMENT IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is **consciously green**. We are a leader in our **commitment to sustainability** and we have a significant **tree canopy**, a network of **parks** and **greenways**, **stream corridors**, and **urban forests**.
- Denton is **safe** and **livable**, a **hospitable community** of friends and neighbors.

Our People, Institutions, and Government

- The City of Denton is a healthy, **family-friendly** community which sees its **youth as its most valuable resource**; a resource worthy of investment in education, healthful **recreation**, and opportunities for challenging and rewarding **employment** and **engagement in civic affairs**.
- The City of Denton has integrated, reconciled, and streamlined its plans, process, policies, and regulations for consistency, clarity, and effectiveness.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- **Managed, balanced, and sustainable growth** in high-quality, livable **urban, suburban, and rural places** which offer diverse **choices** among **neighborhood settings** while respecting private **property rights**.
- An efficient **transportation system** with a safe and **well-connected road network** which accommodates a wide array of **mobility options**, including local and commuter rail **transit**, as well as accommodations for **pedestrians** and **cyclists**.
- **Parks, greenways, stream corridors, tree canopy**, and other natural resources integrating into the **fabric of the community** and contributing to **healthy lifestyles**.
- **Environmental stewardship** through water conservation, positive contributions to regional air quality, sustainable development practices, green infrastructure, and **renewable energy**.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Contiguous, staged growth** which is **fiscally** and **environmentally sound**, **reduces fragmentation** and **sprawl**, discourages premature development, and conserves the city's future growing room.
- **Conservation development** which **retains rural character**, **protects open space** and **greenways**, enhances **development value**, and provides **greater choices** to land owners.



Quakertown Park - Denton

The primary goal of the Parks, Conservation and Environment Element is the creation of a cohesive green infrastructure network within the city and advancement of environmental practices throughout. Green infrastructure refers to the network of natural systems that ties the city together in terms of ecological function and a providing a natural backdrop of rural character and aesthetic value. The notion of green infrastructure goes beyond conserving lands at the city's fringes, but rather supports the integration of open space into all parts of the city in the form of tree canopy, parks of all sizes and types, and sustainable stormwater management. The expansion of green elements into the everyday functioning of the city provides important habitat, areas for natural groundwater recharge, and the improvement of air quality through carbon sequestration, which is powerful in terms of climate change mitigation and reducing the urban heat island effect.

Bringing about the goals of conservation and environmental measures takes a coordinated effort through multiple city departments and regional regulators. The policies of Denton Plan 2030 establish guidance to better protect open space through regulatory tools as well as encourage coordination among complementary Plan goals. Land use policy is the first step in ensuring open space protection, as it creates policies and dedicated land for parks and open space. However, mobility and infrastructure are also tied to the further support the health of Denton's environmental systems, from improved air quality via reduced vehicular emissions, through encouraging alternative modes of transportation; to incorporating stormwater management polices to conserve water resources.

Finally, raising the environmental awareness of Denton's population through education, access to recreational resources, and providing ample opportunities for physical activity and interaction with the outdoors, will create a healthier Denton,

one more appreciative of its natural surroundings. Ensuring adequate access to parks, open space, and natural resources will ensure a healthy, happy, and economically viable community for the next generation and for all cross sections of Denton's population today.

Parks and Recreation

Attractive, safe and well-maintained public parks, open space, and recreation facilities are essential elements of Denton's image and quality of life. Open space refers generally to any parcel or area of land or water that is devoted to either the preservation of natural resources, outdoor recreation, or public health and safety. Parks typically serve a recreation purpose, either passive or active in nature. When combined, "parks and open space" refers to the network of all such areas within the city.

Strategically-placed and equitably-distributed parks can provide a wide array of opportunities for both individual and community enrichment. In addition, parks and open space may serve to protect environmentally-sensitive lands from potentially harmful effects of urban development, including curbing sprawl and reducing fragmentation, and

mitigating against climate change, while also offering recreation benefits.

Parks and open space are places to play, relax, and 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. If properly designed and maintained, parks can enhance the economic value of nearby properties. Open space preserves and linkages and greenways can together knit together neighborhoods with other important elements of the city's fabric, including schools, neighborhoods, community facilities, and commercial developments. Whether in the form of golf courses, parks for active recreation, protected natural areas, passive open space within neighborhoods, they add intrinsic value as well as real estate property value. Such lands can also serve as an effective buffer between incompatible land uses. In short, parks and open space 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.

At present the City of Denton's parks system includes just over 4,000 acres of parks and open

TABLE 5.1: Types of Parks and Existing Acreage

Type of Park	Existing Park Acreage, 2008
Mini-Parks/ Pocket Parks/Urban Open Space	0.00
Neighborhood Parks	185.82
Community Parks	143.36
City Parks	587.29
Open Space Preserve	2,700.00
Trail/Linear Parks	126.11
TOTALS FOR PARK SYSTEM	3,742.58

Source: City of Denton Parks, Recreation, & Trail System Master Plan (2009)

space recreation facilities. More than half of this acreage lies within the Clear Creek Natural Heritage Center, the 2,700-acre preserve opened in 2009 that provides an integral piece of achieving the City's environmental vision and provides an important outdoor recreation facility for the city. Beyond this preserve, the City maintains twenty-six parks and two cemeteries as developed parkland. The system includes 13 neighborhood parks, 10 open space/linear parks, four community parks, and four city parks Table 5.1 identifies the individual parks within each category and their associated acreage and Figure 5.1 depicts their location.

New parks are developed based on the recommended park acreage per 1,000 residents to achieve park level of service as well as meet the needs and vision of the community. Currently, park types, terminology, and level of service standards are based on the *Parks, Recreation and Trail System Master Plan (2009)* and the open space framework provided in the *Open Space Master Plan (2002)*. The *Parks, Recreation and Trail System Master Plan* also includes recommendations for individual elements within parks such as sports fields, picnic pavilions, playgrounds, and skate parks, based on community desires, suitable locations, and reasonable costs. An update to the *Parks, Recreation and Trail System Master Plan* is recommended to ensure that specific recommendations for parks, trails, and recreation amenities are developed within the framework of Denton Plan 2030.

Based on the community vision for the City of Denton through the Plan horizon, including adequate park facilities to maintain the livability and quality of life of Denton is essential. To accomplish this, the city must match population growth through the provision of new and well-maintained parks, open space, and recreation facilities. In addition, the City must think big picture about how the parks and open space

relate to one another, forming a network of facilities that are accessible regionally, locally, and on a community-by-community basis, linked with trails and bicycle paths, and contributing to a network of connectivity and natural resources that frame the city. The city should aim to have an appropriate balance of each of these types of parks to meet community needs and create an exemplary parks, recreation and open space system.

City Parks

City parks are typically greater than 50 acres and serve the entire city as well as larger region. Recreational facilities including playground, picnic area, playing courts, trails, and necessary parking. A portion of the site is set aside for passive recreation activities and/ or natural open space/conservation area. These parks are unique, one-of-a-kind facilities and may include such attractions as garden centers, water parks, outdoor theatres, civic centers, fitness center, a model airplane field, a multi-field athletic complex, a nature center, and are likely to include significant conservation areas.



City Park - Denton

Open Space Preserves

An open space preserve is a special park type that applies to land that is acquired and managed in accordance with land use, preservation, environmental, and urban design objectives. These are developed according to the goals of environmental conservation and the ability to acquire specific land area.

Community Parks

Community parks are typically 30-50 acres, serving the larger community up to a 2-mile radius and featuring a variety of recreational facilities including playground, picnic area, playing courts, trails, and necessary parking. A portion of the site is set aside for passive recreation activities and/ or natural open space/conservation area. These parks may include recreation-multipurpose centers, competitive sports fields, & swimming pools.

Neighborhood Parks

Community parks are typically 5 to 20 acres serving nearby neighborhood(s) within ½ a mile. Usually includes recreational facilities such as a playground, picnic area, court games, trails, and limited parking. A portion of the site is set aside for passive

recreation activities and/ or natural open space/ conservation area.

Mini-Parks/ Pocket Parks/ Urban Open space

Smaller parks, taking the form of mini-parks, pocket parks, or urban open space are typically 2,500 square feet to 1 acre serving immediate neighborhood (1/8 to 1/4 mile in radius). May feature amenities like benches and public art elements and be developed in locations not suitable for larger parks and/or to reclaim undeveloped lots of excess vehicular right-of-way.

Linkages and Greenways

Linkages and greenways knit all open space together. Physically they may take the form of hard or soft surface trails for hiking, biking, skating, horseback riding. Ideally they connect neighborhood area to schools, parks, civic buildings, other communities, creating a framework of connectivity in and around the city.

The policies of Denton Plan 2030 will ensure that the needs of the community as well as the vision for parks, open space and recreational facilities are met as the city grows and develops.

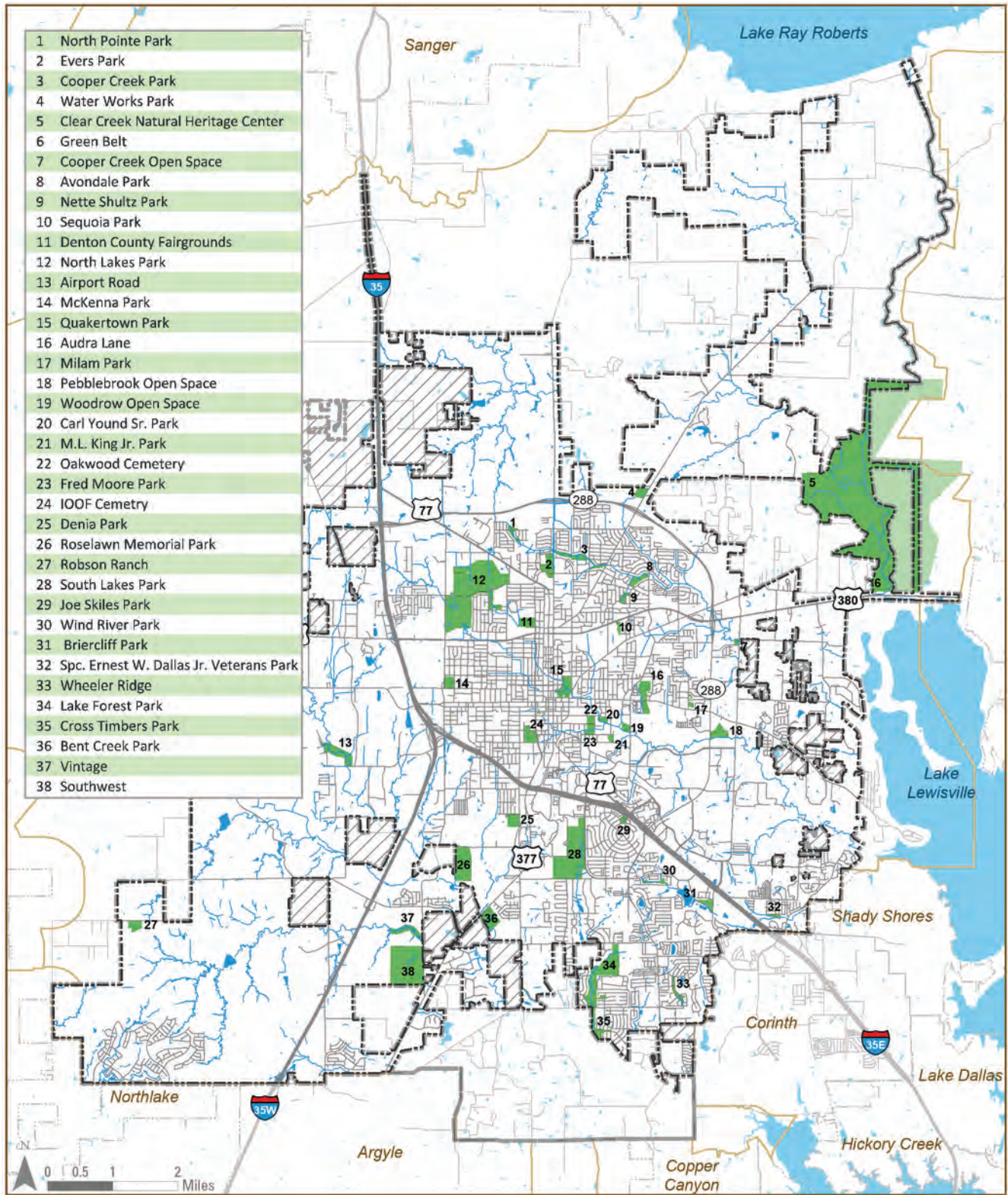


Playground - Denton



Urban Open Space

FIGURE 5.1: Parks



Source: City of Denton

- City of Denton
- Non-Annexation Agreement Areas
- ETJ
- Parks
- Surface Water

* Areas identified on the map may be annexed within the timeframe of the annexation plan

GOAL PCE-1: Unite Denton through a framework of parks, open space, and recreation facilities that respond to unique community needs and match population growth.

Policies and Actions

Provisions of Parks:

Denton Plan 2030 provides the overarching guidance and framework for the provision of parks and recreational resources. The vision for the provision of parks, open space, and recreation facilities is to ensure that Denton is characterized by a superior park system that provides a variety of different park types, connected by trails and open space linkages, that provide recreational and open space opportunities for the growing population as well as achieve environmental benefits. Specific regulations for the development of parks, including standards and terminologies are located in the *Parks, Recreation and Trail System Master Plan*. Standards are established so that appropriate variety and amount of parks are created to match population growth and community needs. Policy 5.1.1 calls for the updating of this plan every five years.

5.1 Provide for the development of superior park facilities in a range of types and sizes, per city standards, to meet Denton’s population growth. (DP p. 110)

- 5.1.1 Create and implement a vision for a park, open space, and trail system in which mobility to, from, between, and within the system is readily apparent and aligned with natural resources in the city and is linked regionally.
- 5.1.2 Update the *Parks, Recreation and Trail System Master Plan* at least once every five years to implement this vision. Align park terminology and recommended acreage standards with



A range of park types and sizes

- national terms and best practices. (M 6.14.4)
- 5.1.3 Acquire and maintain sufficient land to keep pace with Denton’s park needs based on standards of updated *Parks, Recreation and Trail System Master Plan*.
- 5.1.4 Engage the community in the design and planning for new parks to create reflections of neighborhood, community, and city character, as with all community facilities design (HN 7.15.4)
- 5.1.5 Create designs for new recreation and open space facilities that respond to the context of specific neighborhood, the needs of specific segments of the community, and utilize best practices in park design. Create master plans to implement design.
- 5.1.6 Develop, fund, and implement future Capital Improvement Programs

consistent with the *Parks, Recreation and Trail System Master Plan*. (LU 2.4.2, FEV 3.9.4)

- 5.1.7 Periodically survey community preferences and needs regarding parks and recreation. Incorporate this information into revisions of the strategic plan, annual action plans, and updates of the *Parks, Recreation and Trail System Master Plan*.
- 5.1.8 Actively pursue the creation of mini-parks, pocket parks, urban open space, and urban gardens on vacant parcels or other types of unused, available land throughout the city. (HN 7.9.2, CHS 8.3.4)

Integrated Park Planning and Design:

It is important that the provision of parks not only address population-based development standards, but be coordinated with overarching city and regional policy for the protection of environmental resources, the achievement of high quality, memorable public spaces, and the attainment of regional environmental goals. Parks and open space provide myriad benefits for achieving environmental quality goals, such as improved air and water quality, as well as providing access to scenic corridors and views, and natural buffers. Parks and open space development and acquisition plans should endeavor to further regional goals as well as link with other relevant planning policy. Planning for trails needs to be coordinated regionally in order to facilitate a mobility connection between communities and foster a broader green infrastructure network. Trail planning is coordinated through the North Central Texas Council of Governments (NCTCOG).

5.2 **Coordinate acquisition of parks and open space with goals for urban design, mobility, infrastructure, and environmental conservation objectives. (DP p.111)**

- 5.2.1 Implement the updated *Parks, Recreation and Trail System Master Plan* to prioritize development of trails and greenway corridors throughout Denton. Update the plan every five years to identify further significant scenic, historical, and environmentally sensitive lands, and determine strategies to preserve them. (M 6.14.4)
- 5.2.2 Coordinate with North Central Texas Council of Governments (NCTCOG) to achieve objectives of the regional transportation system in linking Denton with surrounding communities via a greenbelt system. (M 6.14.3)
- 5.2.3 Develop parks and open space adjacent to residential areas, community facilities, commercial centers, and the universities to link areas together via green space, and creating opportunities for outdoor access, and physical activity.
- 5.2.4 Acquire land for park dedication along drainage corridors and floodways to preserve environmentally sensitive lands, provide recreation opportunities, and promote stormwater management through green infrastructure (IU 9.11.2).
- 5.2.5 Utilize parks and recreation spaces as elements of air and water pollution management as well as an important tool in buffering incompatible

- land uses, and preventing sprawl and reducing fragmentation of development by promoting land conservation. (DP p.112, IU 9.13.4)
- 5.2.6 Encourage pedestrian and bicycle linkages to parks and recreation areas in order to promote mobility and community health goals. (DP p.107, M 6.14.4)
- 5.2.7 Work with UNT and TWU to link parks within campus boundaries into the city network and create new parks and open space resources as part of campus development and environmental stewardship.
- 5.3.2 Research feasibility of creating revenue-generating parks and recreation features that can reduce the dependency on property tax revenue and generate profits to underwrite other recreation facilities and services.
- 5.3.3 Coordinate with adjacent municipalities, DISD, and local institutions to explore opportunities for cooperative ventures in providing parks and open space.
- 5.3.4 Coordinate with adjacent and nearby municipalities, school districts, local institutions, and other agencies to develop a regional, connected trail system. (M 6.14.3)

Cost-Efficient Parks:

The provision of parks and recreation facilities and programs, like any community facility or service, impacts the city budget. High quality parks and open space, while a priority, are expensive to maintain, program and develop. The City of Denton should coordinate the planning and maintenance of parks and open space with other facilities in order to identify cost-efficient approaches and investigate the opportunity for revenue generating parks and privately-funded parks in the future.

5.3 Develop parks, open-space, and recreation facilities in a manner that is most cost-efficient for capital and operating expenses and coordinated among city departments, adjacent municipalities, DISD, and local institutions and recreation providers. (DP p.112, HN 7.13)

- 5.3.1 Require that plans for new park facilities are coordinated with planning for other community facilities, and vice versa. Identify opportunities for clustering multiple public facilities

Natural Areas, Natural Resources, and Conservation

Environmental protection is one of the most significant ongoing concerns expressed by Denton citizens. During the public input process for Denton Plan 2030, as well as in the 1999 Denton Plan, citizens repeatedly expressed that the natural environment of Denton was among its highest priorities. The City of Denton has already made great strides in the protection of its natural environment and addressing the value of its environmental resources appropriately by prioritizing the reduction of environmental degradation and pollution. With environmental concerns reaching out far beyond the city limits, successful environmental management must be coordinated with the regional community, in order to achieve goals to benefit Denton, the region, and the planet.

Denton County lies at the juncture of the heavily-wooded region of Eastern Texas and the sparse Great Plains of West Texas. Three ecoregions give the City of Denton its mix of prairie grasslands and woodland character: the Blackland Prairie, CrossTimbers, and Grand Prairie land resource areas.

The Elm Fork Branch of the Trinity River is the origin of the water sources for the City of Denton and Denton County. Several major creeks that flow into the Elm Fork pass through the western part of Denton. Clear Creek, flows through the northern portion, while Cooper Creek, Hickory Creek, and Pecan Creek flow southeast through the central area of the city into Lake Lewisville. These creeks also define the city’s watersheds. Denton is served by two lakes: Lake Lewisville and Lake Ray Roberts, both of which were constructed as part of the Trinity Regional Project of the U.S. Army Corps of Engineers. Lake Lewisville, located to the east of the City of Denton on the Elm Fork, is the city’s primary source of drinking water. Lake Lewisville and Lake Ray Roberts are connected via a 20-mile “Greenbelt Corridor” multi-use trail system that follows the banks of the Elm Fork. The trail begins at the Ray Roberts Dam and ends at the headwaters of Lake Lewisville.

As a result of the environmental principles of the 1999 Denton Plan, Denton has identified areas with significant ecological value as Environmentally-Sensitive Areas (ESAs), which were adopted in 2002. These areas are subject to regulations (contained in Subchapter 17 of the Denton Development Code) that limit land-disturbing activity and development in special natural resource areas, as well as protect the city’s water quality. ESAs provide important plant and animal habitats, as well as provide critical linkages for wildlife, as they are intended to link existing and planned open space within the city. Finally ESAs filter pollutants, serve as a source of

Denton lies at the juncture of three ecoregions: the Blackland Prairie, Cross Timbers, and Grand Prairie land resource areas, characterized by a mix of prairie grasslands and woodland. Each boasts a rich, diverse wildlife population seen only in North Texas.



Elm Fork Trinity River



Cross Timbers Ecoregion

resources, and serve as a sink and sequestration area for pollutants.

ESAs, depicted on Figure 3.1, include the following areas as defined in the Denton Development Code:

- **100-Year Floodplain:** Areas within the FEMA 100-year floodplain in its natural state or areas that have been graded, filled, or otherwise disturbed.
- **Riparian Buffers:** Areas identified as 100 feet from the stream centerline for streams draining a basin of greater than one square mile, and 50 feet from any streams that drain areas of one square mile or less.
- **Water-Related Habitat:** Areas designated for wetland, tree, and understory preservation and including significant stands of predominately native water-related habitat.
- **Upland Habitat:** Areas of a minimum of ten acres in size that contain remnants of the eastern CrossTimbers Habitat.

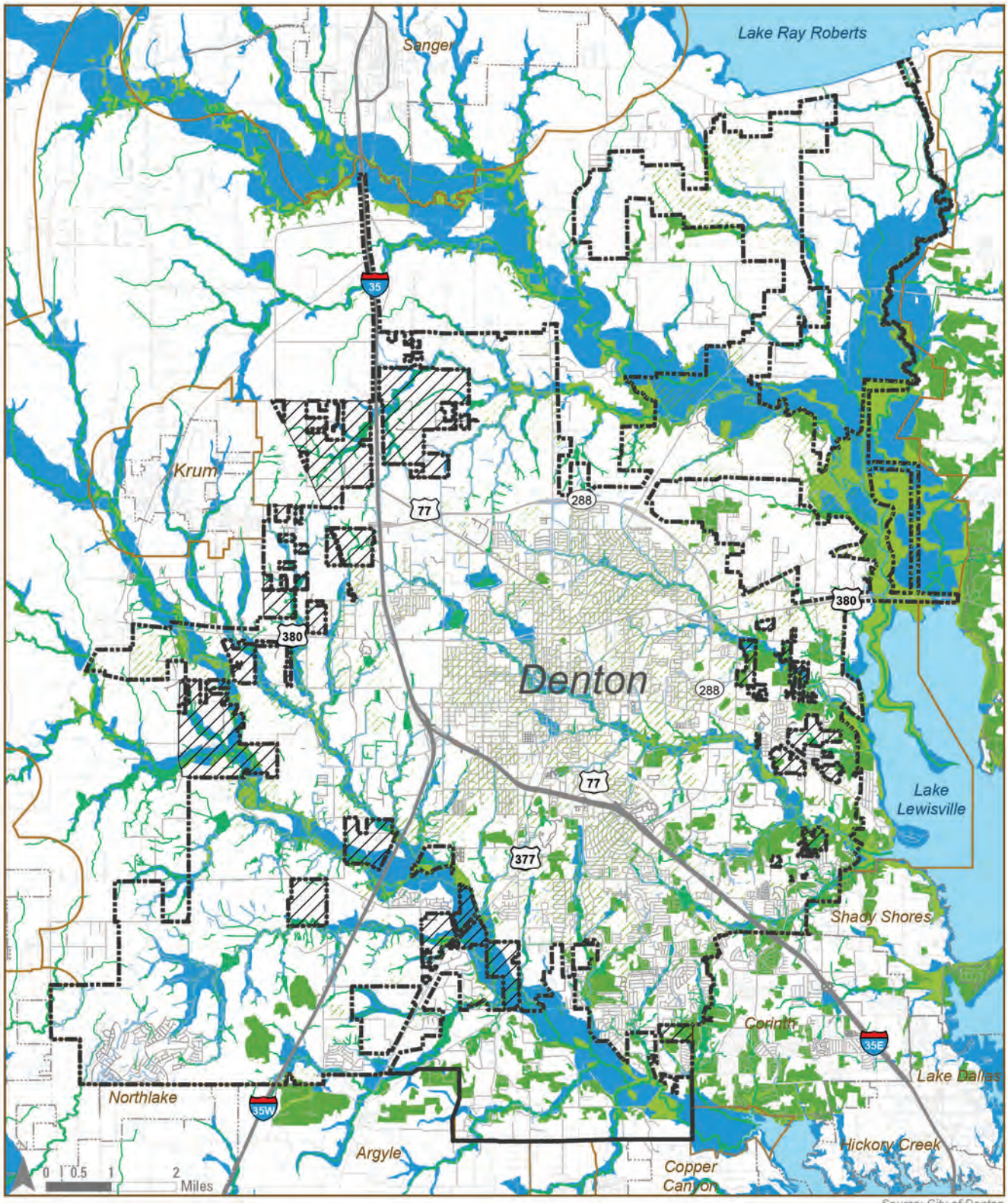
The flagship of Denton’s environmental progress is the establishment of the Clear Creek Natural Heritage Center. Denton, in partnership with the U.S. Army Corps of Engineers, designated the 2,700-acre area in 2009 to celebrate the natural heritage of the city and region. Located in northeast Denton at the confluence of Clear Creek and the Elm Fork, this natural and recreational preserve is a central piece of Denton’s open space network and showcases the city’s natural resources, habitat, and ecoregions. It serves as a gateway to the approximately 2,900 acres of rare bottomland habitat with a diversity of diverse flora and fauna. The Center works to: promote environmental citizenship; provide a place for people to interact and connect with nature; be a model of integrated learning for environmental, outdoor, and experiential learning; provide a leading example of conservation and ecosystem restoration projects;

and be an educational, recreational, and cultural resource for all people.










In addition, Denton has enacted regulations to protect its water resources since adoption of the 1999 Denton Plan. The city received a Clean Water Act Section 319 grant from the Texas Commission on Environmental Quality (TCEQ) in 2010 to explore water quality issues within the Lake Lewisville Sub-basin of the Hickory Creek Watershed. As a result, the city will develop a framework of best management practice (BMP) incentives that can be applied throughout the Lake Lewisville watershed. The city also initiated the Watershed Protection Program in January 2001 to reduce pollutants within its surface waters and to ensure compliance with the National Pollution Discharge Elimination System (NPDES) Storm Water Phase II rule. During the first year of this program, monitoring results were used to establish preliminary baseline conditions for the physical, chemical, and biological components of the city’s surface water resources. Results from this ongoing monitoring program are used to support the requirements of the Phase II stormwater program, assess water quality for the purposes of source water protection, and establish baseline conditions that can be used to evaluate any future changes in water quality.

The city also has made strides in the preservation of its tree canopy, although there is strong community sentiment that the City should do more to preserve and increase it. Denton participates in programs such as Tree City USA (awarded for over 20 years), Scenic City, Keep Denton Beautiful, Keep Texas Beautiful, and Keep America Beautiful. Trees, parks, and public green spaces are viewed as more than just amenities, but essential to community health and quality of life.

FIGURE 5.2: Environmentally Sensitive Areas



Source: City of Denton

- | | | |
|--|---|--|
|  Tree Canopy |  100 Year Floodplain | * Areas identified on the map may be annexed within the timeframe of the annexation plan |
|  City of Denton |  Surface Water | |
|  Non-Annexation Agreement Areas |  Riparian Buffers | |
|  ETJ |  Water Related Habitat | |
| |  Upland Habitat | |



Denton's Tree Canopy

Just under half (40 percent) of the city's 3,000 acres of tree canopy is located in ESA's, illustrated in Figure 5.2. The city enforces a tree preservation ordinance known as the Tree Code that promotes the retention of existing trees, manages and limits tree removal, requires replacement and/or replanting of trees removed, protects trees during construction, and establishes site design and construction criteria to protect the long-term viability of existing trees. The city has discussed updating the Tree Trusts, a section of the tree preservation ordinance, to offer incentives for developers to preserve trees on existing tracts of land rather than remove trees and plant new ones, or pay into the Tree Fund. These tools are important for maintaining essential tree cover, important for a variety of economic and ecological benefits.

As a responsible steward of the natural environment, Denton will enact an integrated approach to conservation management through the policies of

Denton Plan 2030, addressing goals for 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. Tools to protect natural resources may include mitigation banks, which encourage the replacement of function and value of natural resources if preservation is a financial impediment to landowners. Through this and other tools, the policies and implementation of Denton Plan 2030, Denton will continue to develop and implement strong resource conservation programs for water, native, and restored wildlife habitat areas, sensitive lands, and urban forests. Conservation of these areas will be promoted through education programs, incentives, design standards and regulations.

GOAL PCE-2: Use an integrative approach to environmental management to create local land conservation strategies tailored to protecting Denton's water, air, ecosystems, and natural character.

Policies and Actions

Green Infrastructure Network:

Environmental conservation encompasses a range of considerations: water quality, air quality, soil erosion, habitat preservation, public health, agricultural productivity, and rural character. As such, a variety of tools are available to ensure protection of natural resources. Many strategies are related to specific solutions, such as air quality regulations for industrial uses. Others strategies are more far reaching in scope, related to overarching land use and development patterns, and transportation choices. One of the most important aims to achieve in conservation is to achieve a green infrastructure network in Denton, connecting the city through open space and its tree canopy. This network provides both a natural backdrop of rural character and the integration of open space into development, as well as providing important habitat, areas for natural groundwater recharge, and the improvement of air quality through carbon sequestration, which is powerful in terms of climate change mitigation. Regulating conservation takes a coordinated effort through multiple city departments and regional regulators. The policies of Denton Plan 2030 establish guidance to better protect open space through regulatory tools as well as encourage coordination among complementary Plan goals.

5.4 *Promote the formation of a cohesive, broad green infrastructure framework for the city that links open space and natural resources, incorporates goals for land conservation and management, and retains the rural and natural character of Denton.*

- 5.4.1 Further the ESA program to create an integrated system of publicly-owned natural areas that protect the integrity of important conservation sites, protect corridors between natural areas, and preserve outstanding examples of Denton's diverse natural environments. (DP. 107)
- 5.4.2 Acquire and manage land and water to preserve, protect, and enhance important natural areas to contribute to a natural, healthy community and environment.
- 5.4.3 Use the ESA framework as basis for guiding land use decisions and providing an equitable distribution of natural resources throughout the city.
- 5.4.4 Encourage the preservation of floodplain and open space access as a community-wide recreational resource

What is carbon sequestration?

- Carbon is one of the primary greenhouses gasses contributing to global warming. Carbon sequestration means removing carbon from the atmosphere through the natural processes of trees, plants, agricultural and grazing lands.
- Approximately **38%** of Denton's land area consists of agricultural uses while farm and rangeland comprises 5%. Denton's agricultural lands are an important source of locally-grown food.



- instead of singular ownership by one person or a single neighborhood. (DP p.102, IF 9.13.4)
- 5.4.5 Promote Denton’s sustainable features and practices, natural assets, and Parks, Recreation, and Trail System as distinguishing traits for economic growth and community development through public relations materials and business attraction. (FEV 3.5.3)
- 5.4.6 Encourage environmental awareness, the ethical use of natural resources, and preservation of natural habitat through all development policies. (DP p.102)
- 5.4.7 Require an environmental impact analysis for development sites in areas with high ecological values (Environmentally Sensitive Areas), that will trigger appropriate management practices including any necessary mitigation actions. (DP. 104)
- 5.4.8 Promote Conservation Development to protect open space and rural character and reduce development pressure on agriculture. (LU 2.14.1)
- 5.4.9 Work with State of Texas Department of Agriculture to conduct a survey of Prime Agricultural Land consistent with Farmland Mapping and Monitoring Program (FMMP) standards to determine potential locations and value of agricultural land threatened by urban development within Denton city limits and the ETJ.
- 5.4.10 Encourage use of conservation easements and land trusts to protect agricultural land and heritage rangelands through State of Texas Department of Agriculture (i.e. Family Land Heritage Properties) and Natural Resources Conservation Service (NRCS) programs. (LU 2.14.3)
- 5.4.11 Revise Agricultural land use designation to refer to agricultural production rather than an Undeveloped land use.
- 5.4.12 Make broader use of mitigation banks to facilitate market-based compensation to landowners that choose to help protect environmentally sensitive lands. (DP p. 104)
- 5.4.13 Explore adequate public facilities requirements in coordination with Land Use policies and open space conservation. (LU 2.12.2, DP p.104)
- 5.4.14 Enhance clearing and grading requirements to minimize erosion, eliminate clear-cutting, reduce sedimentation, and reduce fugitive dust (airborne particles) in new



Agricultural land in Denton

construction. Utilize guidance of LEED for New Construction for new construction. (DP p. 104)

- 5.4.15 Incorporate strategies regarding Land Use and Open/ Natural Space from Denton’s Sustainability Plan: *Simply Sustainable*, 2012. (pp.32-37).

Expanding and Protecting Tree Canopy:

As stated, Denton has strong community support for the expansion of its existing tree canopy preservation program. Denton’s tree canopy, in concert with its parks, trails and open space, provide an essential layer of the city’s green infrastructure network and provide environmental and aesthetic benefits community health and quality of life.

Much of Denton’s tree canopy is already under protection in ESAs and the city’s Tree Code as discussed above. However, a variety of tools exist to further promote the preservation of Denton’s tree canopy. These tools are important for maintaining essential tree cover, important for a variety of economic and ecological benefits.

Maintaining the urban tree canopy should be done in accordance with existing city policies and ordinances. However the City should proactively engage service providers to amend service criteria so as to contribute to maintaining a healthy tree canopy and coverage.

5.5 Ensure the protection of Denton’s tree canopy as an essential element of Denton’s cohesive, broad green infrastructure framework.

- 5.5.1 Conduct an *Urban Forestry Master Plan* to identify important tree canopy resources and include specific strategies for protection and provision of a more robust tree canopy.



Why do trees, open space, and agricultural lands matter?

- The greater the amount of these elements, the greater the **resilience to climate change**.
- One acre of forest absorbs six tones of CO₂ and puts out four tons of oxygen.
- **Urban trees** currently store **700 million tons of carbon**, with an annual sequestration rate of 22.8 million tons.
- Tree canopy increases property values and provides shade and comfort in urban areas

- 5.5.2 Research and determine what the goal should be for percentage of tree canopy in Denton and establish regulations accordingly, taking into consideration the topography and habitats present and also Denton’s geographic location.

- 5.5.3 Conduct a study to understand the current and future economic development value of Denton’s urban tree canopy, and to determine best practices in urban tree management.

- 5.5.4 Promote Denton’s commitment to sustainable community growth and community aesthetics/appearance through continued participation in the Tree City USA, Scenic City USA, Keep Denton Beautiful, Keep Texas Beautiful, and Keep America Beautiful programs.

- 5.5.5 Update the Tree Trusts section of the tree preservation ordinance with



Tree Preservation - Denton

incentives for developers to preserve existing trees located in development sites rather than remove or replace trees, or pay into the Tree Fund.

- 5.5.6 Establish Heritage Tree Parks in which the City purchases lands identified to have significant amounts of historic trees for long-term preservation.
- 5.5.7 Ensure that service providers are in compliance with the Tree Code regarding tree trimming and planting requirements. (IU 9.4.6, DP p.168)

Habitat and Ecosystems Protection:

Habitat preservation is at the core of environmental protection. Denton's location within the ecoregions of the Blackland Prairie, Cross Timbers, and Grand Prairie, as well as at the confluence of the tributaries of the Trinity River, make the city and surrounding county rich in ecological resources. A key element of land conservation is the protection of native flora, fauna, and aquatic species. Extensive research has been conducted on the value of the habitat in Denton and many areas have been protected as a result of the ESA program, as well as interpreted at

the Clear Creek Natural Heritage Center. The policies of Denton Plan 2030 will ensure the furtherance of environmental protection goals and education, to ensure the continued safeguarding of precious habitat resources.

5.6 *Promote the retention of essential ecosystems and habitat in Denton's land conservation strategies. (DP p. 102)*

- 5.6.1 Develop a plan for conservation and preservation of the unique and endangered native Cross Timbers Forest region trees, Blackjack Oak and Post Oak, which are critical to the local wildlife and natural ecosystem of Denton.
- 5.6.2 Develop conservation and development priorities to be used by planners and decision makers to systematically identify, evaluate, and synthesize various environmental attributes and evaluate ecological values.
- 5.6.3 Create a 10-year plan for acquiring and preserving open space that are considered to be of high value for ecological preservation and are not already under protection.
- 5.6.4 Determine standard for open space provision as a percentage of development area that new developments on greenfield land must provide on- or off-site. Include this provision in development standards for Master Planned Communities (MPCs).
- 5.6.5 Expand the City's public education programs to celebrate Denton's ecosystems through physical



Katy Trail Network



Habitat protection

interpretation, site management, conservation, sustainability, watershed protection, and urban forestry.

- 5.6.6 Update the criteria prepared through the 1999 Denton Plan to identify and prioritize habitats with emerging trends, current conditions, and new expertise to strengthen and continue use of this tool for open space protection. (DP p. 103)
- 5.6.7 Coordinate ecosystem protection goals with surrounding municipalities and Denton County.
- 5.6.8 Continue to enforce and update the ESA regulations in order to 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.

Air Quality:

Air quality, is an issue that affects the entire North Texas region. Four counties in the Dallas/Fort Worth metropolitan area (Denton, Collin, Dallas, and Tarrant counties) have been classified by the U.S. Environmental Protection Agency (EPA) as “non-attainment” areas for ground-level ozone. The EPA also has classified the entire Dallas – Fort Worth metropolitan area as a “serious” ozone non-attainment area. Much of this is as a result of vehicular travel and other factors. Improving the air quality of Denton and the region requires a multi-pronged approach. Air quality is affected by not only vehicular emissions and pollution, but can be ameliorated by natural factors such as tree canopy. Denton has the opportunity to not only improve air quality through the enactment of compact growth principles and multi-modal strategies, but a move towards sustainable building design, industrial standards, and the preservation of open space. The compact growth framework, furthered by the entire Denton Plan 2030 and discussed most thoroughly in the Land Use Element, puts forward policies and actions that will result in development that is located in closer proximity, thereby generating fewer vehicle trips and preserving the greatest amount of open

space. The Texas Commission on Environmental Quality (TCEQ) and the North Central Texas Council of Governments (NCTCOG) both already have strong policies in place that can serve as guidance for Denton to ensure appropriate compliance. Also, the preservation of open space will contribute to carbon sequestration that can also have a positive influence on Denton's atmospheric quality.

5.7 Uphold regional air quality goals through conservation strategies that improve air quality in Denton and the region. (DP p. 102)

- 5.7.1 Promote the expansion of alternative transportation options such as public transportation, walking, and bicycling through the Mobility Element that reduce vehicle trips and thereby reduce emissions.
- 5.7.2 Protect and increase existing tree canopies and promote the enforcement of an enhanced and high quality Tree Preservation program to increase natural carbon sequestration. (PCE 5.5)
- 5.7.3 Continue to work with the NCTCOG to address air pollution on an airshed basis, including regional programs for alternative transportation.
- 5.7.4 Update policies to reduce point-source emissions in keeping with Texas Commission on Environmental Quality (TCEQ) policy.
- 5.7.5 Incorporate air quality and greenhouse gas (GHG) management strategies from Denton's Sustainability Plan: *Simply Sustainable (2012)*.

- 5.7.6 Research and implement methods to view and quantify the value trees provide as infrastructure.
- 5.7.7 Explore and implement methods to mitigate any adverse effects of oil and gas drilling and production on air quality, such as requiring Vapor Recovery Systems.
- 5.7.8 Explore and implement requirements to improve air quality through private community actions, new development, and revitalization efforts.

Water Quality and Conservation:

Denton has been successful at assigning protection and value to its water system, including water bodies and watersheds, in recent decades. Denton's ESA program has been successful in helping to protect its natural resources and improve water quality, both for human consumption and habitat. Denton should continue to enforce the ESA program, as well as participate in regional coordination to address issues of water quality and supply. An innovative, comprehensive approach to natural resources protection will ensure that protecting water quality and habitat will be coordinated with goals for air quality, land protection, as well as goals for mobility and the enhancement of the public realm. The adoption of green infrastructure features as part of the Infrastructure and Utilities Element policies will also be instrumental in improving water quality, conservation, and the natural functioning of Denton's ecosystems.

5.8 Incorporate water management and floodplain preservation strategies into conservation prioritization to improve water quality and maintain the functioning of natural systems. (DP p.106)



Low-impact development - Denton

- 5.8.1 Continue to enforce and update the ESA regulations in order to improve water quality and maintain floodplain habitat through preservation of the 100-year floodplain and wetlands. (DP p.162, IU 9.11.1, 9.13.1)
- 5.8.2 Preserve stream buffers and the bottomland hardwood habitat and wetlands in accordance with ESA regulations.
- 5.8.3 Review and revise engineering standards for roads and stormwater systems to apply low-impact design (green infrastructure) elements to minimize stormwater runoff into water supply and natural systems. (IU 9.11.2, 9.11.3, 9.11.4, M 6.15.1)
- 5.8.4 Coordinate development of greenways and trails along the floodplain and tributaries to promote recreational and mobility goals. (DP p. 106).
- 5.8.5 Limit creation of new impervious surface areas as a result of new development through the adherence

What is impervious surface?

- Impervious area is the amount of hard surfaces such as parking lots, roads, rooftops and driveways.

Why does it matter?

- Impervious cover increases surface runoff, resulting in increased delivery of stormwater and associated contaminants into streams.

SOURCE: EPA



- During a storm event, the house on the right sends more rainwater into the storm system than the house on the left. That's because the house on the right has more impervious surface.

SOURCE: City of Charlotte and Mecklenburg County Government

with the City of Denton *iSWM Design Manual* including low-impact design regulations and incorporation of green standards (i.e. LEED) for new construction. Ensure that measures are regularly enforced and not waived. (IU 9.12.1, 9.12.3, 9.12.4).

- 5.8.6 Continue to enforce and update the ESA regulations to restrict development and encourage greenbelts and other low-intensity land uses incorporated into new development. (DP p. 106)
- 5.8.7 Continue to enforce and update the ESA regulations in order to actively protect, manage, and enhance natural stream corridors and other waterways as natural ecological systems, important wildlife habitat, and accessible recreational areas. (DP p. 107)

- 5.8.8 Incorporate water quality and watershed management strategies from Denton's Sustainability Plan: *Simply Sustainable* (2012).
- 5.8.9 Continue to monitor quality of Denton's drinking water and provide annual updates to community members and to be posted online.
- 5.8.10 Coordinate regionally to achieve sustainable practices in conserving the water supply of North Texas and drought preparedness. (IF 9.6.2, 9.6.3)

Sustainability Framework

Denton has established itself as one of the most environmentally proactive cities in the country. The City completed and adopted a sustainability plan: *Simply Sustainable: A Strategic Plan for Denton's Future* in 2012, which is highly regarded and followed. In addition Denton Municipal Electric (DME) leads the country in the provision of energy from renewable sources, providing approximately 40 percent of its energy from renewable sources as of 2014.

Achieving a more sustainable future for Denton remains a priority for the City and the community, with the intent of continually raising the bar. As sustainability is one of the overarching themes of Denton Plan 2030, it is understood to be both a top priority of the plan as well as an issue that transcends many topics. Policies and actions furthering sustainable practices in terms of land use, land conservation, renewable energy, mobility, water and wastewater services, stormwater management, local food production, and solid waste are found throughout the Plan. The purpose of this discussion is to create a framework to unite the sustainability measures together so that they can be referenced for purposes of providing an update to *Simply Sustainable* as well as further a coordinated sustainability agenda through the planning horizon.

GOAL PCE-3: Create a framework for advancing sustainability in a comprehensive manner for the future of Denton.

Policies and Actions

Green Building Design:

5.9 Further the incorporation of green design standards for new construction and improvements to existing buildings and the public realm. (CC Table 4.1)

- 5.9.1 Create a Green Building Ordinance that mandates green building standards for new residential and commercial construction. Use Green Built™ Texas as a standard.
- 5.9.2 In the absence of a Green Building Ordinance, encourage certification by Green Built™ Texas for construction of residential projects.
- 5.9.3 Promote the establishment of green building service businesses locally in Denton that are hired to further green build goals in the city.
- 5.9.4 Create guidelines and incentives for the construction of green roofs in Denton.
- 5.9.5 Create guidelines and incentives for the use of Energy Star certified products in new construction and commercial and residential remodels.
- 5.9.6 As part of Green Building ordinance, encourage the use of sustainable and locally-sourced materials in new construction and rehabilitation.



Green roof



Sustainable Building Design- UNT

- 5.9.7 Encourage the use of durable materials in all construction that will last and not contribute to significant maintenance needs.
- 5.9.8 Require that all commercial buildings, including City buildings comply with standards for reduced energy consumption.

Low-Impact Development:

Low-impact development is a component of sustainable design that refers to the design of the public realm in a manner that mimics natural systems. Low-impact design guidelines are included as part of the *North Central Texas Council of Government's (NCTCOG's) iSWM Criteria Manual for Site Development and Construction* that Denton adopted in 2013. This manual includes seven categories of guidance including: Planning, Water Quality, Hydrology, Hydraulics, Site Development Controls, Construction Controls, and Landscape guidelines. The manual includes best management practices (BMPs) for site design, including stormwater flows, permeable paving, and drought-tolerant landscaping. By adherence to these guidelines, future development in Denton will be up to the regional standards of sustainable development.

5.10 Further the incorporation of low-impact development for the site design.

- 5.10.1 Implement the *North Central Texas Council of Government's (NCTCOG's) iSWM Criteria Manual for Site Development and Construction* and continue to participate with regional groups to identify and implement best practices.(PCE 5.7.3)
- 5.10.2 Coordinate with design guidelines created for new roads, pedestrian improvements, and trails to ensure that sustainable materials are chosen for site design, such as permeable paving materials that mimic natural systems.

Renewable Energy:

Advancing the progress for renewable energy provision remains a priority for the City of Denton and the community and is an important component of sustainability. As stated in the Infrastructure and Utilities Element, offering cost-effective renewable energy as well as continuing programs such as GreenSense to offer flexibility for consumers is a goal for Denton Municipal Electric (DME), Denton's electric utility.

5.11 Ensure that renewable energy actions are an element of the sustainability framework for the City and a basis for an updated Sustainability Plan.

- 5.11.1 Incorporate actions for Cost-Effective Service, Cost-Effective Renewable Energy, and Lighting Standards are incorporated into the sustainable management practices of the City and the updated Sustainability Plan. (IU 9.1, 9.2, 9.3)

Solid Waste and Recycling:

Management of solid waste and recycling is an important component of sustainability. As stated in Infrastructure and Utilities Element, recycling, landfill gas programs, organic materials and materials recovery are all priorities of the Denton community and have impact into the sustainable operation of the City.

5.12 Ensure that solid waste and recycling goals are an element of the sustainability framework for the City.

- 5.12.1 Incorporate actions for Waste Minimization and Resource Recovery, Efficient Solid Waste and Recycling,

and Environmental Protection and Disposal Capabilities are incorporated into the sustainable management practices of the City and the updated Sustainability Plan. (IU 9.14, 9.15, 9.16. 9.17)

Local Food Production:

Local food is central to furthering sustainability. Food sources are important to issues of community health, economy, and the environment. Food production also affects air and water quality based on the distance that food travels to be consumed in Denton, as well as the practices of local farmers in terms of irrigation. Already the City of Denton supports local farmers, urban agriculture, and community gardens, as well as local businesses focused on locally-sourced and sustainable food. Denton 2030 further supports this goal. Policies in the Land Use and Community Health, Safety and Services Elements contain goals to further local food production practices and access to healthy foods.

