



City of Shenandoah

Comprehensive Plan



Adopted January 27, 2010

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Purpose of the Comprehensive Plan

A city's comprehensive plan can be defined as a long-range planning tool to be used by City staff, decision-makers and citizens to guide the growth and physical development of a community for 10 years, 20 years, or an even longer period of time. State law gives communities the power to regulate the use of land, but only if such regulations are based on a plan. Specifically, the law states:

The governing body of a municipality may adopt a comprehensive plan for the long-range development of the municipality...A municipality may define the relationship between a comprehensive plan and development regulations and may provide standards for determining the consistency required between a plan and development regulations.

Chapter 213 of the Texas Local Government Code

There are two interrelated purposes of a comprehensive plan; one, it allows the citizens of a community to create a shared vision of what they want the community to become, and two, it establishes ways in which a community can effectively realize this vision. This plan is a vision of what Shenandoah can become and is a long-range statement of the City's public policy.

The plan will help guide zoning decisions and serve as a basis for future capital expenditures. It is intended to be flexible and provide latitude for more detailed analysis, which is commonly a part of zoning decisions; however, decisions should be consistent with policies established in the Plan. The City will undoubtedly face future proposals that are inconsistent with the plan. Some of these proposals may be in the best interest of the City and worthy of future consideration. If proposals are approved differing from the Future Land Use Plan, the plan should be amended to reflect the revised objectives.

Baseline Analysis

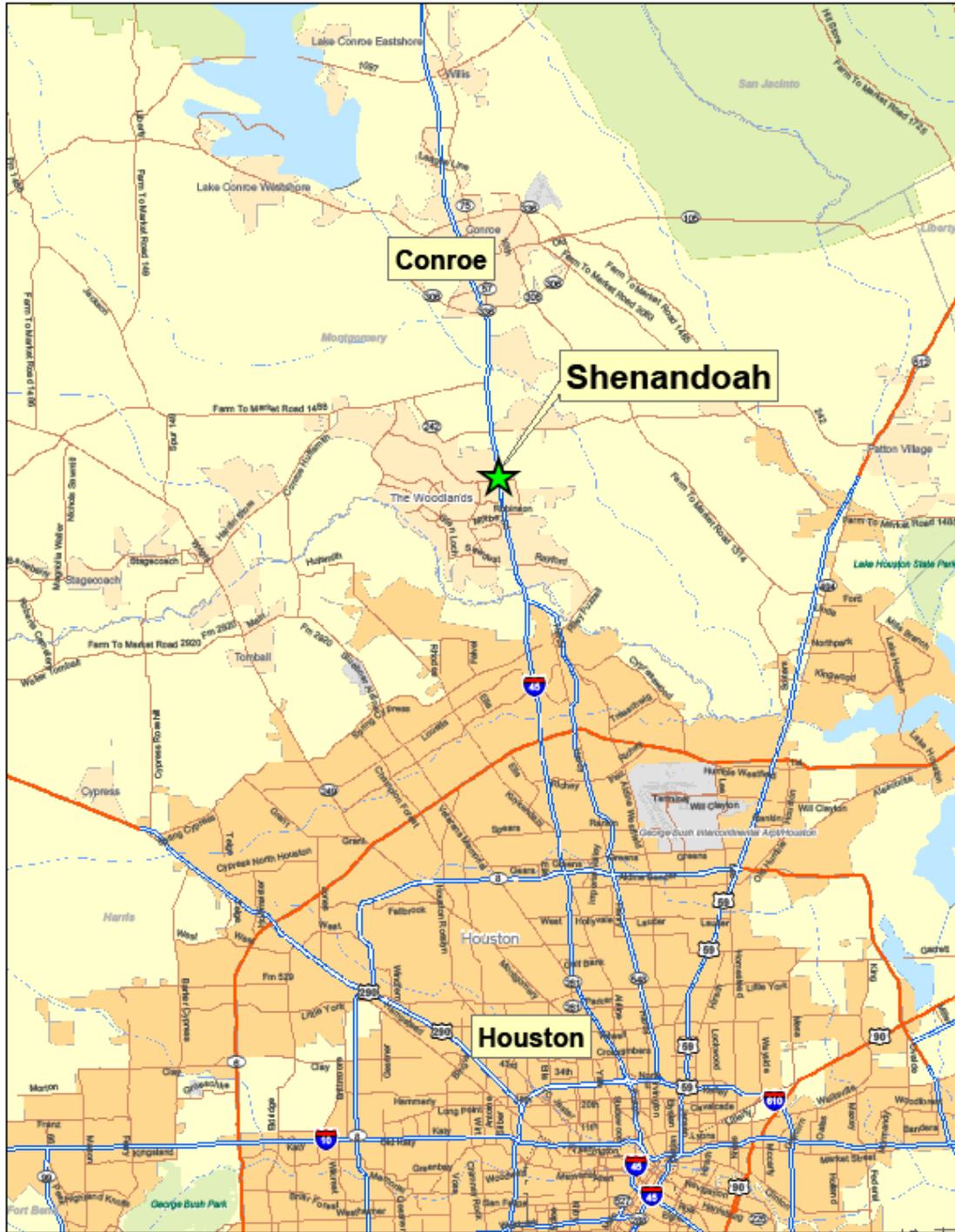


Baseline Analysis

Introduction

This Baseline Analysis represents the initial step in developing this comprehensive plan. It establishes a reference point from which decisions that represent the community's interests can be made. It also enables all people involved in the planning process to have a clear understanding of the City and its characteristics by providing a context of facts and documentation of the physical and socioeconomic characteristics unique to Shenandoah and the surrounding area. These sections reveal the opportunities for, and potential limitations to, the growth and development of Shenandoah.

The following information is intended to provide insight into the historic and existing characteristics of Shenandoah by examining fact-based characteristics about the population. With this profile, the City can better understand and identify particular facets that may affect the planning process and plan recommendations.



Regional Relationships

The City of Shenandoah was incorporated in 1974 with a population just under 1,800 residents. Following its incorporation, the City was able to finance its drainage improvements utilizing its own tax base and avoid annexation by the City of Houston. Today, Shenandoah has a strong retail and commercial base, featuring a wide variety of shopping, dining, and entertainment opportunities. Other features include quality medical facilities, low property taxes, and high-quality schools.

As shown in **Plate I-1**, Shenandoah is located about 30 miles north of Houston and adjacent to The Woodlands. The City is surrounded by the City of Oak Ridge North, and the ETJs of Houston and Conroe. The impacts of the proximity to these cities will be discussed in further detail in the Physical Features section in this chapter.

Population Trends

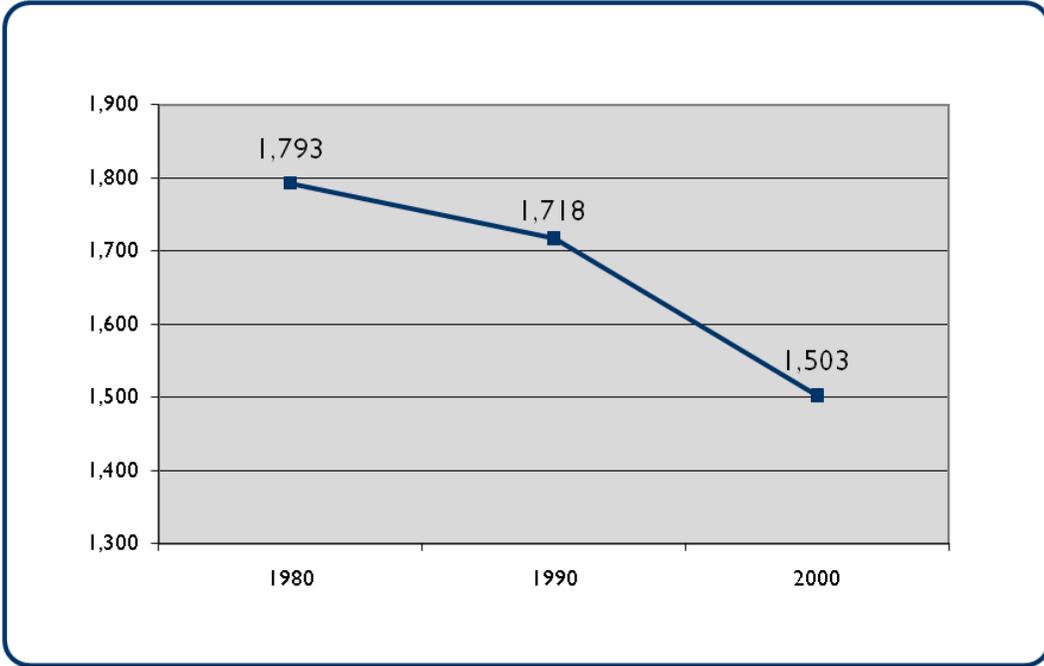
From 1980 to 2000, the population of Shenandoah decreased by nearly 300 residents (see **Table I-1**). The population of Montgomery County, however, more than doubled in size during this time. The City’s population percentage of the County decreased in past decades – a trend that has occurred in cities throughout Texas: counties are generally growing more rapidly than incorporated areas.

Table I-1 | Historic Population of Shenandoah and Montgomery County

Year	Shenandoah	Percent Change	Montgomery County	Percent Change	Percent of County
1980	1,793	---	128,487	---	1.40%
1990	1,718	-4.18%	182,201	41.81%	0.94%
2000	1,503	-12.51%	293,768	61.23%	0.51%

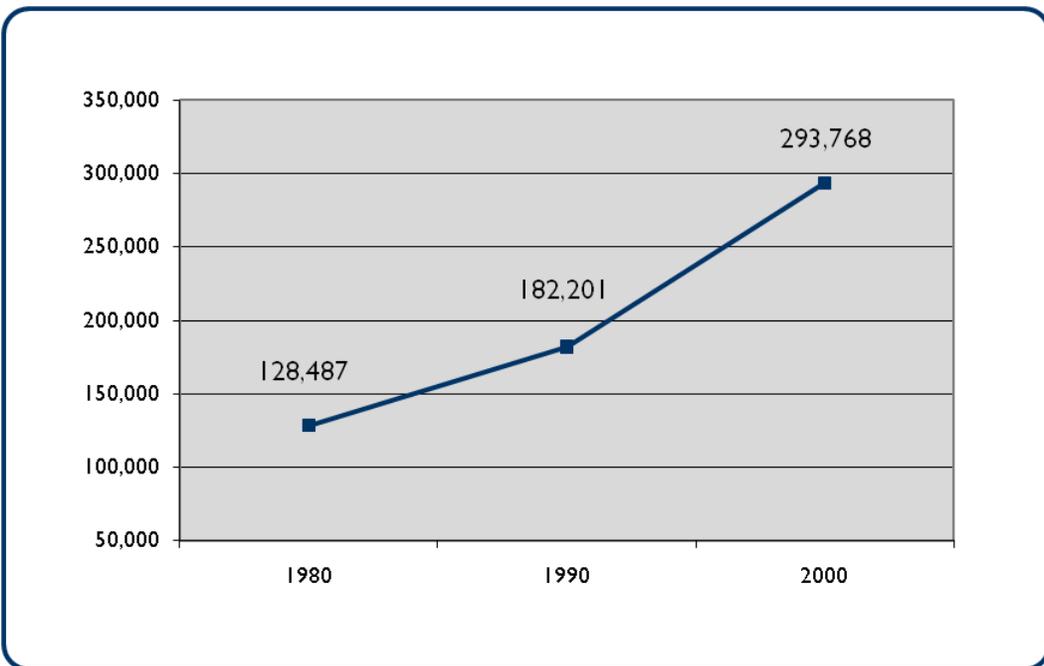
Source: U.S. Census

Figure I-1 | Historic Population of Shenandoah



Source: U.S. Census

Figure I-2 | Historic Population of Montgomery County



Source: U.S. Census

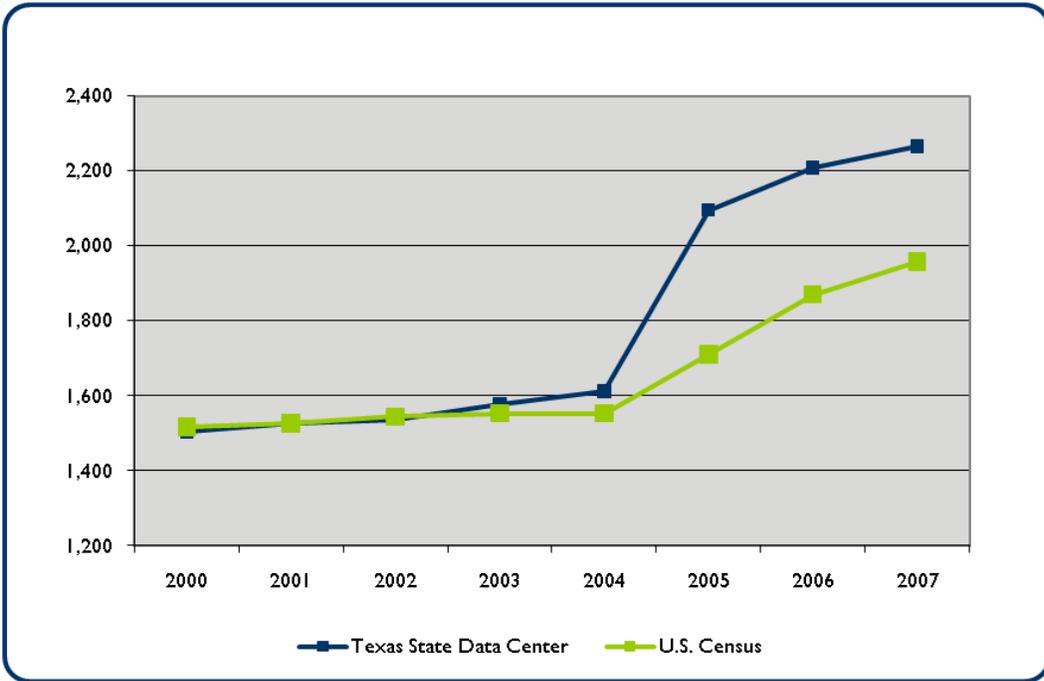
Table I-2 | Annual and Compound Annual Growth of Shenandoah

Year	Texas State Data Center			U.S. Census		
	Population	Annual Growth	CAGR	Population	Annual Growth	CAGR
2000	1,503		6.04%	1,517		3.17%
2001	1,526	1.53%		1,526	0.59%	
2002	1,537	0.72%		1,544	1.18%	
2003	1,577	2.60%		1,553	0.58%	
2004	1,612	2.22%		1,553	0.00%	
2005	2,095	29.96%		1,710	10.11%	
2006	2,208	5.39%		1,870	9.36%	
2007	2,266	2.63%		1,957	4.65%	

Source: Texas State Data Center and U.S. Census

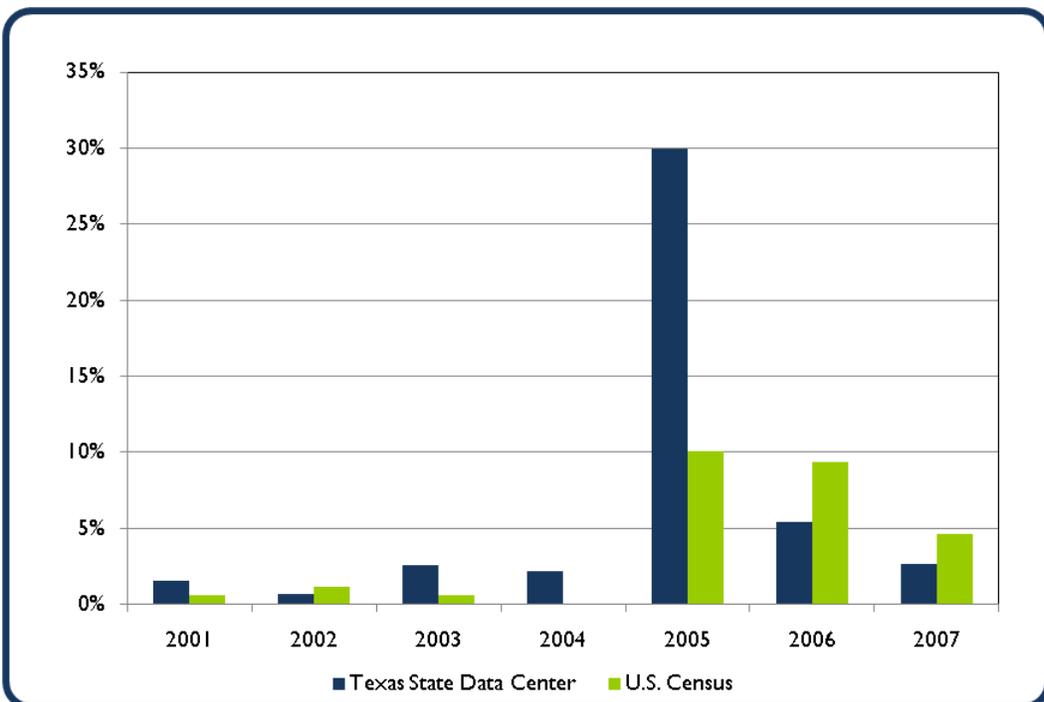
Despite the population decline from 1980 to 2000, recent data (shown in **Table I-2**) indicates an increase within the City of Shenandoah, particularly during 2005 when the number of residents increased by nearly 30% according to the Texas State Data Center. The U.S. Census also reported significant growth during 2005 and 2006.

Figure I-3 | Population of Shenandoah



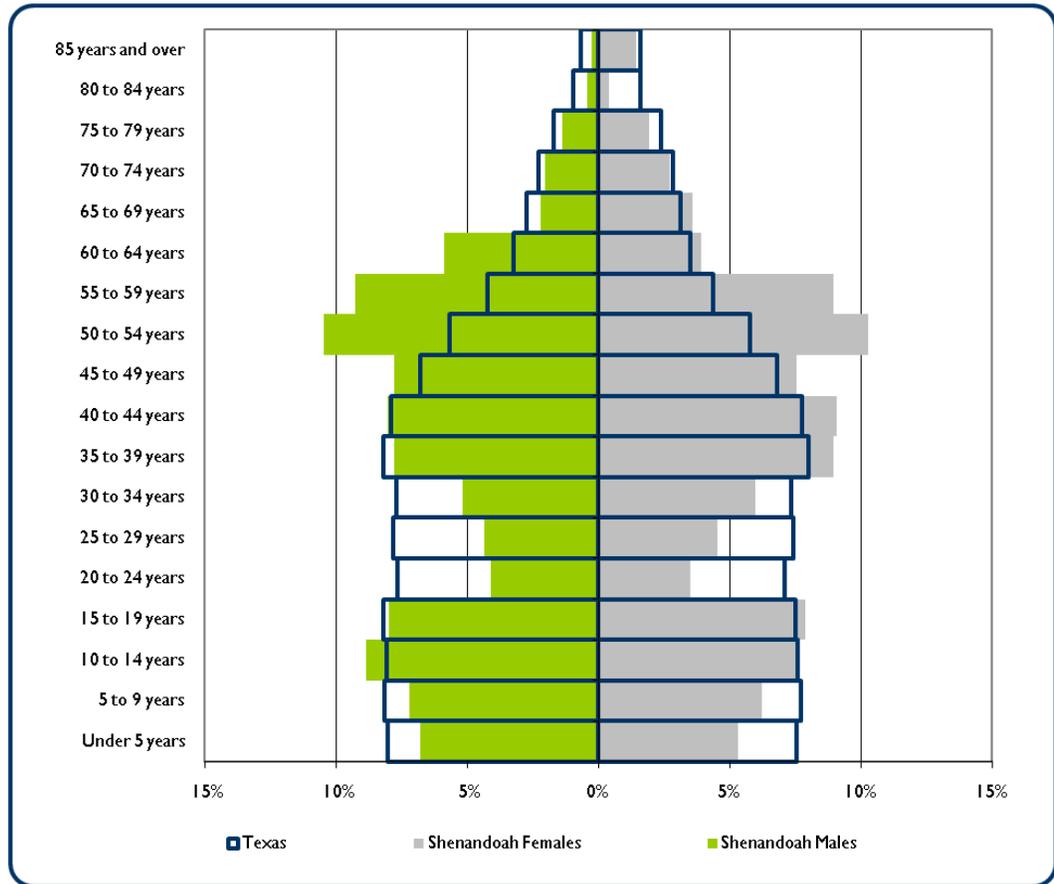
Source: Texas State Data Center and U.S. Census

Figure I-4 | Annual Growth Rate of Shenandoah



Source: Texas State Data Center and U.S. Census

Figure I-5 | Age by Gender Composition of Shenandoah



Source: 2000 U.S. Census

When comparing the age distribution of Shenandoah to the State of Texas, two trends are apparent. First, Shenandoah has a lower percentage of people between the ages of 20 and 34. This age range typically represents college students and young professionals.

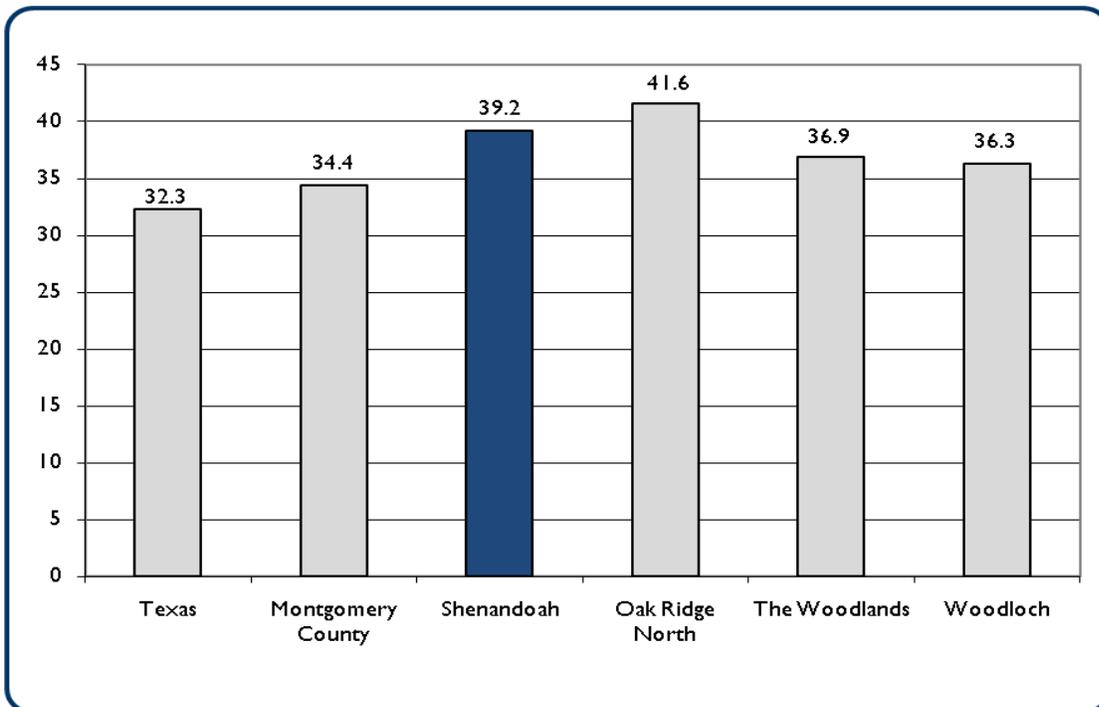
Since U.S. Census data regarding the age distribution of Shenandoah will not be available until the 2010 Census counts, Montgomery County can be used as a reference in determining age trends in the area surrounding Shenandoah. A study commissioned by the South Montgomery County Woodlands Economic Development Partnership estimated that the population between the ages of 20 and 34 constituted about 22% of the population of Montgomery County in 2008. Previous data shows that this age group made up 18.7% of the county population in 2000, and 22.6% of the population in 1990. When examining the 1990 and 2000 Census data, Shenandoah experienced trends similar to Montgomery County. According to the Census, the 20-34 age group within

Shenandoah decreased by 2% between 1990 and 2000 (from 15.8% to 13.8%). It is important to note the relative consistency that these numbers reflect, with little fluctuation between census surveys and no major rise or decrease in this specific age group.

A second trend to note is that in comparison to the statewide averages, Shenandoah has a high percentage of people between the ages of 50 and 64, who are considered part of the “baby boomer” generation. **Figure I-5** indicates that, as the population of individuals between 50 and 64 age, the City will need to adequately plan and address issues related to a growing elderly population.

