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COLLIN COUNTY COMMUNITY COLLEGE
DISTRICT-WIDE MASTER PLAN
1985-2000

OCTOBER, 1985

ACKNOWLEDGMENTS

We would like to express our special appreciation to the Board of Trustees, Administration, and Staff of Collin County Community College for their invaluable assistance and cooperation in preparation of the District-Wide Master Plan. It is hoped that this Master Plan will be the first step in assisting Collin County Community College to become a truly great community college system.

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DALLAS, TEXAS

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DEMOGRAPHIC ANALYSIS
AUSTIN, TEXAS

BARTON ASCHMAN & ASSOCIATES, INC.
TRANSPORTATION & TRAFFIC ENGINEERS
DALLAS, TEXAS

OCTOBER, 1985

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POPULATION

POPULATION TRENDS AND DISTRIBUTION

Collin County has been one of the most rapidly growing suburban areas in the United States. Located north of Dallas, with excellent access to employment opportunities, Collin County grew from 66,920 people in 1970 to 144,490 in 1980. The current population is estimated by the North Central Council of Governments to be nearly 207,000. The average annual increase of nearly 7,800 people in the 1970's has risen to over 13,000 per year in the early 1980's. Figure 1 shows graphically the growth trend from 1970 to 1985. (Unless otherwise stated, all population data are from the 1980 U.S. Census of Population and Housing.)

COLLIN COUNTY POPULATION TRENDS

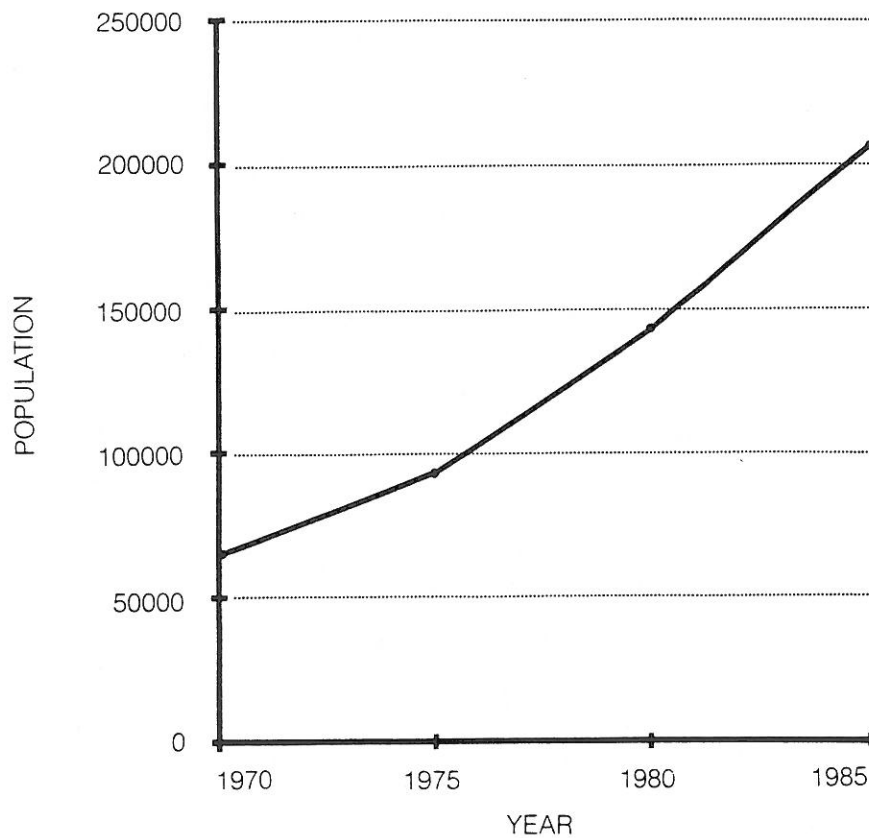


FIGURE 1

POPULATION

Within the county, the growth has been unevenly distributed. The southwest quadrant of the county (the area south of Highway 121 and west of U.S. 75) grew by over 50,000 people in the 1970's. That accounted for approximately two-thirds of the growth. In 1980, the City of Plano had 72,331 people, or approximately 50% of the county's population. The Council of Governments' current estimates show Plano with over 110,000 people, or 53% of the county population. Hence, while there has been growth elsewhere in the county, Plano has been the dominant growth area.

The following Figures 2 and 3 show where residential land development has occurred since 1980. Single family development (Figure 2) has been concentrated primarily in north Dallas and west Plano, and, to a lesser extent, in the south-central part of the county (Allen, central and east Plano). Multi-family development (Figure 3) has been much more concentrated in the southwest part of the county. Multi-family development typically occurs in areas with higher land costs, such as the north Dallas part of Collin County.

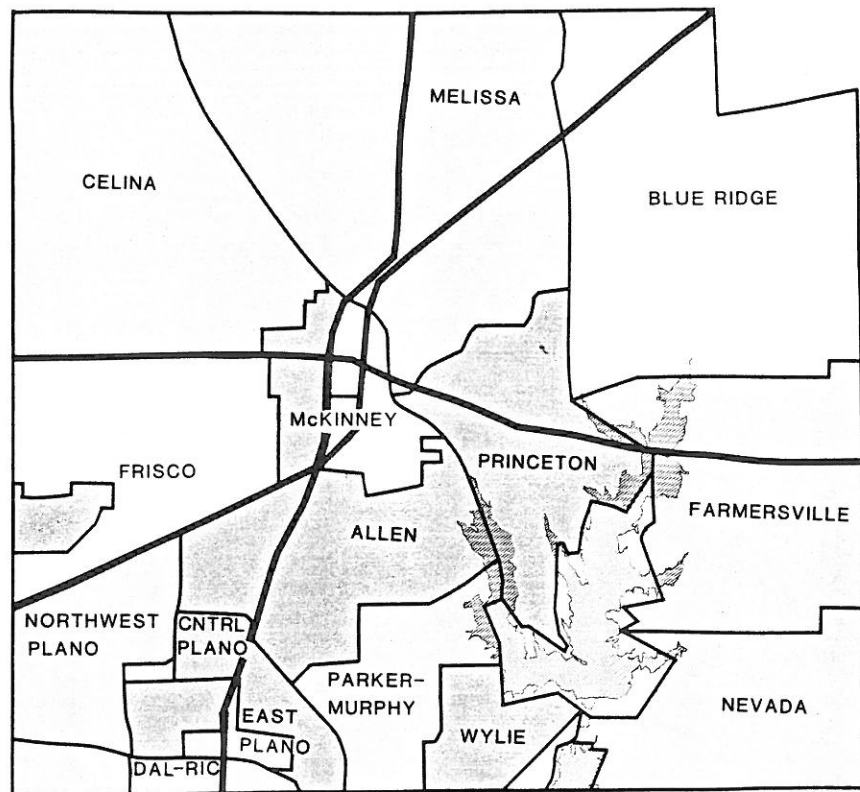
POPULATION

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POPULATION

SINGLE FAMILY ACREAGE
CHANGES 1980-84



ACRES

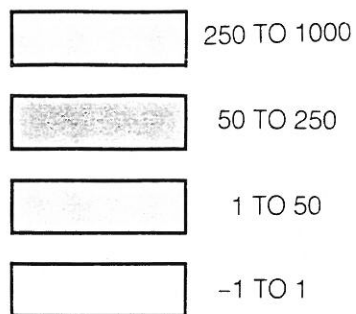
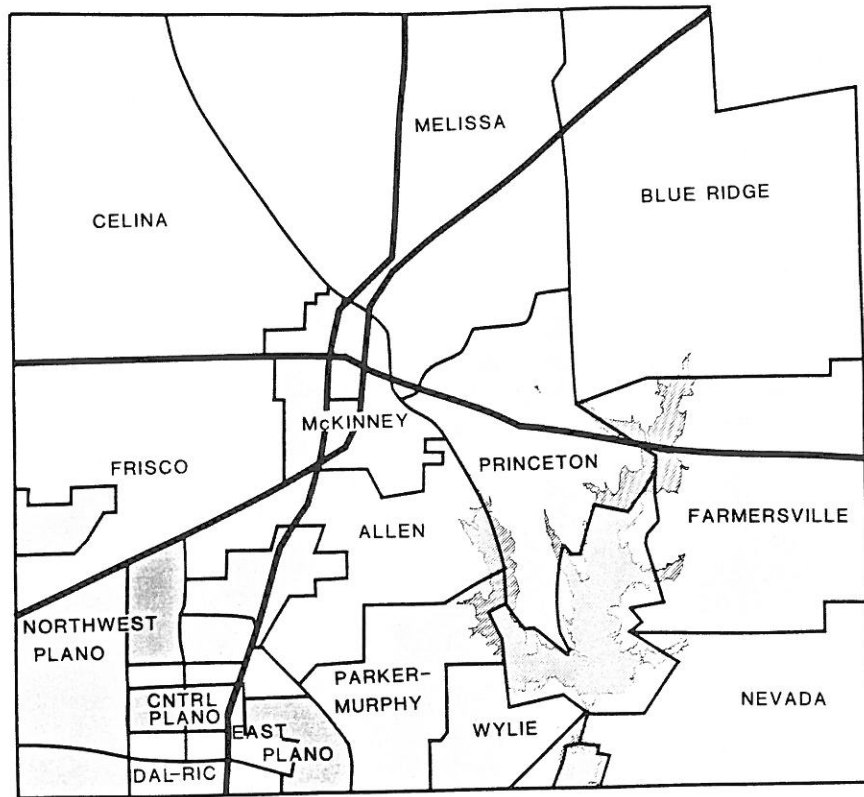


FIGURE 2

POPULATION

MULTI-FAMILY ACREAGE
CHANGES 1980-84



ACRES

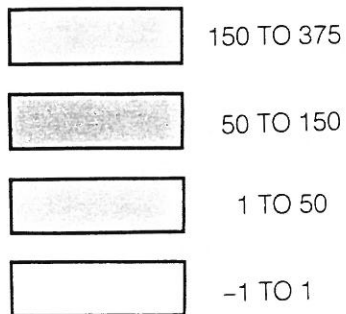


FIGURE 3

POPULATION

DEMOGRAPHIC PROFILE

The population of Collin County is relatively young, as one would expect in an area attractive to young families. Figure 4 shows the age profile of the county compared to the State of Texas.