5.13 Ensure that local food production continues to be at the forefront of the sustainability framework for the City.

- 5.13.1 Continue to expand community gardens and urban agriculture to promote access to healthy foods.
- 5.13.2 Update the Denton Development Code to allow urban agriculture by right in appropriate land use designations. (LU 2.19, 2.2.2, 2.19, 2.20)
- 5.13.3 Actively seek out and implement methods to make local food production easier. (CHS 8.1.6)



Denton Solid Waste and Recycling program



Earthwise Gardens - Denton

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MOBILITY OVERVIEW

Denton is a fast-growing community with growing travel demands among residents, students, and employers. Travel demands include trips to and from work, around town, and to areas outside of Denton. Travel demands increase with population growth, and grow in duration according to the amount of distance between origins and destinations. Travel demands impact the need for more roads to accommodate traffic of all kinds, and are used to model impacts ranging from air quality to fiscal performance. The City and its partners will be challenged in the future to provide a safe, convenient and efficient transportation system as growth occurs in the decades to come.

For much of Denton's recent growth, the automobile has continued as the primary form of transportation, utilizing the farm-to-market road network. While the private automobile will continue to be a major part of the city's transportation system, lifestyle, economic, community design, and infrastructure considerations will drive the development of a more balanced transportation system to complement Denton's growth. Walking, cycling, and riding transit will experience increased emphasis in the decades to come. This has implications for how Denton provides facilities for walking and cycling, how Denton County Transportation Authority (DCTA) provides transit service, and how land use and development patterns influence travel behavior.

Denton Plan 2030 and specifically, the Mobility Element, present a comprehensive vision and opportunity to guide future plans, studies and actions. Updates to the Mobility Plan, for example, will incorporate overarching goals and policies listed within this Element as guidance to inform the details of the resulting Mobility Plan. The Mobility Element references differences in current transportation standards, utility practices, and approaches to complete street and multi-modal standards that will support the overarching vision and land use pattern of Denton Plan 2030. While opportunities exist to adopt guidance that results in streets designed for a range of users and modes, it is important that they be consistent with TxDOT standards. As a result of the Mobility Plan update, City plans and manuals may require revision, which will require coordination between city departments, the NCTCOG, and TxDOT to ensure consistency.

Freight movement associated with Denton's manufacturing and distribution sectors is a key component of the city's economic base, and as such, an important element to consider in the design of the mobility network. As Denton and its travel demand grows, the city must ensure viable freight access and mobility on its transportation network.

MOBILITY IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is **consciously green**. We are a leader in our **commitment to sustainability** and we have a significant **tree canopy**, a network of **parks** and **greenways**, **stream corridors**, and **urban forests**.
- Denton is **safe** and **livable**, a **hospitable community** of friends and neighbors.

Our People, Institutions, and Government

- The City of Denton **government is customer-friendly** and prides itself on its **transparency** and **open communication**, **utilizing modern technology**, its **efficient provision of public services and facilities**, and through its **leadership** in seeking to **realize the Vision** of Denton's future.

The Strength of Our Economy

- We **leverage** our **strategic location** and **multi-modal accessibility** in the Metroplex and capitalize on key assets such as **the Denton Enterprise Airport**.
- We value and support our **major manufacturing employers** and other responsible corporate citizens to **ensure their stability**, encourage their **commitment to Denton**, **facilitate their expansion**, and **leverage their presence** by **accommodating their suppliers**, **supporting businesses**, and workers.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- An efficient **transportation system** with a safe and **well-connected road network** which accommodates a wide array of **mobility options**, including local and commuter rail **transit**, as well as accommodations for **pedestrians** and **cyclists**.
- Special attention paid to our major travel corridors, both aesthetically and functionally, representing Denton's character, brand, and excellence.
- **Parks, greenways, stream corridors, tree canopy**, and other natural resources integrating into the **fabric of the community** and contributing to **healthy lifestyles**.
- **Environmental stewardship** through water conservation, positive contributions to regional air quality, sustainable development practices, green infrastructure, and **renewable energy**.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Contiguous, staged growth** which is **fiscally** and **environmentally sound**, **reduces fragmentation** and **sprawl**, discourages premature development, and conserves the city's future growing room.



I-35 and I-35E in Denton

Finally, one of the major priorities of Denton Plan 2030 is to maintain elements of its small-town charm, as well as to create new places that are interesting, safe, hospitable, and livable. As streets constitute a large portion of the public realm and the places where the community comes together, transportation and the design of the street network can play a large role in setting the tone for community character. Additionally, streets can play a strong role in the promotion of a greener Denton by incorporation of green infrastructure in new and retrofitted streets.

Motor Vehicles

Denton is located in the northwest portion of the Dallas-Fort Worth Metroplex at the convergence of Interstates 35E (from Dallas) and 35W (from Fort Worth). Denton is also served by US Highway 380, which connects the northern portion of the Metroplex

running east and west, and US Highway 377, which runs parallel to I-35W into Fort Worth. I-35E is the primary route connecting Denton to the heart of the Metroplex to the south and as a result suffers from congestion on a daily basis.

The travel demand model prepared by the NCTCOG estimates that most workers who live in Denton County commute to jobs outside of the County (approximately three-fourths). An estimated 2.8 million motor vehicle trips are made each day in Denton County. Of these, about one-quarter are trips made between home and work. NCTCOG travel forecasts estimate that total trips will increase to more than 4.7 million by 2030. The highest growth in trip generation is expected to come from the area in southeast Denton County.

In 2012, travel times ranged between 30 to 60 minutes to Fort Worth and 45 to 75 minutes to

Dallas during peak commute periods. According to NCTCOG’s travel forecasts described in its long-range planning report *Mobility 2035 Plan*, these travel times will remain generally consistent over the next two decades, although travel times to destinations east of Denton into Collin and Rockwall Counties are expected to increase by approximately 10 to 15 minutes.

With the expected increase in both trips and travel times, upgrades to the road infrastructure in and around Denton are required. Studies to expand I-35E from IH 635 to US 380 began in 1998 and, Phase 1 was approved to go forward in 2013. The expansion will add one general purpose lane in each direction along I-35E/I-35 in Denton County, as well as two reversible managed lanes from IH 635 to FM 2181 and additional lanes and frontage roads across Lake Lewisville to the south. Phase 1 is expected to be completed by mid-2017.

Locally, Denton’s street network is based on a farm-to-market street framework in which several arterials, including US 380, US 377, US 77, FM 426, and FM 428 converge in Denton’s traditional center. Loop 288 (on the east and north sides) and I-35 (on the south and west sides) form a “loop” around the city. A planned extension of Loop 288 would extend the loop further west and south, which would foster development in those portions of the city. This planned extension of Loop 288 needs to be monitored closely as the alignment may be in conflict with gas wells and underground pipelines that proliferate west of I-35. (LU 2.13.3) The Roadway Network is shown in Figure 6.1.

Within Denton’s traditional center, including Downtown and surrounding neighborhoods, the grid street network is distributed among local and collector streets, which are well-connected and evenly spaced between the arterials. Further out—closer to the loop and beyond—the street network



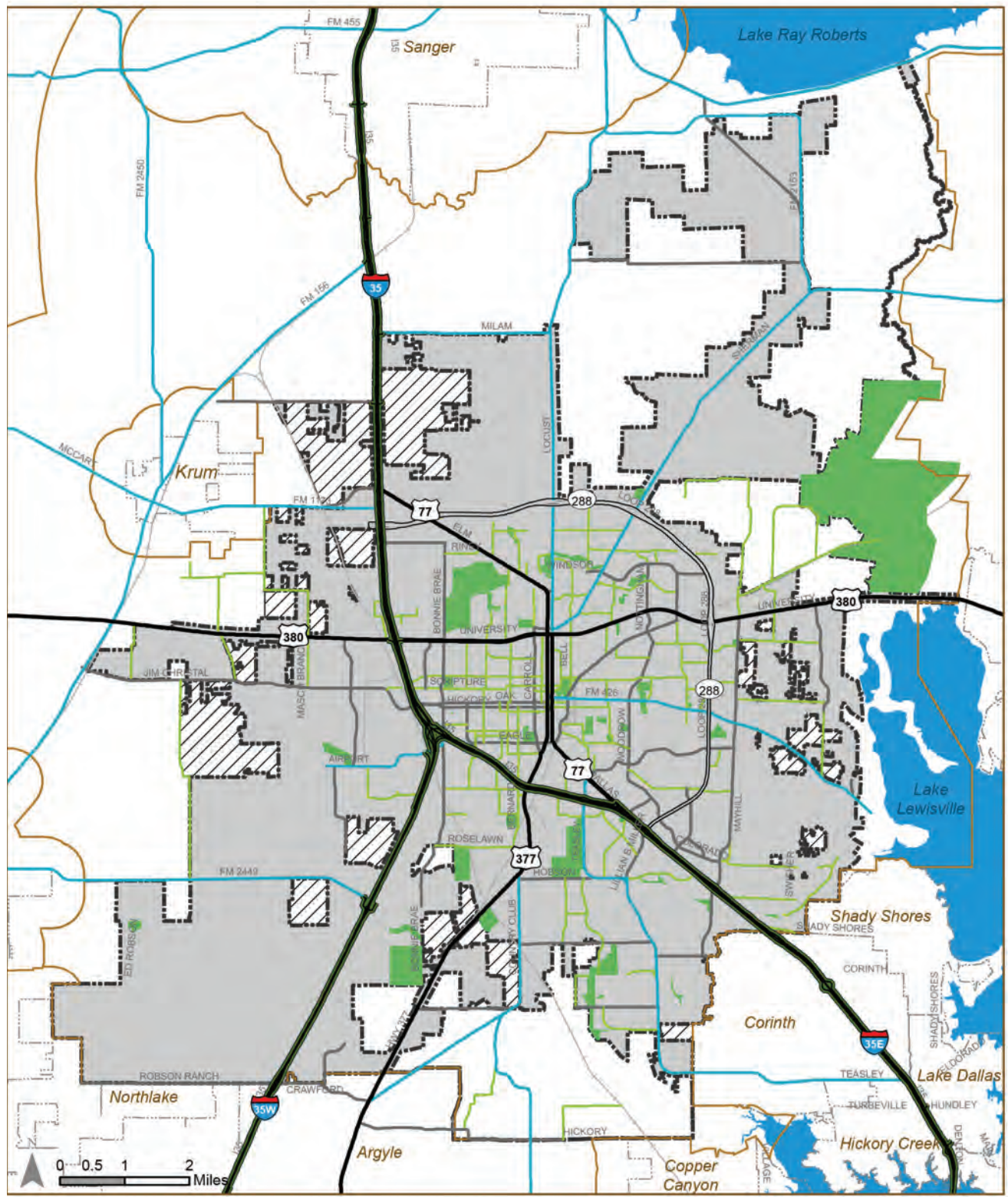
Loop 288 in Denton

becomes a more disconnected suburban pattern. Residential developments become more internally-oriented and funnel traffic to arterials through one or two connections. Commercial uses are typically located at the intersections of arterials and/or extend along arterials in strip fashion.

Although Denton experiences a large degree of out-commuting, there are several major trip attractors within the city, including:

- A cluster of manufacturing and distribution facilities on and near Airport Road just, west of I-35;
- The University of North Texas;
- Texas Woman’s University;
- Several hospitals, including Denton Regional Medical Center, North Texas Hospital, and Presbyterian Hospital;
- Rayzor Ranch; and
- The Golden Triangle Mall.

FIGURE 6.1: Roadway Network



Source: City of Denton

- US Interstate Service
- US Highway
- Loop Road
- State Farm to Market
- Arterials
- Collectors
- Parks
- City of Denton
- Non-annexation Agreement Areas*
- ETJ
- Railroad

* Areas identified on the map may be annexed within the timeframe of the annexation plan.

GOAL M-1: Provide for the safe, efficient movement of motor vehicles, bicycles, and pedestrians in a sustainable way that complements Denton’s planned growth strategy.

Policies and Actions

Mobility Plan:

The Roadway Component Map of the Mobility Plan is the guiding document for the development of Denton’s street network. This Plan will not be realized as a result of a single decision or action. Rather, it is the cumulative result of a number of decisions spanning various entities and years. As a result, it is essential that plans, policies, and activities that have implications for roads within the city be guided by Denton Plan 2030.

At the local level, this means that the Mobility Plan should be an integral part of the layout of street networks in the site plan review process. It should also be the starting point for road projects as they make their way into Capital Improvement Programs and Plans.

At the regional level, the Mobility Plan makes Denton’s case for the inclusion of the city’s priority projects to be funded in the *Transportation Improvement Program (TIP)*, *Long Range Transportation Plan (LRTP)*, and ultimately built by private developers, the City, Denton County, TxDOT, or a combination thereof.

6.1 Pursue new corridors and improve existing corridors in a manner consistent with the Roadway Component of Denton Mobility Plan.

- 6.1.1 Implement the Mobility Plan to be consistent with the Future Land Use Map (FLUM) (LU 2.4.1)
- 6.1.2 Coordinate the Capital Improvement Plan (CIP) as a means for pursuing

What is the Mobility Plan?

The Mobility Plan identifies specific transportation projects and strategies for the City of Denton, including streets and bicycle and pedestrian facilities. It is guided by the goals, policies and actions of the Mobility Element. The City is in the process of updating the Mobility Plan alongside Denton Plan 2030.

city road projects and streetscape improvements. (LU 2.4.2)

- 6.1.3 Continuously coordinate the management of the Capital Improvement Plan (CIP), Mobility Plan, and Denton Plan 2030 to ensure that policies are coordinated. (LU 2.4.1, 2.4.2)
- 6.1.4 Advocate for projects in the Mobility Plan to be included in the regional *Long Range Transportation Plan (LRTP)* and the *Transportation Improvement Program (TIP)*, both maintained by the North Central Texas Council of Government’s (NCTCOG).
- 6.1.5 Ensure new development is consistent with and preserves new roads and road improvements identified in the Mobility Plan. As part of the

- development review process, include a check of the Mobility Plan to ensure that adequate provisions for right-of-way have been made.
- 6.1.6 Establish a procedure for all roads in Denton to comply with consistent standards that contribute to mobility goals, regardless of whether roads are under control of and/or funded by the City, Denton County, TxDOT, or federal.
 - 6.1.7 Coordinate local road expansion with TxDOT plans for the expansion of I-35E, I-35, and other TxDOT roadways.
 - 6.1.8 Coordinate regulations regarding gas wells and pipelines with TxDOT plans for the extension of Loop 288 and other major roadways. (LU 2.13.3)
 - 6.1.9 Continue the city's wayfinding strategy to guide motorists, bicyclists, and pedestrians throughout Denton, noting key entry points, landmarks, and destinations. Coordinate with the Citywide Branding and Placemaking Strategy to call out landmarks and destinations as part of this strategy, where feasible. (CC 4.2.1, 4.2.7)
 - 6.1.10 Partner and collaborate with projects that are major trip attractors to develop and implement innovative ways to manage congestion and incentivize best practices for peak management.

Connectivity:

Well-connected street networks result in more direct routes and shorter travel times, as opposed to a few large, multi-lane arterials which create congested intersections and longer, more circuitous routes. Robust street networks also include smaller streets with less traffic, which are more conducive for walking and cycling. The differences among these connectivity options are shown in Figure 6.2.

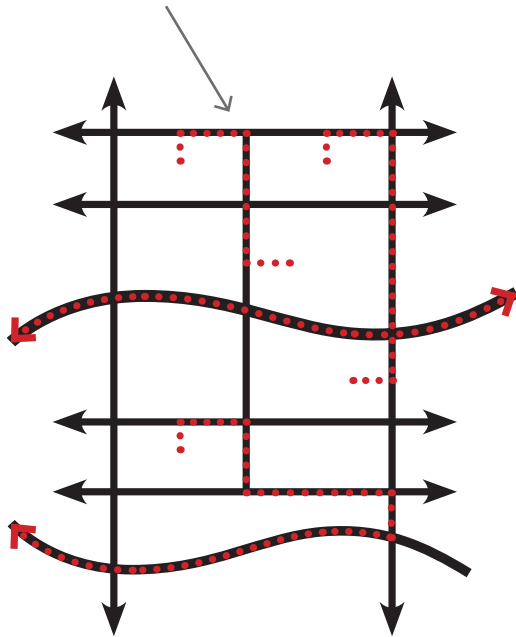
It is important to note that this network does not necessarily have to be provided by the public sector. This network could easily be built as part of private development, as long as it provides connectivity to the external network and it meets applicable design and construction standards.

6.2 Promote street networks and connectivity for the efficient distribution and movement of motor vehicles, bicycles, and pedestrians.

- 6.2.1 Update the Denton Development Code and *Transportation Criteria Manual* to include connectivity standards for new development that are consistent with the updated Mobility Plan (6.1.1).
- 6.2.2 Pursue new opportunities to achieve new roadway connections as development opportunities arise. Update the Mobility Plan accordingly.
- 6.2.3 Provide emergency access when designing new residential subdivisions.

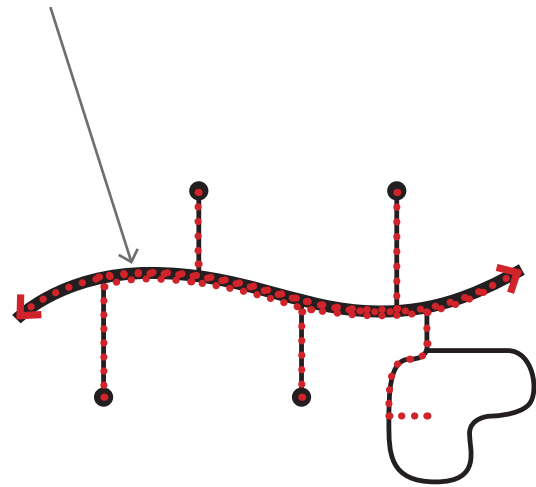
FIGURE 6.2: Connectivity Diagram

Short trips can be made on the local street network



Good Connectivity

All trips must use arterials



Poor Connectivity

Mobility and Land Use:

Land use has a profound influence on travel behavior. How close together or far apart we build our communities has a direct effect on the amount of driving we do or whether we are able to walk or ride a bicycle. There is a direct relationship between the compactness of our neighborhoods and feasibility of transit service.

The Land Use Element prescribes future land uses, such as mixed-use centers surrounded by compact neighborhoods that are conducive to walking, cycling, riding transit, and short automobile trips. These land uses should be encouraged for their ability to support a balanced transportation system and reduce the amount of demand placed on Denton's street network.

6.3 Pursue a coordinated land use and mobility strategy to reduce motor vehicle trip lengths and reduce the need for motor vehicle trips.

- 6.3.1 Encourage and incentivize new development to include elements such as mixed-use and to place homes within walking distance to shopping, education, employment, and entertainment consistent with compact growth framework of the Land Use Element. (LU 2.3.1)
- 6.3.2 Implement the Mobility Plan to be consistent with the Future Land Use Map. (LU 2.4.1)
- 6.3.3 Coordinate mobility standards to be consistent with and allow adequate

right-of-way for public realm recommendations within the proposed *Urban Design Plan* (CC 4.11.1)

- 6.3.4 Use innovative and up-to-date research and methodology to estimate reductions in travel demand when evaluating projects that integrate transportation and land use.

Level of Service:

In terms of Mobility, level of service standards (LOS) are a metric for assessing how well an individual transportation facility or group of facilities (area or corridor) perform. Level of service also refers to the measure by which community facilities are rated and expanded, which are described in other elements of the Denton Plan 2030 (see Fiscal and Economic Vitality and Housing and Neighborhoods Elements). The Fiscal and Economic Vitality Element includes an LOS standard for arterial streets (0.14 lane miles per 1,000 vehicle miles travelled). While this standard is intended to broadly measure whether Denton's infrastructure is keeping pace with growth, LOS measures described here are more refined and intended to measure the quality of the user experience. Traffic is just one type of level of service analysis. At the most basic level, roadway LOS is measured using average daily traffic volumes and capacity in terms of vehicles per day. More sophisticated measures take into account peak period data, travel time data, network measures, and multiple modes.

LOS measures should take into account the balance between mobility and the surrounding context of various places within the city. For example, facilities traversing more rural areas should adopt LOS standards that reflect higher vehicle travel speeds, while facilities in village centers, where the

emphasis is less on moving vehicles quickly and more on compatibility with surrounding activities and character should adopt LOS standards where a greater degree of congestion is acceptable.

By tracking LOS on an annual or semi-annual basis, Denton can monitor how well the transportation system is performing over time and become aware of any system inefficiencies that must be addressed. The LOS standards can be defined in a number of ways, but should be consistent with the city's road impact fee study. For example, if the road impact fee study uses daily traffic volume thresholds to measure impact, those thresholds should be consistent with LOS thresholds.

6.4 *Maintain adequate levels-of-service for travel on Denton's streets.*

- 6.4.1 Develop and adopt LOS standards for all roads in the city that are appropriate for the surrounding environment.
- 6.4.2 Develop a 3- to 5-year review program to track and monitor LOS and system performance on Collector and Arterial road networks.
- 6.4.3 Pursue the multi-modal LOS concept with future Mobility Plan updates.

Access Management:

Having good street connectivity is important to a well-functioning transportation network. However, street systems with too many access points can create friction which poses safety problems and impedes efficient traffic flows. Access points include driveways, cross-streets, and median openings. Each additional access point increases the potential for conflict, which degrades roadway capacity and increases the chances for collisions.

Access should be coordinated closely with development. More intense development, where people and activities take priority, should have greater access than in sparsely developed locations where vehicular speed and mobility take precedence. Freeways, by definition, should have very limited access, followed by arterials and then collectors. Limiting access is less of a concern on local streets with less traffic and slower speeds. Closing substandard access points should also be a high priority. The relationship between thoroughfare type and access are shown in Table 6.1.

Access management standards can provide specific guidance for the placement of access points. For state roads, they should be consistent with the City’s access standards.

6.5 Use access management as a strategy for maintaining road safety and capacity.

6.5.1 Continue to utilize the City’s access management standards for Collectors and Arterials in the city that meet or exceed TxDOT’s standards. The standards should include a requirement for cross-access between commercial building sites and within

and between developments where appropriate. This access should accommodate bicycle and pedestrians either as part of the driveway/street design or through separate pathways.

6.5.2 Develop access management plans for each of the City’s main corridors that are consistent with Small Area Plans, overlay districts, and other land use plans. The access management plan should identify opportunities for median separation, driveway consolidation, cross access and rear access and corresponding signage.

Context-Sensitive Street Design:

Denton Plan 2030 applies policies for Community Character and Urban Design as a way of both preserving existing places within Denton as well as identifying places the City aspires to create. The resulting places are intended to convey a specific look and feel in terms of layout, form, appearance and functionality.

The proposed street network is context-sensitive, meaning the look and feel of the street is reflective of the surrounding land use and activities. Streets

TABLE 6.1: Relationship Between Thoroughfare Type and Access

Function	Rural/High-Speed	Neighborhood/Suburbs	Center/Corridor Overlay	Industrial
Freeways and Expressways	Less Access	Less Access	Less Access	Less Access
Arterials	Less Access	Less Access	More Access	More Access
Collectors	More Access	More Access	More Access	More Access
Local	More Access	More Access	More Access	More Access

that pass through activity centers place more emphasis on lower vehicle speeds, wider sidewalks, and on-street parking. Roads in rural areas place an emphasis on moving vehicles at higher speeds, which means that objects (trees, people, buildings, etc.) are farther from the road. Design guidelines will guide the various elements of street design, such as lane widths, sidewalk widths, horizontal clearances and curb radii that are appropriate for each context. Figures 6.3 through 6.5 illustrate typical sections of what an arterial might look like under different contexts. They depict the vision for complete streets that further modal balance and also include an active public realm, as described in the Community Character and Urban Design Element.

6.6 *Develop a street network that is compatible with and enhances Denton’s community character.*



Context-sensitive design in an urban setting

- 6.6.1 Develop street design requirements that are consistent with and enhance Community Character and Urban Design goals, policies, and actions through coordination with the proposed *Urban Design Plan*. (CC 4.11.1)

FIGURE 6.3: Four Lane Arterial in an Urban/Mixed-use Context



PLACEHOLDER FOR MOBILITY PLAN SECTIONS, ONCE PREPARED

FIGURE 6.4: Four Lane Arterial in a Rural/Higher Speed Context



FIGURE 6.5: Four Lane Arterial in a Suburban Context



- 6.6.2 Ensure that street design requirements include provisions context sensitive solutions that are responsive to the surrounding land use and activities.

Road Financing:

Across Texas and the rest of the nation, regions, and communities are struggling with the issue of how to pay for transportation infrastructure amid stagnant or declining revenues. Projects that have been in the works for years are continually put on hold because of a lack of funds. Regular maintenance is deferred, leading to more costly rehabilitation projects down the road.

Denton Plan 2030 is informed by a Fiscal Impact Analysis, which provides a higher level of assurance that the Preferred Growth Concept will be efficient from a cost and revenue standpoint. The City initiated a road impact fee study, as well as an update of the Mobility Plan, that represents the first step in getting new development to cover its cost for building new road infrastructure.

Beyond those items, there are other actions the City can take to ensure adequate revenue to build and maintain roads:

- First, the City should include regular maintenance and rehabilitation expenses in addition to construction when estimating road costs. This will help the City ensure there is adequate revenue to keep the transportation infrastructure in good repair for the foreseeable future.
- Second, the City should complete a road financing study that considers capital, maintenance and operating costs of all projects in the Mobility Plan and anticipated revenue streams from city, county, state, federal and private sources. Using this information, the City can do two things: implementing the Mobility Plan, phase or scale back the scope of projects to

bring it more in line with anticipated revenues; and pursue new sources of revenue to close any projected gaps. New revenue sources could include additional sales or property tax, public-private partnerships, or developer contributions.

6.7 *Ensure adequate revenue to build and maintain roads.*

- 6.7.1 Incorporate the results of the City's road impact fee study to determine new development's fair share of road costs. (FEV 3.15.1)
- 6.7.2 Include the cost of regular road maintenance and rehabilitation in estimating the cost of building and widening roads. Consider approaches to road construction that minimize lifecycle costs.
- 6.7.3 Complete a road financing study that considers capital, maintenance, and operating costs of projects in the Mobility Plan and anticipated revenue streams from city, county, state, federal, and private sources for appropriate plan phases (e.g. ten year increments). Develop strategies for new revenue sources and/or revise the Mobility Plan accordingly. Coordinate recommendations with the CIP (M 6.1.3).
- 6.7.4 Update the Mobility Plan at least every five years. (M 6.1.1)

Intelligent Transportation Systems:

Intelligent transportation systems (ITS) are defined by the Federal Highway Administration (FHWA) as the application of advanced sensor, computer, electronics, communication technologies, and management strategies—in an integrated

manner—to improve the safety and efficiency of the surface transportation system. In essence, ITS uses technology to enable existing transportation systems to operate more efficiently, often precluding the need to make more costly physical capacity improvements.

The City of Denton developed an ITS Plan in 2002 which prescribes several key elements, including a Traffic Management Center (TMC), closed-circuit television (CCTV) monitoring system, dynamic message signs, and signal integration. Over a decade in existence, the Denton ITS Plan should be updated for a number of different reasons.

First, a number of technologies have emerged subsequent to the plan adoption. For example, adaptive signal technologies now enable street networks to adapt to traffic conditions in real-time. Personal mobile technology have rapidly advanced in the last decade to fundamentally change the way we receive information.

Second, NCTCOG has developed a Regional ITS Architecture, which coordinates all ITS activities throughout the region and sets standards and protocols to ensure seamless integration across jurisdictional boundaries. Denton’s ITS Plan should conform to the Regional ITS Architecture.

ITS will continue to be an important element of Denton’s array of transportation strategies, particularly as the city builds out and large-scale capacity improvements come to end. The ITS Plan is a strategy to implement ITS strategies.

6.8 Engage in ITS strategies as a way of making Denton’s transportation systems more efficient and safer.

6.8.1 Update the Denton ITS Plan to reflect new technologies and to conform to the Regional ITS Architecture. Use



NCTCOG Regional ITS Architecture manages ITS regionally

the ITS Plan as a guiding document for the planning, programming, and deployment of ITS strategies in the city.

6.8.2 Implement ITS strategies and current trends to improve the efficiency of transportation systems prior to making costly capacity improvements.

Travel Demand Management:

Denton is an integral part of the sprawling North Central Texas region. Thousands of Denton residents commute to jobs in places such as downtown Dallas, Fort Worth and around DFW International Airport. In turn, thousands of North Central Texas residents commute every day to Denton’s major employers, such as:

- A cluster of manufacturing and distribution facilities on and near Airport Road just west of I-35;
- The University of North Texas;
- Texas Woman’s University;
- Several hospitals, including Denton Regional Medical Center, North Texas Hospital, and Presbyterian Hospital;

- Rayzor Ranch; and
- The Golden Triangle Mall.

Travel Demand Management (TDM) is one strategy to address large commuting populations by providing alternatives to driving alone during rush hours. NCTCOG maintains a regional TDM program, TryParkingIt.com, which offers a wide range of programs, including carpool ride-matching and vanpools to encourage TDM.

Denton can encourage major employers in the city to implement TDM programs including carpooling, vanpooling and telecommuting by providing incentives such as reduced parking requirements. In fact, TDM programs themselves can be considered a benefit because they make commuting more affordable and convenient for employees. Ultimately, Denton should explore the creation of a Transportation Management Association (TMA), a formal organization dedicated to promoting TDM strategies. Such an exploration could address whether it is feasible for Denton to operate a TMA on its own or whether it should be done in partnership with NCTCOG.

6.9 Use TDM strategies to make efficient use of motor vehicle travel, reduce impacts on road infrastructure, parking, and the environment and to make transportation more affordable.

- 6.9.1 Encourage major employers in the city, including universities, hospitals and others, to participate in TryParkingIt.com, the regional commuter program hosted by NCTCOG.
- 6.9.2 Provide incentives, such as reduced parking requirements, for employers who agree to participate in commuter programs.

- 6.9.3 Create a TMA, separately or in partnership with NCTCOG, to coordinate all TDM efforts in the city and work with major employers and city staff to enforce.

Parking:

Parking exacts a measurable impact on Denton in terms of stormwater runoff, community character, and land use efficiency. While the private automobile – and thus parking – will continue to be a major part of the city’s transportation system for the foreseeable future, steps can be taken to mitigate parking-related impacts while meeting Denton’s needs.

Denton’s parking standards were first developed to meet the peak demands associated with a suburban pattern of separated land uses, resulting in excess parking in many of the city’s commercial areas. Parking standards based on more recent research on parking rates will help to avoid the creation of excess parking. Additionally, the latest best practices in parking include standards for mixed-use developments where parking is often shared by several different uses that are active at different times of day. Transitioning to new parking methods must be done concurrently with transitioning to more compact, mixed-use development patterns. One cannot come before the other.

Reduced parking requirements can be used as an incentive for developments that encourage walking, cycling, and riding transit. Similarly, developments can be incentivized to use pervious or semi-pervious materials in parking lots through reduced stormwater retention requirements.

6.10 Pursue a balanced parking strategy that provides reasonable accommodations and minimizes environmental and land use impacts.

- 6.10.1 Update parking standards for new development in the Denton Development Code to include:
- * The most recent research on parking generation rates.
 - * Shared parking standards for mixed-use developments.
 - * Reduced parking requirements for developments and locations where increased use of transit and non-motorized travel (walking, bicycling) is implemented.
- 6.10.2 Continue to allow and encourage the use of pervious or semi-pervious materials in the construction of parking facilities to further stormwater management goals (IU 9.12.1).
- 6.10.3 Revise the *Site Design Criteria Manual* accordingly to ensure parking areas in private development are consistent with the *Urban Design Plan* and overall urban design policies in the Community Character and Urban Design Element. (CC 4.11.1, 4.16, 4.17, Table 4.1)
- 6.10.4 Encourage enactment of special parking requirements and dedicated parking areas for electric vehicles, car charging stations, and car sharing throughout Denton.
- 6.10.5 Continue the City's wayfinding strategy to guide drivers to locate parking facilities throughout Denton. Coordinate with the Citywide Branding and Placemaking Strategy to call out landmarks and destinations where feasible. (CC 4.1.2, 4.16.2)



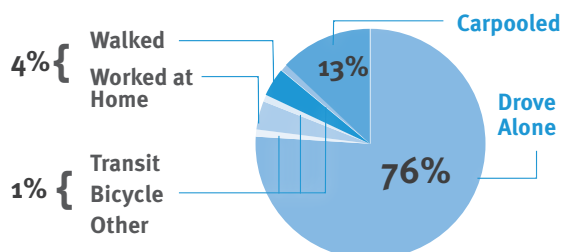
Parking garage in a mixed-use center format

Transportation Impacts on Air Quality:

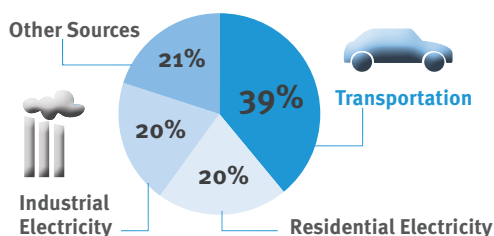
Air quality, which has suffered as a result of vehicular travel and other factors, is an issue that affects the entire North Texas region. Four of these counties (Denton, Collin, Dallas, and Tarrant) in the Consolidated Metropolitan Statistical Area (CMSA) hold nonattainment status for ground-level ozone. The DFW area is classified as a “serious” ozone nonattainment area by the Environmental Protection Agency (EPA). This designation creates both a regulatory compliance reason to take action and a significant health concern for communities within the affected area. The Parks, Conservation and Environment Element describes air quality in greater detail.

Regional coordination to address mobile emission sources as part of the DFW *State Implementation Plan (SIP)* is led by the NCTCOG. Denton can continue to engage as a proactive stakeholder in setting regional air quality policy by participating in NCTCOG planning efforts such as updating the DFW SIP by 2015 and implementing aggressive practices to meet the federally- required attainment deadline of 2018. The NCTCOG recently approved a resolution supporting locally enforced motor vehicle idling restrictions in North Central Texas. As a result, it is

City of Denton Commuting Patterns, 2012



Sources of Emissions, 2012



SOURCE: *Simply Sustainable: A Strategic Plan for Denton's Future* (February, 2012)

encouraging local government adoption of the Texas Commission on Environmental Quality's (TCEQ) idling limitations rule as well as entrance into a North Texas Memorandum of Agreement (MOA) with the TCEQ. This is one of several policies developed by the NCTCOG to reduce air pollution in the North Texas region. Denton is currently considering the adoption of an anti-idling ordinance.

Facilitating use of alternative transportation options such as the A-Train, buses, bicycles and walking will contribute to decreased air emissions as compared to the use of fossil-fuel powered single-occupancy vehicles. Prioritizing policies that decrease total vehicle use, maximize vehicle efficiency by limiting regular starting and stopping driving practices and simultaneously decreasing idle times will contribute to less air emissions within the community. In other words, less traffic translates into better gas efficiency and decreased emissions.

6.11 Implement a comprehensive transportation and mobility approach that minimizes air quality impacts.

- 6.11.1 Participate in NCTCOG air quality forums to develop achievable regional policies to minimize air pollution from Denton's mobile sources.
- 6.11.2 Create and adopt a city-wide anti-idling enforcement policy.
- 6.11.3 Adopt the TCEQ idling limitations rule and sign a North Texas Memorandum of Agreement with TCEQ as part of a city-wide anti-idling enforcement policy.
- 6.11.4 Create a partnership with DISD to reduce bus emissions through anti-idling enforcement and strategic route mapping.

Mobility as Sustainability Framework:

Mobility has a great effect on sustainability, mainly as it relates to air quality. The relationship of mobility to land use helps determine the type of choices that the Denton community can make, which in turn affects commuting patterns and emissions. The policies of the Mobility Element include recommendations for complete streets and context-sensitive design, which will match roadway design with the preferred circulation patterns of the community as it evolves, as well as coordinate recommendations for bicycle, pedestrian, and transit circulation which further contribute to a sustainable mobility framework.



Sustainable mobility



Freight movement in Denton

6.12.1 Ensure that Mobility continues to be at the forefront of the sustainability framework for the City.

- 6.12.1 Incorporate actions from the Mobility Element to further sustainability in Denton as well as provide basis for the updated Sustainability Plan. (IU 9.14, 9.15, 9.16, 9.17)

Freight

Freight transportation is a key component in the DFW Metroplex, as 98 percent of the mainland U.S. population can be reached from the I-35 corridor that runs through North Texas. More than 700 trucking carriers and freight forwarders operate within the DFW region, making use of one of the most extensive surface and air transportation networks in the world.

Several distribution and manufacturing facilities are located within Denton, making it a significant freight generator for the region. Clusters where such facilities are located include:

- Airport Road and I-35W Frontage Road just west of the I-35W/I-35E interchange.

- Western Boulevard and US 380.
- US 380 and Mingo Road, just east of Loop 288.
- Flowers Bakery near Edwards Road and Colorado Road.

Discussions with freight operators have revealed that truck access within the area is a growing concern. Additionally, many of these facilities employ a significant number of workers. Transportation issues cited during interviews include congestion/accessibility during shift changes and providing reliable, convenient accessible transportation options (i.e. public transportation).

In addition, Denton is home to the Denton Enterprise Airport, located west of I-35 in the industrial portion of the city. The Airport's role is that of a publicly-owned, public-use airport. The Airport is classified in the National Plan of Integrated Airports System (NPIAS) as a General Aviation Reliever airport, providing access to the air transportation system for general aviation aircraft. The Airport completed the *Denton Municipal Airport Business Plan* in 2010 that highlighted the Airport's role in attracting and supporting business and creating local jobs. In

addition, its proximity to the developing industrial areas in the western part of the city present an opportunity to augment the movement of goods and services through Denton, strengthening its role in freight operations and supporting business development. The 1999 Denton Plan called for highlighting the role of the Airport in coordinated transportation planning, as a key element in multi-modal transportation, and as a tool to optimize the movement of goods and services throughout the Metroplex. (DP p.136)

Strategic expansion of the physical airport property in coordination with long-term viable aviation

services for the region will be addressed in detail in the updated Airport Master Plan. Planned proactive property acquisition to avoid inflated real estate costs and participation in public-private partnership agreements to assist with infrastructure and facility development remain of interest to the Airport. (DP p. 147) Coordination with Denton Plan 2030 to optimize the multi-modal transportation network in Denton through land use and an implementable mobility framework that considers the economic asset of the Airport will directly impact long-term commerce and economic development. Airport planning must also take into consideration the impact and location of gas wells and pipelines.

GOAL M-2: Enhance Denton's economy by supporting the city's freight network.

Policies and Actions

Freight:

The efficient movement of trucks is paramount to the local and regional economy. Facilities that involve freight transport, specifically those found in the Rail and Trucking Component, should play a prominent role in Denton's transportation priorities and economic development as a whole. In addition, planning for the Denton Enterprise Airport must also be consulted in the development of freight and trucking strategies and specifically addressed in the updated Airport Master Plan. The construction of an additional entrance to the Airport, as proposed in Denton Plan 1999 (p.148), should be coordinated with land use and the mobility framework of Denton Plan 2030 to optimize freight transport in the area.

While the movement of truck traffic is good for economic activity in general, it may detract from the desire to create walkable, people-oriented

streets. The design parameters for efficient truck movement —wide outside lanes, large turning radii, etc.—are not conducive to a walkable environment. Thus, it is best to keep freight routes separate from areas in the city where smaller scale, walkable environments are encouraged. The Future Land Use Map (FLUM) provides a guide on where land uses will be developed throughout the city. *The Rail and Trucking Component of the Mobility Plan* should be coordinated to ensure that there are no conflicts with the furtherance of the goals of the FLUM.

One concern for expanding freight trucking is its detrimental impacts to air quality. When idling, heavy-duty diesel vehicles produce roughly 15 times more emissions than light-duty gasoline vehicles. As discussed above, if the City takes part in the idling agreement with the NCTCOG, they become the enforcement agency and can levy fines against truckers. Denton should consider implementing this measure as it expands freight infrastructure,

yet must consider the implications for enforcement before enacting the policy.

6.13 Provide for the safe and efficient movement of freight to preserve and enhance its contribution to Denton’s economy.

- 6.13.1 Ensure that truck routes identified in the *Rail and Trucking Component of the Mobility Plan* are designed to allow the safe and efficient movement of freight vehicles, in balance with the character of the surrounding community and coordination with the FLUM. (M 6.1.1)
- 6.13.2 Encourage freight generating land uses, such as manufacturing, warehousing and distribution centers, to be located adjacent to truck routes, rail lines and travel centers. (CC 4.17.3)
- 6.13.3 Remove truck routes from the core of the city, away from more dense areas identified in the FLUM.

Proposed Bicycle Facilities in Denton

Shared Routes	27 mi
Wide Curb Lanes (WCL)	24 mi
Bike Lanes (BL)	20 mi
Side Paths	36 mi
Trails & Veloweb	61 mi
TxDOT Roadway w/ WCL or BL	57 mi
Future Collector with Side Path and WCL or BL	15 mi
Future Arterial with Sidewalk and WCL or BL	27 mi



SOURCE: Update to the Pedestrian and Bicycle Linkage Component of the Denton Mobility Plan, 2012.

- 6.13.4 Coordinate freight operations with planning for the Denton Enterprise Airport as part of the Airport Master Plan update.
- 6.13.5 Direct hazardous materials/cargo that are being transported through Denton away from heavily populated or environmentally sensitive areas.



Bicycle and Pedestrian trail in Denton



Bicycle and Pedestrian trail in Denton

Bicycle and Pedestrian Circulation

Improving conditions for walking and cycling, whether to make work locations and other activities more accessible, or to make the city as a whole more walkable, continually emerged as a key priority during all phases of the Denton Plan 2030 visioning process. National research confirms that many Americans would prefer to walk and cycle more and drive less, most notably older (65+) and younger (under 35) generations, but feel there are not enough options available to them (source: *Future of Transportation National Survey*, 2010). Additionally, a number of national trends could shape our transportation systems. Rising fuel and road construction costs and declining transportation revenues are some of the factors that may lead more

Americans to seek out alternatives to driving.

Of particular interest is connectivity between parks and other places of interest. Providing the ability to walk and cycle for recreation is a key part of making Denton a more livable place.

Better walking and cycling conditions requires that facilities such as sidewalks, bicycle lanes, and multi-use paths are included concurrent with the construction of new roadway facilities and provided as stand-alone projects when viable and necessary. However, facilities alone will not fully create an environment for walking and cycling. A supporting land use pattern that facilitates short trips and promoting community design at a human-scale are also essential ingredients.

GOAL M-3: Create a transportation network where residents can walk, bicycle, and use other forms of non-motorized transportation for exercise, recreation, and to get to daily destinations.

Policies and Actions

Mobility Plan:

The Bicycle and Pedestrian Component is an element of the Mobility Plan that identifies specific on- and off-road facilities to make walking and cycling in Denton safe and convenient, and includes guidelines and standards for their design. The City should consult the Mobility Plan when planning, programming, and designing transportation improvements and encourage TxDOT to do the same for their state roads, including the recommendation of the *Bicycle and Pedestrian Linkage Component of the Mobility Plan*.

NCTCOG also spearheads a significant amount of bicycle and pedestrian planning to guide the ten-county region. NCTCOG's Regional Veloweb is a 1,728 mile network of existing and planned off-street, shared-use paths (trails) designed for use by bicyclists, pedestrians, and other non-motorized forms of active transportation in the Dallas-Fort Worth metropolitan area. The network of shared-use paths serves as a system of off-road transportation facilities for bicyclists and other users that extends and completes the region's roadway and passenger rail transit network. The Regional Veloweb has planned connections in 10 counties and 117 cities in North Texas, providing an "interstate" for bicyclists and pedestrians. In

addition, the City of Denton's *Parks, Recreation and Trails System Master Plan* includes proposed locations for recreational trails and bicycle routes throughout the city to link with parks and open spaces. The City should continue to monitor these related planning efforts and update the Bicycle and Pedestrian Component of the mobility plan accordingly.

6.14 Use the Bicycle and Pedestrian Linkage Component of the Mobility Plan and regional plans to guide the placement of facilities and educate residents on walking and cycling in Denton.

- 6.14.1 Ensure that bicycle and pedestrian facilities, as identified in the Mobility Plan, are included in the design of new roads and road improvements.
- 6.14.2 Ensure that bicycle and pedestrian facilities are designed consistent with the guidelines and standards established in the *Bicycle and Pedestrian Linkage Component of the Mobility Plan*.
- 6.14.3 Incorporate NCTCOG regional bicycle plans such as the Regional Veloweb, into Denton's bicycle facilities planning, and actively participate in NCTCOG's Bicycle and Pedestrian Advisory Committee (BPAC). (PCE 5.2.2)
- 6.14.4 Ensure the Bicycle and Pedestrian Component of the mobility plan and the city's *Parks, Recreation, and Trails System Master Plan* recommendations are consistent with each other. (PCE 5.1.2)

Complete Streets and Context Sensitive Solutions

Complete streets refer to the design of roads and other transportation facilities so that they accommodate all users regardless of age or ability. Complete streets are separate from, but related to, context sensitive solutions (CSS). The difference is that CSS speaks more specifically to designing transportation facilities that are supportive of surrounding land uses and activities. Where possible, the city should build facilities that are both complete streets and context-sensitive.

- 6.14.5 Continue the City's wayfinding strategy to facilitate bicycle and pedestrian circulation through Denton. Coordinate with the *Citywide Branding and Placemaking Strategy* to call out landmarks and destinations where feasible. (CC 4.2.1, 4.2.7)
- 6.14.6 Coordinate departments and agencies to implement the *Pedestrian and Bicycle Linkage Component of the Denton Mobility Plan*, including education efforts such as the Smart Cycling Program.
- 6.14.7 Incorporate recommendations from UNT and TWU masterplans for pedestrian and bicycle pathways, and pedestrian streets into the *Pedestrian and Bicycle Linkage Component of the Denton Mobility Plan*.



Pedestrian network - UNT



Complete street with low-impact design features - example

Designing for Complete, Green Streets:

Today, the design of streets in Denton is driven by the *Transportation Criteria Manual*. In order to ensure that new streets and retrofits within the city incorporate desired bicycle and pedestrian features, and green infrastructure features. To ensure that these goals are met, it will be necessary to coordinate an update to the *Transportation Criteria Manual* consistent with the Mobility Plan, including recommendations of the *Bicycle and Pedestrian Linkage Component*, complete streets elements, and low-impact design elements based on the guidance of the *North Central Texas Council of Government's (NCTCOG's) iSWM Criteria Manual for Site Development and Construction* that Denton, adopted in 2013. (see Policies PCE 5.10 and IU 9.11).

6.15 *Ensure that future road designs incorporate bicycle and pedestrian design features as desired and appropriate.*

- 6.15.1 Update the *Transportation Criteria Manual* to incorporate complete streets elements consistent with the updated Mobility Plan as well as the *Bicycle and Pedestrian Linkage Component of the Mobility Plan*.

- 6.15.2 Update the *Transportation Criteria Manual* to incorporate low-impact design elements. (IU 9.11.2, 9.11.3, 9.11.4, PCE 5.8.3, 5.10.1)

Coordination with New Development:

The private realm is just as important as the public realm when it comes to creating environments conducive to walking and cycling. Denton can actively encourage the private sector to build these types of places by incorporating standards into their land development regulations and by offering inducements in the form of incentives. There are a number of materials, such as *Best Development Practices: A Primer for Smart Growth*, and model ordinances that the city can draw from.

