

**GLENBROOK HIGH SCHOOLS  
District Business Office**

**TO: Dr. Mike Riggle**

**FROM: Kimberly Ptak**

**DATE: NOVEMBER 12, 2013**

**RE: ENROLLMENT and CAPACITY STUDIES**

**ENROLLMENT STUDY**

Every year, administration updates its 5-year enrollment projection using October 1<sup>st</sup> fall housing data from feeder districts. A “cohort survival” method is followed, which looks at a cohort of students as it progresses from one grade level to the next. Ratios are tracked and the district methodology averages one and three year ratios to project out enrollment. Enrollment projections are as follows.

**5-year projection** (as of 10/1/13)

	<u>GBN</u>	<u>GBS</u>
2013/14 (projection)	2,084	2,786
2013/14 (actual)	2,087	2,736
2014/15	2,037	2,930
2015/16	2,047	3,027
2016/17	2,007	3,117
2017/18	1,970	3,238
2018/19	1,991	3,242

**CAPACITY STUDY**

A capacity study looks at how many students a building can hold, based on the number of classrooms, type of classroom (i.e. general use or single use – science) and the number of students a classroom can hold based on staffing formulas. According to the study, GBN has a capacity of 2,400 students and GBS has capacity of 3,100 students. Attached is the detailed capacity study and findings.

A brief power point presentation will be given at the November 12, 2013 board meeting to review both the enrollment and capacity studies.

## **CAPACITY STUDY OVERVIEW**

A capacity study was conducted for Glenbrook North and Glenbrook South High School. A capacity study takes into account, the number of classrooms by department, student maximum per classroom according to staffing formula and % of students enrolled in each subject area.

The following conclusions can be made:

1. The maximum capacity of Glenbrook North High School is around 2,500 students. Glenbrook North's current enrollment is 2,084 students.
2. The maximum capacity of Glenbrook South High School is around 3,100 students. Glenbrook South's current enrollment is 2,786 students.
3. Over the next five years Glenbrook North's enrollment is projected to decrease to around 2,000 students.
4. Over the next five years Glenbrook South's enrollment is projected to increase to around 3,200 students. Enrollment is expected to stay, if not exceed 3,200 for a 5-8 year period.
5. Over the next five years the difference between the enrollment at Glenbrook North and Glenbrook South is projected to increase from about 600 students to about 1,200 students.

**Glenbrook North Capacity**  
**Based on Current Staffing Formula**

	# of Rooms	Student Max. Per Formula	Subject Area Maximum	% Enrolled in Subject	Maximum % of Students Who Could be Served Based on Enrollment				
					2,200	2,300	2,400	2,500	2,600
<u>General Classrooms</u>									
English	14.63	21.58	2,526	95.0%	114.8%	109.8%	105.2%	101.0%	97.1%
English Language Learners	1.00	15.00	120	1.5%	5.5%	5.2%	5.0%	4.8%	4.6%
Reading	1.00	12.00	96	4.8%	4.4%	4.2%	4.0%	3.8%	3.7%
World Language	8.88	22.95	1,630	68.6%	74.1%	70.9%	67.9%	65.2%	62.7%
Math	12.50	23.80	2,380	96.2%	108.2%	103.5%	99.2%	95.2%	91.5%
Social Studies	10.00	23.80	1,904	89.4%	86.5%	82.8%	79.3%	76.2%	73.2%
Science	14.00	92.96	2,603	96.7%	118.3%	113.2%	108.5%	104.1%	100.1%
Biology	3.00	23.24	558	21.5%	25.4%	24.3%	23.2%	22.3%	21.5%
Chemistry	4.00	23.24	744	28.2%	33.8%	32.3%	31.0%	29.7%	28.6%
Physics	3.00	23.24	558	22.5%	25.4%	24.3%	23.2%	22.3%	21.5%
Multi-Purpose/Horticulture	4.00	23.24	744	24.5%	33.8%	32.3%	31.0%	29.7%	28.6%
Other - Business	2.00	23.80	381	19.5%	17.3%	16.6%	15.9%	15.2%	14.6%
Other - Health	1.50	26.00	312	11.4%	14.2%	13.6%	13.0%	12.5%	12.0%
Other - Guided Study	1.00	12.00	96	3.4%	4.4%	4.2%	4.0%	3.8%	3.7%
Other - Driver Ed	1.00	26.00	208	11.5%	9.5%	9.0%	8.7%	8.3%	8.0%
Other - Study Hall	3.13	40.00	1,002	22.8%	45.5%	43.5%	41.7%	40.1%	38.5%
Other - Peer Group	4.25	10.00	340	19.3%	15.5%	14.8%	14.2%	13.6%	13.1%
Other - Advocacy	2.25	26.00	468	22.8%	21.3%	20.3%	19.5%	18.7%	18.0%
Other - Academy	0.75	30.00	180	2.9%	8.2%	7.8%	7.5%	7.2%	6.9%
Physical Education	16.00	31.45	4,026	83.5%	183.0%	175.0%	167.7%	161.0%	154.8%
Special Education	10.00	12.00	120	10.8%					
TLS	3.00	8.00	192	1%					

