

Report to the Board of Education and the Community

Enrollment Task Force



May 2019

Mamaroneck School District

Enrollment Task Force Members

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1 - Background

The cycle of enrollment growth and decline is not a new phenomenon for the Mamaroneck School District (the “District”). For over 40 years, the District has responded to the generational shifts in enrollment through a variety of measures including a proposal in the mid 1970’s to close Chatsworth Elementary School (“Chatsworth”) due to dwindling enrollment. This ebb and flow of contraction and steady growth, previously prompted the Board of Education (the “Board”), administration and community to study and implement changes to school configuration seeking remedies to address overcrowding of neighborhood elementary schools.

In 1967-1968, the Board appointed a Citizens’ Advisory Committee to examine enrollment growth and elementary school overcrowding. After 11 months of deliberation, the Citizens’ Committee urged the Board to shift elementary zones to balance elementary schools and construct a third sixth grade wing at Hommocks Middle School (“Hommocks”). In the 1990’s K-12 enrollment increased by 22% adding 781 students across the system and by 33% (634 students) at grades K - 6. During this time, in order to maintain the neighborhood schools model and alleviate enrollment and space constraints in K-6 elementary schools, the Board approved a multi-year plan (1996 – 2000) to transition sixth grade students to Hommocks.

The District faced a familiar challenge of enrollment growth and space constraints in elementary schools in 2005. In 2006, the Board and Dr. Paul Fried, the superintendent at the time, formed the Superintendent’s Committee to Study Space to investigate opportunities within elementary schools to expand the number of classrooms. In more recent years, the District addressed enrollment growth and space limitations at the elementary schools by shifting specialized programs from one elementary school to another.

The most recent cycle of enrollment change began in 2010. Between 2010 and 2018, the overall student population of the District schools increased by 631 students, the equivalent of the population of one of our elementary schools. Growth exceeded that of neighboring districts and the forecasts in the 2011 Demographic study which predicted a peak enrollment in 2018 of 5,112. In fact, District enrollment in the fall of 2017 rose to 5,591.

Historically, the generational system challenge facing prior Boards and administrations was the ability to simultaneously solve short-term enrollment pressures and address overcrowding while maintaining neighborhood elementary schools. Thus, for the last thirty years the District has implemented a range of strategies including shifting enrollment zones, relocating programs, and grade-level reconfiguration of schools. Absent from the decision-making process was a broad consideration of how reconfiguring schools might provide a durable solution to the ebb and flow of enrollment change over time and address issues of equity of opportunity to learn, financial sustainability and efficient use of fiscal resources



Below is a brief summary of the most recent discussions to address enrollment growth and space constraints in the District and the factors leading to the creation of the Task Force.

December 2015

- District publicly reports on enrollment trends and the findings of a space audit conducted at each of the elementary schools as concern increases about the availability of classroom space at both Chatsworth and Murray Avenue (“Murray”) elementary schools.
- Superintendent publicly describes the Forecast 5 Analytic tool, which the District will be using to monitor and project enrollment.

December 2016

- District updates community on enrollment trends and space utilization.
- Superintendent meets with municipal leaders to share enrollment projections.

October 2017

- District begins comprehensive study of space and enrollment, reflecting on the challenges of physical space and financial resources and exploring potential solutions.
- District notes that the challenge of rising enrollment impacts students in each of our six schools.
- Board charges the Superintendent to explore short-term strategies to address space constraints.
- Board expresses concern about the ability to manage long-term enrollment growth and decides to form an Enrollment Task Force to study long-term strategies to address enrollment growth and limits to instructional space.
- Two Community conversations are well attended.

November 2017 – December 2017

- Board considers the addition of modular classrooms at Chatsworth and Murray.

December 2017

- Board concludes modular classrooms schools are not a feasible short-term solution to enrollment growth/space challenges at Chatsworth and Murray for September, 2018 given timing and cost constraints.



February 2018

- Community Conversation held with over 200 in attendance.

March 2018

- District determines that each of the elementary schools can accommodate all students for the 2018-2019 school year without modifying school attendance lines.

Formation of Task Force

Selection Process

After receiving applications from 99 community members and District employees, the Board selected 34 community members and three District employees to participate in the work of the Task Force. The group consists of residents with a variety of educational and professional backgrounds who live in each of the four elementary school zones and includes parents of preschoolers, elementary students, and secondary students, as well as empty nesters. Although some members are relative newcomers, others grew up in the community; two members have lived here for 52 years each.

Task Force Charge

The community-wide Task Force was charged by the Board to fully investigate potential long-term strategies for addressing enrollment growth within the broader context of the District's educational goals, space constraints and fiscal challenges. The role of the Task Force is to assist the Board in making an informed evaluation.

The Board is charged by law with the responsibility of determining which school each student will attend and how schools are configured. Although the Board is committed to including the input of the Task Force, the Administration and the community in its decision-making process, the Board retains the ultimate responsibility for the determination.



2 - Enrollment History and Projections

Looking closely at school and District enrollment data over an eighty-year history (1928 - 2018), there is a clear pattern of growth and decline at the school and District levels.

Year	Central	Chats	Mamk Ave	Murray	Jr.High/HMX	MHS	Total
1928	473	572	540	415	394	452	2846
1938	337	647	656	701	964	737	4042
1948	458	528	348	581	716	798	3429
1958	479	678	626	798	1014	907	4502
1968	775	930	590	997	1399	1441	6127
1978	667	728	504	753	903	1994	5549
1988	431	432	404	484	538	1268	3557
1998	532	678	480	697	819	1167	4424
2008	476	637	661	730	1122	1501	5023
2018	507	690	720	742	1281	1616	5556

In response to demographic shifts and changes to enrollment patterns, prior Boards of Education established Citizen Advisory, Planning, and Space Committees at various junctures to investigate, assess, and/or recommend short and long term strategies (e.g., rezoning, reconfiguration, and new school construction) to address decreasing and increasing enrollment pressures. Committee Reports were similarly shared with the public in 1968, 1975, 1982, 1990, and 2006.

More recently, following a 10.7 percent K -12 enrollment increase adding 488 students over the ten-year period 2000 - 2010, the District sought to secure a demographic study to understand how enrollment trends over the decade 2010 - 2020 would serve to guide long-term planning. The February 2011 Demographic Study performed by Western Suffolk BOCES Office of School Planning and Research projected a gain of 62 students (1.2% increase) at the projected peak enrollment year of 2018. A key finding in this demographic study (see appendix) was the anticipated steady decline of kindergarten enrollment each year beginning 2011-12.



