

The North Central Texas Council of Governments (NCTCOG) forecasted a new set of regional demographics approved by its Executive Board in April 2003. The forecast was conducted for the ten counties that comprise the Dallas-Fort Worth Metropolitan Area (DFWMA) including Dallas, Tarrant, Collin, Denton, Johnson, Ellis, Kaufman, Rockwall, Parker and Wise Counties. This database was used as the baseline to generate future trip patterns in the DFWMA.

As part of this study, a review was made of the historic and projected demographic characteristics embedded in the traffic modeling trip tables developed by NCTCOG. This chapter describes the major socioeconomic characteristics of the DFWMA beginning with the regional trends all the way down to specific trends within the LBJ corridor from IH 30 to Luna Road, the limits of the Managed Lanes project.

The first section of this chapter provides a description of the NCTCOG forecast process used to generate the base demographics. The second section details the regional historical and future growth in the Ten-County Area. The historical and future growth of the individual municipalities within the study corridor is considered in the third section of the chapter. The last section describes the demographic characteristics of the LBJ corridor from IH 30 to Luna Road.

NCTCOG Forecast Process

The forecast process was developed in three steps as illustrated in Figure 3-1. In the first step, regional control totals of population and employment were developed in five-year increments from a base year (2000) through the forecast year (2030). These regional totals were obtained from the Texas State Data Center (TSDC) and were complemented with forecasts developed by independent economists at the Perryman Group.

The TSDC population forecast process is a cohort-component forecast method for which the key element is the rate of migration. Four scenarios with different rates of migration were developed.

Table 3-1 shows the control totals that were considered during the forecasting process. The 2030 population forecast ranges from 6.1 million, for the zero percent migration scenario, to 12.1 million under the 1.0 percent migration scenario. The population control totals adopted by the region are shown bolded in Table 3-1. They reflect similar trends to those developed by the Perryman Group, and fall between the 0.5 and 1.0 migration scenarios from the TSDC, representing a middle ground.

The employment control totals were generated based on a relationship between the estimates generated by the Perryman Group and the Texas Workforce Commission. The employment control totals are depicted in Table 3-2 and show that the total employment in the Ten-County Area will increase from 3.1 million in 2000 to 5.4 million by 2030.

The second step of the forecasting process involved allocating the regional control

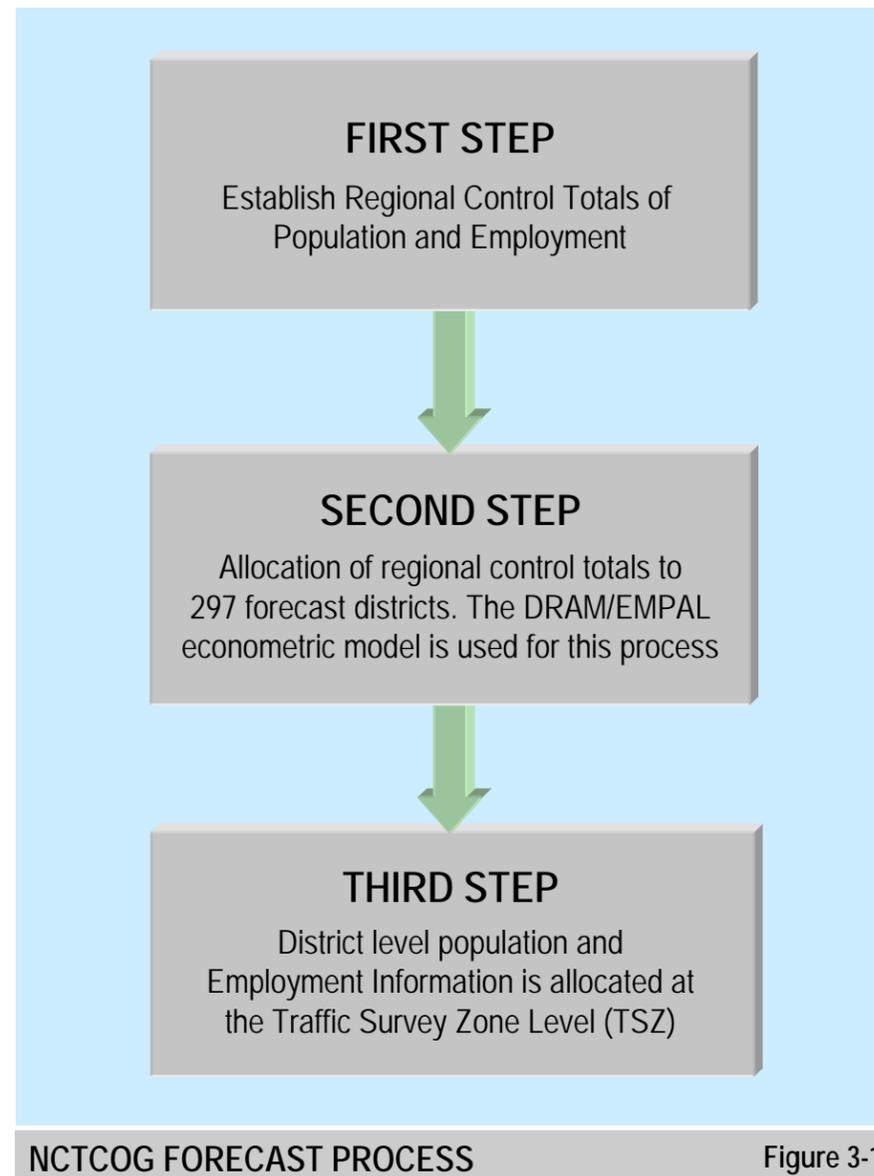


Table 3-1
Population Control Totals

	2000	2010	2020	2030
TSDC Scenario 0.0	5,079,600	5,576,147	5,924,157	6,150,687
TSDC Scenario 0.5	5,079,600	6,075,653	7,172,447	8,403,478
TSDC Scenario 1.0	5,079,600	6,670,036	8,937,884	12,132,893
The Perryman Group	5,079,600	6,336,947	7,728,399	9,216,601
NCTCOG Adopted Forecast	5,154,300	6,391,300	7,733,400	9,125,400

Source: North Central Council of Governments, Research and Information Services.

totals to 297 forecast districts for each five-year interval. The DRAM/EMPAL econometric model was used for this process and it is the most widely accepted model by metropolitan planning organizations in the country. Key variables for the DRAM/EMPAL model include current employment locations by sector, household locations by income quartile, land use inventories, travel time matrices, and the number of workers per household.

In the third and final step, the district level information was disaggregated to the Traffic Survey Zone (TSZ) level which is the smallest aggregation incorporated in the travel demand process. There are 6,386 TSZs in the Ten-County Area. The critical variables used in this process were: district level household change, acres of vacant land, density of future residential development, and proximity to transportation. Output from this process was closely reviewed by the member cities and approved by the

Table 3-2
Employment Control Totals

	2000	2010	2020	2030
NCTCOG Adopted Forecast	3,152,500	3,897,100	4,658,700	5,399,700

Source: North Central Council of Governments, Research and Information Services.

Regional Demographic Task Force before being presented and approved by the NCTCOG Executive Board.

Historical and Future Regional Growth

The DFWMA covers 4,980 square miles encompassing Collin, Dallas, Denton, Rockwall and Tarrant Counties and portions of Ellis, Johnson, Kaufman, Parker, and Wise Counties. The analysis of historical and future demographic growth from a regional perspective is based on county-level information pertaining to population, employment, and income. A description of this information follows.

Historical Regional Population Trends

Table 3-3 shows the historical population trends for counties in the DFWMA, Texas and the nation; and Figure 3-2 illustrates the spatial relationship of each county encompassed within the DFWMA. The total population in the Ten-County Area has increased by an annual rate of 2.6 percent from 1970 to 2000, equivalent to 2,703,347 additional residents. This population growth trend exceeded the state and national growth trends between 1970 and 2000 which were 2.1 and 1.1 percent per year, respectively.

Dallas County, which contains the entirety of IH 635, is highlighted in the following series of tabulations. It is the most heavily-populated county in the DFWMA, growing from 1,327,696 residents in 1970 to 2,218,899 residents in 2000. This addition of 891,203 residents between 1970 and 2000 represented an annual growth rate of 1.7 percent. This annual growth rate was lower than the rate of expansion experienced by the state during the same period, which was 2.1 percent annually.

Tarrant County is the second largest county in the DFWMA in terms of population with 1,446,219 residents in 2000. Its population increased at an annual rate of 2.4 percent between 1970 and 2000, adding a total of 730,632 residents during the same period.

Collin County was the fastest growing county in the DFWMA between 1970 and 2000. The population increased from 66,920 in 1970 to 491,675 in 2000, corresponding to an annual growth rate of 6.9 percent between 1970 and 2000. The Collin County population growth rate from 1970 to 2000 was 3.3 and 6.3 times higher than

the population growth rate experienced by the state and the nation, respectively.

Denton County has historically been among the most heavily-populated and fastest-growing of the counties in the Ten-County Area. The population in Denton County increased from 75,633 in 1970 to 432,976 in 2000, corresponding to an average annual growth rate of 6.0 percent. Its growth rate was 2.9 and 5.5 times higher than the growth rate experienced by the state and the nation, respectively, during that period.

The majority of the population in the DFWMA is concentrated within four counties. In 2000, Dallas, Tarrant, Collin, and Denton Counties comprised a combined total of over 90 percent of the Ten-County Area population total, as evident in Table 3-3. Dallas County accounts for approximately 44 percent of the total population in the Ten-County Area and Tarrant County accounts for approximately 29 percent of the total.

cal and expected future percentage growth. The degree to which Dallas and Tarrant Counties comprise the majority of the total population of the Ten-County Area with Collin and Denton Counties also comprising significant portions of total area population, is evident in Figure 3-3. On a percentage basis, Collin and Denton Counties have experienced the highest rates of population growth since 1970 and are ex-

