

WEST WINDSOR – PLAINSBORO REGIONAL SCHOOL DISTRICT

CAPACITY STUDY 2018

**WW-P Board of Education
Meeting**

March 20, 2018

WW-P MISSION STATEMENT

***Building upon our tradition of excellence,
the mission of the West Windsor-
Plainsboro
Regional School District is to empower all
learners to thoughtfully contribute to
a diverse and changing world
with confidence, strength of character,
and love of learning.***

WEST WINDSOR-PLAINSBORO REGIONAL SCHOOL DISTRICT

Strategic Goals

We believe that every individual has intrinsic worth, that embracing diversity enriches and empowers our community, and that people reach their full potential when encouraged to believe it is possible. Therefore, building upon our tradition of excellence, we will guide and support our students' growth, empowering them to value their individual learning journeys.

WEST WINDSOR-PLAINSBORO REGIONAL SCHOOL DISTRICT

Goal 1: Understanding that all students have diverse needs, backgrounds, and approaches to learning, we will integrate tools and structures to appropriately challenge and enable students to realize their full potential.

WEST WINDSOR-PLAINSBORO REGIONAL SCHOOL DISTRICT

Goal 2: Embracing a rapidly changing world, we will empower learners to assume active roles in their communities, to face and engage global challenges, and to contribute proactively toward a more peaceful, just, inclusive, and secure world.

WEST WINDSOR-PLAINSBORO REGIONAL SCHOOL DISTRICT

Goal 3: Recognizing that children need to balance physical, social, emotional, and academic needs, we will maintain a supportive culture and build structures for the health, safety, and well-being of the Whole Child.

INTRODUCTION

- We have reviewed the existing facilities and floor plan of each school.
- We have reviewed each space and confirmed the existing usage with district personnel and the administration.
- The district used both the NJDOE FES (Facilities Efficiency Standard) and a District Practice usage in our capacity study to calculate the capacity of each space and overall building.
- The District Practice and NJDOE FES capacity is defined in the Methodology section of this report.

PURPOSE OF THE STUDY

- The purpose of the study is to determine the student capacity of the ten schools by determining usage of each space or potential usage of each space. We hope to determine overall capacities of the schools, in conjunction with the demographic study, so that the district can evaluate the enrollment projections and make informed recommendations for facility expansion and utilization.

GOALS OF THE STUDY

- The goal of the study is to provide recommendations to the district on the best usage and efficiency of the schools and to assist in making informed decisions regarding facility expansion due to residential growth.
- To avoid overcrowding in schools and larger than necessary class sizes.
- To ensure resources are aligned to provide equity and excellence for all students including facilities that can support special education students in district in the least restrictive environment.
- To ensure ample educational space for current and projected students.
- To ensure that school enrollment numbers that are manageable for grade range, capacity of buildings, and programmatic needs.

Policy 2312 – Class Size

- Recommended class sizes are:

• Primary grades Kindergarten – 3	18 – 20 Maximum suggested 25
• Upper elementary grades 4 – 5	20 – 28 Maximum suggested 30
• Middle grades 6 – 8	Maximum suggested 30
• Secondary grades 9 – 12	Class size established according to the type of class.

METHODOLOGY

Methodology

- School capacities are measured using spaces that are “capacity generated” spaces for the grade levels for the district.
- Capacity generating spaces include general classrooms, science rooms, self-contained education rooms and other rooms which may contain students during the entire day.
- For the purpose of this study, at the elementary school and middle school, rooms are capacity generating if a room is used as a “homeroom.”

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Overview of Capacity Calculations

- There are two capacity calculation methods, called "FES Capacity" and "District Practices Capacity," that were used to assess existing and proposed school capacity in accordance with the FES and District program delivery practices.
- Facility Efficiency Standards (FES) Capacity - FES Capacity only assigns capacity to pre-kindergarten (if district-owned or operated), kindergarten, general and self-contained special education classrooms. No other room types are considered to be capacity-generating. Class size is based on the FES and is prorated for classrooms that are sized smaller than FES classrooms. FES Capacity is most accurate for elementary schools, or schools with non-departmentalized programs, in which instruction is "homeroom" based. This capacity calculation may also be accurate for middle schools depending upon the program structure.

