Summary Profiles

      a. 2000 SF1 & SF3 Summary Profile by sub-basin and policy area
      b. 2010 SF1 Summary Profile by sub-basin and policy area
      c. 2005-2009 5Year Summary Profile by sub-basin and policy area
      d. Housing Inventory and Demand

Methodology

Data Sets:

2000 Census, 2010 Census, 2005-2009 Census American Community Survey (ACS)

Data Level:

2000 Census block group & 2010 Census block group

Data Analysis:

Before data was collected for the summary reports, the Research Team (team) analyzed whether or not census geographies would represent the study level geographies. To do this, the research team used a geographic information system (GIS) program to determine the best level of census geography. Based on an analysis where researchers determine how much of each census geography falls within each study area (watershed, sub-basin policy area), it was determined census block groups were most appropriate. Census block groups are the smallest level of geography that will fit within the study areas and in which data are available for the 2005-2009 ACS; in order to make the data comparable geographies need to be consistent throughout the study. Therefore data from the 2000 and 2010 Census are also included at the block group level.

In order to prepare summary profiles, the team gathered data items from three sources, the 2000 Census, 2010 Census and the 2005-2009 American Community Services. Next, each census block group was assigned to a study area using the intersect method within ArcMap. A simple percentage of land equation was used to determine how much of each census block fell completely within the study area. The first assumption of the study is that data are distributed evenly across the census block; therefore the percentage of land ratio that fell within the study area will be applied to the data. Once the intersect operation was complete, data was matched to each of the study areas by using the census block group I.D. variable in a database. Upon matching each census block group data to each watershed, the ratio was applied and data for each study area was summed for each variable. This process was used for 2000, 2010 Census and 2005-2009 ACS data. 2000 Census block groups were used for 2000 Census data and 2005-2009 ACS data. 2010 Census block groups were used for 2010 data. Similar methods were applied to the policy areas defined by NCTCOG Environment and Development Department.

Housing inventory

Housing supply and inventory is based on the MLS listings for a particular area. The data were taken directly from the Texas Real Estate Center's website. The areas included in the report are the geographic regions the Real Estate Center follows that are within the watershed study area. The data included in the report is for total number of months of inventory. Months of inventory is determined based on the average length of time a house in on the market vs the total number of houses that are currently listed. This figure is often used to determine the current demand for housing within a specific area.

Housing Demand

The demand section of the report is based on the NCTCOG long range demographic forecast. The forecast is based on projected population and housing in 2040 and is calculated based on a land use model. The occupancy rate for 2040 is an

average of occupancy rates based on previous decennial census data. Household size is calculated based on household population and total number of projected households.

Summary Findings:

The study area for Vision North Texas covers seventeen water subbasins within North Texas. From 2000 to 2010, the population of the study area increased by nearly 1.3 million people. The population in 2000 was 6,063,888 million and grew to 7,378,878 million people by 2010. The Denton Subbasin had the largest percentage increase in population of fifty-eight percent. The area encompassed by the Lower West Fork Trinity increased in total population from 1,739,922 in 2000 to 2,136,945 in 2010. This represents a twenty-three percent increase in population for the subbasin over the decade. Of the sub-basins, Lower West Fork Trinity is the largest with an estimated total population of over 2.1 million while Richland is the smallest, with just over 21,400 people. Likewise for watersheds, Headwaters Trinity River is the largest and Caddo Creek is the smallest in terms of total population. The charts below provide figures for the largest and smallest areas as well as listings of the top five areas in terms of absolute and percentage change in population.