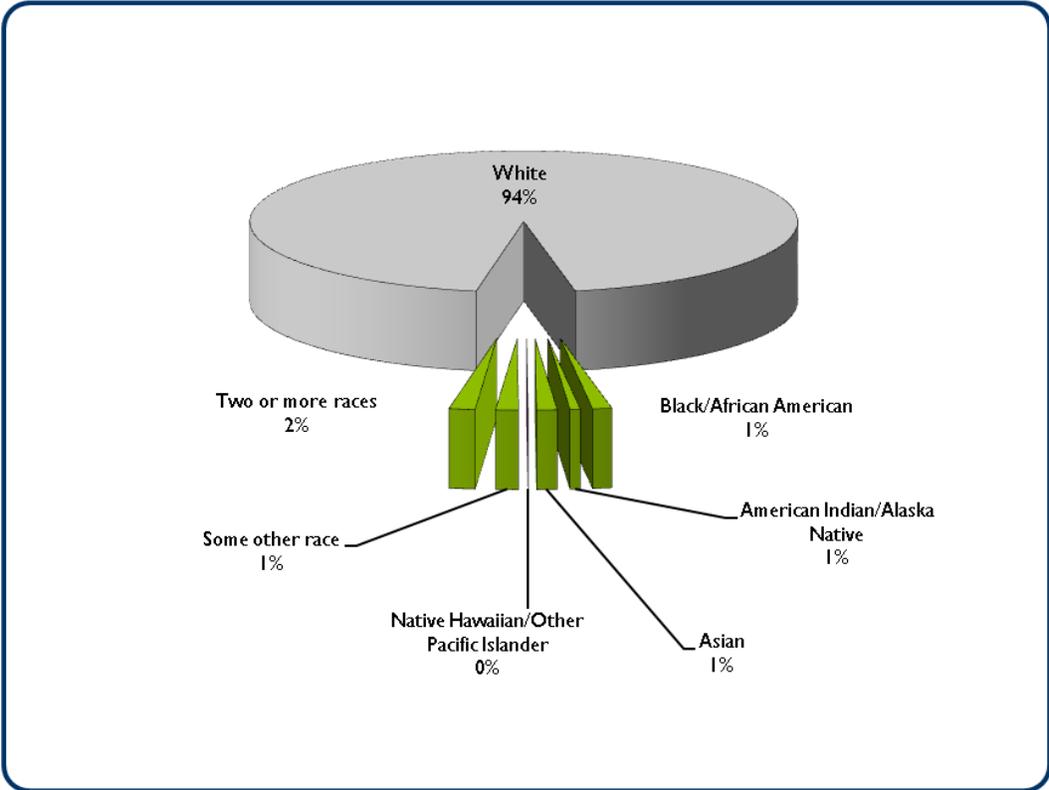
As shown in **Figure I-6**, Shenandoah also has a higher median age than the State of Texas and surrounding communities at 39.2 years. Only Oak Ridge North has a higher median age at 41.6 years. The median age of Montgomery County is 34.4 and the State of Texas has a median age of 32.3 years.

Figure I-6 | Median Age of Shenandoah and Surrounding Areas



Source: 2000 U.S. Census

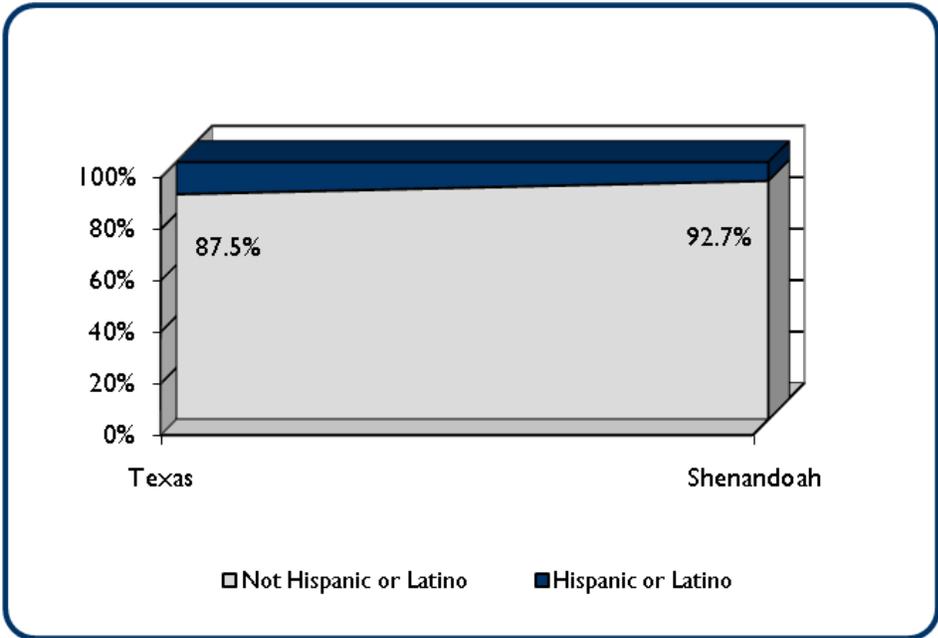
Figure I-7 | Racial Distribution of Shenandoah



Source: 2000 U.S. Census

Racial composition is discussed in order to ensure that the City is aware of its racial, ethnic, and age composition so that Shenandoah’s decision-making process is representative, meaning that all groups are adequately included and represented in this process. **Figure I-7** indicates that the largest racial group in Shenandoah is those identifying as White at 94% of the total population. “Two or more races” is the second highest racial composition at 2% followed by Black/African American, American Indian/Alaska Native, Asian, and those who identified themselves as “Some other race” all with 1% of the population respectively.

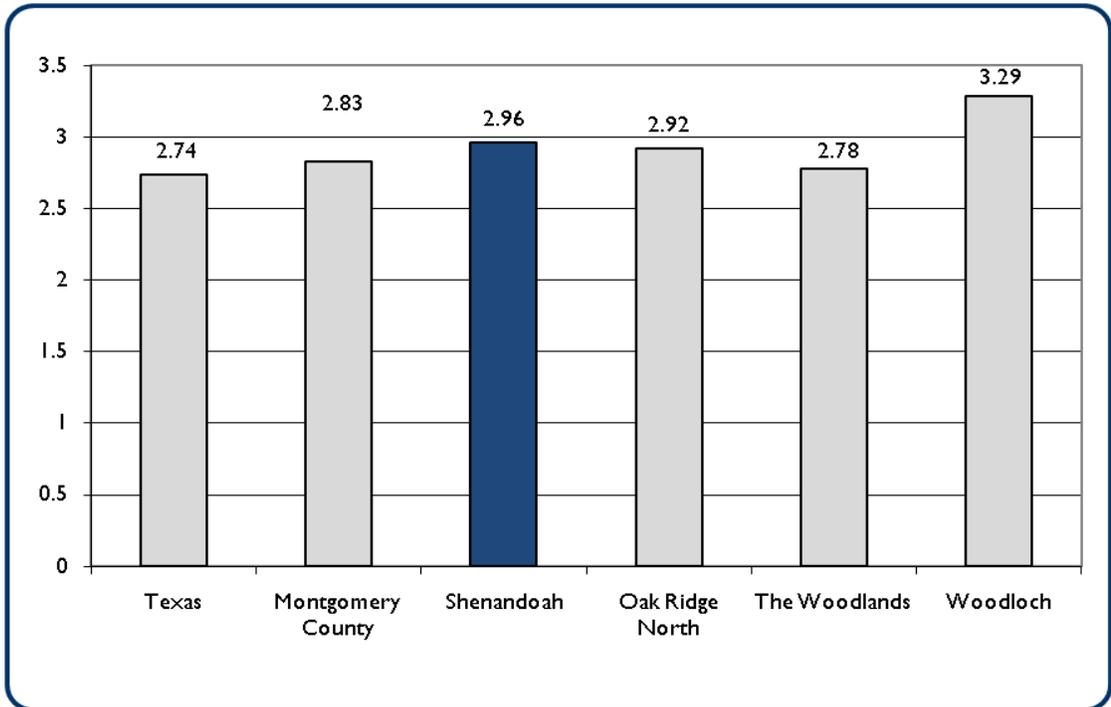
Figure I-8 | Ethnic Composition of Shenandoah



Source: 2000 U.S. Census

When reviewing the Hispanic or Latino population of Shenandoah, 7.3% of the residents identified as Hispanic or Latino of any race and 92.7% of residents identified as not of a Hispanic or Latino origin (see **Figure I-8**). The Hispanic composition of the City is much less than the State of Texas average as a whole at 12.5%. As with the United States as a whole and the State of Texas in particular, the number of residents identifying as Hispanic or Latino of any race is expected to grow in the near future and it can be assumed that this will also be the case in Shenandoah as well.

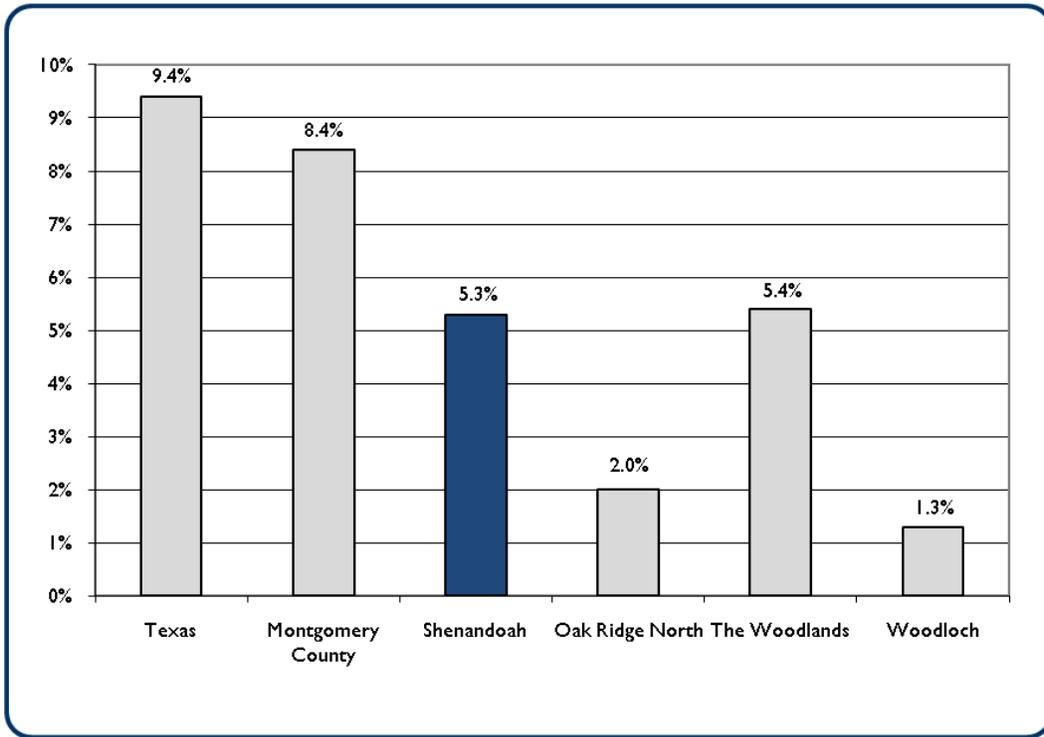
Figure I-9 | Persons per Household



Source: 2000 U.S. Census

Figure I-9 shows the average persons per household for the State of Texas, Montgomery County, and other surrounding communities. When comparing Shenandoah to these groups, the City has the second highest persons per household at an average of 2.96. Only Woodloch has a higher average number of persons per household at 3.29. Shenandoah has a much higher average number of persons per household than the State of Texas and Montgomery County at 2.74 and 2.83 respectively.

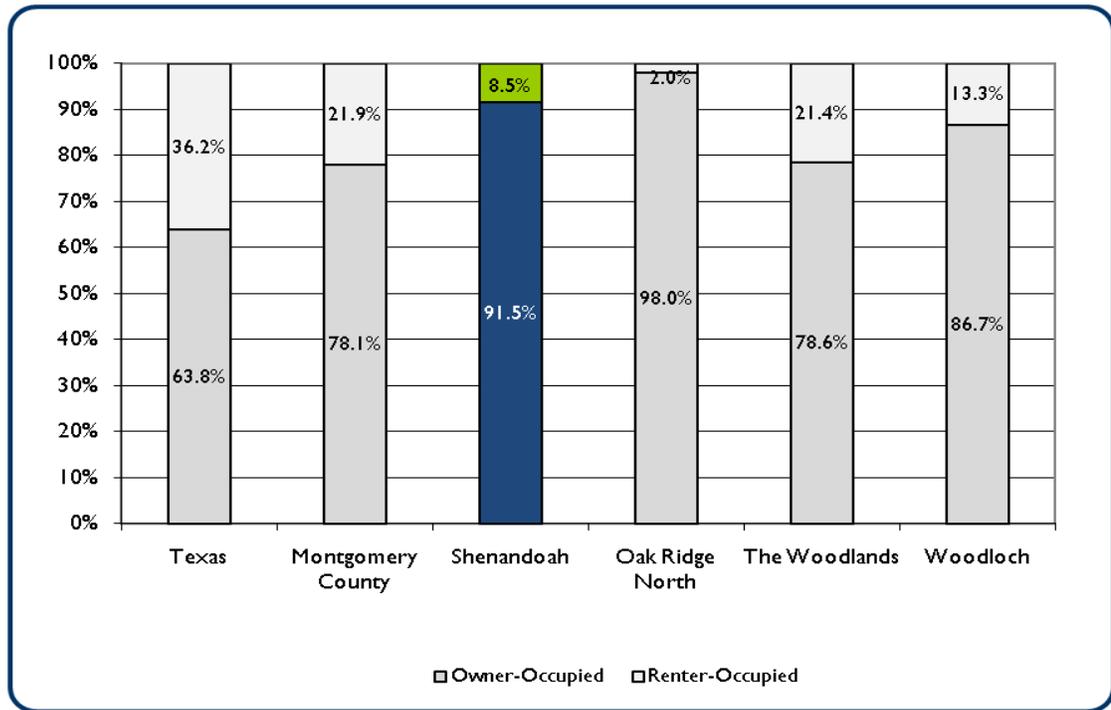
Figure I-10 | Vacancy Rate



Source: 2000 U.S. Census

The vacancy rate can often serve as an indicator regarding land use needs and whether or not new construction is required to meet the needs of a local community. **Figure I-10** shows that Shenandoah has a vacancy rate of 5.3%. Woodloch and Oak Ridge North have the lowest vacancy rates at 1.3% and 2.0% respectively. The Woodlands follows Shenandoah with a vacancy rate at 5.4%. Shenandoah has a much lower vacancy rate than Montgomery County at 8.4% and has nearly half the vacancy rate of the State of Texas at 9.4%.

Figure I-11 | Owner Occupancy Rate



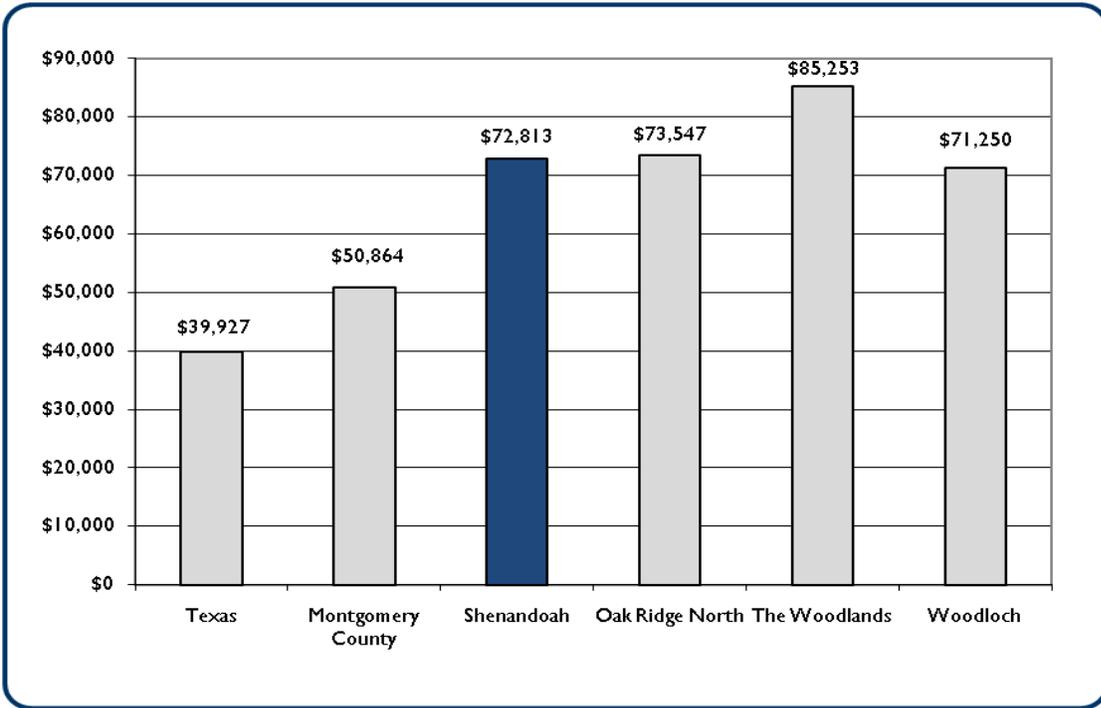
Source: 2000 U.S. Census

It is generally accepted that the length of time people reside in a community results in the improved condition of existing neighborhoods, and that renters tend to live in a single location for a shorter period of time than do owners. It is also generally accepted that there is a greater likelihood that a property owner would maintain a physical structure in better condition than would a property renter.

Figure I-11 indicates that Shenandoah has the second highest percentage of owner-occupied units (91.5%). Oak Ridge North is the only surrounding community with a higher rate of owner-occupancy (98.0%). Shenandoah also has a much higher owner-occupancy rate than Montgomery County (78.1%) and the State of Texas (63.8%).

It is anticipated that the recorded number of renters will increase in the upcoming U.S. Census due to the completion of multiple family housing complexes since 2000.

Figure I-12 | Median Income



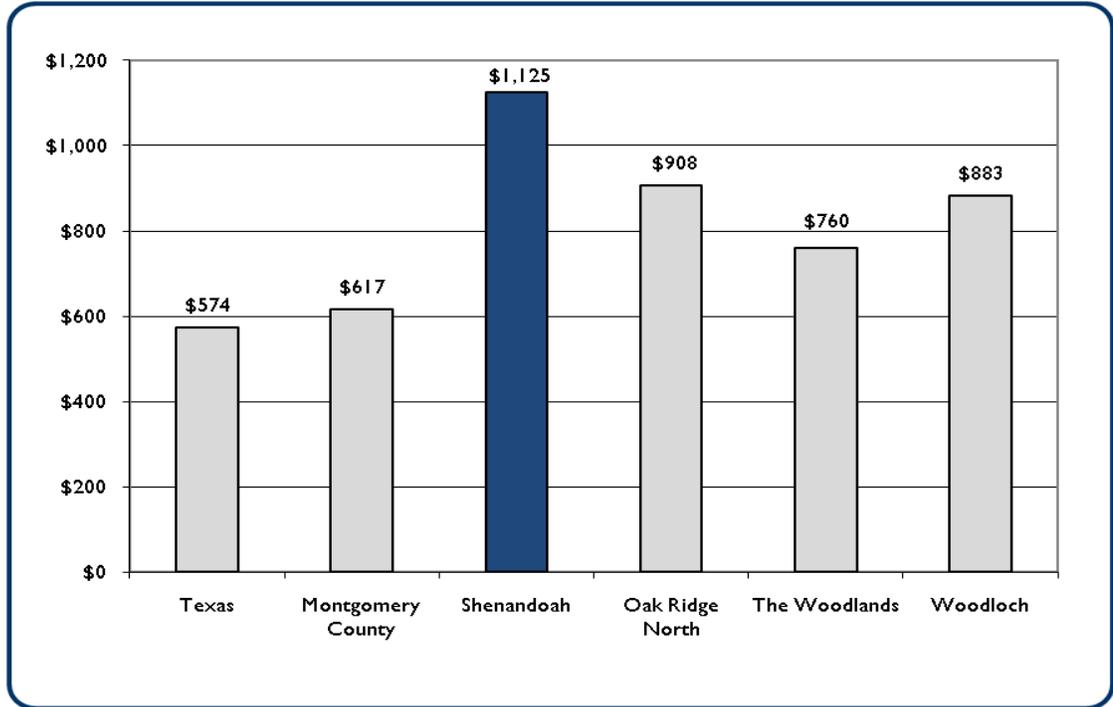
Source: 2000 U.S. Census

Income levels indicate to potential retailers whether or not the City is a prime site to locate their business – the amount of available disposable income is a major factor that influences the type and amount of retail development that a city can support.

Income is a major determining factor for homeownership; a high level of homeownership is generally seen as a positive characteristic for a community. Income levels, therefore, can play a role in the size, type, and quality of residential development a community attracts.

As shown in **Figure I-12**, Shenandoah’s median household income is \$72,813, nearly \$33,000 higher than the State level, yet comparable to the median household income of surrounding areas.

Figure I-13 | Median Gross Rent

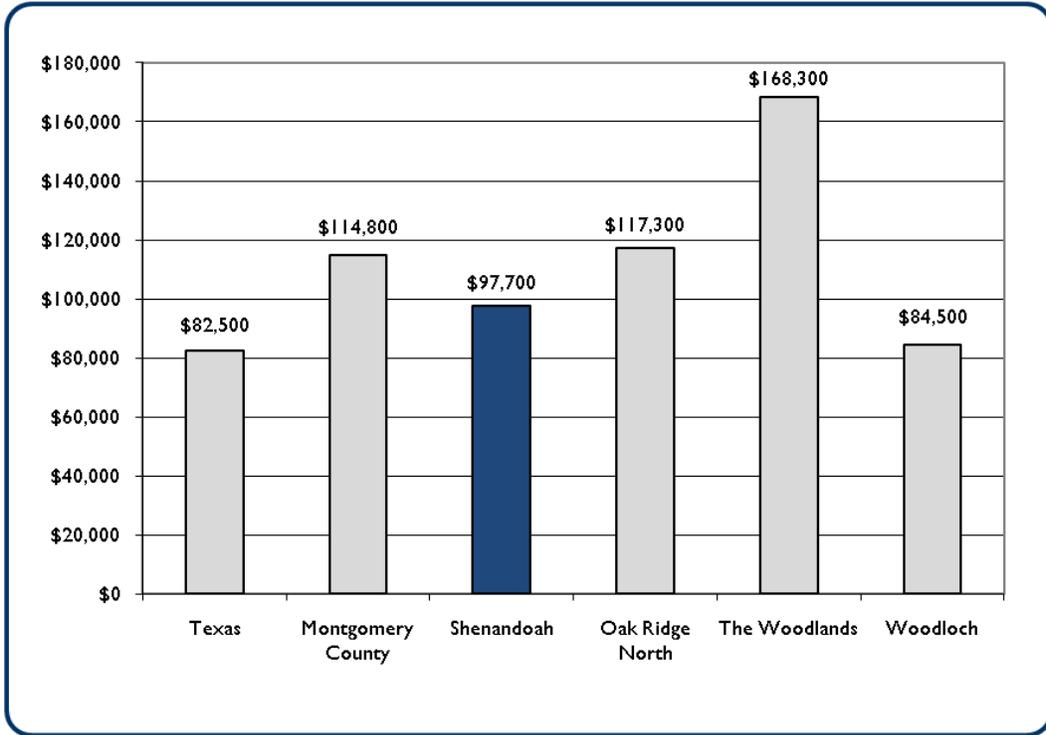


Source: 2000 U.S. Census

According to the U.S. Census, gross rent is (Contract Rent + Utilities = Gross Rent). As shown in **Figure I-13**, median gross rent in Shenandoah is \$1,125, nearly double the median gross rent for Montgomery County.

It is assumed a family can spend up to 30% of the household income on housing costs. With a median household income of \$72,813, over \$21,800 could be spent annually on housing costs. With a median gross rent of \$13,500 annually, it can be concluded that Shenandoah offers affordable rental housing options for its current residents. It should be noted that although this median gross rent is reasonable for current residents of Shenandoah, it is not feasible based on the median household income of the State, under \$30,000.

