



*FutureThink*

Formerly DeJONG-HEALY

# FINAL REPORT



OHIO FACILITIES CONSTRUCTION COMMISSION

**Chardon Local School District**

Geauga County

Enrollment Projections

April 2, 2019

## Chardon Local School District

### INTRODUCTION

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Based on a request from the Ohio Facilities Construction Commission, **FutureThink** was contracted to develop enrollment projections for the Chardon Local School District.

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

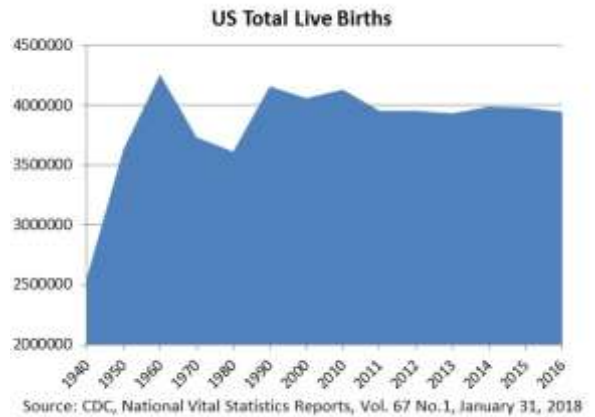
- ▶ Live birth data
- ▶ Historical enrollment
- ▶ Community school enrollment
- ▶ Open enrollment
- ▶ Community demographics
- ▶ Housing information

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.

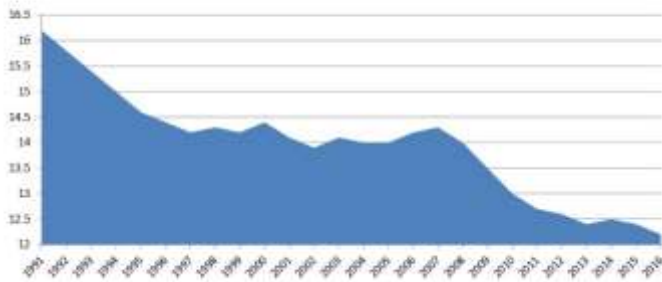
## Chardon Local School District

### NATIONAL & OHIO TRENDS IN ENROLLMENT

Tracing the landscape of the country’s public school enrollment back over the past 70+ 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.



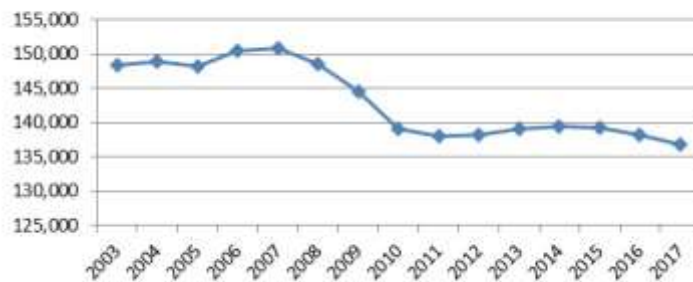
US Population - Live Birth Rate per 1,000 Population



With the live birth rate, there was an increase for the first time in several years in 1998. Other increases occurred in 2000, 2006, and 2007. Since 2007, the birth rate has resumed a descending pattern, reaching an all-time low in 2013. In 2014, there was a slight uptick, but declined again in 2015 and 2016.

Ohio has experienced a similar 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 then declined to an all-time low of 138,024 in 2011. In 2012, 2013, and 2014, there were slight increases, but counts for 2015, 2016, and 2017 show additional decline.

Ohio Birth Counts

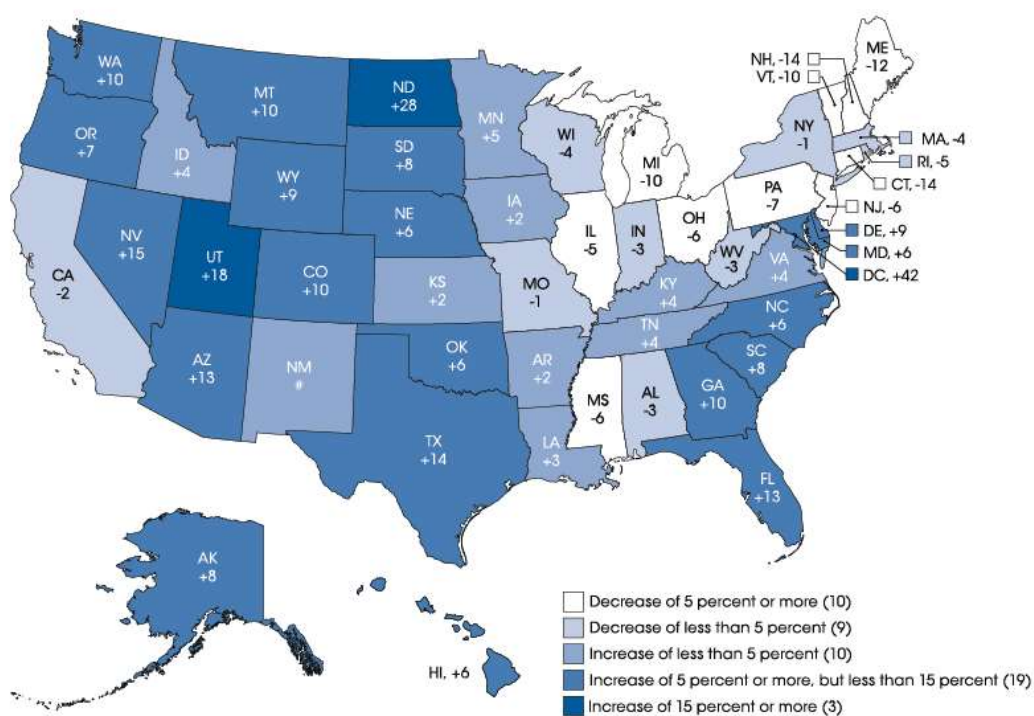


## Chardon Local School District

In addition, to births dropping in Ohio, the state is also aging. The median age in 2017 was 39.9 years of age while the national median age is 37.9 years. In 2010, the median age in Ohio was 38.3 years.

In 2014-15, approximately 56 million students were enrolled in grades Pre-K-12 in the United States, an increase of 3% since the 2011-02 school year. Overall, enrollment is projected to increase by approximately 3% by the 2026-27 school year.

The figure below illustrates the projected change in Pre-K-12 public school enrollment from the 2014-15 to the 2026-27 school year. Growth is expected to continue primarily in the southeast and west. Washington, D.C.; North Dakota; and Utah are projected to experience the most growth. Ohio is projected to experience a decrease of 6 percent.



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2014-15; and Public State Elementary and Secondary Enrollment Model: 1980-2026. See *Digest of Education Statistics 2016*, [table 203.20](#).

## Chardon Local School District

In Ohio, enrollment has declined steadily for both public and non-public school enrollment. From 2008-09 to 2017-18, public school enrollment declined by 140,602 students or approximately 7% statewide.

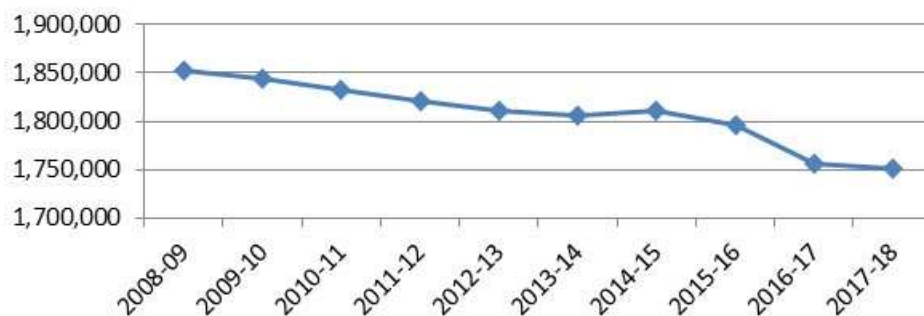
### Ohio Public School Enrollment 2008-09 - 2017-18

Year	October Headcount*
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
2014-15	1,810,577
2015-16	1,795,339
2016-17	1,755,552
2017-18	1,751,888

Source: Ohio Department of Education

\*includes grades K-12 and ungraded

### Ohio Public School Enrollment



## Chardon Local School District

From 2008-09 – 2017-18, private school enrollment has declined by 26,486 students or 14 percent.

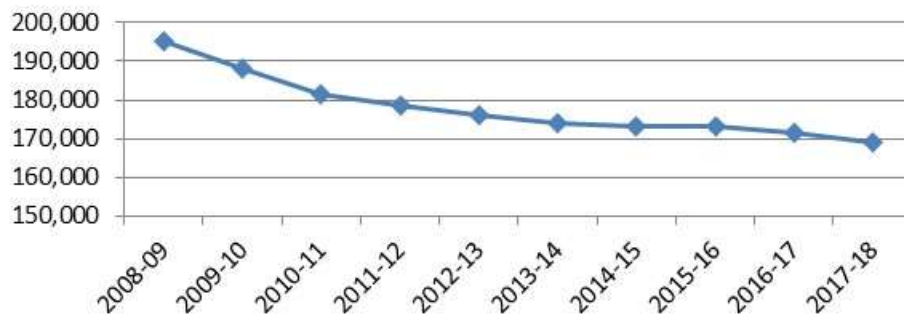
### Ohio Chartered Non-Public School Enrollment 2008-09 - 2017-18

Year	October ADM*
2008-09	195,343
2009-10	187,994
2010-11	181,420
2011-12	178,702
2012-13	176,166
2013-14	173,966
2014-15	173,030
2015-16	172,990
2016-17	171,426
2017-18	168,857

Source: Ohio Department of Education

\*includes grades K-12

### Ohio Non-Public School Enrollment



## Chardon Local School District

Out of 610 school districts, only 89 (or approximately 15%) gained enrollment in grades K - 12 from the 2008-09 to the 2017-18 school year. Of the 521 school districts who lost enrollment, only 72 (or 14%) lost less than 5 percent, and 108 districts (or 21%) lost between 5 and 10 percent. Approximately 46% (or 240 districts) lost between 10 and 20 percent.

For those districts that gained enrollment, 54% increased by less than 5 percent. Of the 10 districts with the greatest increase in students, one is located in Delaware County and seven in Franklin County.