Largest & Smallest Population Geographies							
Population Rank	Subbasin	2000 Census	2010 Census	Population Change	Change Rank	% Change	% Change Rank
1	Lower West Fork Trinity	1,739,922	2,136,945	397,023	1	23%	4
17	Richland	20,157	21,462	1,304	17	6%	14
Population Rank	Watershed	2000 Census	2010 Census	Population Change	Change Rank	% Change	% Change Rank
1	Headwaters Trinity River	1,091,235	1,102,684	11,449	22	1%	88
103	Caddo Creek	313	363	50	88	16%	42
Top 5 Geographies by absolute population growth							
Population Rank	Subbasin	2000 Census	2010 Census	Population Change	Change Rank	% Change	% Change Rank
1	Lower West Fork Trinity	1,739,922	2,136,945	397,023	1	23%	4
3	East Fork Trinity	859,268	1,185,850	326,582	2	38%	2
4	Elm Fork Trinity	747,593	1,001,684	254,091	3	34%	3
2	Upper Trinity	1,391,838	1,475,120	83,282	4	6%	16
7	Denton	117,328	185,809	68,481	5	58%	1
Population Rank	Watershed	2000 Census	2010 Census	Population Change	Change Rank	% Change	% Change Rank
2	East Fork Trinity River-Lake Ray Hubbard	442,499	626,188	183,689	1	42%	10
9	Elm Fork Trinity River-Little Elm Reservoir	137,989	270,201	132,212	2	96%	3
6	Mountain Creek-Mountain Creek Lake	262,063	389,800	127,737	3	49%	8
3	Big Fossil Creek-West Fork Trinity River	474,125	592,531	118,406	4	25%	25
14	East Fork Trinity River-Levon Lake	76,915	160,096	83,181	5	108%	2
Top 5 Geographies by percentage population growth							

Population Rank	Subbasin	2000 Census	2010 Census	Population Change	Change Rank	% Change	% Change Rank
7	Denton	117,328	185,809	68,481	5	58%	1
3	East Fork Trinity	859,268	1,185,850	326,582	2	38%	2
4	Elm Fork Trinity	747,593	1,001,684	254,091	3	34%	3
1	Lower West Fork Trinity	1,739,922	2,136,945	397,023	1	23%	4
11	Cedar	98,791	119,854	21,064	10	21%	5
Population Rank	Watershed	2000 Census	2010 Census	Population Change	Change Rank	% Change	% Change Rank
39	Little Elm Creek-Little Elm Reservoir	9,371	20,445	11,074	24	118%	1
14	East Fork Trinity River-Levon Lake	76,915	160,096	83,181	5	108%	2
9	Elm Fork Trinity River-Little Elm Reservoir	137,989	270,201	132,212	2	96%	3
32	Royse City-South Fork Sabine River	13,042	24,300	11,258	23	86%	4
13	Lower Denton Creek	103,954	167,804	63,850	7	61%	5

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

In addition to varying in population size and growth, the subbasins also vary in terms of demographics. An example of this is provided below with select characteristics for the Lower West Fork Trinity Subbasin, Denton Subbasin and Sulfur Headwater Subbasin. The population of individuals sixty-five years and older is higher in the Sulfur Headwater Subbasin than in the other two subbasins. The proportion of Hispanic or Latino population has grown over the decade in all three subbasins. For detailed information, please see the table below.

	Select Characteristics					
	Largest Sub-Basin (Population)		Fastest Growing Sub-Basin (%)		Slowest Growing Sub-Basin (%)	
	Lower West Fork Trinity		*Denton*		*Sulfur Headwater*	
	2000 Census	2010 Census	2000 Census	2010 Census	2000 Census	2010 Census
Population by Race						
White alone	70.8%	65.9%	88.9%	82.8%	82.4%	78.4%
Black or African American alone	12.1%	14.6%	2.0%	3.9%	12.0%	12.9%
American Indian and Alaska Native alone	0.6%	0.7%	0.5%	0.6%	0.9%	1.1%
Asian alone	3.5%	4.5%	3.7%	6.4%	0.8%	1.3%
Native Hawaiian and other Pacific Islander alone	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%
Some other race alone	10.1%	11.2%	3.0%	3.7%	1.8%	3.4%
Two or more races	2.8%	3.0%	1.8%	2.5%	2.1%	2.7%
Hispanic or Latino Population	21.6%	29.5%	7.6%	12.8%	4.6%	8.2%
Population by Age						
15 years and under	25.3%	28.2%	27.8%	30.0%	22.0%	23.6%
16 to 64 years	66.5%	62.8%	67.1%	63.2%	62.3%	60.6%