6.16 *Encourage new development to create pedestrian-and bicycle- friendly places.*

- 6.16.1 Update the Denton Development Code to include standards for new developments to include:
 - * Connectivity standards for new development that result in short, walkable systems.

- * Bicycle facilities, such as racks and lockers.
 - * Building placement guidelines that result in buildings oriented toward the street and each other, especially in mixed-use centers and corridors.
 - * Safe, direct connections to adjacent transit facilities.
 - * Adequate sidewalks on all streets, including Safe Routes to School.
 - * Appropriate crossing treatments at intersections and mid-block crossings.
- 6.16.2 Partner and collaborate with development projects to include multi-modal features, such as bus shelters and reduced transit rate agreements, by providing incentives for best practices. Such incentives may include:
- * Reduced parking requirements.
 - * Fee credits.
 - * Official recognitions.
- 6.16.3 Develop access management standards that require adjacent developments to connect directly and facilitate easy bicycle and pedestrian travel. (M 6.5.1)
- 6.16.4 Encourage new development to provide off-road trails where appropriate and feasible. (CCTable 4.1)
- 6.16.5 Establish easements to allow pedestrian and bicycle access through private or mixed-use developments, where appropriate, to promote site connectivity and pedestrian circulation. (CCTable 4.1)

Financing the Pedestrian and Bicycle Network:

The City should explore how new development can cover its cost for building new road infrastructure, in conjunction with the road impact fee study, to include pedestrian and bicycle facilities. The study should include pedestrian and bicycle accommodations when estimating the cost of building new roads. The study should also look specifically at potential pedestrian and bicycle demand, the cost to satisfy that demand and create a reflective fee structure.

The City should also include pedestrian and bicycle facilities as part of a recommended road financing study. The City could then use this information to update the Mobility Plan to phase or scale back the scope of projects and bring it more in line with anticipated revenues and/or pursue new sources of revenue to close any projected gaps.

6.17 Ensure adequate revenue to build and maintain pedestrian and bicycle facilities.

- 6.17.1 Account for pedestrian and bicycle facilities in the road impact fee study. (M 6.7.1)
- 6.17.2 Account for pedestrian and bicycle facilities in a Mobility Plan financing study. (M 6.7.3)

Transit Circulation

Transit services provided by DCTA continue to be a growing part of Denton’s transportation system by serving patrons in a number of different ways. The A-Train provides commuter rail service from two stations in Denton through the Lewisville area into Carrollton, where it connects to a DART light rail station. According to NCTCOG projections, about three-fourths of workers living in the County will commute to jobs elsewhere in the region. The A-Train will continue to be an important regional mobility option for Denton residents.

In addition to a large out-commuter population, Denton also sees a large influx of people traveling from across the region into the city daily. These include employees bound for one of the major employers, such as the Denton Regional Medical Center and students, and employees bound for UNT and TWU.

In order for the A-Train to work for people commuting into Denton, there needs to be good local connections to ultimate destinations from the train stations. In some cases, A-Train riders can walk or ride bicycles, but for many destinations, Denton Connect (DCTA’s local transit service) provides that necessary link. Beyond rail station access, Denton Connect also serves many important local transit needs. Most importantly, the UNT campus shuttle service experiences the highest ridership of any route in DCTA’s system. The success of this route should be explored and reviewed to implement in other areas.

DCTA has a number of plans to expand transit service, including upcoming adjustments that will provide a shuttle connection between the MedPark A-Train station and UNT and a new north-south service that will link Denton with Lewisville, Corinth



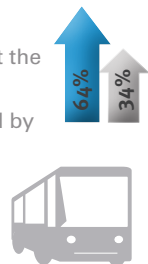
Denton County Transit Authority (DCTA) Denton Connect Bus



A-Train Downtown Denton Station

Transit Statistics

- **A-Train:** Denton Transit Center boardings increased by over 64% and by over 34% at the MedPark Station since 2012.
- **Denton Connect:** Total ridership increased by over 6% since 2012.
- **UNT’s DCTA Shuttles:** Shuttle ridership increased by 7% between 2011 and 2012, with a total of 2,018,009 riders.



and Flower Mound. Additionally, DCTA is studying long term options for regional transit service connecting to Denton via US 377 and I-35W (source: DCTA Long Term Service Plan, 2012).

According to NCTCOG estimates, the number of daily trips (regardless of mode) in Denton County will grow by two million to about 4.7 million over the next two decades. As the city grows, strides must

continue to be made so that transit is accessible and convenient to residents, students, workers, and patrons. This can occur through continued enhancements to local and regional transit service, but also through land use and development patterns that are supportive of transit.

GOAL M-4: Create an environment where transit is convenient and safe for travel both within Denton and to the rest of the region.

Policies and Actions

Transit and Land Use:

There is a plethora of research that reveals a direct relationship between compact growth, and transit ridership. Putting residences and jobs within walking distance of a transit station. Reconnecting America, a leading advocate for transit, suggests that viable transit service – starting with 30-minute bus service – begins at average densities of about seven units per acre. This could be achieved through a variety of single-family and multi-family housing types.

In addition to more compact growth, mixed-use, or putting complementary land uses in close proximity to each other, is also supportive of transit use. The ability to meet basic needs such as errands and dining out, without the use of a car, makes riding transit much more convenient.

6.18 Promote a land use pattern that makes transit convenient and feasible.

- 6.18.1 Encourage and incentivize new development to include transit

supportive elements adjacent to existing DCTA stations. This could include development in mixed-use areas, centers, and corridors.

- 6.18.2 Update the Denton Development Code to permit transit-supportive densities and intensities. (LU 2.9.4)

Transit and Urban Design:

In addition to land use, urban design plays a large role in the viability of transit. For high-impact areas such a rail stations, building placement, parking, and provisions for bicycles are all important transit-friendly features. For developments along existing and planned bus routes, dedicated locations and facilities for bus stops and safe, convenient and well-lit pedestrian connections are important.

These are design enhancements that can be prescribed through land development regulations (base zoning or overlay) and/or design guidelines. As an inducement to incorporating transit-friendly features into site design, the city can offer relaxed



Improved transit stations



Historic streetcar in Denton

parking requirements or density bonuses under the rationale that such features will increase transit ridership and thus reduce the need for parking and/or offset additional trips created by increased density. When Denton enacts a road impact fee, it may consider offsets as an incentive.

6.19 Encourage new development to create transit-friendly places.

6.19.1 Update the Denton Development Code to include incentives and standards for new developments to include:

- * Dedicated transit facilities (stops, shelters, etc.).
- * Safe, convenient, and direct connections between transit stops and building entrances.

6.19.2 Partner and collaborate with DCTA and other transit groups to develop Small Area Plans around existing and future DCTA rail stations to include standards and guidelines for: (CC 4.11.4)

- * Building placement.
- * Access and egress.

- * Parking (if necessary).
- * Bicycle and pedestrian linkages.
- * Local transit connections.

(See Policies LU 2.8.1; HN 7.1.6; CC 4.12.3, 4.16, 4.17, Table 4.1, Table 4.2)

6.19.3 Provide incentives for new development to include transit-friendly features. (LU 2.8) This could include:

- * Relaxed parking requirements (M 6.10.1, M 6.10.2).
- * Density bonuses.
- * Impact fee offsets. (FEV 3.9.8)

Planning for Transit:

The City can help to ensure that transit is successful through close coordination with DCTA and other transit providers on new development projects and the retrofitting of the existing transit network and facilities.

The City should communicate the policies of Denton Plan 2030 and follow-up work to DCTA and other transit-related providers. This includes likely

transit supportive areas identified in the FLUM and transit friendly land development regulations and guidelines. Additionally, the city can provide DCTA and other transit-related interests the opportunity to comment on new development applications.

6.20 *Coordinate with DCTA and other Denton-area transit providers.*

- 6.20.1 Communicate recommendations for transit-supportive areas to DCTA. (CC 4.2.5)
- 6.20.2 Provide DCTA with the opportunity to comment on new development applications with respect to placement of transit-friendly features and impacts on transit vehicle operations.
- 6.20.3 Participate in new transit studies and initiatives, such as planning for new local routes within Denton and DCTA corridor studies.
- 6.20.4 Work with DCTA to identify service enhancements and the development of additional sub-hubs, such as the one at UNT.
- 6.20.5 Establish bus pull-offs along existing and planned routes where appropriate.
- 6.20.6 Work proactively with DCTA and other transit-related providers to progressively improve transit service to encourage ridership by choice and not just by necessity.

6.21 *Coordinate with placemaking and cultural promotion strategies.*

- 6.21.1 Continue the City's wayfinding strategy to help transit users navigate throughout Denton. Coordinate with the *Citywide Branding and Placemaking Strategy* to call out landmarks and destinations where feasible. (CC 4.2.1, 4.2.7)
- 6.21.2 Encourage the use of transit to attend events in Denton through the proposed *Special Events Integrated Transportation Plan*. (CC 4.7.8)

6.22 *Explore the potential for initiating trolley service in Denton.*

- 6.22.1 Perform a study of the feasibility of implementing trolley service in Denton. The study should address potential routes, modes (rubber tire, streetcar), operation (city, DCTA, other transit-related providers) and funding.

Regional Coordination:

In addition to direct coordination with DCTA and other transit-related providers, Denton should continue to be an advocate for regional transit service in general. The City is a member of the Regional Transportation Council and technical committees of NCTCOG, where much of the region's transit planning occurs. Denton should continue to use its position at NCTCOG and other regional bodies to support the expansion of regional transit service.

6.23 *Continue to be an advocate for regional transit service.*

- 6.23.1 Participate in the NCTCOG/MPO's Regional Transportation Council, technical committees and other regional bodies to advocate for expanded regional transit service. In particular those services that expand and enhance regional connections to Denton.
- 6.23.2 Continue to promote the use of the A-Train to travel outside of Denton, serve commuter travel, and link with DART and other local transit-related providers in the Metroplex.
- 6.23.3 Work with DCTA to expand service of the A-Train and local routes to increase ridership and better serve the needs and schedules of the population.

7) HOUSING & NEIGHBORHOODS

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HOUSING AND NEIGHBORHOODS OVERVIEW

By 2030, housing and neighborhood choices will expand and diversify, guided by the policies described below and through partnerships with neighborhood organizations, major employers, non-profits, and development interests. The policies that follow address the retention of the existing housing stock, as well future housing development, consisting of the following primary housing segments:

- Existing neighborhoods in the urban core and developed parts of the city
- Housing in existing and emerging mixed-use centers and corridors, including Downtown and Neighborhood/ University Compatibility Areas
- New development at and beyond the suburban fringe, including the City's large Master Planned Communities (MPCs).

Housing and neighborhoods are closely related, and directly impact a community's quality of life. All Denton residents have a need for housing that is sound, affordable, and suitable for their household and locational preferences. This housing needs to be located in neighborhoods that are safe and livable and that provide a sense of connection to the community with convenient access to schools, parks, shopping, and amenities. Characteristics that enhance livability, such as walkability, access to transit, neighborhood scale, and true mixed-uses such as small, neighborhood scale, walk-to businesses, are becoming increasingly valued by some segments of the population. In order to establish neighborhoods of choice, a range of housing options need to be complemented by community facilities, including schools and parks, and compatible neighborhood-oriented commercial uses (ex. coffee shops and neighborhood grocery stores) that contribute to neighborhood livability. In addition to improving neighborhood livability and an array of housing choices, there are increased expectations for higher quality of both the aesthetics of housing and the design of neighborhoods, including design features that promote neighborliness and health and safety.

Finally complete, balanced, and sustainable neighborhoods are served by neighborhood programs that aid those who live in the community, including communities in need. This includes services for youth, seniors, and people with disabilities, and encapsulates not only services provided by the City and organizations, but opportunities for volunteering, allowing the community members of Denton to support one another and give back. The establishment of these community connections will establish resilient and prosperous neighborhoods for the future.

HOUSING AND NEIGHBORHOODS IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is **safe** and **livable**, a **hospitable community** of friends and neighbors.

Our People, Institutions, and Government

- We retain our **sense of community** and **shared values**, while **welcoming** new arrivals and **celebrating** growing **diversity**.
- We are committed to **fairness** and **equitable access** to opportunity in education, community services, jobs, and government representation.
- All generations, of both natives and newcomers, are **deeply rooted** in the community and are actively engaged in its betterment through **volunteer participation** with faith-based, civic, and/or neighborhood organizations and service on local government boards and commissions.
- The City of Denton is a healthy, **family-friendly** community which sees its **youth as its most valuable resource**; a resource worthy of investment in education, healthful **recreation**, and opportunities for challenging and rewarding **employment** and **engagement in civic affairs**.
- The City of Denton has **integrated, reconciled, and streamlined** its **plans, process, policies, and regulations** for **consistency, clarity, and effectiveness**.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- **Managed, balanced, and sustainable growth** in high-quality, livable **urban, suburban, and rural places** which offer diverse **choices** among **neighborhood settings** while respecting private **property rights**.
- A **compact development** pattern which includes expanded areas of **mixed-use**, a broad array of **housing** and **retail choices** responding to changing demographics and market preferences, and **re-investment** and **infill** in established areas of the city.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.
- **Established neighborhoods** where revitalization and compatible infill development **contributes to stable, livable, and historic character**, and fosters **neighborhood pride** and **homeownership**.
- **Thriving universities** where coordinated planning and collaborations between the City and the academic communities creates **mutually beneficial**, stable, and healthy neighborhood edges and where the non-academic community benefits from the vast **educational and cultural resources** in close proximity.

Housing and Neighborhoods in Denton

The city's housing stock of approximately 45,000 dwellings as of 2012 consists of approximately 58 percent single-family and 42 percent multi-family dwellings. This is a higher proportion of multi-family housing than is typical for North Texas communities, due largely to the influence of university students. With a combined enrollment of just under 50,000 students, the majority of which reside off campus, students are a major segment of the local housing market. The dynamic of housing construction in Denton has shifted significantly over the past decade with a sharp decline in single-family home construction after 2006, with only 2,205 homes built between 2007 to 2012, compared with 6,741 homes built between 2001 and 2006, a shift in part due to impact of the mortgage crisis on the national housing market, coupled with increased demand for multi-family apartments.

Apartments are necessary to provide the diversity and amount of housing for a growing city such as Denton, but the quality of construction, design, and maintenance of the properties are key issues affecting the city on many levels. Also, due largely to the impact of university students, Denton has a much larger proportion of renters: 49 percent compared to around 33 percent for Denton County and Texas. Of particular concern regarding the high proportion of renters and multi-family housing is the condition of some of the city's older multi-family housing, indicated by an unusually high vacancy rate (9 percent).

While housing in Denton, both rental as well as owned housing, is generally more affordable than elsewhere in the region, the incomes of many of Denton's households are also lower than other areas in the region. As a result, a high proportion of



Neighborhood-oriented commercial use

Denton households are considered “cost burdened”; that is, they are paying more than the 30 percent of household income toward housing – the standard of housing affordability. In 2011, nearly 58 percent of renter households and 26 percent of owner households were cost burdened, meaning even “affordable housing” remains too expensive for this group, forcing difficult trade-offs regarding the costs of health care, childcare, and food. As a result, Denton has a high rate of homelessness, with roughly half of homeless individuals unsheltered.

In response to this need, a number of organizations work collaboratively with Denton's Community Development Division to provide affordable housing for low-to-moderate income residents. Denton's supply of subsidized housing includes three affordable housing developments managed by the Denton Housing Authority, as well as in privately-owned scattered site homes and apartments accepting Section 8 Housing Choice Vouchers, which allow rent payments to be set based on income. According to the City's *2010-2014 Consolidated Plan*, Denton has a higher percentage of subsidized affordable housing than neighboring communities. The Community Development Division leverages a budget comprised of federal, state, and local

funding, in coordination with the Denton Affordable Housing Corporation, and non-profits such as Habitat for Humanity of Denton County. Denton has chosen a policy of providing subsidized housing through partnerships with non-profits and with developers using low income tax credits to finance low-moderate income, as well as establishing partnerships with landlords who accept Section 8 Vouchers, rather than concentrating dependent households in public housing developments.

While meeting the needs of students and lower-income households for affordable housing is critically important for Denton, maintaining the stability of, and promoting re-investment in, the city's older neighborhoods is a priority as well. To address issues of neighborhood stability, strategies for neighborhood conservation are needed, including the promotion of mixed-income housing (areas that contain both market rate and affordable units), re-investment in compatible infill housing (development of new housing in within developed areas of the city), efforts to promote greater levels of home ownership, and targeted code enforcement by the City's Community Improvement Services Division. In addition, a rental housing inspection and registration program should be considered to ensure that rental dwellings are properly maintained for habitability.

While the maintenance of the stock of quality, affordable housing and the livability of Denton's neighborhoods is a primary concern, another issue is to anticipate future housing needs as the city's population grows and ages by 2030. One key factor is the demographic shifts already underway, resulting in changing consumer preferences for housing and neighborhoods. Many among the wave of retiring, empty-nest Baby Boomers are opting to downsize from their single-family home. At the same time, young Millennials just entering the

job market, are also entering the housing market. Trends nationally have shown that many in both groups prefer smaller homes, including townhomes and apartments, in walkable, more urban scale mixed-use neighborhoods rather than conventional suburban subdivisions. This dynamic of changing demographics and preferences raises issues related to planning for future housing development. The shift in housing preferences is an opportunity to attract middle and upper income, home-owning households to support market rate, infill housing development, bringing about re-investment and a mixed income balance that is at the core of neighborhood conservation and revitalization in Denton's urban core neighborhoods. Key targets are Downtown Denton and Compatibility Areas surrounding Downtown and the UNT and TWU campuses, as well as areas designated for Business Innovation of the Future Land Use Map (FLUM). One specific opportunity is the trend emerging nationally for housing marketed to retirees who are relocating to reside near their alma maters to pursue opportunities for lifelong learning.

Conversely, these shifting demographics and preferences may present both a challenge and an opportunity for the City's large outlying planned communities, many of which were conceived based on conventional models of suburban, mostly single-family development. As noted in the Land Use Element, the undeveloped land area within these Master Planned Communities (MPCs) is greater than can be absorbed through the Plan horizon. Consequently, it is anticipated that some of the assumptions made in the development plans that were the basis for development approvals will be reconsidered, representing an opportunity to align them to reflect the changing housing market by incorporating a different mix of housing and land use types in community designs that embrace walkability, sustainability, and conservation.

Housing Choice

GOAL HN-1: Develop and maintain a housing stock that meets the needs of all residents with a diverse array of choices in type, affordability, and location (DP p. 122.)

Policies and Actions

Downtown and University Housing:

Downtown Denton and its neighborhood edges, together with the campuses of UNT and TWU and their surrounding neighborhoods, make up Denton's urban core. While there has been some success in attracting high density and mixed-use development Downtown, there is an opportunity to re-focus the *Downtown Implementation Plan (DTIP)* to identify priorities to stimulate development of additional downtown housing, both as new infill and as adaptive re-use (adaptation of historic buildings to new use) of older buildings and upper floors above commercial uses.

The neighborhoods surrounding both Downtown and the two universities have been impacted by factors such as commuter traffic, student housing, parking overspills, and by property acquisition for campus expansion, all of which can disturb neighborhood stability. Denton's urban core is also where the bulk of the city's Section 8 and other subsidized housing is located. Small Area Plans are needed for the Downtown and Neighborhood/University Compatibility Areas to identify items such as: redevelopment targets, incentives for re-investment, infill, and homeownership; land use and housing mix; compatibility and scale; parking policy; walkability; and transit access. The Small Area Plans will also be used to guide zoning and other regulatory adjustments which may be implemented with additional Overlay Districts. Small Area Plans and Overlay Districts are recommended for targeted centers and corridors outside the urban core. Since small area planning targets those areas of the city expected to change in use or character over time,

areas which are expected to remain sound and stable over time would generally not be targeted for small area planning.

7.1 *Promote development of higher density housing as part of mixed-use development in Denton's urban core, including Downtown, the Downtown and Neighborhood/University Transition Areas, and in designated centers and corridors outside the urban core. (DP p. 122)*

- 7.1.1 Revise and update the *Downtown Implementation Plan (DTIP)* to specifically discuss residential development. (LU 2.6.1)
- 7.1.2 Create a *Downtown Compatibility Area Small Area Plan*. (LU 2.6.2)
- 7.1.3 Create regulatory incentives to expand housing in and adjacent to downtown through adaptive re-use, utilization of upper stories, and infill development. (LU 2.6.4)



Multi-family Housing - Denton

- 7.1.4 Partner and collaborate with the universities to create Neighborhood/ University Compatibility Area Small Area Plans around UNT and TWU, integrated with the *Downtown Compatibility Area Small Area Plan* and the updated *Downtown Implementation Plan*. (LU 2.7.1)
- 7.1.5 Partner and collaborate with the universities to establish protocols for joint city – university planning within the university properties, focusing on issues such as: (LU 2.7.2)
- * Creation of redevelopment target areas surrounding blighted properties
 - * Regulation of on-street and off street parking (M 6.10.1)
 - * Pedestrian and bicycle improvement (M 6.14)
 - * Community gathering places and open space (CC 4.10.2)
- 7.1.6 Create Small Area Plans for key centers and corridors. (LU 2.8.1, CC 4.12.3)
- 7.1.7 Establish additional Overlay Districts to apply revised development standards tailored to specific centers and corridors. (LU 2.8.2, CC 4.12.5)

Affordable Housing:

Denton has a higher percentage of affordable housing than neighboring communities. The Denton Housing Authority (DHA) oversees the needs of low and moderate income Denton residents by providing subsidized housing utilizing Section 8 Housing Choice Vouchers funded by the U.S. Department of housing and Urban Development (HUD). These vouchers allow qualified low and moderate-income residents to reside in houses, apartments, and mobile homes with below market rent payments, which is set at 30 percent to 40 percent of household income. Section 8 Vouchers may also be used to purchase, rather than rent, a home. Denton has an inventory of approximately 3,400 subsidized rental units, as of 2014, which are located in three developments (Heritage Oaks Apartments, Pecan Place Apartments, and Renaissance Courts Townhomes), as well as approximately 1,800 in scattered site units. There are approximately 1,500 people on waiting lists, which will span at least five years, for these affordable units as of 2014.

While the Denton Housing Authority manages housing properties, funding and grants are administered through Denton’s Community Development Division. Two primary means of funding are through the federal funding programs of Community Development Block Grants (CDBG), which Denton receives as an Entitlement City, and through the Home Investment Partnerships (HOME) program. Guiding the strategic use of this funding are the five-year strategies contained in the *2010-2014 Consolidated Plan for Housing and Community Development*. Key areas of focus include a Homebuyers Assistance Program, a Home Improvement Program, and a Minor Repair Program to assist renters as well as owners. Related programs such as infrastructure improvement, anti-poverty, human services, and continuum of care strategies to address homelessness are also

provided. Much of Denton's subsidized housing is concentrated in relatively few areas of the city, contributing to socio-economic segregation and pockets of poverty. Consequently, efforts should be made to promote a broader distribution of subsidized dwellings in mixed income housing developments and neighborhoods to avoid pockets of poverty.

7.2 *Expand the availability of affordable housing choices for community members most in need of housing, including seniors and those with low incomes and special needs. (DP p.122)*

- 7.2.1 Support efforts of the Denton Housing Authority to expand the availability of affordable housing for low-moderate income residents through policies for mixed income neighborhoods and housing development.
- 7.2.2 Continue the efforts of the Community Development Division to utilize grant funding targeted to address the needs of low-moderate incomes and distressed neighborhoods, with future action priorities adjusted for consistency with neighborhood conservation strategies for mixed income housing and neighborhoods.
- 7.2.3 Update the *Consolidated Plan for Housing and Community Development* to continually gauge the housing needs of Denton's low income and special needs populations.
- 7.2.4 Partner and collaborate with local organizations and within City departments to improve connections between home-related program resources and potential recipients and neighborhood groups.

- 7.2.5 Development of a rental housing inspection and registration program to ensure that rental dwellings are properly maintained for habitability.

Homelessness:

Denton's homeless population is estimated to be approximately 435 individuals as of January 2014, roughly half of which are believed to be unsheltered. The City is the recipient of a Federal Emergency Solutions Grant (ESG), which targets homelessness. Through this grant, the Community Development Division makes an important impact on the problem of homelessness in Denton. These efforts include collaboration with the Denton County Homeless Coalition (DCHC) and other local charitable organizations, such as Christian Community Action, Denton County Friends of the Family, Giving HOPE, Inc., and the Salvation Army Denton who provide funds for Street Outreach, Emergency Shelters, Homelessness Prevention, and Rapid Re-Housing services to the homeless and those at risk of homelessness.

7.3 *Expand the availability of affordable housing choices for community members most in need of housing, including the homeless. (DP p.122)*

- 7.3.1 Support efforts of the Denton County Homeless Coalition to address the needs of Denton's homeless population.
- 7.3.2 Partner and collaborate with Denton County MHMR, United Way, and other organizations and agencies to address mental illness needs which significantly contribute to homelessness.

Senior Housing:

National studies have demonstrated the tremendous value of retaining and attracting middle and upper income retired seniors. They support the property and sales tax base, contribute to local charities, and do not compete for jobs or exert demands for schools and most other public services and facilities. The Community Development Division and the Denton Housing Authority currently have programs to support low and moderate income housing for seniors, such as at Pecan Place Apartments, located in Downtown Denton. Although Denton is home to Dogwood Estates and Robson Ranch and other market rate senior or active adult housing, there is the potential to attract additional senior living communities, working in collaboration with local medical institutions and real estate development interests.

7.4 Expand the availability of housing choices for existing and potential community members most in need of housing, including seniors. (DP p. 122).

- 7.4.1 Collaborate with local medical institutions and real estate development interests to measure needs and encourage development of life care communities and other housing options for seniors.
- 7.4.2 Encourage the development of options for senior housing with a variety of unit types and cost choices, including ADA-accessible and active adult settings.
- 7.4.3 Partner with organizations and agencies to provide assistance and connect needs and resources for seniors and people with disabilities to be able to maintain single-family homes and properties if they are able to live independently.



Housing for Denton's seniors

Expanding Homeownership:

Denton's Community Development Division provides assistance to facilitate homeownership through its Homebuyer Assistance Program (HAP) to aid first time homebuyers available to qualifying Section 8 households, as well as its Home Improvement Program (HIP) providing counseling assistance for homeowners regarding repairs and maintenance. In addition, the Denton Affordable Housing Corporation (DAHC) provides opportunities for homeownership for low- and moderate-income households through its Affordable Housing Opportunity Program (AHOP). As effective as these programs are, as evidenced by waiting lists, the need appears to be greater than the available resources. Therefore, the City should pursue additional opportunities to support expanded rates of home ownership. Three opportunities are identified. One is to expand the activity of Habitat for Humanity of Denton County (HHDC) in building infill single-family homes for sale to low-moderate income Denton households with zero interest mortgages. As has been done in other communities, the City should partner with HHDC to build a certain number of infill dwellings annually in targeted distressed neighborhoods. This could entail the acquisition by the City of infill blighted or tax

delinquent lots and their transfer to HHDC in return for an agreed upon construction schedule. This would serve multiple purposes, including removing blighting influences and adding to neighborhood stability through greater home ownership.

Because a significant component of the housing market is related to university housing of students, faculty, and staff, the universities could play an important role in expanding home ownership opportunities, particularly in neighborhoods that make up the Neighborhood/ University Transition Areas. As was done in the University District Revitalization Area surrounding the University of Arkansas at Little Rock and the University of Pennsylvania's West Philadelphia Initiatives, the universities could be encouraged to provide financial assistance to faculty and staff for home purchases in neighborhoods surrounding university campuses, thus adding to neighborhood stability. The universities could also make special programs available to first-time homebuyers and alumni.

In addition, consideration should be given to establishing an urban homesteading program in which tax delinquent or abandoned residential structures could be acquired by the City and sold for a nominal sum to individuals who agree to occupy and bring property conditions up to Code, thus eliminating blighting influences. These homes would be made available for sale to qualified low-moderate income first-time home buyers as well.

7.5 Support expanded opportunities for home ownership to encourage neighborhood stability and reduce blight.

7.5.1 Expand partnerships with nonprofit housing providers, such as Habitat for Humanity of Denton County and Denton Affordable Housing, to encourage homeownership.

7.5.2 Encourage UNT, TWU, and other major employers to provide financial incentives for home ownership, particularly in adjacent neighborhoods.

7.5.3 Consider establishing an urban homesteading program to recycle and reoccupy abandoned or tax delinquent properties.

Housing Variety:

While a major focus of housing and neighborhoods is in promoting affordable housing options for Denton's low-moderate income residents and promoting neighborhood stability and reinvestment, there are also opportunities to promote housing development innovation in urban, suburban, and rural contexts. While Denton's single-family neighborhoods and subdivisions serve the large proportion of households that prefer this housing choice, demographic shifts currently underway are beginning to change housing preferences. Specifically, retired empty-nest Baby Boomers, and well as Millennials, increasingly prefer smaller, apartments, condos, lofts, and townhomes in compact walkable locations. While Denton has a large supply of apartments, much of it is older, poorly designed, and not properly maintained. Consequently, there is a need to promote development of a broader array of higher-quality housing options including townhomes and other forms of attached dwellings, as well as mid-rise apartments, condominiums and lofts, and live-work units. These should be targeted within Downtown, Neighborhood/University and Downtown Compatibility Areas and in redeveloping centers and corridors and other locations where such development would not impact established single-family neighborhoods.



Higher-density housing in a mixed-use setting

Outside of Denton's urban core are a number of designated centers and corridors which are targeted to undergo redevelopment from primarily commercial or undeveloped areas to a mixed-use character, incorporating moderate and high density residential uses in walkable patterns near transit and employment. The means of reinvigorating these areas begins with the creation of Small Area Plans. Small Area Plans will identify opportunities and strategies for the introduction of housing as an element of mixed-use, adjusted to the context of each area, as described in the Land Use Element (LU 2.8.1) and Community Character and Urban Design Element (CC 4.12.3).

At the suburban fringe (The Edge), because of excess development capacity within large Master Planned Communities (MPCs), their build-out will likely take the next two decades to complete. Although developments such as Rayzor Ranch and Robson Ranch are well underway, the MPCs have experienced little or no development. As a consequence, much of this development will occur well into the future when market conditions, consumer preferences, and the state-of-the-art in community planning and development practice may be different today from when MPCs were initially



High quality dense housing

approved. It is in the mutual best interest of the City and the owners and developers of the presently undeveloped MPCs to anticipate and provide for flexibility in re-planning these developments. Such opportunities could include the introduction of innovative mixed-use and walkable development patterns, and to design for greater connectivity and alternative mixes and locations of residential, and centers for commercial development and employment.

The Community Vision Statement refers to the vision of Denton's rural fringe as one where scenic rural character is retained with protected open space, greenways along with agricultural and ranch lands. Conservation Development is an approach to the design of rural residential subdivisions which is highly suited to agricultural fringe areas where the retention of rural character and open space is desired. Refer to the Land Use Element (Policy 2.14) which contains specific policies to achieve Conservation Development.

7.6 *Encourage innovative housing development in mixed-use centers and corridors, Master Planned Communities (MPCs), and through residential development in rural areas that protects rural character.*



High quality single-family housing in Denton



Rural residential areas

7.6.1 Establish procedures to facilitate revisions to the land use mix and design of MPCs including: (LU 2.11.1)

- * Incorporation of compact, mixed-use, and walkable development patterns
- * The integration of area-wide trails, greenways, and green infrastructure elements (Table 4.1)
- * A mix of housing types to reflect changing demographics and housing preferences
- * Improved architectural and neighborhood design features (HN 7.7.1, 7.7.2, CC 4.16.2)

7.6.2 Promote Conservation Development (clustered housing) in Rural Agricultural and Rural Residential areas, with permanently protected open space in conservation easements, as an alternative to large lot suburban development. (LU 2.14.1)

7.6.3 Revise Rural Agricultural and Rural Residential zoning districts to provide specific guidelines for Conservation Development, including density and/or lot size incentive for open space protection. (LU 2.14.2)

Improved Quality of Housing and Neighborhoods:

Increasingly, communities within the Dallas-Fort Worth Metroplex, as well as nationally, must compete to become communities of choice based on the quality and aesthetics of housing, as well as design characteristics that foster neighborliness. Specific tools could include design guidelines to avoid patterns of architectural uniformity and monotony through the use of indigenous materials such as limestone, varied color schemes, and details such as front porches facing neighborhood streets and open spaces, rather than lines of garage doors. Likewise, at a larger scale, the clustering of homes around shared open space or gardens, a concept known as “Pocket Neighborhoods” promotes a sense of community as well as security. Involving residents in neighborhood planning exercises can

identify opportunities for enhancing livability and promoting a sense of neighborhood ownership.

7.7 *Establish tools and strategies to enhance the quality and character of housing and neighborhoods.*

7.7.1 Create residential design standards to improve aesthetic quality and variety, including materials, color palettes, and architectural features, such as porches and other elements typical in the region. (CC 4.16.2)

7.7.2 Create subdivision and neighborhood design standards incorporating best practices, such as clustering homes around shared open space (Pocket Neighborhoods) and other components of traditional neighborhood design (TND) including use of rear alleys and orientation to streets with sidewalks and street trees. (CC 4.16.2)

7.7.3 Conduct participatory neighborhood planning efforts in neighborhoods to address opportunities to enhance character and livability.

Neighborhood Conservation

GOAL HN-2: Ensure the continued viability of Denton's established neighborhoods through thoughtful conservation.

Policies and Actions

Neighborhood Conservation:

Neighborhood conservation is an important theme throughout Denton. Denton's Community Improvement Services Division has periodically conducted targeted inventories of exterior building conditions in some of Denton's older neighborhoods. However, Denton lacks a comprehensive neighborhood conservation program to promote neighborhood stability. Such a program would begin with a Housing and Neighborhood Condition Inventory to identify patterns of stability, as well as patterns of decline and disinvestment. Specific conditions to be inventoried include building condition, tenure (owner/renter) and code violations,

as well as livability factors such as crime statistics, traffic conditions, walkability and proximity to parks, schools, and healthy food. Because the principal purpose of a neighborhood conservation program is to encourage investment and stability, neighborhood associations should be encouraged to participate in the surveying effort and to contribute to conservation strategies.

A principal means of reversing neighborhood decline is infill development, that is, new development on vacant or redeveloped properties. In addition to expanding the quantity of sound housing and strengthening the tax base, infill development offers the opportunity to broaden housing choice. For example, the introduction of high-quality townhomes

in or adjacent an established, predominantly single-family neighborhood can serve to attract first-time homebuyers, as well as relocating retirees who may desire a smaller, more low-maintenance home. However, such infill development may be impeded by zoning districts that do not provide for flexibility for varying housing types and lot sizes. Therefore, the Future Land Use Map (FLUM) has been revised to allow for infill while maintaining appropriate scale and density in single-family neighborhoods.

Another available tool to assist in neighborhood conservation and revitalization are Public Improvement Districts (PIDs), authorized under Chapter 372 Texas Local Government Code. PID's collect special assessments to fund street and infrastructure improvements and amenities such as sidewalks, street trees, and parks for the financing of housing construction and rehabilitation.

In order to address potential neighborhood concerns about the impact of infill development, guidelines that define neighborhood compatibility issues such as density, design and scale are included in the Community Character and Urban Design Element. The mechanisms of the Small Area Plan enable more particular design guidelines to be developed for key neighborhoods. As some older neighborhoods in need of infill may also have historic designations or character, policies for neighborhood conservation and historic preservation should be aligned.

Additional tools for neighborhood conservation can be both "defensive" and "proactive" in nature. Defensive mechanisms include preventing "spillover" impacts from adjacent corridor and center development, and from capital investments such as road widenings. Also, neighborhood conservation must address any impacts of concentrations of rentals and subsidized housing in reducing property values and homeownership. Conversely, there are proactive measures to promote

neighborhood stabilization and conservation. These include historic district designations to protect character and make available renovation tax credits, as well as urban homesteading and employer-assisted first-time homebuyer programs described below. In neighborhoods which do not qualify for historic district designations and where present zoning may not ensure compatible infill development, neighborhood stabilization overlay districts may apply. These zoning overlays would modify underlying zoning requirements for such factors as front and side setbacks, garage placement and building height.



Southeast Denton neighborhood



Northwest Denton neighborhood

7.8 Promote the stability and livability of established neighborhoods through the FLUM and a comprehensive neighborhood conservation program. (DP p.122)

- 7.8.1 Include Future Land Use Designations and corresponding zoning districts in the FLUM that protect neighborhood scale and density. (LU 2.2.2, 2.19, 2.20)
- 7.8.2 Partner with neighborhood associations to create a Housing and Neighborhood Condition Inventory and monitoring strategy.
- 7.8.3 Establish criteria to identify the characteristics of compatible infill to ensure that new development in established neighborhoods complements the scale, character and quality of neighborhood housing. (LU 2.9.2)
- 7.8.4 Identify and modify zoning and other regulatory impediments to compatible infill and redevelopment. (LU 2.9.3)
- 7.8.5 Prevent impacts and encroachments of incompatible uses, development scales, and intensities through adherence to the established land use standards and urban design principles.
- 7.8.6 Revise standards in the Denton Development Code to ensure proper transitions and buffers between conflicting land uses, scales, and intensities. (LU 2.9.4)
- 7.8.8 Apply neighborhood conservation strategies, such as targeted code enforcement, housing rehabilitation, clearance of blighted properties, and

the encouragement of mixed income housing and neighborhoods. (LU 2.9.5)

- 7.8.9 Review and revise transportation, infrastructure, and subsidized housing plans and policies that are inconsistent with neighborhood conservation policies. (M 6.1.1)
- 7.8.10 Couple neighborhood conservation strategies with local historic district, historic conservation area, and Neighborhood Stabilization Overlay policies. (CC 4.3.1)
- 7.8.11 Review the policies and priorities contained in the *Consolidated Plan* and the policies of the Community Development Division, the Denton Housing Authority, and the Denton Affordable Housing Corporation for consistency with neighborhood conservation strategies. (HN 7.2.3)
- 7.8.12 Partner and collaborate with Denton County and DISD regarding the development of infill lots that have been abandoned and are tax-delinquent as housing, community gathering places, or community gardens.

Schools and Community Facilities

As the city increases in population, additional community facilities to support community services will be designed and constructed. Facilities will be designed to enhance the community, contribute to aesthetics in urban design and provide functionality to users. Such facilities include schools, libraries, recreation and community centers, and senior centers. Facilities may also refer to government



Newton Rayzor Elementary School - Denton

uses such as utilities and landfills, which are discussed in the Infrastructure and Utilities Element. The community facilities discussed in this Element pertain to the establishment and maintenance of well-served and balanced neighborhoods. Facilities can positively contribute to building a strong social network through thoughtful placement, siting and design, and coordinated management.

Schools

Quality of education and community facilities are often voiced as a priority for residents in any community. These were issues identified in the 1999 Denton Plan as well as in community outreach for Denton Plan 2030. The Denton Independent School District (DISD) administers public education throughout most of Denton, except for small portions of the city lying within the Argyle, Sanger, and other districts (Figure 7.1). The DISD's service area includes three high schools, six middle schools, 21 elementary schools, two early childhood centers, an alternative high school, an Advanced Technology Complex, and other specialized schools and centers. The school district is 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. In 2012, DISD had

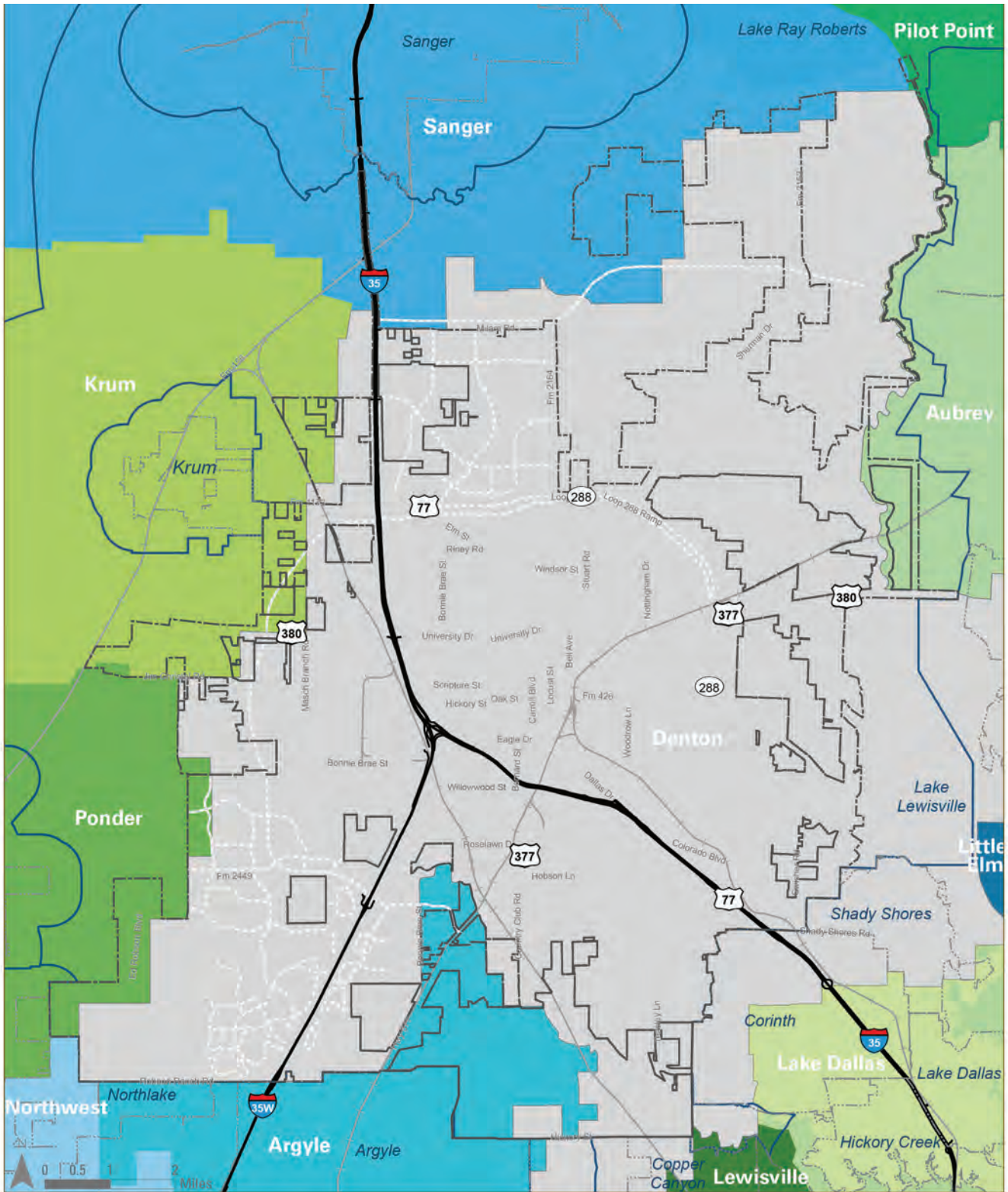


Emily Fowler Central Library - Denton

over 25,000 students with enrollment projections showing a 40 percent increase by 2022, and even more by 2030. Denton also has eight private schools of varying age ranges that are not associated with DISD.

In the 1999 Denton Plan, recent residential development had been located within the Argyle and Denton Independent School Districts. These two districts contained almost all of the urbanizing areas and were expected to experience most of the projected residential growth over the next several years. Today, the southern and eastern sectors of the city are seeing the most development. As development continues to occur in Denton, DISD must keep pace with this activity. Additional schools need to be constructed in areas of new growth. Keeping up with demand is the greatest challenge to the DISD at present, but due to a proactive operations strategy, the District currently conducts 20-year projections to anticipate future needs. In addition to meeting student need, it is important that schools are sited appropriately in order to further sustainability and mobility goals, and a compact development pattern. In addition, existing schools will need upgrades in established parts of the city that will experience increased densification

FIGURE 7.1: DISD and Surrounding School Districts



Source: City of Denton, WRT, April 11, 2014

- US Interstate
- Future Roadway
- +— Railroad
- - - Municipal Boundary
- - - Surrounding Municipalities
- ETJ
- AAA Independent School District

and population growth. Currently, school siting is highly influenced by private development as land for elementary schools is typically donated by developers, knowing that high quality schools make a neighborhood attractive for homeownership. Conversely, the siting of new schools has had a significant impact in driving development patterns, as proximity to good schools is a key factor in demand for housing. This can be seen in the impact of schools outside the city limits near U.S. 380.

Planning for new schools, as well as maintaining existing schools in the urban core, is especially important for encouraging reinvestment and development in a compact pattern so that existing schools do not diminish in quality and standards as newer facilities open. DISD is already furthering sustainability goals, having recently adopted a Safe Routes to Schools and a Sustainable Schools Program, however, policies for school siting need to achieve a shift in development patterns and housing choice. The goals and policies of this Element will ensure that the planning of new school facilities will be coordinated with the overarching goals for Denton Plan 2030.

Community Facilities

The provision of community facilities such as libraries, community centers, and senior facilities are important for maintaining balanced neighborhoods with a range of services. As of 2014, the City of Denton had three library facilities: the Emily Fowler Central Library, the North Branch Library, and the South Branch Library. The library system offers a wide range of services for Denton residents including early and remedial literacy instruction, electronic resources, internet access, and educational training. Materials in a variety of formats are available for checkout remotely or in person. Libraries serve as

community anchors with free meeting space for group, quiet study areas, and structured programs for lifelong learning.

A new 33,000 square-foot branch library is proposed for southwest Denton off of Vintage Road and Bonnie Brae. The area is anticipated to be a multi-department service point including facilities from Fire, Parks, and Libraries. Acquisition of land for a fifth library site in a strategic location will ensure accessibility from all points across the city. As a trusted entity, the Library can act as a catalyst for government, community, and neighborhood interaction.

Denton has two senior centers that serve as locations for the offering of programs, services, and activities designed for adults age 50 and older. Classes and programs include arts and craft classes, cooking classes, foreign language classes, fitness classes, outdoor adventures, and day trips. The two locations are the American Legion Hall, located in eastern Denton, and the Denton Senior Center, located within the Downtown.

Denton also oversees three community centers located throughout the city. These include the Denia Recreation Center, the Martin Luther King Jr. Recreation Center, and the North Lakes Recreation Center. These facilities, that offer a wide range of education and fitness programs as well as places for events and gathering, are excellent resources for furthering community health goals, fostering community unity and pride, and providing sense of place in individual neighborhoods. Specific goals and policies related to recreation centers are contained in the Parks, Conservation and Environment Element. Community facilities are important for creating vibrant neighborhoods and as physical facilities key to carrying out social programs. These centers for community gathering

GOAL HN-3: Maintain and improve the livability of Denton's neighborhoods through provision of adequate schools and community facilities.

should continue to offer co-location opportunities for a variety of activities and programs which foster community interaction. Future facilities should be planned in order to serve additional neighborhoods as the city expands.