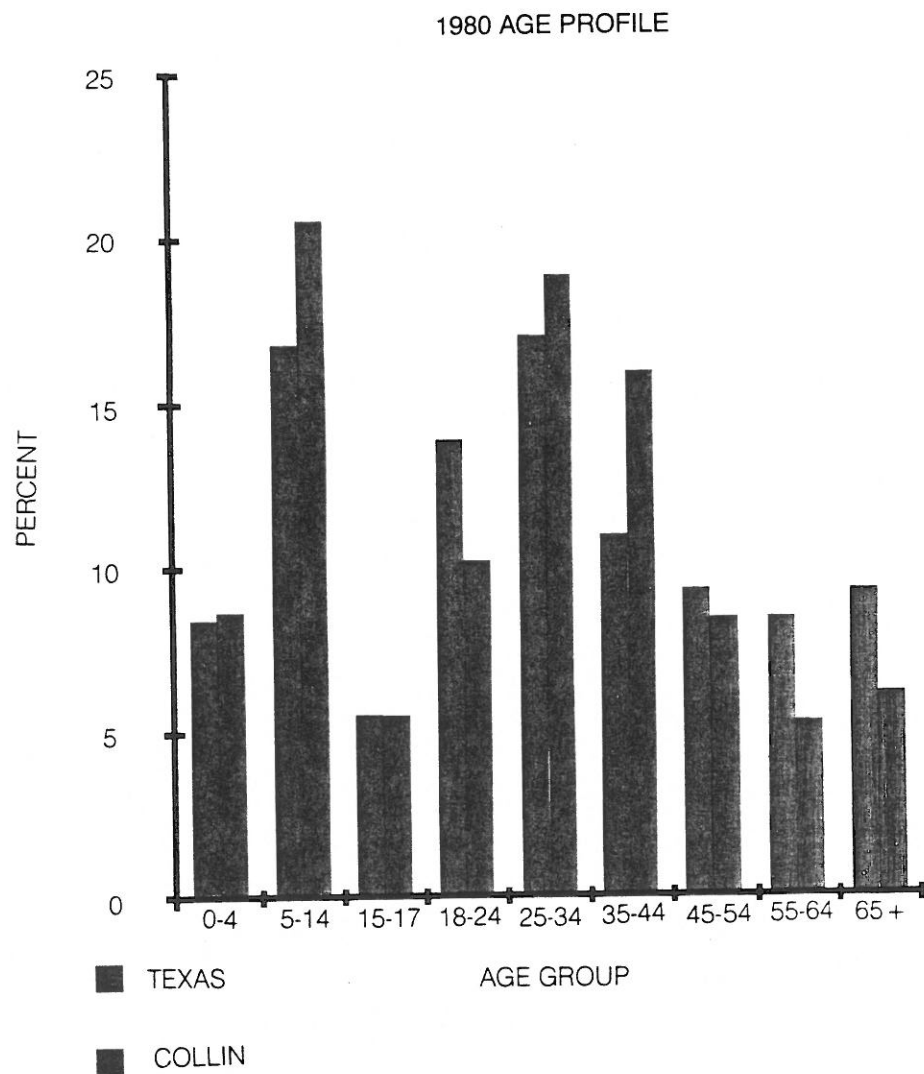


FIGURE 4

POPULATION

While the median age was the same for both county and state (28.2), Collin County obviously had a larger percentage of children (25.9% ages 5-17 in Collin County, compared to 22.0% in the state), and a lower percentage of elderly (6.6% compared to 9.6%). Table 1 presents the actual number of people in each age group in the county. The county has been divided into 15 planning areas in Table 1 to show the spatial variation in the age profile.

There was also considerable variation in age structure in 1980 within the county. Generally, the Plano area was much younger than the rest of the county. For example, while the county had nearly 26% of the population in the 5-17 age group, the central part of Plano had nearly 29% in the same group. At the other end of the spectrum, the rural areas, such as Melissa and Celina, only had 23% of the population in that group.

The large percent of children accounts for the relatively large household size (3.08), compared to the state (2.81). Eighty-five percent of the households were comprised of families (a single-person household is not a family), compared to 75% for the state as a whole. The median family size was 3.42 people, compared to 3.33 for the state.

ECONOMIC PROFILE

Collin County has become a "bedroom" community for Dallas. Thirty-seven percent of those employed worked in Collin County, while nearly 50% worked in Dallas County. Incomes are relatively high. The median household income in 1979 was 45% higher than for the state as a whole. There is little poverty. Only 5% of the families were below the poverty standard, compared to 11% for the state. According to Texas Employment Commission data, unemployment is very low, being under 4% since 1980, compared to the state, with unemployment ranging from 5% to 8% since 1980.

While there is considerable commuting out of the county for work, the Collin County economy is strong and growing. The Municipal Advisory Council of Texas reports that the 1984 assessed valuation for the county was \$9.4 billion, up 31% from the preceding year. The increase was due to construction and growth, not revaluation. The major taxpayers are listed in Table 2.

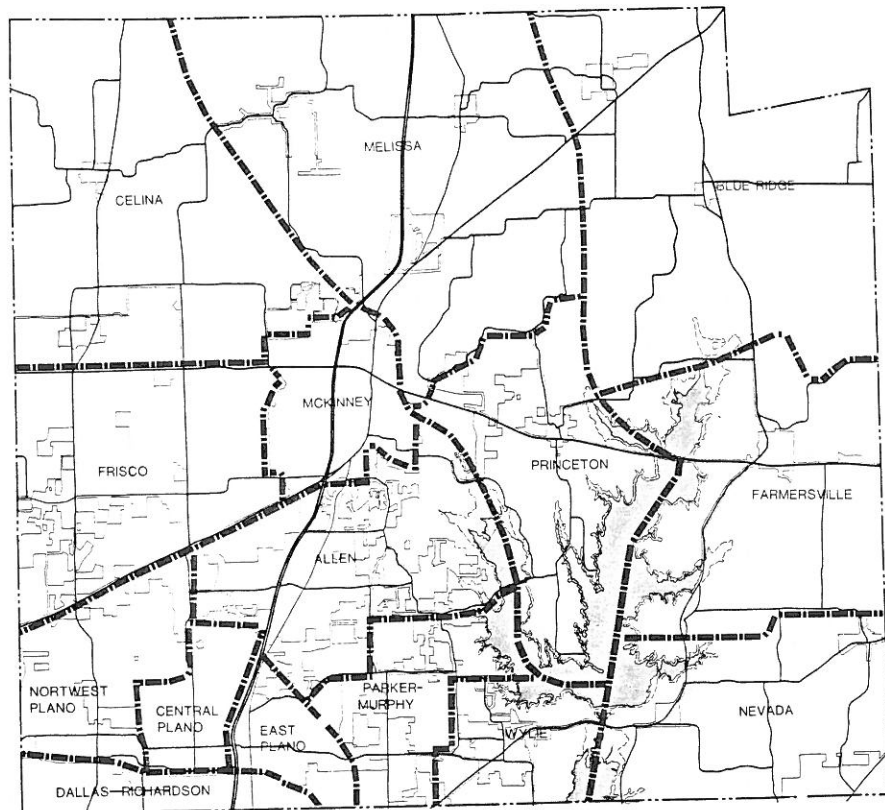
POPULATION

POPULATION 1980

TABLE 1. COLLIN COUNTY POPULATION BY AGE AND PLANNING AREA, 1980

	0-4	5-14	15-17	18-24	25-34	35-44	45-54	55-64	65+	TOTAL
MELISSA	294	762	224	398	568	569	430	400	568	4213
CELINA	244	635	202	371	480	473	331	337	570	3643
BLUE RIDGE	170	482	168	249	359	394	271	277	429	2799
FRISCO	487	870	268	551	804	587	384	324	389	4644
McKINNEY	1384	2707	1173	2214	2137	1557	1397	1479	2540	16588
PRINCETON	439	952	303	556	733	710	559	438	506	5196
FARMERSVILLE	293	700	220	399	539	469	424	445	850	4339
NORTHWEST PLANO	232	332	97	351	791	304	149	95	188	2539
CENTRAL PLANO	4469	11155	2419	3641	10590	9673	3273	1250	740	47210
ALLEN	1227	2346	558	1359	2757	1801	776	465	493	11782
EAST PLANO	2084	4434	1240	2690	4591	3237	1586	1011	1027	21900
PARKER-MURPHY	286	1064	310	373	654	990	477	216	165	4535
DALLAS-RICHARDSON	462	1629	487	632	1180	1732	961	434	258	7775
WYLIE	425	973	348	635	843	824	567	340	557	5512
NEVADA	128	324	118	206	241	259	227	179	219	1901
TOTAL	12604	29365	8135	14625	27267	23579	11812	7690	9499	144576

PLANNING AREA MAP COLLIN COUNTY



POPULATION

TAXPAYERS

TABLE 2. PRINCIPAL TAXPAYERS

		VALUATION
HUNT PROPERTIES	REAL ESTATE	\$246M
FOLSOM PROPERTIES	REAL ESTATE	\$207M
TEXAS UTILITIES	ELECTRIC UTILITY	\$104M
ARCO	PETROLEUM RESEARCH	\$90M
GENERAL TELEPHONE	TELEPHONE UTILITY	\$76M
TP&L	ELECTRIC UTILITY	\$64M
ROCKWELL	ELECTRONIC MANU.	\$58M
SOUTHWESTERN BELL	TELEPHONE UTILITY	\$49M
JBM INC. PROPERTIES	SHOPPING MALL	\$48M
TEXAS INSTRUMENTS	ELECTRONICS MANU.	\$46M

SOURCE: MUNICIPAL ADVISORY COUNCIL OF TEXAS

According to the Municipal Advisory Council, the economy is based primarily on manufacturing and agriculture. There are 60 manufacturing plants employing 20 or more people. Products include boats, plumbing supplies, clothing, valves, and conveying systems. Retail trade is very important. Construction employment is important in all of the growing parts of the county, although many of the workers probably live elsewhere.

As would be expected, most of the major employers are in the southwest quadrant of the county. Near the Dallas County line in southwest Collin County are the following: The University of Texas at Dallas; ARCO; J. C. Penney Life; Westridge Business Park; Digital Switch; the Dallas Morning News; and Plano General Hospital with associated medical facilities. Near U. S. 75 in southern Collin County are the following: Collin Creek Mall; Collin Ridge Business Park; Palisades Business Park; and numerous retail centers. Products manufactured in Plano include electronic data equipment, bakery equipment, air traffic control systems, aerospace equipment parts, brass products, and insulated copper wire.

Allen is another "bedroom" community just north of Plano. The major employer is InteCom with approximately 1,350 employees making telecommunications equipment. Retailing is the other major economic activity in the Allen area.

McKinney in central Collin County has Fisher Controls (gas regulators), Texas Instruments (electronics), Montgomery Elevators, and two hospitals as major employers. Celina is a rural community with a cotton gin and grain elevator. Local manufacturers in Farmersville produce candy, aluminum products, cellophane, and components for steel guitars. Frisco has GNB Batteries, Huston Industries, and agricultural service industries. Agriculture is the predominant economic activity for those working in the northern and eastern portions of Collin County.

POPULATION

COUNTY POPULATION PROJECTIONS

Dennis D. Harner and Associates (DDH) has prepared population projections for the fifteen planning areas into which Collin County has been divided. The 1980 profile for each county was presented in Table 1. Tables 3 through 6 present the age-specific projections for each planning area for 1985, 1990, 1995, and 2000, respectively.

The overall Collin County projection is the average of two other projections, one by the Texas Department of Health (TDH), and one by DDH. Both these projections are based upon cohort-component models which are widely used in demographic analysis (see Irwin, Richard, "Guide for Local Area Population Projections," Technical Paper No. 39, U. S. Bureau of the Census, 1977). The models do have subtle differences which affect the totals. The TDH projection is too high based upon current growth trends, while the DDH projection is too low. The average of the two (268,830 by 1990 and 381,081 by 2000) is very reasonable given current trends. For instance, the 1985 estimate of 203,705 for the county (Table 3) is close to the Council of Governments' estimate of 207,000. (It is DDH's experience that Council of Governments estimates are often too high.)