Overview of Capacity Calculations

- District Practice Capacity - allows the District to include specialized room types in the capacity calculations and adjust class size to reflect actual practices. This calculation is used to review capacity and enrollment coordination in middle and High schools.

DISTRICT PRACTICES

- **K-3 “District Practice” uses 20 students per general classroom, 15 students per Pre-K, 6 students per Autism classroom, 10 students per LLD classroom, 8 students per MD classroom, and 9 students per resource classroom.**
- **4-5 “District Practice” uses 22 students per general classroom, 6 students per Autism classroom, 10 students per LLD classroom, 8 students per MD classroom, and 9 students per resource classroom.**

DISTRICT PRACTICES

- **6-8 “District Practice” uses 24 students per general classroom, 9 students per Autism classroom, 10 students per LLD classroom, 12 students per MD classroom, and 12 students per resource classroom.**
- **9-12 “District Practice” uses 24 students per general classroom, 9 students per Autism classroom, 10 students per LLD classroom, 12 students per MD classroom, and 12 students per resource classroom.**

NJDOE FACILITIES EFFICIENCY STANDARDS

- 15 Students for Pre-kindergarten classrooms**
- 21 Students for kindergarten through third grade classrooms**
- 23 Students for fourth grade through eighth grade classrooms**
- 12 Students for self-contained special education classrooms**
- 24 Students for ninth through twelfth grade classrooms**

UTILIZATION RATES

- Create a utilization factor that is used for the entire building that provides a realistic and accurate capacity, understanding that a building is rarely at full capacity. We will use the following calculations for each school. These factors are part of the NJDOE FES models. These factors are standard in our industry and actual utilizations can vary by district.
 - Elementary school – 90%
 - Middle School and High School – 85%

CAPACITY CALCULATIONS

- A capacity of a building is a dynamic number that can change as spaces are changed to accommodate programs that are added or removed.
- A classroom used for third grade one year is 21, while the same room used as a “basic skills instruction” room the next year has a capacity of 0.

2004 Capacity Report

- In 2004 under the direction of Assistant Superintendent Jon Cosse the district conducted a review of building capacities. The Capacity Committee Report from 2004 stated,

“It must be noted that educational specifications reflect the “programmatic nature of the courses offered at both high schools, and for that given time.” Since building capacity is directly influenced by the regular and special classroom programs offered, it is understandable that some confusion may exist about building capacity.”

- The 2004 report provided a comprehensive understanding of “Calculating Capacity.”

“The Committee understands that the capacity of a given school building is not found in the simple addition of classroom seats or chairs. (Such an oversimplification would ignore the educational programming as well as the ability of the core facility to handle physical education stations, lunch, library, and specialized programs that need basic “large population” space).”

Buildings	Enrollment 10.15.17	School Building Capacity (Cosse Report 2004)	Recalculate d School Building Capacity (Cosse Report 2004)	NJDOE Functional Capacity per the Educational Facilities and Construction Financing Act (EFCFA)	Capacity Listed in the Demographic Report (2012)	WWP Capacity Study 2018
Dutch Neck	685	698	698	513	836	573
Maurice Hawk	750	800	800	536	840	610
Town Center	524	764	764	628	732	515
Wicoff	449	430	430	368	430	387
Millstone River	1087	790	1260	568	1261	989
Village Elementary	728	704	704	596	704	694
PK-5 TOTALS	4223	4186	4656	3209	4803	3768

CAPACITY FACTORS

Capacity is impacted by building use, district practices, and programming such as:

- **Increased specialized instruction space**
- **Class sizes or district practices**
- **Grade levels assigned to rooms**
- **Building scheduling**