(Based on self-contained enrollment)

**Glenbrook North Capacity**  
**Based on Current Staffing Formula**

Single Use Teaching Station	# of Rooms	Student Max. Per Formula	Subject Area Maximum	% Enrolled in Subject	Maximum % of Students Who Could be Served Based on Enrollment				
					2,200	2,300	2,400	2,500	2,600
Art	4.00	21.25	680	9.98%	31.0%	30.0%	28.0%	27.0%	26.0%
Home Ec	4.00	20.40	653	14.20%	30.0%	28.0%	27.0%	26.0%	25.0%
Computer Labs - Business	1.00	23.80	190	2.07%	9.0%	8.0%	8.0%	8.0%	7.0%
Drama	1.00	21.58	173	4.95%	8.0%	8.0%	7.0%	7.0%	7.0%
Applied Technology	4.00	20.40	653	10.46%	30.0%	28.0%	27.0%	26.0%	25.0%
Music - Choir/Orchestra	2.00	75.00	600	14.78%	27.0%	26.0%	25.0%	24.0%	23.0%
Music - Electronic Lab	1.00	20.00	160	2.02%	7.0%	7.0%	7.0%	6.0%	6.0%
Music - Band	1.00	60.00	960	7.43%	44.0%	42.0%	40.0%	38.0%	37.0%
Broadcasting/TV	1.00	20.00	160	6.24%	7.0%	7.0%	7.0%	6.0%	6.0%

**Glenbrook South Capacity  
Based on Current Staffing Formula**

General Classrooms

	# of Rooms	Student Max. Per Formula	Subject Area	% Enrolled in Subject	Maximum % of Students Who Could be Served Based on Enrollment				
					2,800	2,900	3,000	3,100	3,200
English	16.57	21.58	2,861	93.6%	102.2%	98.6%	95.4%	92.3%	89.4%
English Language Learners	1.13	15.00	136	4.1%	4.8%	4.7%	4.5%	4.4%	4.2%
ELL - Study Support	1.00	8.00	64	1.4%	2.3%	2.2%	2.1%	2.1%	2.0%
Reading	1.55	12.00	148	3.6%	5.3%	5.1%	4.9%	4.8%	4.6%
Reading Rtl	0.75	8.00	48	1.1%	1.7%	1.7%	1.6%	1.5%	1.5%
World Language	13.88	22.95	2,548	74.1%	91.0%	87.9%	84.9%	82.2%	79.6%
Math	17.05	23.80	3,246	96.2%	115.9%	111.9%	108.2%	104.7%	101.4%
Math Rtl	0.50	8.00	32	1.0%	1.1%	1.1%	1.1%	1.0%	1.0%
Social Studies	14.88	23.80	2,832	89.3%	101.2%	97.7%	94.4%	91.4%	88.5%
Science	17.00	92.96	3,161	96.7%	112.9%	109.0%	105.4%	102.0%	98.8%
Biology	6.00	23.24	1,116	38.9%	39.8%	38.5%	37.2%	36.0%	34.9%
Chemistry	4.00	23.24	744	20.3%	26.6%	25.6%	24.8%	24.0%	23.2%
Physics	4.00	23.24	744	23.4%	26.6%	25.6%	24.8%	24.0%	23.2%
Multi-Purpose/Horticulture	3.00	23.24	558	14.0%	19.9%	19.2%	18.6%	18.0%	17.4%
Other - Business	4.00	23.80	762	23.0%	27.2%	26.3%	25.4%	24.6%	23.8%
Other - Health	2.13	26.00	443	11.9%	15.8%	15.3%	14.8%	14.3%	13.8%
Other - Guided Study	3.00	12.00	288	3.0%	10.3%	9.9%	9.6%	9.3%	9.0%
Other - Driver Ed	0.88	26.00	183	4.9%	6.5%	6.3%	6.1%	5.9%	5.7%
Other - Study Hall	2.50	40.00	800	26.9%	28.6%	27.6%	26.7%	25.8%	25.0%
Other - Peer Group	4.00	10.00	320	19.3%	11.4%	11.0%	10.7%	10.3%	10.0%
Other - Advocacy	4.00	26.00	832	22.8%	29.7%	28.7%	27.7%	26.8%	26.0%
Other - Academy	0.75	30.00	180	2.2%	6.4%	6.2%	6.0%	5.8%	5.6%
Physical Education	14.00	31.45	3,522	83.5%	125.8%	121.5%	117.4%	113.6%	110.1%
Special Education	10.00	8.00	640	15.8%	22.9%	22.1%	21.3%	20.6%	20.0%
TLS	3.00	8.00	192						

