APPLIED ECONOMICS

MARICOPA ASSOCIATION OF GOVERNMENTS
GROWING SMARTER IMPLEMENTATION:
SCHOOL ENROLLMENT & FACILITIES DATABASE

FINAL REPORT

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1.0 INTRODUCTION

This draft report presents the Phase I results of the MAG Growing Smarter Implementation Project (GSI), Task 6.3 - Schools Database. It includes a collection of baseline data that will ultimately be used to analyze the implications of future population and housing growth on school district enrollment in Maricopa County, both at countywide and small area levels. These baseline data sets encompass demographic, enrollment, and financial data at county and district levels that are pertinent to the Phase II projections.

Chapter 2 presents geographic, demographic and enrollment data at the district level. The data sets include 1995 and 2000 population and enrollment in each district. Chapter 2 also includes a brief synopsis of charter schools and alternative education programs, since enrollment in these programs falls outside district enrollment. All enrollment data was provided by the Arizona Department of Education while demographic data was derived from the MAG TAZ-level population estimates distributed across the 55 school districts in Maricopa County.

Chapter 3 presents the details of capital funding available by school district type from the Arizona School Facilities Board. It also includes a district-level inventory of donated land for educational purposes in Maricopa County.

Finally, Chapter 4 includes a brief description of revenue sources for operations and maintenance funding for public schools at the state, county, and district levels. It also presents the results of an analysis of property values by school district in Maricopa County. Since education operations funding is partially based on property taxes collected on residential, non-residential, and vacant properties, this baseline data is useful in determining the relationship between the property tax base, land use, and future funding.

2.0 PUBLIC EDUCATION PROVIDERS

This chapter presents a baseline data set outlining the composition, geography, demographics and enrollment of the 55 school districts located in Maricopa County. Maricopa County has three types of publicly funded education providers. Traditional district education accounts for the majority of student enrollment, about 95 percent. Charter schools, schools that are publicly funded but may be privately administered, educate approximately 4.5 percent of Maricopa County's publicly funded students. Finally, other schools such as detention centers or magnet schools, educate the small remainder of the students. The first and second sections of this chapter discuss the boundaries and demographics of the school districts, while the third section presents past and present district enrollment. The final section looks at the charter schools and their current enrollment.

2.1 Types of School Districts

District boundaries determine student attendance, as well as define a funding base for an area. Students who reside in a district generally attend schools in that district. The perceived quality of the district's education and services, as well as the tax burden levied in each school district are important factors for the residents and therefore, these factors have a good deal of influence on future residential as well as non-residential small area growth. Enrollment and funding for charter and alternative schools are not restricted to the residency of the student, therefore this demographic analysis is limited to the established school district boundaries and enrollment.

There are three different types of public school districts in Maricopa County. A brief description of the nature and history of the types provides the context for understanding the various geographic and demographic characteristics of Maricopa County school districts. As the Phoenix area grew in the early 20th century, attendance boundaries were drawn to create school districts that allowed for the efficient distribution of schools among the student age population. In that era, compulsory education only went up to 8th grade. Those original district boundaries have not changed, and they are now known as elementary districts and serve grades kindergarten through eight. These older districts are noticeably smaller in area since people did not travel great distances on a daily basis. The elementary districts are primarily located in the older areas of Phoenix, Tempe, and areas along the Salt River.

As compulsory education extended to age 16, high schools began to proliferate throughout the Valley. Union Districts were created overlapping the smaller elementary districts to provide 9th through 12th grade education. Since high schools tend to be much larger than elementary schools, the service area for the high school districts is greater than the elementary district service areas. The Phoenix Union District, for example, encompasses 13 elementary school districts, while Agua Fria Union and Tempe Union correspond with two elementary districts each. This means that high school students who live in the Kyrene Elementary School District also belong to the Tempe Union District and should attend Tempe Union high schools. In spite of overlapping service areas, the elementary and union districts are independent of one another, operating under separate administrations and boards.

Note there are also elementary districts that do not belong to a union district. These are largely rural districts with small student populations and enrollment. Sentinel or Aguila School Districts, for example, do not have enough students to support a high school. Younger students in these types of districts attend elementary schools in their districts, while high school students attend schools in neighboring union or unified districts. If these districts grew enough in size they would become unified districts and support their own high schools, as illustrated in the case of the Higley School District in 1998.

The final district classification is a unified district that incorporates elementary and high school education. In general, these districts were created with the understanding that compulsory education would include high school. With the exception of the Mesa Unified School District, the unified districts are located in more recently developed areas of Maricopa County, on the periphery of the original settlements.

Currently, there are 14 unified districts, six union high school districts, 28 elementary districts within high school districts and seven elementary districts that do not belong to a union high school district (Figures 2-1 and 2-2). There is also an accommodation district that serves areas outside of incorporated school districts. Union districts in Figure 2-1 are highlighted in gray. Figure 2-2 shows the 28 elementary school districts located within the six union districts. Areas in spotted gray are unorganized areas that may encompass national forests, military installations, American Indian communities, or age-restricted areas, such as Sun City. Note that although the J.O. Combs and Apache Junction districts are included in this map, the enrollment in these districts is not incorporated in this study because these districts are mainly in Pinal County.

As the maps indicate, while school districts may bear the name of the city in which they are located, attendance boundaries do not correspond with any municipal boundaries, and often school district boundaries may be more logical than municipal boundaries. An example of this is the Ahwatukee area, which is in the City of Phoenix municipal boundaries but belongs to the Kyrene and Tempe Union school districts. Due to the natural barrier presented by the South Mountain Park, the inclusion of this area in the Tempe district is a much more logical designation than Phoenix, given the shorter transportation times to Tempe.

The elementary/union districting system may appear to be less efficient than the unified system because of the increased administration and overhead. However, there is a good deal of political resistance to the discussion of unifying elementary and union school districts because of the possible loss of local control in education. Historically, the 28 elementary districts and the six union districts have had a higher combined enrollment than the unified districts. However, this trend is shifting as population in the peripheral districts is growing larger.

It is worthwhile to point out the possible effects open enrollment attendance policies have had on district enrollment. In the past, school attendance areas determined the school a student had to attend. In the 1990's, an open enrollment policy was adopted that allows students to attend schools in another district provided there be adequate capacity. This policy was designed to create more choices for residents who live in a district that provides what they may perceive as inferior education. Despite open enrollment policies that do not restrict district enrollment to residency, past experience has shown that the significant majority of students attend district schools that correspond to their place of residence. Open enrollment policies have generally had a greater effect on intra-district school enrollment shifts than district level disparities.