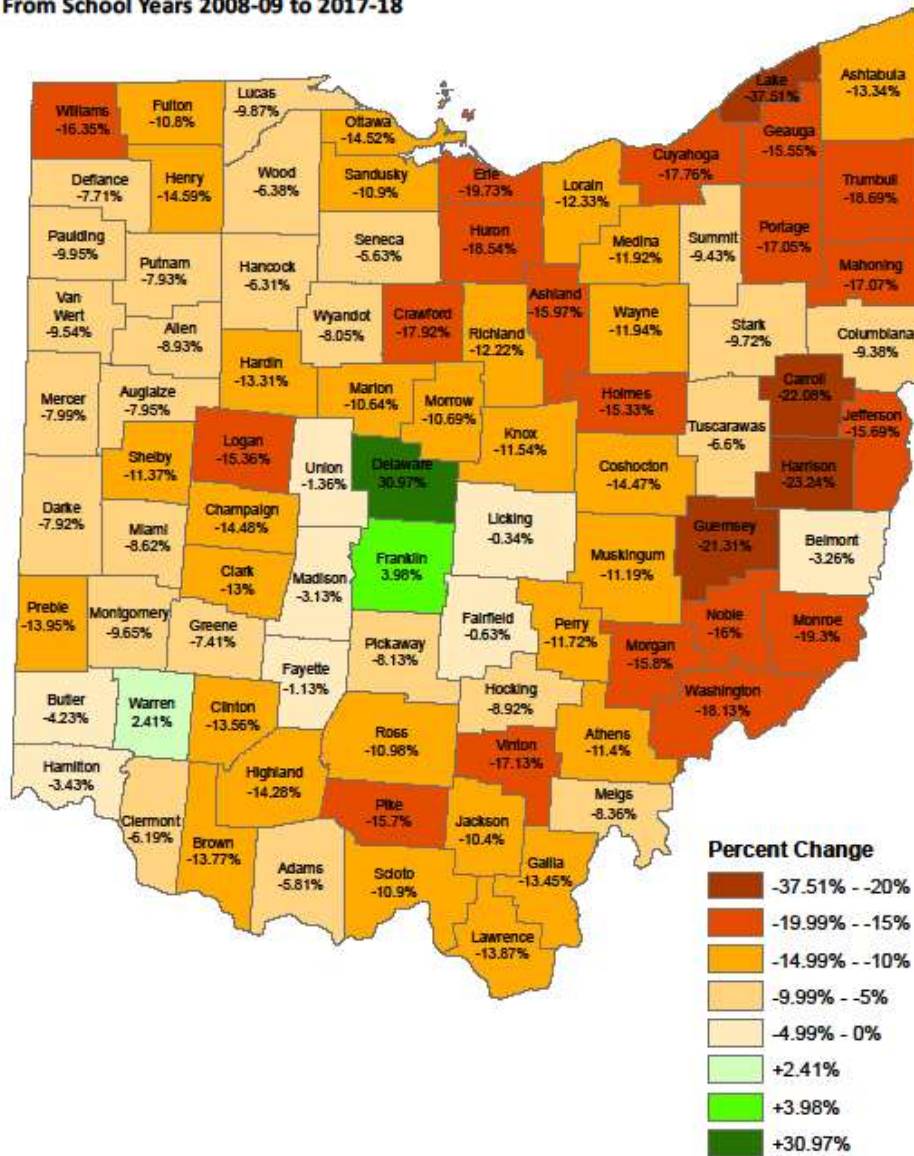
Analyzing enrollment from a county perspective, only 3 of the 88 counties in Ohio gained K – 12 enrollment from the 2008-09 to the 2017-18 school year: Delaware, Franklin and Warren.

County	Percentage Gain
Delaware	30.97%
Franklin	3.98%
Warren	2.41%

Lake County had the highest percentage loss of students at 37.54 percent. Fifty-nine percent of the counties (52 total) experienced a decline of greater than 10 percent. The map on the following page illustrates the gain/loss for each county from the 2008-09 to the 2017-18 school year.

## Chardon Local School District

**Student Enrollment Growth/Loss  
From School Years 2008-09 to 2017-18**





## ENROLLMENT PROJECTION METHODOLOGIES

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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.

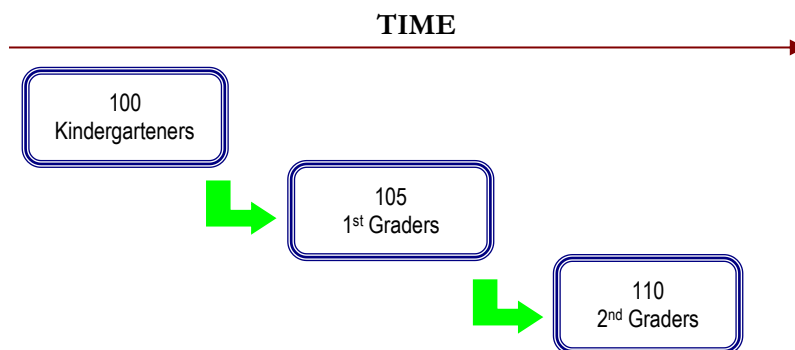
When looking ahead at a school district's enrollment over the next two, five, or ten years, it is helpful to approach the process from a global perspective. For example: How many new homes have been constructed each year? How many births have occurred each year in relation to the resident population? 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:

## Chardon Local 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.

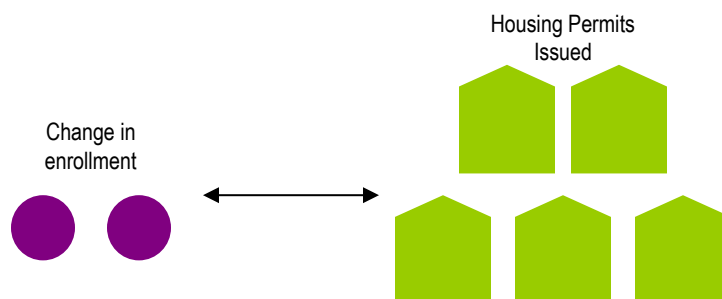
This methodology can be carried through to develop ten years of projection figures. Because there is not a grade cohort to follow for students coming into kindergarten, live birth counts are used to develop a survival ratio. Babies born five years previous to the kindergarten class are compared in number,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

## Chardon Local 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.



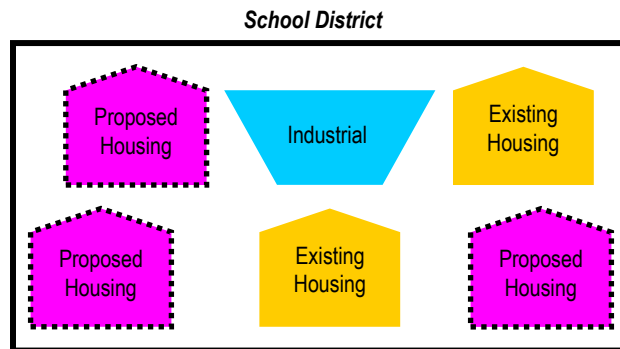
Once yield factors are established, the number of new students per year can be estimated by multiplying the yield factor by the number of projected new housing units. This method is effective when the rate of kindergarten enrollment far exceeds the live birth counts.

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.

## Chardon Local 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 Chardon Local School District.

## Chardon Local School District

### HISTORICAL ENROLLMENT

Over the past ten years, student enrollment in the Chardon Local School District has decreased by 348 students in grades Pre-K – 12, including ungraded and career technical students. Total enrollment for the 2018-19 school year is 2,823 students.

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

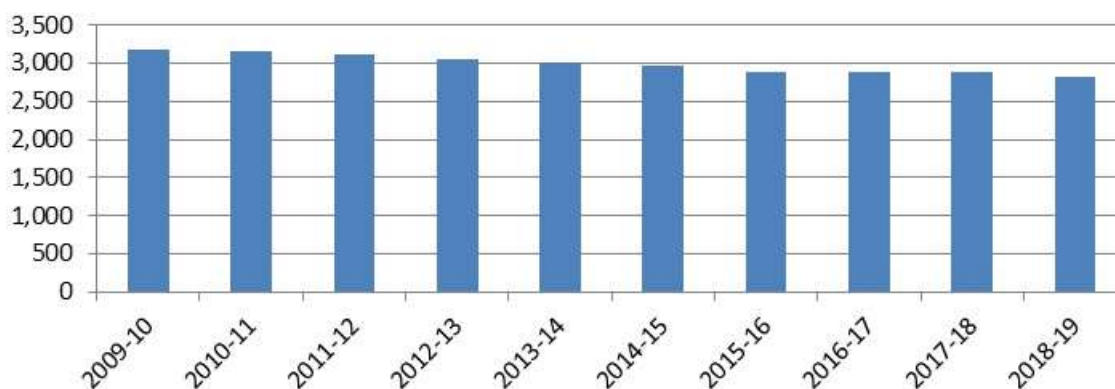
- Pre-K – 99%
- K-3 – 4%
- 4-7 – 9%
- 8-12 – 9%

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

- Pre-K – 1%
- K-3 – 1%
- 4-7 – 1%
- 8-12 – 1%

The following graph illustrates the District’s Pre-K – 12 enrollment history from 2009-10 through 2018-19.

**Chardon Local School District  
Historical Enrollment**



## Chardon Local School District

The following tables illustrate the District's enrollment history from 2009-10 through 2018-19.

**Chardon Local School District  
Historical Enrollment**

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Pre-K (regular)*	7	6	4	5	5	9	8	8	14	14
Pre-K (special needs)	17	10	11	9	10	21	13	12	33	37
K	196	219	204	169	172	164	175	139	164	185
1	216	214	220	212	185	188	171	191	163	171
2	208	212	217	225	208	189	191	175	194	167
3	213	212	221	222	232	218	198	200	182	193
4	226	216	216	229	229	231	227	204	205	196
5	236	226	231	222	233	232	238	235	204	208
6	223	247	240	241	235	239	235	243	237	207
7	263	227	240	249	237	228	244	235	259	230
8	252	271	228	237	249	238	224	250	236	248
9	304	278	284	260	260	261	248	236	260	238
10	263	276	253	250	242	246	255	245	229	255
11	224	210	230	203	215	190	201	221	215	200
12	208	225	224	235	206	224	194	213	235	221
Pre-K - 12 Total	3,056	3,049	3,023	2,968	2,918	2,878	2,822	2,807	2,830	2,770
Ungraded	3	3	2	8	4	0	1	5	0	7
Career Tech Off-Site	112	93	84	83	83	79	60	62	50	46
Grand Total	3,171	3,145	3,109	3,059	3,005	2,957	2,883	2,874	2,880	2,823

Source: Ohio Department of Education, EMIS; Chardon Local School District

**Chardon Local School District  
Historical Enrollment by Grade Group**

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Pre-K (special needs) - 3	850	867	873	837	807	780	748	717	736	753
4 - 7	948	916	927	941	934	930	944	917	905	841
8 - 12	1,251	1,260	1,219	1,185	1,172	1,159	1,122	1,165	1,175	1,162
Pre-K - 12 Total	3,049	3,043	3,019	2,963	2,913	2,869	2,814	2,799	2,816	2,756
Ungraded	3	3	2	8	4	0	1	5	0	7
Career Tech Off-Site	112	93	84	83	83	79	60	62	50	46
Grand Total	3,164	3,139	3,105	3,054	3,000	2,948	2,875	2,866	2,866	2,809

Source: Ohio Department of Education, EMIS; Chardon Local School District

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

## Chardon Local School District

### COMMUNITY SCHOOL ENROLLMENT

In Ohio, community school enrollment has increased dramatically over the last decade. From 2007-08 to 2016-17, enrollment has increased by approximately 35% from 82,643 students in 313 community schools to 111,272 students in 362 community schools. However, there has been a decrease of 8% in both enrollment and number of schools since the 2013-14 school year.