(Based on self-contained enrollment)

**Glenbrook South Capacity  
Based on Current Staffing Formula**

	# of Rooms	Student Max. Per Formula	Subject Area Maximum	% Enrolled in Subject	Maximum % of Students Who Could be Served Based on Enrollment				
					2,800	2,900	3,000	3,100	3,200
Single Use Teaching Station									
Art	3.00	21.25	510	13.1%	18.2%	17.6%	17.0%	16.5%	15.9%
Home Ec	3.00	20.40	490	6.0%	17.5%	16.9%	16.3%	15.8%	15.3%
Computer Labs - Business	2.00	23.80	381	7.3%	13.6%	13.1%	12.7%	12.3%	11.9%
Computer Labs - Computer Science	1.00	23.80	190	1.3%	6.8%	6.6%	6.3%	6.1%	6.0%
Drama	1.00	21.58	173	1.3%	6.2%	6.0%	5.8%	5.6%	5.4%
Applied Technology	5.00	20.40	816	13.1%	29.1%	28.1%	27.2%	26.3%	25.5%
Music - Choir/Orchestra	2.00	75.00	1,200	13.3%	42.9%	41.4%	40.0%	38.7%	37.5%
Music - Electronic Lab	1.00	20.00	160	0.3%	5.7%	5.5%	5.3%	5.2%	5.0%
Music - Band	1.00	60.00	480	8.1%	17.1%	16.6%	16.0%	15.5%	15.0%
Broadcasting/TV	2.00	20.00	320	6.4%	11.4%	11.0%	10.7%	10.3%	10.0%

## Enrollment & Capacity Study Glenbrook North & South



## 5-YEAR ENROLLMENT PROJECTION

- Methodology – Cohort Survival Method
- Average of 1 and 3 Year Ratios
- Historical Accuracy Level – within 1-2%

## 5-year Projection

	<u>GBN</u>	<u>GBS</u>
2013/14 (projection)	2,084	2,786
2013/14 (actual)	2,087	2,736
2014/15	2,037	2,930
2015/16	2,047	3,027
2016/17	2,007	3,117
2017/18	1,970	3,238
2018/19	1,991	3,242
5 year increase (decrease) over current year	(-5%)	18%

## Enrollment Highlights

- GBN will remain stable, if not slightly decrease
- GBS will continue to increase
- GBS is expected to grow over the next 5 years and plateau for the next 5-8 years
- Enrollment difference between the schools is expected to grow to 1,200



## Capacity Study

### What is a capacity study?

A capacity study looks at:

- The number of classrooms available
- The types of classrooms available
  - General purpose, single use (science)
- The number of students assigned to each classroom
  - Staffing formula, class size maximums, etc.

## Capacity Example - GBS

### Glenbrook South Capacity Based on Staffing Formula

	# of Rooms	Student Max. Per Formula	Subject Area Maximum	% Enrolled in Subject	Maximum % of Students Who Could be Served Based on Enrollment					
					2,800	2,900	3,000	3,100	3,200	
<b>General Classrooms</b>										
English	19.25	21.58	3,323	106%	119%	115%	111%	107%	104%	
English Language Learners	2.13	15.00	256	4%	9%	9%	9%	8%	8%	
Reading	1.00	12.00	96	4%	3%	3%	3%	3%	3%	
World Language	13.88	22.95	2,548	74%	91%	88%	85%	82%	80%	
Math	19.00	23.80	3,618	96%	129%	125%	121%	117%	113%	
Social Studies	16.38	23.80	3,119	89%	111%	108%	104%	101%	97%	
<b>Science</b>										
Biology	6.00	23.24	1,116	41%	40%	38%	37%	36%	35%	
Chemistry	4.00	23.24	744	21%	27%	26%	25%	24%	23%	
Physics	4.00	23.24	744	24%	27%	26%	25%	24%	23%	
Multi-Purpose	2.00	23.24	372	10%	13%	13%	12%	12%	12%	
Horticulture	1.00	23.24	186	5%	7%	6%	6%	6%	6%	

## Capacity Study - Findings

**GBN – Maximum capacity 2,400**

**GBS – Maximum capacity 3,100**

### Construction at GBS

- |      |  |
|------|--|
| 1994 | two story addition math wing, science labs, greenhouse – added 250 to capacity |
| 2000 | large academic addition – added 500 to capacity                                |
| 2007 | fitness center, high ceiling gym, second pool, cafeteria space                 |

**GBS will reach its maximum capacity by 2016/17**

**GBN will not reach its maximum capacity**

## Next Steps

1. Acquire additional demographic data
2. Assess the needs of staff and students at larger and smaller high schools
3. Assess the facility needs necessary to support future growth
4. Identify plan for 2014/2015