	2000 Census	2005-2009 ACS	2000 Census	2005-2009 ACS	2000 Census	2005-2009 ACS
65 years and over	8.2%	9.0%	5.1%	6.8%	15.7%	15.8%
Total Housing Units	671,477	831,609	44,393	69,705	20,156	21,386
Vacancy Rate	5.4%	8.0%	6.6%	5.9%	11.7%	13.9%
Total Population in Family Households	86.5%	86.5%	90.5%	89.8%	84.6%	83.3%
Total Population in Nonfamily Households	13.5%	13.5%	9.5%	10.2%	15.4%	16.7%
	2000 Census	**2005-2009 ACS**	**2000 Census**	**2005-2009 ACS**	**2000 Census**	**2005-2009 ACS**
Population 25 years and over with bachelor degree or higher	25.0%	26.0%	42.0%	44.0%	18.0%	21.0%
Population 16 Plus Civilian Employed by Industry	855,698	983,699	61,912	90,448	19,528	21,162
Agriculture, Forestry, etc	0.5%	0.9%	1.4%	1.5%	2.9%	2.6%
Construction	7.6%	8.6%	5.6%	4.8%	7.5%	8.6%
Manufacturing	14.2%	12.7%	10.7%	9.5%	16.7%	15.6%
Wholesale Trade	4.5%	4.0%	5.3%	4.6%	2.7%	2.9%
Retail trade	12.5%	11.9%	12.3%	11.4%	12.1%	12.5%
Transportation_Warehouse_ Utilities	8.1%	7.7%	10.2%	8.7%	5.5%	5.7%
Information	3.8%	2.7%	6.7%	4.5%	2.3%	1.6%
Finance, Insurance, Real Estate, Rent and Lease	7.8%	8.0%	9.7%	11.4%	4.8%	3.4%
Professional, Scientific, Management, Administration	9.6%	10.0%	12.8%	13.1%	4.5%	5.9%
Educational	15.9%	16.8%	13.0%	15.4%	26.6%	27.0%
Arts_Entertain_Rec_Accommodation_Food Service	7.2%	8.2%	5.9%	7.8%	6.3%	5.7%
Other Services	4.9%	5.1%	3.8%	4.3%	4.3%	4.8%
Public Administration	3.4%	3.3%	2.6%	2.9%	3.8%	3.6%

Note: Differences between percentages in 2000 and 2010 might or might not be statistically significant.

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris
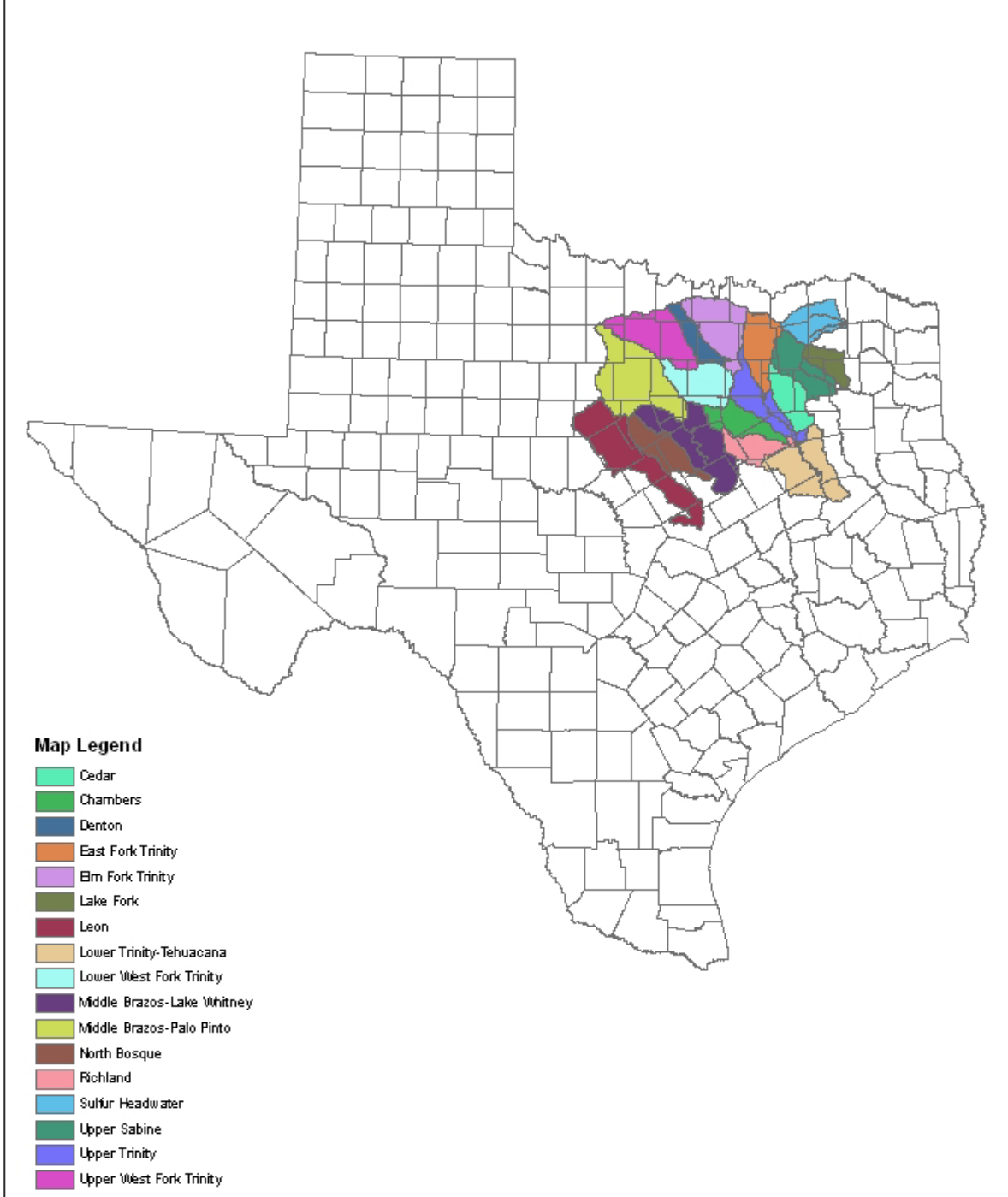
Housing Demand					
Year	Occupancy Rate	Household Population	Total Housing Units	Total Households	Avg Household Size
1980 Census	91.9%	2,978,378	1,193,247	1,096,628	2.72
1990 Census	88.8%	3,950,398	1,685,191	1,497,259	2.64
2000 Census	94.1%	5,115,346	2,014,655	1,895,138	2.70
2010 Census	91.8%	6,339,514	2,524,568	2,317,205	2.74
2040 Forecast	**91.7%**	**10,543,336**	**4,087,033**	**3,745,814**	**2.81**