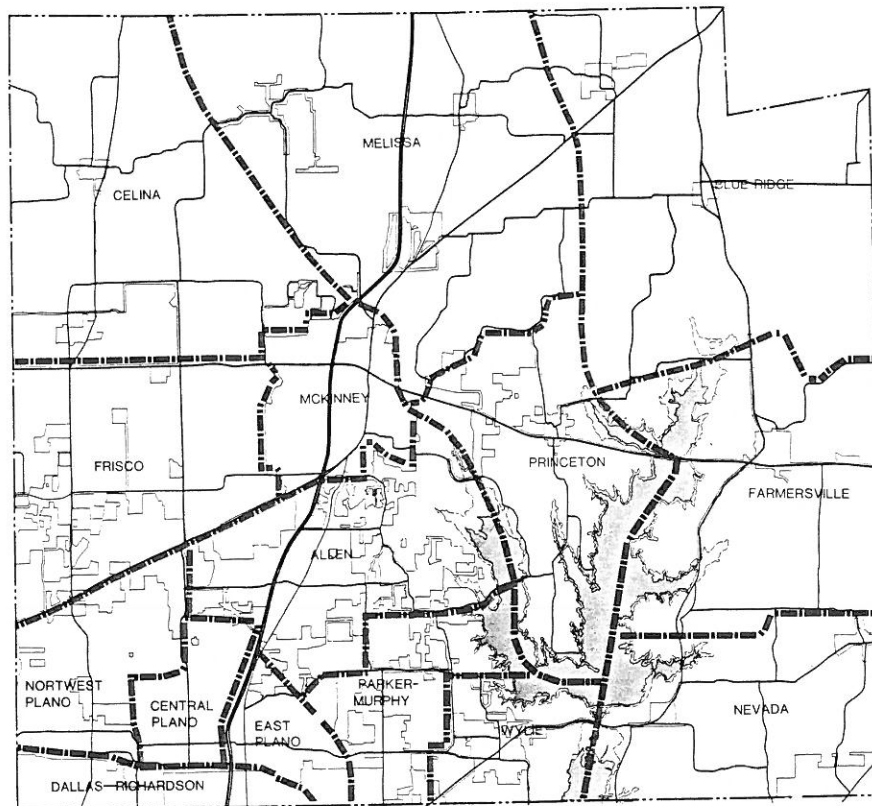
POPULATION

POPULATION ESTIMATE 1985

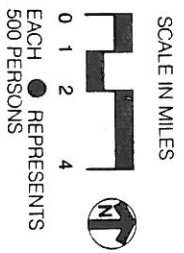
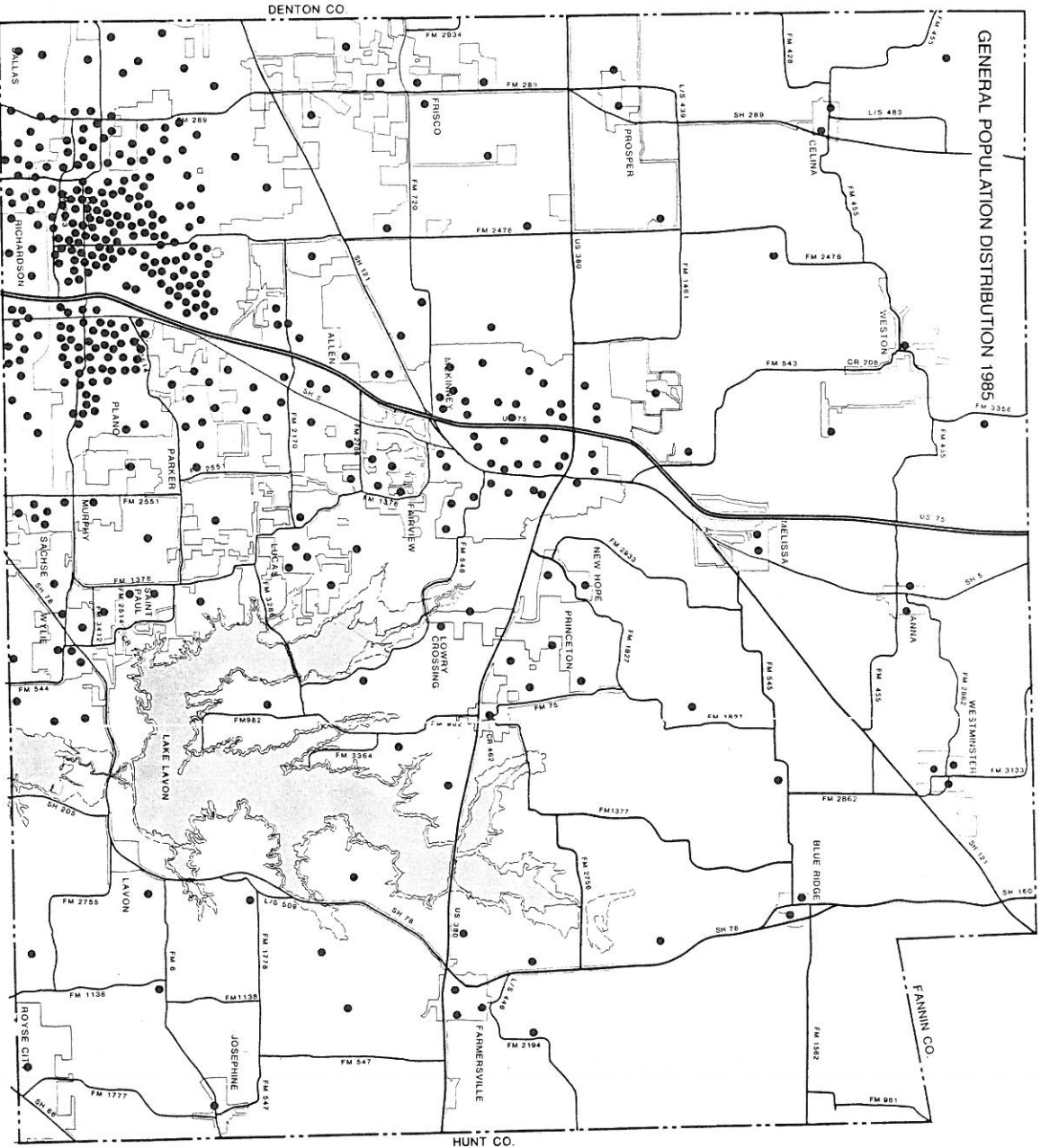
TABLE 3. COLLIN COUNTY POPULATION BY AGE AND PLANNING AREA, 1985

	0-4	5-14	15-17	18-24	25-34	35-44	45-54	55-64	65 +	TOTAL
MELISSA	435	918	290	531	821	821	483	242	290	5031
CELINA	354	747	236	433	669	669	393	197	236	4134
BLUE RIDGE	278	588	186	340	526	526	309	155	186	3294
FRISCO	532	1123	354	650	1004	1004	591	295	354	5907
McKINNEY	1634	3450	1089	1997	3087	3087	1816	908	1089	19157
PRINCETON	530	1119	353	648	1001	1001	589	294	353	5888
FARMERSVILLE	407	859	271	497	769	769	452	226	271	5021
NORTHWEST PLANO	1940	4096	1293	2371	3665	3665	2156	1078	1293	21557
CENTRAL PLANO	5144	10860	3430	6287	9717	9717	5716	2858	3430	55059
ALLEN	1707	3603	1138	2086	3224	3224	1896	948	1138	18964
EAST PLANO	2245	4738	1496	2743	4240	4240	2494	1247	1496	24939
PARKER-MURPHY	575	1215	384	703	1087	1087	639	320	384	6394
DALLAS-RICHARDSON	1757	3708	1171	2147	3318	3318	1952	976	1171	19518
WYLIE	592	1249	395	723	1118	1118	658	329	395	6577
NEVADA	204	430	136	249	385	385	227	113	136	2265
TOTAL	18334	38703	12222	22405	34631	34631	20371	10186	12222	203705

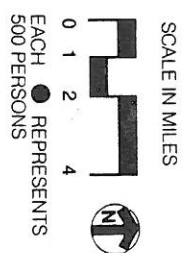
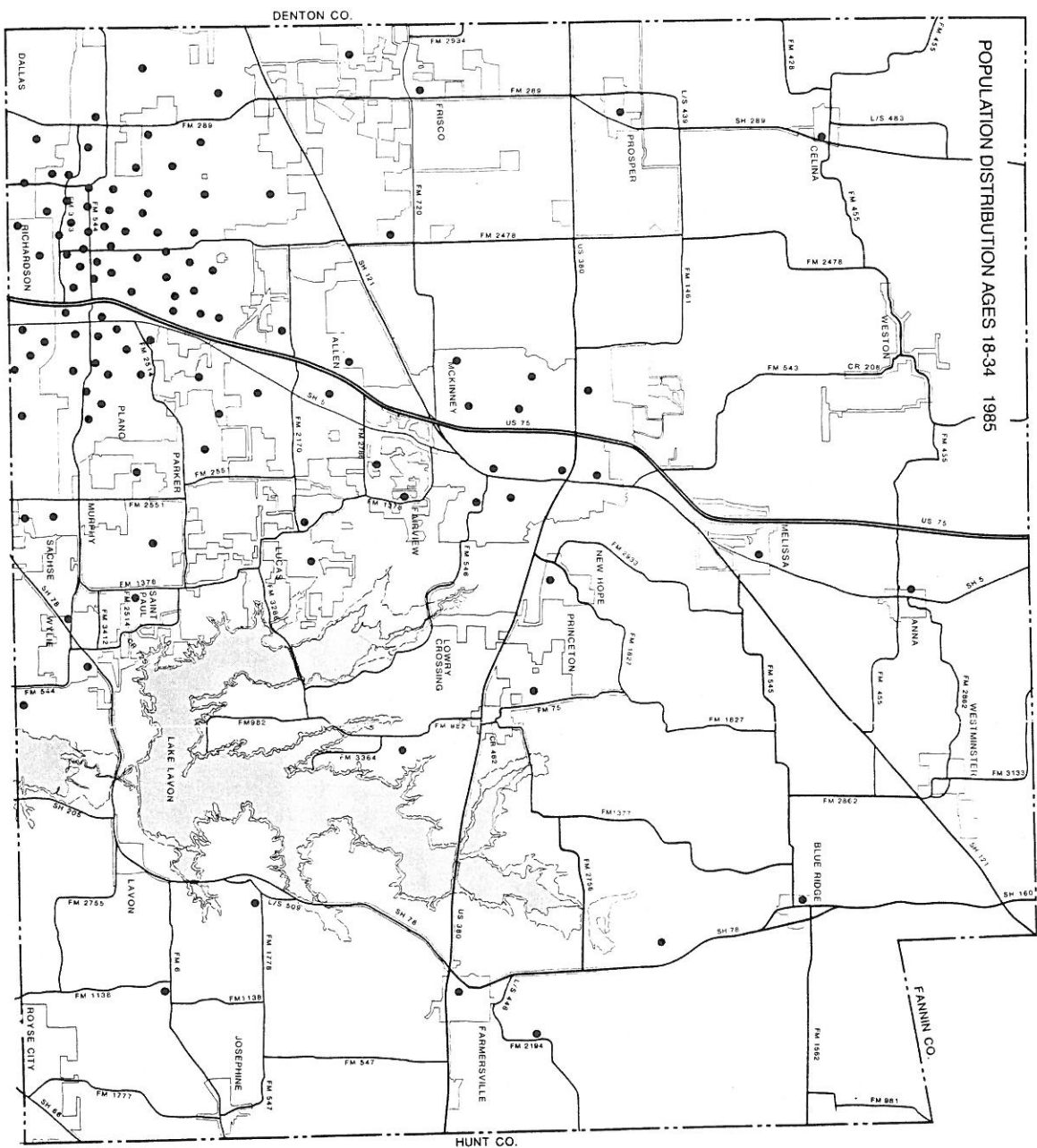
PLANNING AREA MAP COLLIN COUNTY



