



FutureThink

Formerly DeJONG-HEALY

FINAL REPORT



School Facilities
Commission

Shaker Heights City School District

Cuyahoga County

Enrollment Projections

December 5, 2014

Shaker Heights City School District

INTRODUCTION

Based on a request from the Ohio School Facilities Commission, **FutureThink** was contracted to develop enrollment projections for the Shaker Heights City School District.

This report contains ten-year enrollment projections, which were developed for the Shaker Heights City School District by analyzing the following data:

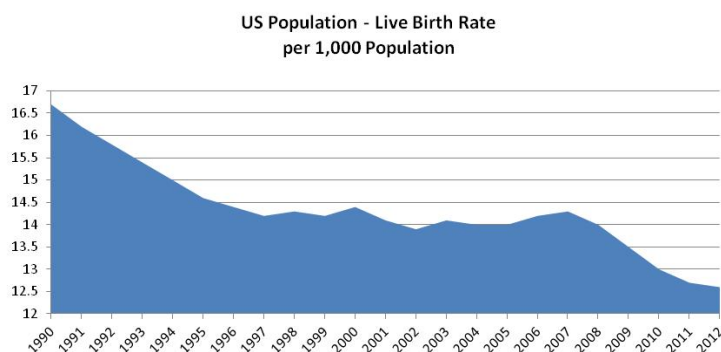
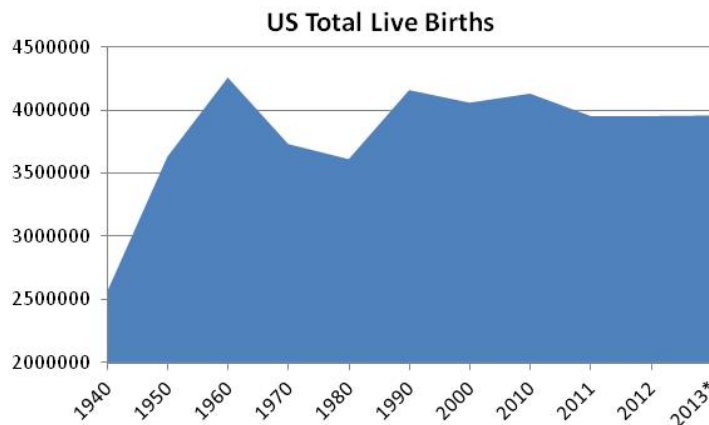
- ▶ Live birth data
- ▶ Historical enrollment
- ▶ Community school enrollment
- ▶ Open enrollment
- ▶ Community demographics
- ▶ Housing information

The projections presented in this report are meant to serve as a planning tool for the future and represent the most likely direction of the District.

Shaker Heights City School District

NATIONAL & OHIO TRENDS IN ENROLLMENT

Tracing the landscape of the country's public school enrollment back over the past seventy years reveals demographic, economic, and social changes. The United States as a whole continues to undergo major shifts in public student enrollment. The baby boom of the late 1940s and 50s was followed by the baby bust of the 1960s and 70s. An "echo" baby boom occurred in the 1980s, which then was followed by the echo baby bust from 1990 to 2000.

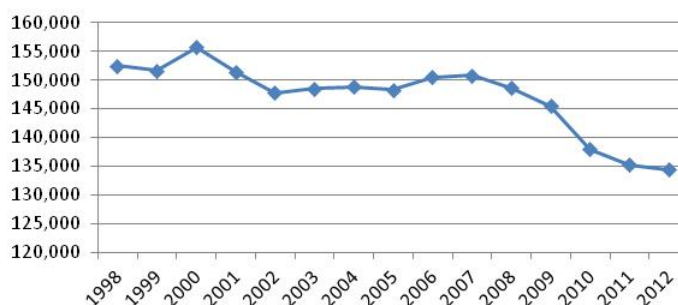


There was a slight uptick from 2000 to 2010. Since 2011, the total number of births has been relatively flat.

With the live birth rate, there was an increase for the first time in several years in 1998. Another increase occurred in 2000. However, the birth rate resumed a descending pattern in 2011 and reached an all-time low in 2012.

Ohio has experienced the same trend in live births as seen around the country. Live birth counts increased in 2000. A descending pattern resumed in 2001 with a slight stabilization from 2002 to 2005. Births increased slightly again in 2006 and 2007 but have since declined to an all-time low of 134,443 in 2012.

Ohio Live Birth Counts

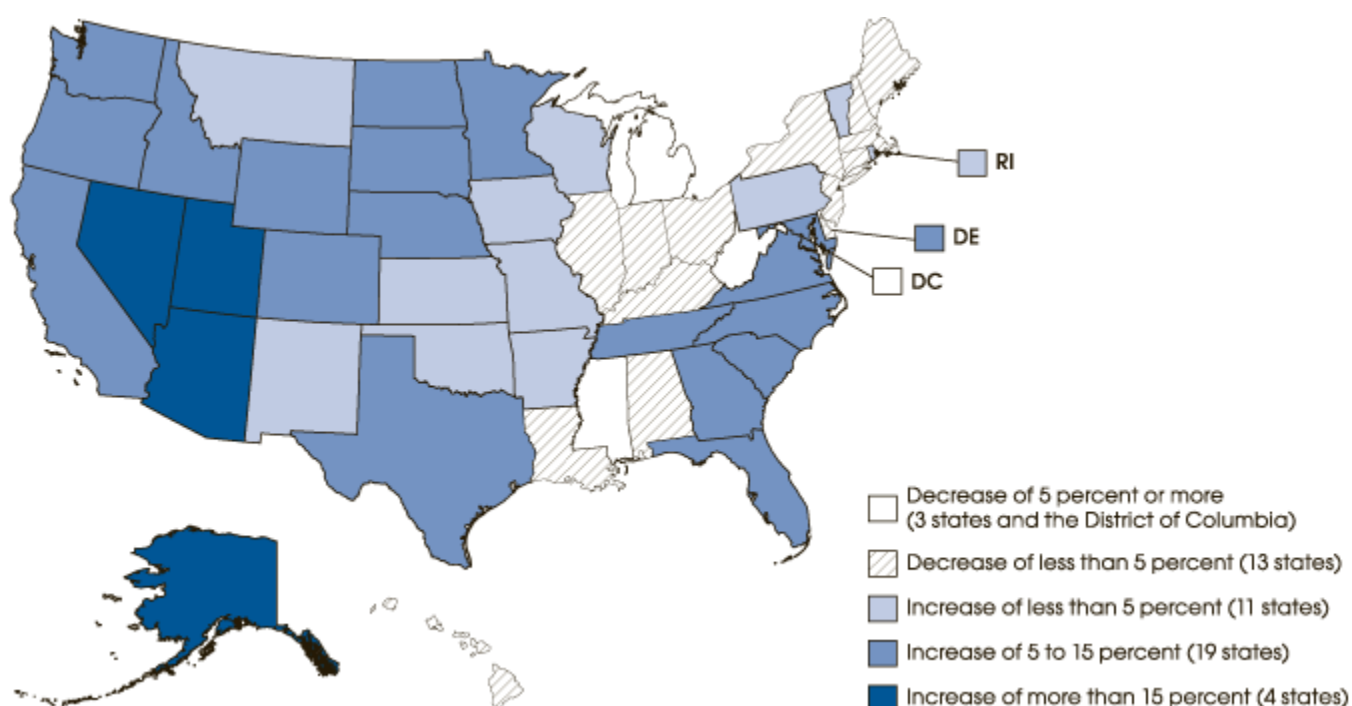


Shaker Heights City School District

In addition, to births dropping in Ohio, the state is also aging. The median age in 2013 was 39.3 years of age while the national median age is 37.2 years. In 2010, the median age in Ohio was 38.3 years.

Public school enrollment reflects the changes occurring in births. In 2011-12, approximately 49.5 million students were enrolled in grades PreK-12 in the United States. From 2000-01 to 2011-12, enrollment increased by 2.3 million students. Overall, enrollment is projected to increase by approximately 5 percent by the 2023-24 school year.

The figure below illustrates the projected change in PreK-12 public school enrollment from the 2011-12 to the 2023-24 school year. Growth is expected to continue primarily in the south and west. Decline is projected in the Midwest and northeast with a few exceptions.



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2011-12; and Public State Elementary and Secondary Enrollment Model: 1980-2012. See *Digest of Education Statistics 2013*, [table 203.20](#).

Shaker Heights City School District

In Ohio, enrollment has declined steadily for both public and non-public school enrollment. From 2003-04 to 2013-14, public school enrollment declined by over 84,000 students or approximately 5 percent statewide.

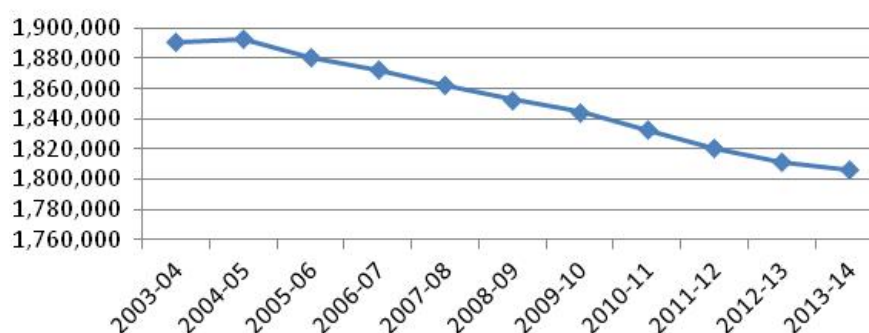
Ohio Public School Enrollment 2003-04 -2013-14

Year	October Headcount*
2003-04	1,890,588
2004-05	1,892,490
2005-06	1,880,426
2006-07	1,872,435
2007-08	1,862,582
2008-09	1,852,542
2009-10	1,844,447
2010-11	1,832,832
2011-12	1,820,312
2012-13	1,811,532
2013-14	1,806,267

Source: Ohio Department of Education

*includes grades K-12 and ungraded

Ohio Public School Enrollment



Shaker Heights City School District

For that same time period, private school enrollment has declined by approximately 49,000 students or 26 percent.

Ohio Chartered Non-Public School Enrollment

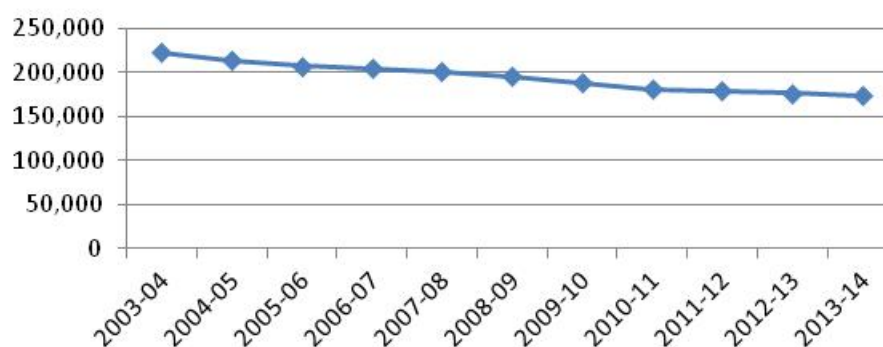
2003-04 - 2013-14

Year	October ADM*
2003-04	222,830
2004-05	213,312
2005-06	207,054
2006-07	204,402
2007-08	200,598
2008-09	195,343
2009-10	187,994
2010-11	181,420
2011-12	178,702
2012-13	176,166
2013-14	173,966

Source: Ohio Department of Education

*includes grades K-12

Ohio Non-Public School Enrollment



Shaker Heights City School District

Out of 613 school districts, only 166 gained enrollment from the 2003-04 to the 2012-13 school year. Approximately 73% of school districts lost enrollment over the 10 years. Approximately 50% of these districts lost less than 10 percent.