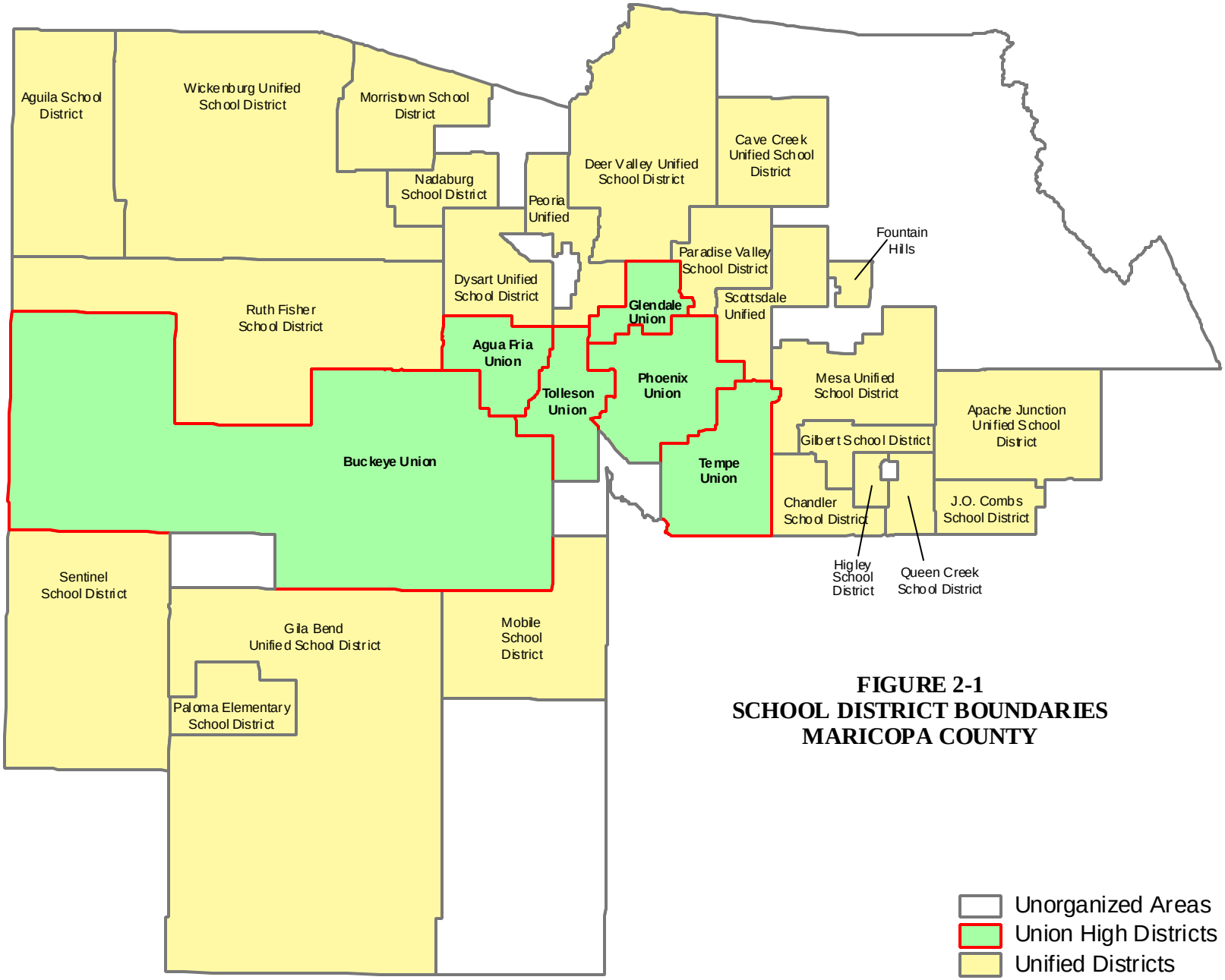
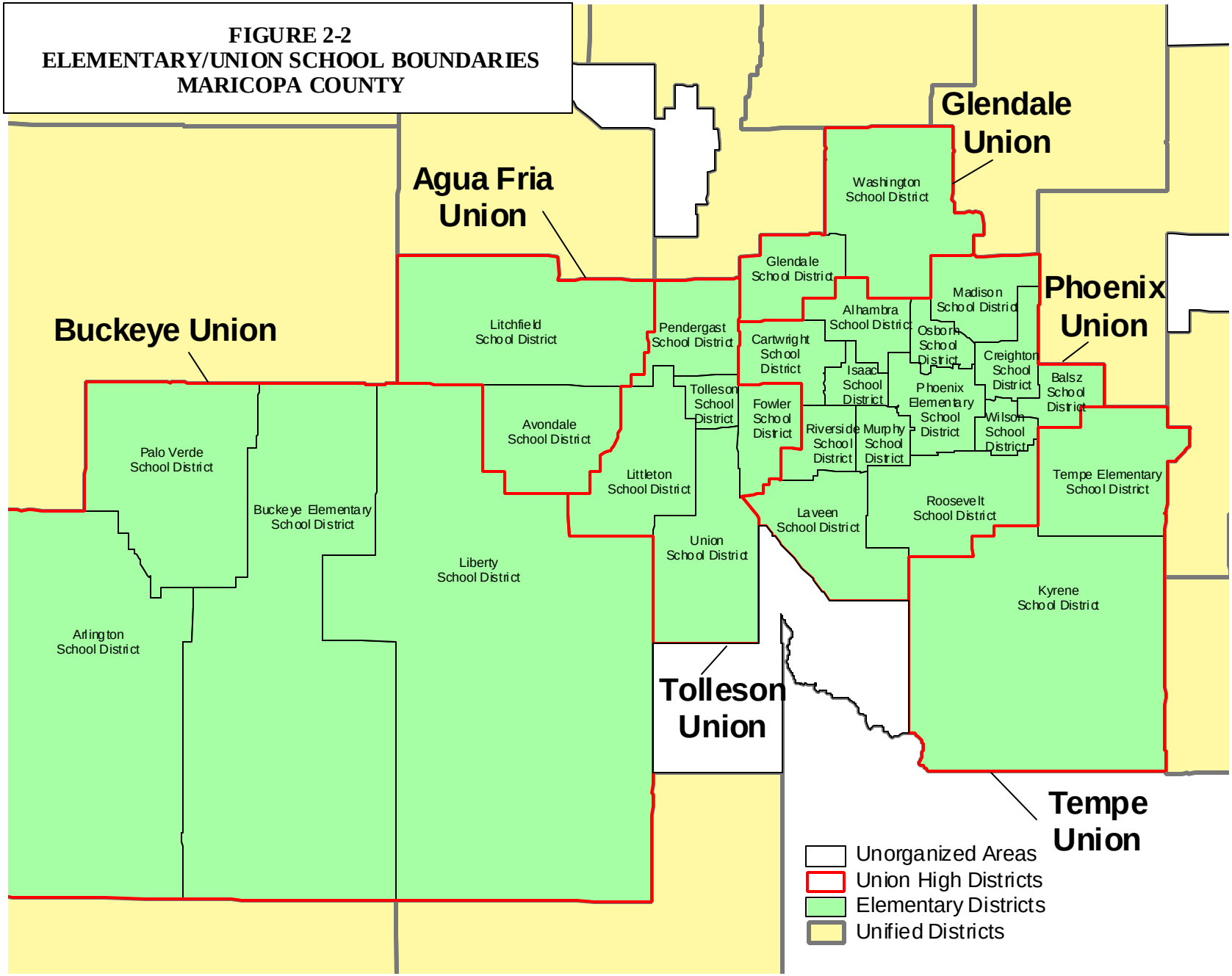


FIGURE 2-1
SCHOOL DISTRICT BOUNDARIES
MARICOPA COUNTY

FIGURE 2-2
ELEMENTARY/UNION SCHOOL BOUNDARIES
MARICOPA COUNTY



2.2 District-Level Demographic Trends

MAG TAZ-level data was used to derive population estimates and projections at the school district level. Figure 2-3 shows the 1995 population estimates and 10-year projections for each district beginning in 2000. The territorial extension of each district and its population density are also listed. The data in this table provide important details about the current demographics of the school districts and suggest some interesting trends.

While elementary school districts reflect the early trends in education, these districts are by no means uniform. The smallest and oldest elementary districts are located in the Phoenix Union High School District and may consist of little more than six square miles. These districts also have high population densities with Creighton and Isaac having over 6,400 persons per square mile in 1995. Conversely, the elementary districts in Buckeye Union High School District are quite large, most notably Arlington which extends just over 700 square miles and has a population density of 2 persons per square mile. The large rural elementary districts that are not within a union district are also quite large, with six of the seven districts showing 1995 population densities of less than 5 persons per square mile. Population density is an important indicator of future of demand for service.

Most unified districts do not have the high population density levels that some of the urban union/elementary districts have, suggesting the lower density pattern of more recent suburban development. Mesa, Scottsdale, and Paradise Valley Unified Districts have the highest population densities among the unified districts, all of which are less than 2,400 persons per square mile. Glendale Union and Phoenix Union have population densities of 4,000 and 3,000 persons per square mile, respectively. It should be noted that Kyrene and Tempe Union School Districts reflect a lower population density due to the inclusion of reservation land. The southern portions of these districts encompass the northern section of the Gila River Indian Community, a very rural area with low population density and little to no possibility for future residential development.

FIGURE 2-3
POPULATION ESTIMATES AND PROJECTIONS BY DISTRICT
MARICOPA COUNTY

	Square Miles	Population 1995	2000	2010	2020	Projected Growth 1995-2020	Population Density 1995*
AGUA FRIA UNION HS DIST 216	94.55	30,037	42,192	70,482	145,660	384.9%	318
Avondale School District 44	28.72	15,609	19,677	29,100	60,645	288.5%	544
Litchfield School District 79	65.83	14,428	22,515	41,382	85,015	489.2%	219
BUCKEYE UNION HS DISTRICT 201	1,222.27	15,093	24,513	38,470	93,537	519.7%	12
Arlington School District 47	708.11	1,502	4,500	6,303	11,498	665.5%	2
Buckeye Elem School Dist 33	187.18	7,554	10,482	13,880	35,435	369.1%	40
Liberty School District 25	261.66	4,888	8,158	16,454	43,131	782.4%	19
Palo Verde School District 49	65.31	1,149	1,373	1,833	3,473	202.3%	18
GLENDALE UNION HS DISTRICT 205	60.31	297,168	314,205	337,639	355,043	19.5%	4,927
Glendale School District 40	16.38	80,059	83,332	103,292	119,518	49.3%	4,887
Washington School District 6	43.93	217,109	230,873	234,347	235,525	8.5%	4,942
PHOENIX UNION HS DISTRICT 210	174.06	535,642	566,387	612,664	689,457	28.7%	3,077
Alhambra School District 68	12.71	71,911	75,127	77,119	77,336	7.5%	5,659
Balsz School District 31	8.81	25,799	30,429	31,008	31,250	21.1%	2,928
Cartwright School District 83	14.07	91,156	93,723	101,728	106,969	17.3%	6,481
Creighton School District 14	10.27	61,484	62,546	62,886	63,277	2.9%	5,984
Isaac School District 5	6.05	39,169	40,272	43,291	43,354	10.7%	6,470
Laveen School District 59	27.97	8,819	10,134	22,152	53,434	505.9%	315
Madison School District 38	16.28	57,340	62,797	62,956	63,130	10.1%	3,521
Murphy School District 21	6.97	14,980	15,564	16,655	17,798	18.8%	2,148
Osborn School District 8	6.88	39,519	41,701	41,764	41,836	5.9%	5,741
Phoenix Elem School District 1	15.61	59,920	63,114	65,594	68,082	13.6%	3,840
Riverside School District 2	9.46	1,879	1,884	5,589	20,633	998.1%	199
Roosevelt School District 66	32.94	58,244	63,403	75,902	95,887	64.6%	1,768
Wilson School District 7	6.04	5,422	5,693	6,020	6,471	19.3%	898
TEMPE UNION HS DISTRICT 213	163.71	267,071	301,162	349,795	366,958	37.4%	1,631
Kyrene School District 28	128.29	127,929	153,428	194,251	202,011	57.9%	997
Tempe Elementary School 3	35.42	139,142	147,734	155,544	164,947	18.5%	3,928
TOLLESON UNION HS DISTRICT 214	105.72	55,809	77,435	125,562	193,239	246.3%	528
Fowler School District 45	12.74	8,506	11,953	21,590	38,165	348.7%	668
Littleton School District 65	30.15	6,660	7,557	12,320	33,996	410.5%	221
Pendergast School District 92	18.54	33,086	47,589	75,122	95,581	188.9%	1,785
Tolleson School District 17	6.15	6,123	8,835	14,933	22,361	265.2%	995
Union School District 62	38.15	1,434	1,501	1,597	3,136	118.7%	38

* Persons per square mile.