POPULATION



POPULATION



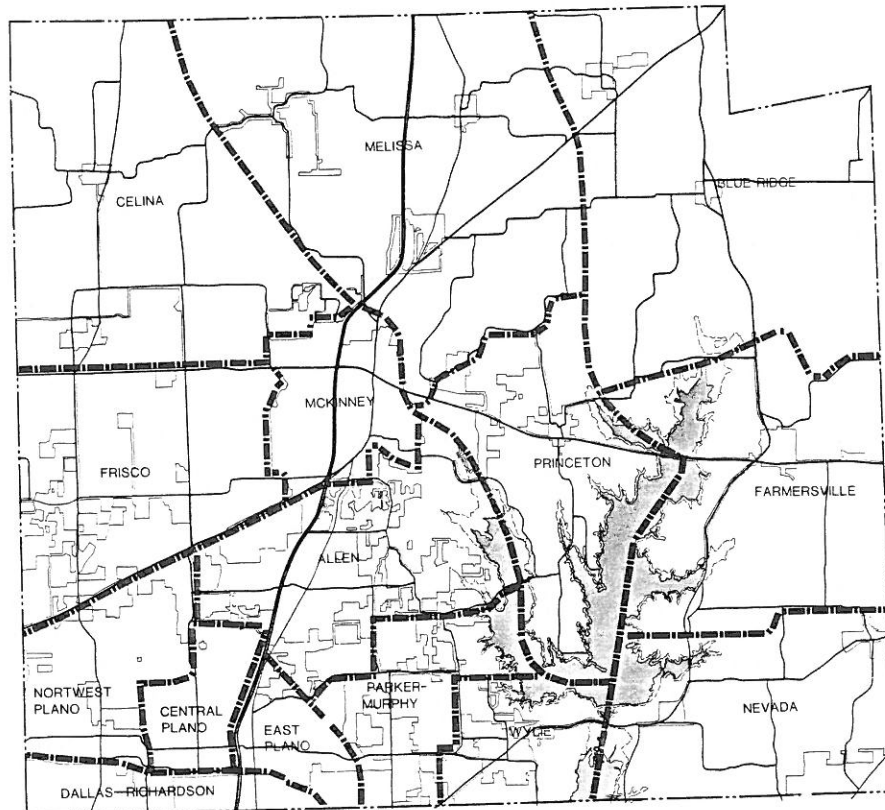
POPULATION

POPULATION PROJECTION 1990

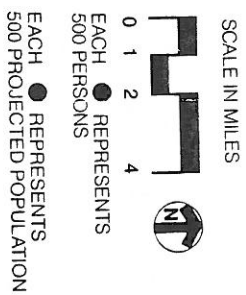
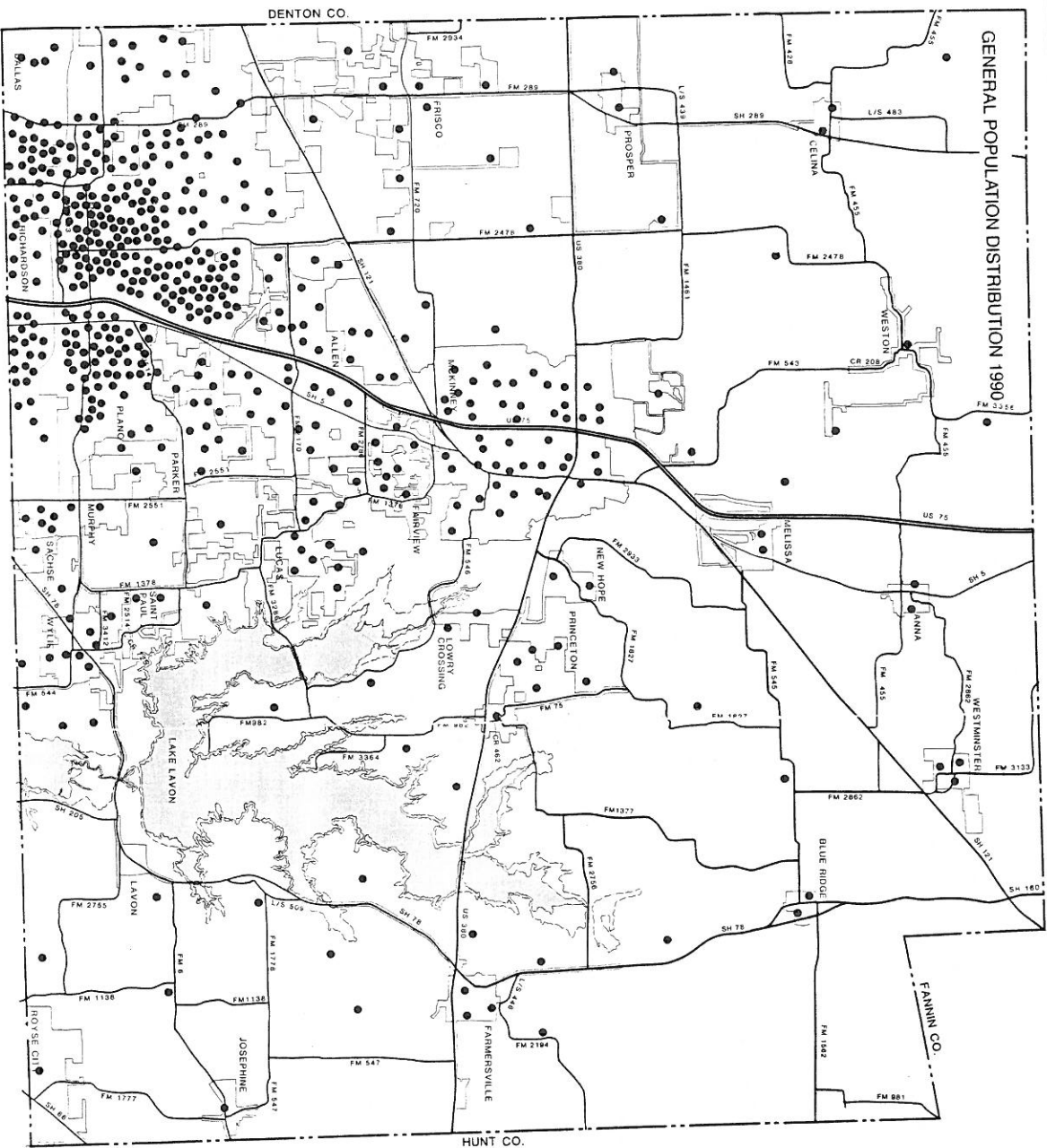
TABLE 4. COLLIN COUNTY POPULATION BY AGE AND PLANNING AREA, 1990

	0-4	5-14	15-17	18-24	25-34	35-44	45-54	55-64	65+	TOTAL
MELISSA	494	989	330	604	879	989	659	275	275	5494
CELINA	391	781	260	477	694	781	521	217	217	4339
BLUE RIDGE	313	626	209	382	556	626	417	174	174	3477
FRISCO	658	1315	438	804	1169	1315	877	365	365	7306
McKINNEY	2117	4234	1411	2588	3764	4234	2823	1176	1176	23523
PRINCETON	709	1418	473	866	1260	1418	945	394	394	7877
FARMERSVILLE	420	841	280	514	747	841	561	234	234	4672
NORTHWEST PLANO	2681	5362	1787	3277	4766	5362	3575	1490	1490	29790
CENTRAL PLANO	6030	12059	4020	7370	10720	12059	8040	3350	3350	66998
ALLEN	3022	6043	2014	3693	5372	6043	4029	1679	1679	33574
EAST PLANO	2423	4846	1615	2962	4308	4846	3231	1346	1346	26923
PARKER-MURPHY	704	1408	469	861	1252	1408	939	391	391	7823
DALLAS-RICHARDSON	2783	5566	1855	3402	4948	5566	3711	1546	1546	30923
WYLIE	668	1336	445	817	1188	1336	891	371	371	7423
NEVADA	242	484	161	296	430	484	323	134	134	2688
TOTAL	23655	47308	15767	28913	42053	47308	31542	13142	13142	262830