Districts with the biggest loss of students were urban school districts.

For those districts that gained enrollment, 50% increased by less than 5 percent. Of the 10 districts with the greatest increase in students, six are located in Central Ohio, and most are considered suburban districts.

Looking at the change over five years, 142 districts (23%) increased in enrollment, 466 decreased (76%), and 5 stayed the same (1%). Of the districts that lost enrollment, 82% declined less than 10 percent.

Districts with the biggest losses were still primarily the urban school districts.

For those districts that gained over 5 years, 80% increased by less than 10 percent. Of the 10 districts with the greatest increase in students, 8 are located in Central Ohio, and most are considered suburban districts.

Analyzing enrollment from a county perspective, only 11 of the 88 counties in Ohio gained enrollment from 2003-04 to 2012-13. Of those, 7 gained less than 10 percent. Delaware County grew by almost 60 percent.

County	Percentage Loss/Gain
Knox	0.09%
Pickaway	1.16%
Clinton	1.24%
Madison	1.26%
Butler	3.46%
Licking	5.66%
Fairfield	6.69%
Union	10.27%
Warren	18.96%
Adams	29.68%
Delaware	59.72%

Source: Ohio Department of Education

Cuyahoga County had the highest percentage loss of students at 21 percent. There were 32 counties that experienced a decline of greater than 10 percent. These counties are listed in the table on the following page.

Shaker Heights City School District

County	Percentage Loss/Gain
Cuyahoga	-21.23%
Carroll	-19.27%
Harrison	-18.80%
Noble	-18.34%
Lucas	-18.10%
Coshocton	-15.30%
Marion	-15.29%
Mahoning	-15.08%
Guernsey	-14.92%
Ashtabula	-14.83%
Richland	-14.57%
Trumbull	-13.87%
Washington	-13.52%
Columbiana	-13.35%
Erie	-13.07%
Clark	-11.93%
Paulding	-11.86%
Williams	-11.85%
Seneca	-11.59%
Putnam	-11.58%
Fulton	-11.46%
Ottawa	-11.37%
Geauga	-11.33%
Huron	-11.10%
Hamilton	-10.97%
Summit	-10.86%
Jefferson	-10.85%
Hardin	-10.74%
Ashland	-10.42%
Crawford	-10.38%
Mercer	-10.32%
Portage	-10.05%

Source: Ohio Department of Education

Shaker Heights City School District

ENROLLMENT PROJECTION METHODOLOGIES

When projecting future enrollments, it is vital to track the number of births, the patterns of enrollment, the amount of new housing activity, and the change in household composition.

In addition, any of the following factors could cause a significant change in projected student enrollments:

- ▶ Boundary adjustments
- ▶ New school openings
- ▶ Changes/additions in program offerings
- ▶ Preschool programs
- ▶ Change in grade configuration
- ▶ Interest rates/unemployment shifts
- ▶ Magnet/charter/private school opening or closure
- ▶ Zoning changes
- ▶ Unplanned new housing activity
- ▶ Planned, but not built, housing

Obviously, certain factors can be gauged and planned for far better than others. For instance, it may be relatively straightforward to gather housing data from local builders regarding the total number of lots in a planned subdivision and calculate the potential student yield. However, planning for changes in the unemployment rate, and how these may either boost or reduce public school enrollment, proves more difficult. In any case, it is essential to gather a wide variety of information in preparation for producing enrollment projections.

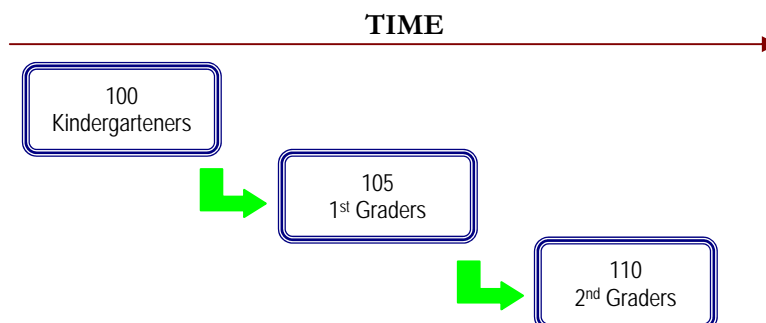
When looking ahead at a school district's enrollment over the next two, five, or ten years, it is helpful to approach the process from a global perspective. For example: How many new homes have been constructed each year? How many births have occurred each year in relation to the resident population? Is housing experiencing a turnover – if so, what is the composition of families moving in/out? Are more or less students attending private school or being home-schooled? What new educational policies are in place now that could affect student enrollment figures?

The data sets generated from questions such as these have led to the development of general methodologies to project future student enrollments. They are as follows:

Shaker Heights City School District

Cohort Survival Method

A cohort is a group of persons [in this case, students]. The cohort survival projection methodology uses previous live birth data and historical student enrollments to “age” a known population or cohort throughout the school grades. For instance, a cohort begins when a group of kindergarteners enrolls in grade K and moves to first grade the following year, second grade the next year, and so on.



A “survival ratio” is developed to track how this group of students grew or shrunk in number as they moved through the grade levels. By determining survival ratios for each grade transition [i.e., 1st to 2nd grade] over a ten-year period of time, patterns emerge and projection ratios can be developed to be used as a multiplier.

For example, if student enrollment has consistently increased from the 8th to the 9th grade over the past ten years, the survival ratios for each year would be greater than 100 percent. Through analysis of the survival ratios, the projection ratio is determined and is multiplied by the current 8th grade to develop a projection for next year’s 9th grade.

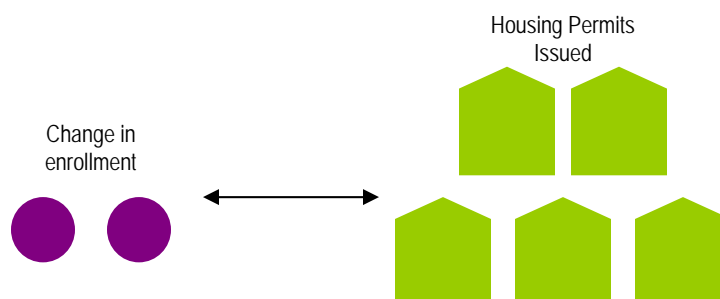
This methodology can be carried through to develop ten years of projection figures. Because there is not a grade cohort to follow for students coming into kindergarten, live birth counts are used to develop a survival ratio. Babies born five years previous to the kindergarten class are compared in number, and a ratio can be developed to project future kindergarten enrollments.

The cohort survival method is useful in areas where population is stable [relatively flat, growing steadily, or declining steadily], and where there have been no significant fluctuations in enrollment, births, and housing patterns from year to year.

Shaker Heights City School District

Housing

Enrollment projections can also be determined by analyzing the housing data for the areas that make up a school district. Yield factors can be established by comparing the historic change in enrollment from year to year divided by the total number of building or occupancy permits issued. For example, if student enrollment has increased by approximately 100 students each year and approximately 200 building permits have been issued each year for the past ten years, then the yield factor would be approximately .5 students per building permit.



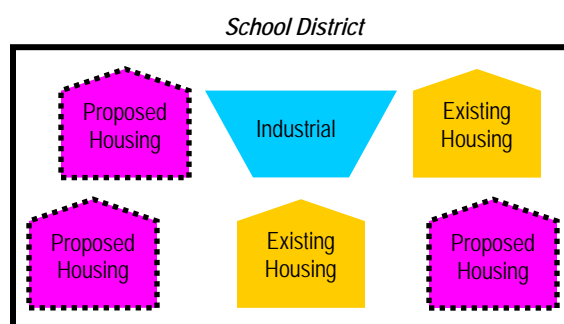
Once yield factors are established, the number of new students per year can be estimated by multiplying the yield factor by the number of projected new housing units. This method is effective when the rate of kindergarten enrollment far exceeds the live birth counts.

If housing demolitions are occurring in a district, these must also be taken into account. For instance, if housing demolitions/withdrawals have increased rapidly over recent years while new housing starts have remained relatively constant over many years, the conclusion may be that some of the new housing starts will simply be replacements for the families displaced by the demolitions. Of course, housing value and household composition would need to be further analyzed to confirm that this is indeed the case. It is possible that enrollment may remain flat or decline even though there is new housing occurring in the area.

Shaker Heights City School District

Land-Saturation Analysis

Housing data also drives the land-saturation analysis enrollment methodology. In areas where there is a high rate of development and the future development patterns in the area are clear, a “build-out” scenario can be developed. The scenario takes into consideration the remaining acreage to be developed, planned rate of completion, zoning policies, density per acre, type of housing, and ratios of school-age children per household type. This method is particularly useful in areas experiencing rapid growth.



Geographic Information Systems

While not a methodology, the need for better tools and easier manipulation of data has led to a new industry standard in planning – GIS [Geographic Information Systems]. GIS technology allows school districts to quickly analyze countless data sets including birth data, housing information, and enrollment statistics.

When paired with enrollment projections, GIS becomes an invaluable information-management and decision-making tool. Often, county or city offices are already implementing GIS technology and data can be shared and expanded among these organizations in the district. GIS tables and maps are included within this report illustrating population, age, and income estimates and projections.

The cohort survival was the primary method used in the development of the enrollment projections for the Shaker Heights City School District.

Shaker Heights City School District

HISTORICAL ENROLLMENT

Over the past ten years, student enrollment in the Shaker Heights City School District has decreased by 325 students in grades Pre-K – 12, including ungraded and career technical students. Total enrollment for the 2013-14 school year is 5,367 students.