Figure I-14 | Median Home Value

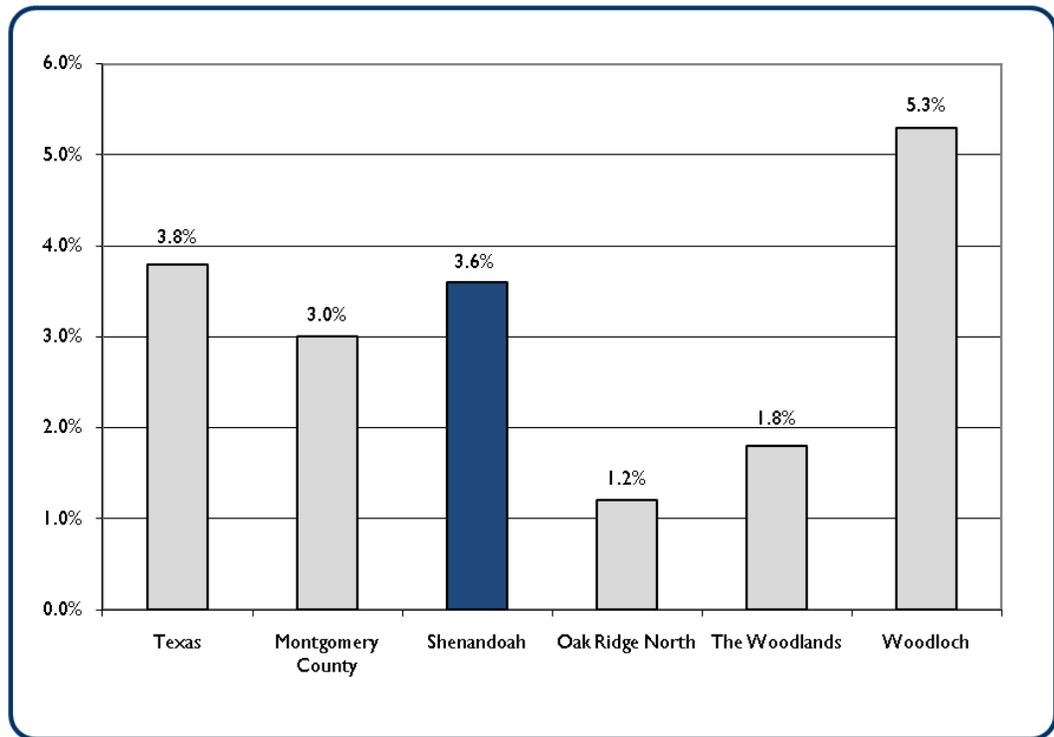


Source: 2000 U.S. Census

Housing values are important to examine because they are indicative of what the City can expect its future housing stock to contribute to the local economy as well as the City’s aesthetic quality. **Figure I-14** shows the median home value in Shenandoah to be \$97,700. This value ranks Shenandoah approximately half way between the State of Texas and Montgomery County. Oak Ridge North and The Woodlands have higher median home values at \$117,300 and \$168,300 respectively. Shenandoah has a higher median home value than Woodloch at \$84,500.

Based on recent Montgomery County Appraisal District data, homes constructed in Shenandoah between January and June 2009 have a median value of \$155,893.

Figure I-15 | Unemployment Rate



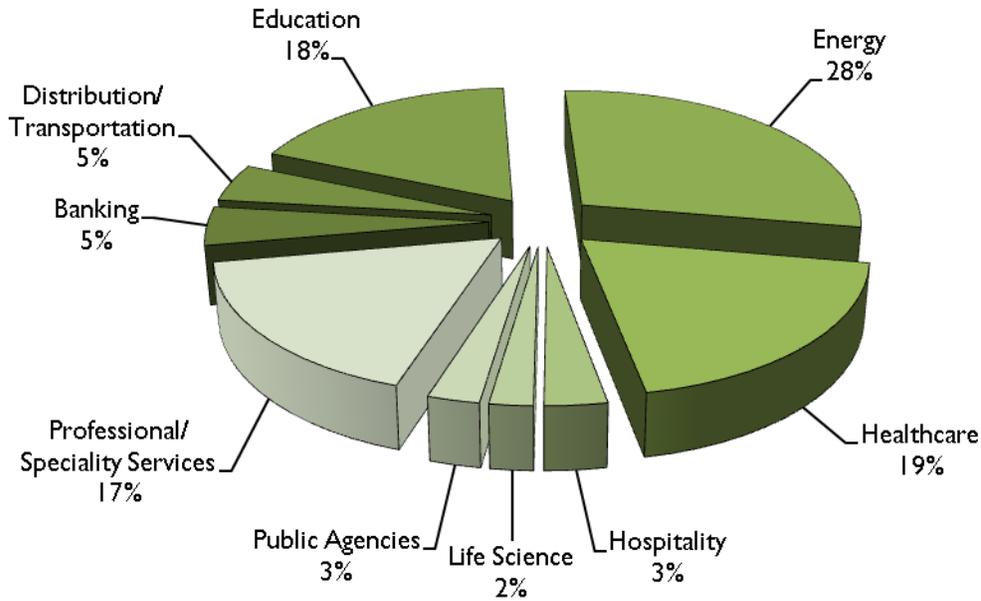
Source: 2000 U.S. Census

Employment opportunities can affect the growth rate of cities. These opportunities are important because they allow people to settle in a community, establish their home and begin a life. If citizens cannot find work in an area, they are forced to move elsewhere, and to take their property and sales tax revenue with them.

Cities are generally dependent on businesses to provide employment opportunities that in turn pay the citizens' salaries and provide them with the ability to buy and sell goods, pay taxes, and so on.

As shown in **Figure I-15**, Shenandoah has an unemployment rate of 3.6%, ranking the City between the State and County levels. The regional unemployment rate is also an important factor, at approximately 3.0% in the County.

Figure I-16 | Employment

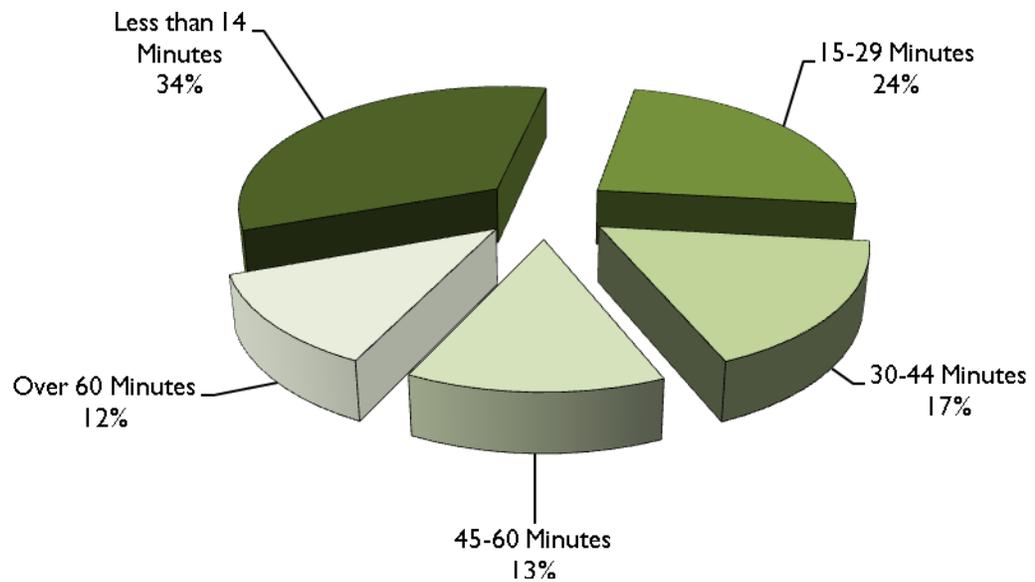


Source: South Montgomery County Woodlands Economic Development Partnership

Each community is different and therefore examining employment trends can indicate a particular area’s economic base, as well as major employment opportunities and economic sustainers within a community. **Figure I-16** shows the employment base for South Montgomery County (includes Shenandoah, Oak Ridge North, and The Woodlands) as of February 2009. Almost one third of people employed in South Montgomery County work in an *Energy* related field, approximately 28%. This is followed by *Healthcare* at 19%, *Education* at 18% and *Professional/Specialty Services* at 17%.

Statistics specifically for Shenandoah can be found in the 2000 U.S. Census. This information shows that 43% of the residents of Shenandoah are employed in *Management, Professional, and Related* fields, followed by 33% in *Sales and Office* fields. These two broader categories likely encompass some of the more specific employment categories described in **Figure I-16**.

Figure I-17 | Commute Time



Source: 2000 U.S. Census

Daily commute time is often an indicator of how far residents must travel to reach their place of employment. It can indicate whether a majority of a community's residents work at employment centers within the City or if residents travel to other communities for employment. **Figure I-17** shows that the largest commuting category is those who travel less than 14 minutes to reach their place of employment at 34%. Overall, 58% of residents reported a commute of 29 minutes or less. In contrast, only 12% of residents reported a daily commute over 60 minutes.

Existing Land Use

The pattern of land use that exists today within the City has evolved to satisfy the requirements of the City's growing needs. The activities of local residents create a need for various land uses, as well as for the supplemental systems that support land uses (i.e., thoroughfare systems). The relationships of existing and future land uses will shape the character and quality of life of the community for many years to come. In order to more accurately assess the City's future land use needs, an analysis of past land use trends and present land use patterns are of primary importance.

The following are the specific elements to be documented in order to describe land use characteristics. Assessment of the land use and neighborhood characteristics will be undertaken using the City's existing land use data, field reconnaissance data (i.e., windshield survey), and aerial photographs, if available.

The existing land use inventory will include:

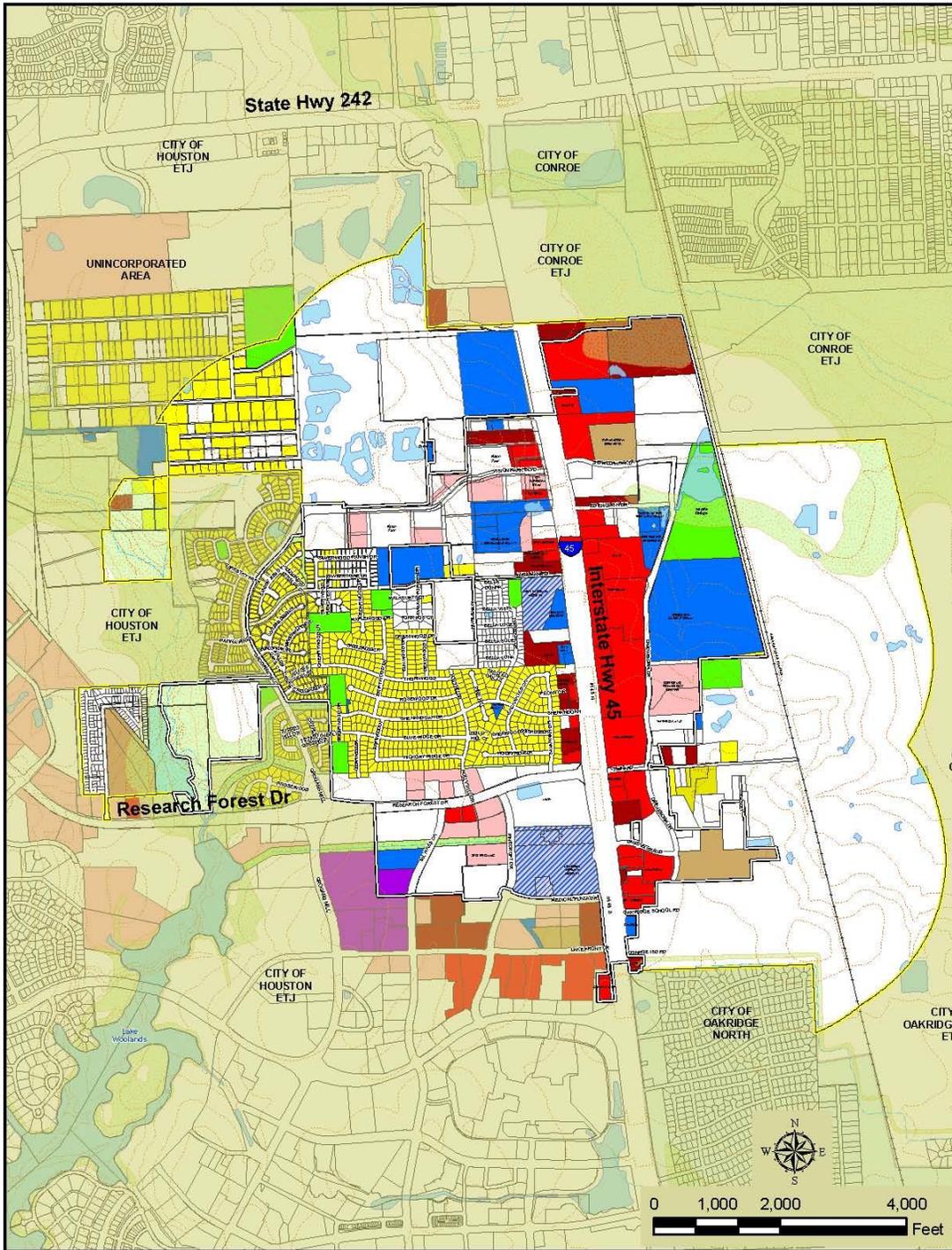
- Existing land use inventory;
- Analysis of types of land uses;
- Discussion of existing development patterns; and,
- Discussion of existing land use relationship, both positive and negative.

In addition to land use information provided by the City, the Sefko Planning Group performed several field surveys in early 2009 in order to analyze the land use trends within Shenandoah. Each parcel of land was color-coded according to various land use types. The information obtained from the survey is used herein to discuss Shenandoah's current land use pattern. Following are descriptions of the various types of land use used in the survey along with the color that is used to graphically represent each use on **Plate I-2**.

Types of Existing Land Use

- 
Residential Uses:
 - 
Single Family Residences:
 One-family dwellings and related accessory buildings.
 - 
Multiple Family Residences:
 Apartment dwellings and related accessory buildings.
 - 
Townhomes:
 Attached two- to three-story dwellings with shared side walls.
 - 
Manufactured Homes:
 Manufactured home located on a lot or parcel and used as a dwelling.
- 
Office Uses:
 Professional/administrative offices, including doctors, dentists, realtors, architects, accountants, secretarial services, etc.
- 
Public/Semi-Public:
 Schools, churches, cemeteries and public buildings.
- 
Parks and Open Spaces:
 Parks, playgrounds and public open spaces.
- 
Retail Uses:
 Uses which primarily provide goods, including clothing shops, shopping centers, service stations and any associated off-street parking facilities.
- 
Commercial Uses:
 Uses which primarily provide services, including automotive repair shops, warehouses, wholesale establishments, and hotels.
- 
Medical Facilities:
 Hospitals.
- 
Industrial Uses:
 Manufacturing, warehousing, distributing, and assembling.
- 
Rights-of-Way/Easements:
 Land dedicated to public use, including roadways, sidewalks, and easements.
- 
Vacant:
 Vacant land having no apparent use or land used for agricultural purposes (ranching or farming).

Plate I-2 | Existing Land Use Map



Source: Sefko Planning Group / Freese and Nichols, Inc.

Baseline Analysis

Existing Land Use

Existing Land Use Analysis

Total acres by land use category for the City limits, extraterritorial jurisdiction (ETJ), and the total planning area (City limits and ETJ combined) are shown in **Table I-3**.

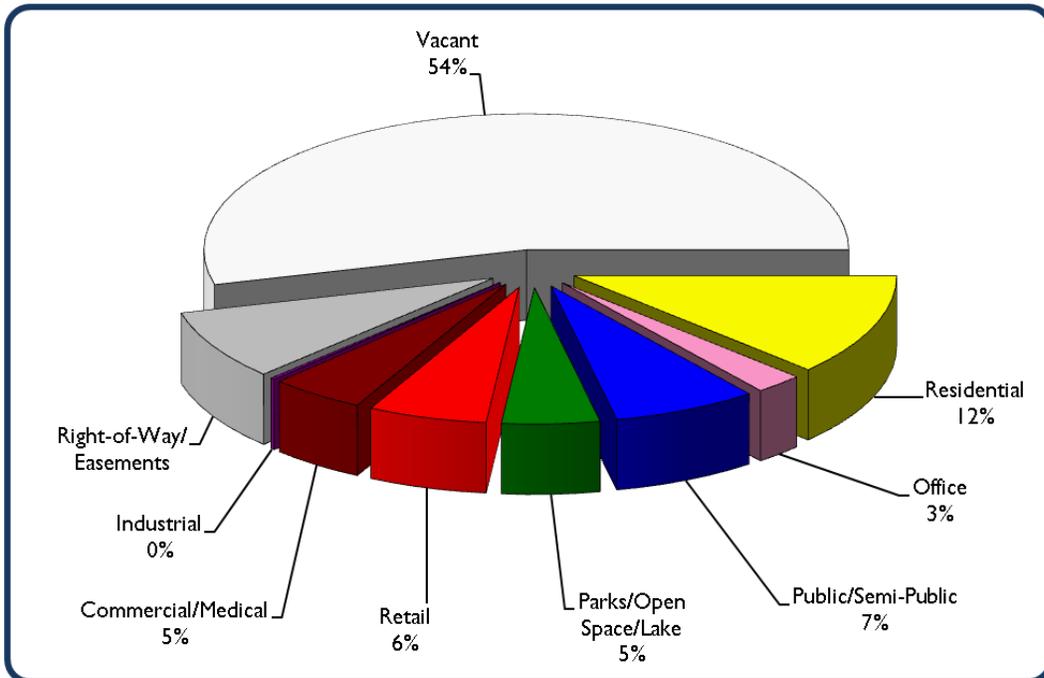
Table I-3 | Existing Land Use Acres

Land Use	City Limits	ETJ	Planning Area
Residential	191	91	282
Single Family	163	65	228
Multiple Family	28	19	47
Townhomes	0	0	0
Manufactured Homes	0	7	7
Office	56	0	56
Public/Semi-Public	124	45	169
Parks/Open Space/Lake	81	27	114
Retail	139	0	139
Commercial/Medical	98	13	111
Industrial	5	0	5
Right-of-Way/Easements	158	20	194
Vacant	316	946	1,262
Total	1,168	1,142	2,310

Source: Sefko Planning Group / Freese and Nichols, Inc.

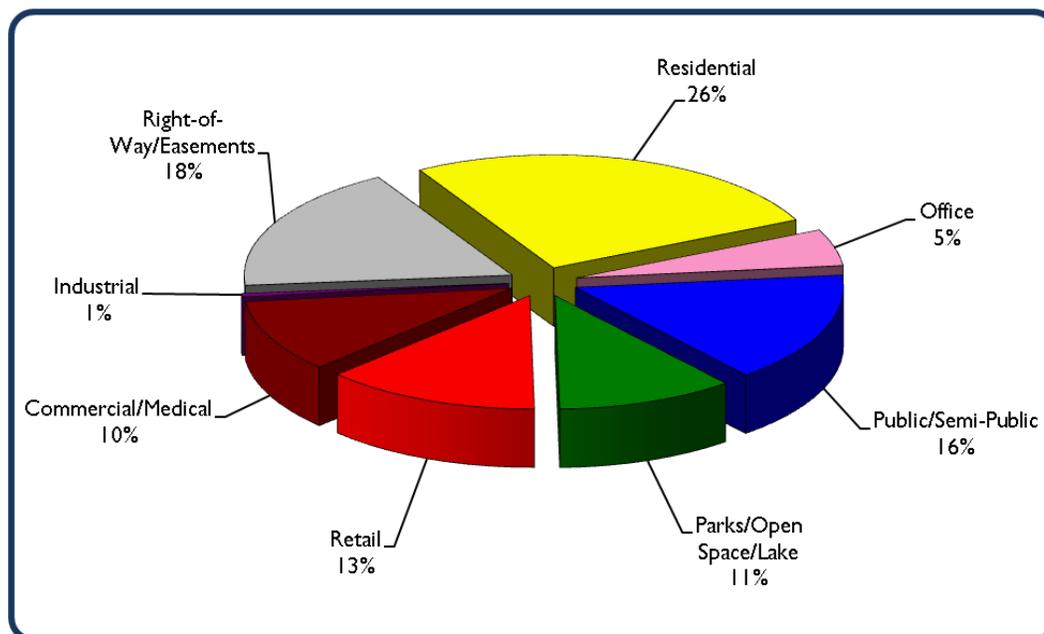
Table I-3 also shows the percentages of each use of the developed land within the planning area. Over 1,260 acres, or nearly half of the total acreage within the planning area is currently vacant, or undeveloped. **Figure I-18** depicts the land use composition of the planning area. Similarly, **Figure I-19** shows the composition of *developed* land uses within the planning area (excludes vacant/undeveloped land). As shown, 26% of developed land within the planning area is used for Residential uses, the vast majority of which are single family households. Other prominent land uses within the planning area include Rights-of-Way/Easements, Public/Semi-Public, Retail, and Parks/Open Space/Lake.

Figure I-18 | Existing Land Use of the Planning Area



Source: Sefko Planning Group / Freese and Nichols, Inc.

Figure I-19 | Existing Developed Land Use of the Planning Area



Source: Sefko Planning Group / Freese and Nichols, Inc.

As shown in **Table I-4**, the percentage of each land use within the City limits compared to the ETJ are somewhat similar. The most drastic difference is a shift to more residential uses in the ETJ (46.4%) compared to the City limits (22.4%). Single Family Residential land use accounts for the highest amount of developed acreage in both the City and the ETJ. The next largest difference is the amount of retail in the City (16.3%) compared to the ETJ (0%).

Table I-4 | Land Use Percentages of Total Developed Acres

Land Use	Percent of City Limits	Percent of ETJ	Total Planning Area	Difference (City Limits - ETJ)
Residential	22.4%	46.4%	25.0%	-24.0%
Single Family	19.1%	33.2%	21.3%	-14.0%
Multiple Family	3.3%	9.7%	1.8%	-6.4%
Townhomes	0.0%	0.0%	1.7%	0.0%
Manufactured Homes	0.0%	3.6%	0.3%	-3.6%
Office	6.6%	0.0%	5.3%	6.6%
Public/Semi-Public	14.6%	23.0%	20.9%	-8.4%
Parks/Open Space/Lake	9.5%	13.8%	10.7%	-4.3%
Retail	16.3%	0.0%	13.0%	16.3%
Commercial/Medical	11.5%	6.6%	6.5%	4.9%
Industrial	0.6%	0.0%	0.5%	0.6%
Right-of-Way/Easements	18.5%	10.2%	18.1%	8.3%
Total	100.0%	100.0%	100.0%	0.0%

Source: Sefko Planning Group / Freese and Nichols, Inc.

Approximately 27% of the total acreage within the City limits and 55% of total acreage within the planning area is classified as Vacant (or undeveloped) land. This percentage amounts to 1,262 acres in the planning area that have the potential to be developed in the future. The importance of the calculation of undeveloped land lies in the fact that it is this land that will allow the City to grow in population in the coming years. It is also the area where decisions will have to be made regarding service provision and roadway construction, because although this land is not currently developed, it is likely to develop at some time in the future. This land is also significant because, as 27% of the City, it can be developed in different and perhaps better ways than the current development.

Most communities do not develop such that 100% of the land is utilized. Generally, approximately 10% remains vacant. However, even given this fact, the existing percentage of vacant acreage within Shenandoah provides acreage to accommodate future population growth within the City limits. This will be discussed further in the Future Land Use Plan as part of Shenandoah's future population growth and ultimate population capacity analysis.