Policies and Actions

New and Upgraded Facilities:

Ultimately the viability and stability of a neighborhood is dependent on its desirability and livability, with the least desirable and livable becoming concentrations of households without choices or the resources to relocate to more desirable locations. Schools and community facilities are important factors contributing to neighborhood desirability, and therefore are important to provide and maintain to encourage neighborhood stability. Throughout the Postwar Housing Boom, preferences favored the proliferation of single-family homes on larger suburban lots, which were more attractive for families. As housing preferences and families favored suburban neighborhoods, schools followed suit and investment in urban schools and community facilities diminished. Housing preferences are now changing, largely coinciding with demographic shifts, namely the retiring Baby Boom Generation and the entry of Millennials into the labor and housing markets. Established traditional neighborhoods are now able to compete with outlying suburban development if expectations for livability are met. Increasingly these expectations are for greater walkability and opportunity for exercise and travel to schools, community facilities, parks, and corner stores with less reliance on the automobile, coupled with the absences of nuisances such as traffic, noise, and blight. Although the characteristics of the urban lifestyle are appealing to many, maintaining

the quality of schools and facilities in these areas is a challenge which must be overcome to support an urban lifestyle for all demographics. In a growing community such as Denton, the building of new facilities must be balanced with the maintenance of existing facilities in the urban core in order to encourage a balance of viable neighborhoods throughout.

79 *Improve the livability of Denton's existing neighborhoods with investments in improved infrastructure, services, and amenities . (DP p. 122)*

- 7.9.1 Link programming of plans for public investments in parks, schools, and community facilities consistent with neighborhood conservation strategies, Compatibility Areas, and Small Area Plans.
- 7.9.2 Provide opportunities to improve public safety, health, and well-being such as:
- * Improved walkability with sidewalks in all neighborhoods, and the prioritization of "Safe Routes to School." (M 6.17.1)
 - * Expanded access to parks and recreation, including development of abandoned properties as pocket parks and community gardens. (CE 5.1.8)
 - * Improved neighborhood appearance through enforcement of dumping and property maintenance regulations and the removal of visual clutter. (CC 4.5.1)
 - * Improved accessibility for people with disabilities.

7.10 *Ensure that schools, libraries, community centers, and senior centers are sited equitably to service all of Denton's neighborhoods.*

- 7.10.1 Work with the City of Denton Department of Parks and Recreation and DISD to match growth projections and identified growth areas to ensure that schools and community facilities are appropriately sited in future growth centers and in locations where multi-modal mobility can be adequately accommodated. (FEV 3.9.1, CE 5.1.2)
- 7.10.2 Collaborate with the Denton school districts to create siting guidelines for the location of new schools and community facilities consistent with overarching urban design policies. (DP p. 130, CCTable 4.1)
- 7.10.3 Revisit the practice of private development driving school siting by creating Denton school district guidelines for building schools and community facilities in locations most conducive to overarching land use goals, including infill areas.

7.11 *Concentrate community facilities in transit-accessible areas and walkable communities to increase greatest potential for access and contribution to community health.*

- 7.11.1 Create policies and agreements with DCTA, other transit agencies, the Denton school districts, and the City of Denton Transportation Department to ensure that walkable and bicycle accessible routes are identified installed, and maintained, near schools and community facilities. (DP p.133, M 6.14, 6.20)



Recreation Facility - Denton



Recreation Facility - Denton

- 7.11.2 Ensure that community facilities are accessible through safe pathways that are well-lit, visible, and protected against traffic safety concerns, including accessibility concerns for people with disabilities. (CCTable 4.1)

7.12 Use community centers, senior centers, schools, and libraries as a means of enhancing and highlighting neighborhood distinction and sense of community.

- 7.12.1 Partner and collaborate with neighborhood residents in the design of new community facilities.
- 7.12.2 Engage neighborhood residents to determine the programming within community facilities and match programming with the needs of distinctive communities and demographic groups.
- 7.12.3 Explore the viability of historic building reuse in housing new community facilities and spaces for community programs. (CC 4.3.8)

Efficient Co-location of Facilities:

Providing ample and well-designed schools and community facilities is of prime importance as Denton looks to its future. Planning for new facilities is much more than responding to population growth and putting the necessary facilities in place, but includes considerations for meeting the unique needs of Denton’s diverse community, advancing sustainable land use and building design standards, and fostering healthy and engaged communities for the future. Policies and actions are designed to further sustainability goals such as placing new schools and community facilities close to transit, accomplished through coordination with DCTA and

Land Use and Mobility goals, and co-location of facilities to promote “one stop” programming and accessibility and efficient land use. In the compact development pattern furthered through the Future Land Use Map (FLUM), it is essential that sufficient community facilities and schools be located within the urban core so that a higher density of housing can be supported. The Downtown especially offers opportunities to house community facilities and programs within existing historic buildings, and to infill areas suitable for redevelopment.

Multi-use development of civic resources maximizes the use of space and decreases associated management capital expenses. Therefore, whenever opportunities exist to co-locate and/or combine civic uses, the development of collaborative partnerships with civic organizations, including universities, schools, and other jurisdictions are encouraged to assist with co-locating facilities.

Land acquisition, property development and maintenance costs can be reduced through co-siting of municipal and civic facilities, where feasible. Maximizing municipal resources, including financial resources, can be realized by setting policies that prioritize multi-use facilities within community activity centers. Enhancing community health has been identified through the Denton Plan 2030 visioning process, and the co-siting and coordinated management of municipal and civic facilities contributes to a connected community.

7.13 Provide joint-use of facilities in order to encourage community unity and ensure cost-efficient maintenance.

- 7.13.1 Conduct a study of all community facilities as part of the updated Capital Improvements Plan (CIP) to analyze the capacity for shared services among existing facilities. (FEV 3.9.1, 3.9.2)

- 7.13.2 Include shared use spaces in plans for future community facilities. (PCE 5.3.1)
- 7.13.3 Include vocational and job training programs in both DISD and City of Denton facilities to serve Denton residents.

7.14 *Combine community facilities for the most efficient use of resources. (CE 5.3)*

- 7.14.1 Co-locate school and school athletic facilities within or adjacent to Regional Mixed-Use Centers. (DP p.55)
- 7.14.2 Locate elementary schools within Neighborhood Mixed-Use Centers. (HN 7.10, DP p.55)
- 7.14.3 Locate major recreational activity centers within or adjacent to Mixed-Use Centers when possible to encourage convenient access between these uses. (DP p. 55)
- 7.14.4 Establish policies to encourage places of worship, service clubs, and other quasi-public uses to co-locate within appropriate activity centers to create community focal points and enable sharing of parking and other facilities. (DP p.55, CC 4.7.8, Table 4.1, M 6.10.1)
- 7.14.5 Ensure compatibility of community facility clusters by choosing locations that are suitable for multi-modal accessibility and neighborhood compatibility.

Community Facilities Design:

Purposeful selection of architecturally distinct community facilities can positively contribute to the community character that is uniquely Denton. Incorporating artistic design into facilities used by the general public can promote community pride and general interest.

7.15 *Enhance community character through well-designed community facilities.*

- 7.15.1 Utilize overarching Urban Design Principles for the design and planning of new municipal facilities. (CC Table 4.1, DP p.55)
- 7.15.2 Include exemplary architectural details when constructing community facilities. (DP p.55, CCTable 4.1)
- 7.15.3 Integrate public art into the planning and design for City and County-owned public facilities. (CC 4.6.2, DP p.74)
- 7.15.4 Engage the community in the design and planning for new community facilities. (PCE 5.2.4)
- 7.15.5 Continue to encourage community facilities to be designed according to best practice sustainability standards (i.e. LEED). (PCE 5.9.8)
- 7.15.6 Ensure that community facilities are accessible via the open space network, with connections to trails, parks, and the pedestrian network. (PCE 5.2.3)
- 7.15.7 Ensure that municipal facilities are designed consistently with municipal lighting standards and include as much natural light as possible to reduce energy costs. (PCE 5.9.8)

8) COMMUNITY HEALTH, SAFETY, & SERVICES

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COMMUNITY HEALTH, SAFETY, & SERVICES OVERVIEW

With the update to the 1999 Denton Plan, it is important to address emerging trends in planning, both nationally and in the North Texas Central region. Among the main emerging themes in planning is supporting healthy communities. This encompasses a wide range of topics, top among them the connection between the built environment and physical activity, which is often limited by the car-oriented lifestyles of most communities. Healthy communities planning attempts to reverse this trend with a focus on encouraging walkable development, public space activation, safe and efficient transportation routes, and places for active recreation. Access to healthy food, improved air quality and water quality, and protection from environmental hazards are also important aspects of health and safety. The Community Health, Safety, and Services Element covers this range of subjects, including:

- Establishment of a comprehensive approach to planning for healthy communities.
- Acknowledgment of national standards, contemporary research, and regional coordination and guidance regarding healthy communities planning, including coordinated programs to improve air and water quality.
- Planning for natural and man-made hazards mitigation on a city-wide scale, including gas well drilling and production.
- Provision of emergency services based on level-of-service standards.
- Furtherance of programs and services addressing under-served and disadvantaged communities in Denton.

The goals, policies, and actions within this Element require coordination throughout Denton Plan 2030, among the many policies linked to land use, housing and neighborhoods, community character, mobility, facilities, parks and open space, and economic vitality. The most important actions for ensuring healthy communities planning will be to coordinate among City departments, a comprehensive approach to supporting public health and wellbeing, along with a robust public education campaign to raise awareness within the community.

Community health and safety is also directly affected by the real and perceived threats of natural and man-made hazards, including gas well drilling and production. Addressing the implications of gas wells as part of the implementation of Denton Plan 2030 will be important for ensuring long-term safety and economic vitality. The day-to-day health and safety of Denton's citizenry will continue to be monitored by the City's emergency services, including police, fire, and emergency medical services (EMS), which will expand to keep up with population growth and city expansion.

COMMUNITY HEALTH, SAFETY, AND SERVICES IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is **consciously green**. We are a leader in our **commitment to sustainability** and we have a significant **tree canopy**, a network of **parks** and **greenways**, **stream corridors**, and **urban forests**.
- Denton is **safe** and **livable**, a **hospitable community** of friends and neighbors.

Our People, Institutions, and Government

- We are committed to fairness and equitable access to opportunity in education, community services, jobs, and government representation.
- All generations, of both natives and newcomers, are **deeply rooted** in the community and are actively engaged in its betterment through **volunteer participation** with faith-based, civic, and/or neighborhood organizations and service on local government boards and commissions.
- The City of Denton is a healthy, **family-friendly** community which sees its **youth as its most valuable resource**; a resource worthy of investment in education, healthful **recreation**, and opportunities for challenging and rewarding **employment** and **engagement in civic affairs**.
- The City of Denton's **institutions of higher learning**, UNT and TWU, are **partners** with government, civic organizations, and local employers in initiatives to **foster creativity in the arts, innovation**, a strong **economy**, **life-long learning**, and the retention of the best and brightest.
- The City of Denton **government is customer-friendly** and prides itself on its **transparency** and **open communication**, **utilizing modern technology**, its **efficient provision of public services and facilities**, and through its **leadership** in seeking to **realize the Vision** of Denton's future.
- The City of Denton has **integrated, reconciled, and streamlined** its **plans, process, policies**, and **regulations** for **consistency, clarity**, and **effectiveness**.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- A **compact development** pattern which includes expanded areas of **mixed-use**, a broad array of **housing** and **retail choices** responding to changing demographics and market preferences, and **re-investment** and **infill** in established areas of the city.
- An efficient **transportation system** with a safe and **well-connected road network** which accommodates a wide array of **mobility options**, including local and commuter rail **transit**, as well as accommodations for **pedestrians** and **cyclists**.
- **Parks, greenways, stream corridors, tree canopy**, and other natural resources integrating into the **fabric of the community** and contributing to **healthy lifestyles**.
- **Environmental stewardship** through water conservation, positive contributions to regional air quality, sustainable development practices, green infrastructure, and **renewable energy**.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.
- **Established neighborhoods** where revitalization and compatible infill development **contributes to stable, livable, and historic character**, and fosters **neighborhood pride** and **homeownership**.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Conservation development** which **retains rural character, protects open space** and **greenways**, enhances **development value**, and provides **greater choices** to land owners.
- Potential **safety** and **compatibility** impacts presented by hazardous activities, such as gas well drilling and production, **mitigated** to protect neighboring persons and property.

Finally, taking care to address the needs of Denton's disadvantaged and underserved populations is an important element of long-term community health and resilience. Community groups in Denton continue to work to provide services to these communities through the city and also provide opportunities for giving back. As part of Denton Plan 2030, these programs should be monitored formally as part of planning policy to ensure that the health and welfare of all of Denton's citizenry remains a priority for the future.

Planning for Healthy Communities

Community health and the built environment has been a primary emergent theme in the field of planning in recent years. The notion of healthy places and public health transcends issues of land use, physical activity, access to the outdoors, and access to healthy, locally-produced food. The Urban Land Institute (ULI), a national non-profit focused on urban development issues, has published a number of documents on the topic of building healthy communities, including Ten Principles for Building Healthy Places. The report is intended to bridge the gap of discourse between the health care and land use fields and thus bring individuals together to develop principles on designing healthier communities.

The Ten Principles for Building Healthy Places are as follows:

1. **Put People First:** *design communities that put community health first and consider health impacts ahead of time.*
2. **Recognize the Economic Value:** *changing lifestyle preferences indicate that walkable, mixed-use, and transit-rich communities are more highly valued and create economic engines in cities.*
3. **Empower Champions for Health:** *use community engagement to further community health goals.*
4. **Energize Shared Spaces:** *activation of the public realm enlivens communities and provides additional opportunities for physical activity and community interaction in the outdoors.*
5. **Make Healthy Choices Easy:** *ensure that environments are safe so that making healthy choices will not be discouraged by perceptions of safety.*
6. **Ensure Equitable Access:** *design for all ages and abilities, focus on safe and accessible routes to schools and integrate land use with transportation, addressing all modes and transportation users.*
7. **Mix It Up:** *a variety of land uses, building types, and public spaces can improve both physical activity and social interaction, which necessitates updating of regulations and standards.*
8. **Embrace Unique Character:** *integrate open space planning and revitalization of existing community centers to base city design on existing assets and character areas.*
9. **Promote Access to Healthy Food:** *food access must be considered with every new development, including reconsidering grocery store size standards and access to existing stores.*
10. **Make It Active:** *use urban design guidelines to further community health goals by co-locating activities, upgrading walking and bicycling infrastructure, and encouraging shared-use facilities.*

The ULI report is based on the premise that one of the most important determinants of physical activity is a person's immediate environment, as people who live in neighborhoods with parks, trails, and greenways are considerably healthier than people who live in neighborhoods without such facilities. As rising health care costs from largely preventable diseases—such as obesity, asthma, diabetes, and depression—have real costs that are passed on to cities and communities to endure, it is important to consider the influence of city design on many aspects of public health. According to the Centers for Disease Control (CDC), in 2010, more than a third of adults in the United States and almost 17 percent of youths were obese, with annual medical costs significantly higher than for individuals of a healthy weight. The rise of obesity and health problems is partially attributed to limited physical activity as a direct consequence of the built-environment and transportation choices. As these considerations are becoming increasingly central in urban design and planning policy, they are complemented by an increased demand for more housing opportunities in compact, urban environments with a sense of place, walkable streets, and transit. Thus, it is important that Denton Plan 2030 establish a framework for a physical environment that is conducive to healthy lifestyle choices.

Another factor in community health is access to healthy foods. While an urban lifestyle is increasingly popular, supermarkets, the best purveyor of a range of food options, are located primarily in outlying suburban neighborhoods. As a result, many urban environments lack food options beyond convenience stores and fast food restaurants, neither of which offer the fresh foods that are desirable in a balanced diet, leaving urban communities with few healthy food choices. Typically, urban communities have been of lower incomes, and grocery stores were unlikely to locate in downtowns due to development codes and limited available sites, and also a lack of buying power.

This trend has contributed to the connection between poverty and obesity and the term “food deserts,” indicative of environments, both urban and suburban, that are underserved by accessible grocery stores. National retailers are beginning to re-think models of grocery stores-- many moving to multi-level options for small sites, and creating different products to serve a variety of incomes. Another factor in community health is the opportunity for local food production within the community in a variety of settings, which also contribute to physical activity and community interaction.

Access to healthy foods is highlighted in Denton's Sustainability Plan: *Simply Sustainable: A Strategic Plan for Denton's Future* (2012). Urban agriculture in Denton has grown in recent decades, paralleling a national trend supporting local food production. The City of Denton partners with the Denton Community Market to support local businesses and promote increased access to local, fresh, and healthy foods. The city has several farmers markets that operate seasonally on various days of the week and allows up to eight hens in a backyard are currently permitted as long as certain standards are met. Additionally, several community gardens and small farms have been established in Denton, including Earthwise Gardens, Cardo's Farm Project, Shiloh Farms and Backyard Farms.

The American Planning Association (APA) has also produced guidance on comprehensive planning for public health, similar to ULI. APA has created a guide to integrating public health into planning called *Healthy Plan Making* (2013). The report is based on the evaluation of comprehensive plans throughout the country that had included public health policies either throughout the plan or in stand-alone Elements. The report concludes with a summary of the most frequent types of policies, as well as recommendations for successful and effective implementation. While



Healthy food



Fostering social interaction



Active lifestyle



Making healthy choices



many cities and counties address a diversity of topics related to public health, the most important elements for implementation are sending the right message, having the support of public officials, interdepartmental coordination, and including metrics to benchmark progress.

Many communities have created frameworks to measure public health through Health Impact Assessments (HIA) in order to promote the consideration of public health in decision-making that affects the built environment, public services, and facilities. HIAs may be conducted for a policy, an individual site, a community, or a region. HIAs help measure the potential effects on community health through screening, scoping, assessing risks and benefits, developing recommendations, reporting, and monitoring. The CDC oversees a Healthy Community Design Initiative as another resource for building healthy communities and ensuring that goals and policies are put in place in a systematic manner.

Currently, community health in Denton is addressed by the Denton County Health Department (DCHD). This Department is focused on making Denton County a healthier place to live, work, and play by improving health outcomes of Denton County residents. Its services focus on disease awareness and prevention, protecting against environmental hazards, encouraging healthy behaviors, and disaster preparedness and recovery. DCHD provides programs on public education regarding cancer, cardiovascular disease and diabetes prevention, tobacco use, West Nile, and injury prevention through healthy behaviors. In addition DCHD offers services for prevention of communicable diseases, including sexually transmitted diseases (STD) and tuberculosis (TB). The Department also offers Women, Infants, and Children (WIC) services to provide nutrition education and food vouchers for those who qualify. The Department regularly engages in partnerships with other organizations such as schools

districts, city parks and recreation departments, UNT, TWU, and local emergency medical services (EMS), to name a few, for things such as mosquito testing for West Nile. The City of Denton’s Building Inspections Division oversees inspections of food establishments to ensure health code compliance. While DCHD and local non-profits do an outstanding job of addressing specific health challenges, there is no all-encompassing policy framework to support healthy lifestyles.

Fortunately, there has been significant work done regionally on the topic of community health and sustainability, affecting all of the communities within the DFW Metroplex. Denton is encompassed in the Vision North Texas plan that was created by the North Central Texas Council of Governments (NCTCOG), in partnership with local ULI chapters, affected cities and counties, and the University of Texas at Arlington. Vision North Texas is a valuable opportunity for Denton to implement regional goals that contribute to the future quality of life, economic desirability, and long-term sustainability of the 16-county North Central Texas region.

Included in *Vision North Texas* is guidance for increasing public awareness about important regional land use issues that affect mobility, air quality, water supply, and other economic and environmental resources. In addition, NCTCOG has worked with its Bicycle and Pedestrian Advisory Committee (BPAC) to create a Regional Complete Streets Policy Statement for North Central Texas. Complete streets refer to thoroughfares that feature a combination of sidewalks, bike lanes, bus lanes, accessible public transportation stops, safe pedestrian crossing opportunities, and other amenities to ensure modal balance and safety for all transportation types. Complete streets are an important element of achieving healthy communities.

With the adoption of the goals and policies of Denton Plan 2030, and with important strides in recent years,



Healthy Communities planning includes access to transit, walkable streets, and housing densities that support transit use

Denton is making progress in achieving the primary guiding principles of *Vision North Texas*. These include:

- a. Development Diversity
- b. Efficient Growth
- c. Pedestrian Design
- d. Housing Choice
- e. Activity Centers
- f. Environmental Stewardship
- g. Quality Places
- h. Efficient Mobility Options
- i. Resource Efficiency
- j. Educational Opportunity
- k. Healthy Communities
- l. Implementation

This framework should continue to serve as a useful tool in implementing goals for healthy communities that further regional goals.

GOAL CHS-1: Integrate planning for healthy communities and individuals into a comprehensive framework for Denton's future development.

Policies and Actions

Healthy Communities Planning:

There is a great diversity of resources informing the implementation of actions to support healthy communities in Denton. The city has already made great strides through the ongoing implementation of Denton's Sustainability Plan and developments in urban agriculture. Given that identifying indicators for community health is a relatively new concept in planning, it is important to establish programs and a system for monitoring progress to ensure that goals are being pursued and achieved. Working to establish guidelines will ensure that community health goals are met. A HIA will allow for the city to understand the "state of the community" in regards to public health in the present day. This can further be monitored annually through a Community Health Report Card. Coordination among City departments is important to ensure that a consistent approach and framework is established, and shared priorities are identified. Substantial research has been conducted in this field that can be applied to planning for community health in Denton.

8.1 Establish a comprehensive framework to promote healthy communities.

- 8.1.1 Produce a *Health Impact Assessment (HIA)* for Denton following CDC guidelines and publish it online.
- 8.1.2 Partner and collaborate with Denton County to create a health policy framework to be applied among departments within the city and county including streets, utilities, planning, parks and recreation,



Healthy Communities Planning

and environmental services and sustainability, and the DCHD.

- 8.1.3 Dedicate staff within the City of Denton to oversee programs, recommendations and guidance focused on community health.
- 8.1.4 Apply the reference resources on community health including ULI and APA guidebooks, as well as the health-related recommendations of Vision North Texas.
- 8.1.5 Create an annual Community Health Report Card featuring the progress of programs focused on community health and the findings of the initial HIA and publish it online.
- 8.1.6 Actively seek out and implement methods to make local food production easier.

Community Health Education:

While planning for community health is important, it is even more important to ensure that the message reaches the Denton population in order to realize true progress. An increase in public awareness for healthy communities can be accomplished by partnerships with major employers and healthcare providers to distribute material about healthy lifestyle choices, coordinated with programs already underway. In addition, partnering with DISD can realize improvement in community health through the types of foods children and youth are served, regulating the level of physical activity that is required, and including public health as a topic of education. A robust communications framework to accompany community health strategies is encouraged to achieve long-term results.

8.2 *Enhance public awareness for community health goals.*

- 8.2.1 Create a robust public relations campaign centered on community health advocacy and promoting physical activity.
- 8.2.2 Work with Denton Independent School District (DISD) to promote awareness of healthy lifestyle choices within Denton schools.
- 8.2.3 Work with major employers and healthcare providers to promote healthy lifestyle choices within Denton employment centers.

Plan and Policy Coordination:

The most important elements of encouraging healthy communities that can be affected by the comprehensive plan are the furtherance of a compact growth pattern, community design that supports physical activity, and a mobility network



Community health education in Denton

that encourages walking, bicycling, and public transportation to reduce emissions and improve air quality. The policies to encourage community health are distributed throughout Denton Plan 2030 and *Simply Sustainable: A Strategic Plan for Denton's Future (2012)*. The adoption and implementation of these plans will ensure that many community health goals are met, and may be tracked to account for progress through the plan horizon.

8.3 *Link healthy community goals and polices throughout the Comprehensive Plan and to Denton's Sustainability Plan.*

- 8.3.1 Promote compact development patterns and urban design standards that support pedestrian access and physical activity. (LU 1, CCTable 4.1)
- 8.3.2 Locate land uses according to the Future Land Use Map (FLUM) to ensure that protected land uses are not in conflict with health hazards, applying standards of environmental justice. (LU 2.3.1)

- 8.3.3 Incorporate complete streets guidelines into update Mobility Plan following the guidance of NCTCOG and the NCTCOG Bicycle and Pedestrian Bicycle Advisory Committee (BPAC). (M 6.1.1, 6.14.3)
- 8.3.4 Continue to implement policies from *Simply Sustainable (2012)* regarding expansion of community gardens and urban agriculture to promote access to healthy foods. (PCE 5.1.8, HN 7.9.2)
- 8.3.5 Include policies for agricultural production and green infrastructure in the update to the *Parks, Recreation and Trail System Master Plan*. (PCE 5.1.2)
- 8.3.6 Implement green infrastructure standards for private development and public rights-of-way as part of stormwater management policies to improve water quality and supply. (IU 9.11)
- 8.3.7 Coordinate with NCTCOG goals for maintaining regional air quality and healthy ozone levels. (M 6.11.1)
- 8.3.8 Create a program to alert Denton residents when ozone levels are at potentially unhealthy levels, based on the Air Quality Index (AQI) monitored by NCTCOG.



Maintaining healthy air quality

Hazard Mitigation

Hazard mitigation is a concern in many communities. Hazards can be broadly defined and may include daily environmental hazards such as noise, polluted stormwater runoff, and air pollution from vehicular traffic and industrial emissions. Hazards also include tornadoes, floods and other natural disasters, and man-made disasters from industrial accidents and terrorist or criminal activity. In North Texas, and Denton in particular, specific concerns regarding gas wells include risks to public safety from potential explosions, and the impact of toxic chemicals on air and water quality. Denton is located atop the Barnett Shale formation, which is a rich resource of natural gas, among the largest in the United States. The rise of hydraulic fracturing (i.e. “fracking”) has made the reserves of the shale more accessible and profitable, and as such, has led to a proliferation of fracking in North Texas and the drilling of gas wells.

Presently, there are over 270 active gas wells within Denton’s city limits. Denton first enacted a Gas Well Ordinance to regulate gas well placement in 2001, which was revised in 2013. Many of the gas wells are within or adjacent to areas currently designated as protected land uses (ex. residential) and in the potential

alignment of planned roads. The potential impacts of gas wells on public health and safety and on the city's pattern of land use and mobility continues to be a topic of great concern, but the factual basis to measure the impacts and mitigate accordingly is limited by a lack of research and study. Consequentially, a *Gas Well and Pipeline Impact and Compatibility Study* is recommended as the basis for future modifications to the Gas Well Ordinance, zoning designations and the Mobility Plan. This is discussed in the Land Use Element under policy 2.13.

The Denton Fire Department's Office of Emergency Management (OEM) is charged with coordinating the City of Denton's emergency management program. Activities include developing emergency plans, offering disaster preparedness training, conducting drills and exercises, and participating in public education programs. The program operates through the four phases of emergency management in order to properly prepare for disasters, coordinate response efforts, provide timely recovery assistance, and implement projects to try to prevent and/or lessen the impacts of disasters. OEM works with numerous public, private, and nonprofit agencies in order to help ensure the City of Denton is a safe place to live, work, and play.

The OEM prepares a Local Mitigation Strategy covering a variety of hazards affecting Denton, known as the Hazard Vulnerability Analysis (HVA). In addition, OEM hosts and participates in a number of emergency preparedness public education programs and prepares guidelines for training and drills. OEM also oversees and utilizes the following programs for Denton:

- Texas Regional Response Network (TRRN), which aids in response and planning efforts by allowing system users to collect and retrieve resource information

- Code Red System and Code RED Weather Mapping
- Emergency Preparedness Planning
- Evacuation and Shelter Guide
- National Incident Management System (NIMS)/ Incident Command System (ICS)
- Pet and Animal Issues
- Disaster planning with special attention to persons with special needs
- Volunteer opportunities related to disaster preparedness

Hazard Protection and Gas Well Drilling and Production:

Protecting Denton's citizens from both natural and man-made potential hazards is an essential element of ensuring efficient city functioning and healthy communities. A particular goal of Denton Plan 2030 is for the City to get a clear understanding of the implications of gas well drilling and production regarding potential risks to public safety, mobility, and livability, balanced with to the positive contributions they make to the local economy and tax base. To address these considerations in a comprehensive and transparent fashion, a *Gas Well and Pipeline Impact and Compatibility Study* is recommended as the basis for future modifications to the Gas Well Ordinance. (LU 2.13.1) The study will examine options for policies and regulations for things such as clustering of gas wells, setback requirements and buffering standards, and procedures for the platting of new wells and abandoned wells. In addition, revisions to the Mobility Plan are also recommended to confirm any conflicts with wells, pipelines and gathering lines in planning future road thoroughfares, as recommended in the aforementioned study. Further detail on gas wells is included in the Land Use Element (Policy 2.13).

In addition to understanding their impact on land use patterns and mobility, gas wells should be included in all future hazards planning, in tandem with the programs currently overseen by the OEM. It is recommended that the OEM prepare a report on understanding the health and safety hazards of gas wells that can be used as a resource by the public to better understand the potential health and safety consequences of gas wells. Gas wells should be included in the Hazard Vulnerability Analysis (HVA) for Denton, which is updated every five years.

8.4 *Ensure effective disaster preparedness for natural and manmade disasters.*

- 8.4.1 Update the HVA every five years.
- 8.4.2 Include consideration of gas well drilling and production in the HVA and addressed by policies of the OEM.
- 8.4.3 Coordinate with land use policies for gas well drilling and production which will mitigate for real and perceived impacts to community safety.

Emergency Services

Denton provides high-quality public facilities and services to protect the safety and welfare of the community. Emergency services, in general, refers to police, fire, and emergency medical services (EMS). The provision of emergency services is provided based on level-of-service standards, which must be maintained to keep up with population growth and the city's expansion. As population increases, the operating capacity of emergency service providers must increase, with additional professional staff, vehicles, and physical facilities in order to maintain level of service standards. Police and fire facilities may be centralized or distributed around the city based on location of density of population and employment. Typically, fire and police departments have a central management office that may be collocated and satellite offices that are located in many different areas to serve neighborhoods directly.

Denton is currently served by the Denton Police Department with a force of 156 sworn officers (i.e., those who have arrest authority) and 68 non-sworn employees. A key measure of level of service for both police and fire protection are response times. As shown in Table 8.1, despite handling more calls for service in 2012, police response time improved from 2008.

The Denton Fire Department operates seven fire stations throughout the city. With a staff of 167 full-time professionals as of 2014, the Department is responsible for fire suppression, fire prevention, fire prevention education, emergency medical services, and disaster preparedness. Table 8.2 shows statistics for fire and emergency services activity from 2008 to 2011. Fire Department activity decreased notably between 2010 and 2011.

GOAL CHS-3: Provide emergency services to keep the community safe and healthy.

Policies and Actions

Emergency Services:

In addition to keeping pace with population growth and providing adequate service, it is desirable that Denton’s emergency services contribute to overarching goals of community health and safety, thoughtful planning and urban design, and to a sense of community and pride. As with other Elements of Denton Plan 2030, emergency services planning should be coordinated with land use, urban design, housing and neighborhoods, and mobility planning in order to realize a holistic, well-integrated, and efficiently-operated city. It is the responsibility of Denton’s Police and Fire departments to update facilities plans regularly to keep a pace with growth and update the Capital Improvement Program accordingly.

The City of Denton utilizes the National Incident Management System (NIMS). NIMS provides a systematic, proactive approach to guide departments

and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents. NIMS aims to reduce the loss of life and property and harm to the environment. City staff involved in emergency operations are trained based on their position and area of responsibilities.

8.5 Ensure adequate police services to protect the health and safety of the Denton Community and business population.

- 8.5.1 Plan and provide for police stations, offices, and supporting facilities adequate to support level of service standards.
- 8.5.2 Co-locate police facilities close by to other community facilities when possible for land use and operational efficiency. (DP p.55)

Table 8.1: Denton Police Department Activity, 2008 - 2012

	2009	2010	2011	2012	2013
Calls for Services	78,826	80,302	76,793	75,384	60,575
Average Response Time (minutes)	5:34	5:09	5:22	5:51	6:31
Traffic Citations	31,465	27,947	25,146	26,121	25,171
Injury Accidents	730	754	685	800	740
Non-Injury Accidents	2,063	1,876	1,718	1,926	2,280

Source: Denton Police Department

Table 8.2: Denton Fire Department Activity, 2008 - 2011

	2008	2009	2010	2011
Fires	427	451	405	518
EMS	6,862	7,071	7,255	7,458
Transports	5,114	5,285	5,326	5,719
HazMat	120	145	109	112
Miscellaneous *	2,300	2,455	2,685	2,905
Other	856			

* Includes all types of rescue calls, alarm calls, assist other agency calls, etc.
Source: Denton Fire Department

- 8.5.3 Design police facilities to be recognized as iconic civic buildings. Reuse and update existing police facilities when possible.
- 8.5.4 Encourage use of the Crime Prevention through Environmental Design (CPTED) design standards to reduce instances of crime. (Table 4.1)
- 8.5.5 Continue to strengthen and grow the City's neighborhood policing program.

8.6 *Ensure adequate fire and emergency prevention and response to protect the health and safety of the Denton Community and business population.*

- 8.6.1 Plan and provide for fire and emergency services, offices, and supporting facilities adequate to support level of service policies maintained by emergency services departments. (FEV 3.9.1, 3.9.2)
- 8.6.2 Co-locate fire and emergency services facilities close by to other community facilities when possible for land use and operational efficiency. (DP p.55, HN 7.13)
- 8.6.3 Continue to design fire and emergency service facilities to be recognized as notable civic buildings. Reuse and update existing fire and emergency service facilities when possible.
- 8.6.4 Maintain response time standards established by the National Fire Protection Association for populations of Denton's size.



Denton Fire Department - Firefighter Story Time

- 8.6.5 Provide connections to resources for tornado shelter purchases and installation.
- 8.6.6 Focus on prevention programs to heighten awareness, minimize loss, and support a safer community.
- 8.6.7 Reduce the possibility of fire in commercial, industrial, and multi-family buildings through development review and a high-quality inspection program.
- 8.6.8 Continue and strengthen the City's participation in the National Incident Management System (NIMS).

Social Services and Programs

Denton currently has a wide range of organizations providing services to communities in need, primarily through non-profits and faith-based groups. Serve Denton, a non-profit organization established in 2002, has been proactive in helping community organizations, government agencies, and places of worship work together for efficient delivery of services to communities in need. In addition, Denton has over thirty active organizations and faith-based groups that continue to grow and provide specific services to serve community needs. Recently, there has been an effort to create a campus for non-profits to enable inter-group collaboration, efficient and streamlined service to the community, and highlighted presence in the city.

In a recent needs assessment conducted by the United Way of Denton County (2011), the greatest needs for social services in Denton County that were revealed include affordable and accessible health and dental care, preventative care, nutrition information, substance abuse prevention and rehabilitation resources, and mental health services. Additionally, childhood homelessness, drug trafficking, predatory lending, and a lack of public education are cited to be among the chief concerns in the city. The goals of Denton Plan 2030 are to enable the city to create a streamlined approach to respond to these needs of these groups with the support of established community groups.

GOAL CHS-4: Provide a variety of community programs that meet the needs of key groups of need in Denton including youth, seniors, and the homeless.

Policies and Actions

Addressing Communities of Need:

While Denton has a robust neighborhood and social services program, through the work of many community organizations and the leadership of Serve Denton, the needs will only persist and become more pervasive as the population grows. As a result, the policies are primarily geared at revisiting and updating the current programs at work in Denton and aligning them with present-day challenges in Denton with an eye to the future. The maintenance of a healthy and thriving community will be enabled by ensuring programs will continue, expand, and add additional capacity to meet changing needs. The provision of

new community facilities, such as community and recreation centers, should also be coordinated with community needs in order to provide centers within Denton's neighborhoods that can serve various needs. (See Housing and Neighborhoods Element).

8.7 Establish a framework for the formation of programs to serve Denton's communities of need.

- 8.7.1 Work with existing Denton community groups to create a dedicated campus facility for non-profit use and the provision of community services and programs.

- 8.7.2 Establish a consortium among city and county departments, DISD, and local youth-focused non-profits to prioritize and create an action plan for identifying and updating the needs of Denton youth and identify key partners to aid in implementation of programs.
- 8.7.3 Create a plan for identifying and updating the needs for combatting substance abuse in Denton and identify key partners to aid in implementation of programs.
- 8.7.4 Work with local partners to strengthen and broaden current programs addressing the needs of Denton's homeless, in conjunction with housing policies. Create a plan to identify and update the needs of Denton's homeless population, including childhood homelessness, and identify key partners to aid in implementation. (HN 7.3)
- 8.7.5 Include health education and preventative care guidelines into all programs serving communities of need.
- 8.7.6 Include needs for neighborhood and social services in the planning for and upgrading of community facilities. (HN 7.12.2)
- 8.7.7 Work with DCTA to ensure that public transit needs for senior and people with disabilities are met.
- 8.7.8 Establish a task force to create policies to eliminate predatory lending practices in Denton.

Volunteer Programs:

Throughout the public input process of Denton Plan 2030, numerous comments were made about providing more volunteer opportunities for people to give back to the community and serve those in need. While many programs exist in the city, providing a formalized organizational framework will help ensure that volunteers are well-matched with those most in need.

8.8 Proactively identify and organize volunteer opportunities within the city that will link Denton residents with opportunities to serve their fellow citizens.

- 8.8.1 Establish a City of Denton staff position to oversee volunteer organization and mobilization.
- 8.8.2 Work with non-profit groups to identify existing volunteer programs and create a framework for identifying additional program needs.
- 8.8.3 Regularly update and enliven the page on the Denton website advertising volunteer opportunities.
- 8.8.4 Establish partnerships with UNT and TWU to volunteer within the community.
- 8.8.5 Establish partnerships with major employers to volunteer within the community.
- 8.8.6 Work with Denton health care providers to continue and expand volunteer opportunities related to provision of health care and health education.



Keep Denton Beautiful volunteer program - Denton

- 8.8.7 Support development of a dedicated campus and/or facility to support the growth and collaboration of local non-profits to better serve communities in need.
- 8.8.8 Include volunteer programs in programming of community facilities and link with school programs. (HN 7.12.2)

9) INFRASTRUCTURE & UTILITIES

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INFRASTRUCTURE AND UTILITIES OVERVIEW

The Denton population is poised to increase by approximately 94,000 persons by 2030—essentially doubling the existing population. The compact growth framework put forward through the Plan will be influenced by the availability and access to, as well as the economic feasibility of, supporting infrastructure. Services provided to the Denton community such as electricity, water treatment and distribution, wastewater collection and treatment, solid waste collection, and flood mitigation and drainage will determine the extent of development and the quality of life of community members throughout the plan horizon. The policies that follow in this Element include the following primary considerations:

- The provision of efficient and sustainable energy systems to the residents and business community of Denton.
- A reliable, safe, and sustainable source of water for the future needs of the Denton community.
- Establishing practices that ensure cost-effective and environmentally-sensitive wastewater services sufficient to meet future demands.
 - Promoting the expansion of a natural systems-based, green infrastructure approach to stormwater management consistent with national best practices.
 - A solid waste and recycling program that moves beyond refuse removal to promote best practices in waste minimization and resource recovery and thinks locally and globally regarding environmental protection.
 - Maintenance of existing and future facilities that ensure their long-term viability to sustain the future of Denton's growth.

Water and energy resources have historically been sufficient to support Denton's growth over the past several decades. However, in the present day, state-wide and global issues such as population growth, variable rainfall, and forecasted shortages in capacity to meet energy demands (i.e. energy reserve margins) have caused staff at the City of Denton to strategically plan to meet customer demands. Denton must now consider a larger community that must collectively adapt to both droughts and floods in an economically- and environmentally-sensitive manner. The ability to rely on natural systems, such as floodplains, to store flood waters has been compromised by historic development within the floodplain. Conversely, renewable energy source options have become economically feasible and are now incorporated into Denton's electricity portfolio. Responding to new options, as well as being more responsive to natural constraints is a theme in the infrastructure policies that follow, and their effect on the long-term resiliency of Denton in terms of cost-effective responses to changing dynamics in the community.

INFRASTRUCTURE AND UTILITIES IN THE COMMUNITY VISION STATEMENT

The Character of Denton

- Denton is **authentic**. Our **small-town charm** and, **North Texas heritage** are proudly embraced along with **positive change, smart and balanced growth, and high-quality development**.
- Denton is **consciously green**. We are a leader in our **commitment to sustainability** and we have a significant **tree canopy**, a network of **parks and greenways, stream corridors, and urban forests**.

Our People, Institutions, and Government

- The City of Denton is a healthy, **family-friendly** community which sees its **youth as its most valuable resource**; a resource worthy of investment in education, healthful **recreation**, and opportunities for challenging and rewarding **employment and engagement in civic affairs**.
- The City of Denton **government is customer-friendly** and prides itself on its **transparency and open communication, utilizing modern technology, its efficient provision of public services and facilities**, and through its **leadership** in seeking to **realize the Vision** of Denton's future.
- The City of Denton has **integrated, reconciled, and streamlined** its **plans, process, policies, and regulations** for **consistency, clarity, and effectiveness**.

Sound Growth: Strengthening Our Form and Function

Throughout Denton we see...

- **Infrastructure** systems which have undergone **well-planned, staged expansion** to serve and **guide the city's growth**.
- **Environmental stewardship** through water conservation, positive contributions to regional air quality, sustainable development practices, green infrastructure, and **renewable energy**.

In the core of Denton we see...

- A **vibrant Downtown Denton**, energized with new **housing, shopping, arts, and entertainment**, supporting day and nighttime activity and a true urban lifestyle – Denton style.

In our rural fringe areas of the city and the Extraterritorial Jurisdiction (ETJ) we see...

- **Contiguous, staged growth** which is **fiscally and environmentally sound, reduces fragmentation and sprawl**, discourages premature development, and conserves the city's future growing room.
- **Conservation development** which **retains rural character, protects open space and greenways**, enhances **development value**, and provides **greater choices** to land owners.

A significant theme in the provision of infrastructure and utilities in the future is based on the transformation from “gray” to “green” infrastructure options, based on the concept of green infrastructure as described in Element 5. Green infrastructure relies on the mimicking of natural systems to create stormwater management that is more akin to natural processes rather than the traditional “gray” concrete systems of the past, which sought to alter natural systems. Significant capital expenses are associated with the installation and maintenance of infrastructure systems. Applying a systems approach to infrastructure developments will conserve resources over the long-term, including costs. Best practices that maximize cost-effective, long-term sustainable green infrastructure options are proposed within this Element that offer the City options for both short and long-term strategies for infrastructure investment including operation, maintenance, and replacement costs.

The Infrastructure and Utilities Element also includes policies and actions to manage solid waste over the development horizon of the Denton Plan 2030. Solid waste management, which includes waste and recycling, has evolved according to best practices since the 1999 Denton Plan. In Denton, waste is viewed as more than just trash to be placed in a landfill, but as an energy source. Furthermore, material reuse and recycling are increasing as rapidly as the available technology permits. Landfill capacity needs to be prolonged, the environment protected, and energy production and material reuse maximized into the future to optimize this community resource.

A well-maintained and operated infrastructure network is fundamental to a healthy, thriving community. Denton’s investment in this infrastructure will both influence and support the framework for compact development and infill that is central to the Denton Plan 2030.

Energy

Energy in Denton is provided by Denton Municipal Electric (DME), Denton’s customer-owned electric utility. It has been in operation since 1905 and provides electricity to approximately 50,000 customers. It reports to the Public Utilities Board and the City Council, similar to other utilities in Denton. DME’s infrastructure system is monitored and maintained by a state-of-the-art National Electric Reliability Council (NERC)-Certified Operations Center and a staff of professional electric workers. By constructing and maintaining transmission and distribution infrastructure and by procuring energy from a variety of sources, DME reliably and cost-effectively meets the power demands of a growing population. Electric power is a vital component of the community, and DME will continue to expand to meet Denton’s growth.

Denton is one of the few communities within the Dallas-Fort Worth Metroplex with its own electric utility. Given Denton’s proximity to the deregulated market, DME is able to compare its rates and service with competitive power providers; this allows DME to ensure customers are getting the best value. As a result, operational efficiency is a cornerstone for DME. As an example, DME is currently implementing an automated metering system with the capability to increase operational efficiency for DME while providing additional value to DME customers in the form of improved usage data, new energy efficiency programs, and additional rate options.

DME’s extensive Capital Improvement Plan (CIP) provides infrastructure improvements to Denton’s electrical system. As of 2014, this CIP includes many projects that will strengthen the transmission and distribution infrastructure in Denton. These projects include the construction of new electrical substations, and the expansion and conversion of existing substations and transmission lines from 69kV to 138 kV.

DME is assessing the viability of new technologies and energies, such as a Combined Heat and Power (CHP) plant. DME currently provides only electrical energy to Denton. DME has the ability to provide natural gas to industrial customers in a specific geographic area, west of I-35, but there are currently no natural gas infrastructure or facilities in place. Should they become economically feasible to pursue, DME should proceed with installing this infrastructure to further economic development efforts.

As of 2014, DME provides approximately 40 percent of its energy from renewable sources, through a multi-year power purchase agreement. A significant portion of DME's power comes from the Gibbon's Creek Coal Plant near Bryan, Texas, owned by Texas Municipal Power Agency. Less than one percent comes from DTE Energy, which operates a landfill "gas to energy" project at the City of Denton Landfill. The remainder is supplied by a power supply contract. Staff in DME's Power Supply Division continually search for cost-effective sources of renewable energy and pursue

additional contracts that contribute to the security and stability of the City's energy source portfolio. By making renewable energy source choices, DME can positively affect statewide air quality, consistent with the goals and objectives of Denton's Sustainability Plan: *Simply Sustainable (2012)*.

DME encourages residential-scale renewable energy through the GreenSense Energy Efficiency Rebate program. Through the GreenSense program, customers can receive rebates of up to \$30,000 by installing photo voltaic solar panels on their home or business. As of 2014, 58 systems had been installed with a combined capacity of 250kW, i.e. enough energy to power approximately 50 homes.

The policies and actions that follow ensure the provision of energy for the City of Denton's future that saves costs, expands options for renewable resources, reduces fossil fuel consumption, improves the physical environment, and is coordinated with overarching sustainability goals.



Wind Turbines - Denton



Gas to energy - Denton Landfill

GOAL IU-1: Provide safe, reliable, and cost-effective electric and communications utilities that apply environmental stewardship to operations and meets future demands.

Policies and Actions

Cost-Effective Service:

As a municipally-owned electric utility operating in close proximity to the deregulated market, it is important for DME to demonstrate its value to customers. One of the most important ways to accomplish this is through competitive rates. To maintain competitive rates, DME will continue to focus on procuring energy and conducting operations in such a way as to keep rates competitively priced and stable.

Siting and construction of substations and related transmission infrastructure requires coordination within DME, with other city departments, with the community, and with property owners. DME’s process for constructing new transmission infrastructure ensures that all stakeholders have input on the decision making process. Management of DME capital investments, including infrastructure expansion and upgrade projects, should promote efficient resource use and positively facilitate long-term development, as identified within the Denton Plan 2030.

9.1 *Seek economically favorable sources of power and continue to develop programs to increase operational efficiency to offer stable and competitively-priced electric rates and exceptional customer service compared to the deregulated market.*

9.1.1 Provide efficient and effective customer services by maintaining rapid response times to customer outages, enhancing communication systems, developing

automated meter reading capabilities, and improving system automation and analysis capabilities. (DP p. 168)

9.1.2 Seek cost-effective sources of power. (DP p.168).

9.1.3 Identify, evaluate, and invest in new technologies and energies that can spur economic development, such as a CHP plant or natural gas, when economically feasible.

Cost-Effective Renewable Energy:

DME successfully sources approximately 40 percent of its energy from wind generation, which is provided to users at no additional charge. Seeking renewable energy options that are priced competitively with traditional sources of energy is one way to expand renewable energy source options that will provide long-term value to the city. In addition, continuing to offer the GreenSense Renewable Rate which provides the option for customers to receive 100 percent renewable energy allows greater flexibility to consumers. The continuation and expansion of these programs is a goal of the Denton Plan 2030.