**Table 3-3
Historical Countywide Population Trends and Projections**

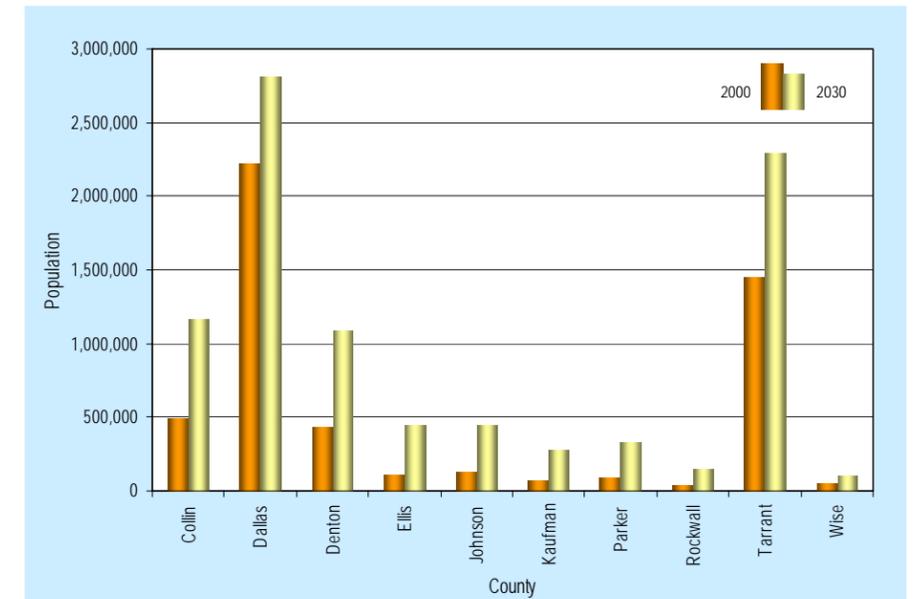
County	Year	Year	Year	Year	Year	Annual Percent Growth (1970-2000)	Annual Percent Growth (2000-2030)	Percent Population Distribution By County	
	1970	1980	1990	2000	2030			2000	2030
Collin	66,920	144,576	264,036	491,675	1,166,645	6.9%	2.9%	9.7%	12.8%
Dallas	1,327,696	1,556,419	1,852,810	2,218,899	2,817,191	1.7%	0.8%	43.7%	30.9%
Denton	75,633	143,126	273,525	432,976	1,085,343	6.0%	3.1%	8.5%	11.9%
Ellis	46,638	59,743	85,167	111,360	448,588	2.9%	4.8%	2.2%	4.9%
Johnson	45,769	67,649	97,165	127,793	444,151	3.5%	4.2%	2.5%	4.9%
Kaufman	32,392	39,015	52,220	71,313	277,745	2.7%	4.6%	1.4%	3.0%
Parker	33,888	44,609	64,785	88,495	328,418	3.3%	4.5%	1.7%	3.6%
Rockwall	7,046	14,528	25,604	43,080	144,976	6.2%	4.1%	0.8%	1.6%
Tarrant	715,587	860,880	1,170,103	1,446,219	2,291,723	2.4%	1.5%	28.5%	25.2%
Wise	19,687	26,575	34,679	48,793	102,449	3.1%	2.5%	1.0%	1.1%
Ten-County Area	2,371,256	2,957,120	3,920,094	5,080,603	9,107,229	2.6%	2.0%	100.0%	100.0%
State of Texas	11,258,480	14,337,820	16,986,510	20,851,820	31,830,579	2.1%	1.4%	---	---
United States	203,982,310	227,225,620	248,709,873	281,421,906	362,880,000	1.1%	0.9%	---	---

Source: NCTCOG, Texas State Data Center, U.S. Census Bureau.

Future Regional Population Growth

Included in Table 3-3 is the future population estimate for 2030 developed by NCTCOG. Population in the Ten-County Area is expected to increase from 5,080,603 in 2000 to 9,107,229 by 2030, corresponding to annual growth rate of 2.0 percent. This annual growth rate for the entire DFWMA is anticipated to be higher than the annual growth rate expected for both the state and the nation.

Dallas County population is expected to grow between 2000 and 2030 at an annual rate of less than one percent per year, from 2,218,899 in 2000 to 2,817,191 by 2030. These anticipated 598,292 additional residents would represent an annual growth rate of 42.8 percent and 11.1 percent below the annual growth rate expected in the state and nation, respectively.



2000 AND 2030 POPULATION Figure 3-3



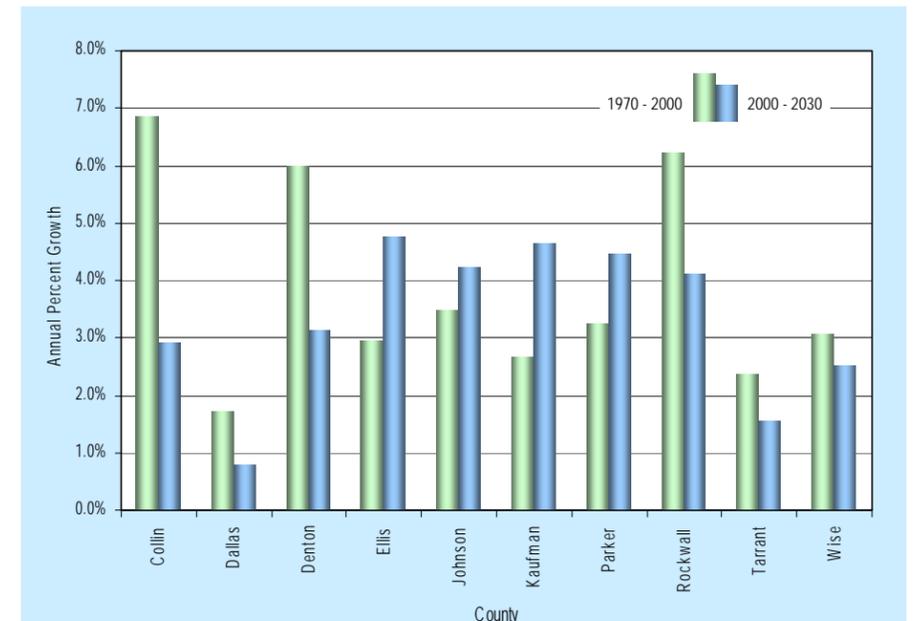
TEN-COUNTY AREA LOCATION Figure 3-2

Tarrant County is expected to add 845,504 residents between 2000 and 2030, growing from 1,446,219 residents in 2000 to 2,291,723 residents in 2030, representing the highest absolute amount of additional residents of any county in the Ten-County Area. This represents an annual average population growth rate of 1.5 percent between 2000 and 2030, which is 7.1 percent and 66.7 percent higher than the annual population growth rate expected in the state and nation, respectively.

Collin County population is expected to grow between 2000 and 2030 at an annual rate of 2.9 percent, from 491,675 in 2000 to 1,166,645 by 2030.

The future population profile for Denton County is expected to be similar to that of Collin County. Denton County population is expected to grow between 2000 and 2030 at an annual rate of 3.1 percent, from 432,976 in 2000 to 1,085,343 by 2030.

Recent (2000) and future-year (2030) population distributions for each of the counties in the Ten-County Area are also presented in Table 3-3. As indicated, Dallas and Tarrant Counties would continue to comprise the largest population centers. However, their overall shares would decline as surrounding counties, particularly Collin and Denton Counties, continue to grow at faster rates.



POPULATION ANNUAL GROWTH RATE Figure 3-4

Figures 3-3 and 3-4 illustrate the future population by county and their annual histori-

pected to remain high-growth counties through to 2030, as evident in Figure 3-4.

Historical Regional Employment Trends

Employment statistics are used as relative indicators of trip attractions to an area. Intense employment growth in an area indicates the potential for a proportional increase in the demand for transportation infrastructure. The countywide historical employment trend in the DFWMA is shown on Table 3-4. Between 1990 and 2000, employment in the Ten-County Area increased at an annual rate of 3.9 percent, which was 34.5 percent higher than the employment growth rate of the state.

Dallas County continues to be the focus of employment in the region. Its employment in 2000 comprised 55.3 percent of the Ten-County Area's total employment. The number of jobs in Dallas County increased from 1,309,000 in 1990 to 1,745,109 in 2000. These additional 436,109 jobs represented an annual average growth rate of 2.9 percent.

Tarrant County employment increased from 565,000 jobs in 1990 to 864,360 jobs in 2000, equivalent to 299,360 new jobs at an annual average growth rate of 1.6 percent. During 2000, the total employment in Tarrant County represented 27.4 percent of the total employment in the Ten-County Area.

Collin County attracted 107,057 new jobs during the 1990s which corresponds to an annual growth rate of 7.7 percent, one of the highest growth rates of any county in the Ten-County Area. Ten percent of the total jobs produced in the region from 1990 to 2000 were attracted to Collin County.

Denton County experienced strong employment growth during the 1990s; employ-

ment grew from 67,000 in 1990 to 152,818 in 2000 corresponding to an additional 85,818 jobs at an annual growth rate of 8.6 percent. Its employment growth rate was the highest in the DFWMA during that period.

Employment distributions by county are also shown in Table 3-4. Dallas and Tarrant Counties incorporate the bulk of the employment centers in the Ten-County Area, recording almost 83 percent of the region's total employment in 2000. Collin and Denton Counties comprised more than 11 percent of the total in 2000.

Figures 3-5 and 3-6 illustrate the future employment by county and their annual historic and expected future percentage growth, respectively. As with the Ten-County Area's population profile, its employment profile shows that the majority of employment exists in Dallas and Tarrant Counties (Figure 3-5) while the greatest degree of historic employment growth on a percentage basis has occurred in Collin and Denton and Counties (Figure 3-6). Employment growth in Collin and Denton and Counties through 2030 on a percentage basis is expected to remain higher than that expected in Dallas and Tarrant Counties. Employment growth in the peripheral counties of the Ten-County Area is also expected to be higher than the expected Dallas and Tarrant County growth.

Future Regional Employment Growth

Table 3-4 also shows the adopted NCTCOG employment estimates for 2030. Dallas County employment is expected to increase from 1,745,109 in 2000 to 2,529,371 in 2030 at an annual growth rate of 1.2 percent during that period. The 784,262 new jobs in Dallas County would represent 34.7 percent of the total additional jobs in the Ten-County Area.

Employment in Tarrant County is expected to reach 1,388,247 in 2030, a 523,887 increase from the 2000 employment of 864,360. Tarrant County is expected to represent 23.1 percent of the total additional jobs in the Ten-County Area.

Collin County's employment is projected to increase from 204,057 in 2000 to 517,264 in 2030 at an annual growth rate of 3.1 percent. Collin County would gain an additional 13.8 percent of the total regional employment growth.

Denton County's employment is projected to increase from 152,818 in 2000 to 413,453 in 2030 at an annual growth rate of 3.4 percent. Denton County would gain an additional 11.5 percent of the total regional employment growth.

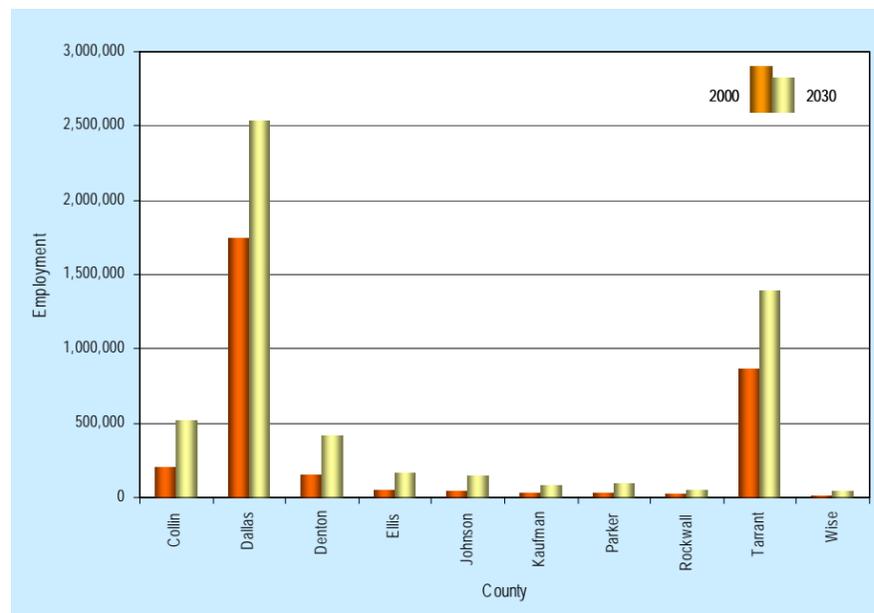
Ellis, Johnson, Kaufman, Parker, Rockwall, and Wise Counties together are expected to add 381,273 new jobs between 2000 and 2030 which accounts for 16.8 percent of the additional regional employment growth. Their combined employment in 2030 is projected to be 10.5 percent of total regional employment.

