



To: Dr. Mike Riggle
Board of Education

From: Dr. Kim Ptak
Dr. R.J. Gravel

Date: Monday, November 12, 2018

Re: Enrollment Forecast Update for 2018-19

Background

For the last several years, the District has hired demographer Dr. Jerome McKibben to calculate a 10-year population forecast. Additionally, the District administration has prepared an internal enrollment projection using a cohort survival method which has an acceptable accuracy rate when limited to four years. Both the population forecast and cohort survival projection have become important tools for long-range planning and budgeting purposes. As a result, these tools are updated on an annual basis using October 1st enrollment counts as recorded in PowerSchool, and summary data provided by our elementary feeder school districts (27, 28, 30, 31, and 34).

Population Forecast

The population forecast methodology used by Dr. McKibben assesses the impact of factors such as fertility rates, housing patterns, mortgage rate, mortality rates, census data, migration patterns, unemployment rates and the dynamics of local private schools, while also taking feeder elementary school district enrollment data into consideration. This comprehensive approach lends itself to increased accuracy in long-term forecasts.

The current forecast tracks very closely with the forecast completed in 2013 which was Dr. McKibben's first year working with our data. In 2013 enrollment at Glenbrook South was expected to peak in 2019-20 at 3,178 students. The recent forecast is consistent and shows 2019-20 as the peak year with enrollment of 3,190. Past facility enhancements to accommodate this increased enrollment at Glenbrook South include converting a computer lab into two general classrooms, converting a technology office into a general classroom, adding a CTE classroom, adding a physics lab, and creating additional seating in the library.

As indicated in the proceeding chart, the district forecast shows relatively the same number of students in 10 years as it does today. Glenbrook North is anticipated to grow by 163 students (7.9%) over the next 10 years, and Glenbrook South is projected to peak at 3,190 in 2019-20 and gradually decline to 2,895 (7.8%) over the next 10 years.

	District			Glenbrook North			Glenbrook South		
	10/1/2018	10/1/2017	O/(U)	10/1/2018	10/1/2017	O/(U)	10/1/2018	10/1/2017	O/(U)
2018-19	5,198 actual	5,199 estimate	(1)	2,059 actual	2,053 estimate	6	3,139 actual	3,146 estimate	(7)
2019-20	5,250	5,256	(6)	2,060	2,057	3	3,190	3,199	(9)
2020-21	5,218	5,209	9	2,035	2,032	3	3,183	3,177	6
2021-22	5,158	5,174	(16)	2,062	2,059	3	3,096	3,115	(19)
2022-23	5,166	5,172	(6)	2,079	2,073	6	3,087	3,099	(12)
2023-24	5,123	5,139	(16)	2,094	2,095	(1)	3,029	3,044	(15)
2024-25	5,126	5,154	(28)	2,155	2,147	8	2,971	3,007	(36)
2025-26	5,141	5,185	(44)	2,164	2,180	(16)	2,977	3,005	(28)
2026-27	4,995	5,136	(141)	2,109	2,182	(73)	2,886	2,954	(68)
2027-28	5,068	5,150	(82)	2,188	2,197	(9)	2,880	2,953	(73)
2028-29	5,117	n/a	n/a	2,222	n/a	n/a	2,895	n/a	n/a

Cohort Survival Projection

The cohort survival method is strictly formula driven and calculates ratios of students as they progress from one grade to the next. The ratios are then used to project future enrollment. The following chart compares the recent projection using October 1, 2018 enrollment counts with the projection calculated a year ago using October 1, 2017 enrollment counts. Overall the current Glenbrook North projection remains relatively consistent over the next three years, while Glenbrook South grows by 1.4% through 2019-20 and then gradually declines.

	District			Glenbrook North			Glenbrook South		
	10/1/2018	10/1/2017	O/(U)	10/1/2018	10/1/2017	O/(U)	10/1/2018	10/1/2017	O/(U)
2018-19	5,198 actual	5,207 projection	(9)	2,059 actual	2,059 projection	(0)	3,139 actual	3,148 projection	(9)
2019-20	5,245	5,269	(24)	2,061	2,063	(2)	3,184	3,206	(22)
2020-21	5,208	5,238	(30)	2,035	2,047	(12)	3,173	3,191	(18)
2021-22	5,158	n/a	n/a	2,069	n/a	n/a	3,089	n/a	n/a

Comparison of Enrollment Methodologies

The following chart compares the results of the two methodologies for calculating enrollment projections. When considering the district enrollment, the two methodologies are within .2% of each other over the next three years.

	District			Glenbrook North			Glenbrook South		
	Pop. Forecast	Cohort Survival	O/(U)	Pop. Forecast	Cohort Survival	O/(U)	Pop. Forecast	Cohort Survival	O/(U)
FY2020	5,250	5,245	5	2,060	2,061	(1)	3,190	3,184	6
FY2021	5,218	5,208	10	2,035	2,035	0	3,183	3,173	10
FY2022	5,158	5,158	0	2,062	2,069	(7)	3,096	3,089	7