9.2 *Seek cost-effective opportunities for expanding DME’s renewable portfolio.*

9.2.1 Support an increase in the quantity and diversity of renewable energy sources in the electric utility’s portfolio.

9.2.2 Support expanding renewable energy source options through public-private partnerships.

Lighting Standards:

Lighting upgrades should be one of the first items addressed when planning for future development, as it can affect heating and cooling energy loads and the specifications for other building systems. Lighting also affects light pollution and reflectance into the night sky, which affects migratory bird patterns and other ecosystem functions. Properly designed and adjusted light fixtures, aimed directly down at the ground decrease light pollution that detract from dark night skies.

While controlling the lighting design of privately-owned development is best controlled by area-specific design guidelines, many cities adopt municipal lighting standards to set a standard for sustainable lighting strategies in all city-owned facilities, which affect energy consumption. The City of Denton has recently leveraged grant funds received as part of the federally funded Energy Efficiency and Conservation Block Grant (EECBG) program to fund a municipal lighting retrofit at 19-City-owned facilities and to purchase new energy audit equipment. Continuing to upgrade lighting fixtures that are energy efficient, non-toxic, and oriented downward when installed in the case of outdoor fixtures, can result in economic savings over the long-term and decrease or even eliminate a toxic waste stream as well as widespread light pollution.

9.3 Continue to advance the use of municipal lighting fixtures that direct illumination efficiently, reduce nuisance lighting problems, and enhance views of the nighttime sky. (DP p.167)

- 9.3.1 Establish a purchase policy for municipal lighting fixtures that are energy efficient and where feasible prioritize non-toxic, non-hazardous lighting equipment materials, avoid glare, spill light and energy waste.



Lighting standards

- 9.3.2 Support the development of an ordinance that applies the Illuminating Engineering Society of North America (IES) recommendations for residential, commercial, and industrial properties.
- 9.3.3 Include guidelines for lighting standards as part of the *Urban Design Plan* and Small Area Plans to encourage sustainable lighting strategies in private development (LU 2.7.1, 2.8.1, CC 4.11.1, 4.12.1, 4.12.2).

Communications Infrastructure:

Several options for communication services are available in Denton, including Charter Communications, AT&T, Sprint and Verizon, among others. These companies provide communication services including telephone, television, cellular phone networks, and high speed internet. Service providers are required by the Public Utility Commission of Texas to anticipate and serve new growth and continuously add new facilities and infrastructure to conform to regulations as needed to meet customer demand.

9.4 *Coordinate with service providers to ensure availability of communications infrastructure throughout the city.*

- 9.4.1 Ensure that communications infrastructure, including fiber optic cables, are installed proactively to keep up with demand as Denton grows.
- 9.4.2 Install telecommunications infrastructure consistent with the Denton Development Code.
- 9.4.3 Work in tandem with other service providers to install underground telecommunications lines when practicable.
- 9.4.4 Work with City of Denton and local businesses via the Chamber of Commerce to sponsor free public wireless internet (Wi-Fi) and increase availability throughout the city.
- 9.4.5 Establish maintenance regulations in the DDC that ensures long-term viability of communications infrastructure.

Undergrounding Utilities:

Underground electric utility service both enhances the aesthetic quality of neighborhoods and decreases exposure of utilities to high wind and potential storm damage from nearby trees and above-ground structures. Reduced exposure to ice, wind, and other hazards decreases the amount of time service is interrupted and costly maintenance expenses incurred. As the City faces continued population growth, investment in sustainable infrastructure options such as underground electric distribution facilities should be considered for new as well as in infill development.

At 55 percent as of 2014, DME has one of the highest portions of underground electric distribution facilities in the state. DME has recently developed an agreement with the University of North Texas (UNT) to bury over 12,000 linear feet of distribution lines. DME budgets money each year to convert overhead distribution lines to underground facilities.

9.5 *Install underground electric distribution facilities wherever practicable.*

- 9.5.1 Enforce engineering code requirements that facilitate the installation of underground distribution facilities for all new commercial and residential developments. (DP p.167)
- 9.5.2 Pursue the installation of underground distribution facilities along and adjacent to major entranceways. (DP p.168)
- 9.5.3 Fund the conversion of existing overhead electric facilities to underground on a fiscally responsible basis through electric service initiatives. (DP p.167)
- 9.5.4 Develop ordinance criteria that encourage service providers (i.e., cable, telephone, electricity, data communications, etc.) in the city to convert existing overhead facilities to underground by adopting and promoting the same service criteria utilized by DME. (DP p.168)
- 9.5.5 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. (DP p.168)

- 9.5.6 Encourage service providers (i.e., cable, telephone, electricity, data communications, etc.) to comply with the Tree Code regarding vegetation removal, tree trimming, and planting requirements. (PCE 5.5.7, DP p.168)

Water

Denton is located in the Region C Regional Water Planning Area, as designated by the Texas Water Development Board. The Dallas-Fort Worth Metroplex is centrally located in the region, and its surrounding counties, including Denton County, are among the fastest growing in the State of Texas.

The City's priority is to ensure that its customers have a sufficient source of raw water for human consumption and daily use. Through existing and future surface water rights, contracts with other entities, and coordinated per capita consumption reduction through 2019, the City plans to provide sufficient water to meet Denton's population projections. (DP p.151)

Denton treats raw water to state and federal drinking water standards and maintains an infrastructure network to distribute the treated water across the City.

Cost-effective prevention of raw water contamination is addressed proactively by the city through targeted pollution prevention program implementation including a comprehensive Watershed Management Program. As stated in the Parks, Conservation and Environment Element, the Elm Fork Branch of the Trinity River is the origin of the water sources for the City of Denton and Denton County. Several major creeks that flow into the Elm Fork pass through the western part of Denton. Clear Creek flows through the northern portion, while Cooper Creek, Hickory Creek, and Pecan Creek flow southeast through the central area of the city into Lake Lewisville. These creeks also define the city's watersheds. Denton is served by two lakes: Lake Lewisville and Lake Ray Roberts, both of which were constructed as part of the Trinity Regional Project of the U.S. Army Corps of Engineers. Lake Lewisville, located to the east of the City of Denton on the Elm Fork, is the city's primary source of drinking water.

The pumping, treatment and distribution processes associated with the drinking water system require infrastructure maintenance and optimized operational management. As identified in this Denton Plan 2030, long-term capital investment priorities strategically funded by a mixture of government bonds, loans, and grants may be leveraged for future water infrastructure projects.

GOAL IU-2: Secure and conserve raw water supplies to meet future needs with a sustainable potable water infrastructure.

Policies and Actions

Water Supply:

Currently, Denton uses surface water from Lake Lewisville and Lake Ray Roberts to supply water

demands. The City currently holds water rights for approximately 24 million gallons per day from these lakes – approximately 4 million gallons per day from Lake Lewisville and approximately 20 million gallons per day from Lake Ray Roberts. If additional water

is needed, the City purchases water from the City of Dallas under an existing water supply contract.

As water demand increases as a result of population growth and development, proactive regional water planning is necessary to ensure the availability of water for the city’s residents, commercial, and industrial customers. By participating in regional planning groups such as the Water Resources Council of the North Central Texas Council of Governments the City can position itself to influence water supply management strategies that will support the expected population growth in Denton.

In addition to increasing water demands due to population growth and development, the variability of precipitation in the region has led to, and may potentially continue to cause, drought conditions extending one or more years. The City established a target to reduce per capita water consumption by one percent annually through 2019, per the *Water Conservation and Drought Contingency Plan (2009; revised 2012)* to increase community resiliency to drought. To assess progress and manage the utility, the city monitors water consumption by metering water usage for all customers and all raw water diversions from Lake Lewisville and Lake Ray Roberts. Continued engagement of the community in water conservation education, compliance with the city’s *Water Conservation and Drought Contingency Plan*, and coordination of messaging and drought restriction implementation with water suppliers in the region will contribute to the goal of meeting basic water supply demands while reducing water consumption.

9.6 Develop long-term water supply contracts and reduce per capita water use to ensure adequate water supply.

- 9.6.1 Review, renew, and maintain the city’s untreated water supply contract with the City of Dallas. (DP p.152)

As increasing demands are being placed on finite water resources, sustainable water, stormwater, and wastewater systems are necessary to ensure the environmental and economic viability of communities.

Source: Simply Sustainable: A Strategic Plan for Denton’s Future, 2012

- Daily, the average person in Denton uses **60 to 80 gallons** of water.



Source: Denton County Fresh Water Supply.

- 9.6.2 Participate in regional water planning and secure water supply contracts with local water suppliers such as North Texas Municipal Water District, Tarrant Regional Water District and/or Dallas Water Utilities. (PCE 5.8.10)
- 9.6.3 Continue to implement the *Denton Water Conservation and Drought Contingency Plan* to help reduce per capita water use. (DP p. 153)
- 9.6.4 Participate in regional coordination of water conservation efforts in North Central Texas such as the Water Efficiency Network of North Texas (WENNT) to promote collaborative water conservation efforts and synchronized regional messaging. (PCE 5.8.10)
- 9.6.5 Identify and pursue new water sources as water supplies become more scarce.
- 9.6.6 Encourage community members to employ best management practices



Lake Lewisville

for water reduction such as use of rain barrels and re-using rainwater on premises.

Water Infrastructure:

With population growth and the further expansion of the city requires the expansion of water infrastructure. The extension of water distribution lines and supporting infrastructure requires substantial capital investment. To accommodate future development and population growth, oversizing water lines in core areas of the city will provide opportunities for increased infill development as supported by the Land Use Element. Encouraging infill development by prioritizing infrastructure investments to support this growth will reduce demands on municipal funds in the long run. Currently, residential and commercial developers must pay for infrastructure expansion to new service areas, to which the City must then provide service. State and federal funding mechanisms, such as the Texas Water Development Board's State Revolving Fund for Drinking Water projects, may be leveraged for future capital investment projects, including efficiency and equipment upgrades.

9.7 *Develop and operate water infrastructure in cooperation with other entities so that it is safe, reliable, cost effective, limits negative environmental impacts, and sufficient to meet future demands (DP p.151).*

- 9.7.1 Promote infrastructure capacity improvements to support infill development, rather than new line extensions that expand the geographic coverage of the city's infrastructure systems. (DP p.151, FEV 3.9).
- 9.7.2 Work proactively to identify gaps in existing infrastructure to support connectivity of existing networks and reduce leapfrog development.
- 9.7.3 Continue to require residential and commercial developers to pay to extend water distribution infrastructure to service development areas through the existing enterprise fund.
- 9.7.4 Anticipate future growth needs by oversizing water distribution lines to meet future development particularly in urban areas subject to fund availability and approval by City Council.
- 9.7.5 Upgrade infrastructure to provide for the transmission of treated water from the plant and storage facilities through the existing system into newly developed areas. (DP p. 153)
- 9.7.6 Balance new elevated storage tanks to the existing elevated storage tanks and allow for adequate refill rates. (DP p.153)

- 9.7.7 Build additional elevated storage over the next twenty years to accommodate future water needs. (DP p.153)
- 9.7.8 Establish maintenance regulations in the Development Code that ensures long-term viability of water infrastructure.

“right sizing” wastewater collection lines provide opportunities for mutual gain, further extending financial resources.

Expansion of existing infrastructure, including collection lines and lift stations to service development areas requires partnership and coordination opportunities with developers. In addition to expansion in future growth areas, resizing interceptor lines to accommodate infill development will support the community’s goals for growth and ensure cost effective and sustainable wastewater infrastructure.

In addition to serving new development, a wastewater strategy must also incorporate sustainable practices in providing wastewater service options that recognize the vulnerability of the city’s watersheds and water capacity. Wastewater effluent may provide a viable potable water supplement to large volume customers, such as large volume customers and parks.

Wastewater system resource recovery will expand as technology options become available. Preserving raw water supplies and protecting the environment from inadequately treated wastewater will drive continual improvement to resource recovery options.

Wastewater

As Denton transitions from a predominantly low density, suburban community to include more areas of high density urban development, the demand for safe and cost effective wastewater services across the city will increase. Protecting the environment, and specifically surface water within the Lake Lewisville watershed, is a priority for continued community health.

Wastewater services address collection lines, lift stations, treatment and resource recovery. As part of the city’s comprehensive water management strategy, wastewater services are critical to maintaining high quality surface water supplies through treatment plant effluent discharges and protective on-site sewage treatment for some residential and commercial properties. Wastewater services include extensive infrastructure networks requiring long-term capital investments for equipment upgrades and operational optimization to maintain system integrity to comply with state and federal regulations. A strategic approach to addressing wastewater capital improvements in coordination with related environmental and water management, both locally and regionally, maximizes city financial resources. In addition, continued coordination with existing programs such as the effluent reuse system in place at the Spencer Power Plant and permitting practices for developers for

GOAL IU-3: Protect surface water and groundwater from contamination from inadequately treated wastewater and expand wastewater system resource recovery.

Policies and Actions

Wastewater Service:

Currently the City of Denton is divided into several Wastewater Service Areas (WSAs). Funding to operate and maintain the supporting infrastructure of each service area is provided through an impact fee ordinance which funds the Wastewater Fund. The City's wastewater collection system consists of approximately 500 miles of wastewater lines and a 46 million gallon per day peak capacity Pecan Creek Reclamation Plant. Completed upgrades to the plant provide approximately 21 million gallon per day additional capacity from current treatment volumes of approximately 15 million gallon per day.

Per the Denton Development Code (DDC), all developments within the jurisdiction of the City shall connect to the City's sanitary sewage facilities unless approved by the City. Residential or commercial properties may implement an on-site sewage system that treats and disposes of no more than 5,000-gallons of sewage per day in pre-approved arrangements. The City enforces a permit program to manage on-site sewage systems as part of a comprehensive, watershed management approach strategy. All communities in areas around Lake Lewisville and Lake Ray Roberts are required to establish effective collection and treatment systems to prevent potential contamination. Active permitting, monitoring, and enforcement are ongoing.

As with water as stated above, extension of wastewater collection lines and supporting infrastructure require substantial capital investment. Already residential and commercial developers pay impact fees and to extend wastewater infrastructure to new development areas, to which the city must then provide service. To support

the compact development pattern as identified in the Land Use Element, oversizing of wastewater lines in core areas of the city would provide opportunities for increased infill development. State and federal funding mechanisms, such as the Texas Water Development Board's State Revolving Fund for Clean Water projects, may also be leveraged for future capital investment projects.

9.8 *Develop and operate wastewater infrastructure in cooperation with other entities so that it is safe, reliable, cost effective, limits negative environmental impacts, and is sufficient to meet future demands.*

- 9.8.1 Provide wholesale wastewater services to entities outside the Denton area in the Hickory Creek watershed to strategically protect the city's drinking water intake from wastewater pollutants. (DP p.157)
- 9.8.2 Continue to work with communities around Lakes Lewisville and Ray Roberts to establish effective collection and treatment systems to alleviate potential water quality problems through active permitting, monitoring, and enforcement. (DP p.157)
- 9.8.3 Locate wastewater facilities in areas that meet engineering criteria and are compatible with adjacent properties to the greatest extent possible. (DP p.155)
- 9.8.4 Continue to require residential and commercial developers pay to extend wastewater collection infrastructure to service development areas. (DP p.155)

- 9.8.5 Participate in the cost of oversizing wastewater lines to meet future development, subject to fund availability and approval by City Council. (DP p.155)
- 9.8.6 Promote inflow/infiltration infrastructure improvements over new line extensions that expand the geographic coverage of the city's infrastructure systems. (DP p.155)
- 9.8.7 Maintain system integrity by prohibiting any connection to the city sewer system that is overloaded. (DP p.155)
- 9.8.8 Enhance existing pretreatment programs to enhance influent quality.
- 9.8.9 Establish maintenance regulations in the Denton Development Code that ensures long-term viability of wastewater infrastructure.

Resource Recovery:

At present, a number of resource recovery strategies are in place in the City of Denton. The Pecan Creek Water Reclamation Plant discharges effluent which is of high enough quality to be safely used for a number of beneficial reuse purposes. For example, an effluent reuse system is in place providing cooling tower water for the Spencer Power Plant. Already several entities within Denton have adopted these practices, including the Denton Regional Medical Center, Oakmont Golf Course, and the Denton State Supported Living Center. Continuing to expand effluent use to industrial and commercial community members as well as to parks and golf courses for irrigation purposes will significantly reduce the use of potable water for non-potable purposes. By using wastewater effluent for non-drinking water applications, costs for treating raw

water to higher drinking water standards can be avoided. (DP p.156)

The creation of strategic partnerships with select industrial and/or commercial large use community members will reduce the demand for raw water supply and treatment while also decreasing the cost of water to these large volume customers. Partnership opportunities between the City and large volume customers can further leverage water conservation strategies in place at the city and facilitate improved community relationships and coordination.

In addition, waste-activated biosolids from the Pecan Creek Water Reclamation Plan are combined with composting and yard trimmings to create soil conditioning products. The City sells these DynoDirt products to residents and other consumers.

9.9 Expand resource recovery options within the wastewater system.

- 9.9.1 Implement a targeted educational program on the benefits of wastewater effluent reuse to high-volume users. (DP p.157)



Wastewater Treatment Plant

- 9.9.2 Engage in long-term partnerships that implement wastewater effluent reuse. (DP p.157)
- 9.9.3 Expand the capabilities of providing effluent to the industrial and commercial sectors as well as parks and golf courses for irrigation purposes.
- 9.9.4 Evaluate additional biosolid recovery options and expand DynoDirt product production, as practicable. (DP p.158)
- 9.9.5 Continue to expand effluent use to industrial and commercial uses, and parks and golf courses for irrigation purposes that will significantly reduce the use of potable water for non-potable purposes.

Stormwater

The ever increasing amount of impervious cover in Denton and the Lake Lewisville sub-basin as a result of new development has elevated threats to the quality of Denton's drinking water supply. Stormwater runoff is generated when rainfall flows over land or impervious surfaces and does not infiltrate the ground. As the runoff flows over land or impervious surfaces, debris, chemicals, sediment, or other pollutants are accumulated and discharged to the receiving waterbody. Regulated under the Clean Water Act, the City of Denton maintains National Pollutant Discharge Elimination System (NPDES) permit coverage as a municipal separate storm sewer system (MS4) to address stormwater quality.

Protecting water resources and maintaining regulatory compliance are priorities for the city. The Watershed Protection Program in 2001, created to address stormwater quality at the watershed level, is an established mechanism for reducing pollutants

in Denton's surface waters. The identification and protection of areas with significant ecological value, termed Environmentally-Sensitive Areas (ESAs), serve as important plant and animal habitat areas and also filter pollutants that would otherwise enter surface waters of lakes and streams. The system-level approach to stormwater management optimizes program management resources and decreases downstream water treatment requirements due to improved surface water quality.

The drainage infrastructure in Denton contains both gray (pipes and channelized) and green (natural) infrastructure elements. Increasingly Denton, as well as other cities throughout the world, are implementing low impact development (LID) stormwater management methods that incorporate onsite retention, such as rain gardens and cisterns, to decrease amounts of runoff, thereby reducing capital costs to install and maintain traditional infrastructure required to convey stormwater away from property. Cost-effective stormwater infrastructure is available through the incorporation of best management practices (BMP's) that both maximize natural infiltration to slow stormwater as well as replenish groundwater. Floodplains also are an essential element in green infrastructure, as they provide naturally-occurring water storage areas to contain water during high volume rainfall events. The preservation of floodplains and maximizing floodplain storage availability will decrease hazards to life and property as well as the need for reoccurring infrastructure repair.

Regional resources such as the *North Central Texas Council of Government's (NCTCOG's) iSWM Criteria Manual for Site Development and Construction* are available to guide developers and inform development code revisions. The City adopted the *Manual* in 2013 to address stormwater infrastructure development on a regional/watershed level and implement cost effective stormwater management in targeted areas within the city and to the city as a whole.

GOAL IU-4: Protect water quality and maintain underground aquifers by managing stormwater at the watershed level.

Policies and Actions

Water Quality:

There are three main watersheds, Cooper Creek, Hickory Creek, Pecan Creek, and Clear Creek that convey water through the city. These watersheds combine to form a sub-basin for Lake Lewisville, the city's main drinking water source. Per the Clean Water Act and U.S. EPA's enforcement of the NPDES Stormwater Phase II rule, the City actively monitors surface water quality from each of its 82 sub-watersheds and implements measures to reduce the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. When deposited into nearby waterways, these pollutants can impair the waterway. This can result in contaminated drinking water supplies, wildlife habitat degradation, and discouraged recreational use of the impaired waterway.

An integrated approach to stormwater management to protect the water quality of receiving water bodies, per the activities described above, is in place. The approach includes implementation of the city's Municipal Separate Sewer Storm System (MS4) Stormwater Management Program as part of the more encompassing Watershed Protection Program. Continuation of the Watershed Protection Program to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act will maintain regulatory compliance and protect water quality within each watershed as it discharges into Lake Lewisville.

9.10 *Protect the quality of surface water from the negative impacts of erosion, flooding, and pollution.*

The City of Denton was awarded the “2013 Best-Tasting Drinking Water in Texas” at the Texas Water 2013 Conference.

- 9.10.1 Minimize erosion occurring during the physical construction of infrastructure and private improvements of developments using adopted best management practices and necessary enforcement, where appropriate. (DP p.163)
- 9.10.2 Provide and oversee a safe, effective drainage system that enhances both the natural and urban environment within the city limits by:
 - * Promoting open space and buffer zones to enhance water quality, as addressed in the city's Watershed Protection Program. (PCE 5.8.6)
 - * Adopting a more aggressive Capital Improvements Program (CIP) for stormwater facility upgrades and the necessary funding mechanisms to support the additional expenditures. (DP p.162, IU 9.7.1).
 - * Developing an education program for residents to reduce the impacts of erosion, flooding and pollution. (DP p.162)
 - * Implementing best practices to eliminate surface water impacts. (DP p.162)

- * Updating impervious surface city inventories to inform utility drainage fee revisions.

Green Infrastructure:

Green infrastructure is an important element of Denton Plan 2030. It provides a basis for the compact growth framework envisioned for the future of Denton, which is woven together by a system of parks and open spaces and infrastructure that respects and is tied to the natural systems that characterize the city and region. In terms of stormwater infrastructure, green infrastructure refers to the use of natural and permeable vegetation and soil to manage rainwater where it falls rather than more costly and environmentally harmful “engineered” systems of concrete pipes and culverts. It also can potentially reduce or eliminate street flooding, as green infrastructure can capture the first 1 to 1.5 inches of rain, rather than channeling it into engineered stormwater systems. Employing green infrastructure practices can also help to reduce greenhouse gas emissions as compared to traditional gray infrastructure based on the materials used and the lack of energy required to pump stormwater.

Regional coordination on stormwater best management practices (BMP’s) for the North Central Texas weather conditions and soil types is led by the NCTCOG. The city should continue to engage the NCTCOG to inform the development of future regional guidance and concurrently implement the *iSWM Criteria Manual for Site Development and Construction*.

A watershed level approach to upgrading the existing substandard drainage systems will incorporate the minimum control measures enforced through the city-wide Watershed Protection Program and account for stormwater best management practices (BMP’s).

9.11 Upgrade substandard drainage systems in a way that incorporates green infrastructure BMPs and watershed system-level site design.

- 9.11.1 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. (PCE 5.8.1, DP p. 162)
- 9.11.2 Provide low impact 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. (PCE 5.2.5 and 5.4.4, DP p.161)
- 9.11.3 Implement the *North Central Texas Council of Government’s (NCTCOG’s) iSWM Criteria Manual for Site Development and Construction* and continue to participate with regional groups to identify and implement best practices.(PCE 5.7.3)
- 9.11.4 Coordinate drainage infrastructure development with operational best practices and the city’s Watershed Protection Program. (PCE 5.7.3)
- 9.11.5 Educate the public on the value of low impact drainage systems. (DP p. 163)
- 9.11.6 Establish maintenance regulations in the Denton Development Code that ensures long-term viability of green infrastructure systems.
- 9.11.7 Ensure that all infrastructure improvements in the Capital Improvement Plan (CIP) are evaluated

to consider if they are furthering green infrastructure goals.

Low-Impact Development:

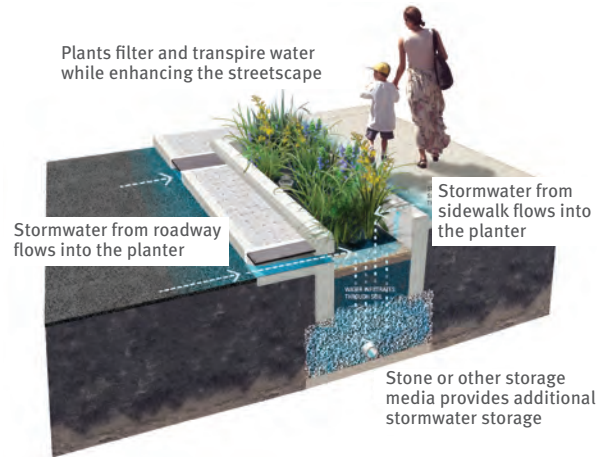
Criteria for low-impact development continues to evolve in the form of regional, state, and national best management practices (BMP’s). The application of the BMP’s as embraced in the city’s Watershed Protection Program, will provide guidance for developers and city engineers. Strategic water quality and quantity management practices should coordinate with regulatory MS4 permitting requirements. Proactive incorporation of low-impact criteria in development standards can contribute to decreased costs to convey the overflow, with greater on site infiltration that recharges the groundwater aquifer and naturally improves water quality through the natural soil filtration process.

Plant selection as part of a holistic landscape design and management are key components to a comprehensive water management strategy for a site. Strategic selection of drought-tolerant plant materials and water-efficient irrigation practices decrease water demand for landscape maintenance. BMPs such as xeriscaping, use of weather-based irrigation controllers, drip irrigation and the cycle-soak method approved for North Central Texas predominant clay soil by Texas A&M AgriLife Extension Office are common examples for the region. These landscape practices are part of an inclusive low-impact development approach for the City.

9.12 Apply low impact development criteria, including green infrastructure practices approved as part of the city’s Watershed Protection Program, to new development and redevelopment projects.

What is green infrastructure?

- Green infrastructure uses vegetation and soil to manage rainwater where it falls.
- Green infrastructure provides stormwater management, flood mitigation and air quality management by weaving natural processes into the built environment.



Types of green infrastructure controls

Rain harvesting	<i>Collecting and using rainwater in the landscape helps reduce demands on surface and ground water supplies and can save money by reducing water bills.</i>
Rain gardens	<i>Rain gardens are shallow, vegetated basins that collect and absorb runoff from rooftops, sidewalks, and streets. Rain gardens mimic natural hydrology by infiltrating and evapotranspiring runoff.</i>
Street planters	<i>Street planters are urban rain gardens with vertical walls and open or closed bottoms that collect and absorb runoff from sidewalks, parking lots, and streets.</i>
Bioswales/ Infiltration basins	<i>Bioswales are vegetated bioretention tools used to partially treat site runoff, reduce flood potential, and direct stormwater from away from vertical development and critical infrastructure.</i>
Porous pavement	<i>Permeable pavement is a porous pavement that filters and allows a portion of roadway and/ or parking lot runoff to infiltrate the surface to recharge ground water sources.</i>

- 9.12.1 Adhere to the *NCTCOG's iSWM Criteria Manual for Site Development and Construction* and continue to participate in regional coordination to develop best on site water management practices. Ensure that measures are regularly enforced and not waived. (PCE 5.8.5)
- 9.12.2 Update the *Drainage Design Criteria Manual* and Denton Development Code Subchapters 18 and 19 to address low impact development, including green infrastructure BMPs.
- 9.12.3 Update the landscaping standards of the Denton Development Code to promote use of drought-tolerant plant materials and water-efficient irrigation practices in all new development. (PCE 5.9.6)
- 9.12.4 Promote low-impact development implementation to decrease stormwater conveyance volumes system-wide. (PCE 5.8.3, 5.10.1)
- 9.12.5 Revise policies that allow use of man-made water features for decorative purposes only. Require polices that expand basin functionality such as for stormwater detention, irrigation water storage, wildlife habitat or other related purposes.



Low-Impact Development - Retention Basin



Low-Impact Development - Bioswale



Low-Impact Development - Permeable Pavement

Flood Protection:

Due to its location at the confluence of several creeks, Denton has some areas that are susceptible to flooding. Periodically, areas within the 100-year floodplain are flooded which results in threats to life and property, health and safety hazards, as well as disruption of commerce and governmental services

and extraordinary public expenditures for rescue and recovery efforts. The cycle of build and rebuild in flood-prone areas is economically unsustainable and environmentally degrading to a city.

Flood losses are created by the cumulative effect of obstructions in floodplains that reduce water storage capacity. This results in floodplain constrictions which exacerbates flood heights and water flow velocities extending the potential for flood damage beyond the 100-year floodplain. To reduce these elevated flood risks, proactive management of the 100-year floodplain is necessary to increase water storage capacity by removing existing structures and otherwise restore more natural floodplain conditions.

9.13 Protect the 100-year floodplain to reduce flooding and improve water quality.

- 9.13.1 Remove existing structures from or adjacent to the 100-year floodplain as opportunities come available. (DP p.162, PCE 5.8.1)
- 9.13.2 Establish and preserve natural channels with appropriate vegetation and daylighting to improve water

quality, restore natural habitat and maximize management opportunities. (DP p.163)

- 9.13.3 Prevent any new structures from being constructed in the 100-year floodplain. For property located in the floodplain, affected undevelopable property may be dedicated to homeowners' associations or directly to the city as a park or open space area as one lot. (DP p.162)
- 9.13.4 Preserve, protect and, where possible, dedicate floodplains to the city in accordance with the city's Watershed Protection Program and the *Parks, Recreation, and Trail System Master Plan* to accommodate multiple functions for flood conveyance, transportation (trails), recreation and open space, habitat protection, and environmental preservation. (DP p.162)
- 9.13.5 Upgrade the flood monitoring system to include predictive flooding condition capabilities. (DP p.162)

Solid Waste & Recycling

GOAL IU-5: Protect public and environmental health and conserve natural resources through waste minimization, materials reuse, and maximum material recovery; enhance community appearance and control costs with efficient collection of solid waste and recycling.

Policies and Actions

Waste Minimization and Resource Recovery:

The City continues to look for ways to reduce solid waste generation and divert waste away from landfill disposal through increased recycling and reuse options on a regular basis. (*Simply Sustainable, 2012, p.48*).

Long-term sustainable materials management shifts people's perceptions of waste to being a valuable resource. It requires participation by an entire community and education is the key to program success. Innovative outreach and education methods are needed to both inform residents about program rules, and gain the support needed to invest in long-term waste management strategies. Supporting community engagement as part of a comprehensive sustainable material management approach will further enhance the City's efforts to prolong the life of the landfill and provide long-term economic benefits. Solid Waste & Recycling (SW&R) informs residents and customers directly, and through organizations and institutions such as Denton ISD, UNT, and TWU; the Chamber of Commerce; and the non-profit community. The collective facility that houses SW&R operations, as well as Wastewater and Beneficial Reuse, is now called ECO-W.E.R.C.S (Waste to Energy, Recycling, Composting, Solar), to better convey the variety of activities and operations the City of Denton undertakes to handle waste.

Keep Denton Beautiful (KDB) is a 501(c) 3 non-profit grassroots organization that exists in partnership

“A well-operated solid waste management system ensures waste minimization, resource recovery, environmental protection, and disposal capabilities to meet future demands.” (DP p.165)

with the City of Denton. KDB inspires individuals to take greater responsibility for creating a clean and beautiful city through litter prevention, reduction of waste, and community beautification. Their mission aligns with the goals of the City and the Solid Waste & Recycling Department, and the City supports KDB with staff, location and operating funds, while a Board of Directors guides the organization and raises funding for programs.

9.14 Utilize innovative outreach programs and diverse partners from the education, business, non-profit, and residential sectors to encourage waste minimization, material reuse and recycling, and enhance community appearance.

9.14.1 Support Keep Denton Beautiful to beautify Denton through waste minimization, beautification, and litter prevention (also identified in the city's Stormwater Management Program). (*Simply Sustainable, 2012, p.49*) (DP p.166)

- 9.14.2 Educate the community with a welcoming facility at ECO-W.E.R.C.S that includes on-site engagement through facility tours, an education room, demonstration gardens, and appropriate interactive learning opportunities.
- 9.14.3 Continue to partner with educational entities such as Denton ISD, UNT, and TWU to develop and present STEM “reduce, reuse, recycle” curriculum and programs.
- 9.14.4 Support business community relations through activity in organizations such as the Chamber of Commerce.
- 9.14.5 Seek out innovative partnerships with community non-profits and foster collaborations with organizations that share environmental and waste reduction missions.



Home chemicals collection - Denton



Resource recovery tours - Denton

Technology and markets drive what items or materials can be targeted for reuse and recycling. Consumer demand and legislative action for more environmentally conscious products and product packaging can result in changing market conditions. The SW&R Department responds to the community and to customer demand, and offers diverse programs that are feasible and cost-effective.

9.15 Create and expand appropriate waste minimization, material reuse and recycling programs.

- 9.15.1 Establish the Home Chemical Collection Center as a regional facility and maintain operation of the ReUse store to foster material reuse and recycling.

- 9.15.2 Maintain partnership with Pratt Recycling for operation of the materials recovery facility (MRF) at ECO-W.E.R.C.S., adding additional commodities to the single stream mix as opportunities arise. (DP p.166) (*Simply Sustainable, 2012, p.49*)

- 9.15.3 Seek opportunities for additional public-private agreements to foster development of new technologies for recycling, energy production and economic development.

- 9.15.4 Standardize access to recycling programs for every Denton resident in multi-family housing, and all commercial businesses through a Universal Recycling program. (*Simply Sustainable, 2012, p.49*)
- 9.15.5 Target additional commercial and residential organic and food waste streams for composting.
- 9.15.6 Support appropriate legislation that reduces waste, litter, and illegal dumping; creates product stewardship initiatives that require producer/retailer responsibility for the design and end-of-life of products; and increases the amount or feasibility of recycling opportunities.



Recycle with Rex educational program - Denton

Efficient Solid Waste & Recycling Collections:

The collection of solid waste materials is an integral part of the operation of Solid Waste & Recycling. The collection of materials in a timely and organized fashion ensures a clean environment and an efficient city. It is important to consider the placement of collection receptacles when desiring for future development, as the location of trash bins, etc. may detract from the appearance of an area, especially if poorly maintained. Thus, design guidelines typically include recommendation for siting of collection receptacles, which may be called for as part of the citywide Urban Design Plan, in Small Area Plans, and are described generally in Table 4.1.

9.16 Support the consistent and efficient removal of trash and recycling from each residence, business, and institution.

- 9.16.1 Design the sites of commercial, multifamily, industrial, and institutional land uses to require solid waste and recycling collection infrastructure to include trash, recycling, and other waste streams generated by the entity, meeting design standards for container screening, placement, and vehicle approach and for safe, cost-efficient collections (both dumpsters and/or compactors). (*Simply Sustainable, 2012, p.49*) (DP p.166, CCTable 4.1)
- 9.16.2 Maintain Solid Waste & Recycling vehicle fleet that utilizes efficient technology to safely collect materials and that operates on the cleanest fuels available.
- 9.16.3 Utilize technologies such as GIS, RFID, and other routing programs to gather

information about participation to target residential information, and maximize routing capability.

- 9.16.4 Further incentivize residential waste reduction through expanded volume-based waste collection pricing. (DP p.166)
- 9.16.5 Expand program to provide city-maintained waste receptacles within the public right of way that promote recycling and encourage cleanliness of the physical environment.
- 9.16.6 Include policies for the upkeep of collection receptacles and areas in the property maintenance code. (CC 4.5.1)

Environmental Protection and Disposal Capabilities:

The Denton Landfill is part of the ECO-W.E.R.C.S. complex, which incorporates a variety of material reduction management processes and activities. Multiple methods are utilized to prolong the life of the landfill and should be continued and enhanced as new technologies become available. The Denton Landfill currently accelerates the decomposition process by recirculating leachate and stormwater using an Enhanced Leachate Recirculation (ELR) system. Methane and other gasses are a byproduct of decomposition, and this increased landfill gas production is captured by well system and transferred to a generator that converts it to electricity that is distributed by DME. The Building Material Recovery (BMR) operation on site accepts and sorts construction and demolition waste, many commercial waste containers, and materials brought in by the public before they reach the landfill working face. Recyclable and reusable materials are removed from the waste stream; electronics, appliances, and other metals are also sorted for

recycling. Composting organic materials in place of disposing in the landfill reduces one waste stream while concurrently repurposing the material as a soil amendment for future resale by the City. Maintaining a local landfill that can continue to serve the city’s growing population will require a regular review of best management practices, alternative energy options, and ongoing material management education.

9.17 Prolong the life of the landfill and protect the environment.

- 9.17.1 Maintain and grow the BMR sorting program to remove recyclables and establish additional reuse opportunities from recovered materials.
- 9.17.2 Begin landfill mining, recovering recyclables and reclaiming soil from old landfill cells.
- 9.17.3 Increase selectivity for gas-generating materials that enter the landfill to maximize the Gas to Energy Program production.
- 9.17.4 Expand on-site organics recovery, composting, or energy production with food wastes or recovered wood not appropriate for DynoDirt program. (*Simply Sustainable, 2012, p.49, DP p.166*)
- 9.17.5 Maintain and improve 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 degradation of the environment. (DP p.166)

10)

IMPLEMENTATION & MONITORING

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IMPLEMENTATION AND MONITORING OVERVIEW

The Vision embodied in Denton Plan 2030 will be realized by actions taken consistently by all city departments to apply its policies and strategies, in coordination with development interests, neighborhood associations, local institutions and school districts, and the community at large. Effective implementation will require continuous and consistent use of Denton Plan 2030 as a key reference for decisions and actions pertaining to growth management, zoning, annexation, development and road and infrastructure investments. It affects all operations and activities of the City of Denton, not merely those of the Planning and Development Department. The Plan is designed to be an evolving, working document that will guide the city in making decisions, establishing priorities, and committing to actions to positively shape the future of Denton.

The individual Elements of Denton Plan 2030 call for policies and specific actions to bring about the positive achievements reflected in the Community Vision Statement. This chapter lays out a program for the implementation of the policies and actions consisting of four key components:

- Principles to guide future planning and decision-making for consistency with Denton Plan 2030
- Procedures for amending, updating, and monitoring progress in implementation of Denton Plan 2030.
- Guidelines for small area planning and mixed-use development and for establishing priorities for small area planning.
- An Action Plan that synthesizes the policies and strategies from the Plan Elements into short-term, mid-term, long-term and ongoing actions, with assigned responsibilities.

Legal Authority

Texas law provides basic guidance to municipalities for developing and applying comprehensive plans. Chapter 213 of the Local Government Code (LGC), grants local municipalities discretionary powers to define the content and organization of a comprehensive plan for the promotion of sound development and the protection of public health, safety and welfare. While the wording of Chapter 213, that a municipality may adopt a comprehensive plan, could be interpreted that adoption of a comprehensive plan is non-compulsory by local governments, Chapter 211 of the LGC recognizes the importance of comprehensive planning and stipulates requirements. Consequently Texas municipalities that adopt zoning must also have a comprehensive plan to base it on. Further, Section 212.010 of the LGC also includes conformance with a municipality's "general plan for extension" as one of the requirements for approval of development plats.

Principles

Upon adoption, Denton Plan 2030 replaces the 1999 Denton Plan and will become a key policy document, separate and distinct from zoning, but to which future zoning and regulations in the Denton Development Code (DDC) shall be made consistent. The following are more specific principles that the City will be following to assure compliance, as well as to amend, monitor, and update Denton Plan 2030.

Principle 1: Plan Hierarchy – Consistency of All City Plans with Denton Plan 2030

With the adoption of Denton Plan 2030 it will become the overarching policy document, establishing the Community Vision as well and the policies and strategies pertaining to all aspects of the city's development. This plan hierarchy is as follows.

Denton Plan 2030

Denton Plan 2030 is the policy reference for all subsequent plans which will be developed in a manner to implement the provisions of Denton Plan 2030.

City-wide Topical Plans

These include plans that pertain to a specific subject area or aspect of the city's functionality applicable city wide. Revisions to current plans and the creation of new plans will be made in conformance with Denton Plan 2030. These include, but are not limited to the following:

- Mobility Plan
- Capital Improvement Plan
- Infrastructure Plan (water, sewer, stormwater)
- Urban Design Plan (CC 4.11.1)

Small Area Plans

A small area plan is a plan that is developed for a clearly delineated area that addresses specific issues and challenges with more detailed actions and strategies than is provided in Denton Plan 2030. A methodology to prioritize the need for small area plans and a template for how to carry out small area planning is provided below. Small area plans include the following.

- Downtown Master Plan / DTIP (LU 2.6.1)
- Downtown Compatibility Area (LU 2.6.2, CC 4.12.2, HN 7.1.2)
- Neighborhood/ University Compatibility Area (LU 2.7.1, CC 4.12.2, HN 7.1.4)
- Centers and Corridors (LU 2.8.1, CC 4.12.3, HN 7.1.6)
- Neighborhood Plans (HN 7.7.3, CC 4.12.1)

Site Specific Plans

These include plans for site specific public facilities. These may include the following.

- Denton Enterprise Airport Master Plan
- Park master plans
- Utility plant master plans
- Other governmental facility master plans

These plans are illustrated in general in Figure 1.8: Plan Hierarchy.

Principle 2: Consistency of zoning and related development regulations and ordinances with Denton Plan 2030

The Land Use and other Plan Elements propose revisions to present zoning and development regulations, such as new standards and incentives for mixed-use development in the downtown area and in other centers and corridors. After adoption, the city should review the DDC and other regulations for consistency with these and other policies and actions called for in Denton Plan 2030 and with the Future Land Use Map (FLUM). Where inconsistencies are identified, the DDC will be amended. This does not suggest that, upon Plan adoption, the zoning map and its various zoning districts must undergo a wholesale revision. Instead, this principle calls for the City to implement a staged program over time to align its zoning map and development regulations with Denton Plan 2030 policies and actions. Suggested priorities and time-frames for regulatory changes are in Table 10.2: Action Plan.

It is important to note that the FLUM does not become or replace present zoning district designations on the zoning map. In fact, LGC Sec. 213.005 contains this specific requirement. A map of a comprehensive plan illustrating future land use shall contain the following clearly visible statement:

“A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.” Instead, the Future Land Use Map conceptually depicts relatively broad categories of land use. Each of these land use categories may accommodate more than a single zoning district, and they will also serve as a guide for considering future rezoning.

While the Zoning Map, and its associated zoning districts, defines specific uses and development types currently permitted for individual properties, the FLUM depicts more broadly, the likely pattern of land uses that may exist in the future. Therefore, the FLUM does not directly determine the specific development that may be approved for a particular property. Applicants for zoning changes must demonstrate that the proposed use / development is consistent with the land use designation on the FLUM. However, consistency with the FLUM is only one of several considerations, and all other development criteria must be met for a rezoning approval, per the process laid out in the DDC. Because FLUM designations are considerably broader than provided in specific zoning districts, several different zoning districts may conform to the provisions of a single FLUM land use category.

Principle 3: Consistency of re-zonings and development approvals with Denton Plan 2030

To provide a greater degree of certainty and direction to the development process, the goals, policies and actions should be used in conjunction with the Denton Plan 2030 to evaluate all requests for re-zoning and development approvals. Proposed developments or uses that clearly support implementation of the Plan should be approved. Conversely, re-zonings for developments or uses that are inconsistent with the Plan, should not be granted approval, until and unless the policies of the Plan

are amended based on findings of fact that clearly demonstrate the need for modification.

Because the policies of the Plan are broader than present zoning and development regulations, most development applications that are consistent with present zoning will also be consistent with the comprehensive plan. In fact, in many cases, particularly those involving re-zoning, the Plan review process will add additional flexibility in the development review and zone change process. This will be true particularly in areas designated for mixed-use, and in centers and corridors, where underlying zoning is more limited than that depicted in the FLUM. However, in cases where a proposed development, larger than a specified magnitude, is in clear conflict with the Denton Plan 2030, such approvals may not be granted unless and until the Plan is amended, in the same manner as it was adopted (see section below on plan amendments).

Principle 4: The City Council shall consider consistency with the Denton Plan 2030 as a factor in making decisions on proposed programs, projects, and initiatives

While a key focus of Denton Plan 2030 is on Land Use, other goals, policies and actions influence every aspect of the City's governance beyond the activities of the Planning and Development Department. Effective implementation of the Plan will depend in part on the extent to which present and future councils take into account consistency with Denton Plan 2030 in the decision-making process. The following are recommended components of a procedure to ensure consistency with Denton Plan 2030:

- Identify specific task schedules, resources and responsibilities for revising the DDC and related development standards to be consistent with

the Comprehensive Plan, in accordance with the timeframes and priorities established in Table 10.2.

- Establish a framework for staff reporting to the City Council regarding the consistency of relevant projects, programs and initiatives with Denton Plan 2030.
- Adopt provisions to modify the Capital Improvement Program (CIP) process to reflect policies, actions, and priorities established in Denton Plan 2030.
- Dedicate staff to the implementation of Denton Plan 2030.

This procedure should be developed and established within one year of adoption of the Denton Plan 2030.

Amendments, Monitoring and Updating

Plan Amendments

Plan amendments are periodic, substantive changes to Denton Plan 2030 and its associated goals, policies and actions, as well as changes to the FLUM which are necessary to accommodate changed or unforeseen circumstances, in a manner consistent with the public interest.

Denton Plan 2030 provides for reasonable flexibility in interpretation, but to have relevance over time, it should be kept current but should not be subject to continuous amendment as a result to developments in progress. Therefore, the Planning and Zoning Commission and City Council will accept applications for Plan amendments on a bi-annual basis via staff requests. When a rezoning request is submitted, staff will evaluate its consistency with the overall goals and objectives of the Plan. If consistent with the Plan 2030 overall, staff should recommend approval

of rezoning requests, even if they do not match the FLUM. Likewise, if a proposed rezoning request is consistent with the FLUM, but inconsistent with the overall goals and objectives of Denton Plan 2030, staff should recommend denial of the request.

The City's approval of a Plan amendment request should be based on the following criteria:

- *That there have been significant changes of an economic, physical, or social nature, which were not anticipated in Denton Plan 2030 and which have substantially alter the basic character of such area (such as the impact of a new highway or a natural disaster) OR there is demonstrated overriding public benefit of the change. This may include planning for a major public facility or amenity, a major source of employment, or an economic development asset that cannot be accommodated without the amendment, as long as it is demonstrated to be consistent with the overall Community Vision Statement and the four themes of sustainability, community character, mobility, and community health established by Denton Plan 2030.*
- Measures of success should be developed as part of an overall plan-monitoring program, to evaluate the effectiveness of implementation efforts and adherence to the plan. These measures may include timeframes for specific completion of actions, or numeric indicators (e.g., number of new miles of bicycle paths; street connectivity ratio; number of acres for usable parkland reserved in new development; etc.)
- Include provisions for a process to monitor implementation progress and adopt Plan amendments (per the previous section), including consideration of an ongoing role for the Citizens Advisory Committee (CAC) or other vehicle for continuous citizen participation.
- Maintain dialogue with the community, neighborhood groups, institutions, adjacent municipalities, school districts, development interests, and other stakeholders and affected parties on a periodic, ongoing basis to monitor the effectiveness and continued relevance of the Plan.

Plan Monitoring and Updating

To avoid Denton Plan 2030 from becoming outdated or irrelevant, the Planning and Zoning Commission, and the Planning and Development Department, on behalf of City Council will monitor plan implementation progress annually, and will conduct a thorough review, revision, and update of the Denton Plan 2030 at least every five years.