Physical Features

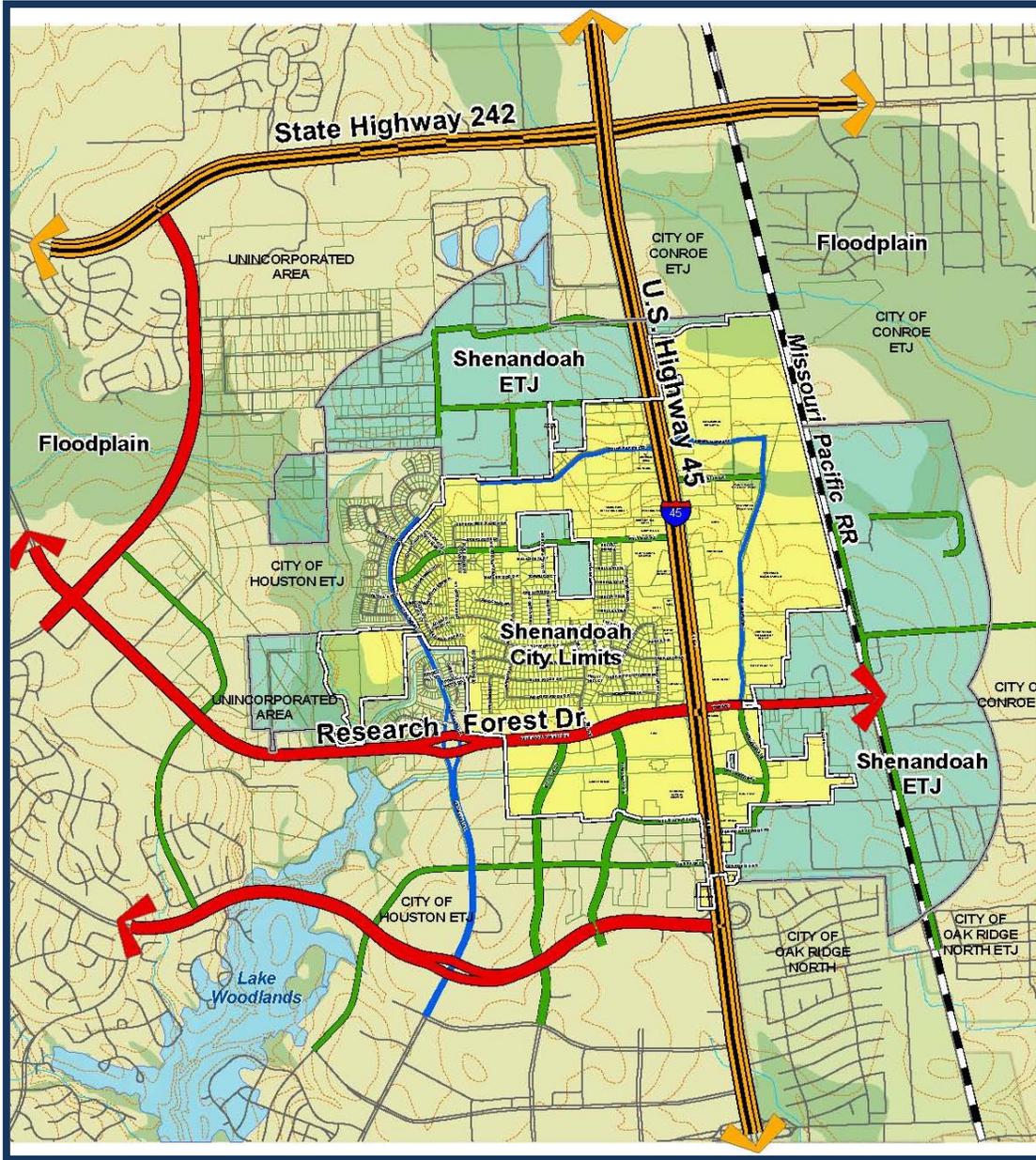
Shenandoah’s man-made and physical environment greatly influences its future land use pattern and rate of growth. It is important to document and analyze the physical factors that will ultimately contribute to the City’s urban form and content. Each element of the Future Land Use Plan must be fashioned with these physical factors in mind. Following are the specific elements to be documented in order to describe the existing physical environment:

- Analysis of the City’s current municipal boundaries and remaining ETJ areas;
- Analysis of the municipal boundaries and ETJs of surrounding cities;
- Analysis of the City’s major topographic features, including any areas of unusual topography or extensive tree cover; and,
- Analysis of existing floodplain areas and other natural drainage features.

Shenandoah’s City limits currently contain 1,168 acres, with an additional 1,142 acres in the ETJ, for a total of 2,310 acres in the planning area. The ETJ area expands 1/2 mile beyond the City limits, with the exception of areas conflicting with a previously existing City limit or ETJ. The City limits and ETJ boundaries of neighboring cities (The Woodlands, Woodloch, Houston, Conroe, and Oak Ridge North) limit Shenandoah’s opportunities for annexation to expand the City limits.

Within the City limits, development is impacted by Interstate 45, Highway 242, and the railroad tracks. These transportation corridors support different types of land uses – the highways support commercial and retail development, while the railroad tracks support industrial uses. Additionally, these corridors bisect the City, dividing the neighborhood and creating separate communities.

Other factors influencing development include the river and its floodplain area, which covers 78 acres within the City limits and 93 acres within the ETJ. As shown in **Plate I-3**, floodplain occurs primarily in the western and northeastern portions of the City and ETJ. Land designated as floodplain is typically difficult to develop with increased development costs and environmental concerns regarding preservation and protection of wetlands.



Source: Sefko Planning Group / Freese and Nichols, Inc.

Vision

2



This Vision chapter provides a foundation for the plan similar to the Baseline Analysis. The Baseline Analysis outlines facts which pertain generally to demographics, housing and land use characteristics. The Vision chapter also provides a foundational element for this plan, but in a very different way – it creates a vision for this comprehensive planning effort, as well as for the City of Shenandoah in general. This is also the chapter upon which many of the recommended actions and implementation efforts of Shenandoah’s 2009 Comprehensive Plan will be based.

What should the future hold for Shenandoah? What should the City be like in 2020 or 2030? These are the key questions that this chapter addresses. The vision for Shenandoah described within this 2009 Comprehensive Plan will help shape and direct growth and development for the next ten years and beyond. In order to do this effectively, this plan should be premised upon a shared vision of what Shenandoah should become as it grows, attains its anticipated build-out configuration, and becomes an increasingly mature, livable and sustainable City.

In order to create this shared vision, numerous meetings with the Steering Committee and City leaders were held, at which the Steering Committee and City leaders participated in a Visual Character Survey (VCS), a Strengths, Weaknesses, Opportunities, and Threats (S.W.O.T.) Analysis, and created a vision statement for the Comprehensive Plan. The first section of this chapter describes the results of the VCS, and the second section discusses the S.W.O.T. The third section outlines the vision for Shenandoah, established through an encompassing vision statement.

Visual Character Survey

A Visual Character Survey (VCS) is a technique in which respondents are asked to score a series of photographs based on what they find to be visually preferable. The images illustrate various aspects of the developed environment. Although it is not necessarily scientific in nature, the VCS is an effective method of receiving attitudinal, aesthetic-based input. This is possible because the survey allows the respondents to view and score real-world examples of developed areas and elements.

The Visual Character Survey that was developed specifically for Shenandoah was primarily the result of issues identified by the Steering Committee during the beginning of the comprehensive planning process. The various areas presented in the VCS included the following:



- Interstate 45 Corridor
- David Memorial Corridor
- Research Forest Corridor
- Neighborhood Marketplace
- Residential Neighborhoods
- Tamina Industrial Area

Respondents were shown 180 images corresponding to the above categories. They were asked to rate each image according to the scale shown below.

1	2	3	4	5
Very Inappropriate		Neutral		Very Appropriate

Respondents were asked to consider several questions about each image as they rated them:

- Do I like or dislike the image?
- By what value do I like or dislike it?
- Is it appropriate or inappropriate for our City?

Following are the results of the VCS. (In evaluating the results of the VCS, the average score of each image is used). Overall high and low scoring images are shown first, followed by the highest and lowest rated images within each of the subject headings previously listed, and the last of the images with the lowest and highest standard deviations (most and least consistent scoring). A total of 13 people participated in the VCS on April 15, 2009.



Overall Highest Scoring Images

Following are the eighteen images (ten percent) that were scored the highest in the VCS. Each of the twenty images received an average score of 4.3 or higher. The category and average score are shown below each image.



Interstate 45
Average Score: 4.7



Interstate 45
Average Score: 4.7



Interstate 45
Average Score: 4.5



Neighborhood Marketplace
Average Score: 4.5



Tamina Industrial
Average Score: 4.5



Interstate 45
Average Score: 4.5



Neighborhood Marketplace
Average Score: 4.5



Residential
Average Score: 4.5



Residential
Average Score: 4.5



Residential
Average Score: 4.5



Interstate 45
Average Score: 4.4



David Memorial
Average Score: 4.4

Vision

Visual Character Survey

Vision Visual Character Survey



Research Forest
Average Score: 4.4



Neighborhood Marketplace
Average Score: 4.4



Neighborhood Marketplace
Average Score: 4.4



Neighborhood Marketplace
Average Score: 4.4



Tamina Industrial
Average Score: 4.4



Research Forest
Average Score: 4.3

Overall Lowest Scoring Images

Following are the eighteen images (ten percent) that were rated the lowest in the VCS. Each of the eighteen images received an average score of 2.4 or lower. The category and average score are shown below each image.



David Memorial
Average Score: 1.5



David Memorial
Average Score: 1.6



Tamina Industrial
Average Score: 1.7



Neighborhood Marketplace
Average Score: 1.7



David Memorial
Average Score: 1.8



Interstate 45
Average Score: 1.8

Vision Visual Character Survey



Tamina Industrial
Average Score: 1.8



Tamina Industrial
Average Score: 1.9



Interstate 45
Average Score: 2.0



Tamina Industrial
Average Score: 2.1



Tamina Industrial
Average Score: 2.2



David Memorial
Average Score: 2.2



Tamina Industrial
Average Score: 2.2



Tamina Industrial
Average Score: 2.3



David Memorial
Average Score: 2.3



Tamina Industrial
Average Score: 2.4



David Memorial
Average Score: 2.4



Interstate 45
Average Score: 2.4

Highest & Lowest Scoring Images by Subject

As stated previously, a wide variety of image types were included within this Visual Character Survey (VCS). The following results illustrate the highest and lowest scoring images for each area.

Interstate 45 – Highest Scoring Images

Images reflecting office buildings or hotels which incorporate aesthetic features such as water, open space, and landscaping features scored the highest in this category.



Average Score: 4.7



Average Score: 4.7



Average Score: 4.5



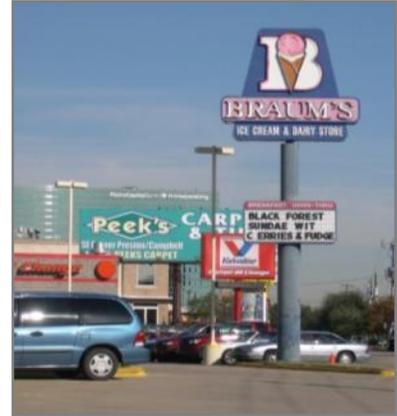
Average Score: 4.5

Interstate 45 – Lowest Scoring Images

Images featuring traditional strip development, poor signage techniques, and lack of aesthetic quality scored the lowest in the Interstate 45 area.



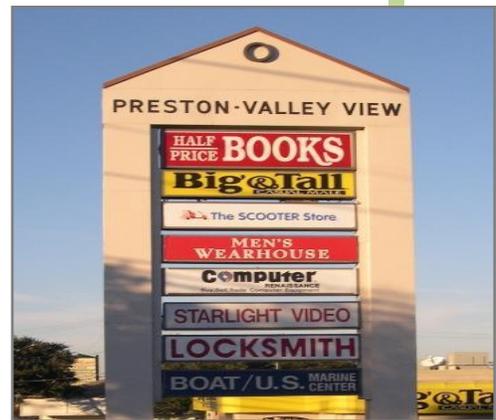
Average Score: 1.8



Average Score: 2.0



Average Score: 2.4



Average Score: 2.5

David Memorial – Highest Scoring Images

Images featuring extensive landscaping and open space and higher quality building materials received the highest scores for development along David Memorial Drive.



Average Score: 4.4



Average Score: 4.3



Average Score: 4.2



Average Score: 4.2

David Memorial – Lowest Scoring Images

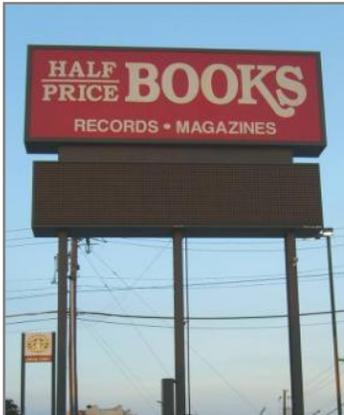
Images of large, metal buildings with limited landscaping were scored least favorably for development along David Memorial Drive. Large pole signs also received poor ratings.



Average Score: 1.5



Average Score: 1.6



Average Score: 1.8



Average Score: 2.2

Research Forest – Highest Scoring Images

Images with natural features such as water and images which incorporated adequate open space were scored the most favorably.



Average Score: 4.4



Average Score: 4.3



Average Score: 4.2



Average Score: 4.2

Research Forest – Lowest Scoring Images

Images depicting a more urban appearance were scored the least favorably in the Research Forest area.



Average Score: 3.2



Average Score: 3.2



Average Score: 3.2



Average Score: 3.3

Neighborhood Marketplace – Highest Scoring Images

The element of water and the incorporation of sufficient public space are once again prevalent in the highest scoring images in this section.



Average Score: 4.5



Average Score: 4.5



Average Score: 4.4



Average Score: 4.4

Neighborhood Marketplace – Lowest Scoring Images

Images reflecting box style developments with little architectural or aesthetic design scored the least favorably.



Average Score: 1.7



Average Score: 2.7



Average Score: 2.7



Average Score: 2.8

Residential – Highest Scoring Images

Residential images featuring lower density housing development with masonry, stone, or other such features scored the highest. Images containing water features in park-type settings also scored favorably.



Average Score: 4.5



Average Score: 4.5



Average Score: 4.5



Average Score: 4.1

Residential – Lowest Scoring Images

Images featuring traditional housing design on a smaller lot scale scored the least favorably.



Average Score: 3.0



Average Score: 3.2



Average Score: 3.2



Average Score: 3.3

Tamina Industrial Area – Highest Scoring Images

Images reflecting an industrial park or business park scored the most favorably. Such developments usually support warehousing and light industrial uses and incorporate large areas of landscaping for aesthetic as well as screening purposes.



Average Score: 4.5



Average Score: 4.4



Average Score: 4.3



Average Score: 4.3

Tamina Industrial Area – Lowest Scoring Images

Images reflecting heavy industrial uses scored the least favorably.



Average Score: 1.7



Average Score: 1.8



Average Score: 1.9



Average Score: 2.1

Most Consistently Scored Images (Lowest Standard Deviation)

Standard Deviation is a calculation used to determine consistency within a group or range of scores. No standard deviation, meaning total agreement across the board, would be indicated with a score of 0.0. Generally, standard deviation scores ranging from 0.1 to approximately 2.0 are considered to be low or fairly consistent.

The following images represent the lowest overall standard deviations or the most agreed upon responses. The average score each picture was rated and the standard deviation score is shown below each image.



Average Score: 3.8
Standard Deviation: 0.44



Average Score: 2.3
Standard Deviation: 0.49



Average Score: 4.7
Standard Deviation: 0.49



Average Score: 4.7
Standard Deviation: 0.49

Least Consistently Scored Images (Highest Standard Deviation)

Standard Deviation is a calculation used to determine consistency within a group or range of scores. No standard deviation, meaning total agreement across the board, would be indicated with a score of 0.0. Generally, standard deviation scores of 2.1 and above are considered to be high, or fairly consistent.

The following images represent the highest overall standard deviation scores or the most inconsistent scoring responses to an image. The average score each image was rated and the standard deviation score is shown below each image. It is important to note that no image received a standard deviation score above the 2.1 level, which indicates a wide agreement by respondents in regards to which images are appropriate and which images are not appropriate for Shenandoah.



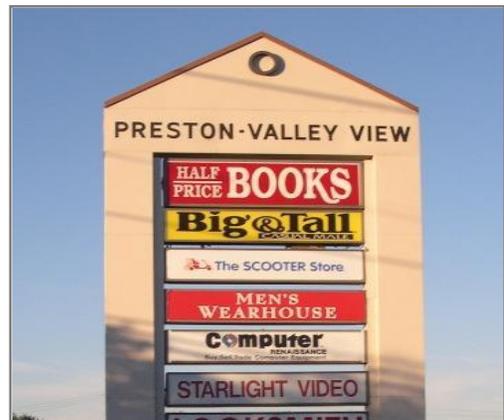
Average Score: 1.7
Standard Deviation: 1.49



Average Score: 3.4
Standard Deviation: 1.45



Average Score: 3.8
Standard Deviation: 1.41

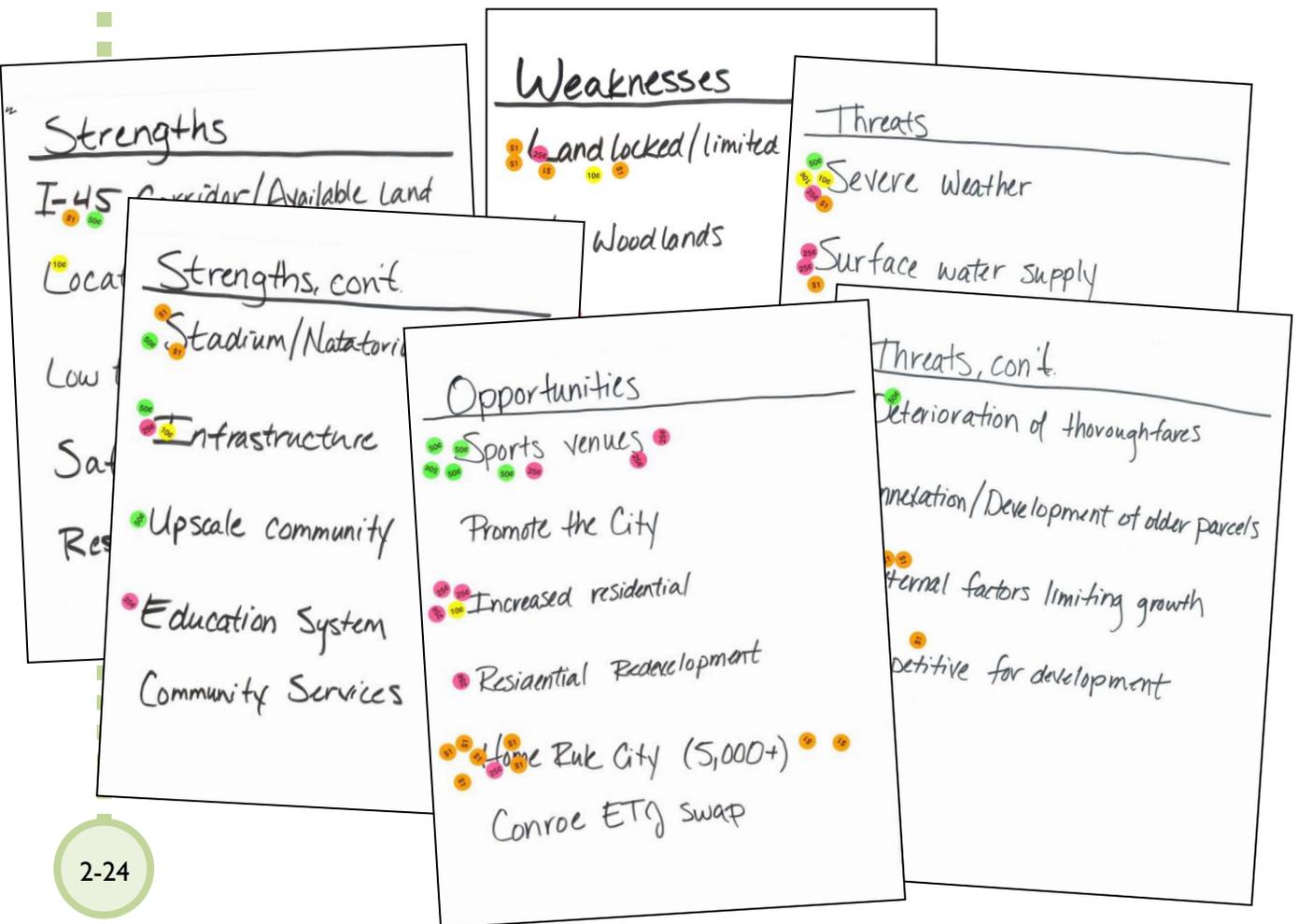


Average Score: 2.5
Standard Deviation: 1.38

S.W.O.T. Analysis

A strengths, weaknesses, opportunities, and threats (S.W.O.T.) analysis is a technique used to identify issues within a City. Strengths and weaknesses identify a variety of aspects that currently impact the community both positively and negatively. Opportunities and weaknesses refer to the future of the community. It is important to note that some characteristics, such as growth for example, could easily fall into more than one category. In fact, depending on the point of view, growth could be considered a strength, weakness, opportunity, and threat, all for the same community.

The Steering Committee met on March 4 to participate in a S.W.O.T. Analysis exercise. During the exercise, participants brainstormed on issues that are strengths, weaknesses, opportunities, and threats to the City of Shenandoah. After all ideas were recorded on large note pads, participants were given dots with different values on them, ranging from 10¢ to \$1, and were asked to vote on the issues using the weighted values – therefore, a vote with a \$1 dot is a higher priority than a 10¢ dot.



The results were scored on a weighted scale. The total dollar value of each issue was multiplied by the number of votes that issue received to determine a weighted value. Based on this weighted value, the issues were ranked in order of priority.

Rank	Characteristic	Value
1	Home Rule City (5,000+)	\$74.25
2	External Factors Limiting Growth	\$48.80
3	Landlocked/Limited room to grow	\$37.45
4	I-45 Corridor/Available Land	\$30.80
5	Sports Venues	\$26.00
6	Low Taxes	\$20.70
7	Strong Balance Sheet	\$18.00
8	Stadium/Natatorium	\$15.00
9	Dependence on Sales Tax	\$11.75
10	Major Employers/Diversified Employment	\$10.50
11	Severe Weather	\$9.75
12	Missing Retail Elements-Neighborhood Service	\$9.25
13	Perception (Identity)	\$8.05
14	Railroad Splits the Community	\$8.00
15	Traffic	\$6.00
16	Competitive for Development	\$5.80
17	Annexation/Development of Older Parcels	\$5.25
18	Surface Water Supply	\$4.50
19	Lack of Buffer Between Commercial and Residential	\$4.00
20	Deterioration of Thoroughfares	\$3.80
21	Uncontrollable external factors	\$3.40
22	Increased Residential	\$3.40
23	Medical Destination / Diversification	\$3.00
24	Infrastructure	\$2.55
25	Overhead Utilities	\$2.55

Rank	Characteristic	Value
26	Town Center-Shop, Eat, Residential	\$2.20
27	Some existing I-45 Commercial Outdated	\$2.00
28	I-45 Corridor	\$2.00
29	Safe Place	\$1.50
30	Fire Department	\$1.00
31	Transportation - Extending David Memorial	\$1.00
32	Walkability	\$0.70
33	First Responders	\$0.50
34	Upscale Community	\$0.50
35	Keeping up with Growth	\$0.50
36	Woodlands/Growth	\$0.40
37	Subsidized Utility Rates	\$0.40
38	Education System	\$0.25
39	Residential Redevelopment	\$0.25
40	Location	\$0.10
41	I-45 Splits the Community	\$0.10
42	Available Industrial Land	\$0.10
43	Responsive City Staff	\$0.00
44	Deed Restrictions	\$0.00
45	Green Space	\$0.00
46	Planning	\$0.00
47	Great Staff	\$0.00
48	Access to Public Officials	\$0.00
49	Zoning	\$0.00
50	Community Services	\$0.00
51	Free Wi-Fi	\$0.00
52	Developer Participation	\$0.00
53	Debt Capacity	\$0.00
54	The Woodlands	\$0.00
55	Medical/Lack of Sales Tax	\$0.00
56	Backwards Ramps	\$0.00
57	Lack of Public Transportation	\$0.00
58	Promote the City	\$0.00
59	Conroe ETJ Swap	\$0.00
60	Watersheds	\$0.00

Vision Statement

A vision communicates the purpose behind planning and the City’s goals from a long-range planning and development perspective. The primary benefit of visioning is that it clarifies how a community will approach its critical planning, development, and growth issues. With this clarified approach that visioning provides, the resulting comprehensive plan will better address the future of the City in a manner that is reflective of the community’s interests. The vision statement should succinctly and vividly describe the community as it will ideally exist in the future.

The vision statement was created based on the input received through the S.W.O.T. analysis and the Visual Character Survey (VCS), as well as other issues raised throughout the planning process. The statement was crafted by the Steering Committee to more accurately reflect the community’s vision.

Shenandoah, by the year 2030 — through community involvement and leadership — will be the City with a reputation for excellence. We will build a community where young and old alike feel they have a special place in the community and choose Shenandoah for lifelong living.

We value:

- Building quality relationships which last through generations.
- Embracing the diverse needs of our current and future population as we continue to grow.
- Committing to involving and communicating with the entire community.
- Respecting the balance between business and resident needs.
- Maintaining high quality, sustainable infrastructure.

We envision:

- A unique and upscale destination.
- A City that other cities emulate for services.
- Two and three generations of families living in the same community.
- Shopping, dining, and services that meet the needs of our community.
- Opportunities for our citizens to recreate, reside and succeed.
- A lifelong home for its populace, where the children come back to raise their children.