The approximate percentages of mainstreamed special education students [Pre-K – 12] for the current school year are as follows:

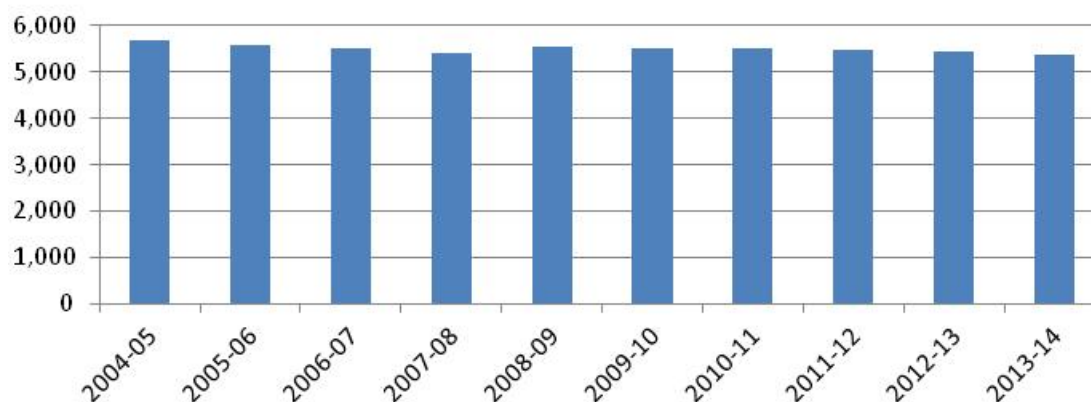
- Pre-K – 100%
- K-4 – 13%
- 5-6 – 20%
- 7-8 – 19%
- 9-12 – 18%

The approximate percentages of self-contained special education students [Pre-K – 12] for the current school year are as follows:

- Pre-K – 0%
- K-4 – 1%
- 5-6 – 1%
- 7-8 – 1%
- 9-12 – 2%

The following graph illustrates the District's Pre-K – 12 enrollment history from 2004-05 through 2013-14.

**Shaker Heights City School District
Historical Enrollment**



Shaker Heights City School District

The following tables illustrate the District's enrollment history from 2004-05 through 2013-14.

Shaker Heights City School District

Historical Enrollment

Grade	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Pre-K (regular)*	0	0	0	0	34	39	23	25	37	36
Pre-K (special needs)	0	0	0	0	50	48	51	57	46	46
K	398	383	384	371	365	390	365	360	346	376
1	429	401	386	395	389	382	403	363	370	350
2	395	426	395	392	393	406	396	414	368	353
3	386	389	427	384	417	396	394	403	410	374
4	439	369	390	432	401	430	403	408	402	396
5	407	422	387	390	434	405	437	416	414	412
6	426	408	425	394	407	421	418	433	407	409
7	464	421	416	418	395	420	440	412	441	403
8	494	474	431	425	422	401	433	436	422	457
9	526	579	551	529	524	514	482	483	526	496
10	458	447	476	417	459	441	452	430	414	464
11	435	446	427	451	420	427	426	407	392	366
12	416	387	404	420	443	382	382	345	370	352
Pre-K - 12 Total	5,673	5,552	5,499	5,418	5,553	5,502	5,505	5,392	5,365	5,290
Ungraded	19	29	27	0	0	11	10	11	12	5
Career Tech Off-Site	0	0	0	0	0	0	0	73	71	72
Grand Total	5,692	5,581	5,526	5,418	5,553	5,513	5,515	5,476	5,448	5,367

Source: Ohio Department of Education, EMIS; Shaker Heights City School District

Shaker Heights City School District

Historical Enrollment by Grade Group

Grade	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Pre-K (special needs) - 4	2,047	1,968	1,982	1,974	2,015	2,052	2,012	2,005	1,942	1,895
5 - 6	833	830	812	784	841	826	855	849	821	821
7 - 8	958	895	847	843	817	821	873	848	863	860
9 - 12	1,835	1,859	1,858	1,817	1,846	1,764	1,742	1,665	1,702	1,678
Pre-K - 12 Total	5,673	5,552	5,499	5,418	5,519	5,463	5,482	5,367	5,328	5,254
Ungraded	19	29	27	0	0	11	10	11	12	5
Career Tech Off-Site	0	0	0	0	0	0	0	73	71	72
Grand Total	5,692	5,581	5,526	5,418	5,519	5,474	5,492	5,451	5,411	5,331

Source: Ohio Department of Education, EMIS; Shaker Heights City School District

*regular Pre-K enrollment is not included in grade group table above or in the projected enrollment figures.

Shaker Heights City School District

COMMUNITY SCHOOL ENROLLMENT

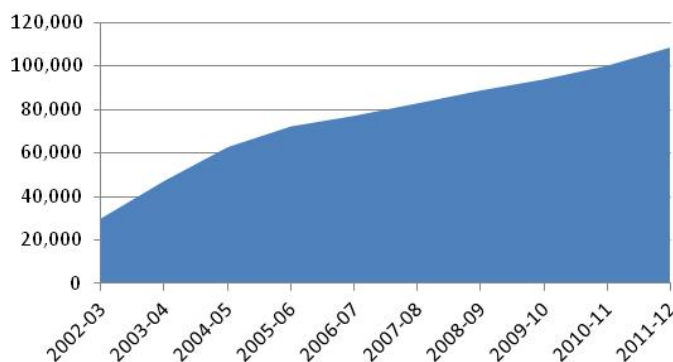
In Ohio, community school enrollment has increased dramatically over the last decade. From 2002-23 to 2011-12, enrollment has increased by over 260% from 29,939 students in 136 community schools to 108,239 students in 355 community schools.

**Ohio
Community School Enrollment**

Grade	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Grand Total	29,939	47,101	62,561	72,064	76,932	82,643	88,536	93,623	99,878	108,239

Source: Ohio Department of Education

Ohio Community School Enrollment

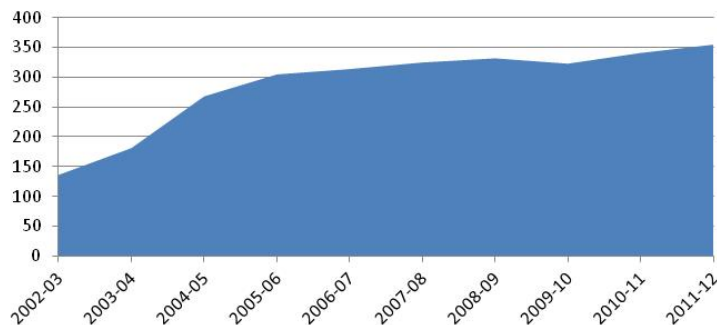


**Ohio
Number of Community Schools**

Grade	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Grand Total	136	181	268	305	314	325	332	323	341	355

Source: Ohio Department of Education

Number of Community Schools in Ohio



Shaker Heights City School District

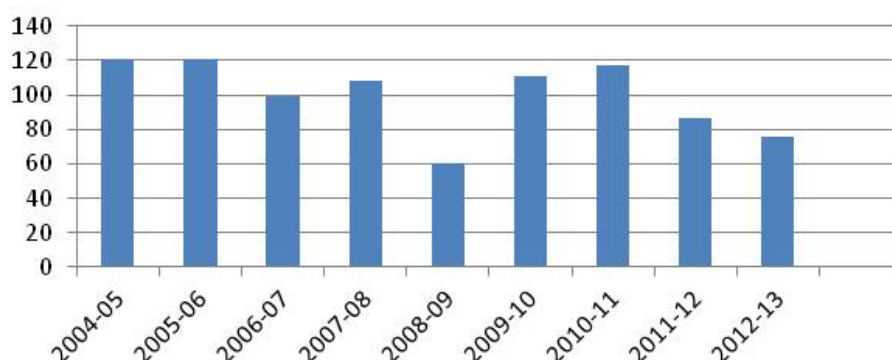
Since 2004-05, the number of Shaker Heights City School District students attending community schools has decreased from 121 to 76 students. Enrollment of Shaker Heights City School District students attending community schools should be closely monitored as it may have a significant impact on District enrollment in the future.

**Shaker Heights City School District
Community School Enrollment**

Grade	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Pre-K	0	0	0	0	0	0	0	0	0	
K	3	3	2	3	2	6	5	5	5	
1	3	3	4	1	1	1	10	1	5	
2	5	5	3	3	0	2	0	5	2	
3	2	2	1	1	0	1	2	3	3	
4	1	1	0	2	2	2	4	5	2	
5	2	2	1	2	2	2	0	2	3	
6	3	3	1	0	4	3	4	2	3	
7	7	7	0	3	2	4	2	4	4	
8	2	2	3	1	1	2	11	7	5	
9	30	30	32	38	22	30	35	18	21	
10	34	34	19	22	11	30	18	11	6	
11	20	20	16	14	4	10	15	12	6	
12	9	9	17	17	9	18	11	12	11	
Ungraded	0	0	0	1	0	0	0	0	0	
Grand Total	121	121	99	108	60	111	117	87	76	

Source: Ohio Department of Education, EMIS; Shaker Heights City School District
Enrollment data for 2013-14 is not available

**Shaker Heights City School District
Students Attending Community Schools**



Shaker Heights City School District

OPEN ENROLLMENT

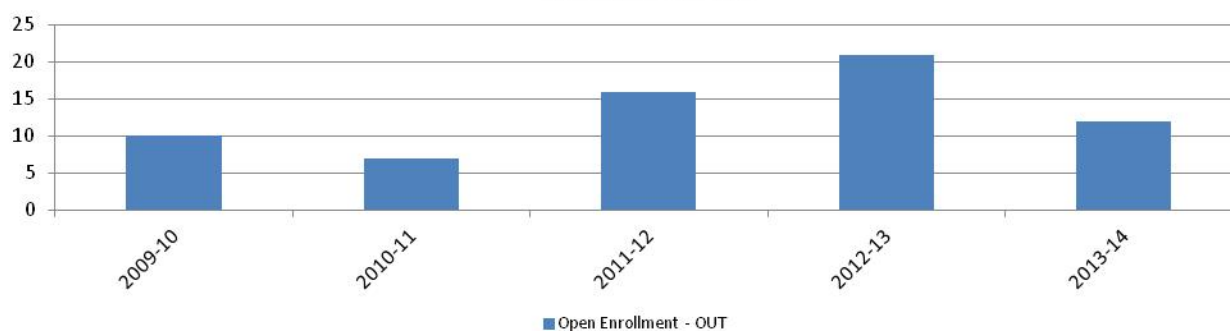
Since 2009-10, the number of Shaker Heights City School District students “open enrolling” out of the District has fluctuated between 7 and 21 students. There are no students “open enrolling” into the District. Significant changes in the number of students “open enrolling” into or out of the District from year to year can impact enrollment projections and should be monitored.

**Shaker Heights City School District
Open Enrollment - OUT**

Grade	2009-10	2010-11	2011-12	2012-13	2013-14
Pre-K	0	0	0	0	0
K	0	0	1	0	0
1	1	0	1	1	0
2	1	0	1	0	1
3	1	0	2	1	0
4	3	1	1	3	1
5	0	2	1	1	0
6	1	0	1	0	0
7	1	0	0	1	0
8	0	1	0	0	1
9	0	0	3	4	0
10	0	0	2	6	1
11	2	1	2	2	6
12	0	2	1	2	2
Ungraded	0	0	0	0	0
Grand Total	10	7	16	21	12

Source: Ohio Department of Education, EMIS; Shaker Heights City School District

**Shaker Heights City School District
Open Enrollment**



Shaker Heights City School District

LIVE BIRTH DATA

Utilization of live birth data is recommended when projecting future kindergarten enrollments as it provides a helpful overall trend. The live birth counts are used in determining a birth-to-kindergarten survival ratio. This ratio identifies the percentage of children born in a representative area who attend kindergarten in the District five years later. The survival ratios for birth-to-kindergarten as well as grades 1-12 can be found later in this report.