Contrary to demographic forecasts, beginning the 2014-15 school year, and continuing four out of the next five years, kindergarten enrollment exceeded projections. In response to higher than expected enrollment in the spring of 2015, the District, using Forecast 5 analytics software, began internal efforts to forecast, monitor, and report (biannually) kindergarten, elementary and secondary enrollment data to the public. At the same time, the District implemented an instructional space audit at each of the four elementary schools to consider short-term options to optimize instructional space in the event that higher-than-expected elementary enrollment continued.

In the spring of 2016, the District administration proactively engaged municipal leaders to assess the impact of community housing development on school district enrollment and space utilization. The District sought data from municipal leaders on development plans, including the number of housing units planned or completed. Finally, the District took action to share concerns about the school impact in connection with the proposed Hampshire Golf Club housing development project.



3 - The Work of the Committee

The challenge for the District was presented to the Task Force:

To meet our mission, maintain and improve the quality of our programs, and operate under sound fiscal practices we need to explore strategies to address:

- Growing enrollment
- Instructional space limitations (based on current educational delivery model)
- Budgetary Resources

Based on this understanding, the Task Force would identify, analyze, and assess potential strategies for addressing these issues.

The work of the Task Force proceeded in three phases:

Phase I: March - August, 2018

“Guided by the tenets of the District’s Mission Statement, members of Task Force will investigate and assess a variety of long-term strategies to address growing enrollment and instructional space limitations by committing to learning about the unfolding transformation of teaching and learning.” [March, 2018 Task Force Charge]

Prior to assessing various long-term strategies, it was critical for the Task Force to gain an understanding of the emerging role of the teacher and student and the changes within the learning environment. Therefore, the first four months were devoted to learning about the range of core competencies that will help graduates thrive in a fast-changing, interconnected global economy, the pedagogical shifts that correspond to new roles for students and teachers, and the essential physical components (school buildings) that support 21st century teaching and learning. To help us learn more about the changing educational landscape, the Task Force invited two nationally renowned educational leaders to Mamaroneck to present their ideas.

On April 16, 2018, Prakash Nair, founding President and CEO of Fielding Nair International, a world-renowned architect and global leader in school design, shared his work on reimagining schools for the 21st century teaching and learning.

On May 7, Dr. Heidi Hayes Jacobs, curriculum designer and author of Bold Moves for Schools: How We Create Remarkable Learning Environments., presented her findings on ways in which schools are redefining the roles of teacher and student and rethinking how schools use time, group students, and personalize learning.



Additional meetings during this phase, focused on the impact of educational policy issues on our school system and how data points might influence long-term strategies to address enrollment space and learning outcomes. The Task Force requested and received specific data from the District to assist in gaining further understanding of the challenges. Task Force members also conducted independent policy research and shared policy studies and articles.

Phase II: September - December, 2018

Based on our learning, research and data review, the Task Force proceeded in small working groups to investigate long-term strategies for enrollment and space, guided by the following:

- If elementary enrollment continues to grow over the next decade and we maintain the neighborhood schools model, current class size guidelines, and program offerings, what options should the Board consider specific to redrawing (modifying) school assignment zones and/or reassignment? What are the advantages, drawbacks, or limitations? What challenges remain or may surface in the future?
- As we evaluate long-term enrollment trends and space needs in the context of our mission, community values, and long-term vision for teaching and learning, should the District prioritize capital expenditures (e.g., expanding, adding, or redesigning schools) in order to maintain the current educational delivery model? To what extent can we address future enrollment growth/learning space limitations by redesigning learning spaces (moving away from cells and bells) consistent with the work presented by Fielding Nair?

Phase III: January - May, 2019

Superintendent Dr. Robert Shaps provided an update to the community on the work of the Task Force at the January 8, 2019 Board meeting.

During this phase of work the Task Force has been immersed in reviewing a significant amount of data that the District has provided in such areas as K-12 enrollment projections (2019-2024), K - 5 classroom utilization research, student demographics, family registration, models of reconfiguration scenarios /transportation impact, and capital expansion cost estimates.

Using this data, Dr. Shaps laid out the following criteria for the Task Force -- working in small groups -- to use in evaluating a range of long-term strategies over the next several months:

- Durability
- Financial Impact
- Educational Impact
- Equity of Opportunity for All
- Class Size



- Overall Value

The results of this work form the basis of this report, as well as recommendations for next steps to be taken by the District and the community.



4 - Phase I - Understanding Educational Policy Issues

Before taking a deep dive into the enrollment fluctuations of our District, the Task Force needed to take a step back to gain a broad understanding of the educational policy and program issues in the field of education today, and to analyze how they may impact our District. To that end, in the spring of 2018 the Task Force divided into subgroups to explore, study, and discuss various educational policy issues that impact teaching and learning. The Task Force spent three months researching internal and external data, meeting in small groups to discuss questions, and creating a chart reflecting the results of the mini-investigations.

The topics investigated were as follows:

1. Income inequality (for example, low income districts, low income students in otherwise wealthy districts, etc.)
2. Class size (is there a magic number to produce the best student outcomes?)
3. Teacher quality (for example, how do you define and evaluate an effective teacher?)
4. Early childhood education (defined as preschool through second grade)
5. Program design (for example, programs focused on dual language, STEAM, other magnet programs, etc.)
6. Educational delivery models (for example, K-2, K-8, 5-8 or other grade configuration models)
7. School choice (allowing families to choose their school assignment based on a variety of options)

The subgroups relied on scholarly articles and book excerpts, newspaper articles, and internal source data to begin to understand each topic. The output of the subgroups was to feed back to the full Task Force answers to the following questions:

1. What have you uncovered that is clear about this educational topic? To this end, what has been determined or agreed upon that may influence our thinking about long-term strategies to address the system challenges of enrollment growth and instructional space limitations.
2. What remains murky or unclear with respect to your educational policy or program issue? What questions or concerns come to mind as we consider how this issue may shape long-term decision-making to address enrollment growth and instructional space limitations?



3. What warrants further investigation specific to your educational policy/program issue as we consider long-term strategies to address enrollment growth and instructional space limitations?

The following is a summary of the results of the subgroups. The complete charts containing the outputs of each subgroup are included in Appendix I.