Future Land Use

3



The right of a municipality to coordinate growth is rooted in its need to protect the health, safety, and welfare of local citizens. An important part of establishing the guidelines for such responsibility is the Future Land Use Plan, which establishes an overall framework for the preferred pattern of development within Shenandoah. In general, the Future Land Use Plan is intended to be a comprehensive blueprint of Shenandoah's vision for its future land use pattern. Specifically, the Future Land Use Plan designates various areas within the City for particular land uses, based principally on the specific land use policies outlined herein.



The Future Land Use Plan is graphically depicted for use during the development plan review process with the Future Land Use Plan map (**Plate 3-1**). The Future Land Use Plan should ultimately be reflected through the City's policy and development decisions. The Future Land Use Plan map is not a zoning map, which deals with specific development requirements on individual parcels. The zoning map and changes in zoning should, however, be based on the Future Land Use Plan and related Future Land Use Plan map.

Shenandoah's land use pattern has evolved over the last several decades to become what it is today. The challenge now is to maintain the current quality and history of the City while paving the way for new, quality, sustainable development that will contribute to the City in the years to come. This Future Land Use Plan has been written to achieve the following:

- Address the needs of the City as a whole;
- Address the concerns and issues raised throughout this planning process;
- Provide policy guidance in keeping with the City's established vision statement, goals, and objectives; and,
- Ensure that Shenandoah is a unique and sustainable community.

The various types of land uses have different needs in terms of location. For example, residential areas should be located away from major roadways so that automobile traffic is generally able to circumvent such areas, thereby preserving the integrity of local neighborhoods and ensuring the safety of local residents. In contrast, nonresidential uses

should generally be located along major thoroughfares in order to allow them the highest visibility possible. An exception to this is heavy commercial and industrial uses, which may have open storage areas and warehouses that would not make a positive contribution to the way in which Shenandoah is viewed, particularly from the Interstate 45 corridor. Retail and some commercial land uses require locations that provide visibility, because these types of land uses often depend on “walk-in business” for success. Offices and supporting services require a combination of access and visibility, allowing a variety of location opportunities. More intense land uses, including heavy commercial and industrial, are typically located in areas less visible from public areas and residential developments, but that also have access to major thoroughfares to accommodate movement of goods and materials.



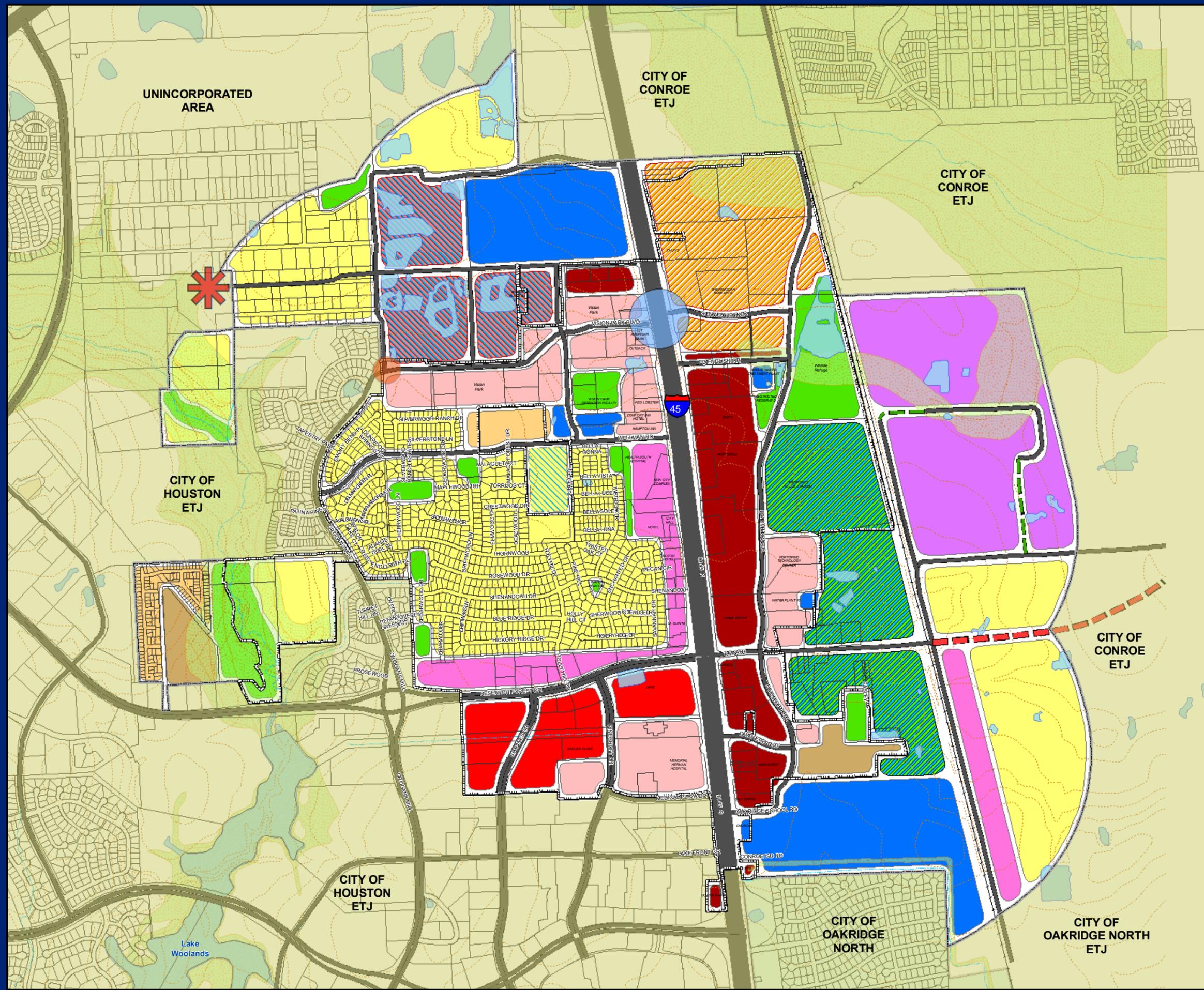
Consequently, areas along Interstate 45 and Research Forest have been designated for retail and limited commercial land uses, particularly those that are designed such that they are aesthetically pleasing. Office and supporting services are designated along Vision Park Boulevard and David Memorial Corridor. The north Tamina area, located east

of David Memorial and near the railroad tracks, is an ideal location for heavy commercial and industrial development within the City’s planning area.

The market, in conjunction with City policy, has dictated the existing land use pattern in Shenandoah – a pattern that generally supports these concepts of residential and nonresidential locations. The Future Land Use Plan map (**Plate 3-1**) further reinforces these concepts.

Future Land Use Plan

Plate 3-1



- Future Land Use**
- Low Density Residential
 - Medium Density Residential
 - High Density Residential
 - Town Center
 - Professional Corridor
 - Neighborhood Services
 - Retail Corridor
 - Interstate Corridor
 - Mixed Use
 - Public/Semi-Public
 - Sports District
 - Parks and Open Space
 - Industrial
 - Floodplain
 - Interchange
 - Roundabout
 - Park & Ride
 - Proposed Major Arterial
 - Proposed Collector
 - Freeway
 - Existing Thoroughfare Plan
 - Shenandoah City Limits
 - Shenandoah ETJ

Note:
 A Comprehensive Plan shall not constitute zoning regulations or establish zoning district boundaries.

FREASE & NICHOLS
 November 2009

0 600 1,200 2,400 Feet
 0 0.125 0.25 0.5 Miles

Future Land Use

All of the previously mentioned locational needs and compatibility issues related to the various types of land use have been considered in the establishment of Shenandoah's Future Land Use Plan. Land uses have been recommended based on three principal factors:

- Ensure compatibility with existing land uses
- Establish a central focus for the City
- Maintain an overall balanced and efficient land use pattern

Knowledge of the recommended future use of the land can help the City apply its zoning regulations accordingly. This knowledge can also help the City ensure that there are adequate public facilities available, such as water, wastewater, police protection, and park facilities. The following sections outline the various types of land uses that will help to provide a positive land use pattern in Shenandoah as the City approaches its ultimate build-out configuration.

Recommended Land Uses

This section of the Future Land Use Plan chapter reviews each type of recommended land use type as shown on the map. Land use types are grouped into two primary categories – residential land uses and nonresidential land uses.

Residential Land Uses

It is recommended that residential land uses continue to be the predominant land use within the City’s planning area, with a range of low, medium, and high density housing types, as well as mixed use developments available.

Low Density Residential Land Use



This use is representative of traditional, single family detached dwelling units. It is recommended that low density residential continue to account for the largest percentage, at 89.5% of residential uses, or 28.7% of the total area within the planning area. Low density residential land use is concentrated primarily to the west of Interstate 45, between Research Forest Drive and Vision Park Boulevard. Some additional low density residential extends to the northwestern-most portion of the ETJ.

Medium Density Residential Land Use



This use consists of attached dwelling units such as duplex units and townhomes or zero-lot line patio homes. These units commonly provide areas for “empty nesters” who may not want the maintenance of a large-lot single family home, and for young families who may find a townhome or duplex more affordable than a single family home. Medium density residential is planned to account for 5.5% of the residential acres within the total planning area (i.e., City limits and ETJ). This use is recommended along the north side of Wellman Road and in the ETJ area west of Grogan’s Mill and north of Research Forest rather than within the core of low density housing.

High Density Residential Land Use

High density residential land use is characterized by traditional apartment- and condominium-type units in attached living complexes. This classification is also intended to provide additional housing choices for Shenandoah residents such that the City becomes more of a “full-life cycle” community (i.e., young professionals, “empty-nesters,” retirees/elderly, etc.).

This use is planned for 1.6% of the planning area (i.e., City limits and ETJ) and 5.0% of all residential uses. It is noticeably separated from the low density housing core, and is located at the existing sites east of Interstate 45, north of Shenandoah Park Drive and south of Research Forest, and the existing site in the southwestern ETJ area north of Research Forest. Some additional high density residential land use has been recommended within the Mixed Use and Town Center land use categories and will be discussed in further detail within those sections.

In high density residential neighborhoods, it is desirable to designate a percentage of the total land area for landscaping and usable open space and other amenities. This lessens the sense of “crowding” and helps to encourage friendly interaction among residents.



Nonresidential Land Uses

Residents of a community should be able to live, work, and recreate all within the community itself; the existence of nonresidential uses allows this. Nonresidential land uses provide places of employment, retail uses that generate sales tax revenue for the City, and community parks. The following sections discuss specific aspects of the various types of nonresidential land uses recommended for Shenandoah.

Parks and Open Spaces Land Use ■



This land use designation is provided to identify all public parks and open spaces within Shenandoah. This includes developed park lands as well as undeveloped, natural open space.

It is important for Shenandoah to ensure adequate park space to serve not only its residents, but also its visitors from other communities who come to the city for shopping, business, or other activities.



About 127 acres within the planning area have been designated as park and open space land use. Many of these park areas currently exist; little additional stand-alone park area has been recommended, although it is recommended parks and open spaces be incorporated within other uses, such as the Town Center and Sports District.

Public/Semi-Public Land Use

This land use designation is representative of uses that are governmental, institutional, or religious in nature. Public/semi-public uses are generally permitted within any area; therefore, the areas shown on the Future Land Use Plan map include the related uses that are currently in existence. It is, however, anticipated that there will be a need for additional public uses with future population growth. The City should remain aware of necessary increases in police and fire protection based on population growth and potential increase in space and personnel for City administration.



Retail Corridor

Areas within the retail corridor are intended to provide for a high density of retail businesses. The development in this area should be multi-storied and pedestrian-oriented to encourage a vibrant, walkable area. Development should also correspond with the Retail-Commercial zoning district regulations.



Neighborhood Services

The neighborhood services land use refers to businesses that support nearby residential areas, such as restaurants, banks, convenience stores and gas stations, and limited office uses. This use is located along the northwestern corner of the Research Forest Drive and Interstate 45 intersection, providing a buffer between the residential area and the highway.





Professional Corridor



This land use type is intended primarily for offices and the businesses that provide support, such as office supply stores, restaurants, hotels and banks. The character of these areas should be somewhat of a corporate campus environment.

Areas designated as professional corridors include Vision Park Boulevard and David Memorial Corridor. Some office uses currently exist at these locations, which are predominantly medical-related.



Interstate Corridor



The interstate corridor is an area of retail and commercial services located along the east side of Interstate 45. This area may be auto-oriented and should provide easy access to and from the interstate. A heavy emphasis should be placed on the visual appearance of developments within this area, as it is one of the most visible portions of the city. Additionally, these retail areas capture sales tax dollars not only from the citizens of Shenandoah, but also from people traveling along Interstate 45, thereby increasing the city's sales tax revenue.

Light Industrial Land Use

The light industrial land use designation is applied to areas intended for a range of research laboratories, heavy commercial uses, assembly, warehousing, manufacturing, and service-type uses.

An area of Shenandoah that has been recommended for industrial land uses is the north Tamina area, east of the existing railroad tracks. Large tracts of land with easy access to major thoroughfares and railways are becoming increasingly hard to find for the industrial business community. This area offers relatively easy access to Interstate 45 and the railroad. Although this use is somewhat isolated and secluded from the remainder of the City, a heavy emphasis should be placed on screening and transitional uses to protect the areas to the south and west.





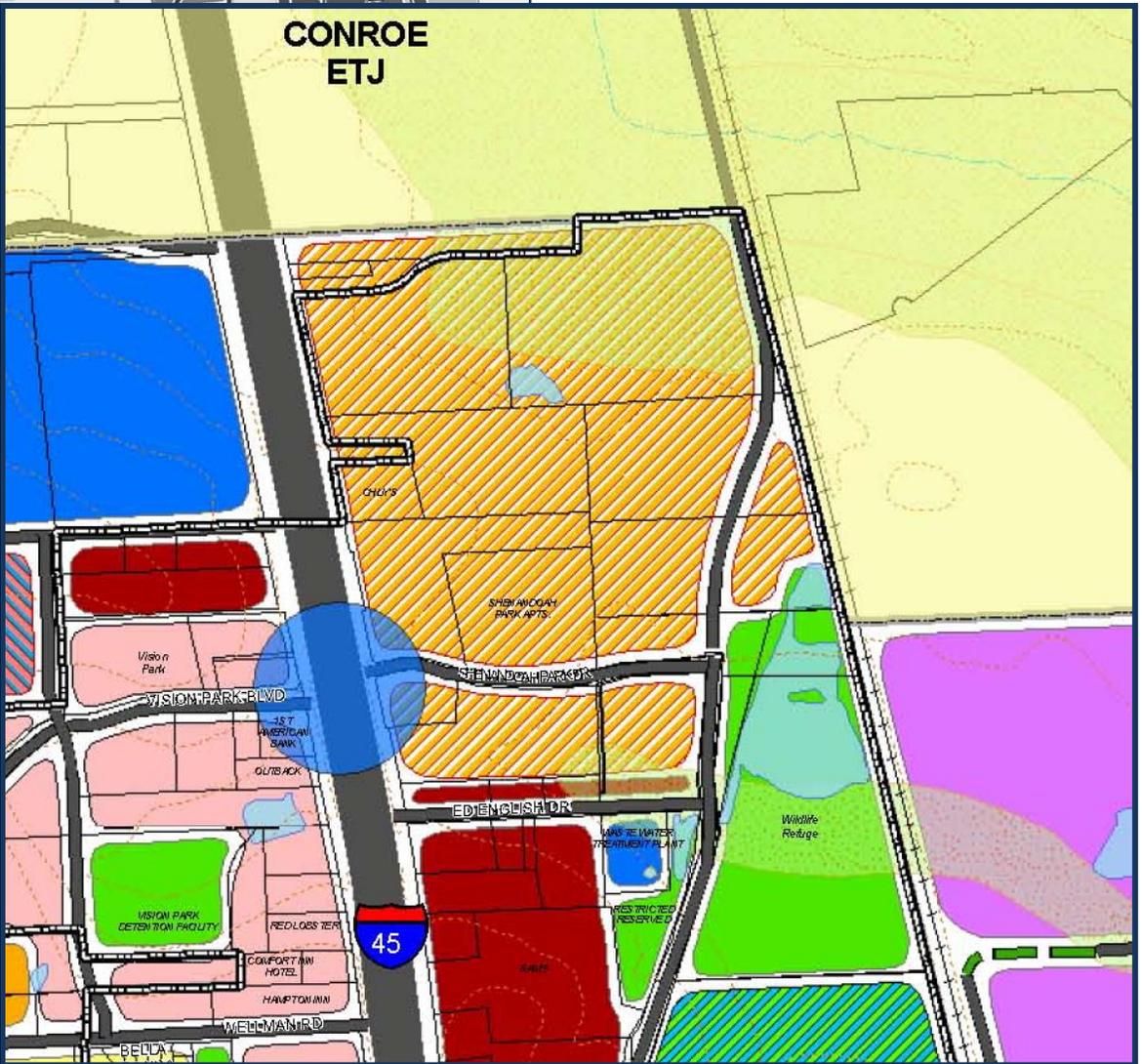
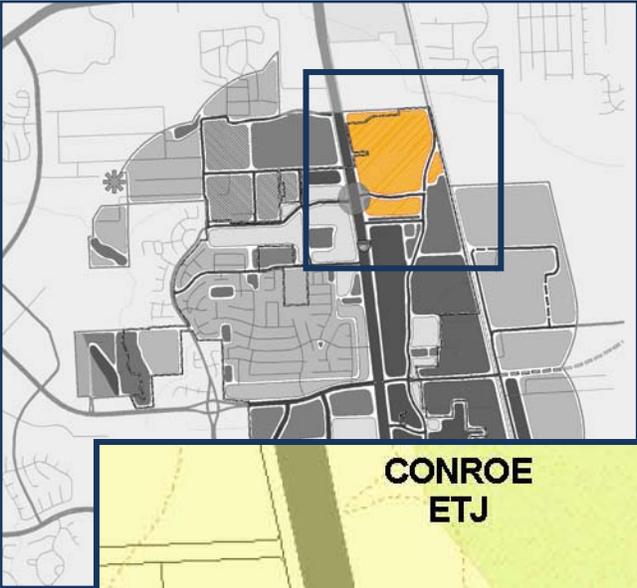
This area is intended for a mixture of residential and non-residential uses, and to be a focal point for the sports district and Vision Park area. The mix is anticipated to be primarily nonresidential, with approximately 80% nonresidential and 20% residential. The nonresidential component will incorporate the existing retail development and encourage entertainment uses. This land use includes 143 acres along the east side of Interstate 45.



This area may accommodate more traditional commercial and high density residential development. Emphasis should be placed on communal orientation, landscaping and screening elements, providing adequate parking, and connectivity throughout the area.

Future Land Use

Land Use Categories

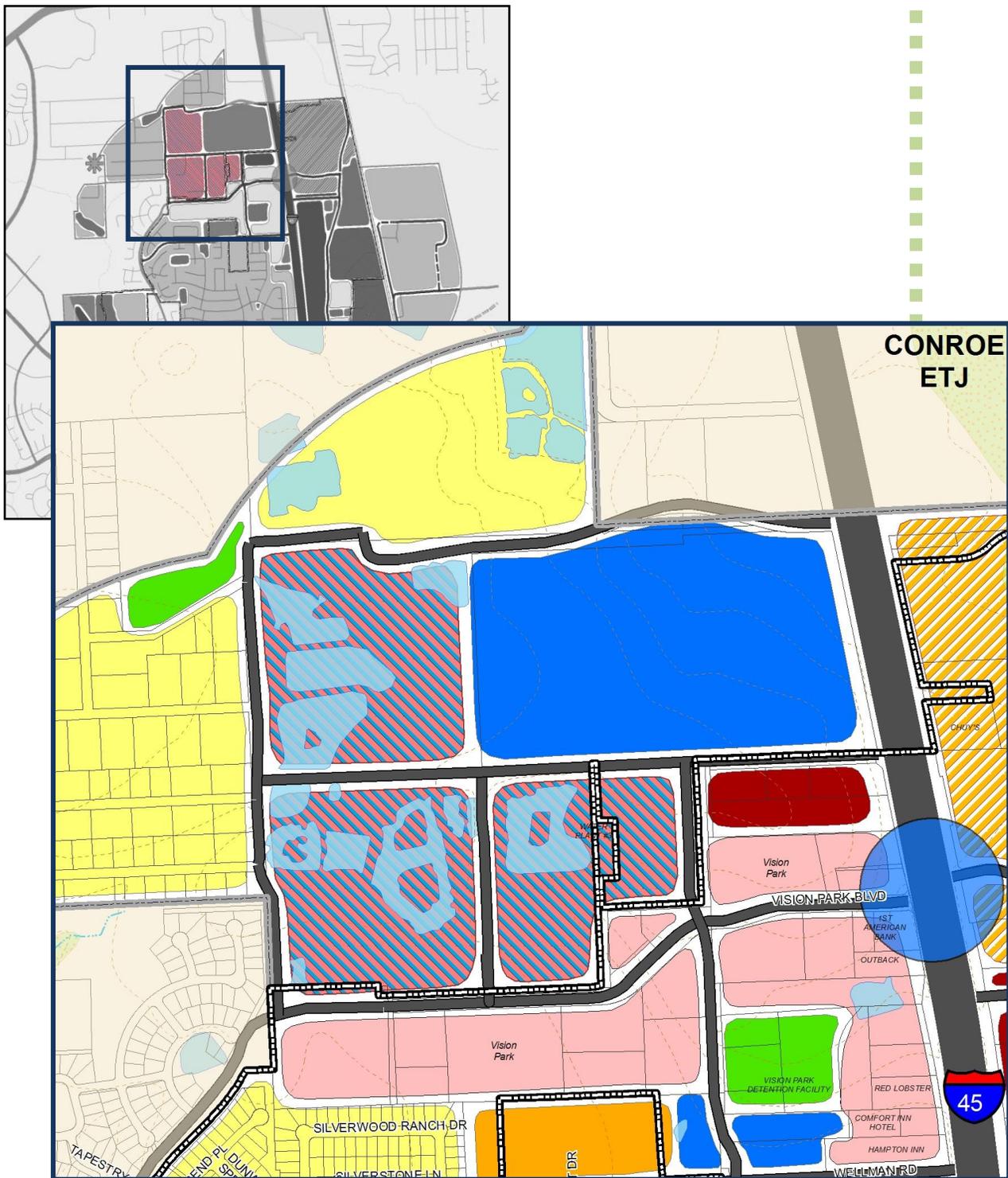




The proposed Town Center area is intended to serve as a core area for the city that provides gathering spaces and a sense of place for citizens. It is anticipated to meet the needs of the nearby residents, offering retail goods and services tailored to the community, office uses, and a variety of residential densities. Specific suggested uses include a small grocery store and centralized municipal services. The area should be pedestrian-oriented and integrate adjacent linear parks and trails. The Town Center is planned to include approximately 112 acres along the north side of Vision Park Boulevard. The southern portion of the Town Center fronting along Vision Park Boulevard should be similar in character to the existing development.

The Town Center should contain prominent gathering spaces, providing for outdoor public dining areas, benches along sidewalks and trails, as well as focal features such as fountains, sculptures, and other types of public art. The area should be pedestrian-oriented and provide for walkable connectivity throughout the development, with sufficient lighting and sidewalks or trails. Buildings should be oriented inward and facing sidewalks (rather than parking areas) to provide interior public spaces that both shelter and invite the public.

Future Land Use Land Use Categories



Future Cemetery

This area is property of Forest Park cemetery. The land to the east has been developed, although this space is currently undeveloped. The City should coordinate with the property owners to ensure proper screening of the cemetery along the Town Center.

Multiple Family

This multiple family development should be a high density development of at least two stories. The primary point of entry should be to the south in order to better integrate the development with the Town Center.

Townhomes

Row-style townhomes should face inward toward an internal street. This medium density residential development will serve as a transitional use between the high density multiple family apartments/condominiums to the east and the park space to the west.

Retail

It is suggested a grocery store or market be developed in this location to serve the community. The building should be oriented toward the west.

Parks

Park space should be integrated into the Town Center to allow for additional buffering, open space, and drainage capacity. A linear park should serve as a buffer between the relatively high-activity Town Center and the residential area to the west. Trails should be included to provide connectivity from the residential areas to the Town Center.