#### Ohio

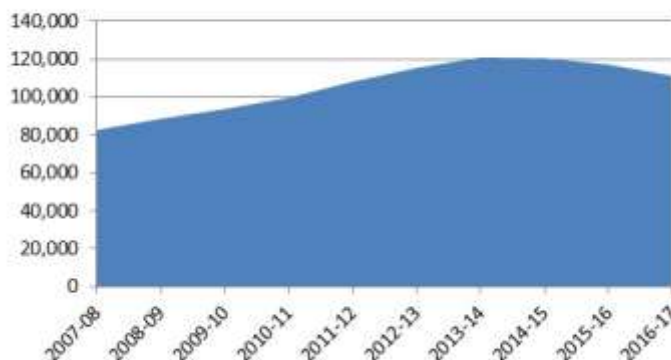
##### Community School Enrollment (Pre-K - 12)

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Grand Total	82,643	88,536	93,699	99,658	108,124	115,324	120,893	120,495	117,126	111,272

Source: Ohio Department of Education, Ohio Community Schools Annual Report 2016-17

FTE students

#### Ohio Community School Enrollment



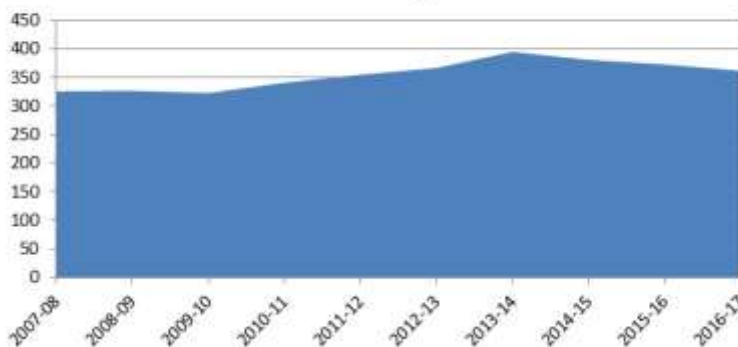
#### Ohio

##### Number of Community Schools

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Grand Total	326	327	323	341	355	367	395	381	373	362

Source: Ohio Department of Education, Ohio Community Schools Annual Report 2016-17

#### Number of Community Schools in Ohio



## Chardon Local School District

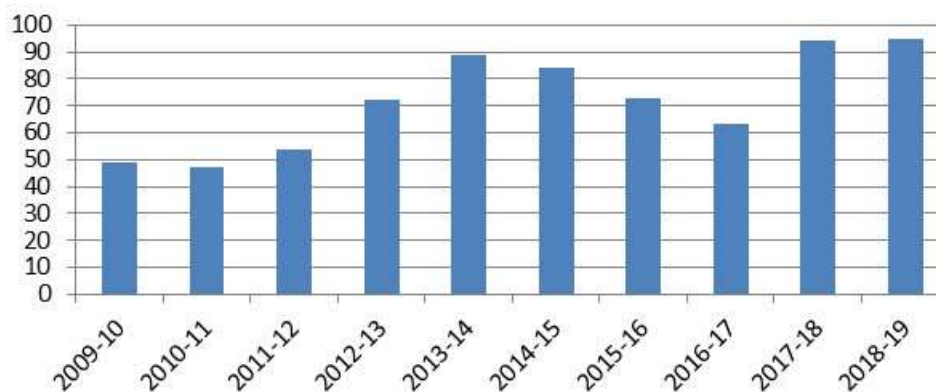
Since 2009-10, the number of Chardon Local School District students attending community schools has increased from 45 to 95 students with some fluctuation. Enrollment of Chardon Local School District students attending community schools should be closely monitored as it may have a significant impact on District enrollment in the future.

**Chardon Local School District  
Community School Enrollment**

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Pre-K	0	0	0	0	0	0	0	0	0	0
K	1	4	3	0	2	1	0	0	0	0
1	1	0	3	5	2	4	1	1	0	0
2	0	1	2	2	6	2	2	1	0	0
3	2	1	3	2	3	5	1	1	0	0
4	4	2	4	3	3	5	4	1	0	0
5	1	3	2	5	4	3	3	1	0	0
6	3	1	6	3	5	2	3	4	0	0
7	2	3	4	8	7	7	5	8	0	0
8	3	4	5	3	10	10	8	4	0	0
9	1	3	6	11	10	7	8	9	0	0
10	9	6	1	14	10	10	7	7	0	0
11	11	8	11	9	16	14	18	9	0	0
12	7	8	4	7	11	14	13	17	0	0
Ungraded	4	3	0	0	0	0	0	0	94	95
<b>Grand Total</b>	<b>49</b>	<b>47</b>	<b>54</b>	<b>72</b>	<b>89</b>	<b>84</b>	<b>73</b>	<b>63</b>	<b>94</b>	<b>95</b>

Source: Ohio Department of Education, EMIS; Chardon Local School District

**Chardon Local School District  
Students Attending Community Schools**





## Chardon Local School District

### OPEN ENROLLMENT

Since 2009-10, the number of Chardon Local School District students “open enrolling” into the District has increased from 0 to 76 students with some fluctuation. The number of students “open enrolling” out of the District has increased from 25 to 72 students with some fluctuation. 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.

Chardon Local School District  
Open Enrollment - IN

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Pre-K	0	0	0	0	0	0	0	0	0	0
K	0	0	5	1	6	4	3	3	10	0
1	0	0	3	3	2	4	5	4	4	7
2	0	0	1	3	2	3	3	6	4	4
3	0	0	3	2	1	2	6	7	5	2
4	0	0	2	2	2	3	3	6	6	7
5	0	0	2	3	3	2	4	3	5	4
6	0	0	2	1	4	6	4	2	8	3
7	0	0	2	2	1	5	6	3	9	6
8	0	0	1	1	0	4	5	5	3	7
9	0	0	1	2	9	10	6	5	12	7
10	0	0	1	2	6	7	14	6	9	11
11	0	0	4	1	8	10	10	15	7	11
12	0	0	5	6	5	7	11	11	18	7
Ungraded	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	32	29	49	67	80	76	100	76

Source: Ohio Department of Education, EMIS; Chardon Local School District

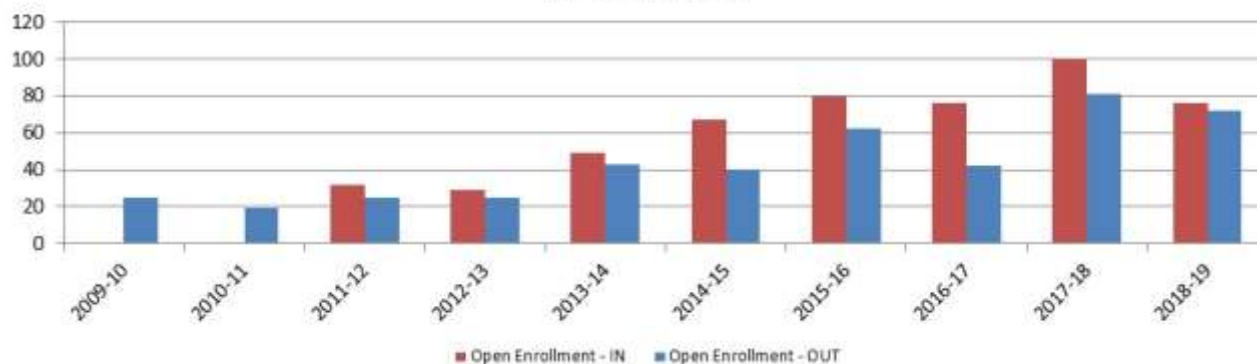
## Chardon Local School District

### Chardon Local School District Open Enrollment - OUT

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Pre-K	0	0	0	0	0	0	0	0	0	0
K	3	2	4	1	11	0	8	7	4	7
1	1	1	3	3	1	9	5	2	10	3
2	1	1	1	3	2	1	5	4	4	8
3	0	2	1	1	3	2	3	4	4	3
4	2	0	1	1	2	3	1	1	8	1
5	2	2	1	1	3	2	3	0	1	9
6	2	2	2	1	1	4	1	1	3	1
7	1	1	2	2	2	1	5	1	3	4
8	2	1	1	1	2	2	2	2	5	5
9	2	0	0	2	7	2	8	4	6	5
10	3	1	0	2	1	7	2	6	8	7
11	2	4	4	1	5	1	10	2	15	8
12	4	2	5	6	3	6	9	8	10	11
Ungraded	0	0	0	0	0	0	0	0	0	0
<b>Grand Total</b>	<b>25</b>	<b>19</b>	<b>25</b>	<b>25</b>	<b>43</b>	<b>40</b>	<b>62</b>	<b>42</b>	<b>81</b>	<b>72</b>

Source: Ohio Department of Education, EMIS; Chardon Local School District

### Chardon Local School District Open Enrollment



## Chardon Local 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.

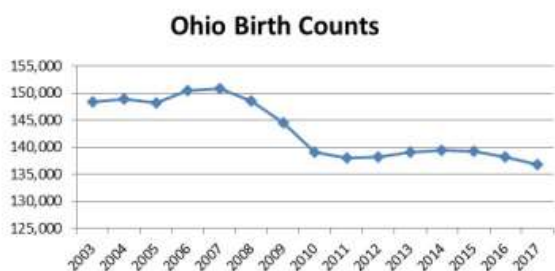
The Ohio Department of Health [ODH] data warehouse provides information about live birth events for Ohio residents. Information about events occurring outside of Ohio to Ohio residents is included. Information about events occurring inside Ohio to non-Ohio residents is not included.