PLANNING AREA MAP COLLIN COUNTY



POPULATION



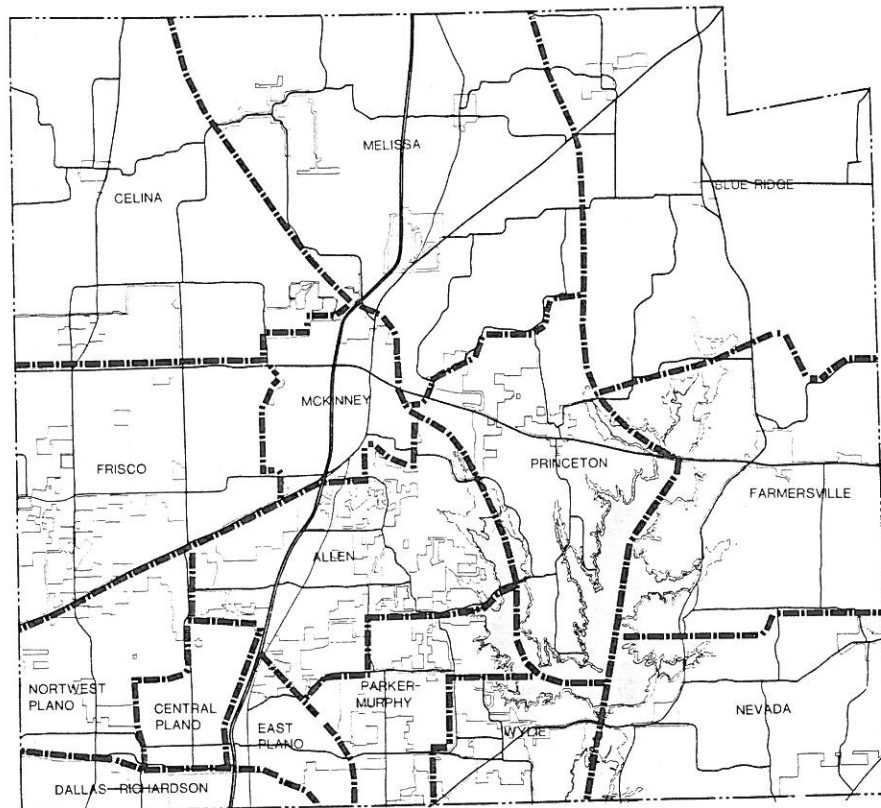
POPULATION

POPULATION PROJECTION 1995

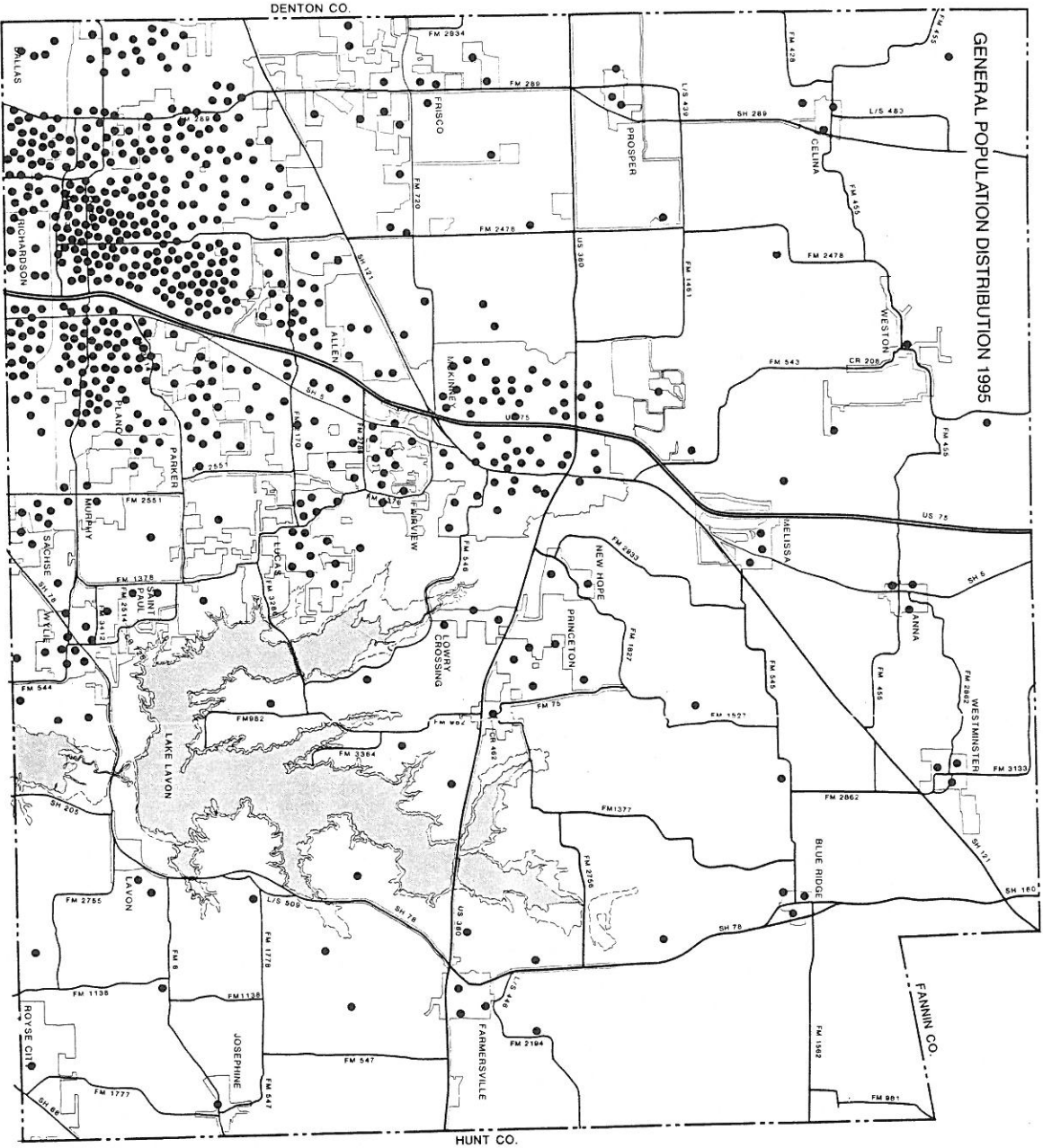
TABLE 5. COLLIN COUNTY POPULATION BY AGE AND PLANNING AREA, 1995

	0-4	5-14	15-17	18-24	25-34	35-44	45-54	55-64	65 +	TOTAL
MELISSA	555	1111	371	679	926	1111	802	309	309	6173
CELINA	428	856	285	523	713	856	618	238	238	4755
BLUE RIDGE	348	696	232	425	580	696	502	193	193	3865
FRISCO	1001	2002	667	1224	1669	2002	1446	556	556	11123
McKINNEY	2547	5094	1698	3113	4245	5094	3679	1415	1415	28300
PRINCETON	783	1566	522	957	1305	1566	1131	435	435	8700
FARMERSVILLE	450	901	300	551	751	901	651	250	250	5005
NORTHWEST PLANO	4325	8651	2884	5287	7209	8651	6248	2403	2403	48061
CENTRAL PLANO	6473	12947	4316	7912	10789	12947	9350	3596	3596	71926
ALLEN	3937	7873	2624	4812	6561	7873	5686	2187	2187	43740
EAST PLANO	2896	5792	1931	3539	4826	5792	4183	1609	1609	32177
PARKER-MURPHY	1042	2083	694	1273	1736	2083	1504	579	579	11573
DALLAS-RICHARDSON	3161	6322	2107	3864	5269	6322	4566	1756	1756	35123
WYLIE	745	1490	497	910	1241	1490	1076	414	414	8277
NEVADA	284	568	189	347	474	568	410	158	158	3156
TOTAL	28975	57952	19317	35416	48294	57952	41852	16098	16098	321954

PLANNING AREA MAP COLLIN COUNTY



POPULATION

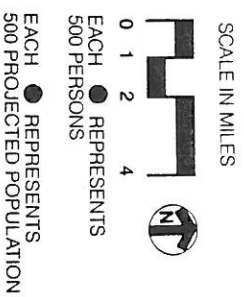
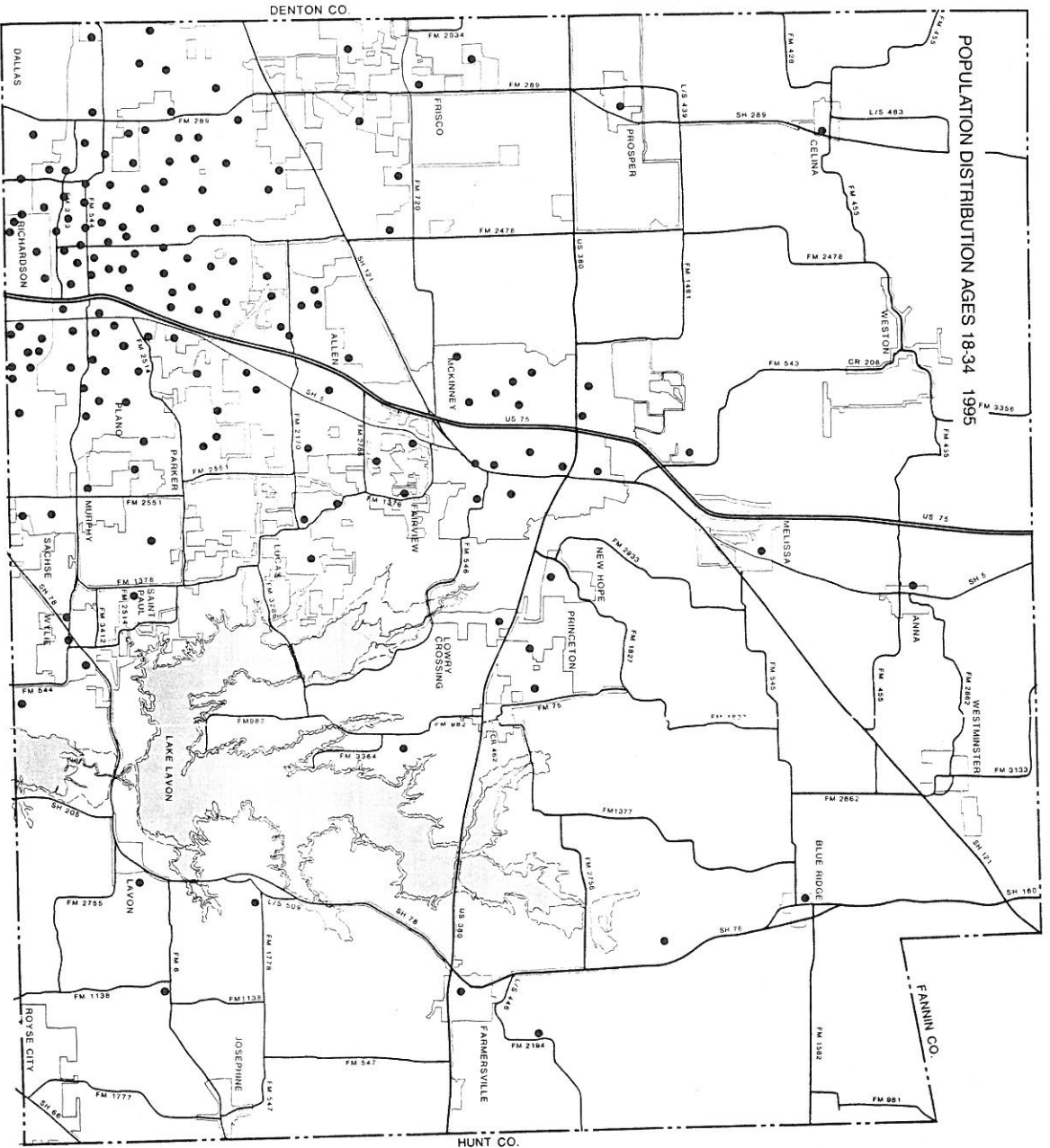