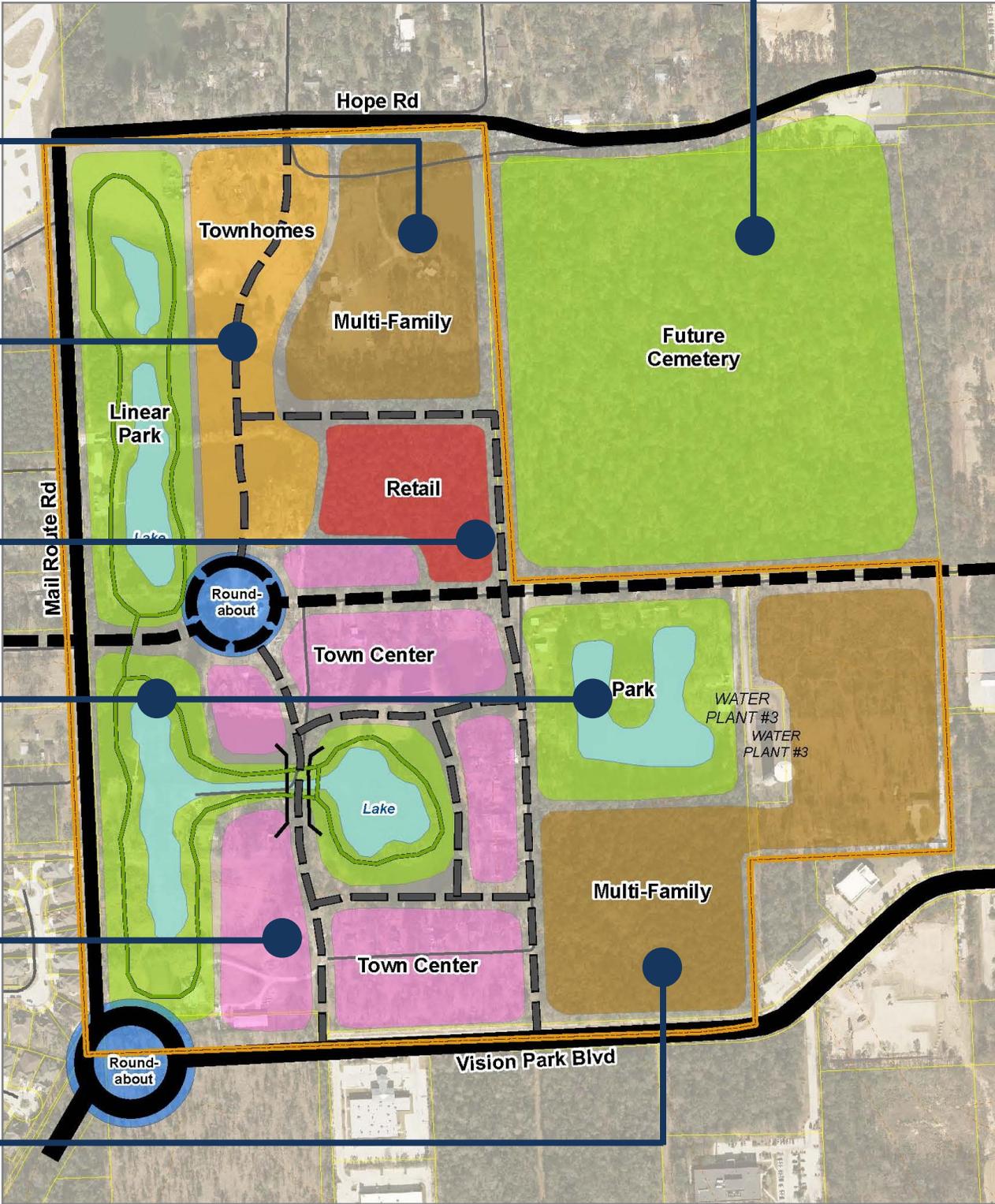
Town Center

This area is the central core of the Town Center development. It should consist of pedestrian-oriented retail development with public gathering spaces integrated throughout.

Multiple Family

This multiple family development should possess a more professional design to assimilate with the office atmosphere in the adjacent areas. The primary point of entry could help integrate the residential development with the Town Center (entry to the west) or with Vision Park (to the south).

Town Center Concept Plan



Future Land Use Land Use Categories

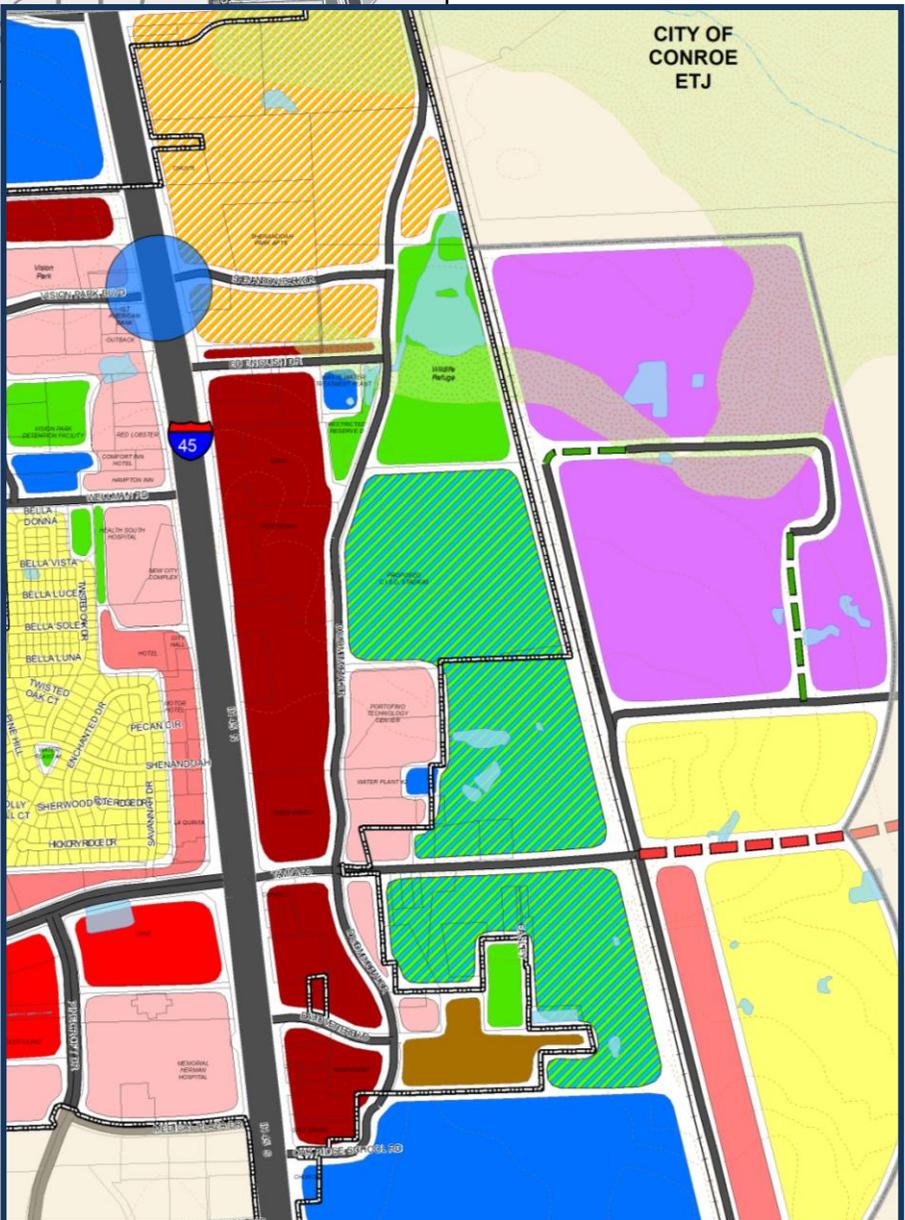


A sports district is proposed for a large area between David Memorial Drive and the railroad tracks to build on the opportunities provided by the new stadium and natatorium. This district is planned to cover about 186 acres within the planning area and would allow for active sports while having minimal impact on nearby neighborhoods. In addition to sports facilities, this area should provide for a variety of supporting and complementary retail and commercial services, such as restaurants, shops, and possibly a small hotel. High density residential developments should also be considered within this district.

Trails for bikes and pedestrians should be integrated into the design of the sports district to ensure connectivity with the surrounding areas, particularly the parkland and mixed use development to the north. Picnic areas and recreational facilities for smaller children should be included within the development. Off-season uses such as concerts, fireworks, and other festivals should also be considered.

Future Land Use

Land Use Categories



Future Acreage

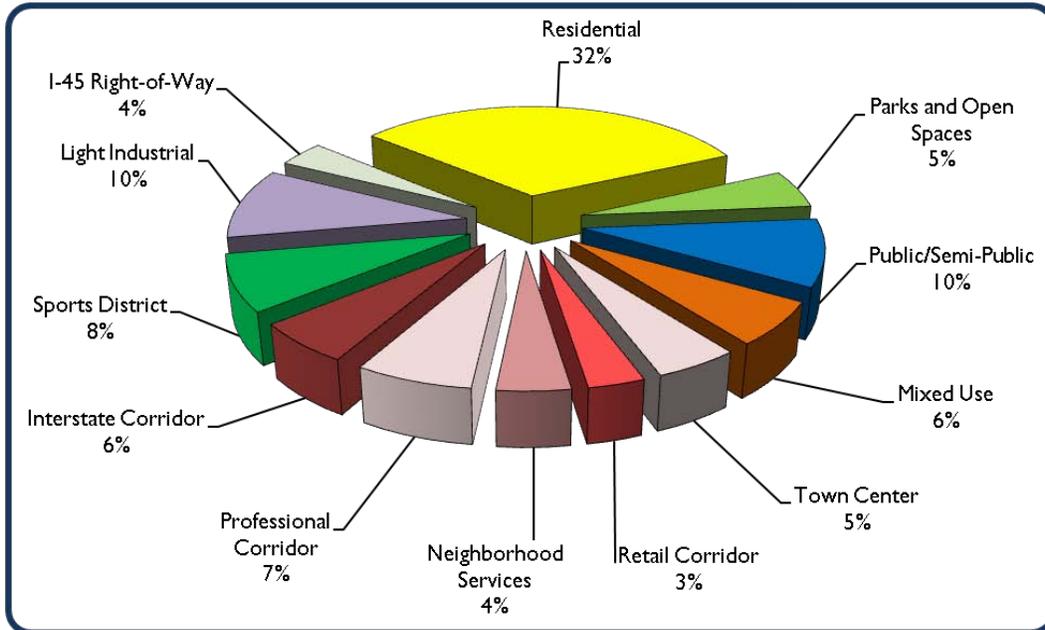
Table 3-1 and **Figure 3-1** show the acreage of land uses based on the Future Land Use Plan within City limits, ETJ, and the combined planning area, as well as the percentage each use comprises of the planning area. As shown, the predominant use recommended is residential, followed by light industrial and public/semi-public purposes. Other substantial uses include the sports district, interstate corridor, and professional corridor.

Despite the fact that residential is the largest land use within the City’s planning area, it is a relatively low percentage compared to other cities. A large percentage of Shenandoah’s land (about 68%) is recommended to be occupied by nonresidential uses, which provide places of employment and entertainment, as well as contributors to the City’s sales tax revenue.

Table 3-1 | Future Land Use Acreages

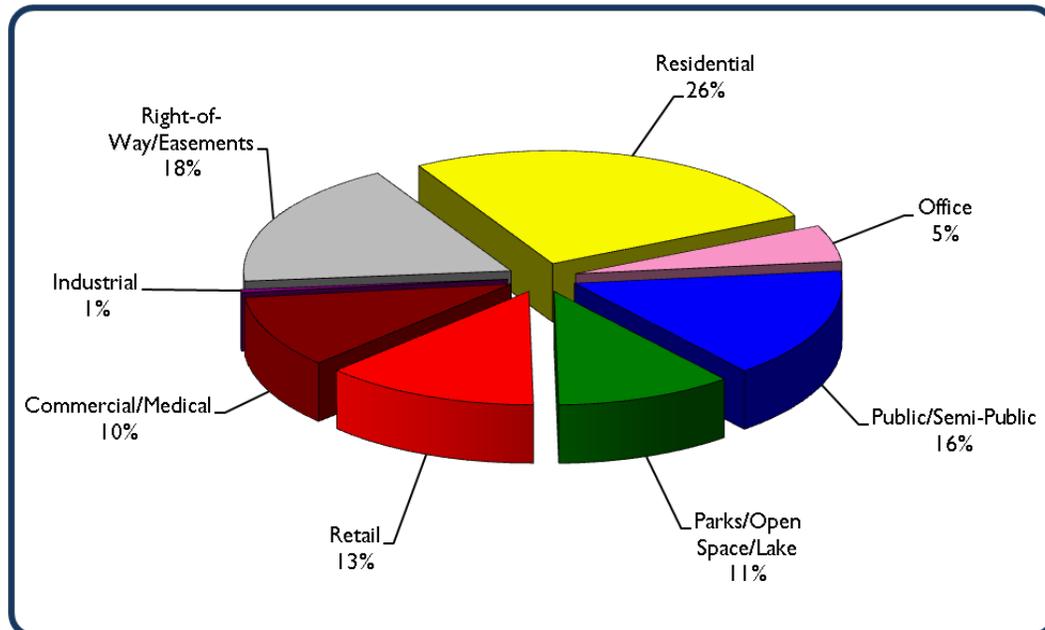
Land Use	City Limits	ETJ	Planning Area	Percentage of Planning Area
Residential	355	385	740	32.0%
High Density	15	22	37	1.6%
Medium Density	3	38	41	1.8%
Low Density	337	325	662	28.7%
Parks and Open Spaces	97	30	127	5.5%
Public/Semi-Public	12	209	221	9.6%
Mixed Use	137	6	143	6.2%
Town Center	2	110	112	4.8%
Retail Corridor	75	0	75	3.2%
Neighborhood Services	63	34	97	4.2%
Professional Corridor	152	3	155	6.7%
Interstate Corridor	132	2	134	5.8%
Sports District	69	117	186	8.1%
Light Industrial	0	234	234	10.1%
I-45 Right-of-Way	74	12	86	3.7%
Total	1,168	1,142	2,310	100.0%

Figure 3-1 | Future Land Use Planning Area Composition



Source: Sefko Planning Group / Freese and Nichols, Inc.

Figure 3-2 | Developed Existing Land Use Planning Area Composition



Source: Sefko Planning Group / Freese and Nichols, Inc.

Population Projections

Increased demand for all types of land uses must be taken into account when establishing a Future Land Use Plan. This section contains estimated projections for the future population of Shenandoah, given the existing City limits.

Table 3-2 | Compound Annual Growth Rate for the City of Shenandoah

Year	Population	Annual Growth	CAGR
2000	1,503		6.04%
2001	1,526	1.53%	
2002	1,537	0.72%	
2003	1,577	2.60%	
2004	1,612	2.22%	
2005	2,095	29.96%	
2006	2,208	5.39%	
2007	2,266	2.63%	

Table 3-2 shows the City's annual growth as well as the compound annual growth rate from 2000 to 2007. During this seven-year period the City's population increased by over 700 residents, a 150% increase.

Table 3-3 | Compound Annual Growth Rate Projections for the City of Shenandoah

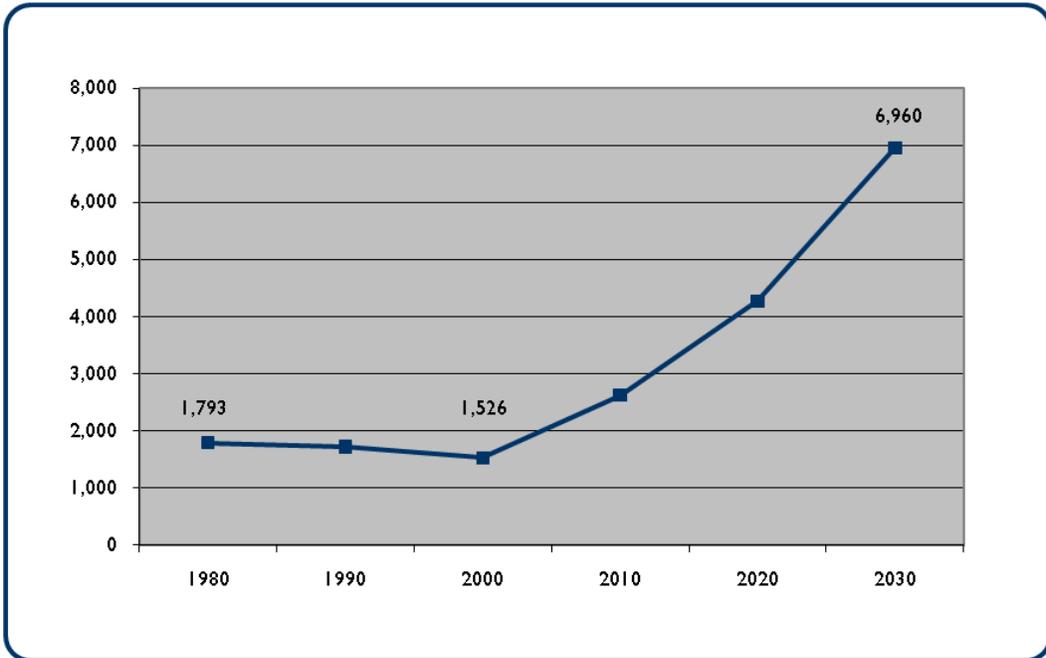
CAGR	1.5%	2.5%	3.5%	5.0%	6.0%
2007	2,266	2,266	2,266	2,266	2,266
2010	2,370	2,440	2,512	2,623	2,699
2015	2,553	2,761	2,984	3,348	3,612
2020	2,750	3,124	3,544	4,273	4,833
2025	2,962	3,534	4,209	5,453	6,468
2030	3,191	3,999	4,999	6,960	8,656

Table 3-3 projects the future population of Shenandoah in five-year increments through 2030 using likely growth rates based on the rates in recent years (shown in Table 3-4) and a 2007 population of 2,266. This represents a range of conservative to

aggressive growth rates – 1.5% and 6.0%, respectively. Growth rates are based on a number of factors, including recent construction activity, development trends throughout the greater Houston area,

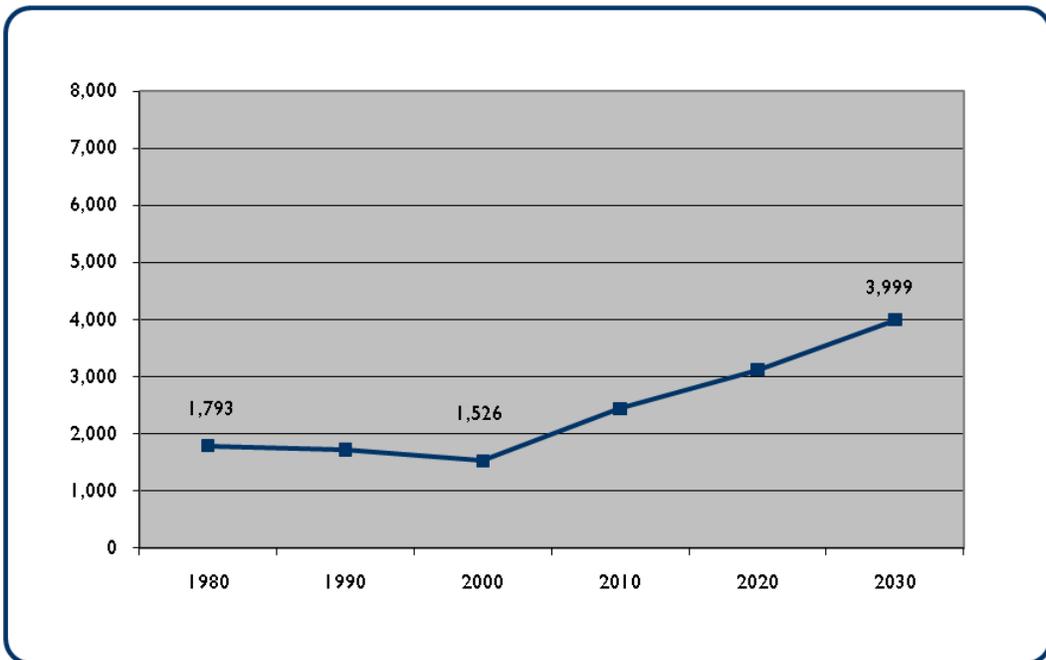
Figure 3-3 shows the historic populations from 1980, 1990, and 2000, and reflects a 5.0% compound annual growth rate in order to project populations for 2010, 2020, and 2030. As can be seen, a continued growth rate of 5.0% is relatively aggressive compared to historic growth. Similarly, **Figure 3-4** shows a more modest 3.5% compound annual growth rate.

Figure 3-3 | City of Shenandoah Population Projection (5.0% CAGR)



Source: Sefko Planning Group / Freese and Nichols, Inc.

Figure 3-4 | City of Shenandoah Population Projection (3.5% CAGR)



Source: Sefko Planning Group / Freese and Nichols, Inc.

Growth in Shenandoah does not always occur at a steady rate. For example, the high density residential projects completed in 2005 created a spike in the population that has since began to level. Because of this, it should be noted that the projections previously discussed do not represent each specific year, but rather the overall or averaged growth.

Ultimate Capacity

Ultimate capacity refers to the maximum number of residents that the City can support, given the current boundaries. In order to calculate the ultimate capacity, as shown in **Table 3-4**, the number vacant residential acres is multiplied by the number of dwelling units per acre, the occupancy rate and number of persons per household (according to the Montgomery County 2005-2007 ACS Census data). The number of current residents is then added to reach the total number of residents that can be supported within the existing planning area. Based on these calculations, the current planning area can support about 9,307 residents.

Table 3-4 | Ultimate Capacity of the Existing Planning Area

	Vacant Acres	Dwelling Units Per Acre	Total Dwelling Units	Occupancy Rate	Persons Per Household	Estimated Population
Low Density	250	3.5	875	97.5%	3.05	2,602
Medium Density	43	8	344	93.0%	2.80	896
High Density	56	20	1120	90.5%	2.65	2,686
Ultimate Capacity Within Planning Area Vacant Acres						6,184
Current Population of Existing Planning Area						3,123
Ultimate Population Capacity of Existing Planning Area						9,307

Future Land Use Goals

The following goals have been developed utilizing public input received during the planning process. This process involved the comprehensive plan Steering Committee, officials and staff of the City of Shenandoah. These goals were used to identify implementation action items which were prioritized and listed in functional groups within the Implementation chapter.

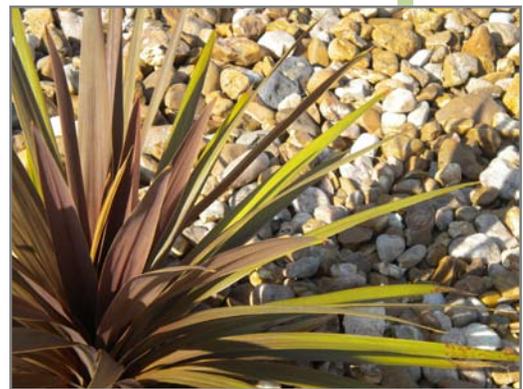
Goal 3.1 Become a Home Rule City

Overcome obstacles, such as limited room for growth and limited areas for annexation, in order to achieve a population of 5,000 residents and establish Shenandoah as a Home Rule City by ensuring that all existing vacant land within the city is utilized for its best possible use in order to reach the population goal.



Goal 3.2 Ensure Proper Development

Encourage a balance of land uses in order to serve the needs of citizens and to provide a more diversified local economic base and ensure that Shenandoah is an economically sustainable City.



Goal 3.3 Encourage Cohesiveness

Work to overcome physical obstructions within the city, such as Interstate 45 and the railroad which essentially divide the city into separate areas, and create a cohesive and well developed community.

Goal 3.4 Promote Aesthetic Appeal

Encourage visually distinguishable areas within Shenandoah. Promote the implementation of quality design standards in order to maximize desirability and aesthetic appeal throughout the city. Emphasize revitalization of land along the Interstate 45 corridor in order to create a positive visual image of Shenandoah for visitors and residents alike.

Goal 3.5 Encourage Walkability

Work to create pedestrian design standards for thoroughfares and streets, especially within mixed use areas or areas of high retail concentration, in order to create a safe area for residents and visitors to shop.

Goal 3.6 Build on Existing Strengths

Build on Shenandoah's small-town atmosphere, existing office/medical facility development, and stadium/natatorium.

Livability

4



Urban design principles strive to improve the quality of life, or "livability", within a community by enhancing the man-made environment and by creating new opportunities for social interaction among residents. Good urban design practices also help to create a legible development pattern that makes the community understandable to residents and visitors alike. They often deal with the sensory response of people to the community's physical environment: its visual appearance, its aesthetic quality, and its spatial character.

Urban design can be used to bolster people's sense of well being and civic pride, their awareness of different places within the community, and even their behavior toward one another. The creative application of specific urban design improvements, no matter how large or small they may be, should result in a more aesthetically and functionally stable community which is a happier and healthier place to live, not only in the physical sense, but in the psychological and emotional sense, as well.