Table 3-4 also presents year 2030 employment distributions for the Ten-County Area. The major employment concentrations are expected to continue to be located in Dallas and Tarrant Counties. However, the projections anticipate the migration of jobs from the major city centers to the growing tech industries located in the suburbs throughout the northern areas of the region. Collin and Denton Counties together accounted for 19.4 percent of regional employment growth from 1990 to 2000 as compared to 73.8 percent in Dallas and Tarrant Counties combined. For the 2000 to 2030 period, the shares of total employment growth shift to 25.4 percent for Collin/Denton Counties and 57.8 percent for Dallas/Tarrant Counties.

Table 3-4
Historical Countywide Employment Trends and Projections

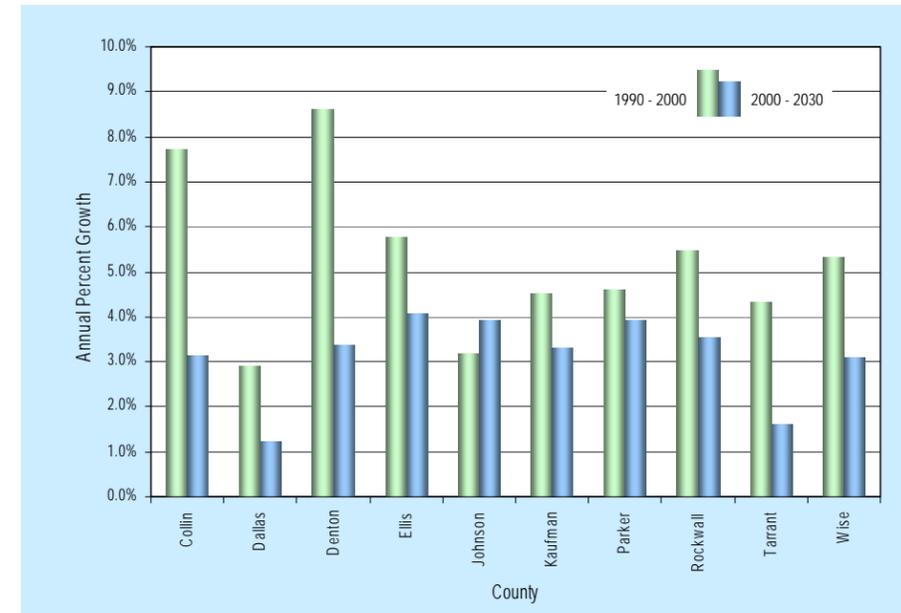
County	Year 1990	Year 2000	Year 2030	Annual Percent Growth (1990-2000)	Annual Percent Growth (2000-2030)	Percent Population Distribution By County	
						2000	2030
Collin	97,000	204,057	517,264	7.7%	3.1%	6.5%	9.5%
Dallas	1,309,000	1,745,109	2,529,371	2.9%	1.2%	55.3%	46.7%
Denton	67,000	152,818	413,453	8.6%	3.4%	4.8%	7.6%
Ellis	28,000	49,071	162,769	5.8%	4.1%	1.6%	3.0%
Johnson	33,000	45,071	142,544	3.2%	3.9%	1.4%	2.6%
Kaufman	20,000	31,027	82,078	4.5%	3.3%	1.0%	1.5%
Parker	19,000	29,816	94,703	4.6%	3.9%	0.9%	1.7%
Rockwall	10,000	17,025	48,466	5.5%	3.5%	0.5%	0.9%
Tarrant	565,000	864,360	1,388,247	4.3%	1.6%	27.4%	25.6%
Wise	9,000	15,100	37,823	5.3%	3.1%	0.5%	0.7%
Ten-County Area	2,157,000	3,153,454	5,416,718	3.9%	1.8%	100.0%	100.0%
State of Texas	6,983,170	9,289,286	16,743,000	2.9%	2.0%	---	---
United States	108,657,200	129,877,063	202,431,000	1.8%	1.5%	---	---

Source: NCTCOG, Texas State Data Center, U.S. Census Bureau, Woods & Poole Economics - CEDDS, 2004; Volumes 1 and 3.



2000 AND 2030 EMPLOYMENT

Figure 3-5



EMPLOYMENT ANNUAL GROWTH RATE

Figure 3-6

Regional Median Household Income Trends

Travel demand is sensitive to the amount of disposable income available within a household; a reliable indicator of a household's propensity for trip making is median household income. Generally, households with higher incomes have a propensity to make more trips than those with lower incomes due to their greater levels of disposable income. Value of time, a key factor in motorist's willingness to pay tolls, also tends to be higher with higher incomes.

A comparison of median household income for the counties in the Ten-County Area is provided in Table 3-5. Dallas and Tarrant Counties had median household incomes that were higher than state and national averages. The median household incomes for the counties in the Ten-County Area were typically higher than the state and national averages. Collin and Denton Counties had among the highest median household incomes out of all of the counties in the DFWMA in 1999.

In 1999, median household incomes in the Ten-County Area ranged from 1.8 times that of the state for Collin County to 1.1 times the state for Wise County. Similarly, the Ten-County median household income ranged from 1.7 times the national median household income for Collin County to 1.00 times the national median household income for Wise County.

The annual rate of growth of median household income in the region between 1989 and 1999, adjusted to constant 1999 dollars using the Consumer Price Index, also compared favorably to the state and nation, although some counties showed a smaller rate of increase. Dallas and Tarrant Counties, the largest and most highly urbanized counties in the region, showed the least amount of median household income growth in the Ten-County Area. Collin and Denton Counties in particular showed the highest rates of median household income growth. Figure 3-7 illustrates the median household income distribution among Ten-County Area counties, the State of Texas and the United States during 1989 and 1999.

Historical and Future Municipal Growth

In this section, the historical and future demographic growth in municipalities within the study area of the proposed IH 635 Managed Lanes from IH 30 to Luna Road toll facility is addressed. The focus of this section is to examine the underlying demographic characteristics of the specific municipalities that the toll facility will serve. Specifically, the demographic characteristics of eight municipalities were considered. They include Dallas, through which the majority of the LBJ Managed Lanes facility would pass, as well as the suburban municipalities around Dallas, through which portions of LBJ either pass or border.

The eastern portion of the study area includes the municipalities of Garland, Mesquite, and Richardson. Dallas comprises the central section of the project study area. The western portion of the study area includes Addison, Carrollton, Farmers Branch, and Irving.

Historical Municipal Population Trends

The historical population trends and projections of the municipalities in the study area are presented in Table 3-6. Average annual population growth between 1970 and 2000 averaged between a low of 0.1 percent in Farmers Branch and a high of 11.2 percent in Addison. As the proposed LBJ Managed Lanes toll facility from IH 30 to Luna Road will be contained within the cities of Dallas, Farmers Branch, Garland, and Mesquite, the data for these municipalities are highlighted in the next series of tables. Dallas, through which the majority of the proposed LBJ Managed Lanes toll facility will pass, comprises the central and primary portion of the project study area. It accounted for 60.6 percent of the total study area population in 2000. Population in Dallas grew from 844,401 residents in 1970 to 1,202,592 residents in 2000, which represents an average annual rate of growth of 1.2 percent during that same period.

Garland, in the eastern region of the study area, comprised the next largest propor-

tion of the total study area population (10.8 percent) in 2000. Population in Garland grew from 81,437 residents in 1970 to 215,165 residents in 2000, an average growth rate of 3.3 percent per year.

Also in the project study area's eastern region, Mesquite comprised 6.4 percent of the total study area population in 2000. The population in Mesquite grew from 55,131 residents in 1970 to 126,366 in 2000, an average annual growth rate of 2.8 percent. The eastern region of the study area, which also includes Richardson, grew by a combined total of 2.9 percent per year between 1970 and 2000.

In the western portion of the study area, Farmers Branch had a population in 2000 of 28,208 residents, which accounted for 1.4 percent of the total study area population. This population grew nominally to its current level from a 1970 population of 27,492, which represents an annual average population growth of 0.1 percent per year between 1970 and 2000. However, between 1970 and 2000, population growth in the western region of the study area, which also includes Addison, Carrollton, and Irving, averaged a combined total of 3.1 percent per year.

The municipalities that comprise the LBJ Managed Lanes study area grew in population by a combined total of 816,604 residents at an average of 1.8 percent per year between 1970 and 2000. Dallas accounted for 43.9 percent of new study area residents between 1970 and 2000. The municipalities in eastern portion of the study area accounted for 30.5 percent of additional residents between 1970 and 2000, while those in the western portion of the study area accounted for 25.6 percent of additional residents during that time.

The historic corridor average annual population growth rate of 1.8 percent between 1970 and 2000 compares to a historical average annual population growth rate of 2.6 for the Ten-County Area, 2.1 percent for the state, and 1.1 percent for the nation.

Table 3-5
Median Household Income

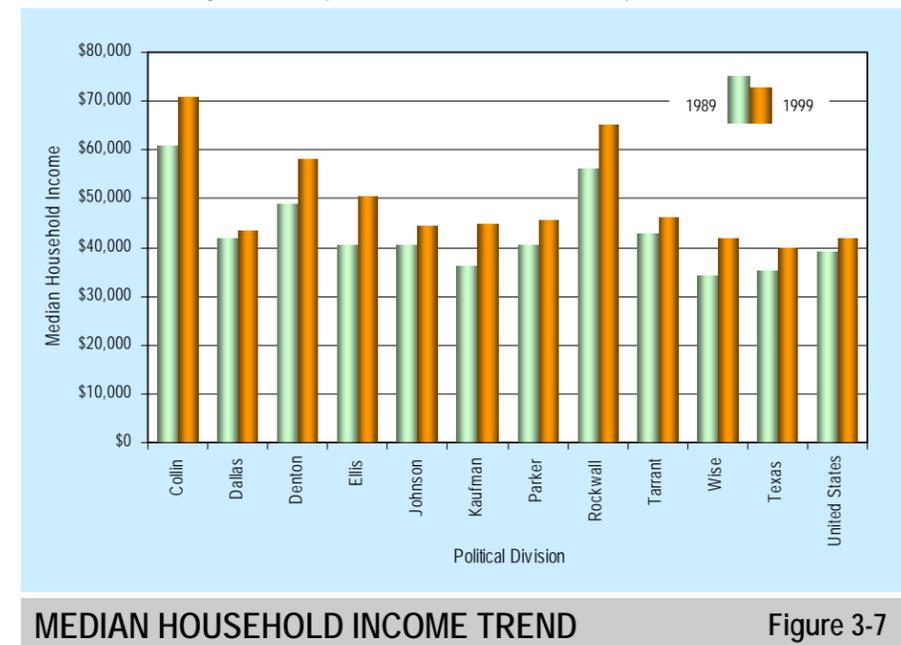
County	Year 1989 (1)	Year 1999	Percent Growth (1989-1999)
Collin	\$60,838	\$70,825	16.4%
Dallas	\$41,782	\$43,324	3.7%
Denton	\$48,800	\$58,216	19.3%
Ellis	\$40,391	\$50,350	24.7%
Johnson	\$40,469	\$44,621	10.3%
Kaufman	\$36,064	\$44,783	24.2%
Parker	\$40,443	\$45,497	12.5%
Rockwall	\$56,075	\$65,164	16.2%
Tarrant	\$42,747	\$46,179	8.0%
Wise	\$34,220	\$41,933	22.5%
State of Texas	\$35,246	\$39,927	13.3%
United States	\$39,212	\$41,954	7.0%

(1) Adjusted to 1999 dollars using the Consumer Price Index (CPI).
Source: 1990 and 2000 Decennial Census, U.S. Census Bureau.