School	Total Enrollment (March 1, 2018)	Total District Classroom Capacity	District Utilization Capacity	Capacity %
Dutch Neck Elementary School	685	637	573	119.48%
Maurice Hawk Elementary School	762	678	610	124.88%
Town Center Elementary School	535	573	515	103.74%
Wicoff Elementary School	438	430	387	113.18%
Millstone River Elementary School	1095	1054	989	115.43%
Village Elementary School	740	771	694	106.64%
Community Middle School	1173	1272	1081	108.49%
Grover Middle School	1275	1224	1040	122.55%
High School North	1447	1996	1697	85.29%
High School South	1605	1968	1673	95.95%

	DN	MH	TC	Wicoff	TOTAL COMBINED
March 1, 2018 Enrollment	685	762`	535	438	2420
Total Classroom Capacity	637	678	573	430	2318
90% Utilization Rate	573	610	516	387	2086
% of District Capacity	119.48%	124.88%	103.74%	113.18%	117.44%
FES Total Classroom Capacity	678	720	630	453	2481
FES 90% Utilization Rate	610	648	567	408	2233
FES Percent of Capacity	112.26%	117.50%	94.36%	107.43%	108.37%

	Village	Millstone River	TOTAL COMBINED
March 1, 2018 Enrollment	740	1095	1835
Total Classroom Capacity	771	1054	1825
90% Utilization Rate	694	949	1643
% of District Capacity	106.64%	115.43%	111.68%
FES Total Classroom Capacity	819	1114	1933
FES 90% Utilization Rate	737	1003	1740
FES Percent of Capacity	100.39%	109.22%	105.45%

	CMS	GMS	TOTAL COMBINED
March 1, 2018 Enrollment	1173	1275	2448
Total Classroom Capacity	1272	1224	2496
85% Utilization Rate	1081	1040	2121
% of District Capacity	108.49%	122.55%	115.41%
FES Total Classroom Capacity	1224	1176	2400
FES 85% Utilization Rate	1081	1000	2081
FES Percent of Capacity	112.75%	127.55%	117.6#%

	NORTH	SOUTH	TOTAL COMBINED
March 1, 2018 Enrollment	1447	1605	3052
Total Classroom Capacity	1996	1968	3964
85% Utilization Rate	1697	1673	3370
% of District Capacity	85.29%	95.95%	90.56%
FES Total Classroom Capacity	1996	1968	3964
FES 85% Utilization Rate	1697	1673	3370
FES Percent of Capacity	85.29%	95.95%	90.56%

HSN vs. HSS

	NORTH	SOUTH
Building Square Footage	323,931	270,372
General Classrooms	44	47
Science Labs	12	12
Physical Education	2	2
Art Rooms	2	3
Music Rooms	3	3
Other Rooms	27	19
Total Instructional Locations	90	86

HIGH SCHOOL: Total Sq. Ft. / Building

	Classroom	Core	Special	Grand Total
HSN	51,161	73,805	12,972	137,938
HSS	52,251	81,002	5,170	138,423
Grand Total	103,412	154,807	18,142	276,361

HIGH SCHOOL: Chart by Room Type

	HSN	HSS	Grand Total
Classroom	56	59	115
Class	44	47	91
Science	12	12	24
Core	20	22	42
Special	14	5	19
Grand Total	90	86	176

SUMMARY AND FINDINGS

GOAL OF THE STUDY

- The goal of the study was to provide recommendations to the district on the best usage and efficiency of the schools and to assist in making informed decisions regarding facility expansion due to residential growth.
- To avoid overcrowding in schools and larger than necessary class sizes.
- To ensure resources are aligned to provide equity and excellence for all students including facilities that can support special education students in district in the least restrictive environment.
- To ensure ample educational space for current and projected students.
- To ensure that school enrollment numbers that are manageable for grade range, capacity of buildings, and programmatic needs.