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 has experienced a similar 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 then declined to an all-time low of 138,024 in 2011. In 2012, 2013, and 2014, there were slight increases, but counts for 2015, 2016, and 2017 show additional decline.

## Chardon Local School District

The following table and graph include the live birth counts for zip code 44024.

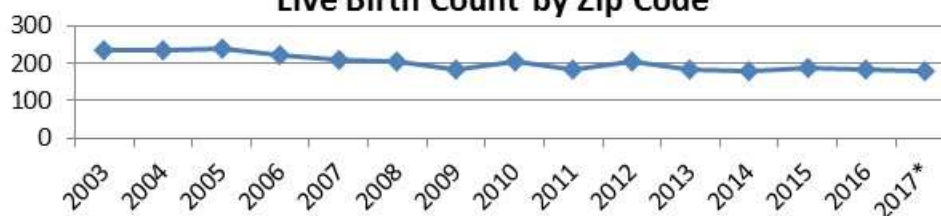
**Chardon Local School District  
Live Birth Count by Zip Code  
2003-2017**

Year	44024
2003	234
2004	235
2005	241
2006	221
2007	210
2008	204
2009	183
2010	205
2011	182
2012	204
2013	182
2014	180
2015	189
2016	184
2017*	178

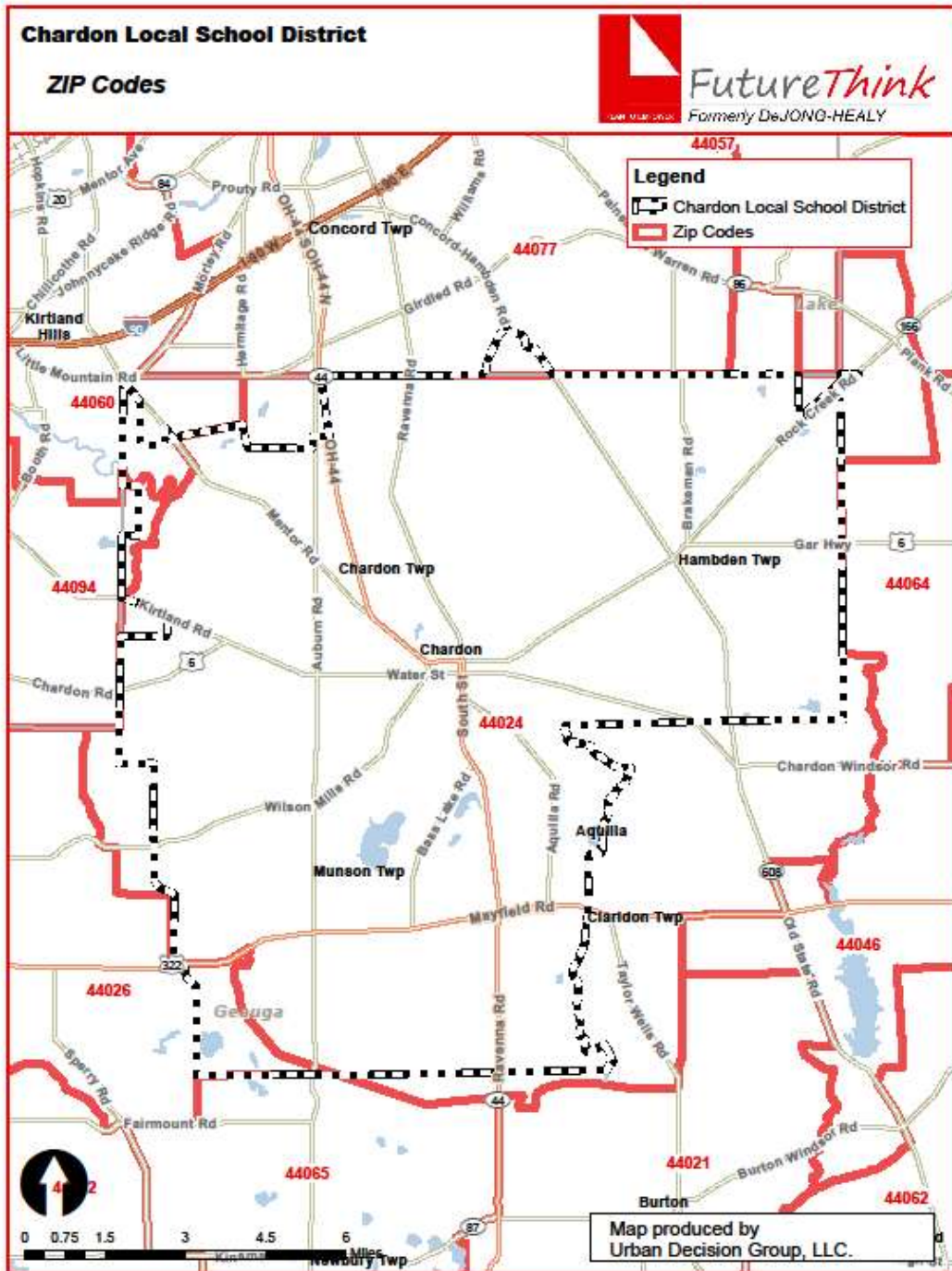
Source: Ohio Department of Health, Statistical Analysis Unit

\*preliminary

**Chardon Local School District  
Live Birth Count by Zip Code**



Chardon Local School District



## Chardon Local School District

## DEMOGRAPHICS

The Chardon Local School District is comprised of Chardon City and Chardon, Claridon, Hambden, and Munson townships in Geauga County. General demographic data is included in the following tables for the areas located completely or partially in the District.

## General Demographic Information

	Geauga County	State of Ohio
Per Capita Income	\$39,513	\$29,011
Median Household Income	\$77,104	\$52,407
Persons Below Poverty	6.5%	14.9%

Source: US Census, American Community Survey, 2017 5-Year Estimates

## Total Population

	2000 Census	2010 Census
Geauga County	90,895	93,389
Chardon City	5,156	5,148
Chardon Township	4,763	4,585
Claridon Township	3,173	3,200
Hambden Township	4,024	4,661
Munson Township	6,450	6,621

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

## Chardon Local 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.*

## Chardon Local 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.

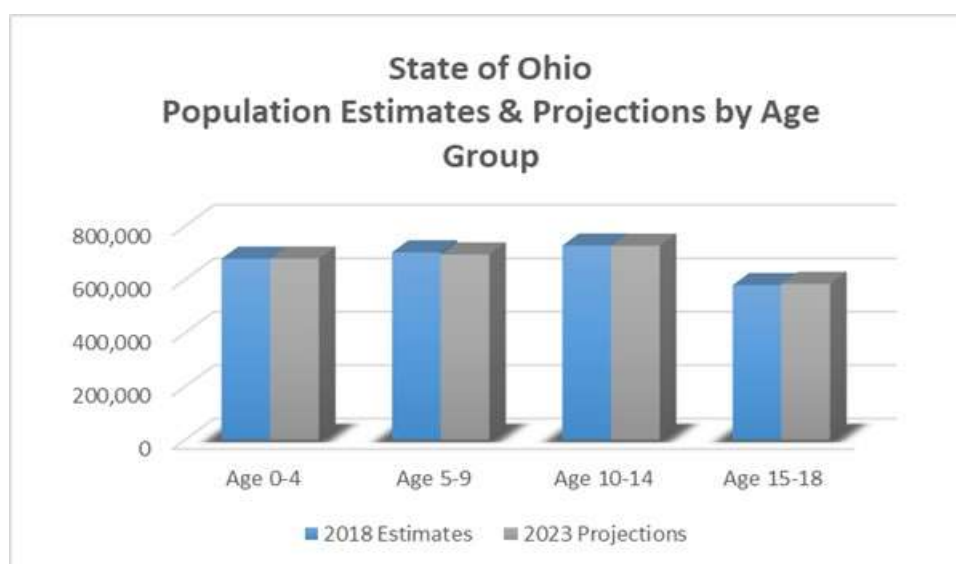
The total population in the State of Ohio is 11,772,676. This population is projected to increase by 146,828 people, or approximately 1% over a 5-year period.

The 0-18 year-old population in the State currently totals 2,687,291. This population is projected to decrease by 4,559 children, or less than 1 percent.

The median age is projected to increase by approximately 2% from 40.0 to 40.7 years of age.

State of Ohio	2018 Estimates	2023 Projections	Change 2018-23	Change 2018-23 (%)
Total Population	11,772,676	11,919,504	146,828	1.2%
Age 0-4	678,107	678,004	-103	0.0%
Age 5-9	702,177	693,853	-8,324	-1.2%
Age 10-14	727,557	726,814	-743	-0.1%
Age 15-18	579,450	584,061	4,611	0.8%
Total Age 0-18	2,687,291	2,682,732	-4,559	-0.2%
Median Age	40.0	40.7	0.7	1.8%

Source: ESRI



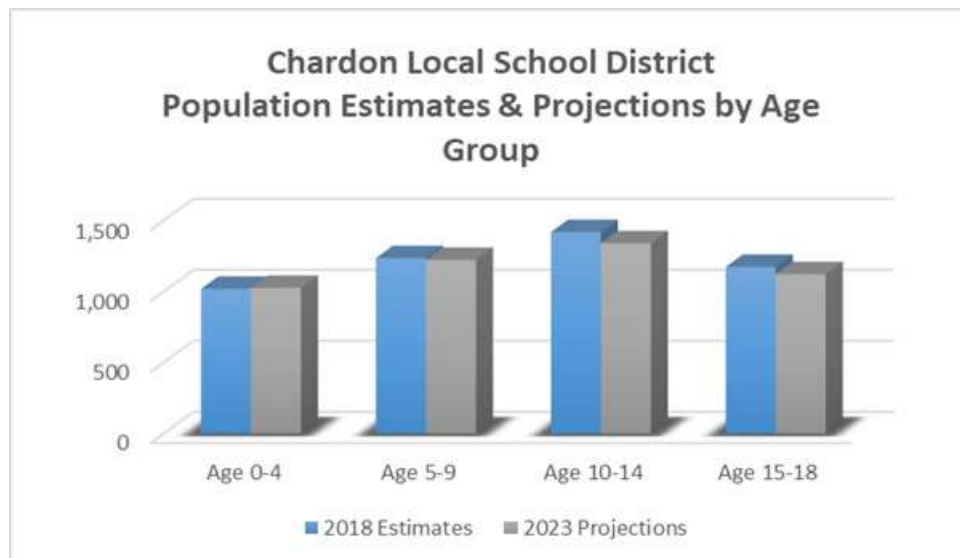


## Chardon Local School District

The total population in the District is 21,747. This population is projected to increase by 376 people, or approximately 2% over a 5-year period. The 0-18 year-old population in the District currently totals 4,852. This population is projected to decrease by 136 people, or approximately 3 percent. The median age is projected to increase by approximately 1%, from 46.4 to 46.9 years of age.