Income Inequality

On traditional measures of academic success, low income students as a group have performed worse than more affluent students. The result is an achievement gap that has continued to grow over the last three decades. Research has shown low income students enter kindergarten at a lower achievement level relative to other students. However, the resulting achievement does not widen significantly and in some cases narrows, as students progress through school. This suggests that good schools can help reduce educational inequality through the resources provided and the association with higher performing students. The earlier the intervention, the more effectively the achievement gap can be narrowed or even eliminated.

Class Size

Smaller class size is a popular educational policy as it is often associated with increased achievement. However, numerous studies on state initiatives to reduce class size and the corresponding impact on learning are not universally agreed upon. Corroborating evidence is sparse, weak and often contradictory, with conclusions seemingly subject to biases of the observer.

In most cases, smaller class sizes delivered modest improvement in learning at all grade levels except at the early elementary level, where it has shown to be effective from the Pre-K to second grade, especially among lower income and English Language Learner (ELL) cohorts. Findings indicate that investments in other areas, such as teacher quality, early childhood programs, and tutoring, provide better return on investment. As such, class size changes should not be viewed in isolation but taken into account with other educational reforms.

Teacher Quality

Teachers have a significant, lifelong impact on students that extends beyond the teaching of academic subject content and skills to the fostering of students' self-esteem. Despite nearly a century of investigation and research, there is no clear, definitive definition for what characteristics or best practices make an "effective teacher." There have been many attributes identified based on feedback (teacher, student, observation) but none that are definitive and quantifiable.



Early Childhood Education

It is generally assumed that the elementary years are when children acquire the academic and social emotional skills upon which academic success depends. These years set a solid foundation that benefits children through their teens and beyond. Research has shown that a child's inability to meet grade level requirements by the end of second or third grade reduces the likelihood of his or her success later on. That gap becomes harder to close in the secondary school years and this is especially true for at risk children who need special services.

Program Design

Similar to school choice, district-wide and magnet programs can be beneficial by enhancing learning opportunities and creating socioeconomic/racial diversity. Of the program design options examined, magnet/specialty programs appear to have the greatest potential to shift enrollment populations. Successful implementation will require understanding of costs (e.g. busing), maintaining accessibility of special programs across schools in the District, and a high degree of "buy-in" by families and the community.

Education Delivery Models

The configuration and physical characteristics of schools can play a role in the effectiveness and impact on student learning. Research shows us that delivery models configured to support active learning contribute to more effective learning and encourage different methods of instruction. All delivery models have strengths and weaknesses and preference for one model over another does not necessarily imply superiority or fit for a school district. School systems configure differently for numerous reasons and configuration alone does not solve all problems.

School Choice

The goal of school choice programs is to give parents more control over their child's education and to allow parents to pursue the most appropriate learning environments for their children. These programs have shown the ability to introduce market forms of accountability, as better performance attracts more demand. Magnet schools have also been shown to increase diversity through a voluntary mechanism.

Such programs are not without criticism and challenges. For example, parent choice can often be driven by convenience, such as location or social groups, which leads parents to potentially chose lower-performing or less diverse schools. The success of school choice is dependent upon a well informed community that knows what different schools provide. This enables parents to make the best and most informed decisions on where to send their children.



5 - Phases II and III - Analyzing Specific Strategies

When the Task Force reconvened in September 2018, it was time to take a close look at the potential long-term strategies that the District could consider when analyzing enrollment patterns. As reported by the administration at the start of the school year, total kindergarten enrollment for 2018-19 was lower than projected and as a result, the District has adequate instructional space for the 2018-19 and 2019 - 2020 school years.

Based on its work during the 2017-2018 school year, the Task Force was familiar with different school configuration options, and had performed mini-investigations regarding policy issues of concern in the field of education. With this background, the Administration asked the Task Force members to divide into subcommittees to analyze the feasibility of certain long-term strategies. Those strategies were:

1. Preserve current elementary schools without expansion
2. Expand current elementary schools
3. Reconfigure students District wide by grade
4. Reconfigure students by school choice

Based on the number of possibilities for the reconfiguration by grade strategy, that subgroup further divided into the following subgroups:

1. Preserve current elementary schools without expansion
2. Expand current elementary schools
3. Reconfigure Hommocks to 5-8 (maintain existing elementary schools otherwise)
4. Reconfigure elementary schools into a ‘full Princeton Plan’
5. Reconfigure elementary schools by ‘pairing’ schools (two options considered:
Murray/Mamaroneck Avenue School (“MAS”) and Central Elementary School
(Central”)/Chatsworth and Murray/Chatsworth and Central/MAS)
6. Reconfigure students District wide by grade - early childhood educational center
7. Reconfigure students by school choice

The subgroups worked throughout the 2018-2019 school year to analyze each long-term strategy against the following evaluation criteria framework:

- **Durability** (*the extent to which the model can withstand enrollment increases and/or decreases*)
- **Financial Impact** (*the extent to which the model obligates financial resources*)



- **Educational Impact** (*the extent to which the model results in positive or negative educational outcomes - e.g. curriculum consistency, enriching programs, professional specialization*)
- **Equity of Opportunity for All** (*the extent to which the model results in classes balanced by socioeconomic status ("SES") and % of English Language Learners and students with disabilities*)
- **Class Size** (*the extent to which the model results in class sizes near the District guidelines*)
- **Overall Value** (*looking at all evaluation criteria holistically, what is the value proposition of the long term strategy?*)

The subgroups took a deep dive into internal District data. This data included, but was not limited to:

- Enrollment Projections
- Elementary Classroom Utilization Projections
- Student Demographics
- Family Registration
- Models of Reconfiguration Scenarios
- Transportation Impact
- Capital Expansion Cost Estimates (Murray and Chatsworth)
- Special Education Program and School Configuration Analysis

In addition to internal data, the subgroups engaged in outside research. For example, some subgroups visited other school districts to learn about different configuration models.

The below summaries highlight the outcome of the subgroups' work. Every subgroup concludes with a number of open questions for the Administration and the Board to consider as the District continues to address changes to enrollment patterns and considers the best way in which to organize students to optimize learning for all.



6 - Phase III - Summary Analysis by Strategy

Preserve Existing Neighborhood Schools

Overview

This strategy evaluated the current neighborhood school model against the evaluation criteria regarding the fluctuation of enrollment in our District.

Benefits

- Preserving the status quo will continue to foster a sense of neighborhood communities - children will go to school with their neighbors and have a greater chance of attending school with siblings.
- Neighborhood schools present the most walkable elementary education model.
- Our District is familiar with this model - with its benefits and drawbacks. It is a model that we know how to work within despite any inefficiencies.