Table 3-6
Historical Municipal Population Trends and Projections

Municipality	Year 1970	Year 1980	Year 1990	Year 2000	Year 2030	Annual Percent Growth (1970-2000)	Annual Percent Growth (2000-2030)	Percent Population Distribution By Municipality	
								2000	2030
Addison	593	5,553	8,783	14,454	19,303	11.2%	1.0%	0.7%	0.8%
Carrollton	13,855	40,595	82,169	109,364	124,086	7.1%	0.4%	5.5%	5.3%
Dallas	844,401	904,078	1,007,618	1,202,592	1,404,847	1.2%	0.5%	60.6%	60.3%
Farmers Branch	27,492	24,863	24,250	28,028	43,978	0.1%	1.5%	1.4%	1.9%
Garland	81,437	138,857	180,635	215,165	241,767	3.3%	0.4%	10.8%	10.4%
Irving	97,260	109,943	155,037	196,632	225,714	2.4%	0.5%	9.9%	9.7%
Mesquite	55,131	67,053	101,484	126,366	157,259	2.8%	0.7%	6.4%	6.7%
Richardson	48,405	72,496	74,840	92,577	113,815	2.2%	0.7%	4.7%	4.9%
Study Area Cities	1,168,574	1,363,438	1,634,816	1,985,178	2,330,769	1.8%	0.5%	100.0%	100.0%
Ten-County Area	2,371,256	2,957,120	3,920,094	5,080,603	9,107,229	2.6%	2.0%	N/A	N/A
State of Texas	11,258,480	14,337,820	16,986,510	20,851,820	31,830,579	2.1%	1.4%	N/A	N/A
United States	203,982,310	227,225,620	248,709,873	281,421,906	362,880,000	1.1%	0.9%	N/A	N/A

Source: NCTCOG, Texas State Data Center, U.S. Census Bureau.



Future Municipal Population Growth

Also included in Table 3-6 is the future (2030) population estimate for the municipalities developed by NCTCOG. Dallas is expected to grow by an average of 0.5 percent per year between 2000 and 2030, during which time it is expected to add 202,255 new residents. This rate of population growth indicates some degree of build-out and the mature level of development within the well-established Dallas neighborhoods.

The edges of the study area are expected to undergo similar overall rates of population growth through 2030 with a similar level of build-out in many of these municipalities. In the eastern portion of the LBJ Managed Lanes study area, Garland is expected to add 26,602 residents by 2030, at an average annual rate of 0.4 percent. Mesquite is expected to add 30,893 residents at an average annual rate of 0.7 percent. In total, the eastern portion of the study area is expected to add a total of 78,733 residents at an average of 0.6 percent per year through 2030.

Similar residential development patterns and rates of population growth are expected in the western portion of the study area through 2030. Farmers Branch is expected to add 15,950 residents between 2000 and 2030 at an average annual rate of 1.5 percent during that period. Addison, Carrollton and Irving are all expected to approach build-out during the 30-year projection period, where their populations are expected to grow by less than one percent per year through 2030.

The municipalities that comprise the LBJ Managed Lanes study area are expected to grow in population by a combined total of 345,591 residents at an average growth rate of 0.5 percent per year between 1970 and 2000. Dallas is expected to account for 58.5 percent of new residents, which indicates an expectation of infill development in the city. The municipalities in eastern portion of the study area are expected to account for 22.8 percent of additional residents through 2030, while those in the western portion of the study area are expected to account for 18.7 percent of additional residents during that time.

The expected study area population growth rate of 0.5 percent through 2030 compares to projected annual growth rates of 2.0 percent for the Ten-County Area, 1.4 percent for the state, and 0.9 percent for the nation.

Due to the mature nature of development with well-established neighborhoods within the municipalities that comprise the proposed LBJ Managed Lanes study area, the shares of population for any of the individual municipalities within the study area are not expected to shift to any great degree by 2030.

Historical Municipal Employment Trends

Historical employment trends for the municipalities in the proposed LBJ Managed Lanes corridor are presented in Table 3-7. The eight municipalities located within the proposed IH 635 Managed Lanes study area have experienced rates of employment growth between 1990 and 2000 ranging from a low of 2.5 percent per year in Dallas to a high of 5.5 percent per year in Mesquite.

As the largest municipality in the proposed LBJ Managed Lanes study corridor with the largest employment base, Dallas experienced the largest amount of additional incremental employment growth between 1990 and 2000. Dallas added 228,664 jobs at an average annual rate of 2.5 percent between 1990 and 2000, accounting for 51.7 percent of additional jobs to the study area during that time.

Garland added 30,965 jobs between 1990 and 2000 at an average annual rate of 4.1 percent. Mesquite added 22,385 jobs at an average rate of 5.5 percent between 1970 and 2000. The municipalities in eastern portion of the proposed LBJ Managed Lanes study area added a combined total 90,392 jobs between 1990 and 2000, which accounted for 20.5 percent of new jobs in the study area during that period.

In the western portion of the study area, Farmers Branch added 24,863 jobs between 1990 and 2000 at an average annual rate of 2.5 percent. Irving added 58,835 jobs at an average annual rate of 4.5 percent between 1990 and 2000. The municipalities in the western portion of the proposed LBJ Managed Lanes study area added a combined total of 122,946 jobs between 1990 and 2000, which accounted for 27.8 percent of the additional jobs in the study area during that period.

The eight municipalities in the proposed LBJ Managed Lanes corridor added a total of 442,002 jobs between 1990 and 2000 at an average annual rate of 3.2 percent during that period. This employment growth rate is slightly lower than the average annual employment growth rate of 3.9 percent in the combined Ten-County Area, but higher than the average annual rates for both the state (2.9 percent) and the nation (1.8 percent) between 1990 and 2000.

Lanes corridor as they continue to mature.

Between 2000 and 2030, Dallas is expected to add jobs at an annual average rate of 1.0 percent, which equates to a total of 351,905 new jobs. These additional jobs in Dallas would account for 50.5 percent of all new jobs expected within the municipalities that comprise the LBJ Managed Lanes study area.

Within the eastern portion of the study area, Garland is expected to add 24,682 jobs between 2000 and 2030 at an average annual rate of 0.8 percent. During that same period, Mesquite is expected to add a total of 23,230 jobs at an average annual rate of 1.2 percent; Richardson is expected to add 68,222 jobs at an average annual rate of 1.8 percent. The municipalities that comprise the eastern portion of the study area are expected to add a combined total of 116,134 jobs at an average annual rate of 1.3 percent between 2000 and 2030.

The western portion of the proposed LBJ Managed Lanes study area is expected to become a focus of future employment growth within the study area. Farmers Branch is expected to add 81,785 jobs between 2000 and 2030 at an average annual rate of 2.5 percent during that period. Irving is expected to add jobs at an annual average rate of 1.7 percent, which equates to a total of 111,506 new jobs. With the addition of Addison and Carrollton, the municipalities in the western portion of the study area are expected to add a combined total of 228,804 jobs between 2000 and 2030 at an average annual rate of 1.7 percent.

Employment in the municipalities in the proposed LBJ Managed Lanes corridor is expected to grow by a combined total of 1.2 percent per year through 2030, compared to projected annual growth rates of 1.8 percent for the Ten-County Area, 2.0 percent for the state, and 1.5 percent for the nation.

LBJ Managed Lanes from IH 30 to Luna Road Corridor Current Development and Future Growth

In this section, the current and future economic development potential along the LBJ Managed Lanes from IH 30 to Luna Road corridor is described. Much of this analysis of future development potential is based on the a description of current development patterns and identification of major employers in the study corridor, consideration of potential new residential and industrial developments, as well as an examination of the demographic forecasts for the area immediately adjacent to and within the proposed LBJ Managed Lanes corridor.

Current Development Patterns

LBJ north of the Dallas metropolitan area traverses an area of the DFWMA that joins the well-established neighborhoods and business districts of central Dallas with the rapidly-expanding municipalities to the north. The corridor is densely-developed with a considerable amount of industrial and commercial land uses. Residential neighborhoods exist in the areas adjacent to the immediate LBJ corridor.

**Table 3-7
Historical Municipal Employment Trends and Projections**

Municipality	Year 1990	Year 2000	Year 2030	Annual Percent Growth (1990-2000)	Annual Percent Growth (2000-2030)	Percent Employment Distribution By Municipality	
						2000	2030
Addison	29,350	45,649	66,213	4.5%	1.2%	2.8%	2.8%
Carrollton	45,250	68,199	83,148	4.2%	0.7%	4.2%	3.6%
Dallas	809,650	1,038,314	1,390,219	2.5%	1.0%	63.5%	59.6%
Farmers Branch	50,150	75,013	156,798	4.1%	2.5%	4.6%	6.7%
Garland	62,300	93,265	117,947	4.1%	0.8%	5.7%	5.1%
Irving	106,600	165,435	276,941	4.5%	1.7%	10.1%	11.9%
Mesquite	31,400	53,785	77,015	5.5%	1.2%	3.3%	3.3%
Richardson	57,750	94,792	163,014	5.1%	1.8%	5.8%	7.0%
Study Area Cities	1,192,450	1,634,452	2,331,295	3.2%	1.2%	100.0%	100.0%
Ten-County Area	2,157,000	3,153,454	5,416,718	3.9%	1.8%	N/A	N/A
State of Texas	6,983,170	9,289,286	16,743,000	2.9%	2.0%	N/A	N/A
United States	108,657,200	129,877,063	202,431,000	1.8%	1.5%	N/A	N/A

Source: NCTCOG, Texas State Data Center, U.S. Census Bureau, Woods & Poole Economics - CEDDS, 2004, Volumes 1 and 3.

Future Municipal Employment Growth

Also presented in Table 3-7 are estimates of future employment growth through 2030, as provided by NCTCOG. As with population, there appears likely to be some degree of diminishing employment growth in many of the municipalities in the LBJ Managed

There are several educational facilities within the corridor, including Eastfield College in Mesquite, and Brookhaven Jr. College and Dallas Christian College in Farmers Branch. There are also prominent recreational venues in the corridor, including the Dallas Athletic Club in eastern Dallas and the Brookhaven Country Club in Farmers Branch.

The LBJ Corridor in Mesquite and Garland to the east and south, and Farmers Branch to the west is generally characterized by areas of open space with adjacent commercial development and pockets of residential subdivisions. In Dallas, the LBJ Corridor is characterized primarily by industrial and commercial land uses with adjacent, compact residential subdivisions. The LBJ Corridor in Dallas east of the Central Expressway has larger lots that support industrial land uses.

North of Dallas, there are major retail developments along LBJ that generate a considerable amount of traffic. The Galleria, a three-level shopping complex containing over 200 shops is located on LBJ east of the Dallas North Tollway (DNT) and provides 10,000 parking spaces for its patrons. The 432-room Westin Hotel is connected to the Galleria. Also adjacent to the Galleria to the east along LBJ, Valley View Center is a shopping complex that has 170 retail shops.