Chardon Local School District	2018 Estimates	2023 Projections	Change 2018-23	Change 2018-23 (%)
Total Population	21,747	22,123	376	1.7%
Age 0-4	1,020	1,027	7	0.7%
Age 5-9	1,237	1,224	-13	-1.1%
Age 10-14	1,420	1,341	-79	-5.6%
Age 15-18	1,175	1,124	-51	-4.3%
Total Age 0-18	4,852	4,716	-136	-2.8%
Median Age	46.4	46.9	0.5	1.1%

Source: ESRI



## Chardon Local School District

Median and average household incomes in the State are projected to increase by approximately 11% and 15%, respectively over a 5-year period. The average family size and total number of family households are both expected to increase slightly.

State of Ohio	2018 Estimates	2023 Projections	Change 2018-23	Change 2018-23 (%)
Median Household Income	\$53,378	\$59,356	\$5,978	11.2%
Average Household Income	\$72,517	\$83,630	\$11,113	15.3%
Average Family Size	3.04	3.05	0.01	0.3%
Total Family Households	3,005,668	3,025,590	19,922	0.7%

Source: ESRI

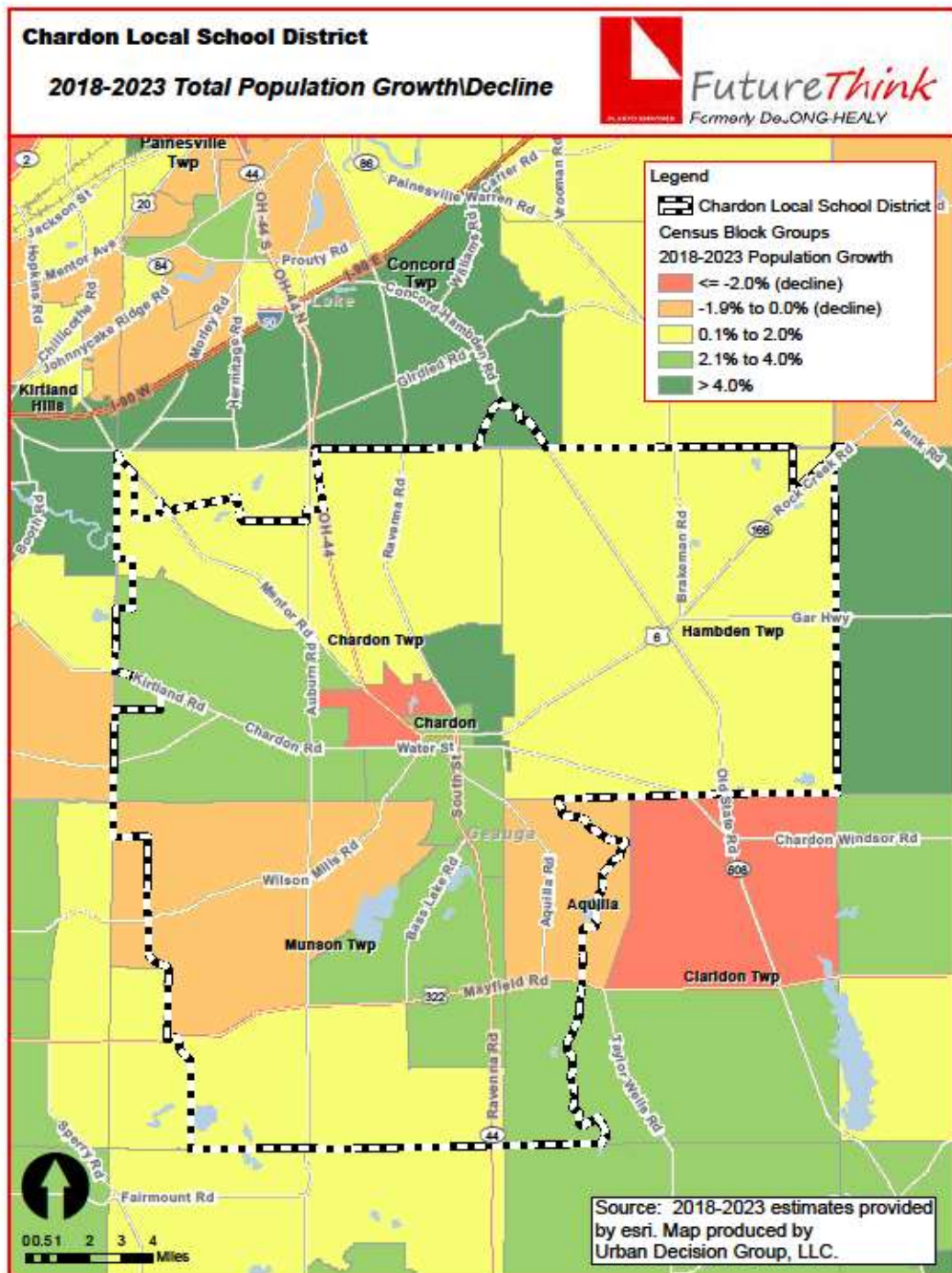
Median and average household incomes in the District are projected to increase by approximately 9% and 13%, respectively over a 5-year period. The average family size is projected to increase slightly, and the number of family households is projected to increase by approximately 1 percent.

Chardon Local School District	2018 Estimates	2023 Projections	Change 2018-23	Change 2018-23 (%)
Median Household Income	\$72,777	\$79,175	\$6,398	8.8%
Average Household Income	\$91,944	\$103,796	\$11,852	12.9%
Average Family Size	3.05	3.06	0.01	0.3%
Total Family Households	5,962	6,047	85	1.4%

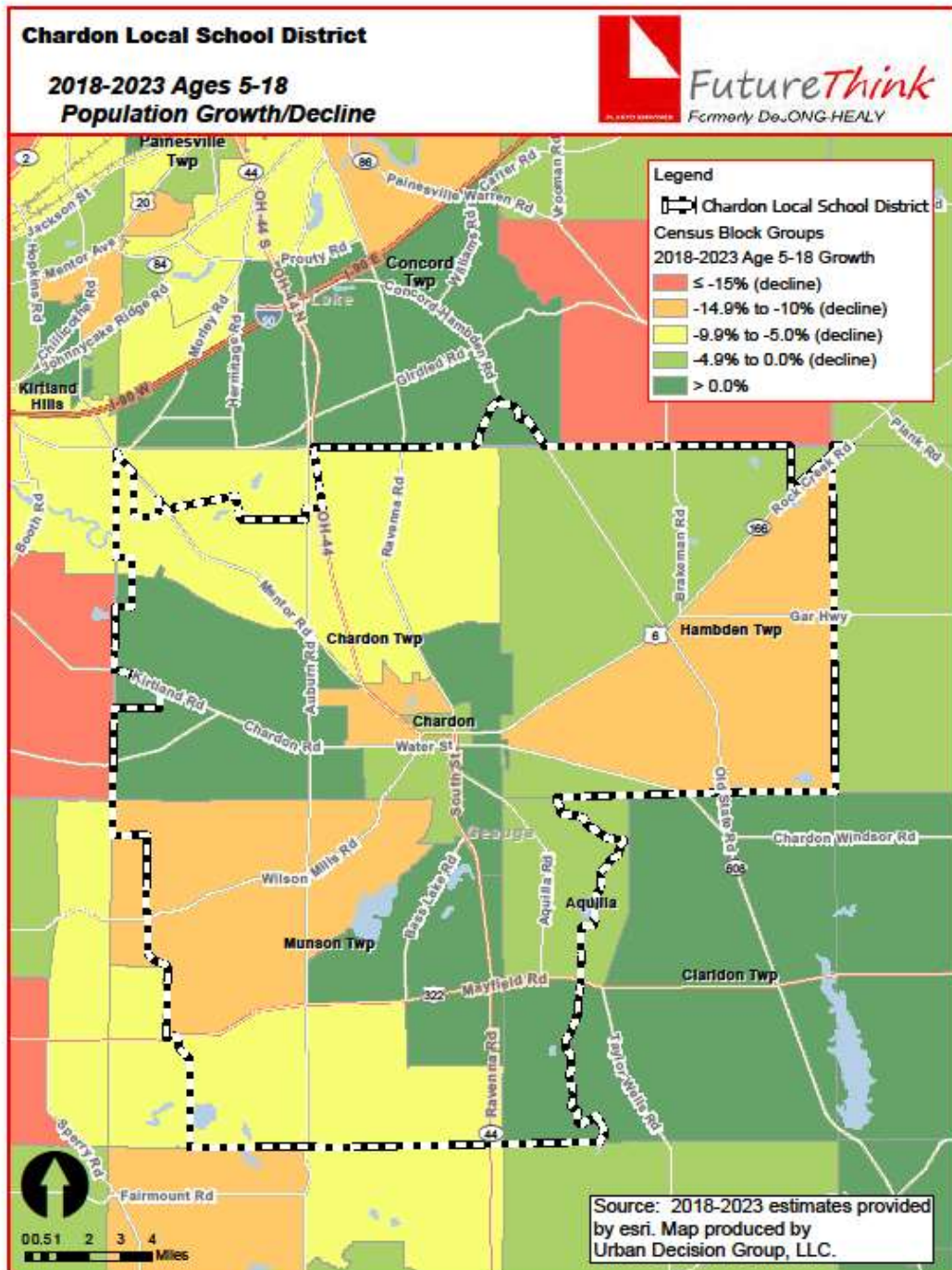
Source: ESRI

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.