Challenges

- Inefficient allocation of resources regarding staffing and classroom usage. For example, ‘specialists’ are currently located in all 4 elementary schools, irrespective of the population in each school that needs such resources, while “specials” teachers may commute to each of the 4 elementary schools spending ‘commuting time’ between schools keeping them out of the classroom.
- Once class size and space reach capacity, the financial impact is unknown. This model does not give much comfort in being able to actively plan for upcoming school years from a budget and hiring perspective.
- There is great fluctuation in class size. The sensitivity of enrollment change has compounded impact on financial cost. A small number of students may cause a whole new class to be structured - which theoretically could happen 4 times (1 in each elementary school).
- Classes are determined very close to the beginning of the school year, which might result in hiring additional staff and teachers in August.
- Perpetuates demographic inequality between schools. The MAS poverty level is much higher than other schools which exacerbates inequality.



Conclusion

Preserving neighborhood schools fosters neighborhood communities and allows for greater walkability. However, the inefficient use of staff and space, coupled with the inequality of opportunity and lack of durability of the current model lead us to believe that we need to consider alternative models beyond preserving neighborhood schools. Modifying the neighborhood school model would give us the opportunity to introduce our kids to all different types of neighbors in an alternative plan which is in line with the District's goal of culturally responsive pedagogy. Parents and students would benefit from interacting with, and learning from, others with a different level of financial security. As a group, we have found a number of questions for further consideration by the Board and the Administration:

- What is the percentage of families who regularly walk to elementary school? We found this is a strong argument for preserving neighborhood schools, but only if there is appropriate walk-to-school usage.
- How does the long-term housing development impact sustainability? There are a number of housing developments in all elementary zones, but the most in Chatsworth and MAS, which are already close to capacity. How will the increase in housing units impact our schools?
- Title 1 funding: Does this funding change in a Princeton Plan scenario?
- How does the possibility of implementing some form of Fielding Nair's work impact the ability to maintain neighborhood schools? Fielding Nair would alleviate a portion of the class size and teacher-usage efficiency questions. We do note that there is a good amount of work involved in implementing Fielding Nair in terms of cost, teacher and parent/family "training" (e.g. evaluation changes, classroom model changes, etc.)



Expand Existing Neighborhood Schools

Overview

This strategy explored opportunities for, and possible impacts associated with, the physical expansion of the existing neighborhood elementary schools to accommodate increased future enrollment.

Benefits

- The expansion of the existing neighborhood schools could present the opportunity to implement new progressive educational pedagogies, styles, and best practices.
- Class size targets could be achieved, and overcrowding likely avoided, through the addition of new classroom space.

Challenges

- Capital projects typically require a long time horizon to move from planning through completion, and seem a poor match for our currently fluid enrollment projections that can change from year to year.
- Expanding our neighborhood schools will require a significant commitment of capital. This commitment may impact the District's ability to use funds to address other unpredicted future needs.
- Expansion will need to be prioritized to one or more schools, and may not be distributed evenly or equitably to address the needs of all students.
- Many of the opportunities for physical school expansion would be achieved at the expense of other available space - for example existing green and/or outdoor space currently available on school lots.
- If money is spent to expand a neighborhood school, there is no guarantee that enrollment within that school's boundaries will grow to match its new capacity.

Evaluation Criteria

The uncertainty of future enrollment, extended time frame for implementing, and the significant amount of capital required makes it challenging for the subgroup to recommend this option. While expanding schools could alleviate concerns about class size, the potential negatives appear to outweigh this benefit.



Conclusion

Adding school capacity without a more reliable understanding of future enrollment levels does not appear to be an effective solution. Are there other, possibly more sophisticated future enrollment models that can be pursued? The group examining this option also recognizes that the current fixed neighborhood school boundaries limits the ability of the District to address enrollment changes. Are there opportunities to re-evaluate this approach to allow for a review of how any physical expansion of schools could be maximized for long-term benefit?



School Choice

“School Choice” occurs when families submit a list of their preferred schools within the District. Ideally, the District would use an algorithm in which families’ 1st, 2nd, 3rd choices are matched with the available facilities as closely to the top one or two selections as possible, while taking student demographics into consideration. There are two forms of school choice models, operational and program design. In an operational model, schools would have an academically similar curriculum, much as our current elementary schools offer now, while possibly having other features that can entice families to not opt for the school closest to them. For example, in White Plains, three of their elementary schools have dual language programs similar to our Dos Caminos program, and a fourth school has an earlier start time eliminating the need for before school care. In a program design model, each school would be modeled on different programs designed for specific educational needs. This can include, but is not limited to, programs such as dual language, project-based learning, International Baccalaureate, STEM, Performing Arts, and the former “Actionville” program.

As a group, we met with the White Plains administration to learn about the long-standing operational school choice program that they operate. To learn more about a program design choice model, we reached out to Montclair, NJ and Greenwich, CT, but were unable to meet with them. We also pulled some information from the task force’s initial research into program design and magnet options.

Benefits

- School choice has the potential to be long-lasting and evolve with parental needs and educational trends. Students can be assigned to schools with maximum flexibility, since neighborhood school zones no longer apply.
- Gives the District the ability to balance the schools (both in number of students per school and controlling class sizes, as well as student demographics within each school) and gives people the choice to pick what school works best for their family.
- It has a strong educational impact as it allows for an increase in opportunities, balance socioeconomic status, evens the playing field, and allows for greater diversity. It is equitable for a large portion of our District, as it levels the playing field for access to all the elementary schools.
- It can increase diversity throughout the schools. The District as a whole shares the benefits as well as allowing individual students to learn unique lessons from classmates they wouldn’t have been exposed to in a neighborhood school model.
- On the operational side, it gives the administration the opportunity to reduce inefficiencies, such as increasing the control over the distribution of students, staff, and resources.
- Program design could be a means of delivering attractive enrichment options at each



school.

Challenges

- There is an unknown busing cost, as it could greatly increase the number of children that require transportation. There would also be an increase in administration and coordination of bus routes.
- There could be an increase in cross-town traffic, as well as congestion at the schools for drop off and pick up.
- To launch multiple educational programs, administrators would need to engage in a period of program design, followed by curriculum development, teacher training and professional development, as well as the sourcing of classroom materials.
- There could be an increase in workload of the administration, with managing student assignments and curriculum conformance across the District.
- Lower Socioeconomic Status households may have lesser ability to navigate options, or gain access to information about the best options available for their children, especially in a program choice model. There would need to be outreach to ensure that these families do not get lost in the process.