DEMOGRAPHIC STUDY - 2018

Table 24
West Windsor-Plainsboro Regional School District Projected Enrollments
2018-19 to 2022-23

[illegible]

DUTCH NECK ELEMENTARY SCHOOL

- Based upon the analysis of district capacity, Dutch Neck is at 119.48% utilization.
- While the demographic study suggests that enrollment will begin to fall in 2021, there is significant residential growth that may occur during that same time period that may alter that projection.
- We must be vigilant in our review of demographics over the next 5 – 10 years due to the Affordable Housing decision in West Windsor. We must work to maintain class size. As such, there are limited options for classroom growth at Dutch Neck.

DUTCH NECK ELEMENTARY SCHOOL

- There is also a potential impact to room needs by housing one of the Dual Language Immersion programs at DN.
- Currently, there is limited room availability for support programs and core spaces (cafeteria, art classes, etc.).
- Due to the Affordable Housing determination it is anticipated that that Thompson Property will be approved. This property will be 179 Townhomes on Old Trenton Road and will send to DN – VIL – GMS – HSS. Potential residential impact is 2021.
- Lastly, as West Windsor Township works to determine their plan for addressing their Affordable Housing obligation it is possible that another property could be approved that impacts DN. If such a property is approved, we may need to review all DN sending paths.

DUTCH NECK ENROLLMENT:

Example(s) of Inward Migration

	2014 - 2015	2015-2016	2016 - 2017	2017 – 2018
K	147			
1 st	162	184		
2 nd		195	204	
3 rd			215	218
TOTAL				

MAURICE HAWK ELEMENTARY SCHOOL

- Based upon the analysis of district capacity, Maurice Hawk is at 124.88% utilization.
- While the demographic study suggests that enrollment will begin to fall in 2021 due to a decrease in birth rates, other factors must be considered such as inward migration and residential growth. The demographic study suggests that declining birth rates will neutralize the residential growth out of the Woodstone Property.
- However, it is critically important that we still account for the need to transfer 4 classrooms from Village to Maurice Hawk.

MAURICE HAWK ELEMENTARY SCHOOL

- In addition, it is anticipated that to meet the Affordable Housing obligation, West Windsor Township will approve at least two additional projects that will send to MH. It is expected that one of those two properties will send school age children as early as 2021.
- In the short term, if birth to K enrollment does trend lower we may be able to consider redistricting a portion of Princeton Terrace from DN to MH in order to secure classroom capacity at DN due to anticipated residential developments sending to DN.
- We must track inward migration as it has become more difficult to rely on birth data due to the influx of families that move into our school community with children. As such, those families are not captured in birth data at the county level.

MAURICE HAWK ENROLLMENT:

Example of Inward Migration

	2014 - 2015	2015-2016	2016 - 2017	2017 – 2018
K	168			
1 st		189		
2 nd			207	
3 rd				216
TOTAL				

MAURICE HAWK ELEMENTARY SCHOOL

- To date, all residential development growth (except the Thompson Property) will send to Maurice Hawk.
- As we work to address the need for classroom space (homerooms, art and music), it will be critical that we monitor the net impact of (PE, cafeteria, and library).
- There is also a potential impact to room needs by housing one of the Dual Language Immersion programs at MH.
- Lastly, as West Windsor Township works to determine their plan for addressing their Affordable Housing obligation it is anticipated that other properties will be approved that impact MH. If such properties are approved, we will need to review capacity figures for MH and evaluate all MH sending paths.

TOWN CENTER ELEMENTARY SCHOOL

- The current utilization rate for Town Center is 103.74%.
- Over the past several years we have seen a decrease in the capacity of Town Center Elementary School as classrooms have been utilized for Special Education programming. Most PK - 2 MD and Autistic programs are now housed at TC.
- The expansion of ten classrooms is being recommended utilizing Capital Reserve. This will provide the district with expanded Elementary capacity on the Plainsboro side of the district. Currently, there are no available rooms at either Wicoff or Town Center. With the Dey Road development about to break ground it is anticipated that we will have additional Elementary students by 2020. We are also anticipating the development of the Princeton Forrestal complex as well.