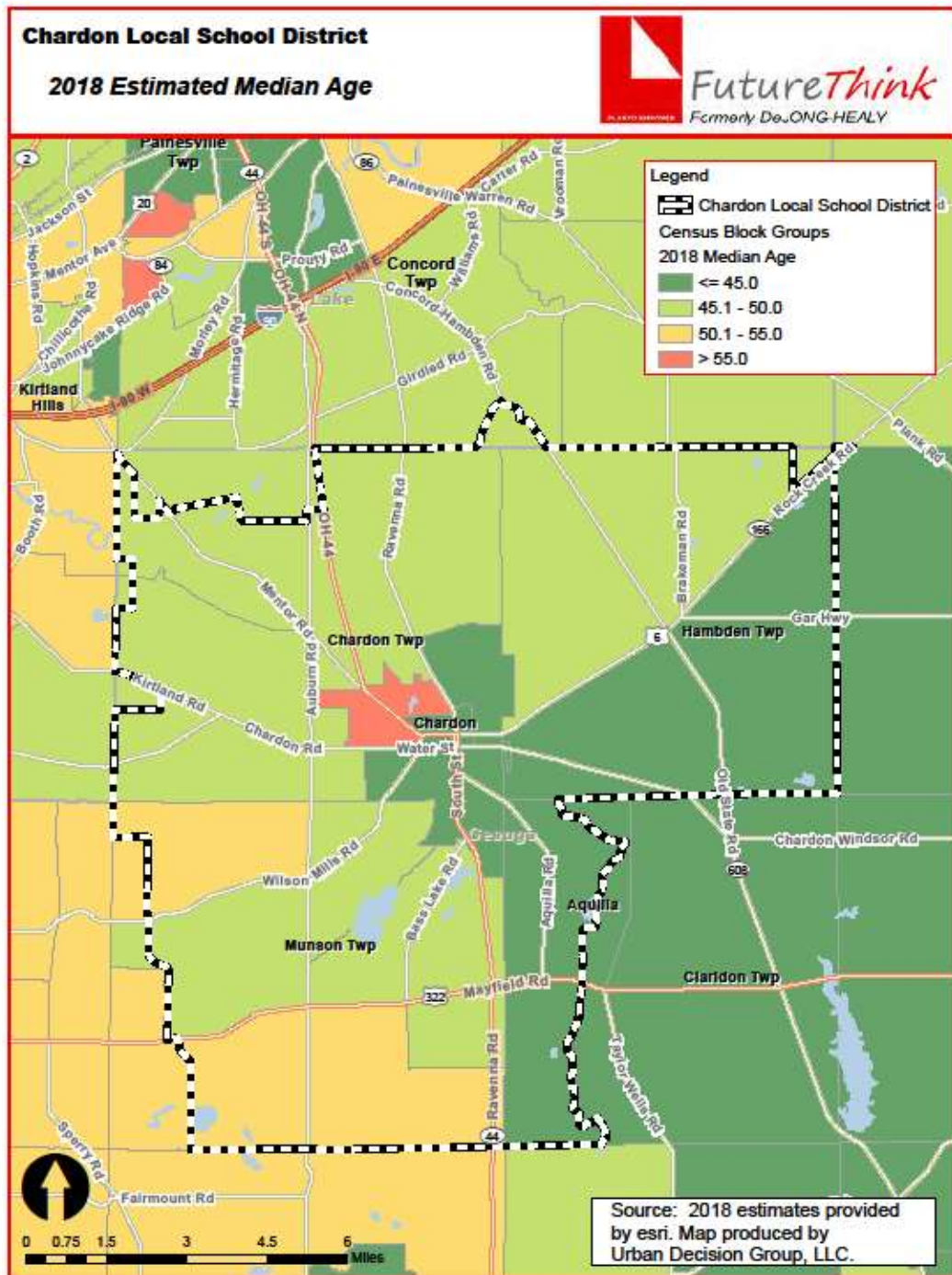
## Chardon Local School District



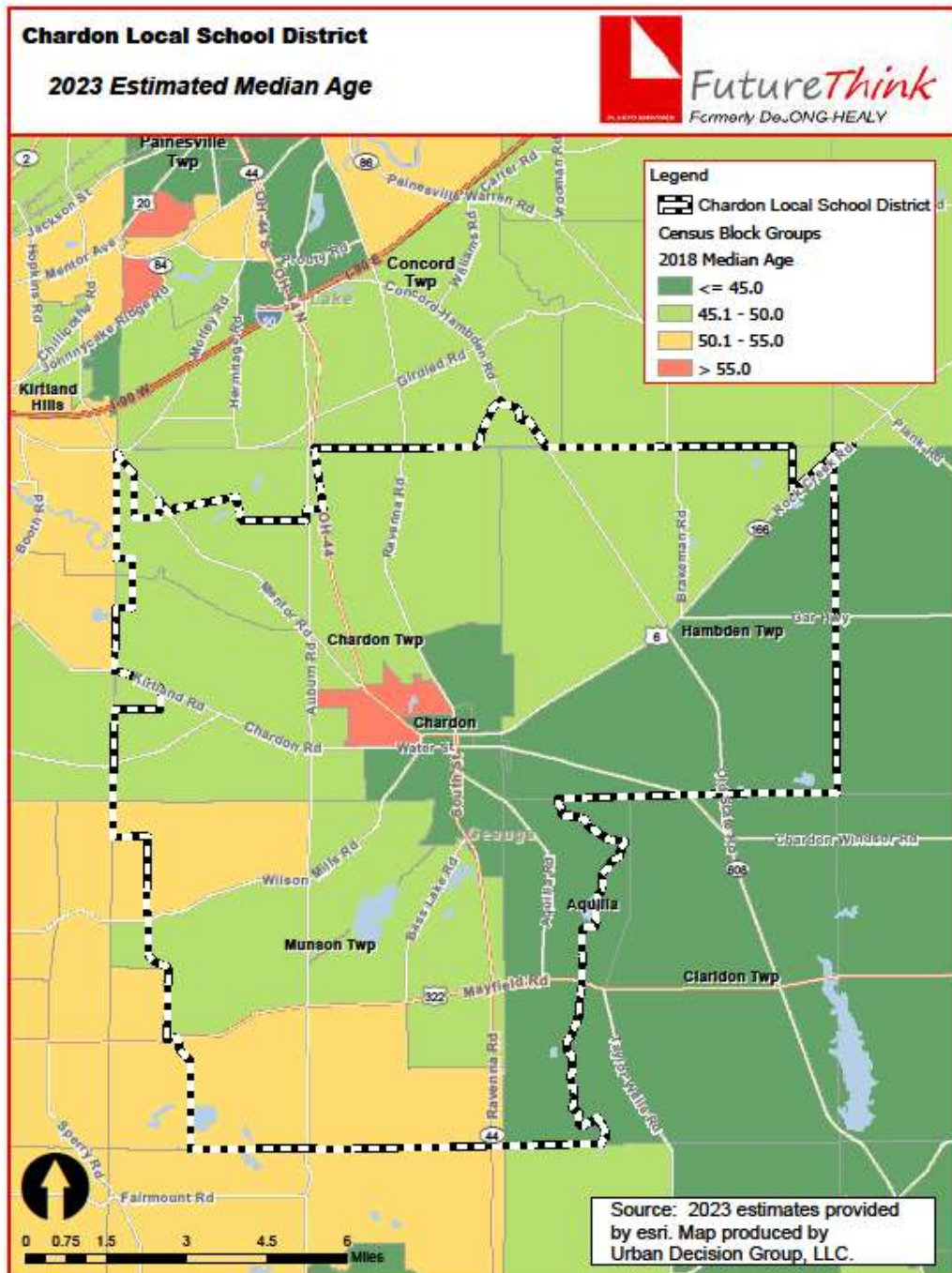
## Chardon Local School District



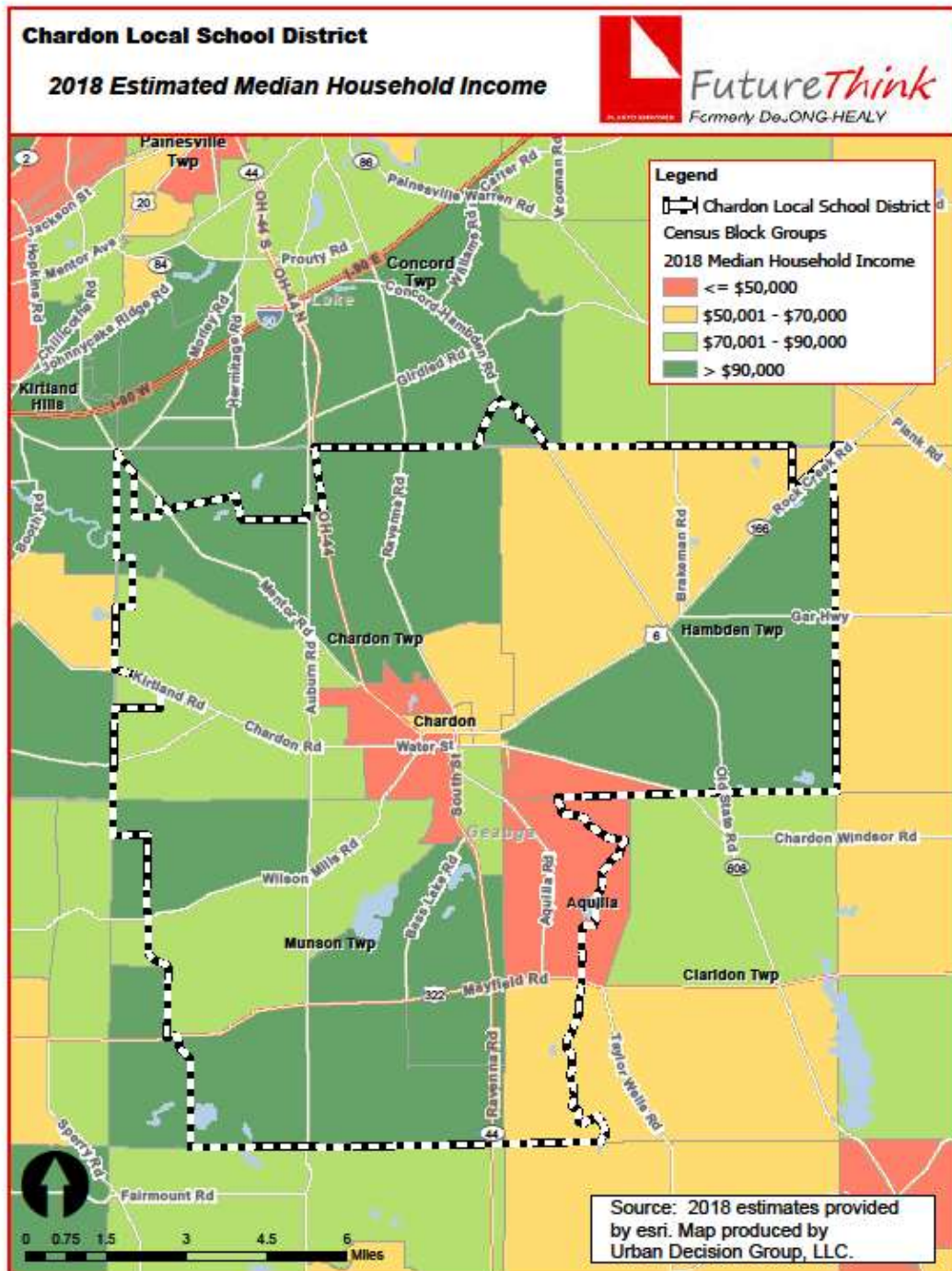
## Chardon Local School District



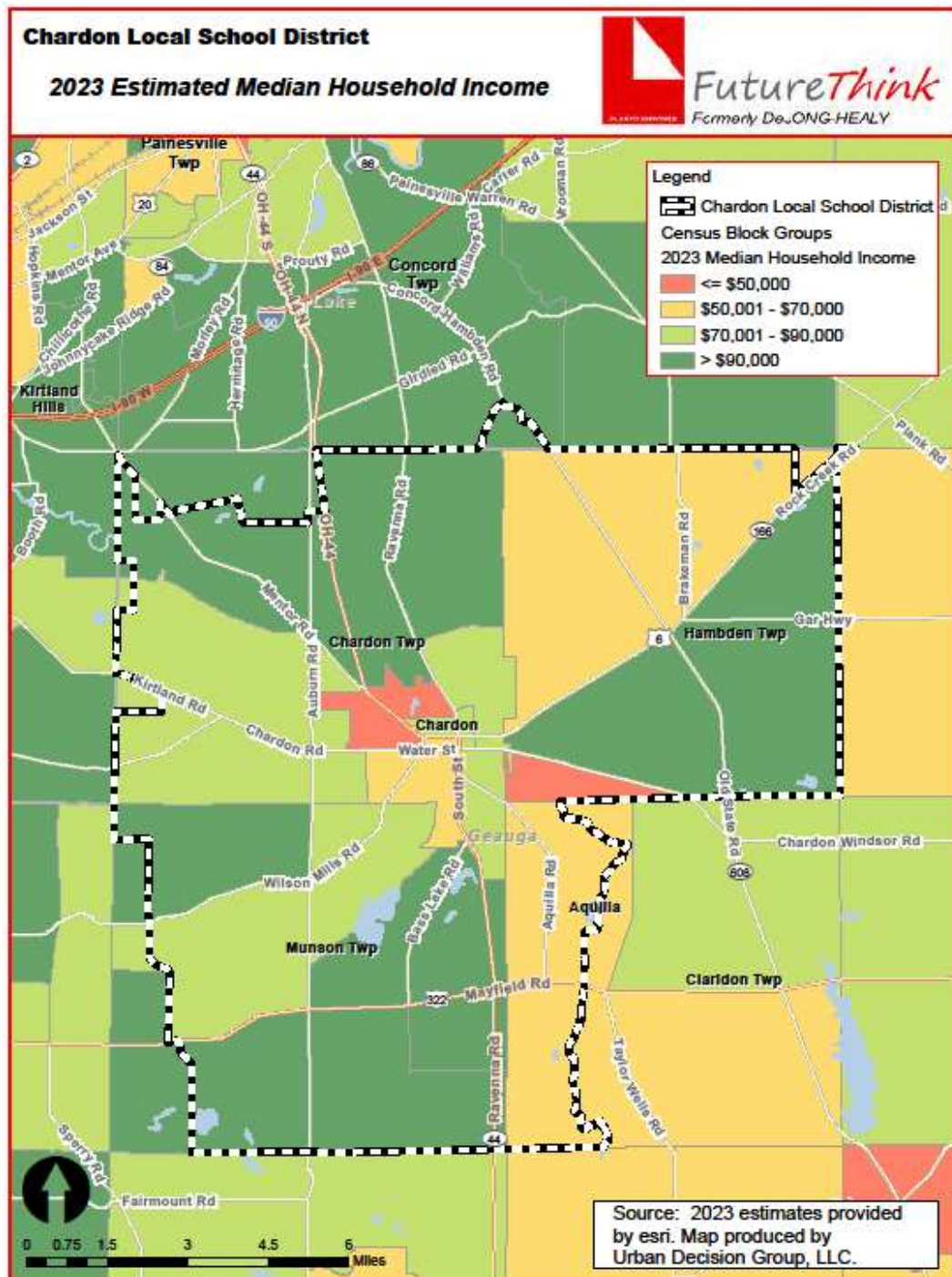
## Chardon Local School District



## Chardon Local School District



## Chardon Local School District





## HOUSING INFORMATION

The chart below illustrates the number of single-family dwelling building permits issued each year in Geauga County.

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

Year	Gauga County
2008	129
2009	62
2010	91
2011	102
2012	116
2013	137
2014	154
2015	132
2016	142
2017	166
2018*	139

Source: SOCDs Building Permits Database

\* through November 2018

## Chardon Local 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 8<sup>th</sup> to 9<sup>th</sup> grade and after one year in 9<sup>th</sup> grade do not have sufficient credits to be classified as 10<sup>th</sup> graders and are counted again as 9<sup>th</sup> 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 Chardon Local 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
2009	2010	90.9%	109.2%	98.1%	101.9%	101.4%	100.0%	104.7%	101.8%	103.0%	110.3%	90.8%	79.8%	100.4%
2010	2011	92.3%	100.5%	101.4%	104.2%	101.9%	106.9%	106.2%	97.2%	100.4%	104.8%	91.0%	83.3%	106.7%
2011	2012	80.5%	103.9%	102.3%	102.3%	103.6%	102.8%	104.3%	103.8%	98.8%	114.0%	88.0%	80.2%	102.2%
2012	2013	84.3%	109.5%	98.1%	103.1%	103.2%	101.7%	105.9%	98.3%	100.0%	109.7%	93.1%	86.0%	101.5%
2013	2014	89.6%	109.3%	102.2%	104.8%	99.6%	101.3%	102.6%	97.0%	100.4%	104.8%	94.6%	78.5%	104.2%
2014	2015	85.4%	104.3%	101.6%	104.8%	104.1%	103.0%	101.3%	102.1%	98.2%	104.2%	97.7%	81.7%	102.1%
2015	2016	76.4%	109.1%	102.3%	104.7%	103.0%	103.5%	102.1%	100.0%	102.5%	105.4%	98.8%	86.7%	106.0%
2016	2017	80.4%	117.3%	101.6%	104.0%	102.5%	100.0%	100.9%	106.6%	100.4%	104.0%	97.0%	87.8%	106.3%
2017	2018	101.6%	104.3%	102.5%	99.5%	107.7%	101.5%	101.5%	97.0%	95.8%	100.8%	98.1%	87.3%	102.8%
	average	86.82%	107.475%	101.12%	103.3%	103.00%	102.3%	103.3%	100.4%	99.9%	106.453%	94.347%	83.488%	103.572%
	standard deviation	7.252%	4.611%	1.635%	1.675%	2.095%	2.011%	1.919%	3.194%	2.068%	3.831%	3.614%	3.353%	2.166%