Evaluation Criteria and Conclusion

In conclusion, while there are many benefits and advantages to both operational and program design choice models, there is more research to be done. One major question in the program choice model: what kind of programs (ie. dual language, project based learning, STEM, I.B.) would be valued by the District families as acceptable and sustainable options? In an operational model, what are the best ways to differentiate the schools to entice away from the closest option? It also needs to be determined if the increased transportation costs balance the increased logistical control and possible cost savings from reducing inefficiencies. Is it possible to decrease distance requirements for transportation, and how would that increase the costs as well as influence the choice of a further school option? Another area to research is if it would be more feasible to add programs to our existing schools to allow the administration more flexibility with distributing students, such as the current Dos Caminos program or the former Actionville program.



Early Childhood Center

Overview

This strategy investigated and assessed the idea associated with establishing a Pre-K to grade one early learning center that would address the District's instructional space challenges within the context of new educational trends and use of space. The vision behind an early childhood center is to improve the quality of learning opportunities, from the experiences children have before they enter the K-12 system and extending through elementary school, to improve learning outcomes and prevent achievement gaps. Although the strategy was centered on having children up to first grade, there is nothing magical about first grade. An early childhood center can take on different grade levels, though many do not go beyond third grade.

As part of our research we met with the Principal of the Hewlett- Woodmere School District, on Long Island, to learn about and tour their early learning childhood center, Franklin Early Childhood Center. With early childhood programs dating back to the late 1960's, Hewlett-Woodmere initiated in the 1970's the implementation of an early childhood center and opened the Franklin Center in 1983.

Benefits

- Social integration of all our students
- Would deal with enrollment increases/decreases
- Financial benefits through shared services and balancing student/teacher ratio across the District
- Deliver stronger academic performance
- Better use of professional development and teacher collaboration

Challenges

- Maintain continuity and positive academic performance beyond the early childhood center
- Ensure community buy- in which is ingrained with a neighborhood school structure
- The reconfiguration ramifications of grades 2-5 students and negative impact that may cause
- Additional costs, such as transportation or technology, and the trade-offs for savings



Evaluation Criteria

The concept of an early childhood center aligns positively to the success frameworks defined by the Task Force. The model provides utmost flexibility in terms of changing enrollment, sets the foundation upon which future learning builds to create positive opportunities for all, would be available to all children in the District and balance class sizes. There would be an increase in transportation costs with having all District children attend one school but that could be offset through savings from shared services by consolidating certain elementary grades under one building. The potential financial impact of this strategy would require further investigation.

Conclusion

The establishment of an early childhood center approach in the District has the potential to positively influence and impact student learning that provides a strong foundation leading to better development, sustained gains, and outcomes extending beyond elementary school. The concept warrants further investigation by the Board. For the model to deliver the promised benefits, the Board needs to make sure that it is not implemented in isolation but as part of a District wide K-12 philosophy with the right investments in technology, teacher development, curriculum, facilities and key performance measurements. As was discovered with Woodmere, there is a divergence in student performance after leaving the Franklin Learning Center back to a traditional neighborhood structure.



Reconfigure Students by Pairing Elementary Schools

The Paired Elementary Schools Model would involve creating 2 sets of 2 elementary schools. In each set of schools, 1 school would house grades K-2 and 1 school would house grades 3-5. The team began by looking at both potential pairings (Central/Mamaroneck Avenue and Chatsworth/Murray as well as Mamaroneck Avenue/Murray and Central/Chatsworth). Upon first examination, one combination of schools did not provide diversity in regards to ethnicity and socio-economic status; therefore the committee fully explored the option that provided leveled diversity: pairing Mamaroneck Avenue with Murray Avenue and paring Chatsworth with Central. This pairing was explored without assigning specific grades to specific buildings.

Benefits

- As enrollment increases or decreases the population is distributed over more sections at each grade level, which allows for greater efficiency in staffing and space
- More efficiency of teachers and aides including travelling teachers and student support staff, should have positive financial impact
- Professional development will be more efficient and consistent over each grade level
- Integrated Co-Teaching/Special Education offered in all grades at all schools due to the consolidation of grades
- More opportunity for shared experiences across grade level
- More opportunity for school-wide enrichment based on appropriate level K-2 or 3-5
- Earlier integration of students with regard to ethnicity, socio-economic status and primary language spoken.
- Class sizes will be more consistent throughout the District within the BOE guidelines, because the students are consolidated into 2 schools rather than 4 at each grade level. Based on projected enrollment this model could save up to 12 sections of classes in the 2019/2020 school year for grades K-5.

Challenges

- According to the transportation policy, the model needs to consider the cost of transportation for approximately 51 students for K-2 (attending Mamaroneck Avenue) and 43 grades 3-5 students (attending Murray). There would be no associated transportation costs for Chatsworth/Central. However, the model likely would result in many more families driving to school. The District may need to consider additional transportation options to mitigate perceived inconvenience to residents.
- Families would need to transition schools an additional time during their tenure in the MUFSD.
- During the transition period, integrating the communities and PTAs would need time and attention.



- Scheduling changes may be necessary to allow for different start/end times at the various schools to enable smooth arrivals and dismissals.

Evaluation Criteria

The paired elementary model would be a more durable model to allow for increasing/decreasing staff and resources based on fluctuating enrollment. It will reduce overall costs of personnel by reducing the number of sections, and provide efficiency for shared teachers, specialists and support staff. The budget efficiencies could result in resource reallocation to increase the opportunity for specialized or specific educational opportunities at each grade level. Students will be combined sooner rather than later when they enter Hommocks Middle School and the diversity in our elementary schools will be more balanced. This model will maintain some aspect of a neighborhood school in that students will attend their closer neighborhood school for part of their elementary years, which should resonate with the community, per concerns voiced at public meetings.

Conclusion

The team recommends that the Board look further into the Paired Elementary Model of combining Murray with Mamaroneck Avenue and Chatsworth with Central. Overall there are many benefits to this model and few challenges. If the Board decides to further evaluate this model, the team suggests addressing the following remaining questions:

- Would infrastructure changes be needed to ensure buildings are best equipped for associated grades?
- Only a small group would require busing in this model...what is the impact of increased car traffic and parking challenges? Would increased efficiency allow for additional transportation for students?
- Would we need staggered start and end times to account for multiple drop-offs and pick-ups?
- What educational benefits/enhancements could MUFSD afford with the increased efficiency of this model?