The Ohio Department of Health [ODH] data warehouse provides information about live birth events for Ohio residents. Information about events occurring outside of Ohio to Ohio residents is included. Information about events occurring inside Ohio to non-Ohio residents is not included.

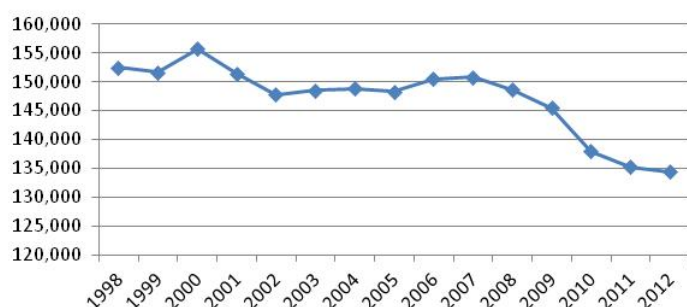
Data is arranged by the residence of the mother. For example, if a mother lives in Powell, Delaware County but delivers her baby in Columbus, Franklin County, the birth is counted in Powell, Delaware County.

The number of live births is recorded by:

- ▶ State
- ▶ County
- ▶ City/Town
- ▶ Census Tract
- ▶ Zip Code
- ▶ Address [not available to the public]

Live birth counts are different from live birth rates. The live birth count is the actual number of live births. A birth rate is the number of births per 1,000 women in a specified population group. Birth rates are provided for counties only and for 9 age groups from 10-14 years to 45+ years.

Ohio Live Birth Counts



Ohio has experienced the same trend in live births as seen around the country. Live birth counts increased in 2000. A descending pattern resumed in 2001 with a slight stabilization from 2002 to 2005. Births increased slightly again in 2006 and 2007 but have since declined to an all-time low of 134,443 in 2012.

Shaker Heights City School District

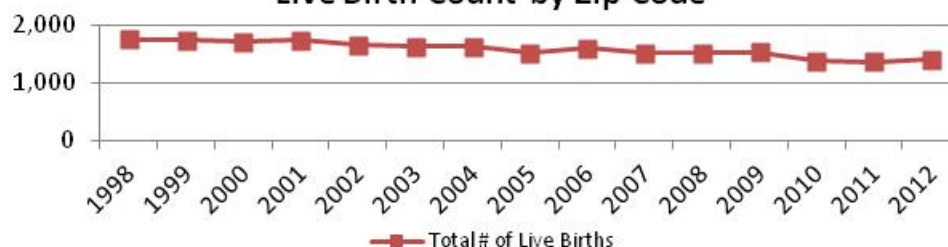
The following table and graph include the live birth counts for zip codes 44118, 44120, and 44122.

**Shaker Heights City School District
Live Birth Count by Zip Code
1998-2012**

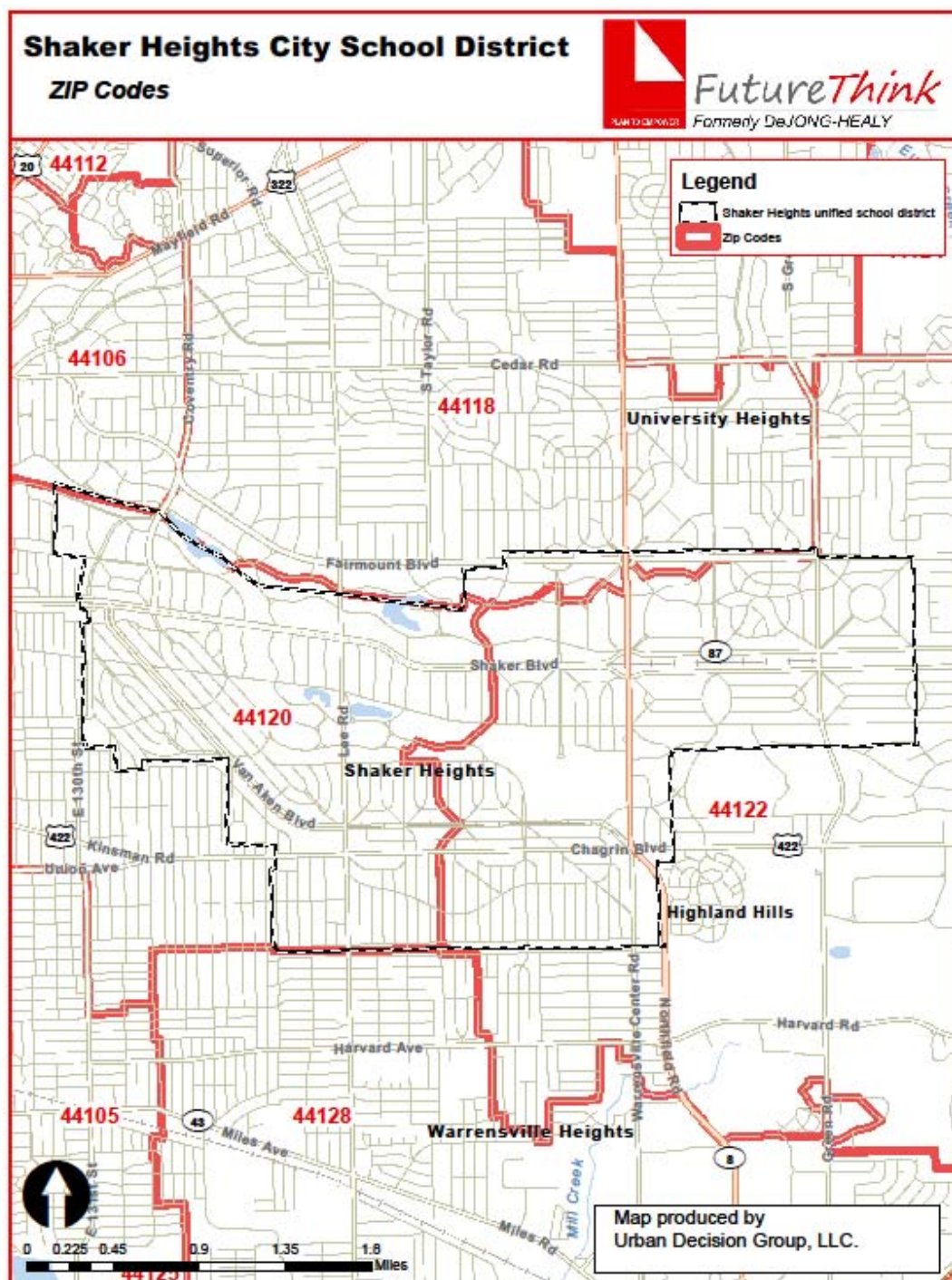
Year	44118	44120	44122	Total # of Live Births
1998	665	720	367	1,752
1999	678	726	328	1,732
2000	682	674	348	1,704
2001	695	716	329	1,740
2002	690	672	290	1,652
2003	635	659	324	1,618
2004	664	633	326	1,623
2005	636	594	283	1,513
2006	654	632	319	1,605
2007	581	623	319	1,523
2008	585	586	343	1,514
2009	635	560	334	1,529
2010	622	471	295	1,388
2011	605	472	288	1,365
2012	598	526	282	1,406

Source: Ohio Department of Health, Statistical Analysis Unit

**Shaker Heights City School District
Live Birth Count by Zip Code**



Shaker Heights City School District



Shaker Heights City School District

DEMOGRAPHICS

The Shaker Heights City School District is comprised of Shaker Heights City in Cuyahoga County. General demographic data is included in the following tables for the areas located completely or partially in the District.

General Demographic Information

	Cuyahoga County	State of Ohio
Per Capita Income	\$27,136	\$25,857
Median Household Income	\$43,861	\$48,246
Persons Below Poverty	17.7%	15.4%

Source: US Census, American Community Survey, 2012 5-Year Estimates

Total Population

	2000 Census	2010 Census
Cuyahoga County	1,393,978	1,280,122
Shaker Heights City	29,405	28,448

Source: ODOD Policy Research & Strategic Planning Office, August 2011

Also included are block group estimates and projections provided by ESRI. ESRI uses a time series of estimates from the U.S. Census Bureau that includes the latest estimates and inter-censal estimates adjusted for error of closure. The Census Bureau's time series is consistent, but testing has revealed improved accuracy by using a variety of sources to track county population trends.

ESRI also employs a time series of building permits and housing starts plus residential deliveries. Data sources are integrated and then analyzed by Census Block Groups.

Sources of data include:

- ▶ Supplementary Surveys of the Census Bureau
- ▶ Bureau of Labor Statistics' (BLS) Local Area Unemployment Statistics
- ▶ BLS Occupational Employment Statistics
- ▶ InfoUSA
- ▶ U.S. Bureau of the Census' Current Population Survey
- ▶ National Planning Association Data Service

Shaker Heights City School District

Below is a list of definitions as they appear on the U.S. Census Bureau website, to aid in interpretation of the following tables and maps.

Household:

A household includes all the people who occupy a housing unit as their usual place of residence.

Average family size:

A measure obtained by dividing the number of members of families by the total number of families (or family householders).

Family household (Family):

A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in census tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may comprise a group of unrelated people or one person living alone.

Householder:

The person, or one of the people, in whose name the home is owned, being bought, or rented. If there is no such person present, any household member 15 years old and over can serve as the householder for the purposes of the census. Two types of householders are distinguished: a family householder and a nonfamily householder. A family householder is a householder living with one or more people related to him or her by birth, marriage, or adoption. The householder and all people in the household related to him are family members. A nonfamily householder is a householder living alone or with nonrelatives only.

Shaker Heights City School District

The following tables illustrate the current estimates and 5-year population projections based on block groups that comprise the state and school district, indicating areas of current and projected growth. The tables have been developed to determine selected age group projections and projections for household income, family size, and total households.

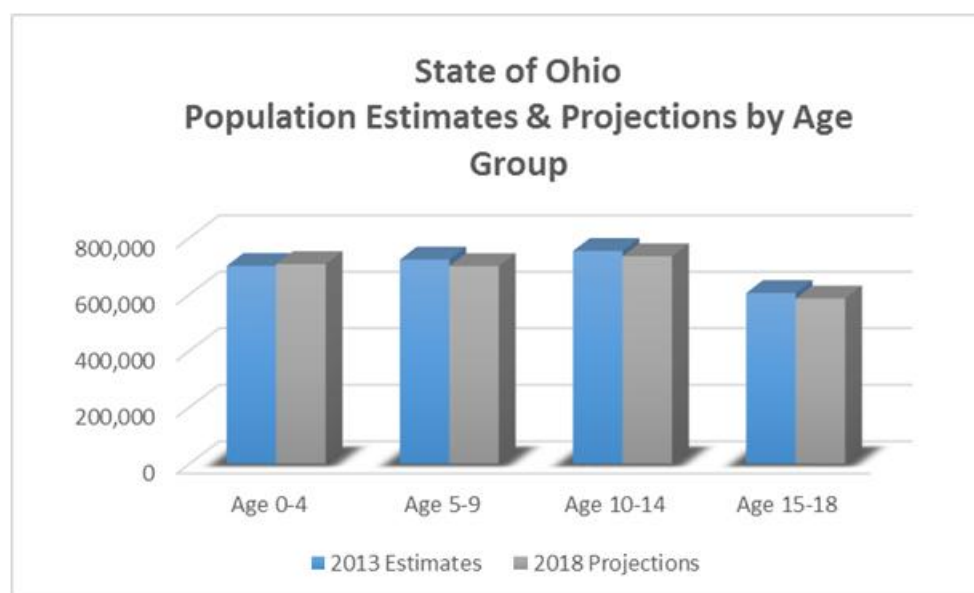
The total population in the State of Ohio is 11,568,779. This population is projected to increase by 77,084 people, or less than 1% over a 5-year period.