Annual Monitoring

At the anniversary of plan adoption, staff shall submit a report indicating actions taken and progress made toward plan implementation during the previous year.

Updating / Plan Revision

Every five years or less, a process shall be initiated to revise and adopt an updated comprehensive plan. The revision process shall include the following:

- Creation of a new CAC, or other working group to guide the update process.
- Preparation of a Denton Plan 2030 Evaluation Report, documenting Plan effectiveness and implementation efforts, identifying constraints upon implementation, and summarizing trends and challenges which have emerged or changed in the period since plan adoption.
- Revision of goals, policies, and actions to reflect changing circumstances, emerging needs and opportunities, and expressed citizen priorities.

- Revisions to the FLUM based on the criteria above.

Guidelines for Small Area Plans and Mixed-use Development

Criteria for Determining Priorities for Small Area Planning

An important component of the implementation strategy for Denton Plan 2030 is subsequent small area planning to address issues specific to certain areas of the city, including small area plans for the Neighborhood/ University and Downtown Compatibility Areas, neighborhoods, and for designated centers and corridors. Because of the potential number of small areas plans, with limited resources the city must be selective in setting priorities for the conduct of small area plans. The following factors shall be considered in setting small area planning priorities:

- A major development opportunity and/or imminent change in land use.
- An area experiencing land use change, deterioration or abandonment.
- Expressed community interest.
- Partnership / funding opportunity (university, developer, property owners).
- Need to plan for the introduction of specific desired uses (mixed-uses, technology/business innovation, senior housing, etc.).

Small Area Planning Guidelines

While comprehensive plans provide broad goals, policies and strategies applicable at the scale of the community, city and region, they are limited in their ability to address the finer grain planning and development issues at the scale of individual neighborhoods, districts, centers and corridors. Consequently, the Land Use Element, and corresponding policies in the Community Character and Urban Design and Housing and Neighborhood Elements, calls for the development of Small Area Plans to address site-specific development issues in areas presenting unique challenges and opportunities. While the approach to conducting small area planning must flexibly be adjusted to reflect particular local circumstances, the following offers baseline guidance and a procedures for prioritizing the need for, developing and implementing such plans.

Purpose of a Small Area Plan

- To respond to a localized challenge or opportunity (land use obsolescence, neighborhood impacts from adjacent uses, redevelopment opportunities, community character enhancement, etc.).
- To provide an opportunity for community members and stakeholders to provide input, create a shared vision, and influence city land use and development policy.
- To apply comprehensive plan principles to the specific circumstances of small areas.
- To create public support for implementation actions (zoning changes, capital improvements, etc.).

Small Area Planning Process

The following provides an conceptual template of a process to develop a Small Area Plan as well as a “menu” of topics and contents that may be included.

Step One – Plan Initiation and Mobilization

- a. Identify plan development parameters (purpose, study area boundaries, stakeholders, timeframe, etc.)
- b. Identify key issues to be addressed (land use, redevelopment, traffic, aesthetics, etc.)
- c. Prepare Work Plan - Identify resources required (staff time, data, mapping, consultants, etc.)
- d. Retain consultants, if required
- e. Appoint Technical Committee (key staff from Planning and Development and other city departments).
- f. Establish Stakeholder Steering Committee and/or Focus Group (area residents, businesses, property owners, institutions, neighborhood associations, development interests, etc.)
- g. Create Public Involvement Plan (community forums, website, notification protocols, email lists, etc.)

Step Two – Vision / Existing Conditions Documentation

- a. Vision Forum

Conduct one or more public forums to solicit stakeholder input concerning current issues and problems and aspirations for future development and enhancement within the small area. Identify areas of consensus to articulate a Vision and Statement of Purpose for the Small Area Plan.

- b. Existing Conditions Documentation

The contents of the existing conditions documentation may include mapping and analyses of some, or all, of the following, particular to the small area identified.

- **Overall**
 - * Strengths / Weaknesses / Opportunities / Challenges
 - * Development / redevelopment opportunity sites
 - * Project Goals and Objectives
- **Land Use and Development**
 - * Existing land use
 - * Land use change
 - * Vacant land
 - * Building and property condition
 - * Adjacent use impacts
- **Community Character**
 - * Historic / architectural character
 - * Landscape character
 - * Urban design (scale, neighborhoods edges, landmarks, etc.)
- **Socio-Economic Issues**
 - * Population / demographics
 - * Market demand
 - * Property tax base
- **Traffic and Mobility**
 - * Vehicular, pedestrian and bicycle circulation
 - * Hazards

- **Infrastructure**
 - * Potable water, sewer, stormwater system condition and capacity
- **Public Facilities and Services**
 - * Parks and recreation
 - * Schools
 - * Emergency Services
 - * Special use facilities (daycare, senior centers, health centers, etc.)

Step Three – Plan Development

a. Concept Development

Consultants, technical committee, and steering committee / focus groups develop and depict alternative concepts for some or all of the following:

- * Land use
- * Character enhancement
- * Traffic and mobility
- * Infrastructure
- * Public facilities and Services
- * Economic development

b. Concept Review Forum

Conduct one or more public forums to solicit stakeholder input concerning alternative concepts and identify areas of consensus.

- c. City Council / Planning and Zoning Commission Review

Review alternative concepts and forum input with City Council and Planning and Zoning Commission.

d. Plan Preparation

Consultants, technical committee, and steering committee / focus groups prepare draft Small Area Plan.

Step Four – Plan Review and Adoption

a. Small Area Plan Review Forum

Conduct one or more public forums to solicit stakeholder input concerning draft Small Area Plan.

- b. City Council / Planning and Zoning Commission Review

Review Draft Small Area Plan and forum input with City Council and Planning and Zoning Commission.

c. Final Small Area Plan

Prepare Final Small Area Plan based on direction from City Council and Planning and Zoning Commission.

Step Five - Plan Implementation

Land use components of Small Area Plans will be implemented in one of two ways; zoning overlay districts or new zoning districts.

a. Zoning Overlay Districts

Where the future land uses identified in a Small Area Plan are consistent with uses permitted within existing zoning districts, Zoning Overlay Districts are the preferred method of adjusting development standards and use provisions. For example, in formerly single use districts, such as highway commercial and residential areas where these will remain the predominant uses, zoning overlays can be used to introduce a mixed-use pattern. Specifically the overlay districts would specify what complimentary land uses not permitted in the underlying zoning districts would be allowed either as permitted or conditional uses. Likewise, zoning overlays can modify the development standards in the underlying zoning districts, such as relaxing

parking requirements in areas converting to mixed-use, or providing bonus densities to promote the introduction of affordable housing and mixed-use.

b. New Zoning Districts

In cases where a Small Area Plan calls for a change in a predominant existing land use, for example, the redevelopment of older industrial areas for commercial or mixed-use, entirely new zoning districts should be created to provide for a new set of permitted uses and applicable development standards.

Mixed-use Development Guidelines

While the concept of mixed-use, that is, complimentary uses such as “corner stores” as well as schools, parks and places of worship woven into the fabric of traditional neighborhoods, is generally well understood, the term “mixed-use” has two very different connotations. The concept of mixed-use as it applies to districts such as Downtown Denton, where there are hundreds of properties under separate ownership, means that a “mix of uses” is permitted on individual sites, such as offices, shops, restaurants, and high density residential that, although developed separately, together comprise a mixed-use district. Another connotation of mixed-use is a “mixed-use development,” meaning a large development under single ownership developed with multiple complementary uses. Mixed-use developments can be one of two configurations: vertical mixed-use consists of multi-story structures in urban centers, typically with ground floor retail use and with either residential apartments or offices on upper floors. Horizontal mixed-use simply means a mixture of complimentary uses on adjoining sites within a well-connected and walkable development pattern.

The purpose of describing principles and standards is not in any way to limit innovative design, but instead to provide a basic framework to communities thinking about encouraging mixed-use and to applicants who specifically request this type of guidance. Guidelines should always be viewed as flexible and open to interpretation. They are intended to foster fresh and creative solutions. No list of principles and standards provides the right guidance in every situation.

~ *Envision Central Texas – Mixed-use Matters (2008)*

While mixed-use is generally to be encouraged due to inherent land use efficiencies, reduced parking demands and greater walkability, the actual “mix” which is achievable depends upon multiple factors related to site context and market demand. Some communities have attempted to mandate mixed-use, for example, requiring that retail cover the entire ground floor of multi-story building. Although well intentioned, vacant storefronts are often the result, where residential and offices uses above do not support the amount of required retail development.

While the existing DDC makes provisions for mixed-use there remain certain impediments to achieving mixed-use development, including the lack of definition of specific mixed-uses appropriate for various areas of the city, as well as development standards such as parking requirements, which are not well adapted to accommodate mixed-use development. In the spirit of this call for flexibility in

Table 10.1: Mixed-use Development Potential Land Use Mix Ratios

Mixed-use District	Acres	Primary Uses	Complimentary Uses	Min. Ratio
Downtown	3 acres (or city block)	Residential	Commercial	20%
		Office	Commercial	20%
		Commercial	Residential / Office	10%
Downtown Compatibility Area	3 acres (or city block)	Residential	Commercial	10%
		Office	Commercial	10%
		Commercial	Office/ Residential	10%
Regional Mixed-use	20 acres	Residential	Commercial	10%
		Office	Commercial	10%
		Commercial	Office/ Residential	10%
		Institutional	Office/Commercial	10%
Community Mixed-use	10 acres	Commercial	Residential / Office	15%
Neighborhood Mixed-use	5 acres	Residential	Office/Commercial	10%
Business Innovation	20 acres	Office/ Light Industrial	Commercial / Residential	10%
Neighborhood/ University Compatibility Area	3 acres (or city block)	Residential	Commercial	10%
		Office	Commercial	10%
		Commercial	Office/ Residential	10%

Source: WRT, 2014

providing for mixed-use development, the following parameters are offered as general guidelines for large scale mixed-use development to prevent large single use developments from interrupting the use synergies intended for the seven mixed-use districts identified in the Land Use Element. Implementation of the mixed-use land use designations can be in the form of new mixed-use zoning districts, or overlay districts to modify development standards applicable to existing zoning districts. For each mixed-use designation, shown in Table 10.1, one or more permitted primary uses are identified

along with permitted complimentary uses and the minimum ratio of such uses to primary uses based on development square footage. For example, a primarily-residential development of 3 acres or 3 city blocks in Downtown would ideally include a minimum of 20 percent of developable square footage as commercial uses.

Action Plan

The Denton 2030 Action Plan, contained in Table 10.2, synthesizes the recommended actions to implement Denton Plan 2030 according to timeframe and relative priority. Six general types of actions and potential implementation tools are included, defined as follows:

- **Planning:** Actions that involve additional planning or study to address specific issues. An example of this are the Small Area Plans, as recommended for compatibility areas and for centers and corridors, as well as studies such as the recommended *Gas Well and Pipeline Impact and Compatibility Study* and *Urban Design Plan*.
- **Regulation:** Actions that involve development of new regulations and revisions to the Denton Development Code to include tools such as overlay districts, new zoning districts, density bonus provisions, etc.
- **Program:** Actions involving a series of steps to be carried out to accomplish an objective.
- **Capital:** Actions that involve investments through the city's Capital Improvement Program, as well as potential funding mechanisms, including Tax Investment Reinvestment Zones (TIRZs) and Public Improvement Districts (PIDs)
- **Outreach:** Actions involving outreach to the public and residents.
- **Partnerships:** These include actions that involve coordination or collaboration with one or more entities to implement the action, such as coordination with UNT and TWU in conducting small area planning for the Neighborhood/ University Compatibility Areas.
- **Long-term:** This includes actions designated to be carried out beyond five (5) or more years from adoption.
- **Ongoing:** These actions are currently being addressed, or should be addressed on a continuing basis.

The Action Plan is not intended to be definitive prescription, or a rigid formula. It is suggested as a framework to guide decision-making and the allocation of resources; a "task list" to ensure steady progress in implementing Denton Plan 2030. The Action Plan does not preclude certain actions from being implemented earlier or later than indicated, subject to the availability of resources. However, the degree of success in implementing the Plan will reflect Denton's ability to consistently act in accordance with the Action Plan.

The actions are organized according to each Element of Denton Plan 2030. Reference to relevant actions from other Elements are provided for each action. The actions are assigned to one of four timeframes:

- **Short-term:** These are actions that should be addressed within two (2) years of Plan adoption.
- **Mid-term:** These are actions that should be addressed within a range of 2-5 years from Plan adoption.

Table 10.2: Denton 2030 Action Plan

**ACTION PLAN
UNDERGOING
CITY REVIEW**

Table 10.2: Denton 2030 Action Plan

**ACTION PLAN
UNDERGOING
CITY REVIEW**



APPENDIX A: GLOSSARY

Abbreviations

ADA: Americans with Disabilities Act

AHOP: Affordable Housing Opportunity Program

APA: American Planning Association

AQI: Air Quality Index

BMP: Best Management Practice

BMR: Building Material Recovery

BPAC: Bicycle and Pedestrian Advisory Committee

CAC: Citizens Advisory Committee

CDC: Centers for Disease Control and Prevention

CDBG: Community Development Block Grant

CIP: Capital Improvement Plan

CMSA: Consolidated Metropolitan Statistical Area

CNN: Certificates of Convenience and Necessity

COA: Certificate of Appropriateness

CPTED: Crime Prevention through Environmental Design

CSS: Context-sensitive Solutions

DAHC: Denton Affordable Housing Corporation

DCHC: Denton County Homeless Coalition

DCHD: Denton County Health Department

DCTA: Denton County Transportation Authority

DDC: Denton Development Code

DEDP: Denton Economic Development Partnership

DFW: Dallas-Fort Worth

DHA: Denton Housing Authority

DISD: Denton Independent School District

DME: Denton Municipal Electric

DMSA: Downtown Denton Main Street Association

DTIP: Downtown Implementation Plan

ECO-W.E.R.C.S: Waste to Energy, Recycling, Composting, Solar

EECBGB: Energy Efficiency and Conservation Block Grant Program

ELR: Enhanced Leachate Recirculation

EPA: United States Environmental Protection Agency

ESA: Environmentally Sensitive Area

ETJ: Extraterritorial jurisdiction

FAR: Floor area ratio

FEMA: Federal Emergency Management Agency

FIA: Fiscal Impact Analysis

FHWA: Federal Highway Administration

FMMP: Farmland Mapping & Monitoring Program

GIS: Geographic Information Systems

GHG: Greenhouse Gas

HAP: Homebuyer Assistance Program

HIA: Health Impact Assessment

HIP: Home Improvement Program

HHDC: Habitat for Humanity of Denton County

HUD: United States Department of Housing and Urban Development

HVA: Hazard Vulnerability Analysis

iSWM: Integrated Stormwater Management

ITS: Intelligent Transportation Systems

KDB: Keep Denton Beautiful

LEED: Leadership in Energy and Environmental Design

LGC: Local Government Code

LOS: Level of Service

LRTP: Long Range Transportation Plan

MPC: Master Planned Community

MUD: Municipal Utility District

MRF: Materials Recovery Facility

NCTC: North Central Texas College

NCTCOG: North Central Texas Council of Governments

NERC: North American Electric Reliability Corporation

NIMS: National Incident Management System

NRCS: Natural Resources Conservation Service

OES: Office of Emergency Management

PID: Public Improvement District

RFID: Radio Frequency Identification

SW&R: Solid Waste & Recycling

TAC: Technical Advisory Committee

TCEQ: Texas Commission on Environmental Quality

TDM: Transportation Demand Management

TIF: Tax Increment Financing

TIRZ: Tax Increment Reinvestment Zone

TMA: Transportation Management Association

TND: Traditional Neighborhood Design

TOD: Transit-Oriented Development

TWU: Texas Woman’s University

TxDOT: Texas Department of Transportation

ULI: Urban Land Institute

UNT: University of North Texas

VMT: Vehicle Miles Traveled

WENNT: Water Efficiency Network of North Texas

WSA: Water Service Area

Glossary of Planning Terms for Reference

A

Adaptive Reuse: The conversion of obsolescent or historic buildings from their original or most recent use to a new use. For example, the conversion of former hospital or school buildings to residential use, or the conversion of an historic single-family home to office use.

Affordable Housing: Housing capable of being purchased or rented by a household with very low, low, or moderate income, based on a household’s ability to make monthly payments necessary to obtain housing.

Annex, v.: To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

Arterial: Medium-speed (30-40 mph), medium-capacity (10,000-35,000 average daily trips) roadway that provides intra-community travel and access to the county-wide highway system. Access to community arterials should be provided at collector roads and local streets, but direct access from parcels to existing arterials is common.

Assessment District: See “Benefit Assessment District.”

Assisted Housing: Generally multifamily rental housing, but sometimes single-family ownership units, whose construction, financing, sales prices, or rents have been subsidized by federal, state, or local housing programs.

B

Baby Boomers: Baby boomers are people born during the demographic Post–World War II baby boom between the years 1946 and 1964.

Best Management Practices: A policy, rule, or regulation that results in greater efficiency or benefits than from standard practices.

Benefit Assessment District: An area within a public agency’s boundaries that receives a special benefit from the construction of one or more public facilities. A Benefit Assessment District has no independent life; it is strictly a financing mechanism for providing public infrastructure as allowed under various statutes. Bonds may be issued to finance the improvements, subject to repayment by assessments charged against the benefiting properties. Creation of a Benefit Assessment District enables property owners in a specific area to cause the construction of public facilities or to maintain them (for example, a downtown, or the grounds and landscaping of a specific area) by contributing their fair share of the construction and/or installation and operating costs

Bicycle Path (Class I Facility): A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but typically are separated from them by landscaping.

Bicycle Lane (Class II Facility): A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Route (Class III Facility): A facility shared with motorists and identified only by signs, a bicycle route has no pavement markings or lane stripes.

Bikeways: A term that encompasses bicycle lanes, bicycle paths, and bicycle routes.

Bike Boulevard: Low-speed street designed to give priority to bicyclists as through traffic.

Blight: The visible and physical decline of a property, neighborhood, or city due to an economic downturn, disinvestment, or the cost of maintaining the quality of older structures.

Bond: An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

Build-out: Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designation.

C

Capital Improvement: A specific undertaking involving procurement, construction, or installation of facilities or related equipment which improves, preserves, enhances or modernizes the City’s provision of municipal services.

Capital Improvements Program (CIP): A program established by a city or county government which schedules permanent improvements, usually for a minimum of five years in the future, to fit the projected fiscal capability of the local jurisdiction. The program generally is reviewed annually, for conformance to and consistency with the general plan.

Carbon Sequestration: Carbon sequestration describes long-term storage of carbon dioxide or other forms of carbon to either mitigate or defer global warming and avoid dangerous climate change.

Centers: Often referred to as nodes, are geographic points where land uses and associated economic and social resources and activities are concentrated.

City: City with a capital “C” generally refers to the government or administration of a city (“City of Denton”). City with a lower case “c” may mean any city or may refer to the geographical area of a city.

City Parks: City parks are typically greater than 50 acres and serve the entire city as well as larger region. Recreational facilities including playground, picnic area, playing courts, trails, and necessary parking.

Climate Change: The change in the average weather of the earth that may be measured by changes in wind patterns, storms, precipitation, and temperature.

Community Park: Land with full public access intended to provide recreation opportunities beyond those supplied by neighborhood parks. Community parks are larger in scale than neighborhood parks but smaller than citywide parks—approximately 30-50 acres.

Complete Neighborhood: A neighborhood that provides a diversity of housing options, access to local shopping, quality schools, open space and recreation, transportation, and other amenities. The neighborhood is developed at a scale that allows for walking and biking and provides for the needs of people of all ages and abilities.

Complete Streets: Streets that include facilities and designs that enable safe access for all users (i.e., pedestrians, bicyclists, motorists and transit riders) of all ages and abilities with characteristics such as comprehensive, integrated, and connected network; balanced design; variety of uses and activities that create a varied streetscape; design that relates well to bordering uses and allows for continuous activity; pedestrian and biking facilities that promote safety and maximize access to bordering uses; aesthetically designed street lights that provide sufficient

illumination of sidewalks; consistent landscaping that includes street trees and landscaped medians and sidewalks; sustainable design that minimizes runoff, minimizes heat island effects, responds to climatic demands, and conserves scarce resources; and well-maintained facilities.

Condominium (Condo): A structure of two or more units, the interior spaces of which are individually owned; the balance of the property (both land and building) is owned in common by the owners of the individual units.

Context-sensitive Solutions (CSS): Context sensitive solutions is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist.

Corridor: Strips of land that lie alongside key transportation routes and serve as connectors between destinations. Sections of a corridor may be devoted mostly to one land use or may include a mix of uses.

D

Daylighting: the redirection of a stream into an above-ground channel. Typically, the goal is to restore a stream of water to a more natural state. Daylighting is intended to improve the riparian environment for a stream which had been previously diverted into a culvert, pipe, or a drainage system.

Defensible Space: (1) In firefighting and prevention, a 30-foot area of non-combustible surfaces separating urban and wildland areas. (2) In urban areas, open-spaces, entry points, and pathways configured to provide maximum opportunities to rightful users and/or residents to defend themselves against intruders and criminal activity.

Demographics: Characteristics of a population, including age, sex, income, race/ethnicity, occupation, and housing characteristics.

Density, Residential: The number of permanent residential dwelling units per acre of land. Densities specified in the general plan are units per gross acre. (See "Acres, Gross,")

Density Bonus: The allocation of development rights that allows a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned. Under Government Code §65915, a housing development that provides 20 percent of its units for lower-income households, ten percent of its units for very-low income households, or 50 percent of its units for seniors is entitled to a density bonus and other concessions.

E

Easement: Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

Easement, Conservation: A tool for acquiring open space with less than full-fee purchase, whereby a public agency buys only certain specific rights

from the land owner. These may be positive rights (providing the public with the opportunity to hunt, fish, hike, or ride over the land) or they may be restrictive rights (limiting the uses to which the land owner may devote the land in the future.)

Economic Development District: An Economic Development District (EDD) is a federally designated organization charged with achieving an economic objective for a defined geography, such as job creation and economic development.

Ecoregion: An ecoregion is an ecologically and geographically area defined by the U.S. Environmental Protection Agency. Ecoregions cover relatively large areas of land or water, and contain characteristic, geographically distinct assemblages of natural communities and species.

Environmental Justice: The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

Extraterritorial jurisdiction (ETJ): an extraterritorial jurisdiction of a municipality is the unincorporated area contiguous to the city's corporate boundaries. The ETJ's distance from the city limits is determined by the city's population. For many communities, Chapter 242 of the Texas Local Government Code means that cities and counties must decide who will regulate subdivision platting and permitting where their authority overlaps in municipal extraterritorial jurisdictions (ETJ), land outside the city's boundary that could be annexed in the future.

F

Fair Market Rent: The rent, including utility allowances, determined by HUD for purposes of administering the Section 8 Existing Housing Program.

Federal Emergency Management Agency (FEMA): An independent Federal agency established to respond to major emergencies. FEMA seeks to reduce the loss of life and protect property against all types of hazards through a comprehensive, risk-based emergency management program. In March 2003, FEMA became part of the newly created U.S. Department of Homeland Security.

Fiscal Impact Analysis: An analysis that estimates the impact of a development or a land use change on the costs and revenues of governmental units serving the development. The analysis is generally based on the fiscal characteristics of the community— e.g., revenues, expenditures, land values—and characteristics of the development or land use change—e.g., type of land use, distance from central facilities. The analysis enables local governments to estimate the difference between the costs of providing services to a new development and the revenues—taxes and user fees, for example—that will be generated by the development.

Flood, 100-Year: The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, chance of occurring in any given year.

Floodplain: The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the floodplain subject to a one percent chance of flooding in any given year is designated as an “area of special flood hazard” by the Federal Insurance Administration.

Floor Area Ratio (FAR): The gross floor area permitted on a site divided by the total net area of the site. Also commonly used in zoning, FARs typically are applied on a parcel-by-parcel basis as opposed to an average FAR for an entire land use or zoning district.

Fracking (Hydraulic Fracturing): a well-stimulation technique in which rock is fractured by a hydraulically pressurized liquid. A high-pressure fluid (usually chemicals and sand suspended in water) is injected into a wellbore to create cracks in the deep-rock formations through which natural gas, petroleum, and brine will flow more freely. When the hydraulic pressure is removed from the well, small grains of hydraulic fracturing proppants (either sand or aluminium oxide) hold the fractures open once the deep rock achieves geologic equilibrium. The hydraulic fracturing technique is commonly applied to wells for shale gas.

G

Gateways: Transition points from one area to another or entrances to a neighborhood or district. These points are often developed a key areas for signage, commercial development, and other public realm initiatives.

General Fund: The general fund is only one piece of Denton’s total budget, but is essential to providing certain services to the community, including a portion of funds for public safety, recreation, public works, courts, traffic and transportation, etc.

Greenhouse Gases (GHG): Gases that trap heat in the atmosphere, analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. The accumulation of GHG in the atmosphere regulates the earth’s temperature. Without the natural heat trapping effect of GHG, the earth’s surface would be cooler.

Greenfield: Parcel or parcels of land that are undeveloped.

Green Infrastructure: Green infrastructure uses vegetation, soils, and natural processes to manage water and create healthier urban environments. At the scale of a city or county, green infrastructure refers to the patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or site, green infrastructure refers to stormwater management systems that mimic nature by soaking up and storing water.

Greenway: a strip of undeveloped land near an urban area, set aside for recreational use or environmental protection.

Groundwater: Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge: The natural process of in- filtration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks that provide underground storage (aquifers).

Growth Trend: Assumes that current trends in land use, population and job growth, and investment patterns will continue in the future.

H

Habitat: The physical location or type of environment in which an organism or biological population lives or occurs.

Hazardous Material: Any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

Heritage Tourism: a branch of tourism oriented towards the cultural heritage of the location where tourism is occurring. The National Trust for Historic Preservation defines heritage tourism as "traveling to experience the places, artifacts and activities that authentically represent the stories and people of the past," and "heritage tourism can include cultural, historic and natural resources."

Historic Preservation: The preservation of historically significant structures and neighborhoods in order to facilitate restoration and rehabilitation of the building(s) to a former condition.

Household: All those persons, related or unrelated, who occupy a single housing unit. (See "Family.")
Households, Number of: The count of all year-round housing units occupied by one or more persons. The concept of household is important because the formation of new households generates the demand for housing. Each new household formed creates the need for one additional housing unit or requires that one existing housing unit be shared by two households. Thus, household formation can continue to take place even without an increase in population, thereby increasing the demand for housing.

Housing Unit: A house, an apartment, a mobilehome or trailer, a group of rooms, or a single room that is occupied as a separate living quarters, or, if vacant, is intended for occupancy as a separate living quarters (2000 U.S. Census definition).

Impact Fee: A fee, also called a development fee, levied on the developer of a project by a city, county, or other public agency as compensation for otherwise-unmitigated impacts the project will produce. Fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development

fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund. Impact/development fees may be used to pay for preparing and updating general plans and specific plans.

Impervious Surface: A surface through which water cannot penetrate, such as a roof, road, sidewalk, or paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

Indicators: A set of measurements or data that provide information about the social, economic, and environmental factors that impact a community's well-being. Indicators can be tracked over time to monitor the implementation of a plan or set of strategies.

Infill: Development and redevelopment of underused buildings and vacant lots in areas served by existing infrastructure. Development that channels economic growth into existing urban and suburban areas and conserves open space and agriculture at the periphery of the city.

Infrastructure: Public services and facilities such as sewage-disposal systems, water-supply systems, other utility systems, schools, and roads

Integrated Stormwater Management (iSWM): The iSWM™ Program for Construction and Development is a cooperative initiative that assists cities and counties to achieve their goals of water quality protection, streambank protection, and flood mitigation, while also helping communities meet their construction and post-construction obligations under state stormwater permits.

Intensity, Building: For residential uses, the actual number or the allowable range of dwelling units per

net or gross acre. For non-residential uses, the actual or the maximum permitted floor area ratios (FARs).

J

Jobs/Housing Balance; Jobs/Housing Ratio: The availability of affordable housing for employees. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

L

Land Use Classification: A system for classifying and designating the appropriate use of properties.

Leachate: any liquid that in passing through matter, extracts solutes, suspended solids or any other component of the material through which it has passed. Leachate is a widely used term in environmental science where it has the specific meaning of a liquid that has dissolved or entrained environmentally harmful substances which may then enter the environment. It is most commonly used in the context of land-filling of putrescible or industrial waste.

Levels of Service (Facilities): facility or service standards currently being maintained and funded through the budget (e.g., park acres per capita, or lane miles of roadways per vehicle miles of travel). Levels of service generally vary from city to city and affect development patterns and fiscal sustainability. Variations in LOS result from both natural fluctuations in new development and capital improvement programs, or by direct action to accept a lower LOS (e.g., municipal staff layoffs) or planned action to invest in a higher LOS (e.g., adding sufficient lane miles to raise the system-wide LOS).

Level of Service (Traffic): A scale that measures the amount of traffic that a roadway or inter-section can accommodate, based on such factors as maneuverability, driver dissatisfaction, and delay. The transportation LOS system uses the letters A through F to designate different levels, with LOS A representing the best operating conditions and LOS F the worst.

Linkages: a contiguous network of open spaces or undeveloped land near an urban area, set aside for recreational use or environmental protection.

Live-Work Development: Buildings or spaces within buildings that are used jointly for commercial and residential purposes where the residential use of the space is secondary or accessory to the primary use as a place of work.

Low-Income Household: A household with an annual income usually no greater than 80 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by HUD for the Section 8 housing program

Low-Income Housing Tax Credits: Tax reductions provided by the federal and state governments for investors in housing for low-income households.

M

Millennials: Millennials are the demographic cohort following Generation X with birth years ranging from the early 1980s to the early 2000s.

Minipark: A small neighborhood park of approximately one acre or less. (see also Pocket Park)

Mixed Use: Properties on which various uses such as office, commercial, institutional, and residential are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A “single site” may include contiguous properties.

Moderate-Income Household: A household with an annual income between the lower income eligibility limits and 120 percent of the area median family income adjusted by household size, usually as established by HUD for the Section 8 housing program. (See “Area” and “Low-Income Household.”)

Mobility: The ability to move about easily using a form of transportation (biking, walking, driving, etc).

Multi-Family residential: A classification of housing where multiple separate housing units for residential (i.e. non-commercial) inhabitants are contained within one building or several buildings within one complex.

Multimodal: Descriptive of a neighborhood, center, or corridor that can be conveniently accessed by multiple modes of transportation, for example automobile, transit, bicycle, or walking.

Municipal Development Districts: A Municipal Development District is a special purpose district created for the purpose of generating economic development and growth opportunities within the boundaries of the district. Texas law authorizes cities to hold an election to create a municipal development district and adopt a sales tax to fund the district.

Municipal Utility District: a special-purpose district or other governmental jurisdiction that provides public utilities (such as electricity, natural gas, sewage treatment, waste collection/management, wholesale telecommunications, water) to district residents.

N

National Historic Preservation Act: A 1966 federal law that established a National Register of Historic Places and the Advisory Council on Historic Preservation, and that authorized grants-in-aid for preserving historic properties.

National Pollutant Discharge Elimination System (NPDES): A national program under Section 402 of the Clean Water Act for regulation of discharges of pollutants from point sources to waters of the United States. Discharges are illegal unless authorized by an NPDES permit. (U.S. Environmental Protection Agency)

National Register of Historic Places: The official list, established by the National Historic Preservation Act, of sites, districts, buildings, structures, and objects significant in the nation's history or whose artistic or architectural value is unique.

Neighborhood: A planning area commonly identified as such in a community's planning documents, and by the individuals residing and working within the neighborhood. Documentation may include a map prepared for planning purposes, on which the names and boundaries of the neighborhood are shown.

Neighborhood Park: City-owned land intended to serve the recreation needs of people living or working within one-half mile radius of the park, ranging from 5 to 20 acres in size.

Non-Attainment: The condition of not achieving a desired or required level of performance. Frequently used in reference to air quality.

O

Open Space: a general term to apply to any parcel or area of land or water that is devoted to either (1) the

preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Open Space Preserves: a special park type that applies to land that is acquired and managed in accordance with land use, preservation, environmental conservation, and urban design objectives.

Overlay Zone: A zoning designation on a zoning map, that modifies the basic underlying designation in some specific manner.

P

Parcel: A lot in single ownership or under single control, usually considered a unit for purposes of development.

Parking, Shared: A public or private parking area used jointly by two or more uses.

Parking Area, Public: An open area, excluding a street or other public way, used for the parking of automobiles and available to the public, whether for free or for compensation.

Parking Management: An evolving technique designed to obtain maximum utilization from a limited number of parking spaces. Can involve pricing and preferential treatment for HOVs, non-peak period users, and short-term users.

Parking Ratio: The number of parking spaces provided per 1,000 square of floor area, (e.g., 2:1 or "two per thousand.")

Parks: Open-space lands whose primary purpose is recreation. (See "Open Space," "Community Park," and "Neighborhood Park")

Peak Hour: The time period during which the greatest demand occurs on the transportation system in the

morning and early afternoon, also known as “rush hour.”

Performance: Refers to how a scenario addresses or fulfills its intended purpose in relation to the set of community indicators.

Pocket Park: A small neighborhood park of approximately one acre or less. (see also Mini Park)

Public Improvement District: a special assessment area created at the request of the property owners in a district. Owners pay a supplemental assessment with their taxes, which the PID uses for services above and beyond existing City services. A PID has its own work program, which may consist of eligible activities such as marketing the area, providing additional security, landscaping and lighting, street cleaning, and cultural or recreational improvements.

R

Recreation, Active: A type of recreation or activity that requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts and various forms of children’s play equipment.

Recreation, Passive: Type of recreation or activity that does not require the use of organized play areas.
Redevelop: To demolish existing buildings; or to increase the overall floor area existing on a property; or both; irrespective of whether a change occurs in land use.

Redevelopment: Restoring buildings, developing vacant lots, or parts of a neighborhood to a better condition by rehabilitating existing buildings or constructing new buildings.

Regional: Pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

Retrofit: To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. Buildings have been retrofitted to use solar energy and to strengthen their ability to withstand earthquakes, for example.

S

Sanitary Sewer: A system of subterranean conduits that carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (that carry surface water) and septic tanks or leech fields (that hold refuse liquids and waste matter on-site). (See “Septic System”)

Scenario: Scenarios are stories about how things may look in the future as population, economy, environment and other factors change. Each scenario represents a possible future. Scenario planning is common in business and planning and is used to help conceptualize the impact of different choices.

Section 8: refers to Section 8 of the Housing Act of 1937, which authorizes the payment of rental housing assistance to private landlords, and is managed by the U.S. Department of Housing and Urban Development (HUD). The Housing Choice Voucher Program provides “tenant-based” rental assistance, so a tenant can move from one unit to

another. It also allows individuals to apply their monthly voucher towards the purchase of a home. Section 8 also authorizes a variety of “project-based” rental assistance programs, under which the owner reserves some or all of the units in a building for low-income tenants, in return for a federal government guarantee to make up the difference between the tenant’s contribution and the rent in the owner’s contract with the government. A tenant who leaves a subsidized project will lose access to the project-based subsidy.

Single-Family residential: A classification of housing where a building is usually occupied by just one household or family, and consists of just one dwelling unit or suite. Most Single Family residential homes in Mill Valley are detached wherein the building does not share an inside wall with any other house or dwelling.

Solid Waste: Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials. Organic wastes and paper products comprise about 75 percent of typical urban solid waste.

Subdivision: The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed.

Sustainability: Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Sustainable Development: Development that maintains or enhances equity, economic opportunity, and community well-being while protecting and restoring the natural environment upon which

people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.

T

Tax increment financing: or TIF, is a public financing method that is used as a subsidy for redevelopment, infrastructure, and other community-improvement projects. TIF uses future gains in taxes to subsidize current improvements, which are projected to create the conditions for gains above the routine yearly increases which often occur without the improvements.

Tax Increment Reinvestment Zone (TIRZ): a political subdivision of a municipality or county in the state of Texas created to implement tax increment financing. They may be initiated by the city or county or by petition of owners whose total holdings in the zone consist of a majority of the appraised property value.

Transit: The conveyance of persons or goods from one place to another by means of a local public transportation system.

Transit, Public: A system of regularly-scheduled buses and/or trains available to the public on a fee-per-ride basis. Also called mass transit.

Transit-Oriented Development (TOD): Moderate- to higher-density development, located within easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use. (Statewide Transit-Oriented Development Study, California Department of Transportation, 2002).

Transportation Demand Management (TDM): the application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time.

Trends: Describes the general direction in which something is changing or developing over time.

Trip: A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one “production end,” (or origin—often from home, but not always), and one “attraction end,” (destination). (See “Traffic Model.”)

V

Vehicle-Miles Traveled (VMT): A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

Veloweb (Regional Veloweb): a 1,728 mile network of existing and planned off-street, shared-use paths (trails) designed for use by bicyclists, pedestrians, and other non-motorized forms of active transportation in the Dallas-Fort Worth metropolitan area. The network of shared-use paths serves as a system of off-road transportation facilities for bicyclists and other users that extends and completes the region’s roadway and passenger rail transit network. The Regional Veloweb has planned connections in 10 counties and 117 cities in North Texas. It is the “interstate” for bicyclists and pedestrians.

Very-Low Income Household: A household with an annual income usually no greater than 50 percent of the area median family income adjusted by house-

hold size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by HUD for the Section 8 housing program.

W

Watershed: The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

Z

Zoning: The division of a city or county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the general plan

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**APPENDIX B: COMMUNITY
FORUM RESULTS**

Denton Plan 2030.com

Our path to the future

Kickoff Open House Event Recap

Thank you for your participation in the Denton Plan 2030 Kickoff Open House on August 9!



The Kickoff Open House drew a great crowd at the Center for the Visual Arts.

The Kickoff Open House was an introduction to the Denton Plan update process and a venue for the community to get acquainted with the project team.

What happened at the Kickoff Open House?

160+ citizens came out to participate in the first Denton Plan 2030 public event, where they shared information and ideas at six interactive stations:

- Station 1: Sign-In and Show Us Where You Live
- Station 2: Welcome / Project Orientation
- Station 3: Strengths and Challenges
- Station 4: Tell Us Your Story
- Station 5: What's Next for Denton?
- Station 6: Vote for the Denton Plan 2030 Logo

Station 1: Sign-In and Show Us Where You Live

Participants signed in and placed a dot on the map of the City to let us know where they lived, allowing us to get an idea of what areas of the city were represented/under-represented at the event in order to target future outreach.



"Let's see, where is my house . . . ah, there it is!"

Reviewing the Passport, which served as a "roadmap" to the evening's events as well as all the stations.

Here are the results of our participants showing us where they live in Denton - [click here](#) to see an enlarged version of this map.

Station 2: Welcome / Project Orientation

This station allowed attendees to get more information about the Denton Plan 2030 process and ask questions of staff and the consultants.



Mayor Mark Burroughs got us started with welcoming remarks. [Watch a video](#) of Mayor Burroughs that was shown at the Station 2.



The crowd was lively - lots of great interaction and conversation. Pictured here, Councilman Kevin Roden; other elected and appointed officials were also present at the Kickoff Open House.



The inside of the Passport: visiting each of the six stations was rewarded with a "star" sticker, qualifying you to be eligible for a door prize. You could also vote - from three options - for our new logo.

After Mayor Burroughs' welcome and opening remarks a presentation was made to give an overview of what's involved in the "comprehensive plan" process and to emphasize the importance of public participation and engagement in the process. [Click here to view this presentation.](#)

Station 3: Strengths and Challenges

We asked participants two key questions:

"What Are Your Favorite Things About Denton?" - to determine what the best things about the city are that we should strive to maintain and promote; and

“What Are Some of the Challenges in Denton?” – to determine the issues we will need to address in Denton throughout the update of the Denton Plan.”



We asked participants to write their thoughts onto sticky notes so they could be placed on big boards. They used these notes to tell us about their favorite things regarding Denton, challenges facing Denton, to relate personal stories about our city, and to offer up ideas for the future. (By night's end five of these big boards had been filled with 393 yellow notes!)

“What Are Your Favorite Things About Denton?”

Four of the five top responses to the favorite things about Denton (Arts & Events, Community, Downtown/Square, and Local Businesses) are all related and supportive of one another.

- “Arts & Events” was a popular category of favorite things about Denton. This category includes comments directly related to art, music, festivals, venues, and concerts.
- Another favorite category was “Community,” which includes comments directly related to a sense and spirit of community, fun people, and feeling at home in the city.
- “Downtown/Square” includes comments regarding a vibrant culture Downtown and around the Square, including the building and businesses associated with them.
- “Amenities” includes comments related to things such as the city’s parks, libraries, and senior centers.
- “Local Businesses” relates to the support of local businesses, fondness for unique shopping districts, and specific local businesses around Denton.

Relevance to Denton Plan 2030:

This information is crucial in determining what Denton Plan 2030 will need to preserve and improve. Many of the favorite things described by the community are in elements of the current Denton Plan, including community, environment, infrastructure, and the introduction. Each element will be assessed for its progress, relevance, and future needs in the update process to ensure that we maintain and promote what people love about Denton as much as possible.

[Click here for the complete list](#) of responses for “What Are Your Favorite Things About Denton?”

“What Are Some of the Challenges in Denton?”

Based upon the responses of those who participated, “Transportation”, issues associated with “Development”, “Infrastructure”, “Environment”, and “Government” are the biggest challenges facing Denton.

- The “Transportation” category contains comments related to traffic, bike and pedestrian connectivity, and mass transit.
- The “Development” category is broad and includes comments related to the general nature of development, the aesthetics of buildings and the city’s gateways, both needed and unwanted land uses, and specific developments within the City.
- The “Infrastructure” category includes comments regarding poor road quality, solid waste and recycling containers needs and issues, and a lack of neighborhood sidewalks.
- The “Environment” category includes comments related to more trees and green space, improved air quality, and sustainable water supplies. Closely related to those issues were concerns with gas wells, both from an environmental and development standpoint.
- Challenges categorized under “Government” involved issues relating to building permits, code enforcement, bureaucratic “red tape,” public participation, and specific public policies.

Relevance to Denton Plan 2030:

Infrastructure, Land, Design, and Environment are all current elements of the current Denton Plan. Each of these elements includes subsections, many of which correspond to the community feedback. It is important to assess what issues persist within each of these elements, identify what new issues have arisen, and work to address them. "Gas Wells" have accelerated since the adoption of the current Denton Plan and will be a new topic assessed in the update process.

Another important piece of the Denton Plan update is to take a serious look at how current City procedures and policies affect development and the city as a whole. The comments provided by the community at the Kickoff Open House reflect that development policies and procedures are significant priorities to address in the Plan.

[Click here for the complete list](#) of responses for "What Are Some of the Challenges in Denton?"

Station 4: Tell Us Your Story

We asked participants to share their personal stories of how they came to Denton and why they decided to stay. [Read the written stories here](#) and [watch the video here](#).



Thinking hard, and putting lots of effort into writing the notes! (We collected lots of really interesting personal stories.)



Station 5: What's Next for Denton?

We asked participants to provide us with big, bold ideas for Denton's future. The comments received were a mix of things community members would like to see in Denton, what they would like to preserve, and what they'd like Denton to become.



One of our consultants collecting and organizing the sticky notes; the notes from this station offered many great suggestions for Denton's future.

- The "Environment/Sustainability" category relates to promoting green building standards and development, conserving natural resources, pursuing renewable energy, allowing urban chickens, protecting trees and open space, conserving

water, and protecting floodplains.

- Ideas under “Economy” relate to types of jobs to create, the industries that should be attracted, and what types of businesses Denton should encourage.
- The “Amenities” category contains ideas such as creating outdoor theaters and entertainment venues, public water and splash parks, dog parks, museums, a zoo, an ice rink, and a municipal golf course.
- The “Transportation” category includes ideas such as public transit expansion and facilities, a commuter and parking plan, and creating more bike lanes and pedestrian friendly development. The “Bike & Pedestrian” category relates to those ideas specifically pertaining to bike lanes, walkability, and pedestrian corridors connecting downtown to the DCTA Transit Center.
- “Infrastructure” and “Development” comments frequently referred to a more aesthetically pleasing city. Most of the comments in these categories relate to burying public utilities, improving streets, beautifying gateways into the city, and fostering a healthy development community to bring about the desired changes.

Relevance to Denton Plan 2030:

The community feedback from the “What’s Next for Denton?” board at the Kickoff Open House provided great ideas for Denton’s future. There is a strong sentiment among those who participated to encourage and maintain local businesses while also creating a creative, high-tech economic base. Transportation and the environment/sustainability are other areas the community has big, bold ideas about. Community members also want to see a Denton where development and infrastructure is aesthetically pleasing and managed properly. Many of these issues are in elements of the current Plan that can and will be analyzed for effectiveness and content.

[Click here for the complete list of ideas](#) for “What’s Next for Denton?”

Station 6: Vote for the Denton Plan 2030 Logo

The last station was an opportunity for participants to vote for the Denton Plan 2030 logo. We also drew for the door prizes from the completed Station Sticker Sheets (as labeled on the Passport). Community members also voted online for their favorite logo until August 24. The winning logo is pictured below!



Councilman Jim Engelbrecht drawing for a door prize.

Voting for our new logo. (Is she old enough to vote?? Actually, you’re never too young to start learning civic responsibility.)

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Our path to the future

The winner – our new logo!

Thank you to the Kickoff Open House participants and online voters who selected our Denton Plan 2030 logo!

Here is a list of the files referenced in this Event Recap:

- [“Passport”](#) to the Denton Plan 2030 Kickoff Open House
- [“Show us where you live”](#) map
- [Welcoming remarks from Mayor Mark Burroughs](#) (video)
- [Overview of the Denton Plan 2030 Process](#)
- [Verbatim comments, Station 3](#) – Favorite things about Denton
- [Verbatim comments, Station 3](#) – Challenges facing Denton
- [Verbatim comments, Station 4](#) – Personal stories about Denton
- [“Tell us your story”](#) citizens’ comments (video)
- [Verbatim comments, Station 5](#) – Bold ideas for Denton’s future
- [Combined Raw Feedback for Stations 3, 4, and 5](#)

Missed the Kickoff Open House?

Don’t worry, there are many more opportunities to get involved and stay engaged:

1. Visit www.DentonPlan2030.com for information on upcoming events
2. Join the conversation at www.EngageDenton.com
3. Like us on Facebook: www.Facebook.com/DentonPlan2030
4. Follow us on Twitter: www.twitter.com/cityofdentontx
5. Sign up for Denton Plan 2030 eNews at www.cityofdenton.com/eNews

Please visit the website or email information@dentonplan2030.com for more information.

Denton Plan 2030.com

Our path to the future

Community Forum 1 Series Recap

Thank you for your participation in Denton Plan 2030 Community Forum 1!

This recap contains feedback results and preliminary trends from all Community Forum 1 events, which took place from November 2012 through April 2013.

The first Community Forum provided a venue for the community to voice their opinions about Denton and what should happen in its future. The results of the Community Forum 1 and information derived from supporting outreach activities (Kickoff Open House, stakeholder interviews, informational community meetings, Mobile Meetings, website and social media, and community surveys), will be the basis for developing a 15-to 20-year community Vision Statement. The Vision Statement will guide the development of each element of the plan, including action steps to make the plan a reality.

A hearty welcome was given at each of the forums in which attendees were greeted by registrants and signed in.