FIGURE 2-3 (CONTINUED)
POPULATION ESTIMATES AND PROJECTIONS BY DISTRICT
MARICOPA COUNTY

	Square Miles	Population 1995	2000	2010	2020	Projected Growth 1995-2020	Population Density 1995*
UNIFIED DISTRICTS							
Cave Creek Unified District 93	143.96	16,827	31,121	69,091	95,988	470.4%	117
Aguila School District 63	283.16	156	235	781	3,524	2159.0%	1
Chandler Unified District 80	79.05	90,195	123,366	181,642	236,863	162.6%	1141
Dysart Unified District 89	125.24	22,196	36,106	51,264	72,373	226.1%	177
Fountain Hills Unif Sch Dist 9	20.73	14,103	18,725	35,215	54,950	289.6%	680
Gila Bend Unified District 24	1,162.22	1,961	2,354	3,138	5,250	167.7%	2
Gilbert Unified District 41	60.08	75,805	129,001	227,001	288,527	280.6%	1262
Higley School District 60	21.87	1,265	2,892	9,730	25,039	1879.4%	58
Mesa Unified School District 4	189.84	388,862	427,913	497,424	532,788	37.0%	2048
Mobile School District 86	250.50	13	59	287	1,565	11938.5%	0
Morristown School District 75	162.25	3,518	3,888	4,510	5,504	56.5%	22
Nadaburg School District 81	72.86	881	1,048	1,844	4,008	354.9%	12
Paradise Valley Unified Dist 69	97.24	194,296	234,564	287,816	338,989	74.5%	1998
Peoria Unified District 11	97.64	125,183	148,260	196,142	241,100	92.6%	1282
Queen Creek Unif District 95	44.47	4,176	6,852	14,682	20,830	398.8%	94
Ruth Fisher School District 90	549.51	1,570	2,889	7,093	24,767	1477.5%	3
Scottsdale Unified District 48	83.33	196,592	219,492	235,640	240,144	22.2%	2359
Sentinel School District 71	468.03	418	836	1,503	3,080	636.8%	1
Deer Valley Unified Dist 97	368.12	109,561	147,126	227,588	323,106	194.9%	298
Paloma Elementary 94	90.56	366	440	568	827	126.0%	4
Wickenburg Unified District 9	687.77	5,931	6,500	8,044	13,973	135.6%	9
Williams AFB Accom School 510	3.76	492	506	543	565	14.8%	131
UNIFIED DISTRICTS TOTAL	5,062.18	1,254,367	1,544,173	2,061,546	2,533,760	102.0%	248
ELEMENTARY/UNION TOTAL	1,820.62	1,200,820	1,325,894	1,534,612	1,843,894	53.6%	660
UNORGANIZED AREAS	1,942.40						

Sources: Maricopa Association of Governments, 2000: Applied Economics, 2001.
* Persons per square mile.

With the exception of Mesa and Scottsdale, most of the unified districts have relatively low population densities and are expected to grow at accelerated rates through 2020. Suburban unified districts such as Chandler, Dysart, Gilbert, Deer Valley and Fountain Hills all expect to experience substantial population growth through the year 2020. Population growth in the urban elementary districts is also most likely to occur in areas that currently have low population densities, most notably Laveen, Roosevelt and Riverside. Although Glendale Union and its corresponding elementary districts currently have very high population densities, significant growth through 2020 is expected, thus reflecting the intensification of the population density of the area.

2.3 Historical District Enrollment Trends

Overall, enrollment in publicly funded schools in Maricopa County increased greatly from 1995 through 2000. While education alternatives such as charter schools have increased their share of total enrollment, districts continue to educate the greatest number of students in Maricopa County. Figure 2-4 below shows the 1995 and 2000 enrollment by district and gender throughout Maricopa County. The data in this table does not include enrollment in charter schools. Total enrollment in the elementary/union districts increased 12.7 percent from 204,781 to 230,698 during the five-year period, while enrollment at the unified districts increased 23.9 percent to 260,937 students. Overall enrollment in the 55 districts grew from 417,642 to 494,093 reflecting an 18.3 percent increase.

Figure 2-4 also illustrates the differences in enrollment between rural and urban districts. Rural elementary districts such as Mobile and Sentinel have less than 35 students enrolled in 2000, while urban elementary districts such as Washington and Kyrene have upwards of 19,000 students. The Mesa Unified District is the largest with over 73,000 students; however, due to its large size, enrollment did not grow as much on a percentage base as in other suburban unified districts. Deer Valley, Peoria, Chandler, Cave Creek and Gilbert netted large increases in student enrollment, which is a direct reflection of current population growth in those areas. Since population is the primary indicator of enrollment, the population projections for these areas suggest continued significant enrollment increases over the next 20 years.

Over the 1995 to 2000 period, various union districts also experienced significant enrollment increases, most notably Tolleson and Agua Fria. However, districts with high population densities, such as Tempe Union, Phoenix Union, and Glendale Union had very low growth rates, and in some cases enrollment decreased. It should be noted that the large enrollment increase in the Higley School District is the result of the addition of a high school in 1998, thus converting the elementary district into a unified district.

FIGURE 2-4
ENROLLMENT BY DISTRICT
MARICOPA COUNTY

	1995			2000			1995-2000 Change	
District Name	Male	Female	Total	Male	Female	Total	Absolute	Percent
AGUA FRIA UNION HS DIST 216	751	720	1,471	1,168	1,087	2,255	784	53.3%
Avondale School District 44	1,445	1,307	2,752	1,658	1,506	3,164	412	15.0%
Litchfield School District 79	874	796	1,670	1,634	1,553	3,187	1,517	90.8%
BUCKEYE UNION HS DISTRICT 201	1,028	866	1,894	565	505	1,070	-824	-43.5%
Arlington School District 47	78	65	143	102	94	196	53	37.1%
Buckeye Elem School Dist 33	626	514	1,140	651	612	1,263	123	10.8%
Liberty School District 25	558	500	1,058	737	696	1,433	375	35.4%
Palo Verde School District 49	127	124	251	154	132	286	35	13.9%
GLENDALE UNION HS DISTRICT 205	6,464	6,509	12,973	6,897	6,751	13,648	675	5.2%
Glendale School District 40	5,104	4,858	9,962	6,122	5,703	11,825	1,863	18.7%
Washington School District 6	12,433	11,641	24,074	12,920	11,975	24,895	821	3.4%
PHOENIX UNION HS DISTRICT 210	10,438	10,248	20,686	11,185	10,541	21,726	1,040	5.0%
Alhambra School District 68	5,063	4,898	9,961	6,958	6,812	13,770	3,809	38.2%
Balsz School District 31	656	558	1,214	1,605	1,604	3,209	1,995	164.3%
Cartwright School District 83	8,082	7,581	15,663	9,431	9,074	18,505	2,842	18.1%
Creighton School District 14	3,567	3,333	6,900	4,124	4,002	8,126	1,226	17.8%
Isaac School District 5	3,587	3,471	7,058	4,195	4,092	8,287	1,229	17.4%
Laveen School District 59	909	903	1,812	897	845	1,742	-70	-3.9%
Madison School District 38	2,267	2,086	4,353	2,564	2,333	4,897	544	12.5%
Murphy School District 21	1,223	1,167	2,390	1,289	1,197	2,486	96	4.0%
Osborn School District 8	1,960	1,928	3,888	2,094	1,937	4,031	143	3.7%
Phoenix Elem School District 1	4,450	4,349	8,799	4,535	4,495	9,030	231	2.6%
Riverside School District 2	103	87	190	102	112	214	24	12.6%
Roosevelt School District 66	5,852	5,576	11,428	5,598	5,356	10,954	-474	-4.1%
Wilson School District 7	554	496	1,050	763	755	1,518	468	44.6%
TEMPE UNION HS DISTRICT 213	5,361	5,048	10,409	5,211	4,910	10,121	-288	-2.8%
Kyrene School District 28	8,138	7,710	15,848	10,104	9,610	19,714	3,866	24.4%
Tempe Elementary School Dist 3	6,967	6,493	13,460	6,543	6,161	12,704	-756	-5.6%
TOLLESON UNION HS DISTRICT 214	1,623	1,533	3,156	2,252	2,048	4,300	1,144	36.2%
Fowler School District 45	717	715	1,432	826	805	1,631	199	13.9%
Littleton School District 65	675	651	1,326	785	691	1,476	150	11.3%
Pendergast School District 92	2,820	2,528	5,348	3,965	3,557	7,522	2,174	40.7%
Tolleson School District 17	478	435	913	723	717	1,440	527	57.7%
Union School District 62	51	58	109	34	39	73	-36	-33.0%
ELEMENTARY/UNION TOTAL	105,029	99,752	204,781	118,391	112,307	230,698	25,917	12.7%

FIGURE 2-4 (CONTINUED)