TOWN CENTER ELEMENTARY SCHOOL

- There are current discussions occurring in Plainsboro of potential additional growth beyond the Dey Road and Princeton Forrestal properties.
- As Wicoff Elementary schools physical footprint is limited, future Plainsboro growth may need to go to Town Center.
- Core facilities will have to be reviewed as PE, music, library and art are nearing full capacity.
- We are currently using a teacher workstation and a bookroom for instructional space. Specials are already on a cart.
- No available classrooms.
- TC experiences high mobility which impacts class size and program support. This past year the ESL population of TC nearly doubled.

WICOFF ELEMENTARY SCHOOL

- The current utilization rate for Wicoff is 113.18%.
- Wicoff Elementary School is projected to grow by 50 students by 2022-2023 with anticipated Plainsboro growth pending at the Dey Road and Princeton Forrestal properties.
- Currently there are no rooms for classroom growth at Wicoff. WL is on a cart, no G&T room, no conference room, limited office space for CST, limited ESL and basic skills classroom space, OT/PT is in a hallway, and classrooms are currently located in the former staff room and computer classroom.
- As Wicoff Elementary schools physical footprint is limited, future Plainsboro growth may need to go to Town Center.

MILLSTONE RIVER ELEMENTARY SCHOOL

- The current utilization rate for Millstone River is 115.43%.
- No available rooms for growth.
- Millstone River was developed as an Upper Elementary facility. As such, there is only one classroom that was built with a bathroom. Should the district ever consider redistricting and moving to a PK – 5 or K – 5 structure, Millstone River will pose significant concerns.

MILLSTONE RIVER ELEMENTARY SCHOOL

- If residential growth occurs, core spaces (music, art, PE, lunch room, etc.) will have to be analyzed.
- The Board of Education and administration should review the utilization of Millstone River and consider options for facility expansion and/or purpose.

VILLAGE ELEMENTARY SCHOOL

- The current utilization rate for Village is 106.64%.
- It is critically important that we account for the need to transfer 4 classrooms from Village to Maurice Hawk. This will open up space for growth fourth and fifth grade classrooms
- In addition, it is anticipated that to meet the Affordable Housing obligation, West Windsor Township will approve at least two additional projects that will send to Village. It is expected that one of those two properties will send school age children as early as 2021.
- All residential development growth for West Windsor will be sent to Village.

VILLAGE ELEMENTARY SCHOOL

- Lastly, as West Windsor Township works to determine their plan for addressing their Affordable Housing obligation it is anticipated that other properties will be approved that impact Village.
- Village currently has one music room and one art room. Should enrollment rise, we will need to address concerns with core space (art, music, PE, cafeteria, and library).
- Currently there is insufficient space for large ensembles and parent programming.
- Insufficient small group instruction space.
- The lunchroom cannot currently accommodate the utilization of additional lunch tables.

COMMUNITY MIDDLE SCHOOL

- The current utilization rate for CMS is 108.49%.
- Community presents a major concern over the next 3 – 5 years as it is anticipated that we will have a 175+ student growth. As lunch is already occurring in a split shift and core facility space is stretched we will have to work on temporary and permanent solutions.
- The district should consider a 8 – 10 classroom addition to provide a safety valve for classroom space.
- Space constraints exist for all special area classrooms including industrial and culinary arts, band, orchestra, and choir, PE, art, etc.

GROVER MIDDLE SCHOOL

- The current utilization rate for GMS is 122.55%.
- Similar concerns to MH, DN, and Village exist at GMS.
- This year GMS has 8th grade classes over 28 students per class with some as high as 30 – 32 students per classroom.
- PE, music and art have limited growth opportunity. Three science rooms must be converted from traditional classroom spaces to fully functioning science classrooms.

GROVER MIDDLE SCHOOL

- GMS could consider converting 3 – 4 World Language classrooms to homerooms and place WL teachers on carts. While this would provide some relief it will not be sufficient for the growth from Affordable Housing obligations in West Windsor.
- GMS will need to examine split lunches and replicate CMS.
- Further, both Middle Schools could consider a review of bell schedule to maximize building efficiency. It is critically important that should any such conversation proceed that it be understood on the front end that any such change could have a detrimental impact on instructional time in core academic areas.