Promoting livability also has long lasting financial benefits. Creating places where people want to be encourages reinvestment into the community. This reinvestment in turn helps to keep taxes low because property values tend to increase which lessens the need to raise tax rates. Quality, sustainable development attracts businesses and residents, expanding the tax base. Financial investments promote a sense of ownership of the community.

This Livability element of the Comprehensive Plan integrates urban design considerations into the City's growth and development processes to create an attractive and recognizable physical environment that complements the functional organization of Shenandoah, and to reinforce a sense of "community" among the people who live here. The intent of this Livability element is to provide recommendations for maintaining and strengthening both the City's image as a community of excellence and leisure, as well as its identity as a small town in spite of its proximity to the expanding City of Houston and other neighboring communities.

In the simplest terms, creating livability means creating places where people want to be, that contribute to interaction and discourse with others, and that are personally fulfilling. Many factors contribute to the livability of a community. This section has two primary focuses:

- Encouraging desirable neighborhoods, and
- Encouraging sustainable concepts.

Desirable Neighborhoods

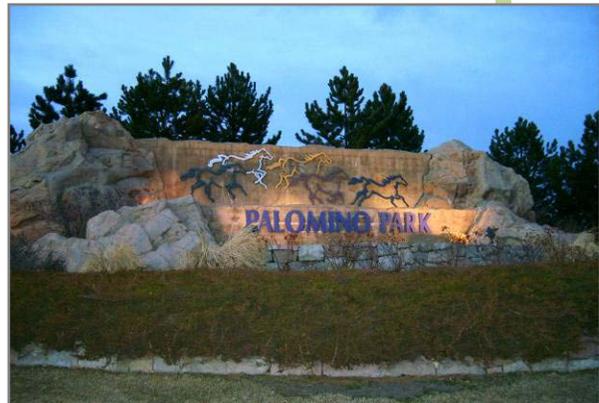
Often thought of as mere beautification of a community, “community image” elements contribute to a much more complex process of utilizing a community’s natural and man-made features to establish a distinct visual image and identity – a “sense of place” – for the community.

Communities often lack visual individuality, especially in the wake of major metropolitan areas, like the City of Houston. Smaller communities have more of a challenge than larger communities due to the fact that smaller communities generally do not have the advantage of distinctive skylines as identifying elements. They must work to create their own identity, or signature, in other ways that are both conducive and responsive to their own individual size, scale and character. A recognizable image/identity is not only important to the inhabitants of a particular community, it is also important to those who live within surrounding areas and to visitors. It helps to provide orientation – a point of reference for people moving through and within a community. The city should continue its efforts to implement innovative and defining design qualities in both public and private development features.

Gateway Entrances

The visual monotony that is often inherent to communities within a particular geographic area makes it appear that each one is just like its neighbors. For example, the visual appearance of the City to a traveler along Interstate 45 may be very similar to the appearance of any other nearby community. This lack of design variety, especially along major corridors, tends to create anonymity, and it becomes difficult for people to know when they have left one community and entered another. Gateways can provide a strong sense of arrival to, as well as a sense of departure from, the community. These features are the first thing visitors see when they arrive and the last impression visitors have when they leave.

The design of gateways into the City of Shenandoah should be guided by several factors. One of the most obvious factors is the number of people using a particular entry point. The most heavily traveled the roadway entering the community is Interstate 45. Although it would be difficult to create an aesthetically-pleasing gateway visible from the highway, the bridges and the frontage roads are alternate options. Improved overpasses with decorative rails, landscaping, lighting, and possibly signage are possibilities. In addition, two entry features for the City placed directly along the Interstate 45 frontage roads, both leading into and out of the community (i.e., at the northern and southern corporate limits) would be a positive step in creating a visual identity. This gateway could include the use of signage, landscaping, and other design elements such as lighting, fencing, paving patterns, art/sculptural elements, a variety of earth forms, or other identifier that signifies arrival into the City.



Another important factor in the design of gateways is to develop an entryway that provides a sense of identity for the community while projecting a desirable image for the City. Consideration should be given to establishing a uniform design concept for all gateway areas, and hierarchical distinction between major and minor gateways can be achieved through design modification for each type of entry feature. Minor gateways could be specific to the individual neighborhood, reflecting the distinct character of each area.



Design of entry features should take into consideration the setting in which each feature will be placed. Although an entry feature might ideally be placed at the corner of a roadway intersection which is at, or near, the true City limits, the design of the feature might conflict either visually or aesthetically with an adjacent retail use at the intersection. In such a situation, it may be prudent to move the entry feature further into the community to provide a better setting and better visibility, such as placing it upon the thoroughfare median, if there is one. The traffic speed at which an entry feature is viewed must also be taken into account, and the size, boldness and scale of the feature should be designed accordingly.

It is important for the City of Shenandoah to assert its differing qualities to distinguish itself from the surrounding communities. Gateway features are a simple first step in this direction. Priority for funding entry features, both in terms of total dollars spent per entry and in terms of the timing of expenditures, should be directly related to the number of people using a particular entry point. Often, donations can be solicited from civic groups to assist in the funding of specific gateways and/or their maintenance (e.g., an "adopt a gateway" program).

Nonresidential and Multiple Family Residential Design Guidelines

The images that people experience along major roadways often create a lasting impression of the local quality of life. Communities across the country have recognized that roadways offer a tremendous opportunity to enhance their image. Shenandoah has made efforts at improving its image by implementing landscaping, screening, and sign standards. The City will need to continue its innovative efforts to pursue quality urban design in all developments and provide flexibility for new market trends, design initiatives and features.

Quality design guidelines are intended to improve the quality of life, or livability, of Shenandoah. The following are recommendations pertaining to nonresidential and multiple family residential developments within Shenandoah, and are intended to promote the quality and aesthetic appeal of the City. Specific methods and enhanced design standards will be considered during the compilation of the new development codes following this planning effort.

Building Materials and Articulation

The City should create a list of acceptable and/or unacceptable building materials and colors for nonresidential and multiple family residential development, particularly highly visible developments along major thoroughfares. One method of ensuring quality building materials is to assign materials within a “class” system. The City can require a certain percentage of each class be used in the design, with an emphasis on the building façade.

In addition to materials, building articulation is another important aspect of building design to consider. Building articulation refers to any prominent architectural feature that breaks up a wall plane, either horizontally or vertically. The City can require that, for example, every 50’ of wall plane, the design must incorporate an element of articulation.





Signage

Another method of enhancing the overall image of Shenandoah is through sign regulation that reduces the visual clutter that can result from a lack of regulation. Because of Shenandoah's location along Interstate 45, many of the businesses along the corridor use pole signs in order to make their advertisements visible to the passing traffic. This use of pole signs does not promote a positive, aesthetically-pleasing image of Shenandoah to those passing through.

The City should consider reviewing the existing sign regulations and determine if there is a feasible and fair alternative to the use of pole signs, such as monument signs or shared signage requirements. Any new sign regulations, however, must be balanced between the public interest and the needs and rights of the business community. For instance, sign

regulations should enhance the roadway by improving the visual appearance and safety, but regulations should allow for businesses to advertise enough to entice customers or clients to stop.

Transitional Uses, Screening, and Buffering

The Future Land Use Plan seeks to minimize conflict between residential and nonresidential areas, but screening and buffering efforts can help to mitigate any remaining incompatibility between land uses.

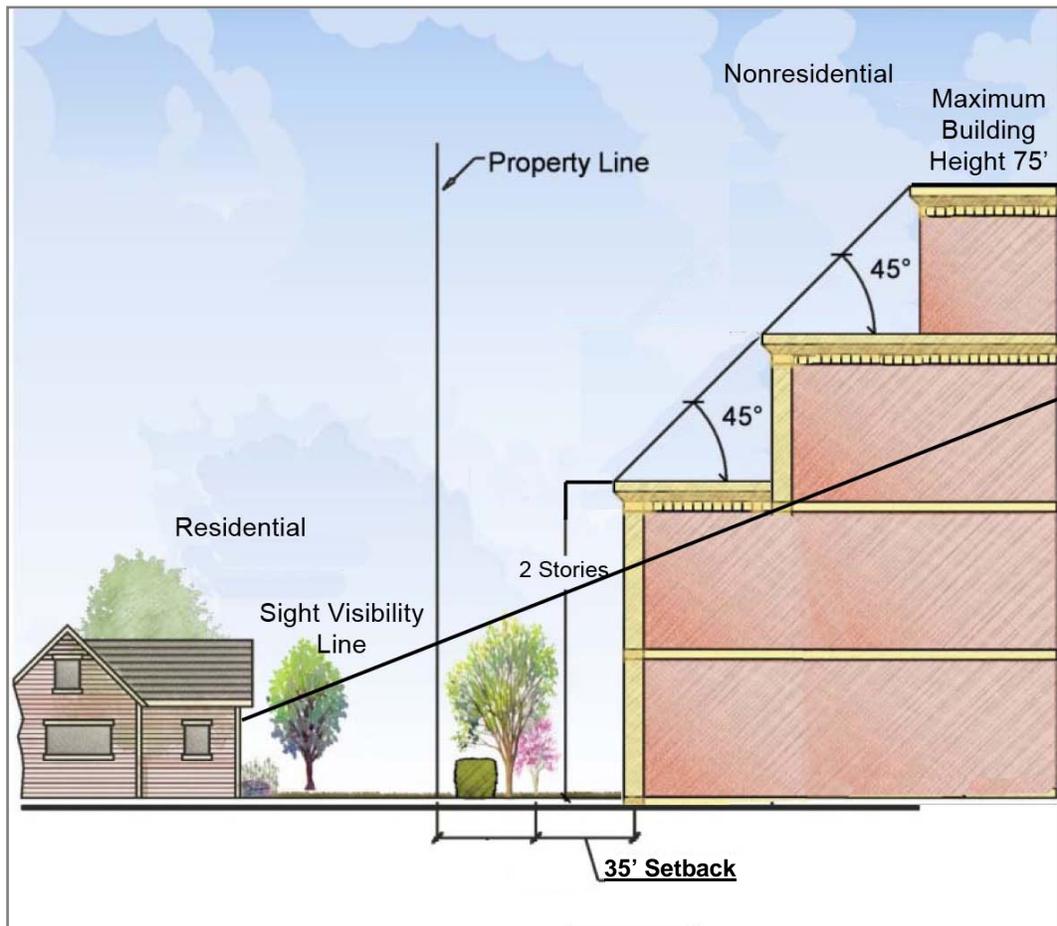
The City should consider reviewing the existing screening and buffering requirements between residential and nonresidential developments. There are several options to alleviate the conflict: require transitional uses, screening, and/or buffering. A transitional use would refer to a park or landscaped open space area, small-scale neighborhood retail within a traditional residential structure, or perhaps medium-density residential.

If a screening wall is used, the wall should be constructed entirely of brick, masonry, or other like material consistent with the exterior finish of the primary structure. It should also be at least six feet in height. Wood, although it is an attractive material to use for screening walls initially, is a high maintenance material and therefore is not recommended for screening walls. Construction of such a wall would typically be a responsibility of the nonresidential land use developer.

In addition to masonry screening walls, various types of landscaping can provide effective screening. Types include landscaped berms, which generally need wide setbacks, and requirements should include that the landscaped berms be three to four feet in height with a maximum slope of 3:1. Certain types of trees can provide effective screening as well. General requirements for landscaping elements being used for screening should include a maintenance provision to ensure that a consistent visual screening is provided.



A significant concern for Shenandoah is the visibility of multi-story commercial and office buildings from single family residential. The City currently requires a 35 foot buffer yard with tree and understory requirements but that may still not be enough. The required buffer yard and building setbacks should probably be adjusted to require all stories above two to be setback at a 45 degree angle or to move the entire building back to accomplish the same effect. Also, solid screening fences, while not obscuring the view of the building, will provide additional security and should be considered.



It is important that the City continue to maintain and enhance the view from public streets and neighboring properties. The City should ensure that any view of solid waste containers (e.g., dumpsters) from existing or proposed public roadways is obstructed by a method of screening. Containers should be screened on three sides and should be equipped with a gate that remains closed when the refuse area is not in use. Additionally, solid waste containers should not be placed within required parking spaces, and they should allow proper access and vehicular circulation by service trucks.

Outside storage, loading areas, and utility equipment should also be screened as much as possible near public streets and neighboring properties. Loading docks and service areas should be located at the rear of the building. When loading docks and/or outside storage areas are located within a side yard, they could be screened from adjacent properties and public rights-of-way by using masonry walls. Cell towers and other utility structures should be designed to blend into the surrounding area whenever possible.

Another option for the City to improve its aesthetic appeal is to investigate the feasibility of underground utilities to reduce the visual clutter of utility poles and cables. In addition to aesthetic advantages, the placement of utilities underground reduces the likelihood of a power outage as a result of a storm. Any areas, currently within the City limits or proposed, should have underground utilities.

In addition to reviewing screening and buffering requirements, the City should consider revising the current landscaping requirements to be more specific to each zoning district. For example, large industrial uses may only require landscaping of the front setback along thoroughfares whereas retail uses should require landscaping of the entire site and office may even require more landscaping. Multi-family and higher density



developments should also have a different requirement including some recreation amenities and open space.

Roadway Design, Connectivity, and Pedestrian Amenities

The term "streetscape" has been developed in recent years to describe the visual image that is projected by a community street and by various elements within and adjacent to the street right-of-way. The following recommendations pertain primarily to the safety and comfort of pedestrians and vehicular traffic, and are based on the input received during public participation exercises as well as modern planning principles. During the exercises, the participants strongly preferred pedestrian-friendly streetscapes, including elements such as landscaped medians, sidewalks, bike lanes where appropriate, and landscaped buffers along the thoroughfares.

The figures below are examples of cross-sections incorporating some pedestrian-friendly amenities. Pedestrian-friendly recommendations include:

- Adequate lighting should be provided along all pedestrian-ways in order to ensure safety of the pedestrian and to encourage pedestrian activity.
- Bike lanes should be included along thoroughfares where possible to encourage non-vehicular traffic and ensure safety of the cyclists.
- Landscaping elements, including shade trees and decorative planters, should be incorporated wherever possible along pedestrian thoroughfares.



- Sidewalks should be in place throughout the City, particularly within nonresidential areas to create walkable shopping centers and a more vibrant downtown area. It is recommended sidewalks be at least five feet in width to accommodate passing pedestrians, or at least seven feet to accommodate bicycles. In addition, all sidewalks should include curb ramps at all pedestrian crosswalks.

Streets should not diverge from the “urban fabric” of the neighborhood, but rather complement the surroundings. The following are recommendations to help promote aesthetically-pleasing streets:

- Maximize the visibility of architecturally distinctive cultural and civic facilities and open space area corridors.
- Maximize visibility of open space areas by locating parks in prominent locations, and by widening open space corridors such as flood plains and trails where they are crossed by roadways.
- Where streets terminate or “T” into another roadway, ensure that there is a prominent feature or building at that point. Good examples of prominent features include such things as parks, clock towers, public art, and architecturally distinctive civic, cultural or nonresidential structures.
- Design streets so that they gently curve, to provide oblique views of buildings and streetscape, but still maintain a general grid pattern to maintain a sense of orientation.
- Encourage shorter block lengths of 600 feet or less on local streets to encourage connectivity and walkability of neighborhoods. In general, cul-de-sacs over 300 feet in length should be discouraged for the same reasons.
- Encourage shared parking options in nonresidential areas throughout the City to maximize use of parking lots. By utilizing shared parking concepts, the number of required parking spaces per business may be reduced for businesses with differing peak parking demand hours.



Town Center

The Town Center land use designation was established to create a central core for the City, a gathering place for the members of the Shenandoah community. As is stated within the Future Land Use Plan element, a mixture of land uses is appropriate for the Town Center, as it is also intended to be a place for local residents to shop, conduct personal and perhaps government-related business, live in the same place as their business, meet neighbors to eat in a restaurant or café, gather for community events and festivals, and other similar activities.

The availability of outside spaces such as courtyards, outdoor seating areas, small squares, pocket parks, and greenbelts, helps to promote a higher level of pedestrian activity and serves to enhance a pedestrian-oriented environment. Where possible, both residential and nonresidential land uses should be oriented to these outside spaces.

The following are design elements that should be incorporated within the Town Center development:

1) Ensure That the Area is Pedestrian-Friendly.

- Include trees and canopies for pedestrian areas along the outside perimeter of buildings, between the sidewalk and street. In addition, ensure that canopy trees are planted to shade people, cars and paving in parking lots.
- Orient business signage for easy viewing by pedestrians.
- Allow for interesting, eye-catching detail such as sidewalk signs, public art and sidewalk displays to enrich the experience of the public realm.
- In retail areas, encourage the design of small

gathering spaces and sidewalks of sufficient width to accommodate both pedestrians and sidewalk tables in order to maximize opportunities for social interaction.

2) Ensure Connectivity between the Town Center and Adjoining Neighborhoods while Minimizing Conflict.

- This could be accomplished by utilizing transition uses such as parks and open space or townhomes and live-work units.
- Require screening of service areas with buildings rather than tall screening walls, whenever possible.
- Provide for trail connections to the neighboring areas to accommodate pedestrian and bicycle traffic.

3) Ensure That the Town Center Contains an Integrated Mix of Uses

- Mixed use retail areas should be encouraged to include office and residential units in order to strengthen the retailing component, reduce trips, and increase activity (and thereby, safety and security). These uses may be either vertically or horizontally mixed, but should be comprehensively planned and integrated with pedestrian and vehicular connections.
- Encourage inclusion of “third places”, such as coffee shops, bookstores, sidewalk cafes and ice cream stands to foster social interaction. Ideally, these should be sited immediately adjacent to the public realm (such as a sidewalk, plaza or neighborhood park) to maximize opportunities for people-watching and informal encounters.
- Encourage inclusion of neighborhood services in the Town Center, such as banks, dry cleaners, neighborhood hardware and small grocery stores, and a range of dining and entertainment options.

4) Ensure the Development is Successful and Sustainable.

The concept of a retail and mixed use development is more than simply defining land uses. Successful mixed use developments, old and new alike, have key elements that make them feel like special places. The following elements, while they are not easy to define or outline, can be generally identified, and should be incorporated in all retail and mixed use developments:



- Considerations should be made to the type of atmosphere that is intended to be created, such as a neighborhood character within the Town Center. Authenticity of design and context should also be considered.
- A mixture of both horizontal and vertical uses should be established, and should include uses such as retail, residential, and office uses. Most development within the Town Center should be at least two stories in height, and the ground floor should primarily be constructed to retail standards.
- Maximum setbacks (build-to lines) bring building facades closer to the street and to the pedestrian.
- A central gathering space or focal point not only creates an identity for the development, but often establishes an obvious pedestrian focus. A gathering space or focal point can be in many forms, including but not limited to a lake, park, plaza, fountain, or civic building.
- Circulation within the development should be focused on the pedestrian getting from one place to another, including access to the development from adjacent neighborhoods and areas. Elements such as wide, lighted sidewalks, benches, shade trees, canopies, and attractive views add to the pedestrian feel.
- Shared parking between uses should be permitted in order to lessen the overall amount of total parking areas. On-street parking should be encouraged wherever possible. All parking structures should be lined with buildings to make it convenient for users and to enhance the pedestrian environment from the adjacent streets. Any parking lots that are created should be internal to the development, and should be broken up into small areas (as opposed to large expanses that are often part of shopping centers and malls).

Strong Neighborhoods

The design and character of residential neighborhoods is an important component of the community's overall urban design. As more property is developed into residential subdivisions, such design factors as the provision of open space, adjacency issues, screening, and landscaping, as well as the design layout of the subdivision itself, will be critical to the perception of the City's residential neighborhoods. While the community clearly must provide developers with options appropriate to the marketing of their subdivisions, the community must also strive to maintain some continuity between different residential subdivisions.

Existing Neighborhoods

Older residential neighborhoods will need continued maintenance in such areas as streets and utility service, while newer residential subdivisions offer the potential of embracing and including positive design elements that will add value, both aesthetic and monetary, to the homes constructed within them. The vast majority of the existing homes and residential areas in the City of Shenandoah are characterized by high-quality development. The enhancement and maintenance of these high-quality areas is of the utmost importance. Shenandoah has over 267 acres of existing residential land use, nearly a third of the acreage within the City's planning area; therefore, efforts should be made to continually improve the existing neighborhoods.

There are many approaches to neighborhood revitalization or restoration. Foremost is the removal of any impediments to making improvements to existing residences. The City needs to discuss the issue of "McMansions" and make sure that the demolition of an existing house and replacement with a significantly larger house has already been addressed. On the other hand, there may be areas where older existing residences on larger, rural type lots may be better suited to higher density townhome development as the area urbanizes. Such areas should be identified in advance so no one is surprised if such a request is encouraged.

The City may also want to consider offering incentives for residential infill and redevelopment on those vacant tracts that have been skipped over. Density bonuses or help with infrastructure costs for the right type of development may also be considered.

One possibility for the City is to work with neighborhood associations and property owners to retrofit neighborhoods with canopy trees to slow traffic and to shade sidewalks and street paving, when physically and financially feasible. On streets that are excessively wide, strategically locate tree planters in the parking lane of the street, while being careful not to interrupt drainage. The installation of street trees can be achieved by developing a City program for planting trees in neighborhoods as residents request it and on a cost-share basis. Other coordinated efforts could include installation of landscaped roundabouts to break-up long straight streets, where physically possible, or screen rear alleys and garages when they abut public streets and open space.

Another opportunity for the City would be to facilitate volunteer-based programs to upgrade housing and improve neighborhood areas. Funds for such programs could be garnered from grants or from charitable donations (e.g., from local businesses, churches, service organizations). Many cities across Texas host home improvement projects in which neighborhood residents volunteer to help with basic exterior household repairs. Many cities receive supply donations from local hardware stores.

The City may find it useful to document the conditions of neighborhoods as they age to identify deteriorating areas and to prioritize such areas for improvements. Facts that should be documented include but are not limited to, code violations, public safety reports (e.g., police and fire), and ownership/rental percentages. There are several methods that can be used to determine these facts, including conducting door-to-door housing condition surveys and reviewing code violation reports.

One key to a successful neighborhood is creating a sustainable environment where the ongoing investment in property is supported by public investment in parks and greenbelt areas; opportunities for social interaction; accessibility for pedestrians, bicyclists and

vehicles; and distinctive characteristics which give an area a unique identity. In summary, neighborhood viability may be quantified in terms of the following characteristics:

- Opportunities for social interaction;
- Careful and strategic placement of retail uses and other appropriate nonresidential uses within the neighborhood area;
- Continued investment in public and private property to stabilize property values;
- Condition of public facilities and infrastructure serving the area. Maintenance of the existing street, utility, drainage, lighting and sidewalk system is critical. If a neighborhood appears to be “written off” by a city as aging, then it is difficult to expect individuals to reinvest in their homes;
- A sense of "community" and "belonging" among residents; and,
- Access to amenities such as open space and trails.

The City of Shenandoah should strive to ensure that these elements are present in all neighborhoods within the City, in both existing and new developments.

Connectivity within residential neighborhoods is another important element to consider. Many of the streets currently feature a cul-de-sac design as compared to an interconnected grid-like pattern. Residential streets should generally reflect a grid-like pattern with gently curving roadways to discourage cut-through traffic, slow speeds, and allow wider views of residential neighborhoods.

Accessory Structures

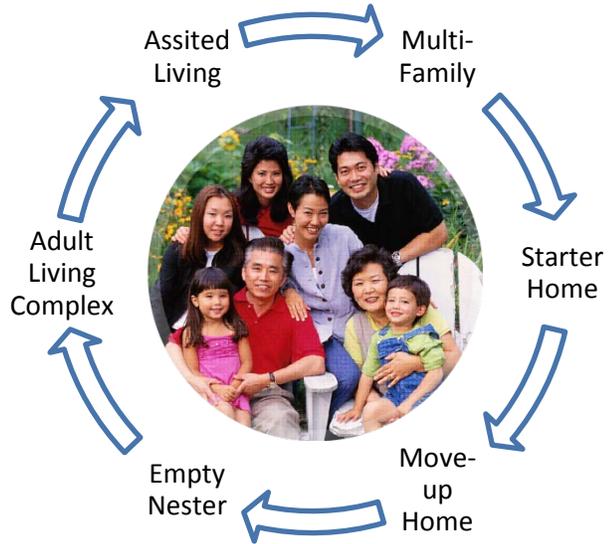
Within single family neighborhoods, standards for accessory structures should be developed to assure compatibility (such as design, materials, and colors) with the primary structure. Accessory structures should be secondary in both size and use to the primary structure.