ENROLLMENT BY DISTRICT
MARICOPA COUNTY

	1995			2000			1995-2000 Change	
District Name	Male	Female	Total	Male	Female	Total	Absolute	Percent
UNIFIED DISTRICTS								
Cave Creek Unified District 93	799	706	1,505	2,136	1,906	4,042	2,537	168.6%
Aguila School District 63	99	85	184	73	96	169	-15	-8.2%
Chandler Unified District 80	7,304	6,958	14,262	10,377	10,027	20,404	6,142	43.1%
Dysart Unified District 89	2,266	2,003	4,269	2,530	2,433	4,963	694	16.3%
Fountain Hills Unif Sch Dist 9	1,063	1,038	2,101	1,246	1,180	2,426	325	15.5%
Gila Bend Unified District 24	323	299	622	305	272	577	-45	-7.2%
Gilbert Unified District 41	7,840	7,600	15,440	14,041	13,087	27,128	11,688	75.7%
Higley School District 60	83	92	175	2,057	1,943	4,000	3,825	2185.7%
Mesa Unified School District 4	35,655	33,505	69,160	37,665	35,534	73,199	4,039	5.8%
Mobile School District 86	8	10	18	12	9	21	3	16.7%
Morristown School District 75	47	53	100	56	53	109	9	9.0%
Nadaburg School District 81	204	183	387	280	197	477	90	23.3%
Paradise Valley Unified Dist 69	15,928	15,374	31,302	17,823	16,913	34,736	3,434	11.0%
Peoria Unified District 11	13,313	12,496	25,809	16,405	15,626	32,031	6,222	24.1%
Queen Creek Unif District 95	568	521	1,089	726	699	1,425	336	30.9%
Ruth Fisher School District 90	120	133	253	169	182	351	98	38.7%
Scottsdale Unified District 48	11,862	11,449	23,311	14,050	13,228	27,278	3,967	17.0%
Sentinel School District 71	16	10	26	17	15	32	6	23.1%
Deer Valley Unified Dist 97	9,848	9,351	19,199	13,186	12,732	25,918	6,719	35.0%
Paloma Elementary 94	38	34	72	43	42	85	13	18.1%
Wickenburg Unified District 9	732	628	1,360	816	750	1,566	206	15.1%
UNIFIED DISTRICTS TOTAL	108,116	102,528	210,644	134,013	126,924	260,937	50,293	23.9%
Maricopa County Regional District	1,377	840	2,217	1,520	938	2,458	241	10.9%
GRAND TOTAL	214,522	203,120	417,642	253,924	240,169	494,093	76,451	18.3%

Sources: Arizona Department of Education, School Finance Unit, 2001; Applied Economics, 2001.

Figure 2-5 shows public enrollment by grade for the entire county in 1995 and 2000. Note that this table includes both district and charter school enrollment. From 1995 to 2000, enrollment increased for all grades, however, the amount of the growth varied significantly by grade level. Grades two, four and eight experienced the largest percentage increases, while tenth, twelfth and first grades had the smallest rate of growth. These trends may have been caused by a variety of factors. There is a fair amount of natural fluctuation in population growth in Maricopa County, as families tend to migrate to and from the area while their children are relatively young. Secondly, the dropout factor tends to have inverse impact on enrollment at the higher grades. Finally, rates of growth may also be affected inversely by charter and alternative school options, since each may target separate grade levels.

FIGURE 2-5
PUBLIC SCHOOL ENROLLMENT BY GRADE
MARICOPA COUNTY

	1995			2000			1995-2000 Change	
Grade	Male	Female	Total	Male	Female	Total	Absolute	Percent
Preschool	1,204	606	1,810	2,093	1,195	3,288	1,478	81.7%
Kindergarden	18,165	16,785	34,950	21,868	20,601	42,469	7,519	21.5%
First	18,992	17,773	36,765	22,976	21,512	44,488	7,723	21.0%
Second	17,854	17,049	34,903	22,433	21,345	43,778	8,875	25.4%
Third	17,954	16,956	34,910	22,588	21,030	43,618	8,708	24.9%
Fourth	17,687	16,728	34,415	22,024	21,353	43,377	8,962	26.0%
Fifth	16,885	16,256	33,141	21,112	20,197	41,309	8,168	24.6%
Sixth	16,978	16,284	33,262	20,644	19,675	40,319	7,057	21.2%
Seventh	16,785	15,993	32,778	20,168	19,350	39,518	6,740	20.6%
Eighth	15,768	15,053	30,821	19,928	18,991	38,919	8,098	26.3%
Ninth	16,180	15,372	31,552	19,933	18,807	38,740	7,188	22.8%
Tenth	15,015	14,166	29,181	17,822	16,886	34,708	5,527	18.9%
Eleventh	12,716	12,141	24,857	15,556	15,094	30,650	5,793	23.3%
Twelfth	11,751	11,547	23,298	14,246	14,032	28,278	4,980	21.4%
Ungraded Elementary	1,551	871	2,422	1,254	639	1,893	-529	-21.8%
Ungraded Secondary	362	49	411	1,977	1,221	3,198	2,787	678.1%
Total	215,847	203,629	419,476	266,622	251,928	518,550	99,074	23.6%

Sources: Arizona Department of Education, School Finance Unit, 2001; Applied Economics, 2001.

In general, enrollment peaks in the early grade levels and gradually declines as the students age. Note that the large increase in preschool enrollment is the result of increased spending and promotion of district preschool programs. However, the majority of preschool education is still privately funded. The decrease in ungraded elementary student enrollment reflects the trend towards mainstreaming students with learning disabilities. At the secondary level, mainstreaming of these students is much more difficult as the disparities in mental capacity become more marked.

A great deal of change in the education system in Arizona occurred between 1995 and 2000. The establishment of charter schools in 1995 and their subsequent proliferation changed the composition of publicly funded education. In 1995, district enrollment accounted for 99.5 percent of all publicly funded students and by 2000 that share dropped to about 95 with charter schools educating about 4.5 percent of students (Figure 2-6). Charter school specifics and data will be presented in the following section. Accommodation schools are run by the county and exist to serve a very small portion of the student population that does not belong to a specific district. Vocational/technical enrollment no longer composes a separate category that it did 1995, as those students are assigned to the district where they reside.

FIGURE 2-6
ENROLLMENT BY TYPE OF DISTRICT
MARICOPA COUNTY

	1995			2000			1995-2000 Change	
Type of School	Male	Female	Total	Male	Female	Total	Absolute	Percent
Accomodation school	1,377	840	2,217	1,520	938	2,458	241	10.9%
Unified district	107,501	101,928	209,429	133,363	126,330	259,693	50,264	24.0%
Elementary, not in HS district	615	600	1,215	650	594	1,244	29	2.4%
Elementary, in HS district	79,364	74,828	154,192	91,113	86,465	177,578	23,386	15.2%
High school district	25,665	24,924	50,589	27,278	25,842	53,120	2,531	5.0%
Vocational/technical	1,036	509	1,545	na	na	na		
Juvenile corrections	289	0	289	817	185	1,002	713	246.7%
State board charter school	na	na	na	4,166	3,870	8,036		
Charter board charter school	na	na	na	7,715	7,704	15,419		
Total	215,847	203,629	419,476	266,622	251,928	518,550	99,074	23.6%

Sources: Arizona Department of Education, School Finance Unit, 2001; Applied Economics, 2001.

The unified districts experienced significant absolute enrollment growth of more than 50,000 students between 1995 and 2000. Elementary districts that are not in a high school district, which are generally rural, experienced very small enrollment growth compared to elementary districts that are within high school districts. It is interesting to compare growth rates in the elementary districts to growth in their corresponding high school districts. Enrollment in the former grew over 23,000 or 15.2 percent, while union high school enrollment grew by less than 3,000 students, or 5.0 percent. This difference in growth patterns is likely the result of a combination of several demographic, sociological, and educational factors. Perhaps the large increase in the elementary student population will translate into large future increases in the union high school population. Perhaps there is currently a large high school age population that is not attending the union high schools, such as dropouts or children attending charter, private or boarding schools. Another possibility is that as their children age, families move away from the union districts into suburban unified districts.

2.4 Charter Schools

The official purpose of charter schools, as outlined by the Department of Education, is to provide additional education choices for parents.[1] Charter schools can offer kindergarten through 12th grade education although many specialize in specific grade levels and/or curricula. A charter school may have an individual mission or focus, such as Montessori pedagogy. Charter schools may also target a specific student population, such as gifted, at-risk or Indian students, or a specific subject area such as agriculture, arts or mechanical technology. They may not be parochial in nature and the general structure of charter schools varies greatly. Finally, charter schools are not subject to certain requirements that govern other public schools, yet they must comply with some provisions in order to receive state funding. There are two types of charter schools, district and charter board sponsored. District sponsored schools are run by existing school districts, such as the Higley Unified District which runs The Learning Institute. The vast majority of charter schools in Maricopa County are board or individually sponsored, which means a governing board of either a for-profit or non-profit corporation administers the schools.

Figure 2-7 provides a listing of the charter schools and their sponsors in Maricopa County. It also lists enrollment by gender. There are over 23,450 students enrolled in charter schools, representing approximately 4.5 percent of publicly funded students in Maricopa County. Of the 128 charter schools, enrollment ranges from as little as 5 to as many as 900 students. The median enrollment is 124 students and the overall mix of male and female students does not significantly vary.

The inception of charter schools in the Fall of 1995, based on 1994 state legislation, has generally had an inverse effect on enrollment in most school districts in Maricopa County, although the magnitude of the impact has been small in most cases. Many charter schools that opened immediately following legislation have closed or merged into another entity. Due to the relatively new nature of the charter schools, there is little historic data to detect any trends in charter school enrollment. Therefore, while charter schools currently represent about 4.5 percent of publicly funded schools, it is difficult to predict the future capture rate.

The effects of charter schools on district enrollment have not been uniform across all the districts because charter schools and their target population tend to vary among districts. Figure 2-8 provides the location of the 128 schools in Maricopa County. Enrollment at charter schools is in a sense open, meaning that a charter school in a certain area may not only affect enrollment in that district but draw students from other districts as well. Therefore, the effects on each district would need to be determined on an individual basis and is not included in the scope of this project.