SCALE IN MILES



0 1 2 4
EACH ● REPRESENTS
500 PERSONS
EACH ● REPRESENTS
500 PROJECTED POPULATION

POPULATION



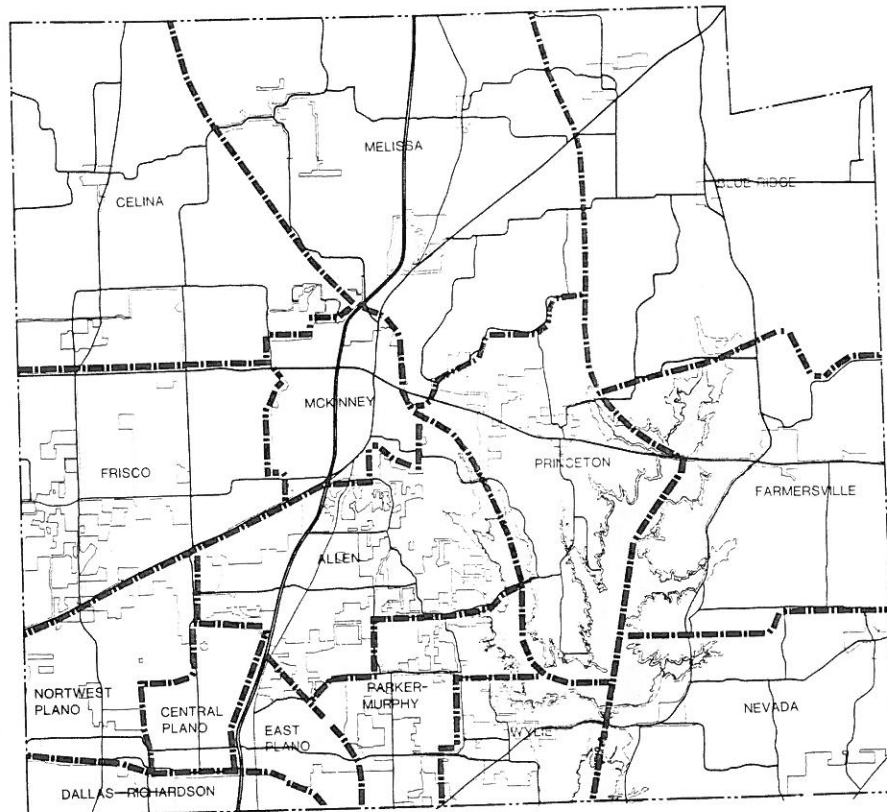
POPULATION

POPULATION PROJECTION 2000

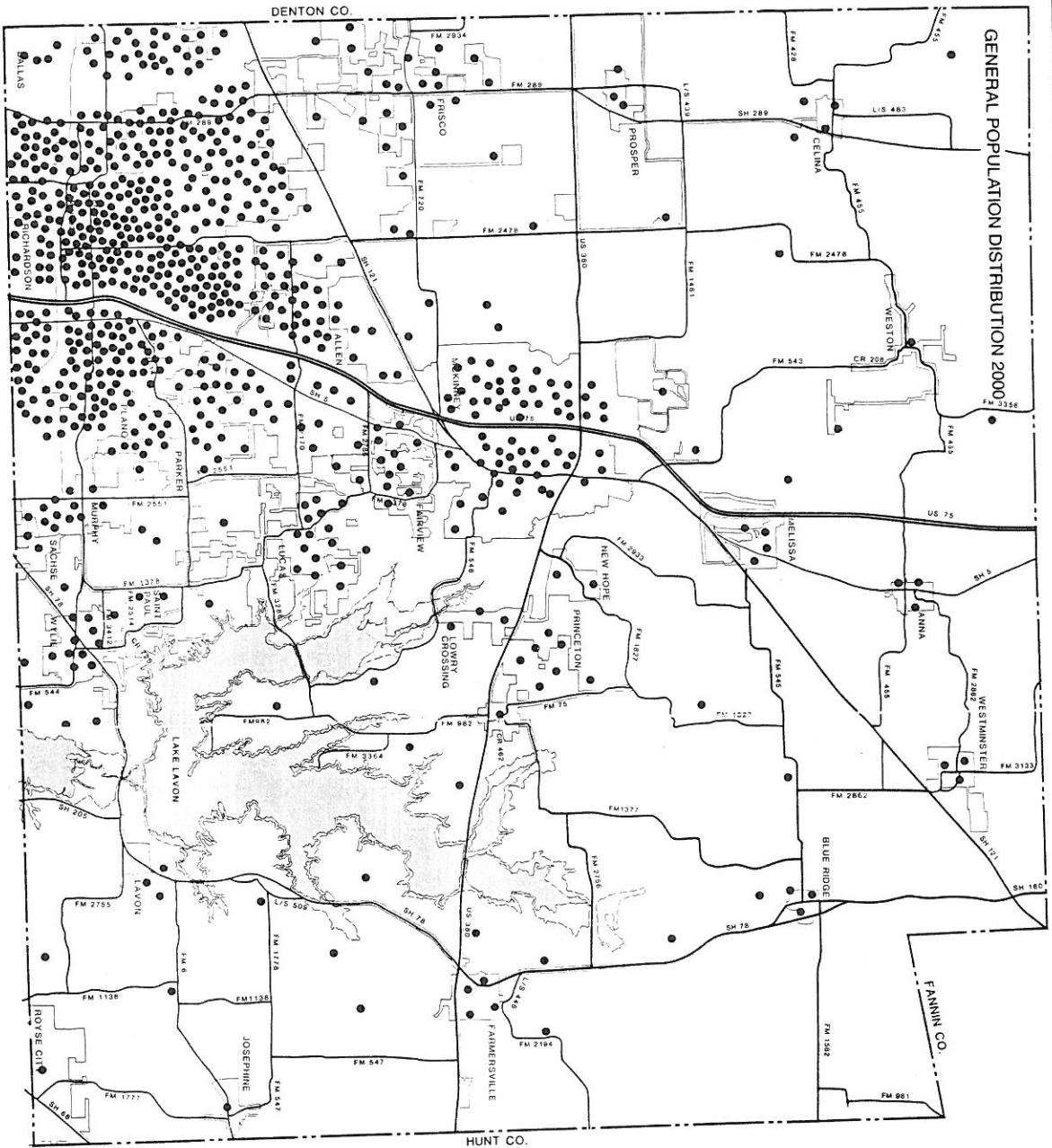
TABLE 6. COLLIN COUNTY POPULATION BY AGE AND PLANNING AREA, 2000

	0-4	5-14	15-17	18-24	25-34	35-44	45-54	55-64	65+	TOTAL
MELISSA	616	1164	411	753	959	1232	959	411	342	6847
CELINA	465	879	310	569	724	930	724	310	258	5169
BLUE RIDGE	383	723	255	468	596	766	596	255	213	4255
FRISCO	1345	2540	896	1643	2092	2689	2092	896	747	14940
McKINNEY	2977	5624	1985	3639	4631	5955	4631	1985	1654	33081
PRINCETON	857	1618	571	1047	1333	1714	1333	571	476	9520
FARMERSVILLE	481	908	320	587	748	961	748	320	267	5340
NORTHWEST PLANO	5970	11276	3980	7296	9286	11940	9286	3980	3317	66331
CENTRAL PLANO	6917	13065	4611	8454	10760	13834	10760	4611	3843	76855
ALLEN	4852	9165	3235	5930	7547	9704	7547	3235	2695	53910
EAST PLANO	3369	6363	2246	4117	5240	6737	5240	2246	1871	37429
PARKER-MURPHY	1379	2605	919	1686	2145	2758	2145	919	766	15322
DALLAS-RICHARDSON	3539	6685	2360	4326	5506	7079	5506	2360	1966	39327
WYLIE	821	1552	548	1004	1278	1643	1278	548	456	9128
NEVADA	326	616	218	399	508	653	508	218	181	3627
TOTAL	34297	64783	22865	41918	53353	68595	53353	22865	19052	381081

PLANNING AREA MAP COLLIN COUNTY



POPULATION




SCALE IN MILES

0 1 2 4

EACH ● REPRESENTS 500 PERSONS

EACH ● REPRESENTS 500 PROJECTED POPULATION



POPULATION

The county-level, age specific projections were then disaggregated to the 15 planning areas. These planning areas are aggregates of census tracts. The Council of Governments has prepared projections for most of the tracts in Collin County. For tracts which the Council of Governments has not analyzed, DDH prepared projections of total population. The age-specific county totals were then allocated to each of the planning areas proportionately. This was necessary because DDH feels the Council of Governments census tract projections are a little high. Figure 5 shows the historic growth trend and the projected totals through 2000.

Figure 6 shows how the population profile of Collin County will change by 1990 and 2000. It is interesting to note that the change is not dramatic because the in-migrants continue to keep the population relatively young. Areas with less in-migration would have an "aging" population profile. Overall, there will be a decline in the proportion of children and an increase in middle-aged adults.

However, as Figure 7 shows, all age groups will experience considerable increases in absolute size over the 20 year period.