Full Princeton Plan

Overview

In 1948 the Princeton, New Jersey school district introduced an approach to organizing their elementary schools that focused on grouping students in their two existing elementary schools by grade rather than by neighborhood. The community decided to organize this way in order to integrate the elementary schools, and to provide a consistent experience for all students. This approach came to be known as the Princeton Plan, and has been implemented by many districts across the country (including Tarrytown and Ossining in Westchester County).

For our District, implementing a Princeton Plan approach would involve splitting Pre-K through 5th grade classes across the Central School, Chatsworth Avenue School, Mamaroneck Avenue School, and Murray Avenue School. For the purposes of this group's analysis, we assessed what was called the "full" Princeton plan - meaning that grades would be distributed across the schools.

Benefits

- Integration of students begins in Pre-K, allowing for opportunities for connections between children at earlier ages than today (when grades only come together in 6th grade).
- Improved balance of race and students qualifying for special education services in classrooms.
- Likely a positive financial impact, with increased transportation costs offset by greater efficiencies in filling classrooms.
- Greater consistency in curriculum and experiences across all students in each grade.
- Increased ability for faculty and staff specialization and skill development.

Challenges

- Given the current configuration of schools, it doesn't appear that the District can support a full Princeton Plan. Accommodating the number of students currently enrolled would require modifications to alleviate capacity issues.
- The plan requires many school transitions for children, families, and faculty.
- Potential negative impact on parent and family connectedness to a school community (based on the relatively short time a student will attend each school).
- Families with multiple children may struggle to manage the logistics of having children across multiple locations.



Evaluation Criteria

In theory, organizing our existing schools into a full Princeton plan should provide the most flexibility to support variations in school populations. Given the number and size of buildings in our District, however, we don't believe that a full Princeton plan approach is feasible. For example, in one iteration of the Princeton plan, each elementary school building would be home to grade level cohorts of more than 400 students. Assuming that each school would house two grade levels, some schools would require space for between 850 and 930 students. Currently not one of our existing elementary schools can support a student population of over 750.

We do believe that the Princeton plan could perform well against other criteria, particularly in equity of opportunity and educational impact.

Conclusion

While a full Princeton plan does not seem to be feasible for our District, are there blended models that are a better fit for our enrollment numbers and existing elementary school buildings? Is further consideration of a Princeton plan coupled with one or two specialized elementary schools a possible option to consider?



Grade 5- 8 Middle School

Overview

The concept of middle school is based on an education model that addresses and responds to the unique developmental stage of young adolescence. According to academic literature, successful middle school models stress the importance of organizing “according to people, place, and time to foster responsive relationships that lead to student success.” (Ellerbrock, C.R.; Main, K.; Falbe, K.N.; Pomykal Franz, D. An Examination of Middle School Organizational Structures in the United States and Australia. *Educ. Sci.* 2018) Current middle school models include grades 5-8, 6-8, or 7-8, with the most common being the 6-8 model.

In order to explore a shift from a grade 6-8 to a grade 5-8 middle school model, we reviewed academic literature addressing middle school education, reviewed the 1990 report of the Superintendent’s Advisory Committee exploring moving the 6th grade into Hommocks, spoke with Emilia Macias-Capellan, the Hommocks Middle School (“Hommocks”) Principal and toured Hommocks. In addition, we visited the Seven Bridges Middle School in Chappaqua, N.Y. and met with their principal, Dr. Joe Mazza.

We assessed a grade 5-8 middle school model assuming the building as presently constructed and the continuation of a team middle school model. We did not explore if the strategy would be feasible if the current building was expanded.

Benefits

- Potential expanded academic and unified arts offerings, including foreign language.
- Ability to switch classes and more specialized instruction from content area specialists
- Fifth graders closer developmentally to grades 6-8 than K-1.
- Greater diversity of students in an academic setting a year earlier
- Frees up classroom space and common areas (i.e, lunchrooms) in the neighborhood elementary schools

Challenges

- Stress on common areas at Hommocks (i.e, gym, lunchroom, hallways, outdoor space)
- Earlier lunchtime necessitated to accommodate all students
- Younger 5th grade students might not be developmentally ready to move to a middle school model
- Special Education specialists providing services such as speech therapy would likely need to divide time between elementary school and Hommocks
- In order to accommodate the 5th grade, additional nursing staff is required



- Additional staff required for reading support
- Moving elementary teachers from individual schools to Hommocks could be a difficult transition

Evaluation Criteria

The primary benefit to this strategy is to free up a variable amount of classroom space at the elementary level each year. This benefit could also be a detriment in future years should enrollment decrease. Based on current class size guidelines, four or five classrooms would become available every year at each elementary school through 2021. One exception is Murray where the 5th grade in 2021 is anticipated to reach six sections. We leave as an open question whether newly available elementary classroom space could be reconfigured or repurposed recognizing that this would necessitate a capital expenditure.

Although a grade 5-8 middle school would bring together students a year earlier, it does not result in more socio-economically balanced elementary schools. Additionally, based on the varying sizes of individual grades, we anticipate only a modest financial benefit to this strategy. This benefit would be offset by the need to hire additional nurses, reading or other specialists. Finally, this strategy would not impact class sizes at the elementary or middle school provided current 5th grade teachers were shifted to the middle school.

Conclusion

While reviewing this strategy we considered the impact on the elementary schools and Hommocks. Although it would free up space at each of the elementary schools, it would place additional stress on Hommocks where class size cohorts have been steadily increasing. For example, the grade 5-8 student population is anticipated to grow from 1737 students in 2019-2020 to 1,809 students in 2021-2022.

Our research also indicated that successful middle schools should incorporate a developmentally appropriate structure. This requires consideration of structuring Hommocks as a 5/6 and 7/8 middle school with separate spaces or wings. We did not have information available to calculate the potential cost of expanding the school or whether expansion was a possibility given planning and zoning regulations. In addition, extensive construction would be disruptive and take at least several years to complete.

Without expansion, we do not believe Hommocks could accommodate an additional 399 to 487 students. Additionally, given that the primary benefit is to free up classroom space at the elementary school, we do not recommend that the Board further explore this strategy.

Should the Board choose to further explore the possibility of a grade 5-8 middle school, we recommend it investigate the feasibility and cost to expand and/or reconfigure Hommocks.



7 - Conclusion and Recommended Next Steps

When the Task Force began its work, a common thought among the group was that the solution to potential capacity issues lay in merely solving a mathematics problem - identify a way to accommodate a growing number of students in the District's school buildings.