1 Arizona Department of Education website. Accessed March 7, 2001.

FIGURE 2-7
CHARTER SCHOOL ENROLLMENT BY GENDER
MARICOPA COUNTY, 2000

Sponsor	Charter Name	2000 Male	2000 Female	2000 Total
ABC Alternative Learning Center, Inc.	Central City Academy	42	48	90
Academy Of Excellence	Academy Of Excellence	102	99	201
Accelerated Learning Center	Accelerated Learning Center (Phoenix)	87	69	156
Acclaim Charter School	ACCLAIM Charter School	139	127	266
Allen-Cochran Enterprises, Inc.	Center for Educational Excellence	61	71	132
APEX Educational Services, Inc	Summit Elementary	62	52	114
Arete School	Arete School	27	25	52
Arizona Academy Of Science And Technology	Arizona Academy of Science and Technology	33	15	48
Arizona Agribusiness & Equine Center, Inc.	Arizona Agribusiness & Equine	40	65	105
Arizona Agribusiness & Equine Center, Inc.	Arizona Agribusiness & Equine #2	13	34	47
Arizona Call-a-Teen Youth Resources, Inc.	Arizona Call-a-Teen Center for Excellence	78	73	151
Arizona Career Academy	Pinnacle High School - Mesa	94	86	180
Arizona Career Academy	Pinnacle High School - Tempe	98	100	198
Arizona Montessori Charter Schools	Arizona Montessori Charter School - Glendale	94	96	190
Arizona School For The Arts	Arizona School For The Arts	88	223	311
Ball Charter School	Dobson Academy, The - A Ball Charter School	233	207	440
Ball Charter School	Hearn Academy, The - A Ball Charter School	171	120	291
Baurau, L.L.C.	Great American Academy - Baurau Learning Center	36	22	58
Benchmark School, Inc.	Benchmark Elemenary School	30	34	64
Benjamin Franklin Charter School	Benjamin Franklin Charter School - Gilbert	243	254	497
Benjamin Franklin Charter School	Benjamin Franklin Charter School - Mesa	154	157	311
Benjamin Franklin Charter School	Benjamin Franklin Charter School - Queen Creek	243	265	508
Black Family & Child Services, Inc., Teen Choice Leadership Academy Div.	Teen Choice Leadership Academy	74	100	174
Bright Beginnings School, Inc.	Bright Beginnings School #1	116	137	253
C. I. Wilson Academy	C.I. Wilson Academy	227	251	478
Cambridge Academy, Inc	Cambridge Academy	17	23	40
Career Pathways Academy	Career Pathways Academy	44	24	68
Carmel Community, Inc.	Carmel Community Arts and Technology	47	43	90
CASY Country Day School	CASY Country Day School #1	52	64	116
CASY Country Day School	CASY Country Day School #2	26	22	48
Challenge School, Inc.	Challenge Charter School	222	274	496
Charter Foundation, Inc.	Childrens Academy of Arizona - Phoenix	93	108	201
Classical Kids Academy	Classical Kids Academy	17	22	39
Country Day Charter School, Inc.	Country Day Charter School	22	27	49
D.W. Higgins Institute	D.W. Higgins Institute	35	36	71
Dragonfleye Science, Inc.	Dragonfleye Charter School	86	60	146
Eagles Aerie Schools	Eagles Aerie School	166	153	319
East Valley Academy	East Valley Academy	7	9	16
East Valley Family & Youth Support Centers	JWJ Academy - Boys & Girls Club Campus	15	11	26
East Valley Family & Youth Support Centers	JWJ Academy - Hope Campus	111	104	215
East Valley Family & Youth Support Centers	JWJ Academy - Kinder Kampus	30	31	61
Ecotech Agricultural Charter School	Ecotech Agricultural Charter School	39	34	73
Edu-Prize, Inc.	Edu-Prize	326	300	626

FIGURE 2-7 (CONTINUED)
CHARTER SCHOOL ENROLLMENT BY GENDER
MARICOPA COUNTY, 2000

		2000		
Sponsor	Charter Name	Male	Female	Total
EduPreneurship, Inc.	EduPreneurship Student Center (ESC) Phoenix	32	38	70
EduPreneurship, Inc.	EduPreneurship Student Center (ESC) Scottsdale	49	42	91
Enterprise Academy	Enterprise Academy	80	97	177
Espiritu Community Development Corp.	NFL YET Academy	324	291	615
Florence Crittenton Services of Arizona, Inc.	Crittenton Youth Academy	1	29	30
Foothills Academy	Foothills Academy	64	42	106
Fountain Hills Charter School	Fountain Hills Charter School	120	105	225
Friendly House Academia Del Pueblo Elementary	Friendly House Academia Del Pueblo Elem	127	107	234
Future Development Education & Performing Arts Academy	Future Development Educational & Performing Arts Academy	140	137	277
Gan Yeladeem: The Looking Glass School	Gan Yeladeem: The Looking Glass School	37	40	77
Gateway Community High School	Gateway Community High School	198	184	382
Gem Charter School, Inc.	Gem Charter School	24	21	45
General Health Corp. dba Arizona Youth Associates	Copper Canyon Academy	120	81	201
General Health Corp. dba Arizona Youth Associates	Desert Pointe High School	35	13	48
Genesis Academy	Genesis Academy	50	65	115
Global Renaissance Academy of Distinguished Education	Grand Canyon College Preparatory Charter School	3	2	5
Heritage Academy, Inc.	Heritage Academy	155	204	359
Higley Unified District	Learning Institute, The	67	73	140
Higley Unified District	Life School College Preparatory - Power Rd.	1	-	1
Horizon Charter School Corp.	Horizon Charter School - Liberty	420	312	732
Horizon Charter School Corp.	Horizon Charter School - McKemy	63	40	103
Horizon Charter School Corp.	Horizon Community Learning Center	53	42	95
Humanities & Sciences Institute, Inc.	Humanities & Sciences Institute	110	95	205
Humanities and Sciences Academy of the United States, Inc.	International Commerce Institute	224	179	403
Ideabanc, Inc.	AmeriSchools Academy	204	216	420
Intelli-School, Inc.	Intelli-School - Glendale	37	52	89
Intelli-School, Inc.	Intelli-School - Main	64	58	122
Intelli-School, Inc.	Intelli-School - Metro Center	79	64	143
Intelli-School, Inc.	Intelli-School - Paradise Valley	70	52	122
International Studies Academy	International Studies Academy	116	102	218
Kachina Country Day School	Kachina Country Day School #1	98	93	191
Kachina Country Day School	Kachina Country Day School #2 (Kachina School for Arts & Sciences)	43	36	79
Keystone Montessori Charter School, Inc.	Keystone Montessori Charter School	42	36	78
Khalsa Montessori Elementary Schools	Khalsa Montessori Elementary School - Phoenix	41	48	89
Leona Group Arizona, L.L.C., The	Desert Hills High School	24	15	39
Leona Group Arizona, L.L.C., The	El Dorado High School	30	11	41
Leona Group Arizona, L.L.C., The	Estrella High School	46	29	75
Leona Group Arizona, L.L.C., The	Maya High School	249	212	461
Leona Group Arizona, L.L.C., The	Peoria Accelerated High School	162	118	280
Leona Group Arizona, L.L.C., The	Summit High School	193	171	364

FIGURE 2-7 (CONTINUED)
CHARTER SCHOOL ENROLLMENT BY GENDER
MARICOPA COUNTY, 2000

		2000		
Sponsor	Charter Name	Male	Female	Total
Leona Group Arizona, L.L.C., The	Sun Valley High School	433	255	688
Leona Group Arizona, L.L.C., The	Tempe Accelerated High School	205	145	350
Leona Group Arizona, L.L.C., The	West Phoenix High School	259	220	479
Liberty Traditional Charter School	Liberty Traditional Charter School	59	48	107
Life Enrichment Community School	Life Enrichment Community School	66	58	124
Life School College Preparatory, Inc.	Life School College Preparatory - Downtown	15	6	21
Life School College Preparatory, Inc.	Life School College Preparatory: Power Road	5	5	10
Life School College Preparatory, Inc.	LS Benchmark	18	18	36
Life School College Preparatory, Inc.	LS Legends	66	45	111
Mesa Arts Academy	Mesa Arts Academy	96	86	182
Montessori Day Public Schools Chartered, Inc.	Montessori Day Public Schools Chartered - Mountainside	131	110	241
Montessori Day Public Schools Chartered, Inc.	Montessori Day Public Schools Chartered - Scottsdale	22	24	46
Montessori Day Public Schools Chartered, Inc.	Montessori Day Public Schools Chartered - Tempe	42	36	78
Montessori Education Centre Charter School	Montessori Education Centre Charter School - Mesa	95	118	213
New Horizon School for the Performing Arts	New Horizon School for the Performing Arts	40	57	97
New School For The Arts	New School For The Arts	68	135	203
Ombudsman Educational Services, Ltd.	Ombudsman Learning Center	85	68	153
Omega Academy, Inc.	Omega Academy	256	268	524
Phoenix Advantage Charter School, Inc.	Phoenix Advantage Charter School	457	441	898
Phoenix Birthing Project dba The Village HS	Village, The: HS for Pregnant & Parenting Teens	8	172	180
Phoenix School of Academic Excellence, The	Phoenix School Of Academic Excellence	20	12	32
PPEP & Affiliates	PPEP TEC - 'Lito' Pena Learning Center	23	22	45
PPEP & Affiliates	PPEP TEC - Coy Payne Learning Center	27	33	60
Right Step, Inc.	Right Step Academy - Phoenix	65	58	123
Right Step, Inc.	Right Step Academy - Tempe	26	32	58
S.A.G.E. (School for the Advancement of Gifted Education)	School for the Advancement of Gifted Education (S.A.G.E.)	80	67	147
Salt River Pima-Maricopa Indian Community Schools	Desert Eagle Secondary School	68	65	133
Scottsdale Horizons Charter School	Horizons Midtown Charter School	27	26	53
Scottsdale Horizons Charter School	Peoria Horizons Charter School	49	42	91
Scottsdale Horizons Charter School	Scottsdale Horizons Charter School	70	67	137
Scottsdale Horizons Charter School	Tempe Horizons Charter School	10	18	28
Sequoia Schools, L.L.C.	Sequoia Choice Schools	61	72	133
Sonoran Desert School	Sonoran Desert School	17	30	47
Stepping Stones Academy	Stepping Stones Academy	42	39	81
Tempe Preparatory Academy	Tempe Preparatory Academy	85	113	198
Tertulia: A Learning Community	Tertulia: A Learning Community #1 (6th Avenue)	79	68	147
Tertulia: A Learning Community	Tertulia: A Learning Community #2 (YMCA)	35	32	67
Twenty First Century Charter School, Inc.	Bennett Academy, The	52	42	94
Valley Academy, Inc.	Valley Academy	242	298	540
Ventana Academic Charter School	Ventana Academic School	34	31	65
Victory High School, Inc.	Victory High School - West Campus	10	15	25