POPULATION

POPULATION TRENDS AND PROJECTIONS

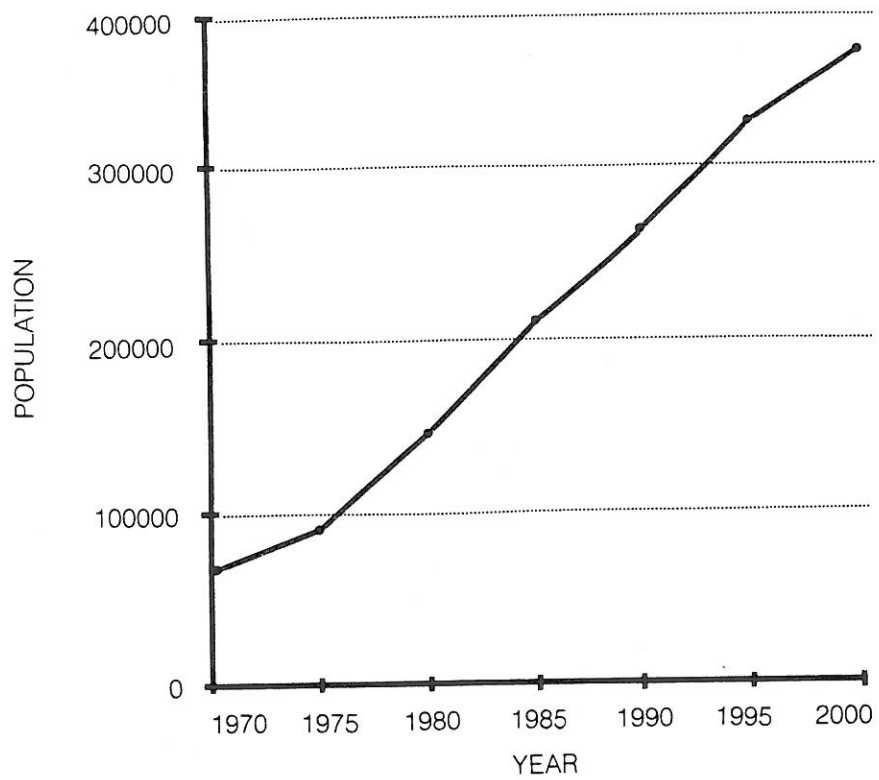


FIGURE 5

POPULATION

AGE PROFILE 1980-2000

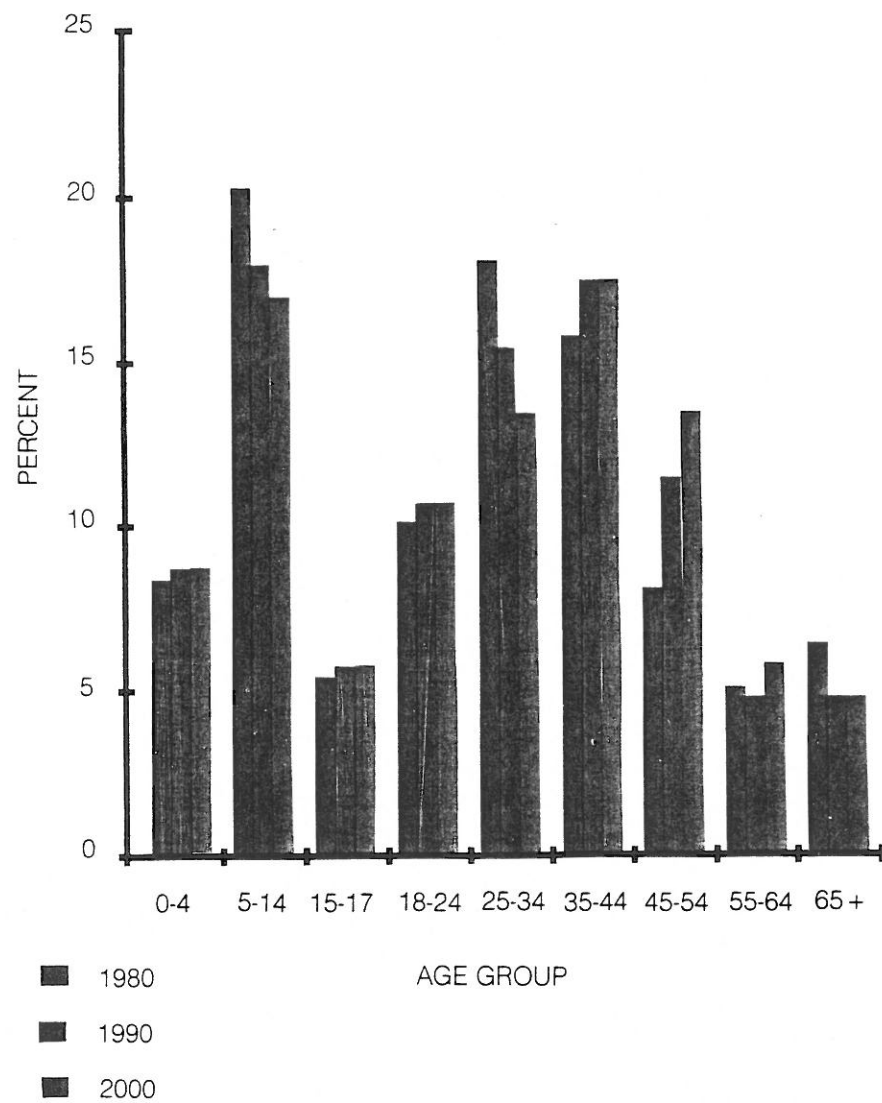


FIGURE 6

POPULATION

POPULATION GROWTH BY AGE GROUP, 1980-2000

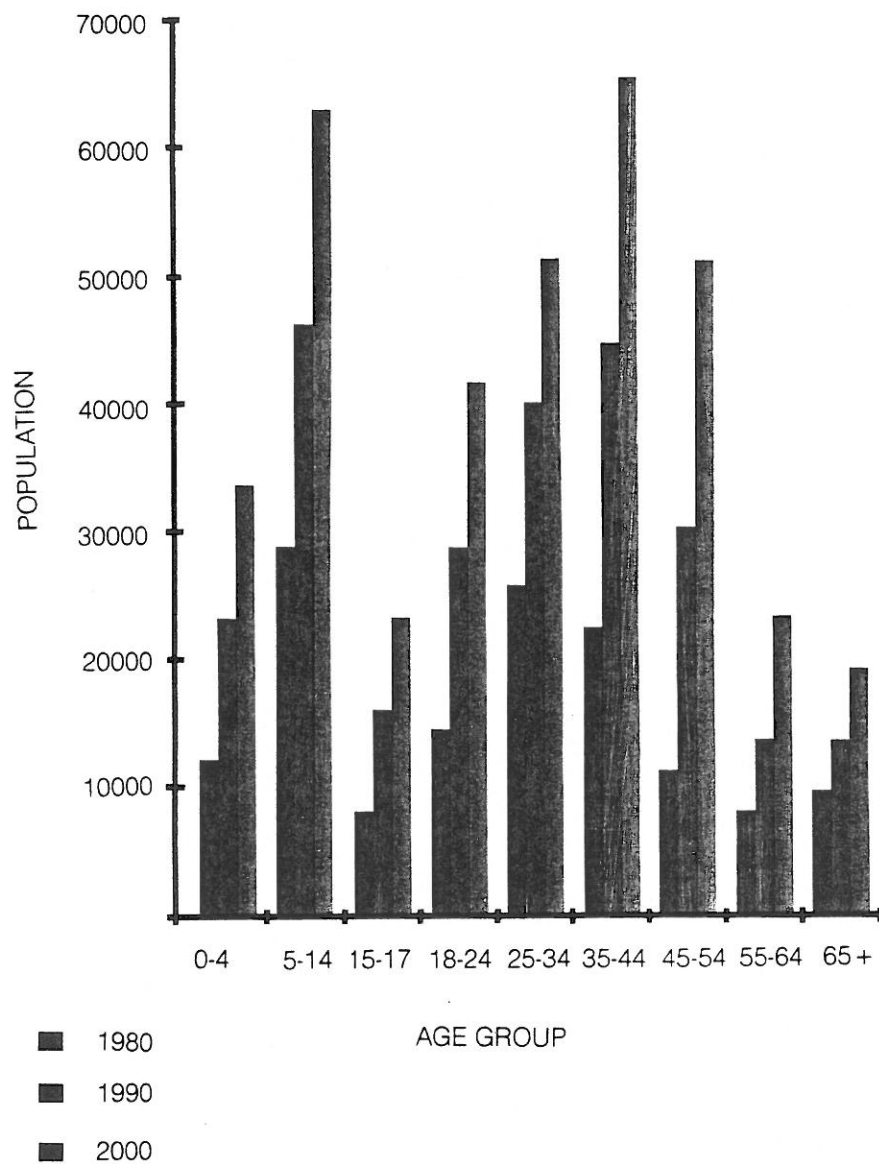


FIGURE 7

POPULATION

CAMPUS POPULATION PROJECTIONS

Research has been accomplished to determine the relationship between enrollment and total population in Dallas and Tarrant Counties. The 1985 student head counts for credit courses at the Dallas County Community Colleges are listed below:

Brookhaven	7,019
Cedar Valley	1,926
Eastfield	8,594
El Centro	5,534
Mountain View	5,315
Northlake	5,091
Richland	<u>13,377</u>
Total	46,856

The January, 1985 total population estimate for Dallas County has been established at 1,799,700. Therefore, Dallas County is averaging a total enrollment of 2.6% of the total population in credit courses.

The Tarrant County Junior College enrollments are shown below:

South Campus	10,632
Northeast Campus	11,043
Northwest Campus	<u>4,764</u>
Total	26,426

The January, 1985 total population estimate for Tarrant County was set at 1,101,300. Therefore, 2.4% of the total population is enrolled at Tarrant County Junior Colleges.

POPULATION

As you can see, the enrollment in Dallas County at 2.6% of the population is slightly higher than the 2.4% shown for Tarrant County. A closer look at the enrollment at Richland, Eastfield and Brookhaven in the Dallas County Community College District also shows that enrollments are far greater in the northern half of the county than they are in other areas. This would lead one to conclude that enrollments as a percent of the total population are probably higher in the northern half of Dallas County. It would seem that the southern half of Collin County would probably follow in this trend.

Based on the data found for Dallas and Tarrant Counties, it would seem reasonable to assume that total head count in credit courses for the Collin County Community College District would be in the range of 2.8% to 3.0% of total population. With the county-wide population projection of 381,081 by the year 2000, it is reasonable to assume that total enrollment in the District by the year 2000 could exceed 11,000 students. This would indicate that although two campuses will probably meet the needs of the District through the year 2000, continued growth in the county will necessitate the placement of a third campus shortly after the year 2000. The location of the District's first two campuses should be carefully considered to allow for strategic placement of a third campus, when that need becomes a reality.

TRANSPORTATION

EXISTING TRANSPORTATION

The existing county-wide population is serviced by several major highways throughout the county. Of course, the major north-south artery is U. S. Highway 75, traveling through Plano, Allen, and McKinney, with major concentrations of population being located near this major artery. U. S. Highway 380 provides a major east-west artery, as it travels through McKinney, Princeton, and Farmersville, crossing U. S. 75 at McKinney.

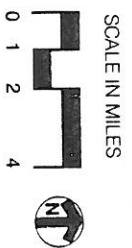
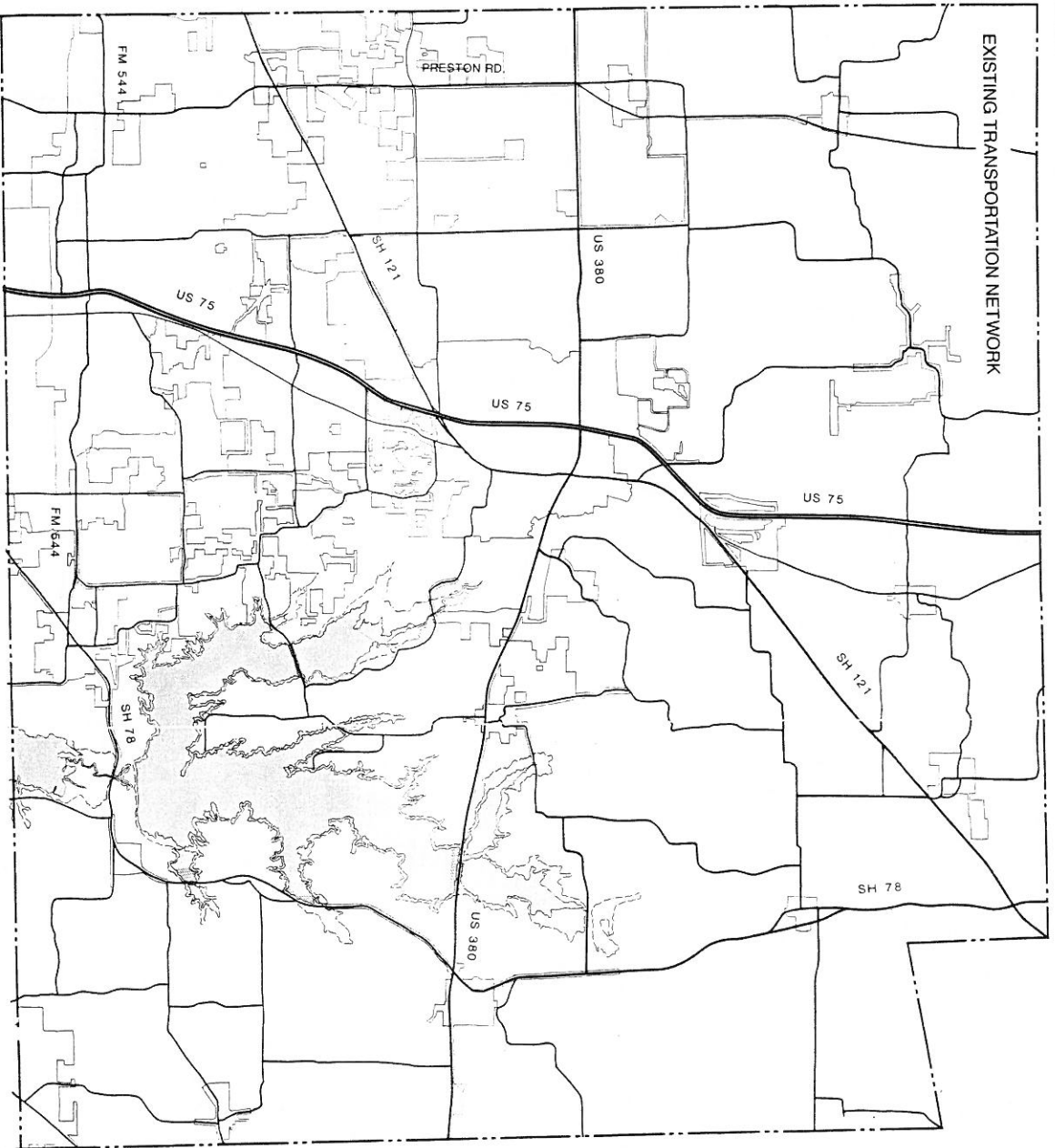
Farm-to-Market Road 544 provides the major east-west accessibility between Wylie and Plano, while State Highway 76 provides north-south access on the eastern side of Lake Lavon.

Highway 121 has become a major traffic diagonal, extending from McKinney southwestward. Preston Road, also State Highway 289, is rapidly developing into a major north-south arterial as well. Although widening and development of this highway is not yet complete, it still provides a continuous north-south access for the westernmost part of the county.

The City of Plano has experienced rapid growth in recent years, a growth which has taxed the city's street system. With the exception of U. S. Highway 75, both north-south and east-west traffic is handled by four or six lane divided streets. These streets obviously become very crowded during rush hours, and access in and out of the city has become very difficult. It is apparent that these traffic flows will continue to be a problem in Plano, although the city is working to increase the capacity of the existing streets as rapidly as possible.

A graphic representation of the major arteries is shown on the following page. Notice that major arteries converge on McKinney, providing good access from remote parts of the county to that area.

TRANSPORTATION



TRANSPORTATION

PROPOSED TRANSPORTATION IMPROVEMENTS

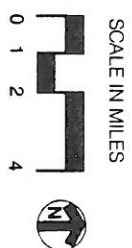
Following is a map showing the Collin County transportation system as it is envisioned by governmental entities in the year 2000. Included in the system is the City of Plano's thoroughfare plan, developed to meet the city's future traffic needs. Although continued growth in Plano will definitely tax the city's streets during rush hour periods, development of major facilities in Plano must occur along major six lane thoroughfares.

TRANSPORTATION



LEGEND

- ██████████ FREEWAY OR CONTROL
- U.S. OR STATE HIGHWAY
- URBAN ARTERIAL SYSTEM
- RURAL ARTERIAL SYSTEM
- PROPOSED COUNTY ROAD

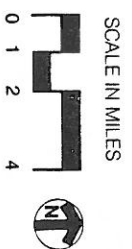
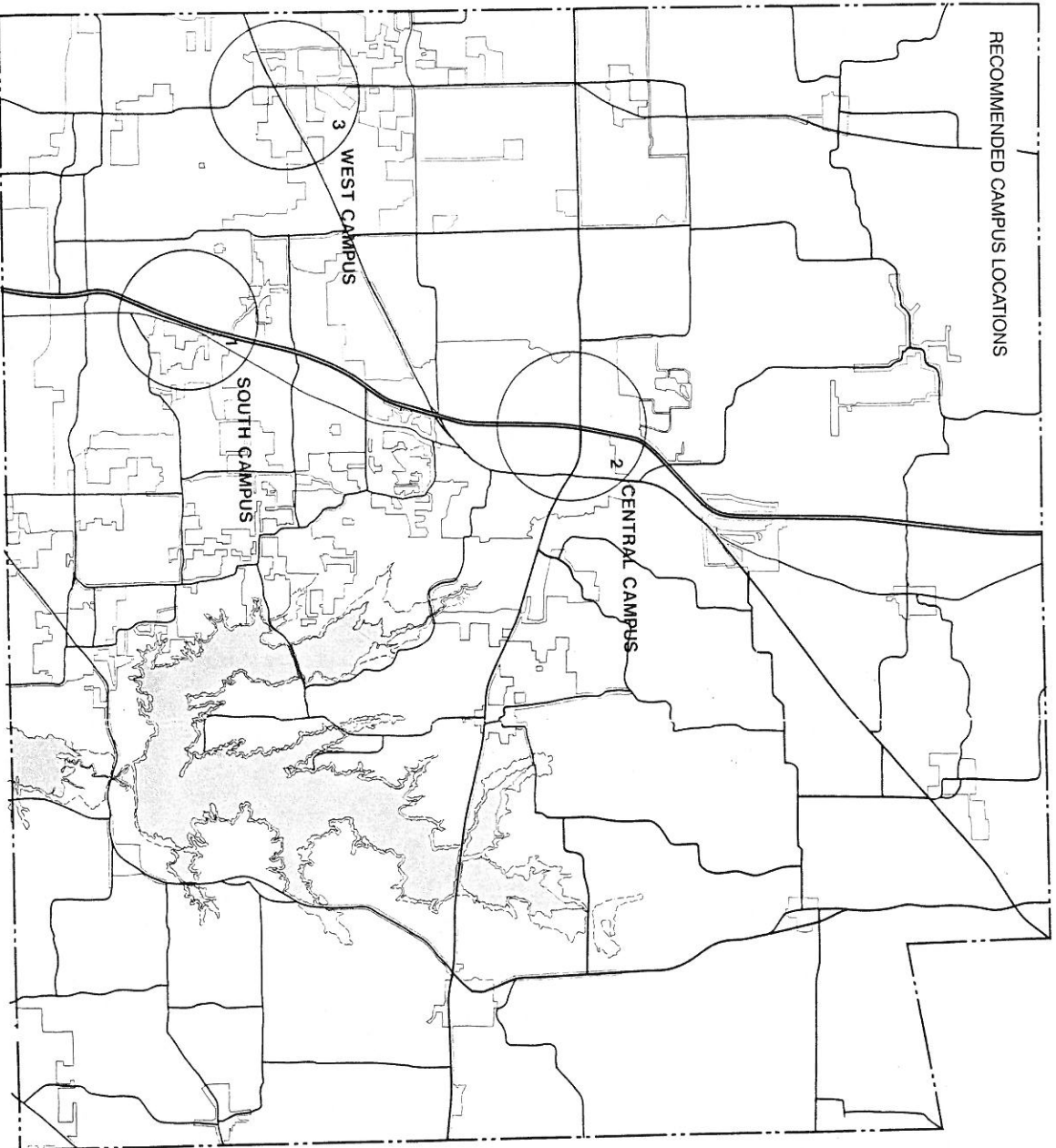