The work evolved and in many ways became much more challenging, as we began our learning about trends in education, education policy and program design. We realized that there are many factors we could apply to assess potential changes to the District's education model, and that there are potential benefits beyond addressing the enrollment and space challenge in re-thinking our current approach.

We also benefited from hearing from the diverse set of experiences and opinions represented on the Task Force, and from the District teachers and administrators working with us. Meeting education consultants specializing in new forms of learning was valuable, as were the conversations and field trips taken by individual subgroups to learn about other districts' experiences addressing similar issues.

While initially there was some speculation that a single solution would appear evident, our conclusion is that there is no one perfect solution to address changing enrollment levels and space constraints in the District. Each of the options we assessed has benefits as well as challenges, and many questions remain. The role of the Task Force was to assist the Board in making an informed evaluation as it retains the ultimate decision making responsibility.

We also recognize that the immediate threat of enrollment exceeding the capacity of our elementary schools has passed, with new 2018-19 kindergarten enrollments decreasing from the prior year and 2019-20 enrollment expected to remain at that level or even decrease further. We do believe that even though it appears the current trend is a leveling off or decrease in enrollment, the District must continue this work to ensure feasible solutions to deal with fluctuating enrollment and the ability to adapt to emerging trends in education. It would be to the benefit of the District to be proactive in these matters rather than having to react to an existing crisis at a future time.

We recommend the Board consider the following points as they develop next steps:

- Complete a more comprehensive study (potentially with a professional demographer) to provide a long-term projection of District enrollment and trends.
- Create a process to further the findings in this report, in particular around the financial considerations, to identify a solution to support future enrollment projections.



- Consider whether the Board has the capacity to continue this work, and whether the involvement of a third-party firm can provide benefits in executing a more in depth strategic analysis that responds to questions raised by the Task Force subcommittees.
- Continue to explore potential design changes to District schools that will address space constraints while providing opportunities to improve and enhance students' educational experience. We recommend the District collect and examine data on student performance related to changes in the physical learning environment.
- Address recurring enrollment and space challenges through multiple analytic frameworks that also focus on improving student outcomes, enhancing programs, addressing issues of equity and diversity, and providing financial sustainability.
- Promote continued conversation with the community.



8 - Appendices

I. Phase I Deliverables

Educational Policy/Program Topic	What is Clear and Generally Agreed Upon?	What Remains Murky or Unclear?	What Warrants Further Investigation?
Early Childhood Education	<ul style="list-style-type: none">ECE is a good thing and benefits last till teens. The benefits are stronger for those w/ lower SES.Gap is harder to reduce after 2nd grade.Important to focus on socio-emotional skills AND cognitive.Important to teach socio-emotional skills @ home.	<ul style="list-style-type: none">At what age should these programs begin?Does half day vs. full day really matter?What is the value of public/UPK/free early childhood education?	<ul style="list-style-type: none">What would our district be interested in providing?What is feasible? Cost?What do we know about the current UPK in our district?Can we prioritize low SES families?How would we make it accessible? What are barriers to enrollment?
Income Inequality	<ul style="list-style-type: none">Students with socioeconomic issues perform better when attending schools with more affluent students (rather than strictly provide more resources).On traditional measures of academic success, low income students perform worse than more affluent studentsIt would be hard to sell greater SES integration to our communityConversation among people coming from different	<ul style="list-style-type: none">What limits do the school buildings themselves (brick and mortar) place on school configuration?What will the impact of new apartment buildings be on traffic and schools?	<ul style="list-style-type: none">Benefits of integrated schools for more economically advantaged studentsCost to offer transportationAre transportation costs offset by other \$ savings or quality of life benefits (e.g. reduced traffic)How to engage parents in the conversation who in the current climate may want to keep a low profile



	<p>racial/ethnic/cultural groups, generations, neighborhoods, SES (even if integration is not pursued) would build more district cohesion</p> <ul style="list-style-type: none"> ● To support integration, transportation would be needed ● Something has to change-we have the resources and we can do better ● In this discussion, many immigrant parents will keep a low profile in the current climate ● There are many methods that can be used to assign students to schools to achieve integration 		
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Teacher Quality	<ul style="list-style-type: none"> ● Teacher = significant factor for student success (human relations between teachers and students is a huge factor). We don't know what or how to quantify teacher effectiveness well ● Despite nearly a century of investigation and research, there is no clear, definitive definition for "effective teacher." There have been lots of attribute identified based on feedback (teacher, student, observation). Nothing definitive and quantifiable ● How to improve teacher effectiveness? Teacher quality isn't really about 	<ul style="list-style-type: none"> ● How to measure teacher positive outcome? Beyond traditional "value added" measure based on test score net gain 	<ul style="list-style-type: none"> ● How to measure teacher positive outcome? Beyond traditional "value added" measure based on test score net gain ● Will increased teacher/professional collaboration improve student learning? ● Could there be more flexibility added to place, time and structure/grouping (two classes "co-teach" together) in our current system to encourage more teacher/professional collaboration? ● Is the community ready to consider "Lesson study" – beta teaching – iterations, refinement, redeploy
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	<p>individual teacher's personal characteristics. But really teacher's ability to deploy best practices (ex., wait time = hand washing, creating positive environments)?</p> <ul style="list-style-type: none"> • Professional knowledge of pedagogy 		
Program Design	<ul style="list-style-type: none"> • District-wide programs and magnets can be beneficial by enhancing learning opportunities and creating diversity (racial/socio-economic) • Of the program design options we examined, magnet/specialty programs appear to have the greatest potential to shift enrollment populations • Must pay close attention to maintaining accessibility to special programs for all families across the socio-economic spectrum. • Instituting magnet programs will necessitate bussing. • Successful implementation will require a high degree of "Buy-in" by families 	<ul style="list-style-type: none"> • WHAT TYPE OF SPECIAL PROGRAMS?! What does the community value? What are our priorities? Diversity? Language? STEM? International Bac? • Costs associated with implementation, transportation, teacher training, etc • How best to educate our community so that they can assess magnet vs. neighborhood schools value to their family? • Would the roll-out of specialized programs actually cause enrollment to increase by attracting families already in the district who perhaps attend private schools? • Is this truly a long-term solution to the enrollment and space challenges we are facing? 	<ul style="list-style-type: none"> • Poll the community to better understand its priorities (what programs could potentially be well-received) • In-depth cost studies • How long would it take to implement? • How to ensure equal access to entire community?
Class Size	<ul style="list-style-type: none"> • A hot-button issue • Common sense suggests smaller is better but how small is effective, both educationally and relative to the costs incurred? 	<ul style="list-style-type: none"> • Given changes in technology and prospective thinking about the possibility of changes in classroom configurations and formats, what is a classroom, what will be 	<ul style="list-style-type: none"> • How does class size relate to and affect program design, facilities layout and overall, space requirements? • How does the community's fiscal plan impact the available options and