## Chardon Local School District

### ENROLLMENT PROJECTION

Enrollment projections were developed after analyzing the data collected in this report. The projections indicate a decrease of 336 students in grades Pre-K through 12, not including regular Pre-K students, from the 2018-19 to the 2028-29 school year. The following tables and graph illustrate projected enrollments by grade and by grade group through the 2028-29 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 Chardon Local School District funds preschool through the following sources:

- General fund
- Tuition
- IDEA-B

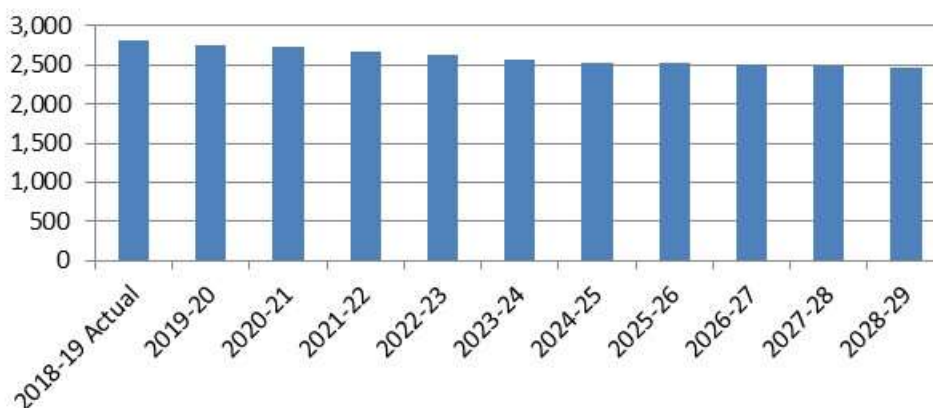
#### Kindergarten:

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 11<sup>th</sup> and 12<sup>th</sup> grade enrollments and projected separately.

**Chardon Local School District  
Projected Enrollment**



## Chardon Local School District

### Chardon Local School District Projected Enrollment

Grade	2018-19 Actual	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Pre-K (special needs)	37	32	33	32	31	32	32	32	32	32	32
K	185	156	163	159	154	158	158	158	158	158	158
1	171	199	167	175	170	165	169	169	169	169	169
2	167	175	203	170	178	174	168	172	172	172	172
3	193	174	181	210	176	185	180	174	179	179	179
4	196	202	181	189	219	184	193	188	182	186	186
5	208	199	205	184	192	222	187	196	191	184	189
6	207	211	202	208	186	195	225	189	199	193	187
7	230	209	213	203	209	188	196	227	190	200	194
8	248	227	206	209	200	206	185	193	223	187	197
9	238	260	238	215	219	210	215	193	202	234	196
10	255	234	255	233	211	215	205	211	189	198	229
11	200	221	202	220	201	182	185	177	182	163	171
12	221	206	226	207	225	206	186	190	182	187	168
Pre-K - 12 Total	2,756	2,705	2,675	2,614	2,571	2,522	2,484	2,469	2,450	2,442	2,427
Ungraded	7	4	4	4	4	4	4	4	4	4	4
Career Tech Off-Site	46	52	52	52	52	47	45	45	45	43	42
Grand Total	2,809	2,761	2,731	2,670	2,627	2,573	2,533	2,518	2,499	2,489	2,473

Source: FutureThink

### Chardon Local School District Projected Enrollment by Grade Group

Grade	2018-19 Actual	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Pre-K (special needs) - 3	753	736	747	746	709	714	707	705	710	710	710
4 - 7	841	821	801	784	806	789	801	800	762	763	756
8 - 12	1,162	1,148	1,127	1,084	1,056	1,019	976	964	978	969	961
Pre-K - 12 Total	2,756	2,705	2,675	2,614	2,571	2,522	2,484	2,469	2,450	2,442	2,427
Ungraded	7	4	4	4	4	4	4	4	4	4	4
Career Tech Off-Site	46	52	52	52	52	47	45	45	45	43	42
Grand Total	2,809	2,761	2,731	2,670	2,627	2,573	2,533	2,518	2,499	2,489	2,473

Source: FutureThink

### CONCLUSION

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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 Chardon Local School District.