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

Housing Supply: Select Counties			
Collin County	**Months of Supply**	**Denton County**	**Months of Supply**
2010		2010	
January	4.5	January	5.2
February	4.9	February	5.5
March	5.1	March	5.7
April	5.1	April	5.4
May	5.3	May	5.7
June	5.6	June	6.2
July	6.1	July	6.7
August	6.0	August	6.6
September	6.0	September	6.4
October	5.8	October	6.4
November	5.6	November	6.3
December	5.0	December	6.0
2011		2011	
January	5.0	January	6.0
February	5.1	February	6.1
March	5.4	March	6.6
April	5.8	April	7.0
Inventory (single family, townhomes, and condominiums)			

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

2000 & 2010 Subbasin Data Maps & Charts

Subbasin Study Area

Map Legend

- Cedar
- Chambers
- Denton
- East Fork Trinity
- Elm Fork Trinity
- Lake Fork
- Leon
- Lower Trinity-Tehuacana
- Lower West Fork Trinity
- Middle Brazos-Lake Whitney
- Middle Brazos-Palo Pinto
- North Bosque
- Richland
- Sulfur Headwater
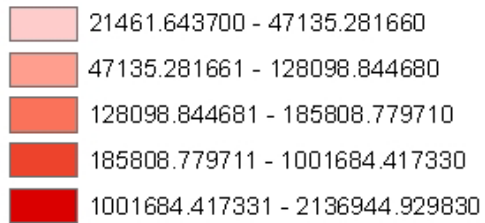- Upper Sabine
- Upper Trinity
- Upper West Fork Trinity