FIGURE 2-7 (CONTINUED)
CHARTER SCHOOL ENROLLMENT BY GENDER
MARICOPA COUNTY, 2000

		2000		
Sponsor	Charter Name	Male	Female	Total
Villa Montessori Charter School	Villa Montessori - Phoenix	182	193	375
Villa Montessori Charter School	Villa Montessori - Scottsdale	28	27	55
Westwind Academy	Westwind Academy	89	116	205
Wilson Charter High School	Wilson High School	99	114	213
Total		**11,881**	**17,574**	**23,455**

Source: Arizona Department of Education, School Finance Unit; Applied Economics, 2001.

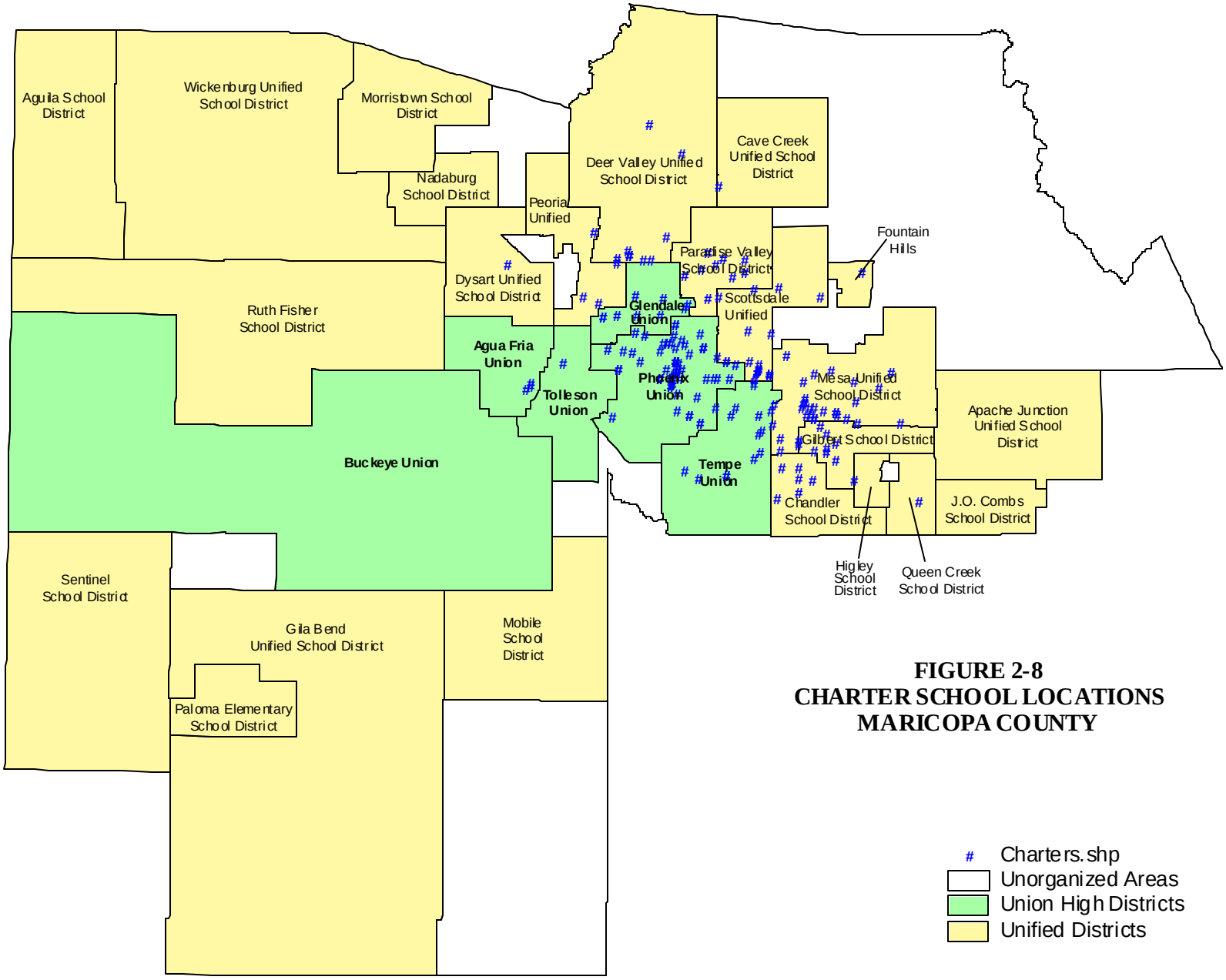


FIGURE 2-8
CHARTER SCHOOL LOCATIONS
MARICOPA COUNTY

3.0 CAPITAL FUNDING

This chapter presents a brief overview of capital funding for education in Arizona. The School Facilities Board (SFB) oversees the capital funding for all districts to ensure uniform facilities are available, regardless of the wealth and property tax contributions of each district. The Board was created in 1998 as the result of a court decision declaring the previous school funding system unconstitutional. This chapter details the general mechanism of capital funding and the standards used in determining capital expenditures. It also includes a brief discussion of current land inventory donated to the districts for education site construction.

The Students FIRST (Fair and Immediate Resources for Students Today) legislation was signed into law in July 1998, paving the way for the correction of deficiencies in existing schools, building renewal and new school construction. The programs are financed by state sales tax and provide schools with basic capital infrastructure according to adequacy guidelines. The concept of Students FIRST is fundamental, because it relieves the burden on individual districts to generate local funding through bond elections, general property tax and overrides in order to finance capital structures for education. Through this legislation, state sales tax is distributed on an equal basis to wealthy and poor districts alike throughout the state based on facility needs. The three components of Students FIRST are designed to not only address current inequalities among schools statewide, but also to provide minimum standards for new construction wherever it may occur.

3.1 Standards

The deficiencies correction and building renewal programs standardizing school facilities statewide must be completed by July 2003. General guidelines for all schools include standards that range from building regulations such as air conditioning and basketball courts, to instructional capital such as computers, Internet access and library books. The capital funding does not provide for expenditures deemed to be nonessential to educational instruction. Therefore, funding may exclude playground equipment (if not used for physical education), hot water in laboratories, aesthetic interior or exterior construction and parking spaces beyond the requirement. The deficiency and renewal clauses were designed to provide poorer districts with limited property tax collections the ability and incentive to improve the basic capital structures necessary to educational instruction.

The School Facilities Board provides financing for the construction of new facilities employing these guidelines and standards. This is especially important for growing districts whose population is increasing at rates much higher than other areas. The most important factors in the capital funding equation are projected enrollment and minimum required square feet per pupil. The standards vary depending on the location, size and grade level of the schools in each district and account for higher construction costs in rural areas (Figure 3-1). The cost per square foot determines the amount of funding available for the construction of new facilities. High schools require the greatest amount of square feet per pupil and also have the highest allotted cost per square foot.

FIGURE 3-1

CAPITAL FACILITIES FUNDING STANDARDS
STATE OF ARIZONA

Grade Level	Square Feet per Pupil	Cost per Square Foot Urban	Cost per Square Foot Rural
K-6	90	$97.43	$102.30
K-8	92.4	$98.71	$103.65
6-8	97	$101.04	$106.09
7-8	100	$102.85	$108.00
9-12 (< 1,800 pupils)	134	$119.09	$125.04
9-12 (> 1,800 pupils)	125	$119.09	$125.04

Source: Arizona School Facilities Board, May 2001.

Projected enrollment is also a key factor for determining new school funding. Each individual district must provide ten-year enrollment projections to the SFB as a basis for current and future funding. Table A in the Appendix lists the enrollment projections by district and grade level for most school districts. Note that these figures will not form the base for the enrollment projections in Phase II, due to the different enrollment projection techniques employed by each individual district.

3.2 Site Acquisition

The School Facilities Board also undertakes the task of land acquisition for new school sites, which takes place in three steps. The first includes land donations, typically by residential subdivision developers or municipalities. According to Dr. Philip Geiger, director of the SFB, the Board pursues land donations from developers first as a part of a moral obligation that residential developers have to future residents.[2] The second approach for land acquisition is through the lease or purchase of land from the state trust. The final method, employed if other options prove futile, is the purchase of land from private landholders.