The Addison Airport is located approximately three miles north of LBJ, immediately west of the DNT in the Town of Addison. The airport is comprised of 366 acres and has a 7,200 foot runway. The airport is characterized by approximately 177,000 operations annually; making it the busiest general aviation airport in Texas, and consistently in the Top 3 or Top 4 general aviation airports in the nation.

The Mesquite Championship Rodeo was established in 1958 as an experiment in ongoing rodeo and has gone on to become a world-class attraction. The rodeo is held at Resistol Arena, located on the west side of LBJ in Mesquite south of SH 352 (south of IH 30). The arena has seating for 6,500 with an estimated annual attendance of 250,000. By 1998, the facility was expanded to include a Convention Center, Exhibition Hall and a hotel. The rodeo season runs April through to September on Friday and Saturday nights.

Eastland College is a community college in Mesquite west of LBJ on IH 30. The campus serves the southeastern corridor of Dallas County and is one of nine institutions that comprise the Dallas County Community College system. It has a student body of approximately 10,000 that

generally reside in communities throughout eastern Dallas County and commute to the campus.

Major Employment Establishments

The Dallas Morning News ranks the top 200 major corporations in the Dallas-Fort Worth metropolitan area (D-FW Top 200) every year. The ranking is based on the total revenue generated by each corporation in the previous year. From the 2005 rankings, 80 of those corporations are located within a five-mile proximity to the proposed LBJ Managed Lanes facility. Of these 80 corporations, 52 are located in Dallas and 20 are located in Irving. Richardson, Garland, Addison, and Carrollton are study corridor municipalities that also host D-FW Top 200 corporations. A list of

these corporations is presented in Table 3-8.

The City of Irving has the highest-ranked corporation in the survey, which is also located in the LBJ Managed Lanes study corridor. Exxon Mobile Corp., the headquarters of which is located at Las Colinas in Irving at the western end of the project study corridor, is ranked 1st in the D-FW Top 200 with \$298.0 billion in revenue in 2004. Exxon employs 1,300 in the D-FW region.

Also located in Irving within the LBJ Managed Lanes corridor are many corporations, some of which are located in the Las Colinas area, with large employment bases. Among them are Michael's Stores Inc. which is ranked 22nd in the D-FW Top 200

(\$3.4 billion) and employs 1,787; Zale Corp. is ranked 27th (\$2.3 billion) and employs 1,600; Atmos Energy Corp. is ranked 24th (\$2.9 billion) and employs 1,051; La Quinta Corp is ranked 60th (\$593.2 million) and employs 834; ACE Cash Express Inc. is ranked 88th (\$246.7 million) and employs 486; Commercial Metals Co. is ranked 17th (\$4.8 billion) and employs 446.

Located in the project corridor within the City of Dallas are many D-FW Top 200 corporations that have large employment bases. Texas Instruments Inc., which is located south of LBJ east of Central Expressway, is one of the largest employers in the DFWMA with 10,600 employees. It is ranked 6th in the D-FW Top 200 with \$12.6 billion in revenue in 2004.

Also located in Dallas within the LBJ Corridor is Brinker International Inc. which is ranked 20th (\$3.7 billion) and employs 9,750; Neiman-Marcus Group Inc. is ranked 21st (\$3.5 billion) and employs 4,186; Tenet Healthcare Corp. is ranked 12th (\$9.9 billion) and employs 3,110; Tuesday Morning Corp. is ranked 52nd (\$897.8 million) and employs 1,100; Kimberly-Clark Corp. is ranked 5th (15.1 billion) and employs 480.

Other major employers located in the LBJ Managed Lanes study corridor are United Surgical Partners International Inc. which is located in Addison. It is ranked 70th (\$389.5 million) and employs 1,145. Also in Addison is Palm Harbor Homes, which is ranked 61st (\$578.5 million) and employs 549. In Richardson, Lennox International Inc. is ranked 23rd (\$3.0 billion) and employs 950.

In addition to the corporations ranked in the 2005 Dallas Morning News survey described above, there are several employment establishments within the five-mile LBJ Managed Lanes study corridor with 500 or more employees. Corporations such as Texas Health Resources Inc, the Presbyterian Hospital, Blue Cross Blue Shield, Perot Systems, IBM, Nokia and others are important traffic generators to the proposed LBJ

**Table 3-8
Major Corporations Ranked by the Dallas Morning News**

Name	City	2005 Rank	Employment in DFW Region	Name	City	2005 Rank	Employment in DFW Region
Exxon Mobil Corp.	Irving	1	1,300	U.S. Restaurant Properties Inc.	Dallas	108	NA
Kimberly-Clark Corp.	Dallas	5	480	Carreker Corp.	Dallas	111	205
Texas Instruments Inc.	Dallas	6	10,600	Ashford Hospitality Trust Inc.	Dallas	112	27
Tenet Healthcare Corp.	Dallas	12	3,110	Capstead Mortgage Corp.	Dallas	118	15
Commercial Metals Co.	Irving	17	446	Aegis Communications Group Inc.	Irving	119	215
Brinker International Inc.	Dallas	20	9,750	Capital Senior Living Corp.	Dallas	120	NA
Neiman-Marcus Group Inc.	Dallas	21	4,186	Transcontinental Realty Investors Inc.	Dallas	121	NA
Michael's Stores Inc.	Irving	22	1,787	TurboChef Technologies Inc.	Dallas	128	30
Lennox International Inc.	Richardson	23	950	Zunicom Inc.	Carrollton	129	48
Atmos Energy Corp.	Dallas	24	1,051	Digital Generation Systems Inc.	Irving	134	118
Zale Corp.	Irving	27	1,600	Arabian American Development Co.	Dallas	136	NA
Pioneer Natural Resources Co.	Irving	36	370	Peerless Manufacturing Co.	Dallas	137	NA
Valhi Inc.	Dallas	41	90	U.S. Lime & Minerals Inc.	Dallas	141	108
Aleris International Inc.	Irving	43	70	Abatix Corp.	Dallas	142	35
FelCor Lodging Trust Inc.	Irving	45	65	RF Monolithics Inc.	Dallas	144	194
Aviall Inc.	Dallas	46	410	Digital Recorders Inc.	Dallas	145	6
Lone Star Technologies Inc.	Dallas	49	55	Collegiate Pacific Inc.	Dallas	151	90
Tuesday Morning Corp.	Dallas	52	1,100	Ascendant Solutions Inc.	Dallas	152	NA
Kronos Worldwide Inc.	Dallas	53	30	Carrington Laboratories Inc.	Irving	157	122
NL Industries Inc.	Dallas	56	NA	Thomas Group Inc.	Irving	158	67
La Quinta Corp.	Irving	60	834	DGSE Companies Inc.	Dallas	160	46
Palm Harbor Homes Inc.	Addison	61	549	NewMarket Technology	Dallas	162	NA
ElkCorp	Dallas	63	435	Remote Dynamics Inc.	Richardson	165	80
Magnum Hunter Resources Inc.	Irving	65	145	ViewCast.com Inc.	Dallas	168	50
Haggar Corp.	Dallas	66	890	Royal BodyCare Inc.	Irving	171	67
Dave & Buster's Inc.	Dallas	69	550	Healthaxis Inc.	Irving	172	89
United Surgical Partners International Inc.	Addison	70	1,145	Micropac Industries Inc.	Garland	174	112
i2 Technologies Inc.	Dallas	71	500	WON Inc.	Dallas	175	25
Prentiss Properties Trust	Dallas	74	140	Citadel Security Software Inc.	Dallas	176	110
Darling International Inc.	Irving	78	95	CabelTel International Corp.	Dallas	181	NA
Dynamex Inc.	Dallas	82	158	Integrated Security Systems Inc.	Irving	182	NA
Nexstar Broadcasting Group, Inc.	Irving	85	17	Axtive Corp.	Dallas	185	30
ACE Cash Express Inc.	Irving	88	486	Electric & Gas Technology Inc.	Garland	186	100
American Realty Investors Inc.	Dallas	89	25	Intrusion Inc.	Richardson	187	35
Remington Oil & Gas Corp	Dallas	90	38	Income Opportunity Realty Investors Inc.	Dallas	188	NA
Carbo Ceramics Inc.	Irving	91	14	Capital Southwest Corp.	Dallas	190	NA
Pegasus Solutions Inc.	Dallas	93	250	Spindletop Oil & Gas Co.	Dallas	192	NA
CompX International Inc.	Dallas	95	2	United Systems Technology Inc.	Dallas	193	15
Tyler Technologies	Dallas	99	201	Avatar Systems Inc.	Dallas	194	10
Natural Health Trends Corp	Dallas	107	25	Preferred Voice Inc.	Dallas	195	NA

Source: Dallas Morning News, 2005 D-FW Top 200.