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

2010 Subbasin Population Heat Map

Map labels: Elm Fork Trinity, East Fork Trinity, Sulfur Headwater, Upper West Fork Trinity, Denton, Lake Fork, Upper Sabine, Middle Brazos-Palo Pinto, Lower West Fork Trinity, Cedar, Upper Trinity, Chambers, Middle Brazos-Lake Whitney, Richland, North Bosque, Leon, Lower Trinity-Tehuacana
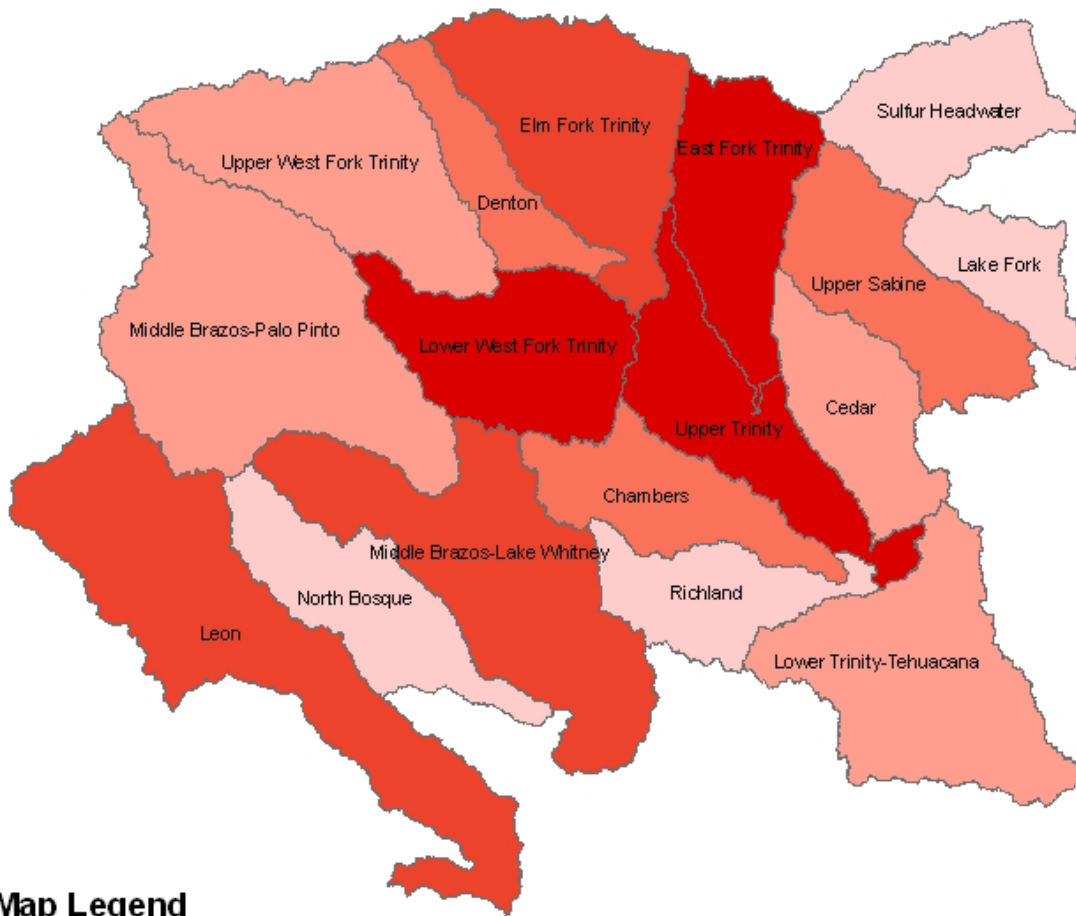
Map Legend

2010 Population

	21461.643700 - 47135.281660
	47135.281661 - 128098.844680
	128098.844681 - 185808.779710
	185808.779711 - 1001684.417330
	1001684.417331 - 2136944.929830

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

Total Population

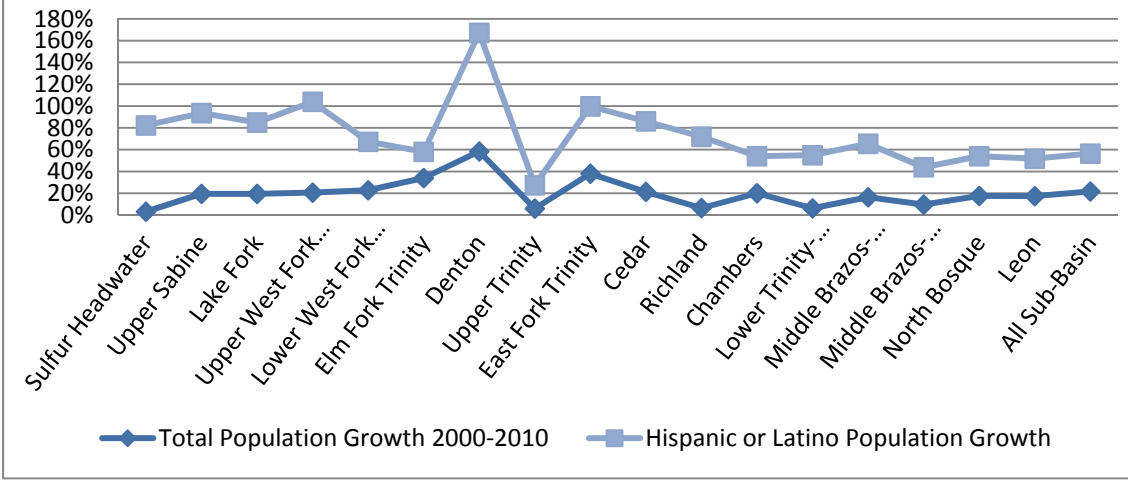Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