In most cases, developers address the education needs of residents and donate land. The current number of acres and land value of donated land in Maricopa County varies across districts (Figure 3-2). As would be expected, in growing districts there is a significant amount of land donation although the property values vary by market area and improvement status. Improved land generally has basic infrastructure in place including streets, water, sewer, telecommunications and other utilities. In the Deer Valley Unified District there are five sites donated encompassing over 88 acres with a value of over $16 million, while in Dysart over 177 acres have been donated with an assessed value of only $5.8 million. Note that the value of the donation varies across the county – 10.1 acres donated by a developer in the rural Nadaburg Elementary District has a value of only $120,000. It should also be noted that a developer is under no legal obligation to donate land for schools, which could create problems for certain districts with high growth expectations such as Gilbert and Cave Creek. If no land is donated for education, the SFB could end up paying an inflated amount to purchase land from private landowners.

2 Dr. Philip Geiger. Stakeholders Meeting, Cave Creek Unified School District. June 7, 2001.

FIGURE 3-2
LAND DONATIONS BY DISTRICT
MARICOPA COUNTY

District	Number of Sites	Acreage	Land Value	
			Improved	Unimproved
Avondale Elementary	3	39.6		$1,734,000
Buckeye Union	1	45.3		$2,770,000
Buckeye Elementary	3	10.6	$424,165	
Chandler Unified	1	10.0	$1,090,000	
Deer Valley Unified	5	88.7	$16,566,432	
Dysart Unified	9	177.2	$3,796,608	$1,999,000
Fowler Elementary	1	12.0	$2,585,000	
Gilbert Unified	2	15.0	$1,650,000	$434,673
Higley Unified	2	38.7	$3,110,000	$510,192
Laveen Elementary	1	15.5		$620,000
Litchfield Elementary	2	26.4	$1,882,826	
Littleton Elementary	1	9.5	$475,538	
Nadaburg Elementary	1	10.1	$120,000	
Paradise Valley Unified	1	9.3	$1,624,000	
Queen Creek Unified	2	24.2	$1,865,000	
Tolleson	1	20.0		$1,600,000
Wickenburg Unified	1	20.0	$700,000	
Total	**37**	**572.1**	**$35,889,569**	**$9,667,865**

Source: Arizona School Facilities Board, May 2001.

While a district can only receive funding for basic capital improvements and new construction through the School Facilities Board, each district also maintains the ability to raise local funds through limited general obligation bonding and capital overrides. Depending on the decision of the electorate in each district to increase capital funding through increased property taxation, it is possible for some districts to have higher levels of capital funding in spite of the legislation to provide equalization. However, the Students FIRST initiative through the SFB guarantees minimum spending standards for capital projects throughout the state.

4.0 OPERATIONS FUNDING

Even though operations for education are publicly funded and property tax is generally considered the main revenue source, it is difficult to attribute specific tax revenues to education. There are several mechanisms used to equalize spending across the districts statewide. Most operation and maintenance funding is dispersed based on student enrollment and type of district. As seen in the previous section, capital funding is also equalized through the School Facilities Board. Equalization prevents districts with a less affluent tax base from receiving less funding, and hence, inferior quality education services. The first section in this chapter discusses overall funding sources and expenditures at state, county and district levels. The second section presents the property valuations by district in Maricopa County thus providing an overall view of the nature of the property tax base in each district.

4.1 Funding Sources and Expenditures

Total school district funding comes from four different levels – federal, state, county and local. Figure 4-1 shows the total operating revenues as well as the share of source contributions by type of district. Federal funds, as well as many state funds, are administered by the state for the purpose of special programs such as the Class Size Reduction, Johnson-O'Malley program for American Indian students and Drug Free Schools among many others. While the majority of state revenues comes from the general fund and helps balance out additional spending required at the district level, local funding is based primarily on property tax collections. Finally, county revenues refer to the spending required to run the county regional district and accommodation schools.

Before fiscal year 1995-1996, districts were the only entity to receive state funding as shown in Figure 4-1. However, the 1995-96 data onward accounts for charter school funding, which is financed and distributed using different mechanisms than those used for districts. During fiscal year 1999-2000, district and board-funded charter schools received about 3.5 percent of all education revenues statewide. Districts received the overwhelming majority of funding, which came largely from local and state sources. Federal funding has accounted for 7 to 8 percent of district spending since 1995, while local and state sources account for between 40 to 50 percent of funding.

Education funding varies throughout the state, with respect to the diverse economic, geographic and demographic sources and needs in each county. In Maricopa County in 1999-2000, local sources provided 47.04 percent of the revenues, followed by state, federal and county sources, each contributing 45.29, 4.77 and 2.9 percent, respectively.[3] In some counties, federal and state funding account for much larger portions of total funding, up to 44 and 63 percent, respectively. Local source contributions as a share of total in Maricopa County are among the highest in the state. Note that the expenditure data included in this chapter does not include special bonding or capital overrides funded at the district level.

3 Arizona Department of Education. "Superintendent's Annual Report." October, 2000.

FIGURE 4-1
PERCENT REVENUE BY SOURCE
ARIZONA EDUCATION FUNDING

Fiscal		Total	Distribution by Source				
Year	Recipient	Revenues	Federal	State	County	Intermediate	Local
1990-91	Total	2,826,107,000	6.50%	45.60%	3.90%		44.00%
1991-92	Total	3,021,949,000	6.50%	45.30%	3.80%		44.40%
1992-93	Total	3,151,501,000	6.30%	44.60%	4.70%		44.40%
1993-94	Total	3,290,684,000	7.00%	44.80%	3.90%		44.30%
1994-95	Total	3,486,916,000	7.00%	47.80%	3.30%		41.90%
1995-96	District	3,808,086,499	7.00%	47.20%	3.10%		42.60%
1995-96	Charter	35,495,925	2.60%	96.90%	0.00%		0.50%
1995-96	Total	3,843,582,424	7.00%	47.70%	3.10%		42.20%
1996-97	District	3,974,660,831	7.20%	48.10%	3.10%		41.60%
1996-97	District Charter Schools	11,523,428	0.80%	44.00%	0.00%	2.80%	52.40%
1996-97	Board Charter Schools	65,945,215	5.50%	88.10%	0.00%	2.90%	3.50%
1996-97	Total	4,052,129,474	7.20%	48.80%	3.00%		41.00%
1997-98	District	4,286,437,065	8.13%	46.97%	3.00%		41.89%
1997-98	District Charter Schools	18,812,464	45.42%	0.23%	0.00%	0.00%	54.36%
1997-98	Board Charter Schools	104,015,724	9.67%	83.45%	0.00%	1.45%	5.42%
1997-98	Total	4,409,265,253	8.33%	47.64%	2.92%	0.03%	41.08%
1998-99	District	4,991,796,831	7.67%	44.34%	2.68%		45.31%
1998-99	District Charter Schools	15,831,861	5.11%	26.32%	0.00%	0.00%	68.57%
1998-99	Board Charter Schools	149,173,733	4.32%	84.22%	0.00%	0.35%	11.11%
1998-99	Total	5,156,802,425	7.57%	45.43%	2.59%	0.01%	44.39%
1999-00	District	5,264,801,274	8.56%	47.15%	2.70%		41.59%
1999-00	District Charter Schools	30,248,324	7.17%	6.00%	0.00%	0.05%	86.78%
1999-00	Board Charter Schools	163,337,837	6.30%	86.72%	0.00%	0.25%	6.73%
1999-00	Total	5,458,387,435	8.48%	48.11%	2.60%	0.01%	40.80%

Source: Arizona Department of Education. "Superintendent's Annual Report." October, 2000.

While federal funds are awarded on an individual program and district basis, state and local monies are subject to an equalization formula designed to adequately and fairly distribute revenues among the districts. Equalization prevents wealthy districts from receiving operations funding exceedingly higher than poorer districts. For example, the Scottsdale Unified District may generate very high tax revenues because of higher tax rates and values of the property, sales and income tax, while a poorer district such as Paloma may generate much less because of low property values and limited economic activity. The equalization formula is a complex equation based on several factors, including student head count, transportation time, teacher experience, assessed value, soft capital outlay and other factors and is determined on a district by district basis.

Current expenditures, as shown in Figure 4-2, are funding intended to cover operational cost with amounts ranging from $3,005 to $7,392 per student. Similar to the funding for capital expenses, current expenditure funding accounts for the variation in expenditure costs between district types. The current expenditures provide a base by five categories associated with operations for the individual equalization formula of each district.

Spending on classroom instruction is the largest line item representing 50 to 60 percent of operations spending; it makes up the smallest share in unified and accommodation districts and the largest share in elementary districts not within a high school district. The share of expenditures for administration ranges from 11 to 20 percent, while service spending accounts for between 24 and 35 percent of expenditures. This chart reinforces the need for the consideration of district type in the equalization process since the spending needs for each type of district are unique. For example, rural districts generally have much higher costs per pupil because of smaller student populations and higher transportation costs. Table 2 in the Appendix provides the exact amount of current expenditures by district for the 55 Maricopa County school districts.

4.2 Property Values

Another factor vitally important in the equalization process is the consideration of assessed value, which provides a significant portion of education funding through property taxes. Operations funding is derived from a variety of sources, as seen in Figure 4-1. Likewise, state, county and local sources also receive their funding from a variety of sources including federal and state grants, income tax, property tax and sales tax. It is very difficult to isolate a single funding source and attribute those contributions directly to operations expenditure for education. One reason for this is that the two biggest entities that fund education, state and local, come out of a common pool of funds comprised of various sources. Another reason is the equalization formulas of education spending distribute operational funds equally across the state.