The 0-18 year-old population in the State currently totals 2,782,573. This population is projected to decrease by 55,490 children, or approximately 2 percent.

The median age is projected to increase by 1.3% from 39.3 to 39.8 years of age.

State of Ohio	2013 Estimates	2018 Projections	Change 2013-18	Change 2013-18 (%)
Total Population	11,569,779	11,646,863	77,084	0.7%
Age 0-4	700,700	706,986	6,286	0.9%
Age 5-9	723,214	700,267	-22,947	-3.2%
Age 10-14	753,762	734,671	-19,091	-2.5%
Age 15-18	604,897	585,159	-19,738	-3.3%
Total Age 0-18	2,782,573	2,727,083	-55,490	-2.0%
Median Age	39.3	39.8	0.5	1.3%

Source: ESRI

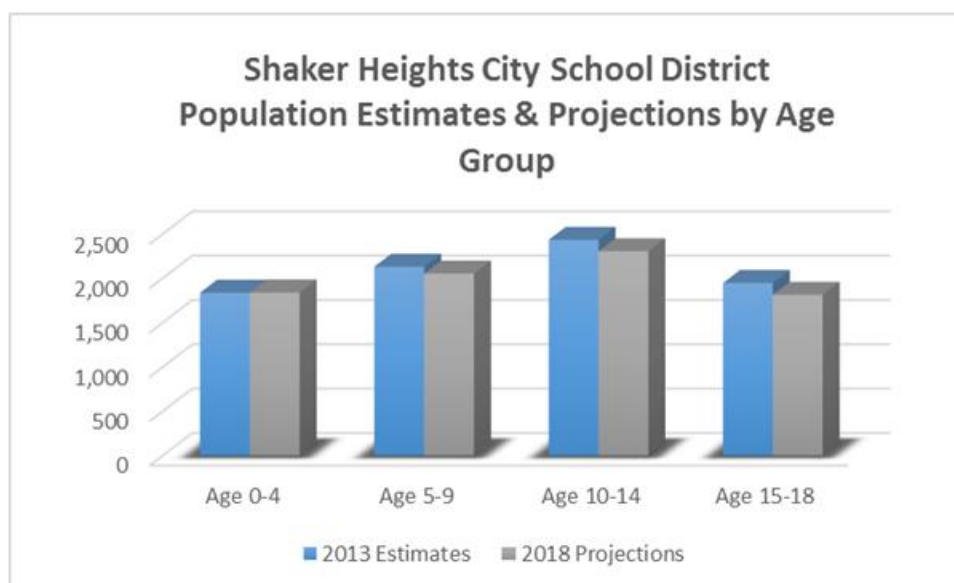


Shaker Heights City School District

The total population in the District is 32,219. This population is projected to decrease by 239 people, or less than 1% over a 5-year period. The 0-18 year-old population in the District currently totals 8,352. This population is projected to decrease by 337 people, or approximately 4 percent. The median age is projected to increase by approximately 1%, from 41.7 to 42.3 years of age.

Shaker Heights City School District	2013 Estimates	2018 Projections	Change 2013-18	Change 2013-18 (%)
Total Population	32,219	31,980	-239	-0.7%
Age 0-4	1,838	1,841	3	0.2%
Age 5-9	2,132	2,053	-79	-3.7%
Age 10-14	2,434	2,306	-128	-5.3%
Age 15-18	1,948	1,815	-133	-6.8%
Total Age 0-18	8,352	8,015	-337	-4.0%
Median Age	41.7	42.3	0.6	1.4%

Source: ESRI



Shaker Heights City School District

Median and average household incomes in the State are projected to increase by approximately 20% and 17%, respectively over a 5-year period. Average family size is projected to remain the same. The total number of family households is projected to increase by less than 1 percent.

State of Ohio	2013 Estimates	2018 Projections	Change 2013-18	Change 2013-18 (%)
Median Household Income	\$46,291	\$55,389	\$9,098	19.7%
Average Household Income	\$62,843	\$73,509	\$10,666	17.0%
Average Family Size	2.99	2.99	0.00	0.0%
Total Family Households	2,991,207	2,994,188	2,981	0.1%

Source: ESRI

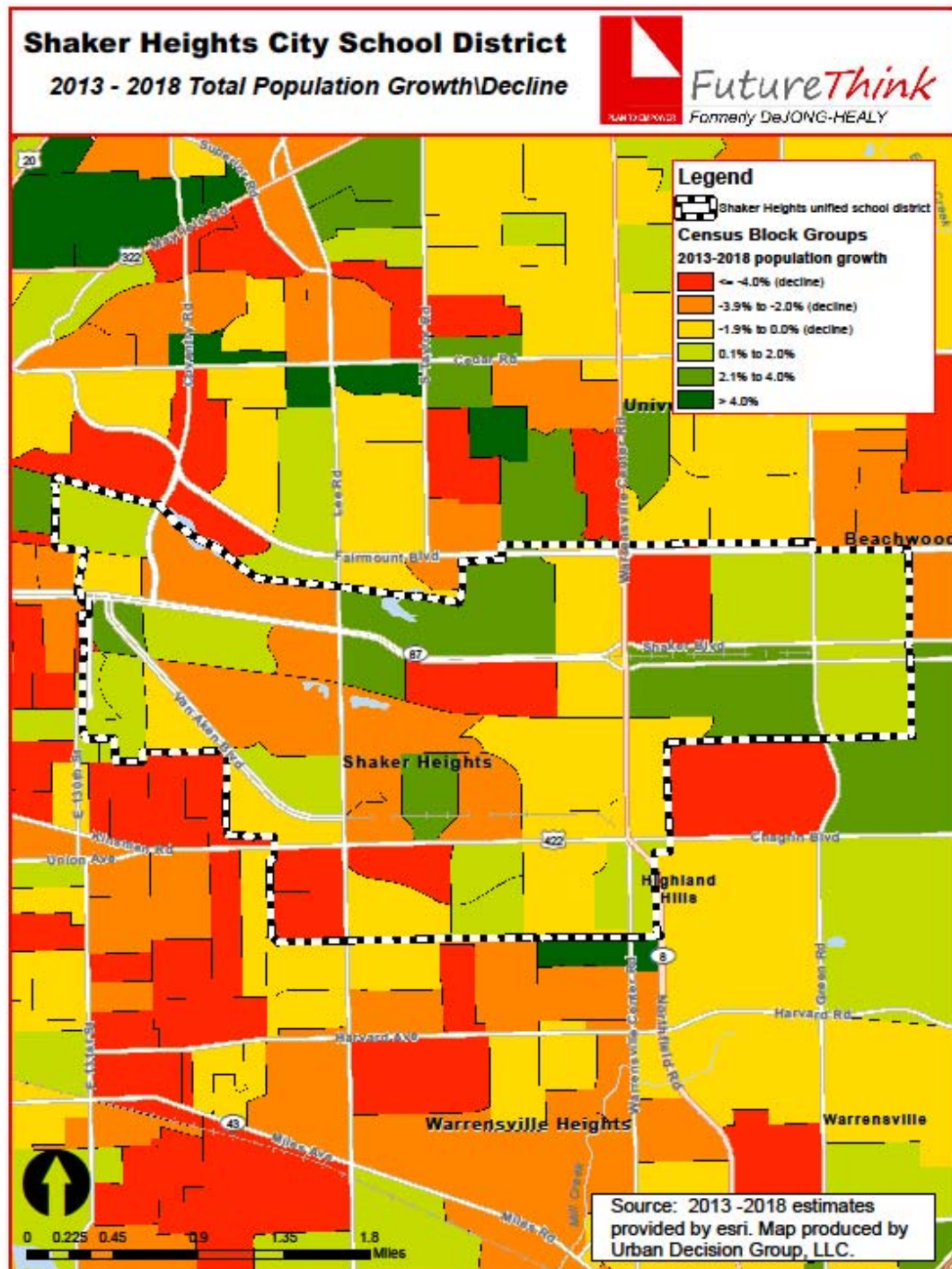
Median and average household incomes in the District are projected to increase by approximately 21% and 23%, respectively over a 5-year period. Both the average family size and number of family households are projected to decline slightly.

Shaker Heights City School District	2013 Estimates	2018 Projections	Change 2013-18	Change 2013-18 (%)
Median Household Income	\$65,995	\$79,792	\$13,797	20.9%
Average Household Income	\$103,118	\$126,785	\$23,667	23.0%
Average Family Size	2.99	2.98	-0.01	-0.3%
Total Family Households	8,568	8,463	-105	-1.2%