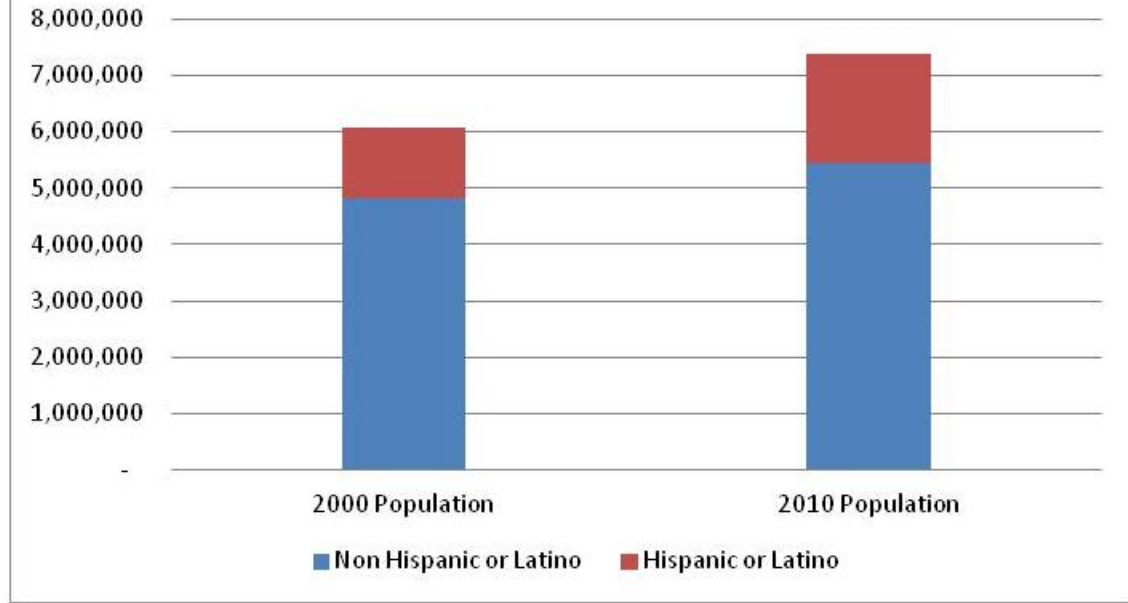**Proportion of Total Population in 2010**
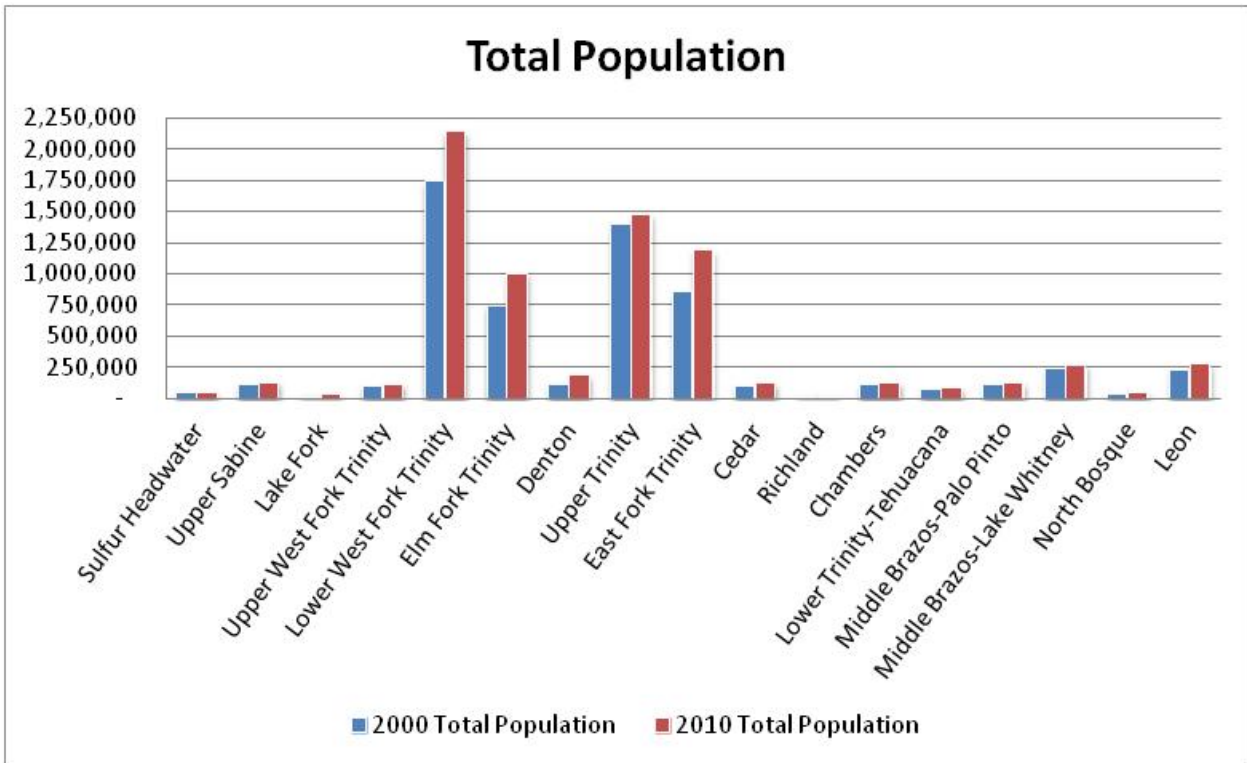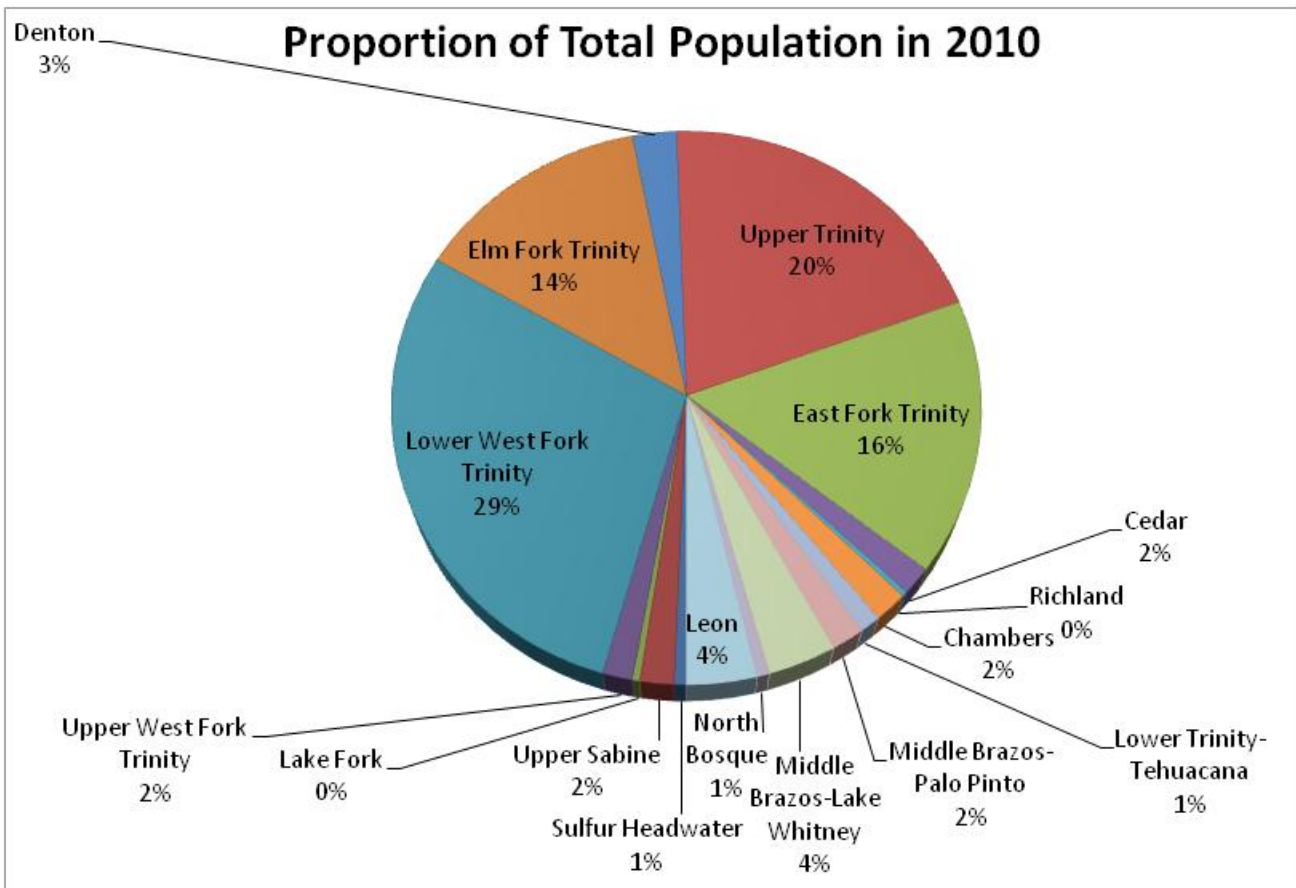
Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris
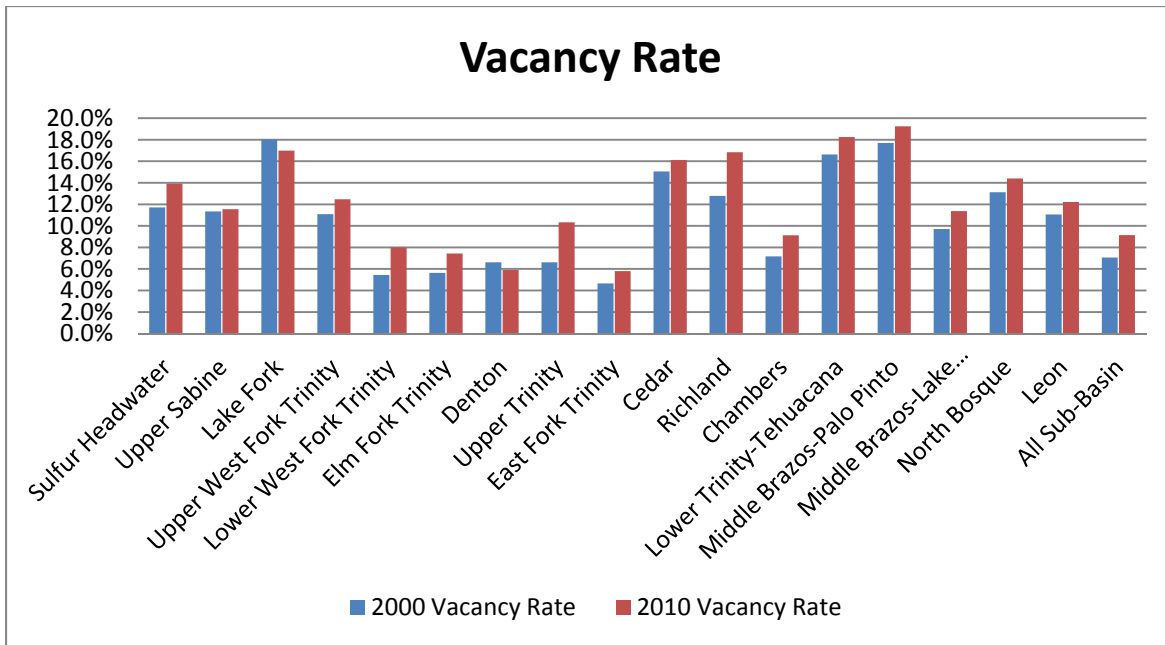
Population Growth Rate between 2000 and 2010

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

Total Population for All Sub-Basin Areas

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris

Vacancy Rate

Bar chart showing 2000 Vacancy Rate (blue) and 2010 Vacancy Rate (red) for the following sub-basins: Sulfur Headwater, Upper Sabine, Lake Fork, Upper West Fork Trinity, Lower West Fork Trinity, Elm Fork Trinity, Denton, Upper Trinity, East Fork Trinity, Cedar, Richland, Chambers, Lower Trinity-Tehuacana, Middle Brazos-Palo Pinto, Middle Brazos-Lake..., North Bosque, Leon, All Sub-Basin.

Source: North Central Texas Council of Governments Research and Information Services, www.nctcog.org/ris