### APPENDIX

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The following documents are included in the appendix:

- District Acceptance
- District Questionnaire

The February 2001 Enrollment Projection Report is available upon request.



Tracy Healy <thealy@futurethinkinc.com>

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## Community School Count Correction

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**Hanlon, Michael** <michael.hanlon@chardonschools.org>

Tue, Apr 2, 2019 at 11:27 AM

To: "Farizel, Dianne" <dianne.farizel@chardonschools.org>

Cc: Tracy Healy <thealy@futurethinkinc.com>, Ashley Brudno <ashley.brudno@chardonschools.org>, Jeff Tuckerman <jtuckerman@hammondconstruction.com>

Tracy:

Thank you for your assistance this morning. Per our conversation, the Chardon Local School District accepts the enrollment projection with the understanding that the latest adjustments will be made and reflected in the final report.

Thanks.

Michael P. Hanlon, Jr. Ph.D.  
Superintendent

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Chardon Local Schools  
428 North Street  
Chardon, Ohio 44024

Office: 440-285-4052  
Cellular: 440-622-6085

<http://www.chardon.k12.oh.us>

PLEASE NOTE: This message and any response to it may constitute a public record, and therefore may be available upon request in accordance with Ohio public records law. (ORC 149.43).

On Tue, Apr 2, 2019 at 10:50 AM Farizel, Dianne <dianne.farizel@chardonschools.org> wrote:

[Quoted text hidden]

## District Questionnaire for Chardon Local of Geauga County (47183) [THealy]

District Questionnaire has been submitted for review

### Enrollment Report For Chardon Local of Geauga County (47183)

#### Contact Information

Superintendent Name: Michael Hanlon  
Superintendent Email: michael.hanlon@chardonschools.org  
Superintendent Phone: (440) 285-4052  
Contact Name (if different from Superintendent):  
Contact Title:  
Contact Email:  
Contact Phone:

#### K12 Enrollment

Grade	Enrolled 2009– 2010	Enrolled 2010– 2011	Enrolled 2011– 2012	Enrolled 2012– 2013	Enrolled 2013– 2014	Enrolled 2014– 2015	Enrolled 2015– 2016	Enrolled 2016– 2017	Enrolled 2017– 2018	Enrolled 2018– 2019
<b>K</b>	196	219	204	169	172	164	175	139	164	185
<b>1</b>	216	214	220	212	185	188	171	191	163	171
<b>2</b>	208	212	217	225	208	189	191	175	194	167
<b>3</b>	213	212	221	222	232	218	198	200	182	193
<b>4</b>	226	216	216	229	229	231	227	204	205	196
<b>5</b>	236	226	231	222	233	232	238	235	204	208
<b>6</b>	223	247	240	241	235	239	235	243	237	207
<b>7</b>	263	227	240	249	237	228	244	235	259	230
<b>8</b>	252	271	228	237	249	238	224	250	236	248
<b>9</b>	304	278	284	260	260	261	248	236	260	238
<b>10</b>	263	276	253	250	242	246	255	245	229	255
<b>11</b>	282	254	275	241	262	226	229	253	238	227
<b>12</b>	262	274	263	280	242	267	226	243	262	240
<b>Ungraded</b>	3	3	2	8	4	0	1	5	0	7
<b>Total</b>	<b>3147</b>	<b>3129</b>	<b>3094</b>	<b>3045</b>	<b>2990</b>	<b>2927</b>	<b>2862</b>	<b>2854</b>	<b>2833</b>	<b>2772</b>

#### 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, **including** Pre-K students in a program run by an ESC or other agency?  
yes

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

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	2009– 2010	2010– 2011	2011– 2012	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018	2018– 2019
<b>Pre-K with disabilities</b>	17	10	11	9	10	21	13	12	33	37

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	2009– 2010	2010– 2011	2011– 2012	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018	2018– 2019
<b>Pre-K Other (not disabled, not enrolled in ECE, or Federal Head Start)</b>	7	6	4	5	5	9	8	8	14	14

## 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 22 to 1
- 4–5 25 to 1
- 6–8 26 to 1
- 9–12 21 to 1

## Grade Configurations

K through 3  
4 through 7  
8 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	K-3	4-7	8-12
<b>IE13</b>	21	73	87
<b>IE14</b>	7	4	13
<b>IE15</b>	5	7	13
<b>Total</b>	<b>33</b>	<b>84</b>	<b>113</b>

\*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 2009–2010	Enrolled 2010–2011	Enrolled 2011–2012	Enrolled 2012–2013	Enrolled 2013–2014	Enrolled 2014–2015	Enrolled 2015–2016	Enrolled 2016–2017	Enrolled 2017–2018	Enrolled 2018–2019
PreK	0	0	0	0	0	0	0	0	0	0
K	1	4	3	0	2	1	0	0	0	0
1	1	0	3	5	2	4	1	1	0	0
2	0	1	2	2	6	2	2	1	0	0
3	2	1	3	2	3	5	1	1	0	0
4	4	2	4	3	3	5	4	1	0	0
5	1	3	2	5	4	3	3	1	0	0
6	3	1	6	3	5	2	3	4	0	0
7	2	3	4	8	7	7	5	8	0	0
8	3	4	5	3	10	10	8	4	0	0
9	1	3	6	11	10	7	8	9	0	0
10	9	6	1	14	10	10	7	7	0	0
11	11	8	11	9	16	14	18	9	0	0
12	7	8	4	7	11	14	13	17	0	0
Ungraded	4	3	0	0	0	0	0	0	94	95
<b>Total</b>	<b>49</b>	<b>47</b>	<b>54</b>	<b>72</b>	<b>89</b>	<b>84</b>	<b>73</b>	<b>63</b>	<b>94</b>	<b>95</b>

## Open Enrollment (In)

Grade	Enrolled 2009–2010	Enrolled 2010–2011	Enrolled 2011–2012	Enrolled 2012–2013	Enrolled 2013–2014	Enrolled 2014–2015	Enrolled 2015–2016	Enrolled 2016–2017	Enrolled 2017–2018	Enrolled 2018–2019
Prek	0	0	0	0	0	0	0	0	0	0
K	0	0	5	1	6	4	3	3	10	0
1	0	0	3	3	2	4	5	4	4	7

2	0	0	1	3	2	3	3	6	4	4
3	0	0	3	2	1	2	6	7	5	2
4	0	0	2	2	2	3	3	6	6	7
5	0	0	2	3	3	2	4	3	5	4
6	0	0	2	1	4	6	4	2	8	3
7	0	0	2	2	1	5	6	3	9	6
8	0	0	1	1	0	4	5	5	3	7
9	0	0	1	2	9	10	6	5	12	7
10	0	0	1	2	6	7	14	6	9	11
11	0	0	4	1	8	10	10	15	7	11
12	0	0	5	6	5	7	11	11	18	7
Ungraded	0	0	0	0	0	0	0	0	0	0
Total	0	0	32	29	49	67	80	76	100	76

### Open Enrollment (Out)

Grade	Enrolled 2009– 2010	Enrolled 2010– 2011	Enrolled 2011– 2012	Enrolled 2012– 2013	Enrolled 2013– 2014	Enrolled 2014– 2015	Enrolled 2015– 2016	Enrolled 2016– 2017	Enrolled 2017– 2018	Enrolled 2018– 2019
Prek	0	0	0	0	0	0	0	0	0	0
K	3	2	4	1	11	0	8	7	4	7
1	1	1	3	3	1	9	5	2	10	3
2	1	1	1	3	2	1	5	4	4	8
3	0	2	1	1	3	2	3	4	4	3
4	2	0	1	1	2	3	1	1	8	1
5	2	2	1	1	3	2	3	0	1	9
6	2	2	2	1	1	4	1	1	3	1
7	1	1	2	2	2	1	5	1	3	4
8	2	1	1	1	2	2	2	2	5	5
9	2	0	0	2	7	2	8	4	6	5
10	3	1	0	2	1	7	2	6	8	7
11	2	4	4	1	5	1	10	2	15	8
12	4	2	5	6	3	6	9	8	10	11
Ungraded	0	0	0	0	0	0	0	0	0	0
Total	25	19	25	25	43	40	62	42	81	72

## JVS Enrollment

Does your District belong to a JVSD? yes

Please select the JVSD your District belongs to: Auburn

Please provide enrollment for students attending JVS (or "Other") full or half-time.

Grade	Enrolled 2009– 2010	Enrolled 2010– 2011	Enrolled 2011– 2012	Enrolled 2012– 2013	Enrolled 2013– 2014	Enrolled 2014– 2015	Enrolled 2015– 2016	Enrolled 2016– 2017	Enrolled 2017– 2018	Enrolled 2018– 2019
Full Time 11	0	0	0	0	0	0	0	0	0	0
Full Time 12	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Grade	Enrolled 2009– 2010	Enrolled 2010– 2011	Enrolled 2011– 2012	Enrolled 2012– 2013	Enrolled 2013– 2014	Enrolled 2014– 2015	Enrolled 2015– 2016	Enrolled 2016– 2017	Enrolled 2017– 2018	Enrolled 2018– 2019
Half Time 11	58	44	45	38	47	36	28	32	23	27
Half Time 12	54	49	39	45	36	43	32	30	27	19
<b>Total</b>	<b>112</b>	<b>93</b>	<b>84</b>	<b>83</b>	<b>83</b>	<b>79</b>	<b>60</b>	<b>62</b>	<b>50</b>	<b>46</b>

## 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 2009– 2010	Enrolled 2010– 2011	Enrolled 2011– 2012	Enrolled 2012– 2013	Enrolled 2013– 2014	Enrolled 2014– 2015	Enrolled 2015– 2016	Enrolled 2016– 2017	Enrolled 2017– 2018	Enrolled 2018– 2019
Off- Site Career Tech 11th	0	0	0	0	0	0	0	0	0	0
Off- Site Career Tech 12th	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Career Tech Program Enrollment

Include only those students who are considered "concentrators" or enrolled in a "pathway". Do NOT include students who are just taking one course.

**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:City of Chardon  
Chardon Township Munson Township Hambden Township Claridon Township

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]

## 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 and forward documents to:

Tracy Healy (thealy@futurethinkinc.com)

or

Future Think Inc.

5685 Tynecastle Loop

Dublin, 43016

Return To District Print Report

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