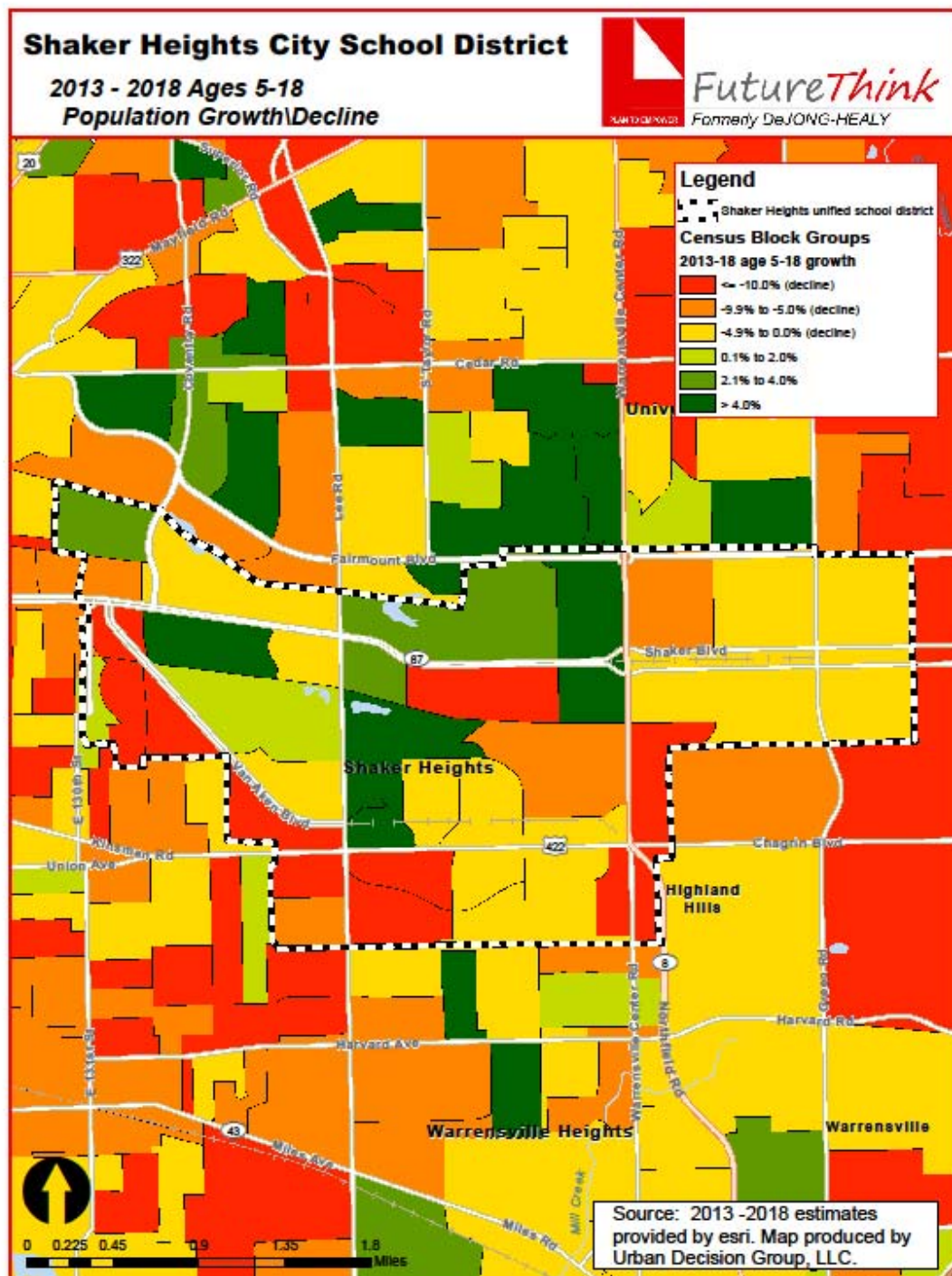
Source: ESRI

The maps on the following pages illustrate the data identified in the tables. The color coding identifies areas within the District that may be increasing or decreasing at different rates than others.

