



**To:** Dr. Mike Riggle

**From:** Dr. R.J. Gravel  
Dr. Kimberly Ptak

**Date:** November 14, 2016

**Re:** Enrollment Forecast Update

**Background**

Every year, using October 1st fall housing enrollment data the District updates its enrollment projections using a cohort survival method. Additionally, for the last few years, the District has hired Dr. Jerome McKibben to update his population forecast calculation. The results of the two methodologies are within one percent of each other for the first three years, after that, Dr. McKibben's forecast has proven more accurate.

**Glenbrook Cohort Survival Method**

The cohort survival method uses feeder enrollment figures and extrapolates the past and present into the future by following and tracking cohorts of students as they progress from one grade to the next. The following chart compares the recent projection using 10/1/16 fall housing data with the projection calculated a year ago using 10/1/15 fall housing data. Calculations using the cohort survival method have been most accurate projecting three years out, as such the below table shows projections for FY18, 19 and 20.

**Key Findings**

- This year's actual district-wide enrollment is 5,075, which is 26 students less than the projection
- Projection shows a 2% overall increase, district-wide, between now and FY 2020.
- Current year projection at GBN is fairly consistent with the projection done a year ago, while the GBS projection shows less of an overall increase then a year ago.

	District-wide			GBN			GBS		
	10/1/2016	10/1/2015	O/(U)	10/1/2016	10/1/2015	O/(U)	10/1/2016	10/1/2015	O/(U)
<b>FY2017</b>	5,075 actual	5,101 projection	-26	2,049 actual	2,039 projection	10	3,026 actual	3,062 projection	-36
<b>FY2018</b>	5,129	5,182	-53	2,030	2,028	2	3,099	3,154	-55
<b>FY2019</b>	5,153	5,231	-78	2,071	2,053	18	3,082	3,178	-96
<b>FY2020</b>	5,176	5,303	-127	2,076	2,076	0	3,100	3,227	-127

### **Dr. Jerome McKibben Population Forecast**

The population forecast methodology differs from the District's cohort methodology in that it primarily 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 data into consideration. This comprehensive approach lends itself to increased accuracy in long-term forecasts.

#### **Key Findings**

- This year's actual district-wide enrollment is 5,075, which is 28 students less than the projection
- Projection shows a 1% overall decrease, district-wide, between now and FY 26/27.
- GBN is projected to dip slightly below 2,000 in FY2021 and return to an enrollment level between 2,000-2,100.
- GBS is projected to reach it's peak in FY2021 at 3,118 and then decrease to 2,926 in FY2027.
- New housing unit construction in the Glenview area has slowed significantly over the last two years due to a decrease in new rental properties.
- New home construction in Northbrook remains at a consistent low level, averaging about 30-40 new units a year.
- In order to maintain current enrollment levels, Glenview needs to have an average of 550 existing homes on the market at any given time to insure enough in-migration of young households, while Northbrook needs to average 400. Glenview currently has 350 existing new homes on the market and Northbrook has 325.

	District-wide			GBN			GBS		
	10/1/2016	10/1/2015	O/(U)	10/1/2016	10/1/2015	O/(U)	10/1/2016	10/1/2015	O/(U)
<b>FY2017</b>	5,075 actual	5,103 projection	-28	2,049 actual	2,033 projection	16	3,026 actual	3,070 projection	-44
<b>FY2018</b>	5,129	5,139	-10	2,023	2,016	7	3,106	3,123	-17
<b>FY2019</b>	5,162	5,178	-16	2,059	2,030	29	3,103	3,148	-45
<b>FY2020</b>	5,188	5,231	-43	2,050	2,046	4	3,138	3,185	-47
<b>FY2021</b>	5,107	5,173	-66	1,989	2,003	-14	3,118	3,170	-52
<b>FY2022</b>	5,077	5,203	-126	2,007	2,023	-16	3,070	3,180	-110
<b>FY2023</b>	5,063	5,205	-142	2,004	2,056	-52	3,059	3,149	-90
<b>FY2024</b>	5,020	5,155	-135	2,010	2,059	-49	3,010	3,096	-86
<b>FY2025</b>	5,024	5,126	-102	2,063	2,102	-39	2,961	3,024	-63
<b>FY2026</b>	5,050	5,103	-53	2,080	2,092	-12	2,970	3,011	-41
<b>FY2027</b>	5,021	n/a	n/a	2,095	n/a	n/a	2,926	n/a	n/a

**Comparison of Enrollment Methodologies**

The following chart compares the results of the two methodologies for calculating enrollment projections. District-wide, the two methodologies are within .2% of each other over the next three years. On a building level, the two methodologies are within 1.2%.

	District-wide			GBN			GBS		
	Cohort Survival	Pop. Forecast	O/(U)	Cohort Survival	Pop. Forecast	O/(U)	Cohort Survival	Pop. Forecast	O/(U)
<b>FY2018</b>	5,129	5,129	0	2,030	2,023	7	3,099	3,106	-7
<b>FY2019</b>	5,153	5,162	-9	2,071	2,059	12	3,082	3,103	-21
<b>FY2020</b>	5,176	5,188	-12	2,076	2,050	26	3,100	3,138	-38