Table 3-9
Major Employment Establishments With 500 or More Full-Time Employees

Name	City	Number of Employees	Type of Business	Name	City	Number of Employees	Type of Business
TEXAS HEALTH RESOURCES INC	IRVING	9,384	Office	PIZZA HUT HEADQUARTERS	DALLAS	800	Office
TEXAS INSTRUMENTS HQ	DALLAS	5,345	Manufacturing	SPRINT INC	FARMERS BRANCH	800	Office
COMPUCOM CAMPUS	DALLAS	5,300	Office	PIONEER NTRAL RESOURCES USA INC	IRVING	800	Office
PRESBYTERIAN HOSP-DALLAS	DALLAS	4,100	Medical	CENTRE	DALLAS	750	Office
TEXAS INSTRUMENTS INC	DALLAS	4,000	Manufacturing	MESQUITE COMMUNITY HOSPITAL	MESQUITE	750	Medical
BLUE CROSS BLUE SHELD-TX	RICHARDSON	3,000	Office	ARCHON RESIDENTIAL MGT LP	IRVING	732	Office
DYNAMEX DEDICATED FLEET SVCS	IRVING	2,950	Office	MEDICAL EDGE HEALTH CARE	DALLAS	725	Office
PEROT SYSTEMS CORPORATION	DALLAS	2,811	Office	FRITO-LAY	ADDISON	700	Warehouse
RAYTHEON/E-SYSTEMS INC	GARLAND	2,750	Manufacturing	MCKESSON	CARROLLTON	700	Manufacturing
IBM CORP	FARMERS BRANCH	2,590	Office	QUAKER OATS COMPANY SOUTHWEST	DALLAS	700	Office
NOKIA	IRVING	2,400	Office	LIBERTY MUTUAL	IRVING	700	Office
UNITED PARCEL SERVICE INC	MESQUITE	2,340	Warehouse	MEDICAL CENTER OF MESQUITE	MESQUITE	700	Medical
MEDICAL CITY DALLAS	DALLAS	2,200	Medical	SECURITY NATIONAL INSURANCE CO	DALLAS	690	Office
RICHLAND COLLEGE	DALLAS	2,000	Educational	MILLS ELECTRICAL CONTRACTORS	DALLAS	650	Office
UNITED PARCEL SERVICE INC	DALLAS	2,000	Warehouse	ESSILOR LABORATORIES	DALLAS	650	Manufacturing
NEC AMERICA INC	IRVING	1,850	Office	ESSILOR LABORATORY OF AMERICA	DALLAS	650	Office
JPMORGAN CHASE	DALLAS	1,700	Office	FIRST TRANSIT INC	DALLAS	650	Office
TYCO ELECTRONICS POWER SYS	MESQUITE	1,690	Manufacturing	TENET HEALTHCARE	FARMERS BRANCH	650	Office
CAPITAL SENIOR LIVING INC	DALLAS	1,558	Office	OCCIDENTAL CHEMICAL CORP	FARMERS BRANCH	650	Office
MBNA INFORMATION SRVCS INC	ADDISON	1,550	Office	MACY'S	DALLAS	620	Retail
MARY KAY COSMETICS-HQ	ADDISON	1,500	Office	GENERAL ALUMINUM COMPANY OF TX	CARROLLTON	608	Manufacturing
AEGIS COMMUNICATIONS	IRVING	1,500	Office	UNITED DENTAL CARE INC	DALLAS	607	Office
ST MICROELECTRONICS	CARROLLTON	1,450	Manufacturing	BRINKMANN CORP	DALLAS	600	Manufacturing
CITIGROUP	IRVING	1,430	Office	TENET HEALTHCARE	DALLAS	600	Office
VIA INC	IRVING	1,400	Office	TRAVELER'S PROPERTY CASUA	DALLAS	600	Office
NOVATION LLC	IRVING	1,400	Office	WIDOWED PERSON SVC	DALLAS	600	Office
DALLAS SEMICONDUCTOR	FARMERS BRANCH	1,300	Manufacturing	IBM CORP	FARMERS BRANCH	600	Office
GEICO INSURANCE	FARMERS BRANCH	1,200	Office	ICON HEALTH & FITNESS	MESQUITE	600	Manufacturing
FEDERAL GOVERNMENT-LOCAL IRS	FARMERS BRANCH	1,200	Office	UNITRIN PROPERTY & CASUALTY INSURANCE	DALLAS	575	Office
SOFTWARE SPECTRUM INC	GARLAND	1,200	Warehouse	ACCUCOM TECHNICAL SERVICES	RICHARDSON	570	Manufacturing
BAKER DRYWALL CO	MESQUITE	1,125	Warehouse	RHD MEMORIAL MED CTR	FARMERS BRANCH	560	Medical
HALLIBURTON ENERGY SRVCS	CARROLLTON	1,100	Manufacturing	VERIZON (SIERRA I)	IRVING	558	Office
BAYLOR MEDICAL CTR-GARLAND	GARLAND	1,094	Medical	AIR LIQUIDE AMERICA	DALLAS	550	Manufacturing
XEROX CORP	IRVING	1,030	Office	AMERISERVE	ADDISON	530	Office
VERIZON	IRVING	1,000	Office	SERVICE ELECTRONICS INC	DALLAS	525	Manufacturing
NEIMAN MARCUS - MAIL ORDER	IRVING	1,000	Warehouse	EFFICIENCY NETWORKS	DALLAS	525	Office
VERIZON COMMUNICATIONS	IRVING	1,000	Office	ADVANCEPCS	IRVING	522	Office
ZALE CORP	IRVING	1,000	Office	BOY SCOUTS OF AMERICA	IRVING	520	Office
GTE CORPORATION	IRVING	1,000	Office	WAL-MART SUPERCENTER	MESQUITE	510	Retail
XEROX CORPORATION	IRVING	1,000	Office	GENERAL ELECTRIC CAPITAL CORP	ADDISON	500	Office
PEPSI COLA BOTTLING	MESQUITE	1,000	Manufacturing	ASSOCATED BLDG SERVICES-DALLAS	DALLAS	500	Office
TD INDUSTRIES	FARMERS BRANCH	973	Office	NORDSTROM	DALLAS	500	Retail
NORTH LAKE COLLEGE	IRVING	970	Educational	SPRINT BUSINESS	DALLAS	500	Retail
FIDELITY INVESTMENTS	IRVING	970	Office	BRINKER INTERNATIONAL	DALLAS	500	Office
VERIZON	IRVING	950	Office	CITY OF DALLAS	DALLAS	500	Office
EASTFIELD COLLEGE	MESQUITE	950	Educational	SOUTHWESTERN BELL MBL SYSTEMS	DALLAS	500	Office
QUICK LEARNING LLC	DALLAS	900	Office	STANLEY TOOLS	FARMERS BRANCH	500	Manufacturing
DOCTORS HOSPITAL	DALLAS	900	Medical	ARMY & AIR FORCE EXCH SRVC	FARMERS BRANCH	500	Office
CITY OF DALLAS	DALLAS	900	Office	STERLING COMMERCE	IRVING	500	Office
ERICSSON HEWLETT PACKARD	DALLAS	900	Office	DATA RETURN CORP	IRVING	500	Office
DMDA INC	IRVING	880	Office	ORACLE CORP	IRVING	500	Office
CINGULAR WIRELESS	FARMERS BRANCH	870	Office	LAS COLINAS MEDICAL CENTER	IRVING	500	Medical
TEXAS INSTRUMENTS INCORPORATED	DALLAS	850	Office	VERIZON	IRVING	500	Office
AUSTIN BRIDGE AND ROAD INC	DALLAS	800	Manufacturing	GABLES RESIDENTIAL TRUST	IRVING	500	Office
I2 TECHNOLOGIES	DALLAS	800	Office	TEXAS DEPT OF TRANS	MESQUITE	500	Office

Source: North Central Texas Council of Governments.

Managed Lanes facility.

Table 3-9 identifies the corporations within the five-mile corridor around the proposed LBJ Managed Lanes facility with 500 or more employees. The location of the existing "Major Employment Establishments" in the vicinity of the study area is shown in Figure 3-8.

The areas within the LBJ Corridor in Dallas and Irving contain many large and mature business establishments that employ and attract large numbers of employees and patrons. The presence of these major employment centers in the region, as identified in Table 3-9 and Figure 3-8, will continue to provide the foundation upon which the area's stable economic activity is based. These major employment establishments are located throughout the LBJ Corridor, many of them concentrated around major thoroughfares, including US 80, IH 30, US 75, the DNT, IH 35E, SH 114, and SH 161.

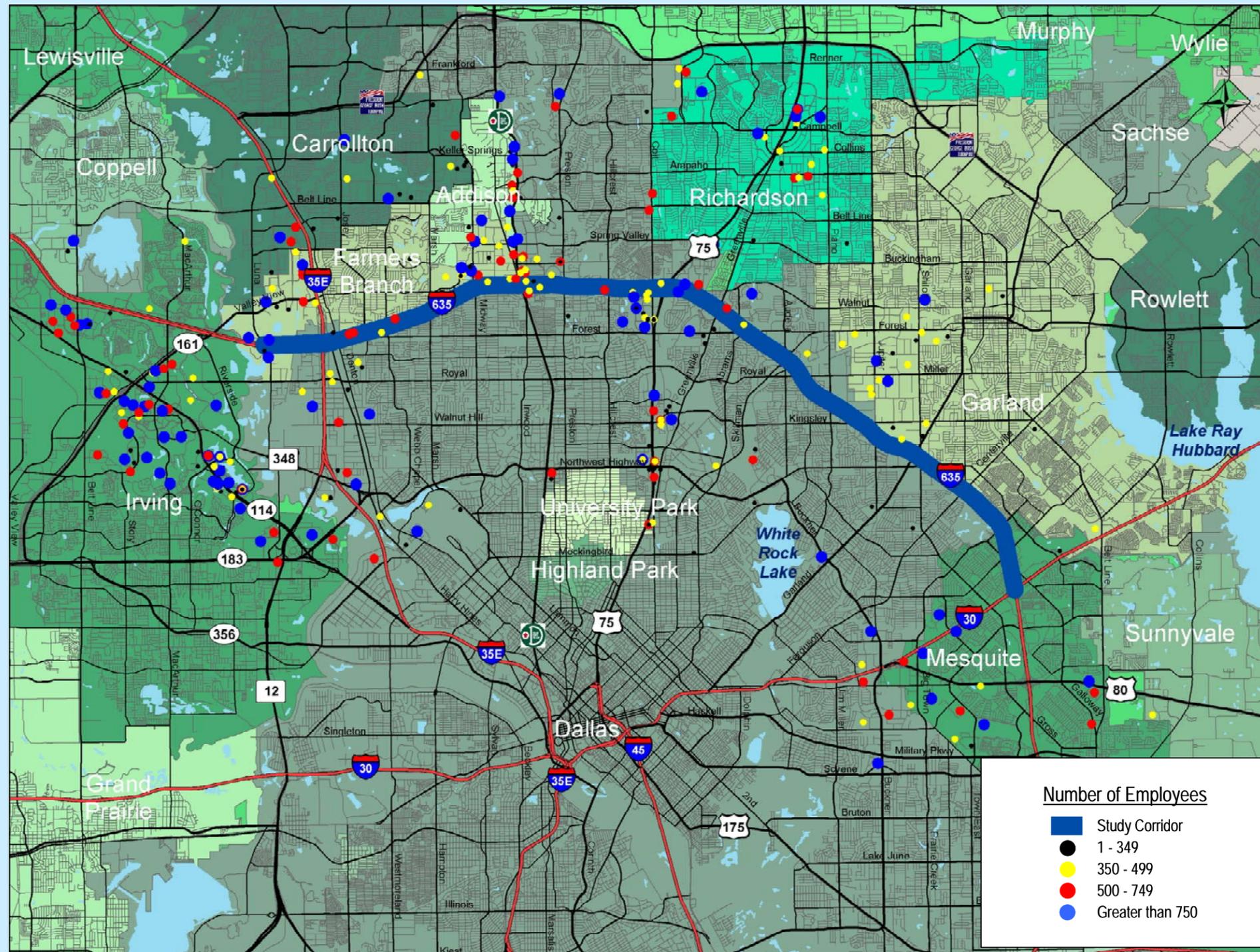
Additional Potential Developments within Study Area

Given the generally mature nature of development within the municipalities that comprise the LBJ Corridor, and the proximity of existing commercial and industrial land uses, particularly along IH 635 itself, the land use profile of future developments that are expected within the IH 635 Managed Lanes corridor will likely be consistent with existing land use types.

The following development proposals have been identified which could potentially influence traffic on the proposed LBJ Managed Lanes facility upon completion. These developments, of varying size and land use type, range from smaller development proposals that would likely have a focused economic impact to larger developments that would have a wider, regional impact.

- Local developers are planning speculative projects that will add 1.5 million square feet of office space along the Dallas North Tollway (DNT) between LBJ and SH 121. Known as the "Platinum Corridor," vacancy rates in this corridor have fallen considerably, from nearly 30 percent in 2000 to under 11 percent as of March 2005. Ten of the largest properties in the Platinum Corridor currently have occupancy rates of 99 percent or higher.

Within the Platinum Corridor, occupancy rates are higher and rents lower south of SH 190 versus those areas to the north. Nearly all recent big-lease deals within the Platinum Corridor have occurred south of SH 190. They include Coca-Cola Enterprises, which leased 119,000 square feet at Centuria Tower in Farmers Branch; Fannie Mae, which subleased 164,000 square feet at JPMorgan International Plaza in Farmers Branch; Wachovia Corp., which leased 60,300 square feet at Spectrum Center in Addison; and FedEx Kinko's, which added a floor to its lease at Galleria III in Dallas.