CAMPUS LOCATIONS

It is obvious that a successful community college campus must be located near population centers and that the campus must be readily accessible to the population which it serves. This is especially important in an area like the Dallas-Fort Worth metroplex, since several other institutions of higher learning are located in the area. In fact, the nearness to population centers and the ready access provide one of the distinctives that must be found in a successful community college system.

A proper campus location, then, can be considered as an essential element in the success of the community college district. Three recommended campus location zones have been identified on the county map shown on the following page. Each zone has been strategically located to serve both existing and projected future concentrations of development and population.

CAMPUS LOCATIONS



CAMPUS LOCATIONS

ZONE 1

Zone 1 has been located to serve the present major population center of Plano in the southwestern portion of Collin County. Zone 1 should provide ready access from all of Plano, as well as from Allen and Wylie. Located on the northern side of Plano, along U. S. Highway 75, a site in this zone would fulfill the access requirements outlined above. Spring Creek Parkway is a major east-west thoroughfare street that will eventually extend to Denton County on the west and into the east Collin County area, via Parker Road and Park Boulevard. Parker Road will also be a major east-west thoroughfare serving this zone. U. S. 75 will be widened to six traffic lanes, plus frontage road, between F.M. 544 and Spring Creek Parkway within the next five years. Spring Creek Parkway will extend east of State Highway 5 to Parker Road within the next five years, and it will be increased to a six lane divided thoroughfare on the west side of U. S. 75 in the future. Eventual plans call for Spring Creek Parkway to be grade separated at major intersections, which will greatly increase its traffic capacity.

ZONE 2

Although Zone 2 is not located in the midst of a major population center within the county, it does provide easy access, within a reasonable period of time, for all residents in the northern half of the county. The two major arterial routes, U. S. Highway 75 and U. S. Highway 380, provide excellent access from north, south, east, and west, while the more densely populated southwestern quadrant of the county can also be served by Zone 2 through access on State Highway 121.

ZONE 3

The purchase of a site in Zone 3 should be considered as the District attempts to meet the demands placed on it by continued growth in the southwestern part of the county. This growth will eventually make a campus located in Zone 1 less accessible for students living on Plano's west side, and the total population of Plano will necessitate a campus size that is greater than the District presently desires. Although presently served by two lane roadways, sites in Zone 3 are programmed to have good traffic access in the future. Current plans include the widening of Preston Road to a six lane divided facility to Carpenter Road in Plano, with this widening scheduled to be completed within the next five years. Sections of State Highway 121 are scheduled for widening to four lanes in the near future and the State Department of Highways and Public Transportation is considering the designation of State Highway 121 as a freeway, which will greatly increase its capacity in the next ten to twenty years.

CAMPUS LOCATIONS

DEVELOPMENT PROCESS

It is the opinion of this consultant that campuses in Zones 1 and 2 should be developed as soon as possible. The Zone 1 site should serve as the District's largest initial campus, meeting the needs of the southern portion of Collin County. The campus in this zone should be sized to provide services for a student population of between 5,000 and 7,000, and it should be expected that growth to this range should occur by the year 1990. A site in Zone 2 should also be developed in the District's initial phases to meet the needs of residents in the northern half of the county. However, population projections do not show that growth in the northern portions of the county will require a large campus in Zone 2. Therefore, the District may wish to consider keeping the size of the facility in Zone 2 rather small for the next fifteen to twenty years, while it begins development of a campus in Zone 3.

Projections show that by the year 1990, over 5,500 students, residing in the general area of Zone 1, should be attending Collin County Community College, while approximately 2,200 students would reside in portions of the county that would normally attend the campus in Zone 2. By the year 1995, nearly 7,000 students can be expected at the Zone 1 campus, with approximately 2,700 students at the Zone 2 campus. This would indicate that by the year 1995, the District should be ready to open a new facility in Zone 3. By the year 2000, projections indicate a student population in excess of 5,600 for the campus in Zone 1, with Zone 2 housing approximately 2,700 students, and the campus in Zone 3 serving just over 3,000 students. The Collin County Community College District, with three campuses, would be well positioned to accept the growth within the county beyond the year 2000.

SITE SELECTION GUIDELINES

The Collin County Community College District now faces the task of locating specific sites within the recommended zones outlined above and of initiating campus development on each of those sites. Following are specific guidelines for use by the District in selecting sites and planning future facilities. Listed are major considerations that, if followed, will contribute markedly to the reduction of capital costs and long term serviceability of the college's physical plant:

LOCATION

Access: Campuses should be located within 1/8 mile of the confluence of two major north-south, east-west arterials. Although the District may wish to avoid grade-separated arterials, four to six lane arterials are mandatory.

Neighborhood: Campuses should be buffered by means of intervening land use or on-site development from residential or industrial property. Attempts should be made to visually insulate the campus from undesirable surroundings, while still projecting a friendly image, an image that is clearly part of the community.

Community Facilities: It should be noted that campuses should be located to take maximum advantage of joint use opportunities. Specifically, the District should seek to locate near community facilities that complement the chartered mission of the college and offer some potential of sharing development and maintenance costs.

Size: It is recommended that for a campus serving a student population of approximately 7,000 students, approximately 150 acres should be purchased. This will provide enough land for the District to accomplish some of the visual requirements outlined above.

Regulation Considerations: Campuses should be located to avoid conflict with special district zoning and other development regulations that could adversely affect future flexibility and site potential. Flood plains should be carefully evaluated. Although the campus plan could incorporate some flood plain areas, an excessive amount of flood plain land could limit development and flexibility of the campus.

SITE SELECTION GUIDELINES

UTILITIES

Energy Source: Potential sites should have access to both power and gas in sufficient quantities to service the long-term needs of the campus. Access to these facilities should be considered in the overall campus development cost.

Sewage: Sites should be serviced by a sanitary sewage system, of sufficient size to insure sufficient expansion. The development of facilities in the area should be considered in the overall cost of the site. Likewise, the terminal treatment system should be capable of handling and processing any specialized waste that might be generated as a part of the college's academic programs.

Communications: Access to state-of-the-art communications should be available at each site. Substandard communication service could limit the long-term utility of the campus and prevent the use of computer and other audio/visual technology.

Drainage: The site should have access to an existing drainage outfall or storm sewage system with sufficient capacity to drain the site in a developed condition.

Water: Potable water for both consumer and fire protection needs should be available. If construction of such lines is necessary, the cost of these facilities should be considered in the overall cost of the site.

SITE SELECTION GUIDELINES

NATURAL CONDITIONS

Topography: The site should generally have slopes of 1% to 3%. Areas of slope greater than 3% should be evaluated carefully to be sure that they occur in a pattern that will not result in excessively high construction budgets for earthwork. Old landfills or previously disturbed sites should be viewed with suspicion and should be carefully tested.

Soils: The soils of Collin County are typically poor from an engineering standpoint. However, potential sites should be evaluated to see if unusual measures will be required to stabilize the subgrade.

Drainage Pattern: Natural on-site drainage patterns should be carefully studied to insure that they will not require major revisions during development. The potential for on-site retention of storm drainage should exist.

Orientation: Orientation, while a less significant consideration than the foregoing criteria, could contribute to the energy savings and seasonal comfort of the campus. While the facilities can be designed to limit problems, in general, properties that have south to southeast facing slopes will be more comfortable and energy efficient than properties with west or north facing slopes.

Vegetation: Some existing vegetation will potentially add to the visual character of the campus. Sites without major landscaping barriers will reduce clearing and grubbing costs. Unfortunately, developments such as a campus make it very difficult to preserve existing vegetation, since large buildings and parking facilities require substantial grade revision. The proximity of these structures to one another also changes the soil-moisture relationships, which will often result in a long-term deterioration of the existing on-site vegetation.

SITE SELECTION GUIDELINES

CAMPUS DESIGN

Site Organization: Campus development should provide optimum flexibility, based on long-term utility. A community college in close proximity to other major institutions of higher education must be able to respond quickly to changes in the educational market. For this reason, each campus in the system should be planned with an infra-structure of utilities and buildings that lend themselves to easy conversion and retrofitting in order to respond quickly to shifts in educational demands. This is particularly important in a growth center like Collin County.

Likewise, in keeping with the stated goal of providing the "highest quality education for the least cost," campuses should be located and organized in such a way that they take maximum advantage of other public facilities and buildings.

In general, we would suggest that campuses be designed axially, with the utility infra-structure forming the axes. This will allow building addition and expansion to be accomplished in modular segments. The number of axes will, of course, be governed by specific site limitations.

This arrangement optimizes pedestrian access, minimizes utility costs, and avoids vehicular pedestrian conflicts, while constantly providing opportunity to expand.

Long-Term Utility: Maintenance, energy and material life cycle costs should be paramount considerations in all campus design.

While initial costs are a major consideration, a basic material pallet should be selected to guide all future development. Selection of the pallet should be based on the long-term serviceability of the material, its relative energy efficiency to cost ratio, and its long-term maintenance costs. For example, rigid pavements will remain serviceable longer than flexible pavements due to soil and temperature extremes, while, for the same reasons, flexible structural systems are preferred.

SITE SELECTION GUIDELINES

Visual Character: Collin County Community College should establish a strong visual image for itself. As a newly created institution, the District has the unique opportunity to create a strong visual image that makes a statement about its direction and mission in the community. Unfortunately, this is an opportunity lost by many new and old institutions alike in their haste to move ahead with their building programs. The Board and Administration should give careful consideration to their basic philosophy and articulate their ideas to future design consultants in a way that will insure a strong visual image of the mission of Collin County Community College.

SUMMARY

The guidelines stated above are intended to provide a basic framework to guide the Collin County Community College in future decision making. The attempt is to provide an objective phase by which sites can be evaluated and relative merits of each identified. The District will find there are no perfect sites. If the guidelines above are utilized, the District will be able to objectively evaluate the alternatives that do exist.