The following events made up the Community Forum 1 series and are described below:

- Community Forum 1 – November Series
- Thursday Nov. 1 – Advanced Technology Complex
- Friday Nov. 2 – MLK Jr. Recreation Center

Saturday Nov. 3 – John Guyer High School

Community Forum 1 – Spanish Series

[Click here for the Spanish Series recap in Spanish. Haga clic aquí para ver el resumen en español.](#)

Saturday, February 2, 2013 – Calhoun Middle School

Community Forum 1 – February Series

Thursday, February 7, 2013 – Advanced Technology Complex

Saturday, February 9, 2013 – Guyer High School

Community Forum 1 – University Series

Thursday, March 21, 2013 – McConnell Hall, University of North Texas

Wednesday, March 27, 2013 – McConnell Hall, University of North Texas

Monday, April 1, 2013 – Student Union Room #207, Texas Woman's University

What happened at Community Forum 1?

Over 200 citizens came out to participate in the second Denton Plan 2030 public event series, where the primary purpose was to share ideas on Denton's strengths and weaknesses, as well as the City's challenges and opportunities for the future.

The meetings were held at multiple locations over several months in order to accommodate as many citizens as possible. Meetings were held at different times of day in order to meet varying schedules as well. The attendance for all events was:

- November – 100 people (total of all events)
- February – 44 people (total of all events)
- Spanish – 12 people
- Universities – 57 people (total of all events)

Each of the events in the Community Forum 1 series was done in a similar format in order to solicit input that could be compared equally. At each event, planning consultant WRT gave an overview of the planning process and community forum exercise and emphasized the importance of public participation throughout the comprehensive planning process. The Spanish series featured a presentation given in Spanish.

[Click here to view this presentation.](#)

[Also click to view a brief summary video.](#)



Lead consultant John Fernsler of WRT gives an overview of the Forum's agenda and goals at the November Series

Mayor Mark Burroughs welcomes the group and conveys the importance of the Denton2030 Plan Update at the November Series.

The participants then went to their breakout tables for small group exercises to discuss and prioritize issues and aspirations for Denton.

Exercise 1: How do we perceive our community today?

Participants were asked to consider Denton in terms of its current strengths and weaknesses.

Strengths: What present characteristics of Denton do we value? What are the qualities that we should retain? What conditions or trends do we interpret as opportunities to make our community better in the future?

Weaknesses: What present conditions of our community do we characterize as problems requiring resolution? What

negative aspects of our life here would we change?

All of the participants' responses were recorded. Each person was then asked to pick their top three strengths and weaknesses. The group facilitator read the strengths and weaknesses aloud to the group, asking for a show of hands and recording the resulting "votes" for each issue. The number of votes was then recorded for each topic to identify the top strengths and weaknesses for the group.



Forum attendees were distributed into tables at the beginning of the visioning exercise. A mix of age and representation was encouraged at each table to reflect a variety of viewpoints. (November series shown)

Strengths

Common themes that emerged from the list of top strengths include:

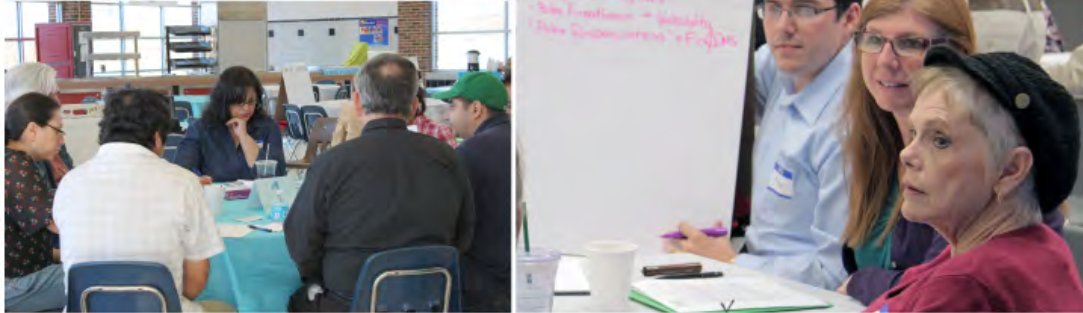
Community Forum 1 – November Series

- Education and the universities
- Sense of community
- Small and local business culture
- Vibrant downtown
- Arts and music – creative culture
- Historic character

University Series



Tables walked through the 4 topics of the Visioning exercise to answer the query: "How do you see your Denton today and how do you imagine it in the future?"



Spanish Series

November Series

- Diverse neighborhoods
- Quality parks and recreation
- Transportation access (A-train, I-35)
- Denton Municipal Airport
- Natural beauty and the environment

Community Forum 1 – Spanish Series

- Natural beauty and the environment
- Music and festivals
- Diversity and Culture of the City
- Volunteerism
- Locational (geographical) benefits
- Development potential
- The A-Train
- Local retailers
- Universities
- Friendliness of City, openness of citizens
- Multiple festivals/ community events

Community Forum 1 – February Series

- Small town feel
- Vibrant downtown
- History and culture
- Universities
- Parks, libraries, community facilities
- Diverse land uses
- Quality small businesses
- Location, access to the region
- Fast growing city
- Responsive leadership
- Music and the arts
- Events and entertainment for all ages
- Green space and natural beauty
- Effective solid waste management
- Good weather
- Denton Municipal Electric
- Clean and safe
- People, sense of community, family friendly

- Airport
- Diverse economy
- Alternative transportation choices

Community Forum 1 – University Series

- Affordability of housing
- Location and access
- Small town character and unique identity
- Universities
- Public transportation
- Downtown, the Square, and historic feel
- Local business community
- Natural environment
- Medical industry
- Diversity of community
- Job opportunities for all
- The Arts Scene
- Friendly community
- Environmental awareness/ sustainability programs
- Airport

Relevance to Denton Plan 2030:

Understanding what the community values most and wants to preserve and build on as Denton continues to grow is vital to the success of Denton Plan 2030. Many of the strengths identified in Community Forum 1 were also raised at the Kickoff Open House and can be found in elements of the current Denton Plan, including community, environment, access, history, and downtown vitality. Each element will be assessed for its progress, relevance, and future needs in the update process to ensure that we maintain and promote what people love about Denton as much as possible.

[Click here for the complete list of responses for Denton’s “Strengths” from Community Forum 1.](#)

Weaknesses

Common themes that emerged from the list of top weaknesses include:

Community Forum 1 – November Series

- Traffic congestion / traffic safety
- Street and sidewalk disrepair
- Lack of sidewalks
- Lack of incentives for infill development
- Parking problems (downtown, university areas)
- Inconsistent/restrictive development regulations and permitting
- Lack of diverse housing opportunities
- Conflicts between neighborhoods and universities

Tables Every table participant had an opportunity to provide their thoughts on the Strengths, Weaknesses, Opportunities, and Threats (or Challenges) of Denton, as facilitators guided the conversation and scribes recorded the comment succinctly through the 4 topics of the Visioning exercise to answer the query: "How do you see your Denton today and how do you imagine it in the future?"



February Series



University Series

- Lack of planning for gas wells
- Unattractive gateways / streetscapes
- Lack of tree preservation
- Poor air quality
- Low frequency transit service
- Not retaining graduates
- Tax exempt status of universities
- Lack of community involvement

Community Forum 1 – Spanish Series

- Barriers to creating new businesses
- Permitting process
- Opportunities for minority advancement
- Retaining students from the universities
- Lack of protection for natural beauty and environment
- Lack of employment opportunities
- Underrepresentation of minorities in positions of authority
- Need for greater food diversity
- Schedule of public transportation limiting
- The mall needs to be updated
- Not adequate parks
- More night life options
- Volunteer opportunities lacking

A facilitator at the Spanish series encourages attendees to identify items they considered to be Strengths of Denton.



Community Forum 1 – February Series

- Road conditions / traffic congestion
- Lack of community / neighborhood services
- Unbalanced development
- Poor drainage
- Poor air quality
- Lack of water conservation
- Pipelines
- Not business friendly
- Parking problems (downtown, universities)
- Onerous development process / fees
- Lack of street connectivity
- Transient population / homelessness
- Poor pedestrian and bike access
- Lack of image for the city
- Vacant buildings
- Aging infrastructure
- Lack of transit oriented development (TOD)

Community Forum 1 – University Series

- Quality of streets and road conditions
- Range of public transit options and schedule
- Air quality
- Inconsistency of zoning and planning regulation
- Crime
- Limited employment opportunities
- Ample sidewalks and pedestrian facilities
- Ample bike lanes and bicycle connectivity
- Friendly to businesses
- Civic involvement
- Vacancy rate, dingy
- Limited night life options
- Transient student population
- Poor student retention due to lack of job options
- Lack of welfare/ social services
- Retail options
- Denton school district
- University and students impact on housing and physical environment
- Traffic congestion

Relevance to Denton Plan 2030:

Negative issues related to transportation, infrastructure, environment, housing and neighborhoods, and economic development were addressed in the current Denton Plan. It is important to assess what issues persist within each of

these elements and to identify new issues that have arisen since the plan was adopted and work toward addressing them. For instance, traffic and parking problems seem to remain a consistent issue today, while transit service and gas well proliferation have emerged as issues since the adoption of the current Denton Plan and will be incorporated in the update process.

[Click here for the complete list of responses for Denton's "Weaknesses" from the Community Forum 1.](#)

Exercise 2: How do we imagine our community in the future?

Participants were asked to consider Denton's future in terms of its challenges and opportunities.

Challenges: What conditions or trends do we see as challenges that we should prepare for or prevent?

Opportunities: What conditions or trends do we interpret as opportunities to make our community better in the future?

As in Exercise 1, all of the participants' responses were written down and top "votes" were recorded for each issue to identify the top challenges and opportunities.

Challenges

Common themes that emerged from the list of top opportunities include:

Community Forum 1 – November Series

- Keeping pace with exponential growth (infrastructure, transportation, utilities, schools, housing, social services)
- Keeping people in Denton
- Threats/barriers to small businesses (codes, taxes, big box)
- University expansion into neighborhoods
- Maintaining quality education
- Staying competitive in the region (jobs, business, skilled workers)
- Aging infrastructure
- Attracting diverse housing options
- Maintaining historic/cultural identity with new growth
- Proliferation of gas wells

Through the prioritization exercise, each table reviewed the comments on each of the topic areas and voted on their "top three" in order to identify community priorities. Facilitators led the tables in finding commonalities, and encouraged grouping of similar comments.



November Series



February Series



November Series

Community Forum 1 – Spanish Series

- No Latinos in positions of authority
- Illiteracy an increasing problem due to lack of recognition of needs of Latinos
- Importance of recognizing Latinos as the a part of the future for the City

Community Forum 1 – February Series

- Lack of funding resources
- Balancing growth with quality of life
- Protecting natural resources, rural character, green space
- Threats to small businesses
- Fear of change
- Coordinating plans / visions between Denton, universities, county, state, other municipalities, etc.
- Obstacles to redevelopment /green development
- Air quality impacts
- Allowing for diverse housing choices
- Future energy and water demand
- Denton's image / maintain downtown, eclectic atmosphere
- Retaining and attracting young professionals
- Socioeconomic status / changing demographics
- Traffic / downtown truck traffic / parking
- Impacts of gas well drilling
- Limited rail access
- Need for social services

Community Forum 1 – University Series

- Not enough support for independent businesses
- Responsible development of sustainability programs

- Business community
- Collaboration between UNT and TWU, and the City
- Traffic, need to expand I-35
- Overly rapid growth to be accommodated by adequate infrastructure and sustainable development pattern
- Attracting new businesses and employment opportunities
- Policy approval/ city regulation
- Transient population/ retention of university graduates
- Preserving small town feel
- Balanced land uses
- Adequate water supply
- Use and appreciation for public transit
- School overcrowding
- Need to get handle on climate change and mitigation
- Pollution
- Road quality
- Maintenance of infrastructure

Relevance to Denton Plan 2030:

The Denton Plan 2030 update needs to consider negative trends that, if left unchecked in a growing community, could have serious impacts on the quality of life and economic health of the City. Another key component of the plan update is to address issues that are considered strengths, but may have facets that could prove challenging in the future. For example, the presence of the universities has been highlighted as a major strength in the community forum and other feedback opportunities, but the potential impacts of university expansion into adjacent neighborhoods was also highlighted as a major challenge to be addressed in the plan.

[Click here for the complete list of responses for Denton's "Challenges" from the Community Forum 1 Series.](#)

Opportunities

Common themes that emerged from the list of top opportunities include:

Community Forum 1 – November Series

- Hub of medical and educational facilities
- Increase diversity/mix of employment opportunities

Through the prioritization exercise, each table reviewed the comments on each of the topic areas and voted on their "top three" in order to identify community priorities. Facilitators led the tables in finding commonalities, and encouraged grouping of similar comments.



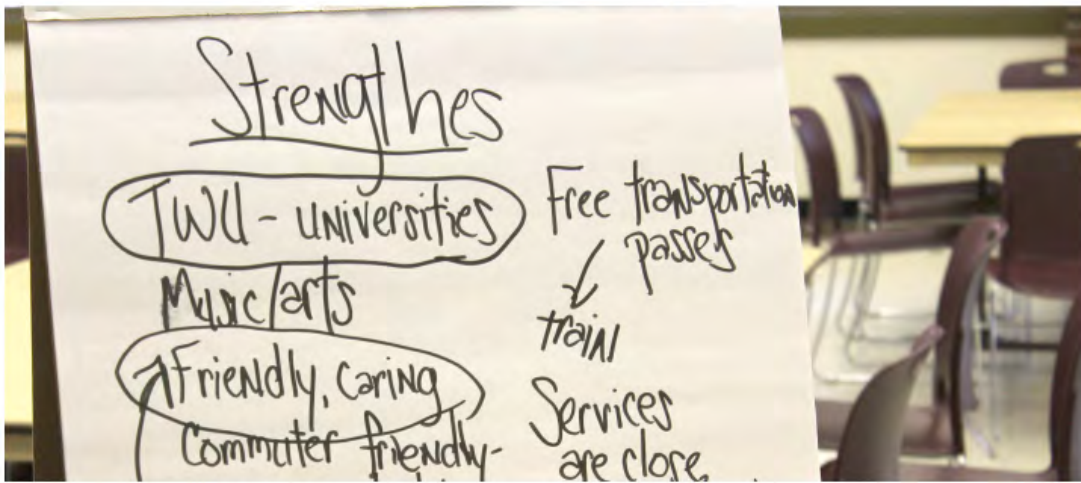
February Series



February Series



November Series



University Series

Expansion of the rail system

- Talents of university graduates
- More unique shopping opportunities
- Provide resources and venues for artists and musicians
- Expand and improve special events
- Capitalize on economic development downtown
- Nurturing and involving the community/neighborhoods
- Encourage entrepreneurship / build on the entrepreneurial spirit
- Great regional access
- Denton Municipal Airport – opportunity for economic growth
- Maintain local character
- Improve educational attainment
- Increase sustainability programs
- Expand economic/tech partnership (Discovery Park)
- Improve mobility/transit connections (downtown/universities)

Community Forum 1 – Spanish Series

- Land available for development

Community Forum 1 – February Series

- Highly educated workforce
- Reuse of existing / historic buildings
- Infill development opportunities
- I-35E expansion
- Expansion of social services – social service hub
- Expand transit and bike/pedestrian connections – TOD opportunities
- Redevelopment opportunities – mall renovation

- Leveraging universities to promote local industry
- Denton as a destination – vibrant downtown, variety of entertainment / restaurants
- Arts, music, and cultural opportunities
- Promote Denton's quality education
- Airport
- Increase diverse housing opportunities
- Emergency services – mini fire stations
- Attract businesses and increase the tax base

Community Forum 1 – University Series

- Universities contribution to economy and educated workforce
- Community events/ arts and culture scene
- Retail and shopping options
- Location and access to adjacent cities/ highway
- Diversity of people
- Job growth
- Strengthening of bicycle program
- Improve use of parks and environmental program
- Harnessing growth of businesses, the economy
- Affordable housing and ability to attract residents
- Sustainability programs and environmental awareness
- Airport
- Promotion and growth of public transportation system
- Medical industry
- Use of social media for promotion of City/ events

Relevance to Denton Plan 2030:

In considering opportunities for Denton's future, some participants felt strongly that the presence of the universities and medical facilities is an important opportunity for economic growth in Denton. At the same time, local businesses and creative/unique entrepreneurs are also vital to Denton's future growth. Maintaining excellent access in the region via expressways and transit are also considered key to Denton's successful future, and improving connectivity between major activity nodes (universities, downtown, etc.) are important opportunities. Some participants also want to maintain Denton's unique image and natural systems while accommodating growth and economic development. Many of these issues are in elements of the current Plan that will be addressed and expanded upon in the update.

[Click here for the complete list of responses for Denton's "Opportunities" from the Community Forum 1.](#)

What happens at the end of Community Forum 1 and what happens next?

Following each forum, participants were thanked and guaranteed that their hard work would be incorporated into feedback that would help to inform the community Vision Statement representing their issues and aspirations. The input of each forum was tabulated by comment, grouped by theme, and counted so that every issue and vote would not be missed!



Denton's Planning Director Brian Lockley gave closing remarks and informed participants of how their input would be used in next steps at the November series



Mayor Mark Burroughs discussed community issues at the November series and thanked attendees for their participation.



Citizens of all ranges of ages attended the forums representing a range of opinions and input.

Community Survey: Issues and Aspirations

After completion of the Community Forum 1 series and data gathering, citizens helped validate the top themes received through community input on Denton's strengths, weaknesses / challenges, and opportunities through a community survey.

175 persons completed an online "Issues and Aspirations" survey in which participants ranked the importance of factors identified as community strengths, weaknesses / challenges, and opportunities in the community forums. In addition, the same ranking exercise was conducted through a statistically valid telephone survey among 300 randomly selected residents. While the relative rankings varied slightly, both surveys generally confirmed the voting pattern revealed in the forum input. Among all sources of input, consensus strengths included the universities, downtown, the arts and music scene and the character of the community, while consensus weaknesses included traffic, infrastructure and unbalanced growth. Consensus opportunities included greater leveraging of higher education and the medical community, encouraging entrepreneurship, and improved mobility choices.

[Click here to see the tabulated results of the online survey.](#)

[Click here to see the tabulated results of the phone survey.](#)

Here is a list of the files referenced in this Recap:

- [Overview of the Denton Plan 2030 and Community Forum 1 Process Presentation](#)
- [Brief summary video of November Series](#)
- [Complete list of responses – Strengths](#)
- [Complete list of responses – Weaknesses](#)
- [Complete list of responses – Challenges](#)
- [Complete list of responses – Opportunities](#)
- [Combined list of Community Forum 1 – November Series responses](#)
- [Combined list of Community Forum 1 – February Series responses](#)
- [Combined list of Community Forum 1 – University Series responses](#)

Thank you to the Community Forum 1 participants for their great input and ideas!

Missed Community Forum 1?

Don't worry, there are many more opportunities to get involved and stay engaged:

Visit www.DentonPlan2030.com for information on upcoming events

Join the conversation at www.EngageDenton.com

Like us on Facebook: www.Facebook.com/DentonPlan2030

Follow us on Twitter: www.twitter.com/cityofdentontx

Sign up for Denton Plan 2030 eNews at www.cityofdenton.com/eNews

Volunteer to host a Community Conversation

Please visit the website or email information@dentonplan2030.com for more information.



The input from Community Forum 1 series were tabulated by theme and used to inform the Vision Statement.

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Our path to the future

Community Forum 2 Series Recap

Community Forum 2 is complete, and the results are in!

Community Forum 2 occurred in October and November 2013, and the events were held at various dates and locations in order to encourage the greatest amount of input and attendance. Approximately 100 total participants attended one of the four open houses to learn about the issues facing Denton and to express their preferences regarding future growth and community character. The following events made up the Community Forum 2 series and are described below:

- Thursday, October 17, 2013 – Denton Civic Center
- Tuesday, October 29, 2013 – McConnell Hall, University of North Texas
- Wednesday, October 30, 2013 – Student Union Room #207, Texas Woman's University
- Saturday, November 9, 2013 – Martin Luther King, Jr. Recreation Center

The second Community Forum in the Denton Plan update process gave the community an opportunity to vote on their preferred form of growth for the future of Denton. Scenarios were developed using the input from Community Forum 1, other feedback, meetings, and the refinement of the Community Vision Statement. The Vision Statement will guide the development of each element of the plan, including action steps to make the plan a reality. ([see Draft Community Vision Statement](#))

What happened at Community Forum 2?

Each of the events in the Community Forum 2 series were presented in a similar format in order to solicit input that can be compared equally.



Stations 1 and 2 gave participants a background of how the Vision Statement was developed, and valuable information about land use and density that would help them evaluate the future growth scenarios.



Consultants and Denton staff were available to answer questions about the scenarios and findings.

Participants visited each of five stations dedicated to an important decision or presenting important information that would help to guide the decision-making process. Stations included:

Station 1: Welcome

Station 1 provided an overview of the Community Forum 2 open house, Community Forum 1, and a summary of the Draft Community Vision Statement. The Draft Community Vision Statement was informed by the public input at CF1, and participants were given their own copy of the complete draft. The top five strengths, opportunities, weaknesses, and challenges from Community Forum 1 were listed to provide context.

Station 2: Understanding Scenarios

Station 2 gave an introduction to the Growth Trend Scenario (i.e. “business as usual”) and the Alternative Growth Scenarios with illustrations of different densities and descriptions of development types. This information was intended to provide a frame of reference to evaluate the next stations.

Station 3: Understanding the Fiscal Picture

Station 3 illustrated the financial structure of the City of Denton and several aspects of the City’s budget. Data regarding the City’s financials was used to calculate the fiscal impact findings (i.e. cost to the city) for each Growth Scenario.

Station 4: Comparing Alternative Scenarios

Station 4 provided the opportunity for community members to vote on their preferred growth pattern for Denton. The Growth Trend Scenario and three Alternative Growth Scenarios were presented with explanatory text and a table of indicators (ex. percentage of jobs within ¼ mile of existing transit service). Indicators included initial findings on environmental and fiscal impact that helped inform participants’ decisions in voting for their preferred Scenario. The station concluded with a summary table of findings and an evaluation of each against the Community Vision Statement. Community members were asked to vote for their first and second choices for their future Denton.

Station 5: Community Character Considerations

Station 5 explored four Community Character Considerations, which are elements impacting the urban environment that go beyond density and land use and may be implemented in any Growth Scenario. The four Considerations were developed from community desires in the Community Vision Statement. Community members were asked to vote for their first and second choice Community Character Consideration for their future Denton.

Download a printable summary of the five stations [here](#) to see how information was presented to inform the community process.



Participants were asked to review and vote on Growth Scenarios that will influence Denton’s growth and land use decisions in the next 15 to 20 years at Station 4.

Community Forum 2 Results

Station 4’s Preferred Scenario Votes

Upon viewing and evaluating the four Growth Scenarios based on the information presented in Station 4 as well as the information from Stations 2 and 3, participants were asked to vote on their preferred Scenario for the future of Denton. Participants were able to vote for a first and second choice. The tally of the voting is shown in the table below. For the overall score, a weighted approach was used in which first choice votes were counted twice and second-choice votes

once. The final score represents the weighted combination of all votes received through the four Community Forum 2 events.

What is your First Choice Preferred Scenario?			What is your Second Choice Preferred Scenario?		
1) Growth Trend	16	16%	1) Growth Trend	1	1%
2) Centers Growth	27	27%	2) Centers Growth	23	34%
3) Corridors Growth	22	22%	3) Corridors Growth	25	37%
4) Compact Growth	35	35%	4) Compact Growth	19	28%
Total	100	100%		68	100%

Total Weighted				
	First Choice	Second Choice (x1)	Total	Percent
1) Growth Trend	32 (16x2)	1	33	12%
2) Centers Growth	54 (27x2)	23	77	29%
3) Corridors Growth	44 (27x2)	25	69	26%
4) Compact Growth	70 (35x2)	19	89	33%
Total	200	68	268	100%

Note: Percentages are rounded.

The Compact Growth Scenario received the greatest number of votes—one third of all votes (33%). This Scenario was followed by Centers Growth Scenario (29%) and Corridors Growth Scenario (26%), each with just over a quarter of all votes. The Growth Trend Scenario received the least number of votes (12%). This information will be used to shape the Preferred Growth Concept that will lead to the development of the Future Land Use Plan for Denton.

Station 4's Development Priorities Votes

To gain a better understanding of why someone voted for a particular Scenario, participants were asked to vote for their top three priorities for future development in Denton. The results of this voting process are shown in the table below:

What are your overall priorities for future development in Denton?		
More Mixed Use	41	17%
Jobs Close to Home and Accessible by Walking and Transit	44	18%
Reduced Greenfield Development	33	14%
Improved Transit Access and Service Throughout the City	37	16%
Less Waste and Water Use	19	8%
Increased Walkability and Trails Throughout the City	53	22%
Lower Infrastructure and Service Costs	11	5%
Total	238	100%

Note: Percentages are rounded.

Based on the total number of votes, the top three priorities were: 1) Increased Walkability and Trails Throughout the City (22%); 2) Jobs Close to Home and Accessible by Walking and Transit (18%); and 3) More Mixed Use (17%). These key priorities will be used to refine the Preferred Growth Concept, ensuring that the priorities will be able to be met with the proposed development pattern. The emphasis that the community placed on these development priorities will also help determine the importance of weighing the elements of the Preferred Growth Concept and eventually including policies related to these themes in Denton Plan 2030.

Station 5's Community Character Considerations Votes

Community Character Considerations are items that can be implemented in any Growth Scenario that reflect important issues specific to Denton. Similar to the Growth Scenarios, community members were asked to vote for their first and second choices to include within the Preferred Growth Concept. As with the Growth Scenarios, a weighted approach was used to determine the overall score in which first choice votes were counted twice and second choice votes once. The voting for Community Character Considerations revealed the following preferences:

Placemaking & Urban Vitality received the highest number of votes by a large margin (38%). Tied for second and third most important Community Character Considerations were Green Infrastructure and Multi-Modal Access (22%). Although Conservation received the fewest number of votes, it received the highest number of second choice votes, demonstrating that it was still an important item for many community members.

What is your First Choice Community Character Consideration			What is your Second Choice Community Consideration		
1) Green Infrastructure	20	22%	1) Green Infrastructure	15	22%
2) Multi-Modal Access	18	18%	2) Multi-Modal Access	20	29%
3) Placemaking & Urban Vitality	42	46%	3) Placemaking & Urban Vitality	12	18%
4) Conservation	12	13%	4) Conservation	21	31%
Total	92	100%		68	100%

Total Weighted				
	First Choice	Second Choice (x1)	Total	Percent
1) Green Infrastructure	40 (20x2)	15	55	22%
2) Multi-Modal Access	36 (18x2)	20	56	22%
3) Placemaking & Urban Vitality	84 (42x2)	12	96	38%
4) Conservation	24 (12x2)	21	45	18%
Total	184	68	252	100%

Note: Percentages are rounded.

Summary

The input received at Community Forum 2 was very insightful for informing the future development pattern of the City of Denton over the next 15 to 20 years. Community members were strongly in support of a Compact Growth pattern for the city, and for the clustering of development around key areas (i.e. Centers or Corridors) rather than fragmented sprawl as shown in the Growth Trend. A compact development framework was further supported by the prioritization of mixed-use development, linking the community through walkable pedestrian networks, the potential for jobs located closer to home, reducing commuting times, and creating balanced, mixed-use neighborhoods. Finally, the community confirmed that maintaining and increasing “Placemaking and Urban Vitality” is an essential attribute of their future Denton. This reinforces the need for maintaining a strong downtown core and sense of place in existing character areas of Denton, allowing new development to be complementary to those areas, as well as providing areas of new development that can be centers of community in the future. The desire for a Compact Growth pattern was further reinforced by the community’s voting for multi-modal transportation options, which are more easily accommodated through compact development, as well as protecting environmental resources through the inclusion of Green Infrastructure elements and Conservation areas. Many of these elements can be acknowledged through policy in the updated Denton Plan 2030, as they affect much more than just new growth.

What happens after Community Forum 2?

The votes and ideas from CF2 will be used to prepare Denton’s Preferred Growth Concept, which will serve as the basis for future land use and the policies, strategies, and actions of the updated Denton Plan. The Preferred Growth Concept will be presented at Community Forum 3 in 2014.

Please stay tuned to www.DentonPlan2030.com for updates!

Thank you to the Community Forum 2 participants for their great input and ideas!

Missed Community Forum 2?

Don’t worry, there are many more opportunities to get involved and stay engaged:

Visit www.DentonPlan2030.com for information on upcoming events

Join the conversation at www.EngageDenton.com

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**APPENDIX C:
METHODOLOGIES**

Denton Plan 2030 Growth Trend Scenario Methodology

Introduction

The Growth Trend Scenario illustrates the 15- to 20-year development pattern that is likely to occur in Denton based on projected population, recent trends, and existing conditions and regulations. In simple terms, it represents a “what the future will look like if we do nothing different” scenario.

This document describes how the City of Denton is expected to grow over the next 15 to 20 years, assuming growth continues in a pattern similar to recent decades. Key data inputs, assumptions, and steps that were taken to prepare the Denton Growth Trend Scenario are summarized in the following sections. The Growth Trend Scenario map (Figure 3) indicates, conceptually and in broad strokes, where residential and non-residential growth is most likely to occur.

Existing Conditions and Trends

The following facts, derived from data analysis of population and land use trends, were key in constructing the assumptions for the Growth Trend Scenario, as described later in this document:

- Denton’s population increased by 41 percent between 2000 and 2010, growing from 80,537 to 113,383 people. This was its most intense decade of growth since the 1960s.
- New projections forecast an additional 93,951 residents by 2030.
- Denton has a higher proportion of single-person households than Denton County and Texas as a whole. Thirteen percent of these were residents aged 65 or older. In the same year (2010), only 22 percent of Denton County’s households and 25 percent of all households in the state of Texas were single-person households.¹
- The population of Denton is fairly young. The 18 to 24 age cohort comprised one quarter of the city’s population in 2000 and 2010. However, the city’s adult population has seen an increase in the number of older residents, generally due to the aging of the baby boomer generation.
- These demographic shifts involve changes in housing preferences that Denton’s housing market does not meet today, such as more multi-family housing and units for singles and young families.

¹ Population projects were derived from the report *Economic and Demographic Projections for the City of Denton: An Update*,” Prepared by Center for Economic Development and Research; University of North Texas. April 2011. Data were based on the U.S. Census Bureau’s American Community Survey, 2010.

- Denton has annexed over 20,500 acres of land since 1999.
- Between 1967 and 2000, a total of 24 natural gas well permits were issued in the City of Denton. Between 2000 and 2010, almost 500 permits were issued. Development opportunities are limited in areas with high concentrations of natural gas wells and associated pipelines.

Trend Factors and Methodology

1. Projected Population and Housing / Non-Residential Growth

In order to estimate the 15- to 20-year development pattern that is likely to occur in Denton in a “business as usual” scenario, the Growth Trend Analysis begins with an estimate of future housing demand based on specific factors including current and projected population, household size, and existing housing units. Table 1 illustrates the data and calculations used to arrive at projected 2030 housing demand, which is a factor of projected population growth (projected minus existing population) divided by existing household size. As indicated in Table 1, it is estimated that Denton will need an additional 37,282 housing units to accommodate its projected population in 2030.

Table 1 - Population and Housing Growth

2010 Population (1)	113,383
2010 Household Size (2)	2.52
2011 Total Housing Units (3)	43,755
2030 Population Projection (4)	207,334
2011-2030 Population Change (5)	93,951
2030 Housing Demand (6)	37,282
Total Projected 2030 Housing Units (7)	81,037

(1) Source: US Census Bureau

(2) Source: 2010 US Census

(3) Source: American Community Survey 2007-2011 5-year estimates

(4) 3% Annual Growth Source: University of North Texas Center for Economic Development and Research

(5) 2030 population projection - 2010 population

(6) 2011 -2030 population change / household size

(7) 2030 housing demand + 2011 total housing units

2. Residential Demand

The next step in the Growth Trend Analysis involves estimating projected housing unit demand by type (single family, multi-family, and other) and the associated land area required to accommodate it. Table 2 shows the projected residential units by type as a proportion of existing (2011) units. For instance, 54 percent of existing units are single family and 54 percent of projected units will be single family, resulting in about 20,000 additional single family units by 2030. Using the existing proportion of housing types reflects the *status quo* of development patterns in the city.

Projected units were then multiplied by the existing acres per unit to arrive at the projected acreage needed to accommodate each housing type. Projected acreage was then adjusted to accommodate an additional 25 percent land area to incorporate associated roads/infrastructure. As shown in Table 2, the greatest housing demand is in the category of single family detached, which will also require the vast majority of land area in the future.

Table 2 – Residential Demand by Type

	2011 Units (1)	% of 2011 Units	Existing Dev. Residential Area (AC) (2)	Existing Density (3)	Acres per unit (4)	2030 New Units (5)	New Residential Area (AC) (6)
1 unit detached (Residential Single Family)	23,548	53.818%	8,134	2.90	0.35	20,064	8,663
1 unit attached, 2-4 units, Other (Residential Other)	5,826	13.315%	1,024	5.69	0.18	4,964	1,091
5+ units (Residential Multi-Family)	14,381	32.867%	963	14.94	0.07	12,254	1025
Total	43,755		10,121			37,282	10,779

(1) Source: American Community Survey 5-year estimates

(2) Source: City of Denton GIS

(3) 2011 units / existing dev. residential acres

(4) Existing residential acres / 2011 units

(5) 2030 housing demand x % of total units

(6) (Acres per unit x 2030 new units) + 25% of land area for roads and infrastructure

3. Non-Residential Demand

Next, the Growth Trend Analysis determined the amount of non-residential development needed within the next 15 to 20 years. This calculation was done by applying the current proportion of residential to non-residential development (in acres) to the new residential area (in acres) projected in Table 2. This resulted in a combined total of 5,282 acres needed for commercial, industrial, and institutional development to support residential growth in Denton. The summary of calculations is shown in Table 3.

Table 3 - Non-Residential Demand by Type

	Existing Dev. Non-Residential Area (AC) (1)	% of Existing Dev. Residential Area (2)	New Non-Residential Area (AC) (3)
Commercial	2,711	26.784%	2,309
Industrial	1,304	12.888%	1,111
Institutional (Government + Institutional)	2,940	29.047%	1,861
Total	6,955	68.719%	5,282

(1) Source: City of Denton GIS

(2) Existing dev. non-residential acres / total existing dev. residential acres

(3) % of existing dev. residential area x new residential acres

Note: It is assumed that some major institutions that already encompass significant portions of land within the city (26% of the total institutional land) would not continue to grow in the same proportional rate to other uses within the city.

4. Land Consumption

The total amount of new land that will be needed to absorb Denton’s projected growth is summarized in Table 4 – Land Consumption. This combines the new residential and non-residential development calculated as described above. A total of 16,061 acres will be needed to accommodate Denton’s projected 2030 growth. The estimated location of this new growth, as depicted in the Growth Trend Scenario, is expected to follow similar patterns of development to recent trends. The scenario is depicted in Figure 3 and was developed based on a combination of factors, including the Projected Population and Housing/Non-Residential Growth analysis, Susceptibility to Change analysis, and assumptions for placing growth. This methodology is described in Sections 5 and 6 below.

Table 4 - Land Consumption

Total Acreage (1)	60,900
Dev. Residential Area (AC) (2)	10,121
Total Units (2011) (3)	43,755
Avg. Acres Per Unit (4)	0.23
New Projected DUs (5)	37,282
New Residential (AC) (6)	10,779
New Non-Residential (AC) (7)	5,282

(1) Total Municipal Acreage

(2) Existing residential acres

(3) Source: American Community Survey 5-year estimates

(4) Average acres per unit (developed residential area / total units)

(5) Projected new dwelling units (2011 -2030 population change / household size)

(6) New residential area = (average acres per unit x new dwelling units)

(7) New non-residential acreage estimated at 69% of new residential area

5. Susceptibility to Change Analysis

The Growth Trend Scenario assumes that much of the necessary growth in Denton would occur in areas that are undeveloped, unconstrained, and located within the city limits (note that it is assumed that the non-annexation agreement areas will be annexed by 2030). In order to estimate the areas where growth would occur beyond that, a Susceptibility to Change analysis was conducted, examining the geographic areas most suitable for development and likely to change. The analysis is informed by layering a number of susceptibility indicators including natural features, topography, and floodplains, areas of existing or planned development, access to existing roads and infrastructure, and amenities. This methodology is described below:

Methodology

Using GIS, WRT created a series of raster files representing each of the selected susceptibility indicators. Each file was given a numeric score from 0 to 10 to weight how likely the indicator is to influence development. The higher the score, the more likely the land will be developed in the future. Each indicator used in the analysis is described below:

1. *Out of Bounds Areas:* The analysis assumes certain portions of the city are out of bounds and not susceptible to future development or redevelopment patterns. This land includes waterways and existing parks. The “out of bounds” areas are excluded from the analysis and are shown in white on the map (Figure 2).

Excluded:

- *Waterways:* Includes undevelopable waterways and bodies of water such as Hickory Creek, Cooper Creek, Pecan Creek, and the Trinity River as well as ponds and small lakes. The scale of analysis includes a buffer around these waterways that are also excluded.
 - *Parks:* Publicly owned parks within the City of Denton.
2. *Factors of Susceptibility:* After excluding the areas considered out of bounds, the Susceptibility to Change analysis was applied to remaining lands within the city. Specific portions were given a low susceptibility score, meaning these areas are considered least likely to change in the future. Lands within the lowest susceptibility areas were given a score of '0' to indicate their likeliness of being developed. This score was defined given that individual susceptibility indicators do not increase the susceptibility of land to develop. Lands with higher susceptibility were given a higher score, with '10' representing the highest susceptibility. As such, each individual factor may or may not contribute to any given area's likelihood of development.

All factors were weighted equally with areas likely to change of a higher value than those where change is not likely. These factors are illustrated in Figure 1 and described below.

- *Environmentally Sensitive Areas:* Existing areas of environmental sensitivity include the 100-year floodplain identified in the preliminary Flood Insurance Rate Maps (FIRMs), as well as upland and water-related habitat. As development near the ESA's is discouraged, *susceptibility decreases as proximity to the ESA's increases.*
- *Slope:* There are a number of areas in Denton that have slopes greater than 25 percent which typically make development more cumbersome. Although Denton is not a city particularly limited by topography, this factor was still included to inform the Analysis. *Susceptibility decreases as slope increases.*
- *Gas Wells and Pipelines:* Gas wells and pipelines have proliferated in and around the City of Denton in recent decades. While the impact of gas wells and pipelines on future development is still unknown, they have the potential to impact where future development is allowed. Therefore, *susceptibility decreases as proximity to concentrations of gas wells and pipelines increases.*
- *Proximity to Roads:* Land in proximity to existing roads is more likely to develop given that access is a primary factor in an area's desirability for development. Areas with access to I-35E and I-35W are particularly susceptible to change. *Susceptibility decreases as distance from roads increases.*

- *Non-annexation Agreement Areas:* In the City of Denton, the Annexation Plan includes land that may be annexed in the future. If the City does not act on its intent to annex, the City will lose the ability to annex said land. Therefore, the analysis treated land within non-annexation agreements as equally as likely to develop as land within the city. (Note: this is the area previously referred to as the 5-year Annexation Plan).
- *Proximity to Existing Development:* Land in close proximity to existing development signifies importance of land use adjacency and development trends as to where new development will occur. *Susceptibility increases as proximity to existing development increases.*
- *Proximity to Schools:* Areas close to existing schools are desirable for residential development as they offer a key facility needed to attract new residents. While additional schools will be provided as development increases, development is more likely to occur where a school already exists. *Susceptibility increases as proximity to schools increases.*
- *Water and Sewer Service Areas:* Development is more likely to occur where infrastructure already exists. *Susceptibility increases within current Water and Sewer Service Areas.*

Once the Susceptibility to Change analysis was conducted, the overall analysis was applied to the entire city using each susceptibility indicator added together to obtain a cumulative “score” of susceptibility. Land that was considered particularly susceptible likely fell under multiple categories of susceptibility and thus was ranked the highest. The individual susceptibility layers are shown in Figure 1, and the combined susceptibility results are overlaid in the composite Susceptibility to Change map shown in Figure 2.

Figure 1

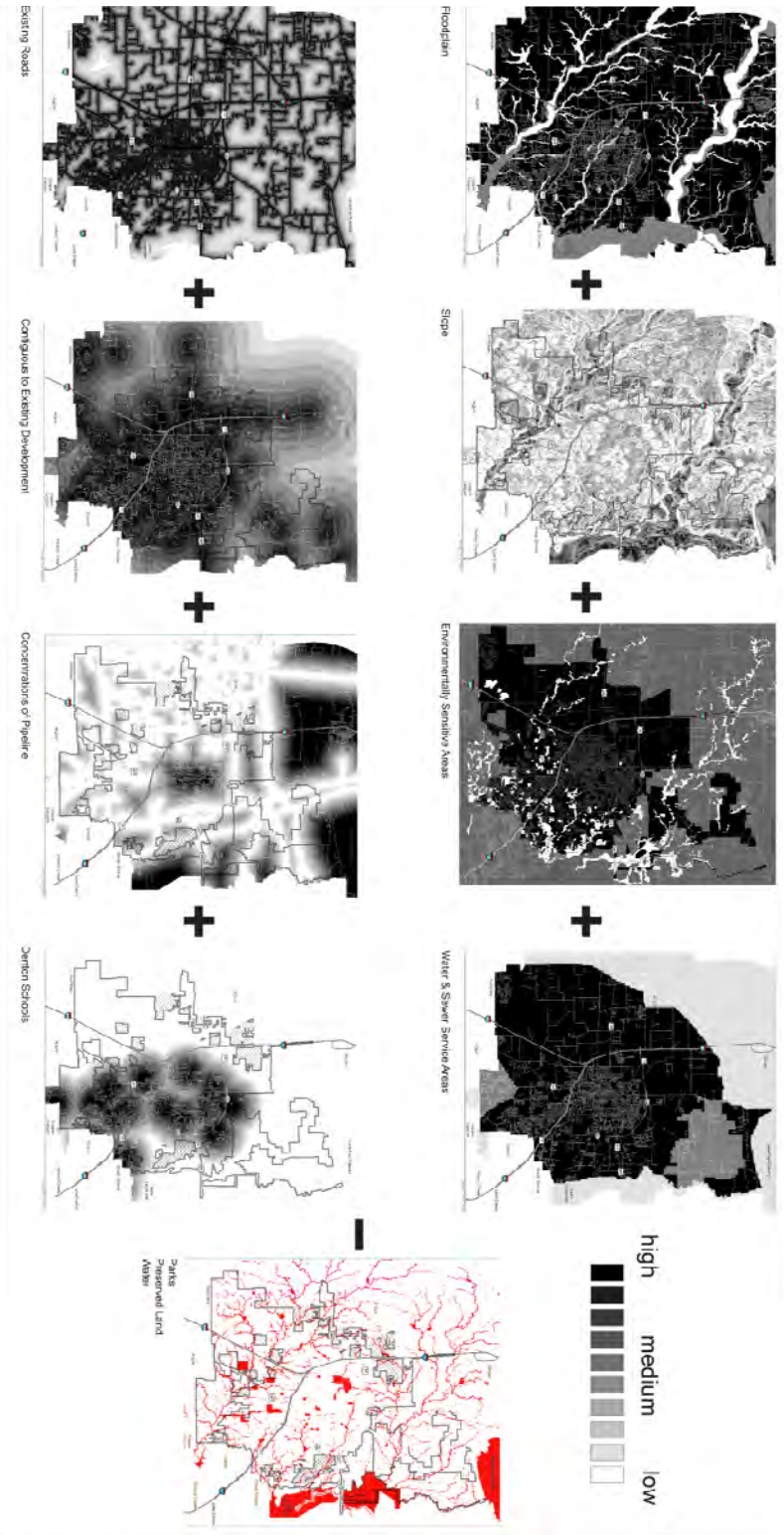
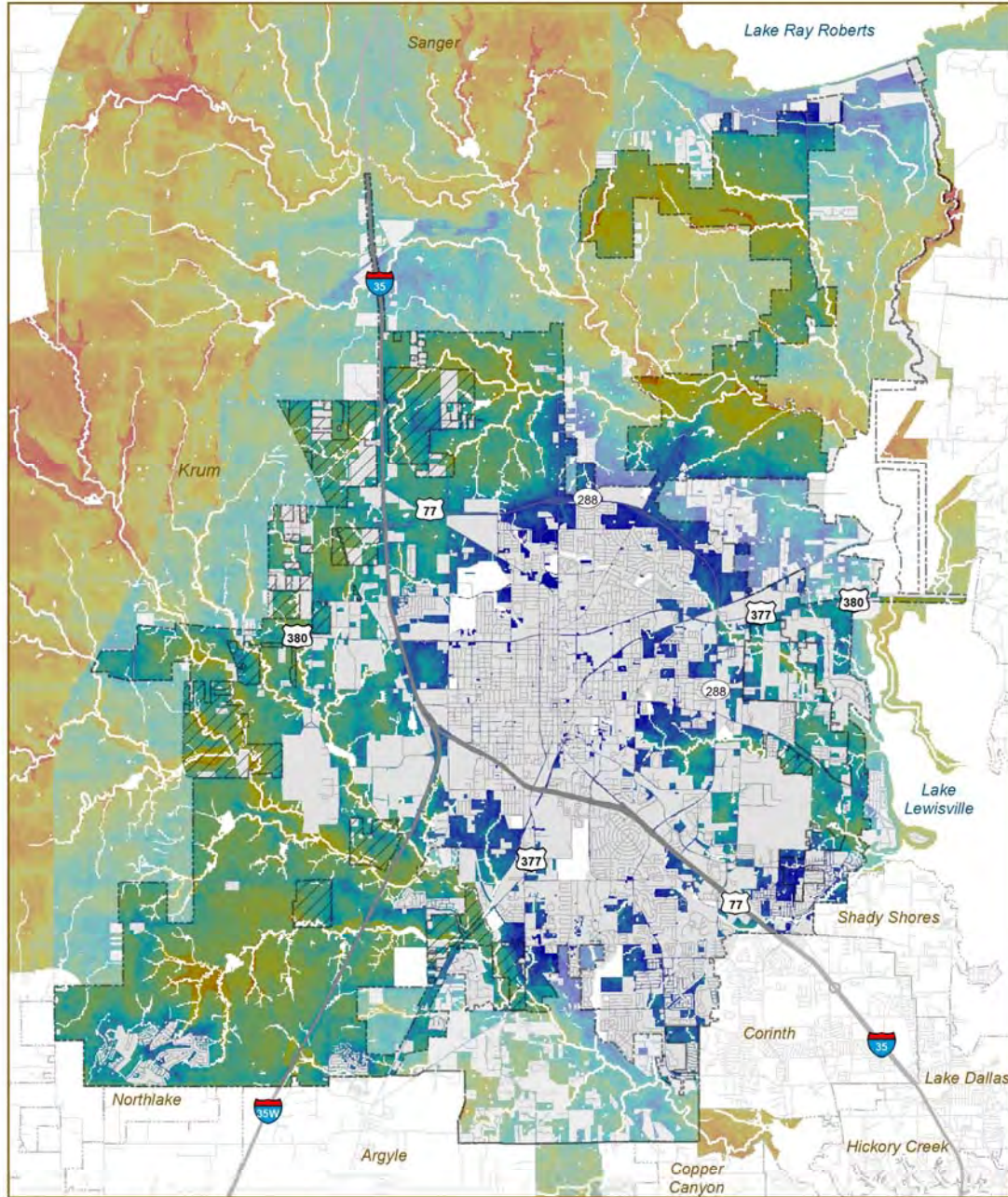




Figure 2



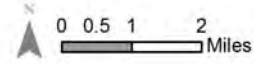
Source: City of Denton

Susceptibility to Change

-  City Limits
-  Nonagreement Annexation Areas
-  Existing Development

-  Highest Susceptibility*
-  Lowest Susceptibility*

* White indicates areas excluded from susceptibility (ie. Waterways, Parks, etc)



Growth Trend Scenario

Using the projected growth calculations in Steps 1 through 4 and the Susceptibility to Change analysis in Section 5 as the starting point, the Growth Trend Scenario (Figure 3) estimates where development is likely to occur over the next 15 to 20 years if current trends continue within the city's existing city limits.