Shaker Heights City School District

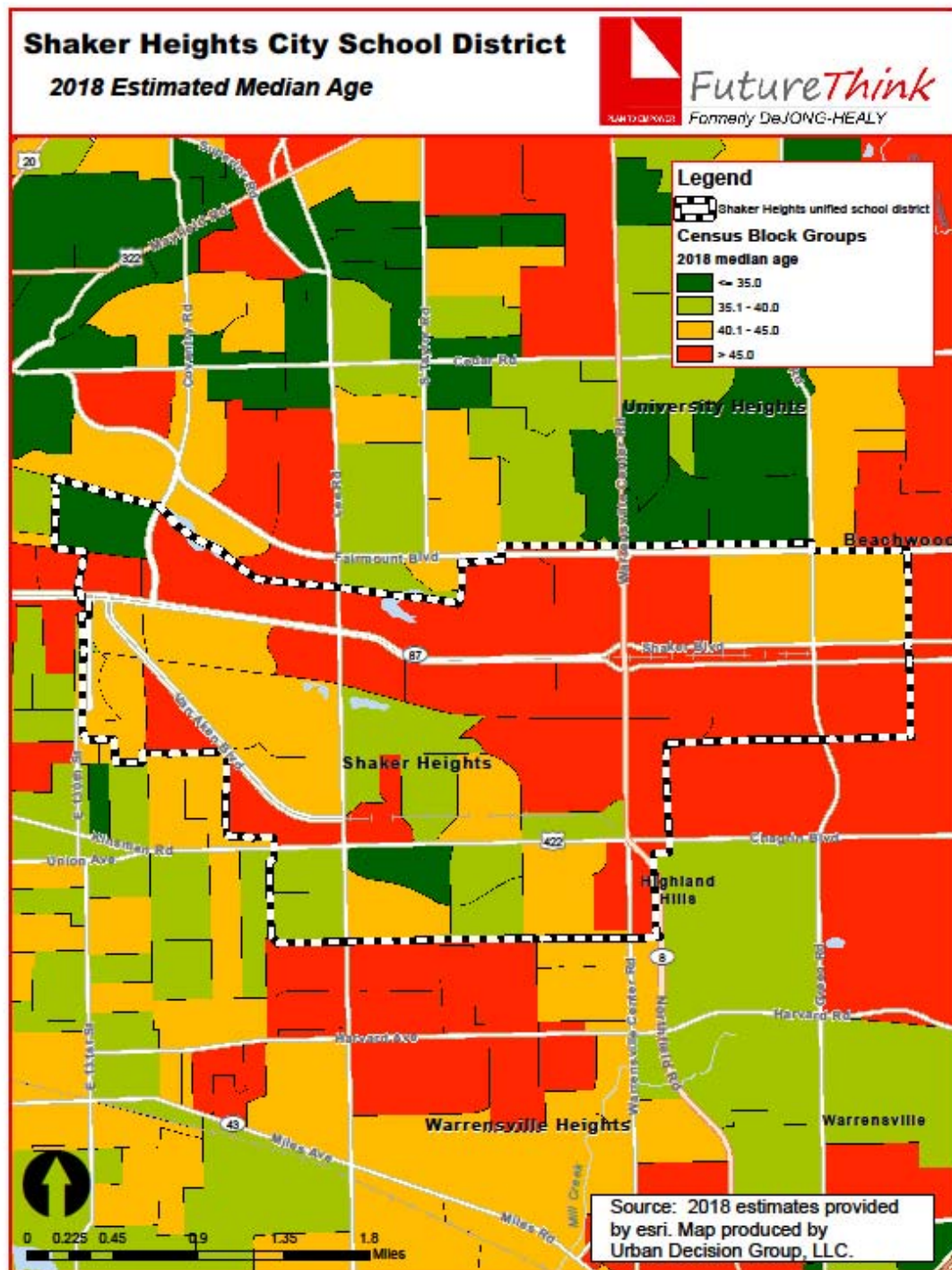


Shaker Heights City School District

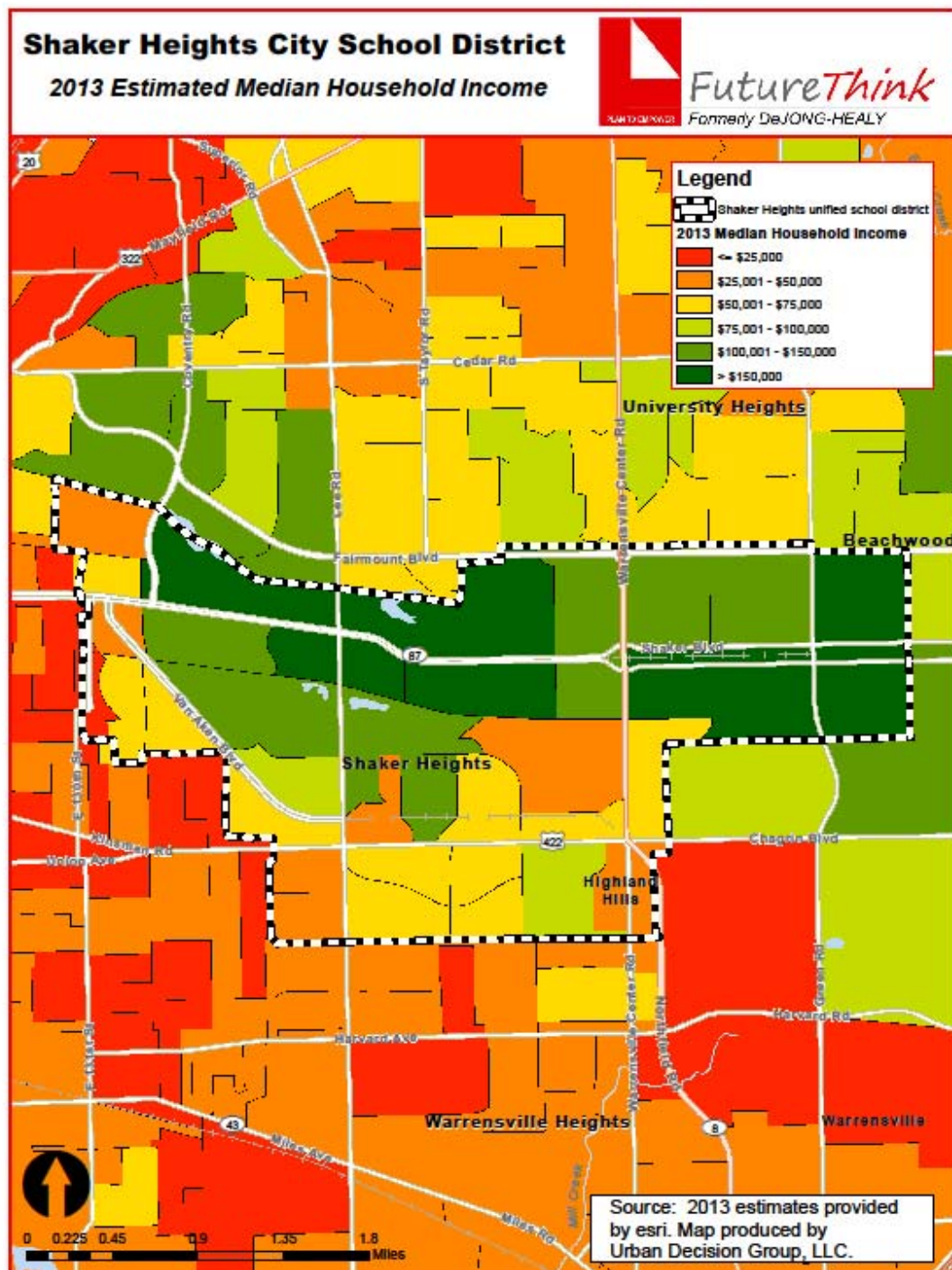




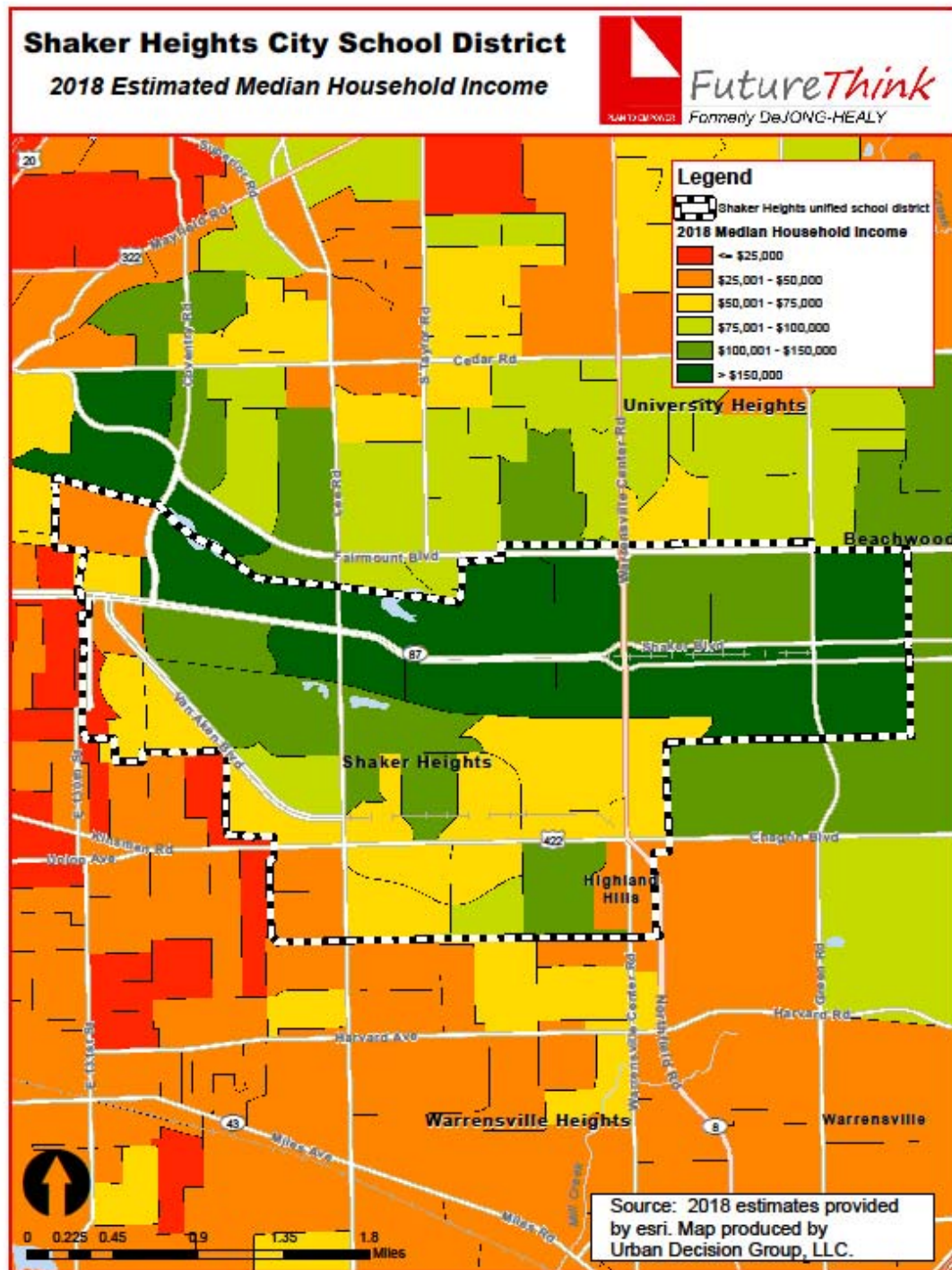
Shaker Heights City School District



Shaker Heights City School District



Shaker Heights City School District



Shaker Heights City School District

HOUSING INFORMATION

The chart below illustrates the number of single-family dwelling building permits issued each year in Shaker Heights and Cuyahoga County.

**# of Building Permits Issued for Single Family
Dwellings**

Year	Shaker Heights	Cuyahoga County
2003	13	1,865
2004	13	2,010
2005	34	1,748
2006	0	1,246
2007	2	922
2008	0	542
2009	0	462
2010	0	490
2011	0	401
2012	0	488
2013	0	639
2014*	0	263

Source: SOCDS Building Permits Database

* through May 2014

Shaker Heights City School District

SURVIVAL RATIOS

The chart below demonstrates the changes in enrollment as students move through the system. Percentages greater than 100 indicate that there are more students than there were in the previous grade the previous year. In other words, there was growth and new students entered the system. Percentages less than 100 indicate that there was decline with students leaving the system.

- Birth to Kindergarten: This ratio indicates the number of children born in the area who attend kindergarten in the District 5 years later. Percentages less than 100% result from movement out of the district, attendance at a non-public or charter school, or residence in another district within the same area.
- Grades 8-9: The higher than usual percentage often is a result of school district promotion policies. Often in school districts, students are promoted from 8th to 9th grade and after one year in 9th grade do not have sufficient credits to be classified as 10th graders and are counted again as 9th graders the following year. There may also be students who attended private or charter schools or are home schooled through grade 8 and then attend public schools for high school education.

The following table illustrates the survival ratios for the Shaker Heights City School District.

from	to	birth -> K	K->1	1->2	2->3	3->4	4->5	5->6	6->7	7->8	8->9	9->10	10->11	11->12
2004	2005	22.5%	100.8%	99.3%	98.5%	95.6%	96.1%	100.2%	98.8%	102.2%	117.2%	85.0%	97.4%	89.0%
2005	2006	22.1%	100.8%	98.5%	100.2%	100.3%	104.9%	100.7%	102.0%	102.4%	116.2%	82.2%	95.5%	90.6%
2006	2007	22.5%	102.9%	101.6%	97.2%	101.2%	100.0%	101.8%	98.4%	102.2%	122.7%	75.7%	94.7%	98.4%
2007	2008	22.6%	104.9%	99.5%	106.4%	104.4%	100.5%	104.4%	100.3%	101.0%	123.3%	86.8%	100.7%	98.2%
2008	2009	24.0%	104.7%	104.4%	100.8%	103.1%	101.0%	97.0%	103.2%	101.5%	121.8%	84.2%	93.0%	91.0%
2009	2010	24.1%	103.3%	103.7%	97.0%	101.8%	101.6%	103.2%	104.5%	103.1%	120.2%	87.9%	96.6%	89.5%
2010	2011	22.4%	99.5%	102.7%	101.8%	103.6%	103.2%	99.1%	98.6%	99.1%	111.5%	89.2%	90.0%	81.0%
2011	2012	22.7%	102.8%	101.4%	99.0%	99.8%	101.5%	97.8%	101.8%	102.4%	120.6%	85.7%	91.2%	90.9%
2012	2013	24.8%	101.2%	95.4%	101.6%	96.6%	102.5%	98.8%	99.0%	103.6%	117.5%	88.2%	88.4%	89.8%
	average	23.08%	102.292%	100.71%	100.3%	100.69%	101.3%	100.3%	100.7%	101.9%	119.023%	84.986%	94.179%	90.916%
	standard deviation	0.923%	1.757%	2.663%	2.710%	2.854%	2.292%	2.311%	2.115%	1.246%	3.542%	3.882%	3.680%	4.885%

Shaker Heights City School District

ENROLLMENT PROJECTION

Enrollment projections were developed after analyzing the data collected in this report. The projections indicate a decrease of 619 students in grades Pre-K through 12, not including regular Pre-K students, from the 2013-14 to the 2023-24 school year. The following tables and graph illustrate projected enrollments by grade and by grade group through the 2023-24 school year.

Preschool:

The Ohio School Design Manual [OSDM] provides space for preschool students with disabilities and a maximum of 40 ECE preschool students. The Shaker Heights City School District funds preschool through the following source:

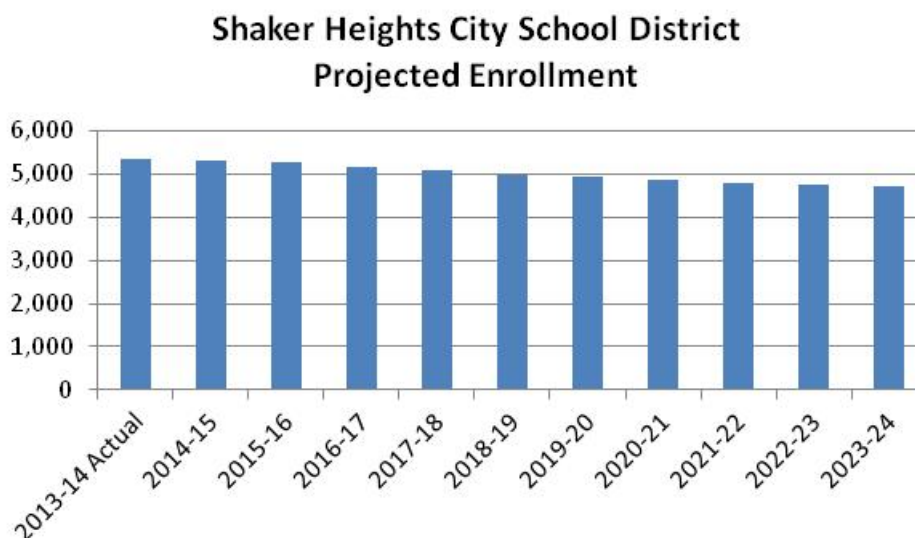
- General fund

Kindergarten:

The OSDM provides space for all day, every day kindergarten.

Career Technical:

Due to the specialized space requirements, career technical students are pulled out of the 11th and 12th grade enrollments and projected separately.



Shaker Heights City School District

Shaker Heights City School District

Projected Enrollment

Grade	2013-14 Actual	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Pre-K (special needs)	46	50	46	45	46	46	46	46	46	46	46
K	376	360	327	321	331	333	333	333	333	333	333
1	350	384	367	333	328	337	340	340	340	340	340
2	353	352	386	369	335	329	339	341	341	341	341
3	374	355	353	387	370	336	330	340	342	342	342
4	396	376	356	355	388	371	337	331	341	344	344
5	412	405	384	364	363	397	379	344	339	349	351
6	409	408	401	380	360	359	393	375	341	335	345
7	403	409	407	400	379	359	358	392	375	340	334
8	457	412	417	416	409	387	367	365	400	382	347
9	496	537	484	490	489	480	455	431	429	470	449
10	464	433	469	422	427	426	418	397	376	374	410
11	366	428	399	432	389	394	392	385	365	346	345
12	352	330	386	359	389	350	355	354	347	329	312
Pre-K - 12 Total	5,254	5,239	5,182	5,073	5,003	4,904	4,842	4,774	4,715	4,671	4,639
Ungraded	5	10	10	9	9	9	9	9	9	9	9
Career Tech Off-Site	72	74	77	77	76	73	73	72	69	66	64
Grand Total	5,331	5,323	5,269	5,159	5,088	4,986	4,924	4,855	4,793	4,746	4,712

Source: FutureThink

Shaker Heights City School District

Projected Enrollment by Grade Group

Grade	2013-14 Actual	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Pre-K (special needs) - 4	1,895	1,877	1,835	1,810	1,798	1,752	1,725	1,731	1,743	1,746	1,746
5 - 6	821	813	785	744	723	756	772	719	680	684	696
7 - 8	860	821	824	816	788	746	725	757	775	722	681
9 - 12	1,678	1,728	1,738	1,703	1,694	1,650	1,620	1,567	1,517	1,519	1,516
Pre-K - 12 Total	5,254	5,239	5,182	5,073	5,003	4,904	4,842	4,774	4,715	4,671	4,639
Ungraded	5	10	10	9	9	9	9	9	9	9	9
Career Tech Off-Site	72	74	77	77	76	73	73	72	69	66	64
Grand Total	5,331	5,323	5,269	5,159	5,088	4,986	4,924	4,855	4,793	4,746	4,712

Source: FutureThink

Shaker Heights City School District

CONCLUSION

As with any projection, the District should pay close attention to live birth counts, enrollment in elementary schools, community school enrollment, open enrollment, and any housing growth. Each of these factors will have an impact on future student enrollment.