HIGH SCHOOL NORTH

- The current utilization rate for HSN is 85.29%.
- While HSN's enrollment is hovering in the mid-1400's it is anticipate that HSN will increase by 200 students within the next five years. Anticipated enrollment for the HSN entering classes of 2023 and 2024 of over 480 and 470 respectfully. It is anticipated that HSN will surpass 1700 by the 2023 – 2024 school year.
- Plainsboro Township has approved residential developments on Dey Road and at Princeton Forrestal. Furthermore, discussions have occurred about additional residential growth in Plainsboro that will require active monitoring.

HIGH SCHOOL NORTH

- It must be noted that once our student population crosses 1600 there is a significant programmatic concern with the number of science labs available.
- Lastly, once enrollment crosses 1650 students it is anticipated that the facility will be hovering between 95% - 100% utilization.

HIGH SCHOOL SOUTH

- The current utilization rate for HSS is 95.95%.
- Much like HSN, when HSS crosses 1600 students there are significant concerns with the ability to provide students with their desired course requests in the area of science. During the 2018 – 2019 school year Biology will be significantly challenged due to the size of the 9th grade projected enrollment and based upon the anticipated requests for AP Biology. By 2019 – 2020 we anticipate 28 sections of Chemistry, Chemistry Honors, and AP Chemistry being offered. At that time we will be out of Chemistry rooms.

HIGH SCHOOL SOUTH

- All significant residential growth occurring in West Windsor is currently zoned for HSS.
- Due to the unique nature of the instructional classroom design at HSS (open space concept) World Language and Special Education classrooms are often assigned to classrooms with walls. As enrollment increases there will be a limitation on general classroom options.
- Core space (commons, PE, art, and music) will need to be analyzed.

Affordable Housing Properties

Calculation/Projection – West Windsor

Subdivision/Developer	Number of Units	Affordable Housing Obligation	Assumed % of Affordable Housing	Notes
American Properties (Thompson Property)	179	45	.25	Townhomes
Lowes Center – Garden Homes	650	155	.25	Apartments
Transit Village (District 1)	800	100	.122	Apartments
Four Hundred Steps	100	20	.2	Apartments
Woodstone	443	89	.2	Apartments
Toll Brothers	91	6	.1	51 Townhomes, 40 Apartments
Project Freedom	72	72	1.0	

Affordable Housing Properties

Calculation/Projection – West Windsor

Bear Brook Homes	10	2	.2	7 Homes, 3 Townhomes
Princeton Ascend	17	3	.2	Apartments
Ellsworth Center	24	6	.25	Apartments
SUBTOTAL	2386	498		
Assumed approximately 600 credits (900 remaining)	1608	402	.25	
Remaining COAH need 900 – 518 = 382				
TOTAL (ESTIMATED)	3994	900		

POTENTIAL IMPACT OF COAH DECISION

- AFFORDABLE HOUSING OBLIGATION WEST WINDSOR

• TOTAL	UNITS	YIELD	POTENTIAL NUMBER OF STUDENTS
• 900	3994	.4	1598
• 900	3994	.58	2316
• 900	3994	.81	3235

RECOMMENDATIONS

- There is no single or easy solution to resolve the issues that motivated the district to engage in this study.
- The long range solution to our pending challenges will be exacerbated by residential growth.
- As such our long term solution will be a combination of efforts that may include:
 - EXPANION;
 - RENOVATION;
 - POTENTIAL REDISTRICTING;
 - AND INNOVATION.

RECOMMENDATIONS CONTINUED

- Expansion would mean adding classrooms to existing structures.
- Renovation would build on expansion and would include the modernization of areas of buildings to better meet the needs of students and instructional programs.
- Redistricting would consider a review of current residential sending paths and make calculated shifts in order to address potential overcrowding in any on particular school.
- Innovation requires considering new organizational and instructional models.