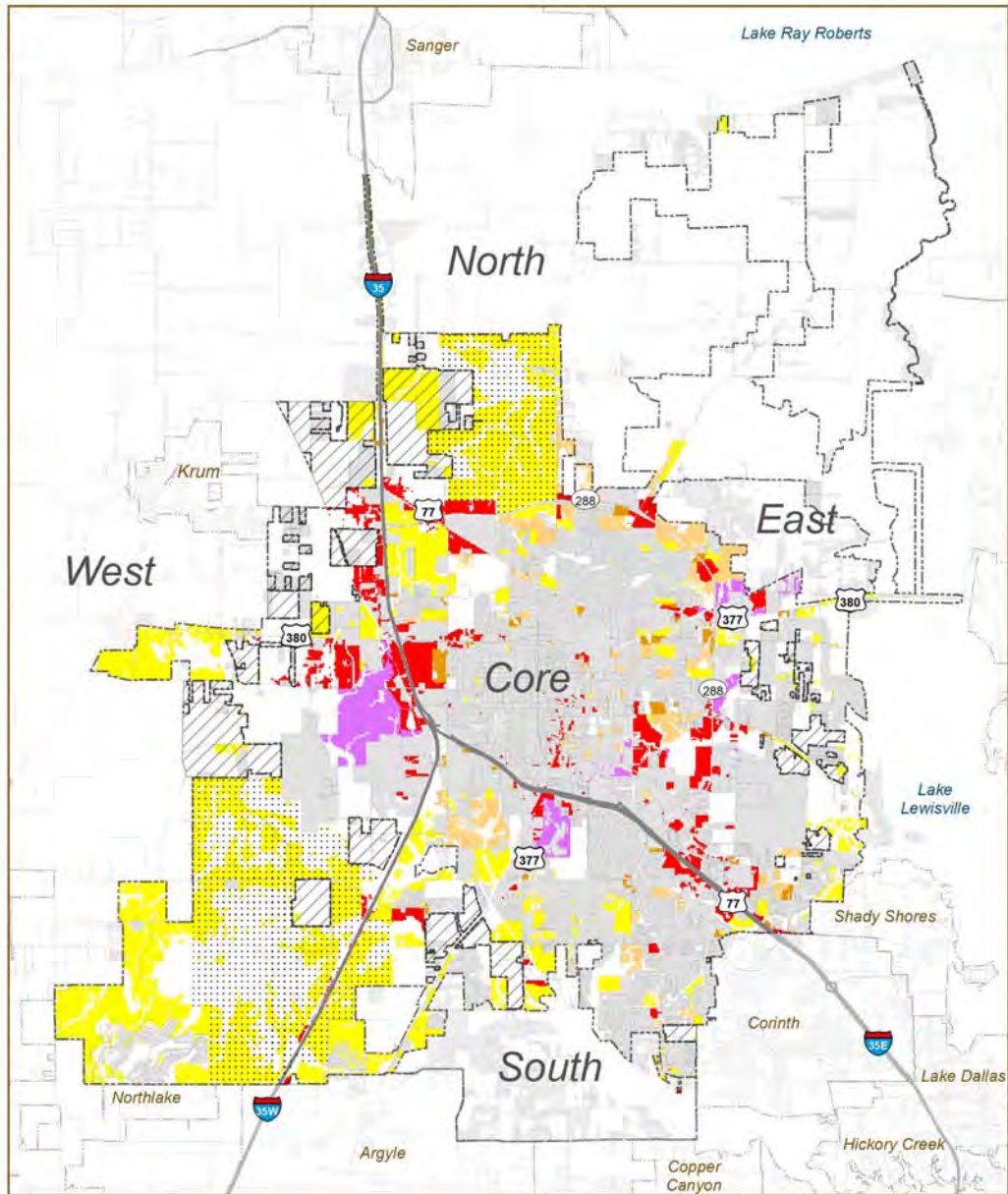
The projected growth was placed throughout the city according to the development types allowed by the city's current zoning. All of the existing zoning districts of similar character were grouped together to coincide with the projected residential and non-residential demand categories in Table 1 and Table 2 to determine where future development would go. The total land area for each category was placed in the undeveloped areas within these grouped zoning districts according to their level of susceptibility to change.

For example, Denton has over 20,000 acres of undeveloped land currently zoned for low-density residential uses (including approved Master-Planned Communities, and agricultural areas). According to the growth projections identified in Table 2, there will only be a demand for 8,663 acres of single family residential development over the next 15 to 20 years. Therefore the growth in this category is placed in the undeveloped areas zoned for single family residential with the highest susceptibility until the total demand of 8,663 acres is reached. This process is repeated for each of the five projected land use categories identified in Figure 3.

To depict a realistic vision of where growth might occur, the following assumptions were made.

- *Institutional Development:* For the purposes of this analysis, the Growth Trend Scenario does not attempt to locate projected institutional land uses, it is assumed that projected institutional development, such as schools, is incidental to residential development and is incorporated with single family residential uses on the map. It is also assumed that growth associated with institutions such as hospitals and universities will be contained within their existing footprint, or will occur in a case-by-case manner that is beyond the ability of this exercise to predict.
- *Non-annexation Agreement Areas:* It is assumed that this land will be annexed by the City by 2030 and is considered as likely to develop as other land within the city even though these areas do not currently have a zoning designation. It is assumed that highly susceptible, undeveloped land in these areas will contain predominantly single family development with small percentages of commercial, institutional, and other residential development. (*Note: this is the area previously referred to as the 5-year Annexation Plan*).

Figure 3



Growth Trend Scenario by Land Use Type

- | | |
|-----------------------------------|----------------------------------|
| Single Family Residential Growth* | Existing Development |
| Other Residential Growth* | MPC Areas |
| Commercial Growth | City of Denton |
| Multifamily Residential Growth | Non-annexation Agreement Areas** |
| Industrial Growth | |

* Includes institutional uses

** Areas identified on the map may be annexed within the timeframe of the annexation plan

The resulting Growth Trend Scenario allocations fall into the following categories according to on their location within the city.

Table 5 – Growth by Type and Proportion of Development

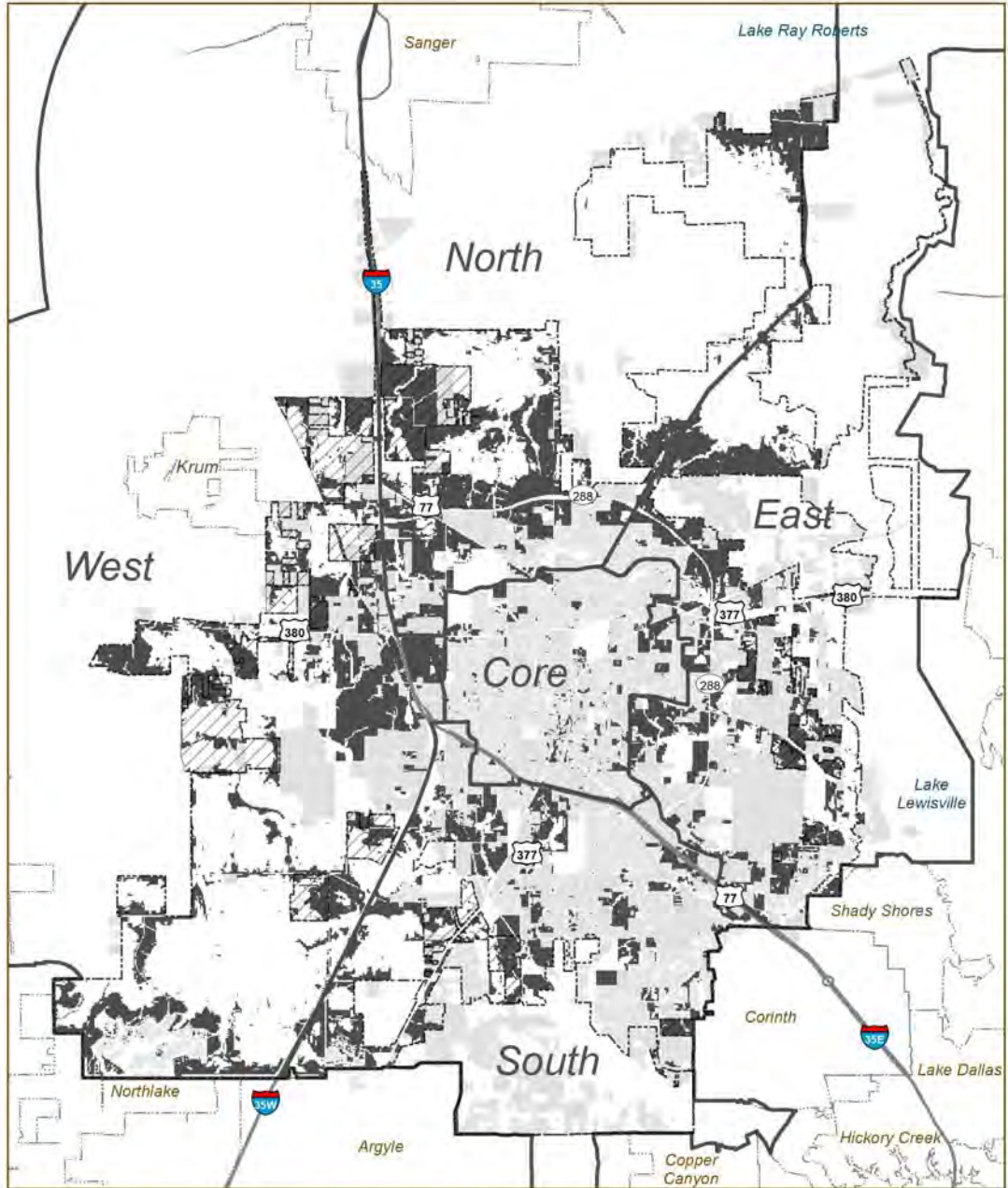
Land Use Type	Total Acreage	Total Units	% Infill*
Residential Single Family (1 unit detached)	8,663	20,064	1%
Residential Other (1 unit attached, 2-4 units, Other)	1,091	4,964	6%
Residential Multi-Family (5+ units)	1,025	12,254	21%
Commercial	2,310	--	6%
Industrial	1,111	--	3%
Institutional	1,861	--	3%
Total	16,061	37,282	4%

*The boundary of the Infill Special Purpose Overlay District was used to delineate the “Core” fiscal analysis zone, with development totals and percentages included in Table 6.

- *Percent Infill:* This is considered undeveloped, unconstrained land that is zoned for residential or non-residential development and within the Infill Special Purpose Overlay District. The majority of this area is built out, and the current trend for single family and non-residential development occurs outside of this area.
- *Zoned Land:* There is sufficient land zoned for residential and non-residential uses projected to accommodate growth well beyond the projected 2030 Growth Trend.
- *Greenfield Development:* No land beyond the existing city limits and non-annexation agreement areas is needed to accommodate the projected growth. Due to the scale of undeveloped and agricultural land with existing residential and commercial zoning, no agricultural land would need to be rezoned to accommodate the projected population and land use growth.

Figure 4 shows a generalization of where new development is projected to occur, which clearly illustrates its location and overall footprint.

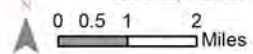
Figure 4



Source: City of Denton GIS

Generalized Growth Trend Scenario

- Projected Growth
- Existing Development
- Fiscal Analysis Zones
- City of Denton
- Non-annexation Agreement Areas*



*Areas identified on the map may be annexed within the timeframe of the annexation plan

6. Fiscal Analysis Zones

After refinement of the Growth Trend Scenario, a Fiscal Impact Analysis will be conducted to quantify the costs of serving future development based on the “business as usual” pattern of growth. The Fiscal Impact Analysis model requires that the Growth Trend Scenario to be divided into discrete geographic areas, or Fiscal Analysis Zones. Fiscal Analysis Zones are areas within the City that share similar characteristics and that allow the analysis to reflect differences due to geography. As indicated in Figure 3, the Fiscal Analysis Zones that have been proposed for Denton include the Core, North, South, East, and West zones.

Table 6 – Growth by Type by Fiscal Analysis Zone

Land Use Type	Acres in Core *	Acres in North	Acres in South	Acres in East	Acres in West
Residential Single Family (1 unit detached)	123	2,735	1,304	1,529	2,972
Residential Other (1 unit attached, 2-4 units, Other)	62	286	318	425	0
Residential Multi-Family (5+ units)	212	110	76	397	231
Commercial	144	298	318	676	874
Industrial	32	0	172	163	743
Institutional	64	551	370	412	464
Total	637	3,979	2,558	3,603	5,284

* The City’s “Infill Special Purpose Overlay District” was used as the boundary of the “Core” Fiscal Analysis Zone.

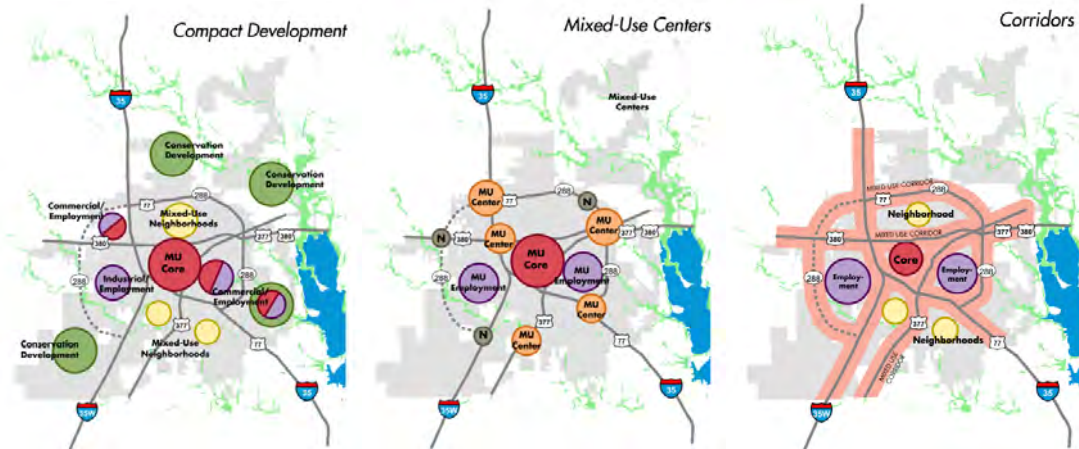
Denton Plan 2030 Alternative Scenario Methodology

August 28, 2013

1. Identify Growth Alternative Concepts

Using input from Community Forum 1, WRT developed conceptual approaches to land use and urban development that mirrored the public input received and the Vision Statement. These draft concepts were shared with the CAC and discussed with staff to inform the development of Alternative Scenarios. These are shown in Figure 1.

Figure 1



2. Refine Alternative Growth Concepts

Using concept direction, WRT refined growth concepts based on input from City staff, proposed developments and infrastructure improvements, and examination of development potential of key areas within the City.

Based on this input, three distinct scenarios are created: Centers, Corridors, and Compact. These scenarios are intended to be conceptual and illustrate three discernible options that can direct future urban form and future investment.

Figure 2 - Centers

Centers

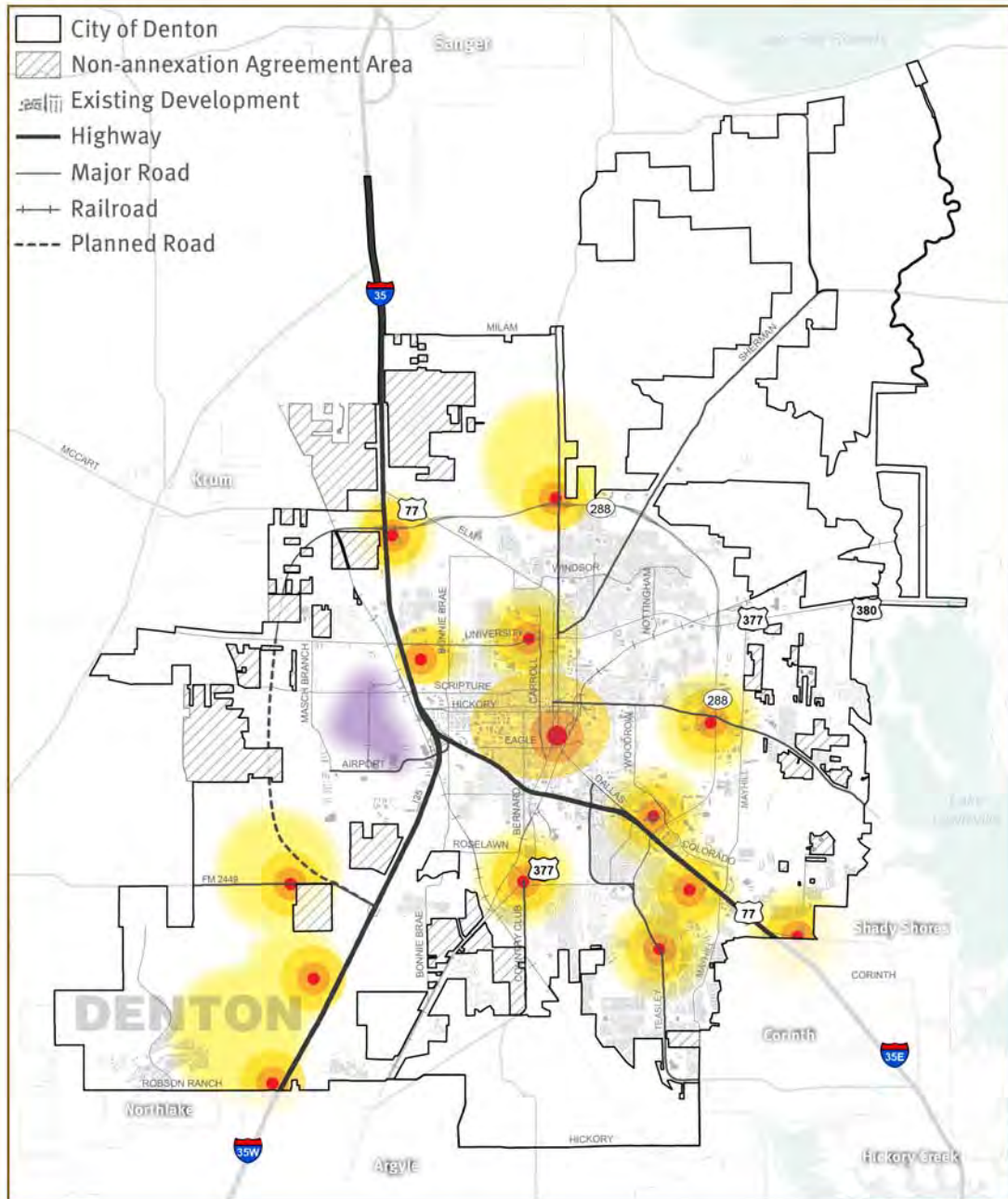
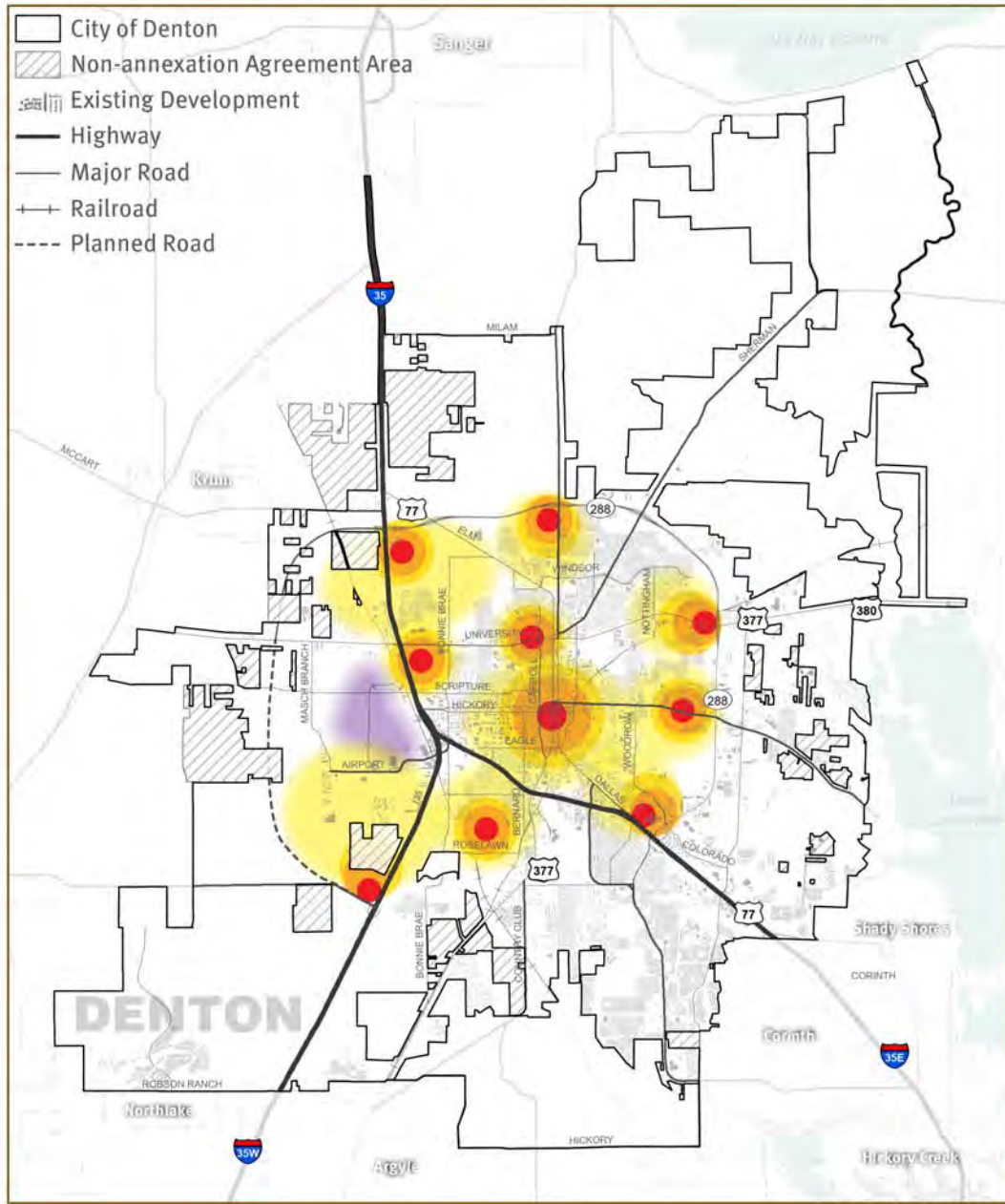


Figure 4 - Compact

Compact



3. Projected Proportion of Development

The development allocation under the alternative scenarios will assume that future growth can divert from its current trend. For example, the Growth Trend projected that the same proportion of single-family residential, multi-family, and other residential typologies would remain consistent. In the alternative scenarios, this proportion will be adjusted to reflect the community’s input and expressed interest in more managed, and balanced growth in a compact, walkable, development pattern. The Compact Alternative added an additional higher-density land use in order to accommodate projected number of housing units within the most compact development form. These ratios are shown in Table 1. Commercial, industrial, and institutional development proportions are unchanged from the Growth Trend Scenario. These land uses support residential development, as calculated by total number of housing units, which are unchanged from the Growth Trend. (Table 2)

Table 1 - Residential Land Uses Demand Per Scenario

	Existing Density		Growth Trend			Centers and Corridors Alternatives			Compact Alternative		
	Units per Acre	Acres per unit	2030 New Units	% of Total	Acres Yield	2030 New Units	% of Total	Acres Yield	2030 New Units	% of Total	Acres Yield
Single Family (Total)	2.90	0.35	20,064	53.82%	8,663	16,777	40%	6,439	7,456	20%	3,219
Other Residential, (1 unit attached, 2-4 units)	5.69	0.18	4,964	13.32%	1,091	5,592	20%	1,639	7,456	20%	1,639
Multifamily (5+ Units)	14.94	0.07	12,254	32.87%	1,025	14,913	40%	1,248	14,912	40%	1,248
Multi-Family High Density	30	.03	0	0%	0	0	0%	0	7,456	20%	311
Total Units			37,282	100%		37,282	100%		37,282	100%	
Total Acres					10,779			9,325			6,417

Table 2 - Non-Residential Demand Per Scenario

	Existing Dev. Non-Residential Area (AC) ⁽¹⁾	% of Existing Dev. Residential Area ⁽²⁾	Acres Needed – Centers, Corridors, and Trend ⁽³⁾	Acres Needed – Compact Scenario ⁽³⁾
Commercial	2,711	26.784%	2,309	1,155
Industrial	1,304	12.888%	1,111	1,111
Institutional (Government + Institutional)	2,940	29.047%	1,861	1,861
Total	6,955	68.719%	5,282	4,126

(1) Source: City of Denton GIS

(2) Existing dev. non-residential acres / total existing dev. residential acres

(3) % of existing dev. residential area x new residential acres

Note: It is assumed that some major institutions that already encompass significant portions of land within the city (26% of the total institutional land) would not continue to grow in the same proportional rate to other uses within the city.

4. Capacity Studies and Allocating Growth

Once the general location of new development areas were identified with input from Denton city staff, WRT determined where growth could be accommodated under each of the scenarios. Growth was placed based on underlying land use, surrounding context, zoning, and avoiding environmentally –sensitive areas. Growth was placed first in vacant or undeveloped areas.

Rather than in the Growth Trend where the “susceptibility to change” determined where new development would go, growth in the Alternatives Scenarios followed the proposed urban framework (Centers, Corridors, Compact) as the key influence, and in some situations resulted in redevelopment or a change in zoning. Also proportions of redevelopment were suggested based on relative obsolescence of buildings and commercial zones, or where a greater amount of density was needed to be consistent with the framework of the scenario. It is important to note that redevelopment is a “best guest” assumption, but does not suggest that stable neighborhoods and commercial areas, universities, or historic properties would be affected. In no case is development proposed in Environmentally-Sensitive Areas, even if development is already located there. All scenarios also acknowledged the widening of I-35E and the 500’ right-of-way that would be required, which limited growth around highways. Areas where a concentration of gas wells exists was also assumed to be less likely to support residential growth. The capacity of Centers and Corridors are illustrated in the Tables 3 and 4 below.

The Alternative Scenarios assume that much of the necessary growth would be accommodated in a compact development pattern, but that there would still be land needed in the periphery to accommodate a portion of the growth. Once the amount of land totaled to occur in identified

Centers and/or Corridors was calculated, the remaining necessary land needed for growth will be placed in approved subdivisions and where no environmental constraints existed.

Table 3 - Centers Alternative Development Capacity

Note: all numbers in acres

Center	Single Family Residential	Other Residential	Multifamily Residential	Commercial	Industrial	Institutional	TOTAL	% Redevelopment
Hills of Denton	1047	259	119	300	0	344	2069	0%
Robeson Ranch	1440	240	130	373	0	328	2511	0%
Inspiration	1440	240	130	373	0	328	2511	0%
Cole Ranch	1431	235	124	368	0	364	2522	0%
Stonehill Center	169	142	76	96	0	98	582	4%
Golden Triangle	185	62	79	105	0	58	489	20%
377 & Country Club Road	161	57	54	70	100	53	495	20%
288 & University	73	46	92	66	150	34	461	15%
Rayzor Ranch	73	60	19	59	80	42	333	9%
Shady Shores	109	64	36	47	0	50	306	28%
Hickory Creek	85	33	55	44	0	30	247	21%
Unicorn Lakes	33	17	24	114	0	14	202	12%
TWU	45	40	26	35	0	19	165	91%
Downtown	148	144	282	260	0	99	933	71%
TIRZ	0	0	0	0	781	0	781	0%
% REDEVELOPMENT	5%	14%	23%	13%	0%	9%	9%	

TOTAL	6439	1639	1248	2309	1111	1861	14607
DEMAND	6439	1639	1248	2309	1111	1861	14607

Table 4 - Corridors Alternative Development Capacity

Note: all numbers in acres

Corridor	Single Family Residential	Other Residential	Multifamily Residential	Commercial	Industrial	Institutional	TOTAL	% Redevelopment
Downtown	23	16	253	406	0	9	706	65%
University (I-35 to 288)	0	0	47	95	0	0	142	82%
Rayzor Ranch	817	235	149	209	61	242	1712	3%
288 at I-35	449	243	67	133	169	159	1220	6%
Elm	284	0	0	0	0	65	349	0%
Hills of Denton	886	72	78	156	0	220	1412	0%
Sherman	188	26	32	65	0	49	360	0%
University at 288	409	86	42	84	0	115	736	25%
University East of 288	373	0	0	0	0	86	460	33%
Mayhill North of 35E	506	61	106	211	0	130	1014	0%
Mayhill South of 35E	114	65	0	0	0	41	221	0%
288 at 35E	0	32	63	125	0	7	226	83%
288 (University to I-35E)	161	90	106	212	48	58	675	12%
Teasley South of 35E	91	106	1	2	0	46	246	28%
377 South of 35E	79	91	46	92	29	40	377	45%
Bonnie Brae South of 35E	499	151	0	0	23	149	822	0%
Cole Ranch at FM2449	650	164	103	205	0	187	1309	0%
Robeson Ranch	910	182	47	94	0	251	1485	0%
Southeast Denton	0	20	110	220	0	5	355	89%
TIRZ	0	0	0	0	781	0	781	0%
% REDEVELOPMENT	4%	8%	38%	41%	0%	5%	13%	
TOTAL	6439	1639	1248	2309	1111	1861	14607	
DEMAND	6439	1639	1248	2309	1111	1861	14607	

The creation of the Compact Scenario required a different approach. This is shown in Table 5 and described below.

Table 5- Compact Alternative Development Capacity

Developable Area in Compact Growth Scenario	
Total Area in Core	23,344
- ESAs	3,621
- Infrastructure (25%)	5,836
Remaining	13,887
- Industrial Land Use	1,111
Developable Area	12,776
- Undeveloped Land	5,113
Area to be Redeveloped	7,663
Development Demand in Compact Growth Scenario	
Residential	6,414
Non-Residential	4,126
- Industrial Land Use	1,111
Total Land Demand	9,432
- Undeveloped Land	5,113
Remaining Demand	4,319
Area to be Redeveloped/ Remaining Demand	4,319/9,432
% Redevelopment	56%

The goal of the Compact Scenario was to accommodate *all* proposed growth with the “core” of the city—meaning within Loop 288 and the proposed completion of Loop 288 west of I-35. This area was estimated in GIS to be 23,344 acres. Reducing this area by 25% for infrastructure, as listed in Table 1 and 2 assumptions, 5,836 acres were subtracted. The total acres of parks and Environmentally-Sensitive Areas within the “core” amounted to approximately 3,621 acres, which was also subtracted from the developable area. The assumption was made that industrial land use density would not change, so this total demand of 1,111 acres was included in this scenario. Thus, the resulting area on which development *could* occur, even in existing areas, is 12,776 acres.

Using the density yield from Table 1 and 2 for the Compact Trend, a total of 9,432 acres would be needed to accommodate residential, commercial, and institutional uses. This is broadly assuming that the proportion of both residential and non-residential demand and density will shift. Those percentages are shown in Table 1. It is assumed that the density of commercial

uses will increase as well, as most development will be compact rather than suburban in nature. Thus the compact trend assumed that half of the amount of commercial acreage would be needed (1,155 acres). Again, it is assumed that industrial land use density would not change, so this total demand of 1,111 acres was included in this scenario and is allocated in the same locations as in the other alternatives.

A total of 5,113 acres are undeveloped within the “core,” as measured in GIS. Therefore, development would go there first, leaving 4,319 acres that must be allocated in redevelopment areas. Removing these 5,113 acres from the 12,776 of developable land leaves 7,663 of currently developed land that must accommodate redevelopment. In other words, 4,319 acres of new growth must occur within 7,663 acres that currently contains development, yielding 56% redevelopment of the existing built environment.

4. Illustration of Scenarios

Once the detailed analysis was completed, the scenarios must be illustrated in a format that creates a clear picture of where growth could be concentrated in the future, and appear distinctly different from one another. Therefore, the location of growth is generalized in a graphic format to show relative size and proportion of development as calculated in the detailed analysis. These will be presented at Community Forum 2. Once the preferred scenario is determined, more specific allocations of land uses will be developed in preparation of the Final Plan. The scenarios are illustrated simply to show that development *can be* accommodated in the framework suggested.

Land uses are grouped to show a range of density and “mixing.” This means that as density increases, so does the amount of mixed-use development. Also, land uses in the scenarios are not meant to be interpreted as single uses, but rather to illustrate a range of potential uses. As an example, low-density residential areas can include single-family residential in addition to schools and parks. Similarly, commercial areas can include a range of retail types, commercial offices, and employment locations. Land uses are illustrated generally, because the scenarios are meant to illustrate general locations of land uses. Developing more specific locations of potential future land uses will be included as part of the Preferred Scenario and Final Plan.

5. Character Overlays

Once future land use has been placed according to the above methodology, the Alternative Scenarios will then be depicted to incorporate a series of character overlays that demonstrate high priority future development considerations, as expressed during Community Forum 1. These character overlays are important for determining future development character, but do not change the allocation of land use. These key themes include:

- **Green Infrastructure**
- **Mobility**

- ***Placemaking***

Diagrams will be developed to illustrate these overlays as “constants” within the land use alternatives. The community will be asked to prioritize these items on a scale of 1 to 5 during Community Forum 2 to confirm that these should be included as part of Alternative Scenarios.

Denton Plan 2030 Preferred Growth Concept Methodology

Introduction

At Community Forum 2, held in October and November 2013, the public reviewed the Growth Trend Scenario and three alternatives to the Trend: 1) Centers Growth, 2) Corridors Growth, and 3) Compact Growth. The Growth Trend depicts where growth and development are most likely to occur over the next 15 to 20 years based on “susceptibility to change” factors, with no change to past trends and policies. The three alternatives to the trend, developed with the results of Community Forum Series 1 and guidance from the Citizens Advisory Committee (CAC) and the Technical Advisory Committee (TAC), illustrate options for development patterns that use land more efficiently, promote mixed uses, and are more walkable, compact and fiscally responsible.

Community Forum Series Two

Community Forum Series 2 was held at four events during October and November 2013. Approximately 100 total participants attended four open houses to learn about the issues facing Denton, and to express preferences regarding land use development scenarios and community character. The open houses included brief presentations and an opportunity for participants to learn about the growth and development trends in Denton, talk with the consultants and City of Denton staff, and to share their opinions about development. The open houses featured 5 stations with 41 informational or input boards. Station 1 contained information about the Plan Update process, Station 2 provided background information on land use and density decisions, and Station 3 contained information about the budget and organizational structure of the City. Station 4 contained information and indicators on each of the scenarios on which participants were asked to vote. Indicators included initial findings on environmental and fiscal impact that helped weigh participants’ decisions in voting for alternative futures. Station 5 presented options for Community Character, or elements of the city’s environment, design, and mobility patterns that could be applied to any scenario. Participants were asked to vote on each which of these community character elements was most important to include. Voting was conducted using dots. A questionnaire was also distributed at the end of CF2 that allowed participants to share comments and feedback about the process and about the scenarios.

The following tables summarize results from the open houses sessions. Approximately 100 community members voted for their preferred future scenario and community character considerations.

Community Forum 2 Results

Station 4’s Preferred Land Use Scenario Votes

Upon viewing and evaluating the four land use scenarios based on the information presented in Station 4 as well as the information from Stations 2 and 3, participants were asked to vote on

their preferred land use scenario for the future of Denton. Participants were able to vote for a first and second choice. The tally of the voting is shown in the table below. For the overall score, a weighted approach was used in which first choice votes were counted twice and second-choice votes once. The final score represents the weighted combination of all votes received through the four Community Forum 2 events.

What is your First-Choice Scenario?			What is your Second-Choice Scenario?				Total
1) Growth Trend	16	16%	1) Growth Trend	1	1%	17	10%
2) Centers Growth	27	27%	2) Centers Growth	23	34%	50	30%
3) Corridors Growth	22	22%	3) Corridors Growth	25	37%	47	28%
4) Compact Growth	35	35%	4) Compact Growth	19	28%	54	32%
Total	100	100%		68	100%	168	100%

Total Weighted				
	First Choice x2	Second Choice x1	Total	Percent
1) Growth Trend	32	1	33	12%
2) Centers Growth	54	23	77	29%
3) Corridors Growth	44	25	69	26%
4) Compact Growth	70	19	89	33%
Total		68	268	100%

The Compact Growth Scenario received the greatest number of votes—one third of all votes (33%). This scenario was followed by Centers Growth (29%) and Corridors Growth (26%), each with just over a quarter of all votes. The Growth Trend received the least number of votes at 12%. This information will be used to shape the Preferred Growth Concept that will be used to guide the development of the Future Land Use Plan for Denton.

Station 4’s Development Priorities Votes

To gain a better understanding of why someone voted for a particular Scenario, participants were asked to vote for their top three priorities for future development in Denton. The results of this voting process are shown in the table below.

What are your overall priorities for future development in Denton?		
More Mixed Use	41	17%
Jobs Close to Home and Accessible by Walking and Transit	44	18%
Reduced Greenfield Development	33	14%
Improved Transit Access and Service Throughout the City	37	16%
Less Waste and Water Use	19	8%
Increased Walkability and Trails Throughout the City	53	22%
Lower Infrastructure and Service Costs	11	5%
Total	238	100%

Note: Participants were asked to vote for their top two priorities.

Percentages are rounded.

Based on the total number of votes, the top three priorities were: 1) Increased Walkability and Trails (22%); 2) Jobs Close to Home and Accessibility by Walking and Transit (18%); and 3) More Mixed use (17%). These key priorities will be used to refine the Preferred Growth Concept, ensuring that the priorities will be able to be met with the proposed development pattern. The emphasis that the community placed on these development priorities will also help determine the importance of weighing the elements of the Preferred Concept and eventually including policies related to these themes in the Denton 2030 Plan.

Station 5’s Community Character Considerations Votes

Community Character Considerations are items that can be implemented in any Growth Scenario that reflect important issues specific to Denton. Similar to the land use scenarios, community members were asked to vote for their first and second choices for those items that were “Very Important” (First Choice) to include within the Preferred Concept and those that were also “Important” (Second Choice). As with the land use scenarios, a weighted approach was used to determine overall score in which first choice votes were counted twice and second-choice votes once. The voting for Community Character Considerations revealed the following preferences:

What is your First-Choice Community Character Element “Very Important?”			What is your Second-Choice Community Character Element “Important?”		
1) Green Infrastructure	20	22%	1) Green Infrastructure	15	22%
2) Multi-Modal Access	18	18%	2) Multi-Modal Access	20	29%
3) Placemaking & Urban Vitality	42	46%	3) Placemaking & Urban Vitality	12	18%
4) Conservation	12	13%	4) Conservation	21	31%
Total	92	100%		68	100%

Total Weighted				
	First Choice x2	Second Choice x1	Total	Percent
1) Green Infrastructure	40	15	55	22%
2) Multi-Modal Access	36	20	56	22%
3) Placemaking & Urban Vitality	84	12	96	38%
4) Conservation	24	21	45	18%
Total	184	68	252	100%

Placemaking & Urban Vitality received the highest number of votes by a large margin, receiving 38% of the votes. Tied for second and third most important community character considerations were Green Infrastructure and Multi-Modal Access, both with 22% of votes. Although Conservation received the fewest number of votes, it received the highest number of

second choice votes, demonstrating that it was still an important item for many community members.

Summary

The input received at Community Forum 2 was very insightful for informing the future development pattern of the City of Denton over the next 15-to-20 years. Community members were strongly in support of a Compact Growth pattern for the city, and for the clustering of development around key areas (i.e. Centers or Corridors) rather than fragmented sprawl as shown in the Growth Trend. A Compact development framework was further supported by the prioritization of mixed-use development, linking of the community through walkable pedestrian networks, and the potential for jobs located closer to home, reducing commuting times and creating balanced, mixed-use neighborhoods. Finally, the community confirmed that maintaining and increasing “Placemaking and Urban Vitality” is an essential attribute of their future Denton. This reinforces the need for maintaining a strong Downtown core and sense of place in existing character areas of Denton, allowing new development to complement those areas, as well as providing areas of new development that can be centers of community in the future. The desire for a Compact Growth pattern was further reinforced by the community’s voting for multi-modal transportation options, which are more easily accommodated through compact growth, as well as protecting environmental resources through the inclusion of Green Infrastructure elements and Conservation areas. Many of these elements can be acknowledged through policy in the updated Denton 2030 Plan, as they affect much more than just new growth.

Preferred Growth Concept Draft

What is the Preferred Growth Concept?

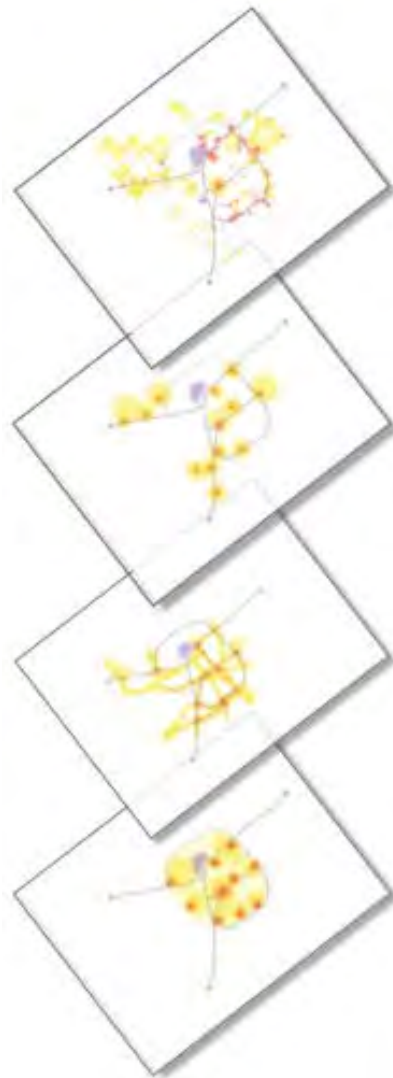
The Preferred Growth Concept is a conceptual vision for the form, character and general location of development of the City that reflects the input and expressed preferences of the community participants. The general location of new development and areas for intensification will be the basis for the development of a Future Land Use Map that will be included in the Denton 2030 Comprehensive Plan Update.

Process

The Preferred Growth Concept combines various aspects of each of the scenarios and community character elements that received the highest number of votes. Additionally, comments received through the questionnaire distributed at CF2 helped add detail to formulation of the Preferred Concept. The refinement of the scenarios and the creation of the Preferred Growth Concept involves both the creation of a graphic combination of the scenarios, and the creation of a distribution of land uses demonstrating development capacity. The distribution of land uses will then be used in order to calculate the fiscal impact of the Preferred Concept, which can be compared to each of the four scenarios.

The Compact Scenario received the highest number of votes at 33 percent of votes. As a result, this scenario provides a strong basis for the development of the Preferred Growth Concept. Adjustments were made to this base to incorporate elements of the Centers and Corridors growth scenarios which were considered to be the first or second choice by 29% and 26% of votes, respectively. The voting for the Centers and Corridors revealed that the community is interested in seeing development clustered around distinct locations, such as Corridors and Centers, rather than haphazard sprawl.

In the creation of the Alternative Scenarios, development capacity studies were conducted in order to ensure that the projected amount of development could be accommodated under each scenario in the locations shown. The Growth Trend was created based solely on the “susceptibility to change” analysis, while the Alternatives Scenarios depicted more compact



growth occurring in more purposeful patterns (Centers, Corridors, Compact). Growth was placed based on underlying land use and zoning, surrounding context, and avoiding environmentally sensitive areas. Growth was placed first in vacant or undeveloped areas, and then was placed in areas that could potentially redevelop. These steps are repeated for the Preferred Growth Concept, to assure that the projected development and the locations shown were feasible. Factors evaluated in this process included:

- Existing land use
- Context evaluation using aerial maps
- Existing zoning
- Approved subdivisions
- Environmentally-sensitive areas
- Vacant or underutilized areas
- Areas adjacent to I-35 that could be affected by its widening
- Areas adjacent to corridors currently being upgraded (i.e. Teasley and Mayhill)
- Areas of gas well proliferation
- Areas otherwise likely to redevelop
- Areas in the vicinity of areas identified as important for placemaking and urban vitality

In each scenario, the amount of projected land use that is needed to match population growth had to be achievable. These development amounts—of both residential and non-residential land uses—were consistent throughout the scenarios. The total amount of residential units and non-residential acreage will be met within the Preferred Growth Concept as well, with the proportions of development most closely matching the preferences of the community. The development capacity analysis will be conducted using GIS and will accompany the Preferred Growth Concept map, as well as the location of development according to Fiscal Impact Zone.

In addition to simply accommodating land use, the Preferred Growth Concept also weighs the **priorities** of the community in choosing the land uses scenarios. In Community Forum 2, the highest priorities included “Increased Walkability and Trails (22%),” “More Mixed Use (17%),” and “Jobs Close to Home and Accessible by Walking and Transit (18%).” Through the placement of land uses, the draft Preferred Growth Concept will encourage a shift towards more mixed-use development, bringing together compatible residential, commercial, office, institutional, or other uses within a walkable scale. The direction of the Preferred Growth Concept will allow for increased pedestrian activity, reduced car trips for short distances, expanded housing choices, and opportunities for an expanded pedestrian and transit network.

Finally, inputs of the **Community Character** preferences help refine the Preferred Growth Concept. The voting for the Community Character considerations revealed a desire for “Placemaking and Urban Vitality” (38%), “Multi-modal Access (22%),” and “Green Infrastructure” (22%) in the community. Conservation received 18% of the weighted votes and the highest amount of second-choice votes, indicating that it was still very important to the community. This underscores the importance of a diversity of building types, sensitivity to the

environment, and an appreciation for areas for community gathering to be included throughout Denton. Locations of existing and potential areas of urban vitality also help to refine the location and character of potential development areas illustrated within the Preferred Growth Concept as well as potential areas for conservation, multi-modal access and the green infrastructure network. These are illustrated as they appeared on the boards for Community Forum 2, overlaid with the preferred land use and development framework.

The Preferred Growth Concept will also be informed by the Fiscal Impact Analysis that was conducted concurrently with the aforementioned process. Order of magnitude development costs were shared with the community at CF2, corresponding to each scenario, so served as a source of information for scenario evaluation. The votes received by the community demonstrate that the most fiscally sound scenario—the Compact Growth Scenario—was the most popular. However, in the voting of land use priorities, “Lower Infrastructure and Service Costs” received only 5% of votes, showing that this was not the most important consideration for the determination of their votes. The fiscal impact findings are will help determine the scenario(s) that are most fiscally responsible, which will serve as one means of defining the manner of directing the location of development and the Preferred Growth Concept.

Within the Denton 2030 Plan document, the Preferred Growth Concept will precede the Land Use Plan, appearing either in the discussion of the Vision or within the introduction section on Land Use. The concept is meant to serve as an overarching framework for development. It is not the Final Land Use plan, but rather a conceptual diagram to demonstrate how the land use plan will be refined and updated to meet the needs of the community for the next 15 to 20 years.

Denton Plan
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Our path to the future



Prepared by the City of Denton, August 2014