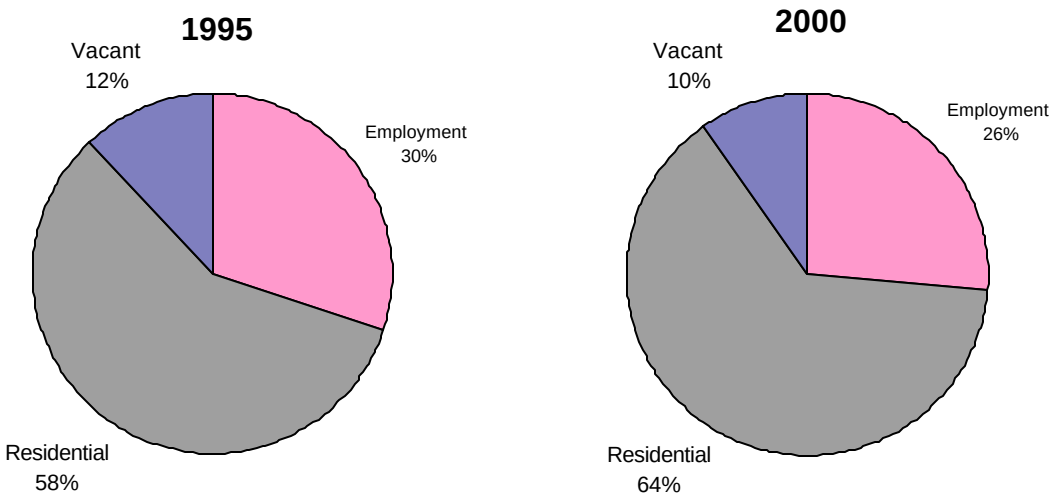
Despite this, local property tax collections are the key source of funding in education and can be important to individual districts for overrides. Primary and secondary property tax collections throughout Maricopa County are collected on behalf of six major taxing jurisdictions; state, county, cities and towns, community colleges, schools and other agencies receive a portion of the total property tax levied. Note that in Maricopa County, the state does not levy a secondary property tax and other agencies do not levy a primary tax. Schools receive the majority of primary and secondary tax collections. In both 1999 and 2000, schools received 60 percent of the primary and 64 percent of secondary tax collections in Maricopa County.[4] The $1.48 billion in property taxes collected in Maricopa County for schools correspond to about 99.78 percent of total local education funding. Therefore, it is worthwhile to examine the composition of the property tax base across the districts in Maricopa County since future growth and valuation of properties will invariably affect school funding.

Figures 4-3 and 4-4 show the full cash value of the properties within each school district in Maricopa County for 1995 and 2000, respectively. Due to the large and diverse nature of Maricopa County, school districts have varying property types and values. Therefore, property value here is classified into three general land use categories: residential, employment and vacant. Residential denotes values of residential properties, while employment encompasses all land use categories that generate employment, such as office, industrial and retail. Vacant refers to vacant land, open space and agricultural land. This particular classification system is used because both vacant as well as agricultural land are not closely tied to the level of population or employment.

4 Arizona Department of Revenue. "Annual Report." October, 2000.

The 2000 full cash values of property in incorporated school districts in Maricopa County are distributed as follows: 64 percent residential, 26 percent employment-based and 10 percent vacant land (Figure 4-5). A larger portion of the total value is now attributed to residential land than in 1995. This degree of change in only a five-year period is the result of several factors. First, existing properties that in the past had much lower values have received more accurate valuation under recent assessments, attributing higher values to older residential and employment properties within Maricopa County. At the same time, assessment of vacant land occurs relatively infrequently compared to assessments of other land types, and its value may not reflect the same increase patterns of residential or employment uses. When these two factors are coupled with the rapid residential growth and in-fill Maricopa County experienced from 1995 through 2000, they result in changes in the composition of assessed value.

FIGURE 4-5
FULL CASH VALUE BY LAND USE
MARICOPA COUNTY

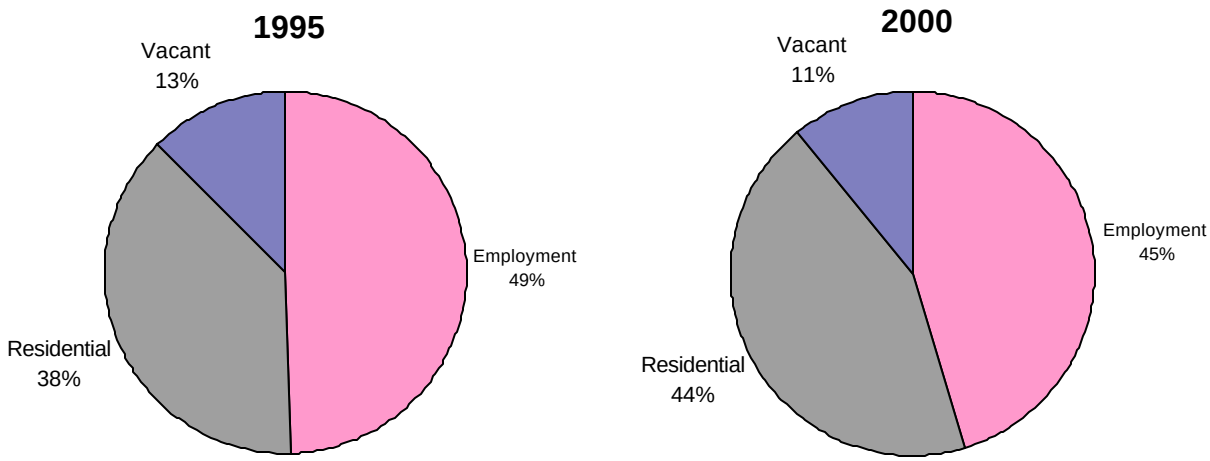


Sources: Arizona Department of Revenue, 2000; Applied Economics, 2001.

While the total full cash property value in Maricopa County shows residential development composing the majority, it is important to compare the land use composition with assessment rates in order to determine the actual tax contribution of each category. Employment-generating properties are taxed at 25 percent of value, residential at 10 percent and vacant land at 16 percent. When examining the assessed value contribution of each land use, the distribution looks much different. As shown in Figure 4-6, despite a smaller amount of total taxable land, employment land uses generate the most amount of assessed value because of the higher assessment ratio. Figure 4-6 also reinforces the finding that residential property not only increased in full cash value, but also in the share of tax contributions during the five-year time period from 1995 to 2000.

FIGURE 4-6
ASSESSED VALUE BY LAND USE

MARICOPA COUNTY



Sources: Arizona Department of Revenue, 2000; Applied Economics, 2001.

In order to gauge the small area impact of growth on school districts, it is important to examine district level property values. Rarely do school districts have an even balance of property values across all the three property categories, as indicated in Figures 4-3 and 4-4. Property values in rural districts tend to be largely comprised of vacant and employment land uses while urban areas typically have large shares of residential and employment properties. For example, in rural districts such as Arlington and Mobile, the share of residential assessed property value is much smaller than the industrial or vacant shares. However, tax revenues collected from vacant or other lands typically compensate for the lack of residential property tax generation. The opposite may be true in urban districts, and those with high population densities where vacant land is scarce.

The district with the highest property value is the Scottsdale Unified District reporting a 2000 full cash property valuation of over $21.97 billion, of which 75 percent is attributed to residential uses. Note that Scottsdale also has a larger territorial extension than many other urban districts. In fact, most suburban unified districts have residential properties accounting for 70 percent or more of the total property valuation. In contrast to the highly residential suburban areas, the composition of land uses as well as the total valuation in rural districts varies widely, depending on the specific type of development in each. For example, the Paloma School District has the lowest valuation of any school district in Maricopa County reporting only $21.8 million in property value. Vacant land in Paloma accounts for the largest share of property values, while residential and employment together compose only 13 percent. The Mobile School District, with 2000 property values of only $22.7 million, has employment uses representing 44 percent of total property values. This is because of the presence of large landfills and other heavy industry uses in the district, classified under employment, that generate a substantial amount of property tax. Another interesting rural case is the Ruth Fisher School District, with 2000 property value of $5.3 billion, much larger than surrounding rural districts. Although the value of employment land has gone down by $1.0 billion since 1995, the value of the Palo Verde Nuclear Plant greatly outweighs the values of residential and vacant land in the district.

Examining the total amount of property values can be misleading because it does not reflect the relative size of each district. Residential land use valuations with respect to the total population of a district better reflect the property tax contribution per resident in the district. The average and median 2000 residential value per person

rates are $26,696 and $20,478, respectively. The highest rate of residential value per person in Maricopa County in 2000 is found in Cave Creek Unified District, with over $123,000 of residential property per person. As expected, rural districts have the lowest per capita values because of the lower property values associated with rural land.

Values generated by employment land uses vary widely across school districts in Maricopa County, since the amount and share of employment generating land uses also differ. The 2000 full cash values generated by employment land uses divided by district employment provides a measure of property tax contributions generated per employee. The median rate is $23,287 of property value per employee. The highest rates are seen in the Ruth Fisher and Mobile school districts with the nuclear power plant and the landfills. These uses generate large amounts of property value and require few employees. Districts with the lowest rates per employee are Higley Unified, Buckeye Elementary and Litchfield Elementary whose low rates are due to the low taxable property values coupled with more employment per acre.

The rates per resident and per employee provide an understanding of the nature of property tax contributions in Maricopa County. The data should not be interpreted in isolation from enrollment data, because even though many rural districts have property values lower than urban and suburban districts, these schools also have lower enrollment and smaller budgets. While the exact connection between property tax burden and school funding cannot be established because of many factors, the data derived from these tables can be helpful in determining future property values on a district level. This is essential for calculating the impact of growth on schools over the next 40 years in Phase II of this project.

APPENDIX A
SUPPLEMENTARY TABLES