Number of Employees

- Study Corridor
- 1 - 349
- 350 - 499
- 500 - 749
- Greater than 750

MAJOR EMPLOYMENT ESTABLISHMENTS

Figure 3-8

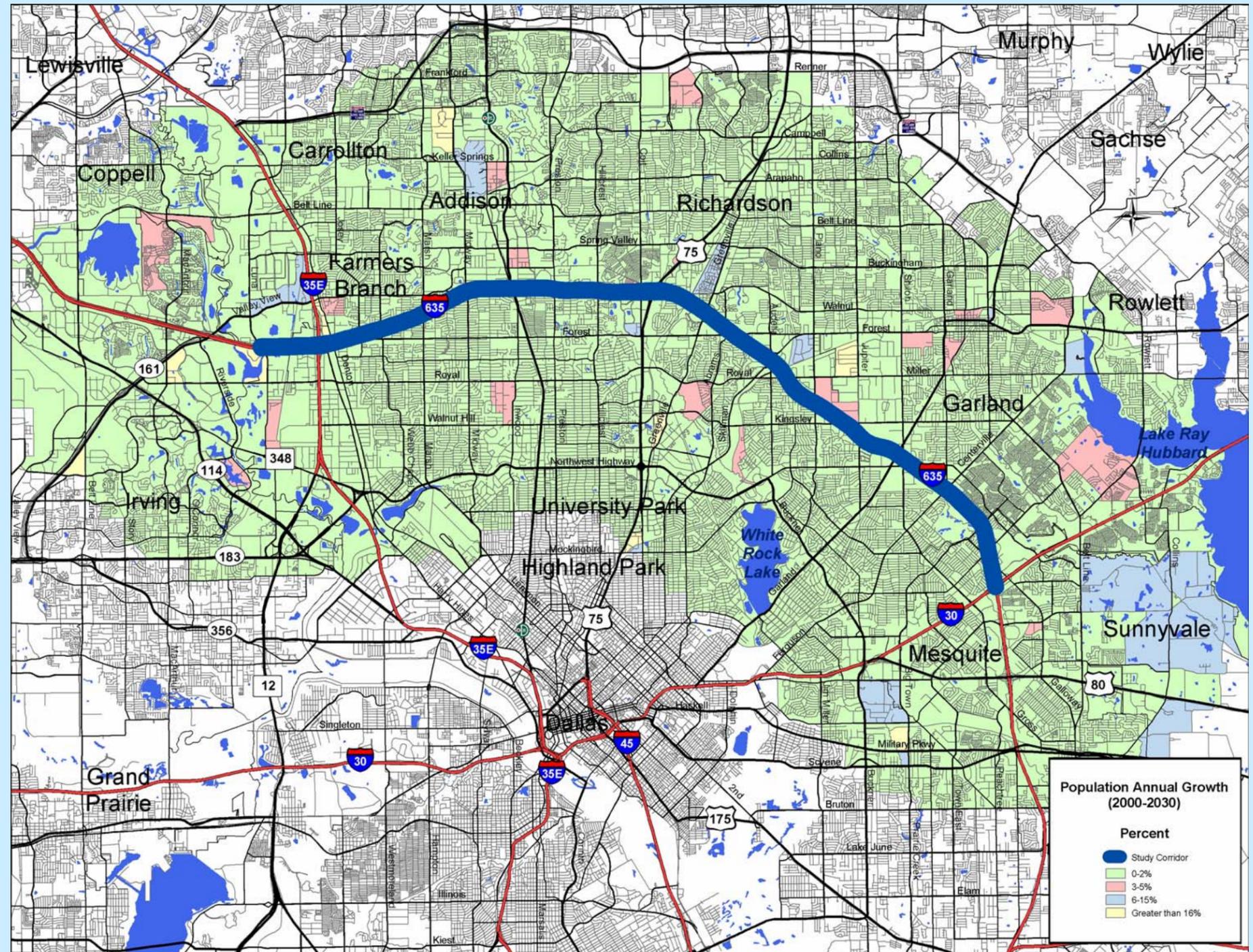
- Plans for redevelopment of the Centura Tower, a prime 412,000 square foot office complex, and its adjacent land parcels in the Platinum Corridor south of Belt Line Road, have begun. They call for the multi-phased development of the 16-acre parcel including four office buildings totaling 1.6 million square feet, a 300-room hotel, and two luxury high-rise apartment buildings. Construction on this redevelopment project is expected to begin in mid-2005.
- The following housing developments shown below in Table 3-10 are proposed within the LBJ Managed Lanes Corridor which would add more than 1,000 housing units to the study area by the end of 2008.

**Table 3-10
New Residential Developments**

Development Name	Municipality	Location	Size	Estimated Completion Date
District A-City Homes	Addison	Quorum Drive at Belt Line Road	183 Condominiums	December 2006
Bluffview	Dallas	Midway Road at Parkside Drive	12 Single-Family Houses	December 2006
White Rock Creek	Dallas	North Bruckner Boulevard at Garland Road	53 Single-Family Houses	January 2008
The Courtyards	Farmers Branch	Marsh Lane at Valley View Lane	23 Single-Family Houses	December 2005
Lyons Crest Estates	Garland	Bobtown Road at Lyons Road	100 Single-Family Houses	December 2006
Hidden Forest	Garland	SR 66 at Basswood Trail	117 Single-Family Homes	December 2007
Emerald Lake Estates	Garland	Broadway Boulevard at Oats Road	155 Single-Family Homes	December 2007

- In Mesquite, a large amount of speculative industrial development is either in planning stages, or has recently begun. According to recent statistics from Cushman & Wakefield of Texas Inc., the Garland/Mesquite industrial submarket is among the tightest in the Metroplex, with a fourth-quarter 2004 vacancy rate of eight percent, down from ten percent in 2003. As a result of the development potential in Mesquite, two national developers (ProLogis and Industrial Developments International) have plans to develop nearly 2.7 million square feet of industrial space in the city within the next couple of years.
- Construction recently began on a 520,000 square-foot speculative distribution center in Mesquite at the intersection of U.S. 80 and Buckner Road. The site can accommodate 1.2 million square feet of development.
- Work is set to begin on the construction of a 250,000 square-foot speculative building in Mesquite at the intersection of Skyline Drive and Peachtree Road. Known as the Skyline Trade Center, the development will ultimately consist of 1.5 million square feet of development.
- Construction on a 300,000 square-foot manufacturing plant on 25 acres in Garland has begun. The plant, which will be located adjacent to the West Kingsley Road/South Garland Avenue intersection, will employ over 300 and be completed by the end of 2005.

- Texas Instruments recently broke ground on the Richardson Fabrication Plant, a \$3 billion semiconductor plant in Richardson at Alma Road and Renner Road. It estimated that this new million-square-foot facility that will be in operation by late 2006 and employ more than 1,000 workers.
- The University of Texas at Dallas (UTD) has broken ground on an \$85 million Natural Sciences & Engineering Research facility in Richardson near the Renner Road/Alma Road intersection. This facility will be used to advance UTD into a Tier I research university, through attracting faculty and students interested in advanced engineering and technology research.
- With \$20 million made available by the Texas Enterprise Fund, Countrywide Financial is renovating three buildings in the Galatyn Park Urban Center in Richardson for relocation and expansion. Countrywide plans to employ 5,000 at these new facilities. This new facility and the resulting relocation are likely to be complete by the end of 2007.
- A mixed-use facility in Richardson, adjacent to the Central Expressway along Arapaho Road known as the Arapaho Road Station District, is in the planning stages. Plans for the area around the Arapaho Road DART station call for 400,000 square feet of office space, a 14-screen cinema, 450 hotel rooms, and retail and restaurant space.
- In Farmers Branch, the first phase of a mixed-use town center development is in initial planning stages. The Farmers Branch Town Center project will be built around a future Dallas Area Rapid Transit light rail station near the Valley View Road intersection with IH 35E, just north of LBJ. Scheduled for completion in 2011, the project will include retail, office, medical, restaurant, and residential components, as well as a city hall and other civic buildings. The first phase of this development involves seven acres of apartment and retail space. The project will eventually include more than 80 acres of mixed-use development.
- A mixed-use complex is planned in Farmers Branch facing Lake Ray Hubbard at IH 30. The project, known as Harbor Point, will be anchored by a 120,000 square-foot Bass Pro Shops Outdoor World. The retail and entertainment project will also have restaurants, a conference center hotel.
- A Dr. Pepper StarCenter is being built on 14 acres near the town center project in Farmers Branch. It is estimated that



POPULATION ANNUAL COMPOUNDED GROWTH RATE (2000 - 2030)

Figure 3-9

the complex, scheduled for completion in November 2005, would likely employ hundreds and attract more than 700,000 visitors to events each year.

Future Population and Employment along the Proposed LBJ Managed Lanes from IH 30 to Luna Road Corridor

The population and employment growth between 2000 and 2030 for an approximate five-mile corridor centered on the proposed LBJ Managed Lanes toll facility disaggregated at the Traffic Zone level is highlighted in Figures 3-9 through 3-12.

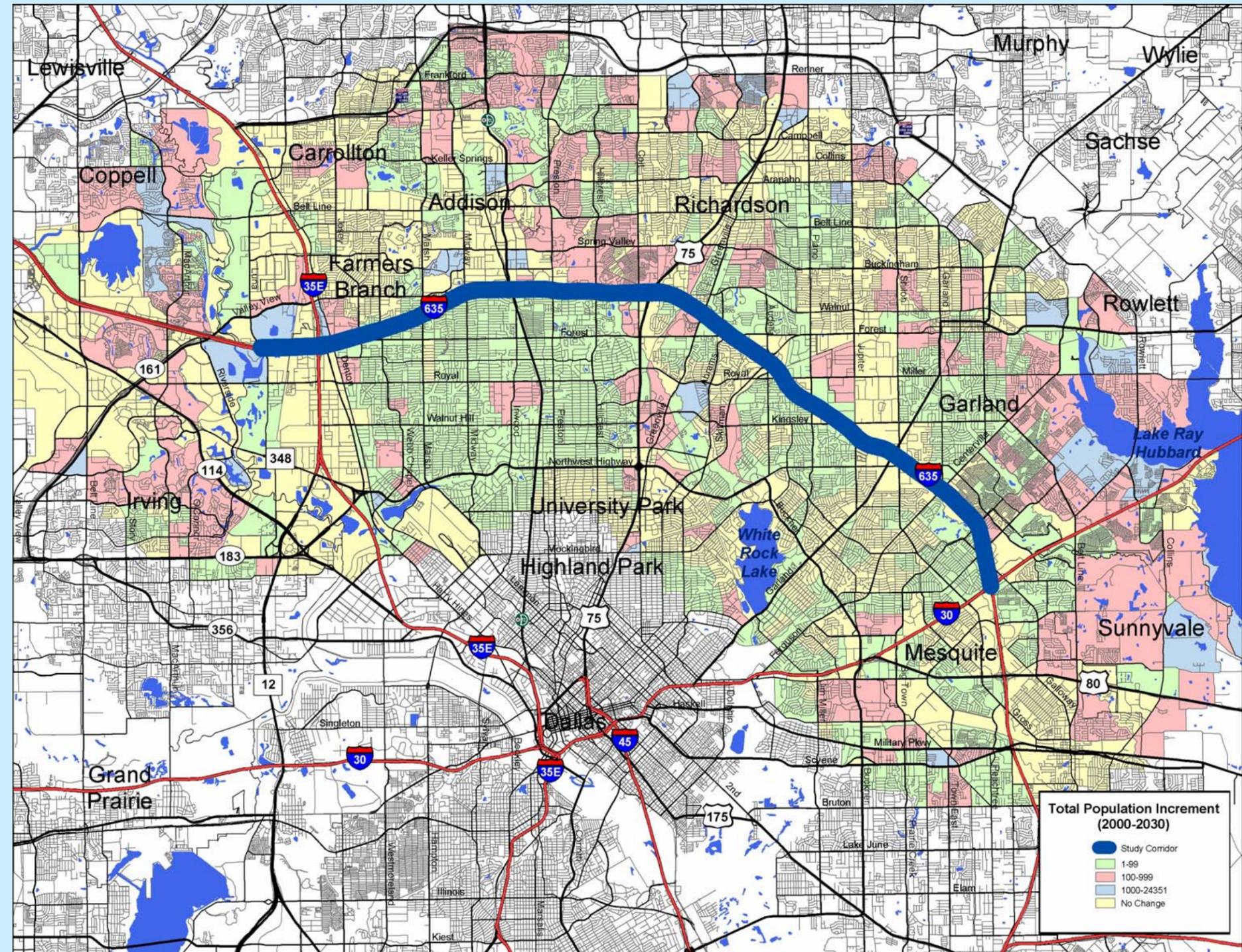
Population Growth Estimates - Figure 3-9 identifies the annual compounded growth rate for population, as provided by NCTCOG. The majority of the zones within the five-mile corridor primarily composing the suburban regions forming a ring around Dallas to the north, including the cities of Mesquite, Garland, Richardson, Addison, Farmers Branch, and Irving, among others, show compounded annual population growth rates of less than 5 percent through 2030.