FutureThink is pleased to have had the opportunity to provide the District with enrollment projection services. We hope this document will provide the necessary information to make informed decisions about the future of the Shaker Heights City School District.

Shaker Heights City School District

APPENDIX

The following document is included in the appendix:

- District Acceptance
- District Questionnaire



Tracy Healy <thealy@futurethinkinc.com>

Update on Enrollment report for Shaker Heights

Tracy Healy <thealy@futurethinkinc.com>

Fri, Dec 5, 2014 at 10:35 AM

To: Tracy Healy <thealy@futurethinkinc.com>

----- Forwarded message -----

From: **Hutchings, Gregory** <hutchings_g@shaker-heights.k12.oh.us>

Date: Thu, Dec 4, 2014 at 8:38 PM

Subject: RE: Update on Enrollment report for Shaker Heights

To: Tracy Healy <thealy@futurethinkinc.com>, "Wilkins, Stephen" <wilkins_s@shaker-heights.k12.oh.us>

Cc: Prenosil William <Bill.Prenosil@ofcc.ohio.gov>

Here's my approval

This e-mail is intended only for the addressee(s) and may contain material that is confidential under state and federal law. If you were not an intended recipient, please notify the sender and delete all copies. School District e-mail is to be used only for school purposes. The District may monitor e-mail to and from its network. This email and any response to it may be archived for later retrieval and may constitute a public record and therefore may be made available upon request in accordance with Ohio Public Records law (ORC 149.43).

cc

District Questionnaire for Shaker Heights City SD of Cuyahoga County (44750)

District Questionnaire has been submitted for review

Enrollment Report For Shaker Heights City SD of Cuyahoga County (44750)

Contact Information

Superintendent Name:	Gregory Hutchings
Superintendent Email:	hutchings_g@shaker.org
Superintendent Phone:	(216) 295-4323
Contact Name (if different from Superintendent):	Fred Shalhoup
Contact Title:	Director of Operations
Contact Email:	shalhoup_f@shaker.org
Contact Phone:	(216) 295-4333

K12 Enrollment

Grade	Enrolled 2004 –2005	Enrolled 2005 –2006	Enrolled 2006 –2007	Enrolled 2007 –2008	Enrolled 2008 –2009	Enrolled 2009 –2010	Enrolled 2010 –2011	Enrolled 2011 –2012	Enrolled 2012 –2013	Enrolled 2013 –2014
K	398	383	384	371	365	390	365	360	346	376
1	429	401	386	395	389	382	403	363	370	350
2	395	426	395	392	393	406	396	414	368	353
3	386	389	427	384	417	396	394	403	410	374
4	439	369	390	432	401	430	403	408	402	396
5	407	422	387	390	434	405	437	416	414	412
6	426	408	425	394	407	421	418	433	407	409
7	464	421	416	418	395	420	440	412	441	403
8	494	474	431	425	422	401	433	436	422	457
9	526	579	551	529	524	514	482	483	526	496
10	458	447	476	417	459	441	452	430	414	464
11	435	446	427	451	420	427	426	445	428	408
12	416	387	404	420	443	382	382	380	405	382
Ungraded	19	29	27	0	0	11	10	11	12	5
Total	5692	5581	5526	5418	5469	5426	5441	5394	5365	5285

All Day Kindergarten

Do you offer kindergarten to all students, all day, every day?
yes

Preschool Enrollment

Do you **house** Preschool/Pre-K students in your facilities?

yes

Please select your district's preschool funding sources:
General Fund

Early Childhood Education (ECE) grant funding (known as entitlement and public preschool) is distributed by the Ohio Department of Education to districts to provide preschool services for 3- and 4-year old children of income eligible families.

Do you house Early Childhood Education (ECE) students in your facilities?

no

Do you house Pre-K students with disabilities in your facilities?

yes

Please provide enrollment data:

Grade	2004 –2005	2005 –2006	2006 –2007	2007 –2008	2008 –2009	2009 –2010	2010 –2011	2011 –2012	2012 –2013	2013 –2014
Pre-K with disabilities	0	0	0	0	50	48	51	57	46	46

Do you house other Pre-K students in your facilities that are not students with disabilities and are not enrolled in ECE, or Federal Head Start (e.g., tuition-based or funded with other sources)?

yes

Please provide enrollment data:

Grade	2004 –2005	2005 –2006	2006 –2007	2007 –2008	2008 –2009	2009 –2010	2010 –2011	2011 –2012	2012 –2013	2013 –2014
Pre-K Other (not disabled, not enrolled in ECE, or Federal Head Start)	0	0	0	0	34	39	23	25	37	36

Student Teacher Ratios

What are your district's current average student to teacher ratios for the following grade groups?

Include core teachers only.

- K–3 20 to 1
- 4–5 20 to 1
- 6–8 20 to 1
- 9–12 24 to 1

Grade Configurations

PK through 4
5 through 6
7 through 8
9 through 12

Students with Disabilities

Definitions:

- **IE13** — Special Education outside the regular class less than 21% of the day.
- **IE14** — Special Education outside the regular class at least 21% of the day and no more than 60% of the day.
- **IE15** — Special Education outside the regular class more than 60% of the day.

Please provide enrollment for students with disabilities by ODE program code and grade configuration.

Code	PK-4	5-6	7-8	9-12
IE13	156	110	114	254
IE14	94	52	52	44
IE15	22	9	11	27
Total	272	171	177	325

*These students should be included in the October headcount

Does your District house additional students with disabilities from other school districts? (i.e., county programs, etc.) no

Community Enrollment

Grade	Enrolled 2004 –2005	Enrolled 2005 –2006	Enrolled 2006 –2007	Enrolled 2007 –2008	Enrolled 2008 –2009	Enrolled 2009 –2010	Enrolled 2010 –2011	Enrolled 2011 –2012	Enrolled 2012 –2013	Enrolled 2013 –2014
PreK	0	0	0	0	0	0	0	0	0	0
K	3	3	2	3	2	6	5	5	5	0
1	3	3	4	1	1	1	10	1	5	0
2	5	5	3	3	0	2	0	5	2	0
3	2	2	1	1	0	1	2	3	3	0
4	1	1	0	2	2	2	4	5	2	0
5	2	2	1	2	2	2	0	2	3	0
6	3	3	1	0	4	3	4	2	3	0
7	7	7	0	3	2	4	2	4	4	0
8	2	2	3	1	1	2	11	7	5	0
9	30	30	32	38	22	30	35	18	21	0
10	34	34	19	22	11	30	18	11	6	0
11	20	20	16	14	4	10	15	12	6	0
12	9	9	17	17	9	18	11	12	11	0
Ungraded	0	0	0	1	0	0	0	0	0	0
Total	121	121	99	108	60	111	117	87	76	0

Open Enrollment (In)

Grade	Enrolled 2004 –2005	Enrolled 2005 –2006	Enrolled 2006 –2007	Enrolled 2007 –2008	Enrolled 2008 –2009	Enrolled 2009 –2010	Enrolled 2010 –2011	Enrolled 2011 –2012	Enrolled 2012 –2013	Enrolled 2013 –2014
Prek	0	0	0	0	0	0	0	0	0	0
K	0	0	0	0	0	0	0	1	1	0
1	0	0	0	0	0	0	0	1	0	0

2	0	0	0	0	0	0	0	1	0	0
3	0	0	0	0	0	0	0	2	1	0
4	0	0	0	0	0	0	0	1	3	0
5	0	0	0	0	0	0	0	1	1	0
6	0	0	0	0	0	0	0	2	0	0
7	0	0	0	0	0	0	0	0	2	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	3	3	0
10	0	0	0	0	0	0	0	2	8	0
11	0	0	0	0	0	0	0	3	2	0
12	0	0	0	0	0	0	0	1	2	0
Ungraded	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	18	23	0

Open Enrollment (Out)

Grade	Enrolled 2009–2010	Enrolled 2010–2011	Enrolled 2011–2012	Enrolled 2012–2013	Enrolled 2013–2014
Prek	0	0	0	0	0
K	0	0	1	0	0
1	1	0	1	1	0
2	1	0	1	0	1
3	1	0	2	1	0
4	3	1	1	3	1
5	0	2	1	1	0
6	1	0	1	0	0
7	1	0	0	1	0
8	0	1	0	0	1
9	0	0	3	4	0
10	0	0	2	6	1
11	2	1	2	2	6
12	0	2	1	2	2
Ungraded	0	0	0	0	0
Total	10	7	16	21	12

JVS Enrollment

Does your District belong to a JVSD? no

Career Technical Compact Enrollment

Does your District belong to a Compact? yes
Please select the districts in your compact.

Please provide enrollment for students leaving to attend a career tech program at any of the districts in your compact.

Grade	Enrolled 2004 –2005	Enrolled 2005 –2006	Enrolled 2006 –2007	Enrolled 2007 –2008	Enrolled 2008 –2009	Enrolled 2009 –2010	Enrolled 2010 –2011	Enrolled 2011 –2012	Enrolled 2012 –2013	Enrolled 2013 –2014
Off-Site Career Tech 11th	0	0	0	0	0	0	0	38	36	42
Off-Site Career Tech 12th	0	0	0	0	0	0	0	35	35	30
Total	0	0	0	0	0	0	0	73	71	72

Career Tech Program Enrollment

Comprehensive Career Tech: Students who attend academics and career technical programs in your district.

On-Site Career Tech: Students who attend academics in another district but attend career technical programs in your district.

Satellite JVSD: Same as Comprehensive Career Tech, but the program is sponsored and/or administered by the JVS District and housed by your District.

Boundaries

Please list municipalities, townships, and any additional counties within the boundaries of your school district: CLEVELAND

Has your District experienced changes in District-wide boundaries since 2004? no

Growth

Do you expect significant growth in your District over the next 10 years? no

Additional Information

Please provide any additional information you feel may impact your District's future enrollment [i.e. private schools opening or closing]

Tracy Healy instructed me to note the following: I have no Open Enrollment students coming into Shaker - I don't know how the State arrived at these numbers. Our vocational compact isn't listed in the drop-down. It is Tri Heights Career PREP.

Submission Documents

The following are additional documents which may be useful in projecting your District's enrollment. Please check any documents you intend to provide for consideration:

☐ Return To District ☐ Print Report

Please contact Tracy Healy (thealy@futurethinkinc.com, 614-264-2638) with any questions or concerns regarding the District Questionnaire.

Comments or Suggestions Regarding OSFC Website