Housing Options

It is important for cities to provide a variety of housing for the full life cycle of citizens and to meet the needs of different segments of the population – people of different ages, socio-economic levels, and employment levels. The “full-life cycle” is intended to describe all stages of life – young singles, professional couples, families with children, empty-nesters, retirees and seniors, including those requiring living assistance. In addition to providing housing types for all its residents, offering higher density housing will also help the City to eventually achieve home-rule status.



There are several existing multiple family housing developments within the City. As previously mentioned, the Town Center, Mixed Use District, and Sports District are anticipated to include residential components. Multiple family land uses can be designed in such a way that they are assets to the community, and are integrated within the residential fabric of the community. Zoning regulations in each of these districts should allow for multiple family housing, and include requirements and restrictions to ensure quality developments that will contribute to the character

and atmosphere of the City. Examples of such requirements may include incorporation of open space, number of dwelling units per structure, height or story limits, building materials and articulation, site design, setbacks, parking, and screening and buffering requirements.

Cluster design can be utilized in multiple family residential developments to create pockets of planned open space by allowing clustering of higher density development. Incentives, such as allowing a larger number of dwelling units per acre, can be developed in order to encourage developers to use this concept. This method of development utilizes increased densities in some areas of the development by decreasing the density in other areas; permanent open space is set aside, while the overall density of the development remains the same.

By providing a variety of residential densities and allowing for open space areas, the cluster design creates a neighborhood atmosphere, in contrast to traditional apartment complexes with limited social interaction and limited open space amenities.

This type of residential neighborhood design could be especially valuable for the City of Shenandoah due to its limited area for additional residential growth. The City should consider providing developers with incentives to utilize this design technique when developing multiple family residences. One way in which the City can do this is generally referred to as a “density bonus”, whereby a developer is allowed higher density levels in exchange for the provision of open space and additional streetscaping. However, when the clustering technique is used, it should be buffered from adjacent major roadways and existing or proposed large-lot development.

No Clustering

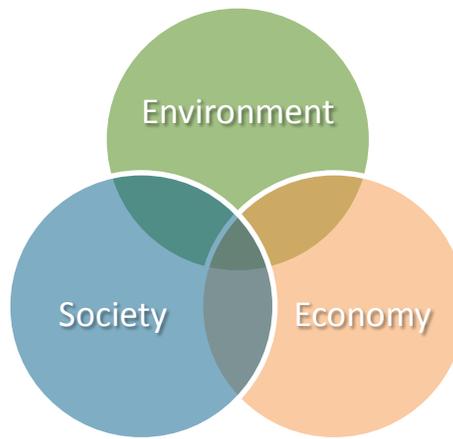


Various Levels of Clustering with Provision for Green Space



Sustainability

Sustainability is commonly defined as an approach to development that meets the current needs of society without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987). In order to be a sustainable community, all development-related decisions should consider the impacts to the environment, economic viability, and social well-being, in both the short and long term. Shenandoah should adopt a model for development that embraces this three-pillar, or triple bottom-line approach to sustainability including environmental, economic and social measures.



Environmental

The environmental pillar focuses on the “green” aspect of sustainability. This pillar seeks to ensure that natural resources are not used more quickly than they can be replenished by encouraging the concepts of reducing, reusing, and recycling. In addition, issues pertaining to air and water quality are integrated into the environmental pillar. The following is a list of steps that the City should consider to become a more environmentally-friendly community.

Air Quality

- Require measures to protect air quality during construction
- Continue to pursue alternate modes of transportation
- Continue to work with HGAC on regional air quality programs

Water Quality

- Minimize site disturbance during construction to reduce erosion
- Provide sufficient topsoil depths to promote water penetration
- Protect groundwater sources from contamination
- Adopt storm water best-management practices



Waste Stream

- Expand opportunities for recycling throughout the community
- Promote composting programs
- Provide incentives to recycle construction waste
- Promote the use of recycled materials in construction projects



Land

- Promote the use and protection of local, natural landscaping species during development
- Encourage compact design to maximize density and reduce land consumption
- Prohibit and remove invasive species from landscapes where possible
- Minimize the effects of light pollution on neighboring properties



Energy

- Provide incentives for new construction to exceed local energy codes by 25% or more
- Invest in renewable energy sources and providers
- Allow on-site renewable energy generation





Green Building

- Adopt a green building standard such as LEED® or Built Green™ for future municipal buildings
- Use climate sensitive design to minimize the impact of wind and rain
- Reduce the heat island effect with alternative roof and parking design



Water Supply

- Promote the use of individual unit water metering
- Promote the use of xeriscaping
- Employ water conserving measures or devices where possible

Food Systems

- Provide incentives for a centrally located grocery store that utilizes regional and organic products
- Promote individual and community gardens

Economic

Consideration of the local economy is crucial in becoming a sustainable community. Without a successful, sustainable economy, both the environment and the society will be negatively impacted. The following is a list of steps Shenandoah should take to move toward a sustainable economy.



Diverse and Viable Economic Base

- Continue to promote a diverse base of land uses
- Provide appropriate transitional areas for long term compatibility



Local Reinvestment

- Promote the use of local suppliers
- Provide opportunities for local businesses to enhance their properties

Meaningful Employment

- Create a wide range of permanent and seasonal employment opportunities
- Promote the use of local services and labor

Training/Education

- Expand local opportunities with the school district and regional higher education providers
- Develop community training and educational programs

Healthy Environment

- Provide incentives to redevelop brownfield and greyfield sites
- Promote the redevelopment of surface parking into higher uses



Social

The social pillar refers to how individuals or groups interact within the natural and built environments, and how those environments shape the culture. Following are steps that should be considered in order to make Shenandoah a more socially sustainable city.



Compact Community Design

- Promote the efficient use of land that maximizes allowable densities
- Promote infill development of vacant parcels of land
- Maximize the use of existing roads and services



Culturally Rich/Diverse

- Require exemplary urban design in defining projects
- Provide opportunities to include public art that reflects the community
- Provide flexible, creative spaces for residents
- Promote participation
- Provide a mix of compatible uses within an area
- Encourage accessibility measures beyond the minimum code requirements



Strong/Supportive Community

- Develop areas for individuals and the community to gather
- Provide amenity spaces, such as dog runs and community gardens, for activities and gathering
- Assure transitional areas integrate well and do not intrude overshadow adjacent uses

Clean/Safe Environment

- Employ the existing natural topography and flora in landscaping
- Assist in the prevention of crime with programs such as CPTED (Crime Prevention Through Environmental Design)
- Design pedestrian and cyclist friendly thoroughfares
- Promote the use of alternative modes of transportation
- Provide a range of housing opportunities

Community Connections

- Provide multi-modal links to community resources
- Create gateways and green spaces that identify the community or area

These sustainable development alternatives should be considered with each development decision. In order for the community to become more sustainable, it must work to incorporate each of the three pillars into its decision making processes. With practice and a sustainable attitude, the community will be better prepared to address challenges in the future and embrace opportunities as they arise.

Livability Goals

The following goals have been developed utilizing public input received during the planning process. This process involved the comprehensive plan Steering Committee, officials and staff of the City of Shenandoah. These goals were used to identify implementation action items which were prioritized and listed in functional groups within the Implementation chapter.

Goal 4.1 Establish an Identity for the City and its Special Areas

Create an identity for Shenandoah to help distinguish itself from neighboring cities, and to help define the character of each neighborhood or district within the City. Utilize identifying elements, such as signage, landscaping, lighting, fencing, paving patterns, art/sculptural elements, and a variety of earth forms.

Goal 4.2 Utilize Nonresidential and Multiple Family Residential Design Guidelines

Promote a positive, aesthetically-pleasing image of Shenandoah to residents and visitors.

Goal 4.3 Encourage Pedestrian-Friendly Amenities

Promote strong streetscape standards which incorporate connectivity and pedestrian amenities into roadway design. Create a Town Center which incorporates mixed uses, community gathering places, and pedestrian design in order to create an ultimately successful and sustainable community.

Goal 4.4 Ensure Strong Neighborhoods

Continue to maintain and strengthen existing neighborhoods with an emphasis on creating a “full-life cycle” community

Goal 4.5 Promote Sustainability

The City should review alternatives to encourage environmental, economic, and social sustainability for Shenandoah.

Implementation

5



Truly successful communities have a vision for their future. They set forth clear goals and identify practical and specific actions to help attain that vision. This chapter completes Shenandoah's comprehensive plan by providing implementation techniques and priorities that cohesively address the goals. The plan must be structured to provide direction for decision-makers and stakeholders for successful implementation. Implementation must be designed so that it can begin immediately after a plan is approved.

This Implementation chapter is structured into a coordinated action program so that City leaders, Staff, and other decision-makers can easily identify the steps that are necessary to achieve the vision for Shenandoah described within this plan. Specifically, it provides an overall listing of recommended implementation actions, for the short- and long-term and on-going actions. These actions are correlated to the related goal discussed within the Future Land Use Plan (Chapter 3) and Livability Strategies (Chapter 4).

This chapter of the plan should be viewed as the initial action plan for implementation. It should be updated as progress occurs on these items. That process of taking action, reporting on results, and updating the priorities is necessary to respond to change and to keep the plan current, while continuing to implement the plan's overall policies.

General Use of the Plan

For planning to be effective, it must guide each and every individual development decision. The City should consider the vision, goals, and policies of the comprehensive plan in its decisions, such as decisions regarding infrastructure improvements, zoning ordinance amendments, and projects and programs to implement. The development community should incorporate the broad concepts and policies of the plan so that their efforts become part of a meaningful whole in planning the City.

Although the plan is intended to serve as a guide for the City, it is also intended to be a dynamic planning document for Shenandoah — one that responds to changing needs and conditions. The full benefits of the plan can only be realized by maintaining it as a vital, up-to-date document. As changes occur and new issues within the City become apparent, the plan should be revised. By such action, the plan will remain current and effective in meeting the City's decision-making needs.

Plan amendments should be made after thorough analysis of immediate needs, as well as consideration for the long-term effects of proposed amendments. The City Council and other City officials should consider each proposed amendment carefully to determine whether or not it is consistent with the plan's intent, and whether it will be beneficial for the long-term health and vitality of the City.

Annual reviews of the comprehensive plan should be undertaken with respect to current conditions and trends. The Steering Committee, which is comprised of current and past Council members, Planning and Zoning Commission members, citizens, and stakeholders, has been invaluable to this comprehensive planning process. The committee members' knowledge of this comprehensive plan as well as what is occurring in Shenandoah in terms of development, re-zonings, and capital improvements would provide great insight during periodic reviews of this comprehensive plan. The Planning and Zoning Commission should review this plan annually (with input from the other Steering Committee members, if members are still available for service) and should make recommendations on prioritized changes to this document.

A report on the findings of the Planning and Zoning Commission should then be prepared by City Staff and presented to the City Council. Those items that appear to need specific attention should be examined in more detail, and changes and/or additions should be made accordingly. By such periodic reevaluations, the plan will remain functional, and will continue to give civic leaders effective guidance in decision-making. Periodic reviews of the plan should include consideration of the following:

- The City's progress in implementing the plan
- Changes in conditions that form the basis of the plan
- Adjustments related to capital expenditures
- Changes to the City's regulations or programs
- Adjustments of implementation priorities
- Changes in State laws

In addition to periodic annual review, the comprehensive plan should undergo a thorough review and update every five years. The review and update process should begin with the establishment of a committee similar to the Steering Committee that was appointed to assist in the preparation of this plan. Specific input on major changes should be sought from various groups, including property owners, neighborhood groups, civic leaders, developers, business owners, and other citizens and individuals who express an interest in the long-term growth and development of the City.

Implementation Mechanisms

The following is an overview of mechanisms that can be used to implement the recommended actions. Many actions require a combination of mechanisms, as well as coordination between various City departments and other entities, including the Texas Department of Transportation (TxDOT).

Development regulations are used to guide development, and should use the plan and its vision as a foundation for the regulations. Zoning is perhaps the single most powerful tool for implementing comprehensive plan recommendations. The City's zoning ordinance should be updated with the recommendations contained within the chapters of this plan. All zoning and land use changes should be made within the context of existing land uses, future land uses, and planned infrastructure, including roadways,

water and wastewater. The act of subdividing land to create building sites has a major effect on the overall design and image of Shenandoah. Much of the basic physical form of the City is currently created by the layout of streets, easements, and lots. In the future, the basic physical form of Shenandoah will be further affected by such action. Requirements for adequate public facilities are essential to ensure the City's orderly and efficient growth.

A Capital Improvement Program (CIP) is essentially a city's adopted budget for the fiscal year, outlining capital projects, justification, priority level, time frame, and financing arrangements. Capital improvements are integrally linked to the City's comprehensive plan and its regulatory ordinances. A capital improvement such as a water treatment plant illustrates this concept in the following example:

The comprehensive plan recommends areas for a particular type of development, the zoning ordinance reinforces plan recommendations with applicable zoning districts consistent with that type of development, and the subdivision ordinance regulates the facilities (e.g., utility extensions, roadway widths, etc.) necessary to accommodate that type of development. The type of development that is recommended by the comprehensive plan and that is regulated and approved in accordance with the zoning and subdivision ordinance dictates the water treatment plant's size and capacity.

It is in the City's long-term financial interest to invest regularly in the physical maintenance and enhancement of Shenandoah rather than to undertake large improvement-type programs at longer time intervals. A modest amount of money expended annually on prioritized items in accordance with plan recommendations will produce a far greater return to the City than will large expenditures at long intervals.

Although capital projects typically refer to roadways, drainage, parks, and other public safety issues, Cities can also budget funding through the CIP for special studies or programs to address specific issues. For example, the City may want to designate funding in order to conduct feasibility studies or create training programs.

The City should consider developing a comprehensive CIP to help balance the community's needs and growing infrastructure demands. The difference between a traditional CIP and a comprehensive CIP is a more thorough, inclusive, and objective process in which projects are categorized and prioritized. The comprehensive CIP evaluates the capital improvement projects identified by the City and, based on input from City staff, citizens, and City Council, cost, and funding opportunities, subjectively prioritizes each project.

In the development of a comprehensive CIP, project information is gathered from City staff, including the number of projects, the types, and general details of each. City staff and key community leaders provide input on ranking criteria – issues that are important to the City – which is used to create a scoring system. Each project then receives an objective score based on how it meets the ranking criteria. For example, if Shenandoah feels that public safety and quality of life are two of the most important principles, then projects relating to those aspects will receive a weighted score. Following the scoring of projects, City staff helps to identify the justification of the ranking of each project. Finally, the CIP is created based on this information for a five year, ten year, or longer time period.



Recommended Implementation Actions

Implementation actions have been recommended to address the goals identified within each chapter. The following tables provide a coordinated listing of the recommended implementation actions. Because few cities have the ability to implement every recommendation immediately following adoption of the plan, actions should be placed into a time table and prioritized. The timeline and priority associated with each action must be balanced with funding, City Staff resources, and logical order.

Goal 3.1:	Become a Home Rule City
Goal 3.2:	Ensure Proper Development
Goal 3.3:	Encourage Cohesiveness
Goal 3.4:	Promote Aesthetic Appeal
Goal 3.5:	Encourage Walkability
Goal 3.6:	Build on Existing Strengths
Goal 4.1:	Establish an Identity for the City and its Special Areas
Goal 4.2:	Utilize Nonresidential and Multiple Family Residential Design Guidelines
Goal 4.3:	Encourage Pedestrian-Friendly Amenities
Goal 4.4:	Ensure Strong Neighborhoods
Goal 4.5:	Promote Sustainability

Each table has been designated for a time period based on the public input received and the nature of the action – short-term, long-term, and on-going. Short-term generally means within the first and second years following plan adoption, and long-term generally means within five years following plan adoption. On-going items are actions that need to be continually implemented and addressed. Each implementation action is numbered by its associated goal.

The top priorities were identified through an exercise with the Steering Committee incorporating the previously “weighted” identified issues (see Chapter 2: Vision). During the exercise, each goal and implementation action from the recommendation chapters was summarized and shown on large boards, which are shown below. The Steering Committee members discussed each of the actions and determined which of the items should be considered “highest priority”, regardless of time period (i.e., short-term, long-term, on-going).

The top ten priorities are indicated within the tables by an asterisk.

3.1 Home Rule City

- * 3.1.1 Allow for higher density residential zoning
- 3.1.2 Pursue annexation within ETJ
- 3.1.3 Negotiate boundaries

3.2 Proper Development

- 3.2.1 Emphasis on high density retail along Research Forest
- * 3.2.2 High quality design in Professional Corridor
- 3.2.3 High quality design standards for light industrial
- * 3.2.4 Encourage development of mixed use areas

3.3 Cohesiveness

- * 3.3.1 Interstate 45 overpass at Vision Park Blvd
- 3.3.2 Continuous landscaping from Research Forest onto Tamina Rd
- 3.3.3 Implement/Improve trails plan

3.4 Aesthetic Appeal

- 3.4.1 Consider Interstate 45 corridor study
- * 3.4.2 Revise design standards

3.5 Encourage Walkability

- 3.5.1 Future cross-sections ensure safety of automobile, pedestrian, bike traffic
- * 3.5.2 Connect pedestrian facilities to future developments

3.6 Existing Strengths

- 3.6.1 Create a central gathering place
- 3.6.2 Promote Professional Corridor
- * 3.6.3 Promote Sports District

4.1 Identity

- 4.1.1 City entryways
- 4.1.2 Interstate 45 overpass
- 4.1.3 Neighborhood signage

4.2 Design Guidelines (NR/MF)

- 4.2.1 Building materials and articulation
- 4.2.2 Sign regulations
- * 4.2.3 Screening and buffering between conflicting residential and nonresidential

4.3 Pedestrian Amenities

- 4.3.1 Pedestrian-ways: sufficient lighting, wide sidewalks, landscaping elements

4.4 Strong Neighborhoods

- 4.4.1 Permit accessory structures with guidelines
- 4.4.2 Allow cluster design in multiple family developments
- * 4.4.3 Housing options

4.5 Sustainability

- 4.5.1 Environmental sustainability
- * 4.5.2 Economic sustainability
- 4.5.3 Social sustainability

Short-Term Implementation Actions

Implementation Actions	Mechanism	Lead
<p>3.1.1 Allow for higher density residential zoning at appropriate locations, such as the proposed Town Center, Mixed Use District, and other high or medium density residential areas.</p>	Zoning Ordinance / Fire Code	Community Development Department
<p>3.2.3 Ensure high quality design standards for light industrial development in the north Tamina area.</p>	Zoning Ordinance	Community Development Department
<p>3.4.2 Revise design standards to reflect the desired visual character of the City.</p>	Zoning Ordinance	Community Development Department
<p>4.2.1 Establish strong building material and building articulation design standards on new construction.</p>	Zoning Ordinance	Community Development Department
<p>4.2.2 Ensure quality sign regulations.</p>	Zoning Ordinance / Sign Ordinance	Community Development Department
<p>4.2.3 Promote the usage of screening and buffering techniques in order to reduce the conflict between residential and nonresidential land uses.</p>	Zoning Ordinance	Community Development Department

<p>4.4.1</p> <p>Permit the use of accessory structures with standards to assure compatibility with the primary structure (such as design, materials, and colors), and that the accessory structure is secondary in both size and use to the primary structure.</p>	<p>Zoning Ordinance</p>	<p>Community Development Department</p>
<p>4.4.2</p> <p>Develop standards to allow for cluster design in multiple family residential developments to support the incorporation of open space.</p>	<p>Zoning Ordinance</p>	<p>Community Development Department</p>



Long-Term Implementation Actions

Implementation Actions	Mechanism	Lead
3.2.4 Encourage development of mixed use areas, including the Town Center, Mixed Use District, and Sports District.	Zoning Ordinance	Community Development Department
3.3.2 Ensure that landscaping, gateway features, and other identifying elements are continuous from Research Forest Drive onto Tamina Road.	CIP / Subdivision Ordinance	Community Development Department / Public Works Department
3.4.1 Consider a corridor study to improve the use types and aesthetic appeal along Interstate 45.	Corridor study	Community Development Department
3.5.1 Develop cross-sections for all future streets to ensure safety and accessibility for automobile, pedestrian, and bike traffic.	Subdivision Ordinance / Transportation Plan	Community Development Department / Public Works Department
3.6.1 Establish a Town Center for Shenandoah to create a central gathering place for residents.	Zoning Ordinance / CIP (land acquisition)	Community Development Department / Economic Development Department
4.1.1 Construct entryways near the City's boundaries to signify arrival into Shenandoah.	CIP	Community Development Department / Public Works Department
4.1.2 Use the Interstate 45 overpass as an opportunity for identifying features such as signage or unique artwork.	CIP	Community Development Department / Public Works Department / TxDOT

On-Going Implementation Actions

Implementation Actions	Mechanism	Lead
3.1.2 Continue to pursue annexation and growth opportunities within the current ETJ.	Growth management study	Community Development Department
3.1.3 Continue to work with neighboring municipalities to negotiate boundaries.	Inter-local boundary agreements	City Manager's Office and various departments
3.2.1 Continue to place an emphasis on high density retail along Research Forest Drive.	Zoning Ordinance	Community Development Department / Economic Development Department
* 3.2.2 Continue to encourage high quality building design within the Professional Corridor area along Vision Park Boulevard.	Zoning Ordinance	Community Development Department
* 3.3.1 Continue to request and plan for an overpass for Interstate 45 at Vision Park Boulevard.	CIP	City Manager's Office and various departments / TxDOT
3.3.3 Continue to improve, expand, and implement the Spokes to Loops Trails plan.	CIP / Trails Plan	Community Development Department / Parks & Recreation Department / Public Works Department



<p>3.5.2 Continue to make efforts to connect pedestrian facilities to future developments.</p>	<p>CIP / Trails Plan / Subdivision Ordinance</p>	<p>Community Development Department / Parks & Recreation Department / Public Works Department</p>
<p>3.6.2 Continue to promote and expand the Professional Corridor as a premier center for medical and office space.</p>	<p>Marketing materials</p>	<p>Economic Development Department</p>
<p>3.6.3 Promote the Sports District as an attraction for visitors and a recreational opportunity for the local residents, with an array of supporting uses.</p>	<p>CIP / Zoning Ordinance / Inter-local agreements with ISDs</p>	<p>Community Development Department / Economic Development Department / Parks & Recreation Department</p>
<p>4.1.3 Continue to use signage to identify distinct neighborhoods or districts.</p>	<p>CIP</p>	<p>Community Development Department / Public Works Department</p>
<p>4.3.1 Ensure that pedestrian-ways along thoroughfares have sufficient lighting, wide sidewalks, trees, and other landscaping in order to ensure pedestrian and vehicular safety and comfort.</p>	<p>CIP</p>	<p>Community Development Department / Public Works Department</p>
<p>4.4.3 Support different housing options to promote a “full-life cycle” community.</p>	<p>Zoning Ordinance</p>	<p>Community Development Department</p>

<p>4.5.1</p> <p>Encourage environmental sustainability measures such as air quality protection, water quality protection, recycling opportunities, land and species protection, energy conservation, and green building standards.</p>	<p>Zoning Ordinance / Subdivision Ordinance / Building Code / City policy / Various studies and programs</p>	<p>Building Department / Community Development Department / Parks & Recreation Department / Public Works Department</p>
<p>4.5.2</p> <p>Promote economic sustainability through the creation of a diverse and viable economic base, reinvesting in local businesses, creating employment opportunities, and creating training and educational opportunities.</p>	<p>Zoning Ordinance / City programs</p>	<p>Community Development Department / Economic Development Department</p>
<p>4.5.3</p> <p>Maintain social sustainability through compact community design, cultural opportunities, community interaction, and a clean and safe environment.</p>	<p>Zoning Ordinance / Subdivision Ordinance / Code Enforcement</p>	<p>Community Development Department / Economic Development Department / Public Works Department</p>



Conclusion

These implementation actions are the culmination of goals and recommendations discussed throughout the comprehensive plan. As Shenandoah continues in its quality planning efforts, the actions and priorities outlined within this plan should be considered. Additionally, this chapter helps to lay the foundation for the development of the Integrated Development Code.

This plan represents a planning process that took place over a time period of approximately one year. The various elements of the plan are based upon realistic goals and recommendations for the City that resulted from an intensive comprehensive planning process involving a Steering Committee, citizens, City Staff, and elected and appointed officials. The comprehensive plan, once adopted, becomes the official policy of the City. To be fully effective, the plan should be used on a daily basis to determine policy, thereby guiding Shenandoah to realize its ultimate vision.