However, there are select zones within the corridor in which higher levels of population growth are expected. Select zones within the cities of Sunnyvale, Mesquite, and Garland within the eastern portion of the study area, Richardson and Addison in the central portion of the study area, and Farmers Branch in the west, are expected to undergo population growth averaging up to 15 percent per year through 2030. There are zones in Mesquite, between Garland and Richardson, and in Addison that are expected to undergo population growth approaching 20 percent per year through 2030. Certain zones within Irving are expected to undergo population growth exceeding 20 percent through 2030.

The total estimated incremental population growth between 2000 and 2030 is presented in Figure 3-10. This figure shows that many of the zones within the project study corridor are either not expected to undergo any population change or undergo only modest incremental population growth, again indicating the mature nature of development in many of the study corridor municipalities.

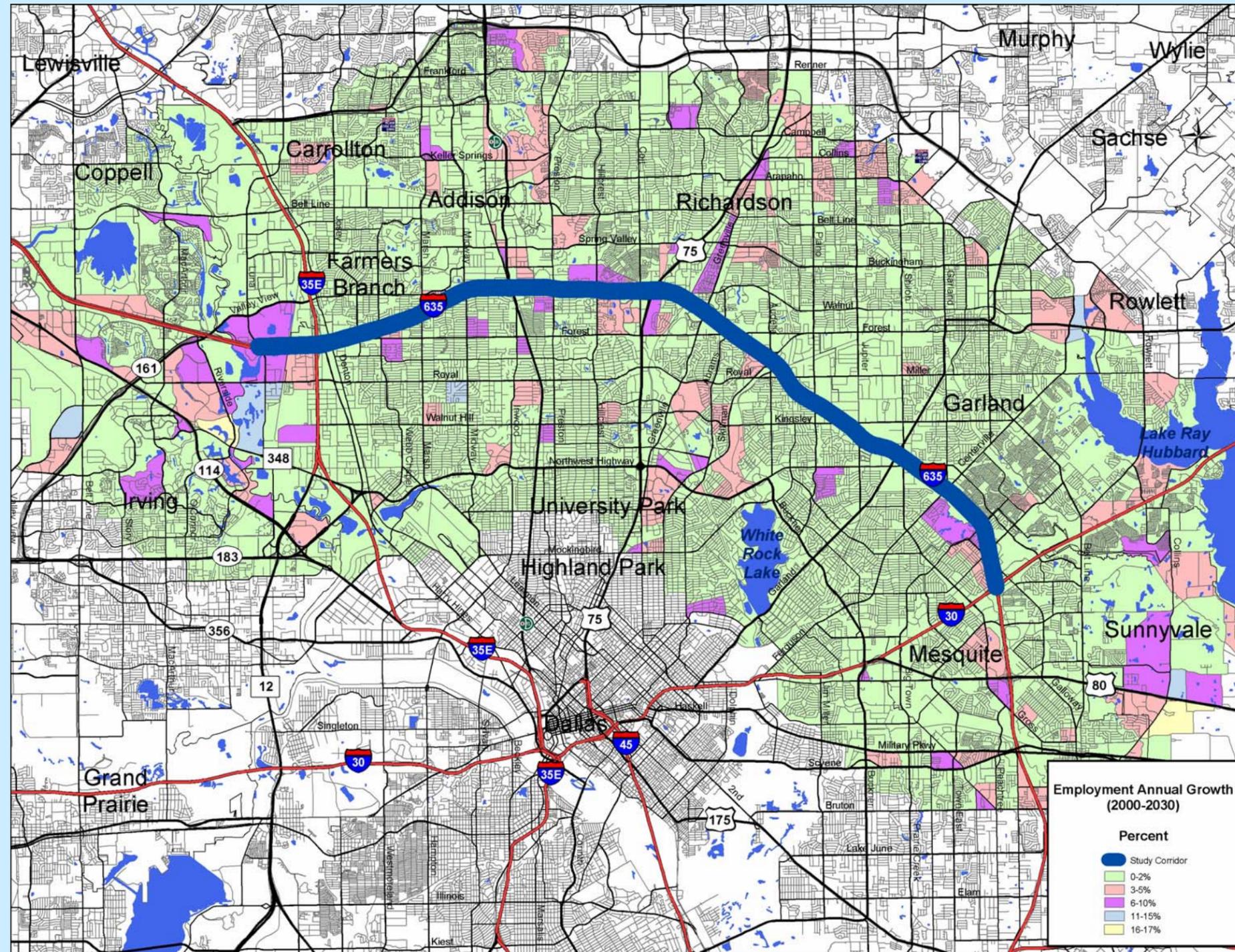
The highest levels of incremental population growth are expected to occur in select areas either to the east, west, or north of the LBJ Managed Lanes study corridor.

Employment Growth Estimates - Figure 3-11 identifies the



TOTAL POPULATION INCREMENT (2000 - 2030)

Figure 3-10



EMPLOYMENT ANNUAL COMPOUNDED GROWTH RATE (2000 - 2030)

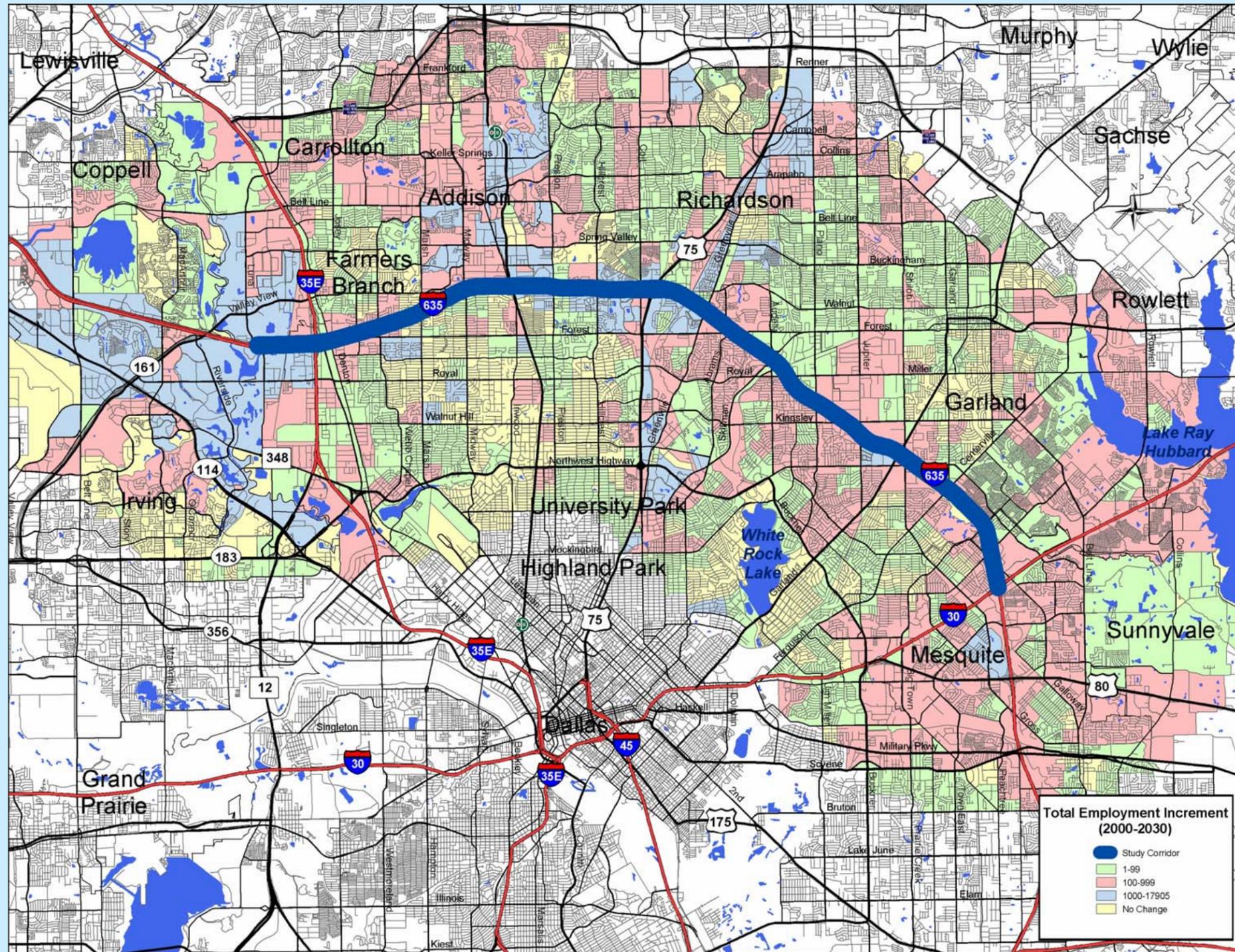
Figure 3-11

annual compounded growth rates for employment within the TSZs in the five-mile LBJ Managed Lanes corridor, as provided by NCTCOG. The majority of the zones within the five-mile corridor show compounded annual employment growth rates of less than 5 percent between 2000 and 2030.

However, there are select zones spread throughout the corridor that show compounded annual employment growth rates of between 5 and 10 percent. Isolated areas to the east of the corridor around Sunnyvale and to the west of the corridor between Farmers Branch and Irving show compounded annual employment growth greater than 10 percent.

The total incremental employment growth between 2000 and 2030 for the five-mile LBJ Managed Lanes corridor is presented in Figure 3-12. This figure indicates that many of the TSZs within the five-mile corridor and adjacent to the proposed LBJ Managed Lanes project, particularly to the south toward the Dallas urban center, are not expected to undergo any significant employment growth.

However, there are select zones throughout the corridor that are expected to undergo modest incremental employment growth between 2000 and 2030. The most significant incremental employment growth within the LBJ Managed Lanes corridor is expected to occur within the western regions of the study area between Farmers Branch and Irving. There are select zones throughout the study corridor that are expected to undergo similar levels of significant incremental employment growth.



TOTAL EMPLOYMENT INCREMENT (2000 - 2030)

Figure 3-12