	<ul style="list-style-type: none"> Corroborating evidence is sparse, weak, often contradictory with conclusions seemingly subject to biases of the observer Class size reduction appears to be most clearly effective in the Pre-K to second grade and among lower income and ESL cohorts 	<ul style="list-style-type: none"> the classroom of the future? How will current classroom sizes be affected by these considerations? What is the sensible increased investment to achieve a specified increase student performance? 	<ul style="list-style-type: none"> ultimate decisions relating to class size? How do labor contracts and other work rules impact available alternatives? Is there a negotiation/amendment process available to address potential conflicts?
Educational Delivery Models	<ul style="list-style-type: none"> No one size fits all for districts All options have limitations and opportunities School systems configure differently for different reasons Configuration alone won't solve all problems Models are all effective somewhere 	<ul style="list-style-type: none"> Which model is better for MUFSD? Will changing the configuration alone fix enrollment? What causes a district to change configuration and what are the outcomes? Can we find systems that look like us that made changes? Are our community's values aligned with what is really best for our school district? 	<ul style="list-style-type: none"> How does Ossining do it? What are their results? How might changing our configuration affect the achievement gap and system integration? What are all of the K-5 possibilities?
School Choice	<ul style="list-style-type: none"> School choice models vary greatly based on local community needs and priorities Magnet schools are often used to increase diversity through voluntary mechanism Parent choice can often be driven by convenience (ie, location or special group) The success of choice program relies heavily on parents being well informed about choices 	<ul style="list-style-type: none"> Do students in intra-district magnet programs experience higher levels of achievement? Would school choice result in uniform diversity across schools, enrich student experience and have a positive impact on educational outcomes? What is the range of choices? Is this really choice or is a mandatory lottery needed to balance enrollment at the schools? How would special ed fit in a choice model 	<ul style="list-style-type: none"> Is there data on magnet school in high performing suburban districts? What is the cost of implementing program (new curriculum, transportation)? Would school choice have a material impact on resource allocation or relieve fiscal constraints? Would school choice rebalance the student load more dynamically? What are the different types of programs/curricula utilized with intra-district choice?



II. Full Group Write-Ups of Phase III Options

Preserve Existing Neighborhood Schools

Project Team: Lisa Catucci, Teresa Hsiao, Jayne Lipman, Saahil Mahajan, Lisa Munoz, Miran Robarts, and Barbara Roque

Preserve Existing Neighborhood Schools

Durability:

-If we went “full or partial Fielding Nair” (FN), how much capacity would gain if we kept neighborhood schools? (being examined by another group). What if we went to some form of Princeton plan? (being looked at by another group).

-Some negatives with FN: teacher buy in and training, family and parent “training”, evaluation changes. What is historical return or long term value of a FN model?

- New developments focus on particular elementary districts (MAS and Chatsworth in particular).

Financial Impact:

1) inefficient allocation of resources regarding staffing and classroom usage in particular. For example, specialists (such as ENL teachers or math AIS specialists) are currently located in all 4 elementary schools, irrespective of the population in each school that needs such resources. If these specialists were located in one location, the District would see a cost-savings. Another example are the music, art, computer science and other “specials” teachers who commute to each of the 4 elementary schools. Their ‘commuting time’ between schools is an inefficient use of teachers’ time and keeps them out of the classroom. “Specials” offerings could be expanded if we could use these teachers more efficiently. Under a Princeton Plan, it is possible that we could have additional programming within the existing budget. For example, the budget allocated today on the specialists who commute to multiple schools could be allocated elsewhere.

2) Once class size and space reach capacity, the financial impact is unknown. In the current model, there is great fluctuation in class size. The sensitivity of enrollment change has compounded impact on financial cost. A small number of students may cause a whole new class to be structured - which theoretically could happen 4 times (1 in each elementary school). For example, if a 3rd grade section in one school has 85 students, and another school has 90 students, the 85 students may be split into 4 classes and the 90 students in 5 classes - this creates ‘empty seats’ which is an inefficient way to allocate space. It also means that classes are determined very close to the beginning of the school year, which might result in hiring additional staff and teachers in August. More efficient use of space would allow us to have less staff overall.

3) Neighborhood schools do minimize the budget required for busing as compared to the Princeton Plan, school choice, or other options.

4) Neighborhood schools are a known commodity. The District is aware of the budget inefficiencies, and can plan to accommodate the known unknowns.



Educational Impact:

- 1) Community schools vary in the programs they offer and the ways they operate, depending on their local context. However, four features—or pillars—appear in most community schools, and support the conditions for teaching and learning found in high-quality schools (see infographics).
 1. Integrated student supports
 2. Expanded learning time and opportunities
 3. Family and community engagement
 4. Collaborative leadership and practice
- People enjoy that kids can go to neighborhood schools.
- Siblings go to same school
- Inability of teachers to specialize if you went with one of the other options
- Different potentials from each of the schools to be able to structure different innovations (i.e., varying amounts of green space and all-purpose rooms, how libraries are structured in different buildings)--
 - Lab classroom, speciality rooms, possibility if some form of princeton plan if teachers can specialize in smaller age-range.
 - What is impact of going to school with families who are very similar to each other or different -- how does this impact transition to HMX? Might make transition to hmx easier if kids had more exposure to a more heterogeneous group earlier. Although, there may still be a divide even if kids are together sooner -- there may have to be a more direct intervention in order to more fully break the divide.
- Co-taught classes: Resource inefficiency. Decreases likelihood of resources being available for each school in neighborhood model.

Equity of Opportunity for All:

- Preserving neighborhood schools perpetuates demographic inequality between schools. I.e., MAS poverty level is much higher than other schools -- preserving neighborhood schools does not address this.
- Privileged district: do we have an obligation to spread wealth around more than we currently do?
- Opportunity to introduce our kids to all different types of neighbors in an alternative plan which is in line with the district's goal of culturally responsive pedagogy.
- What does “equity” mean? Educational parity for all? In light of diversity questions in district, is princeton plan a way to bridge gap within district?
- Perception that the high achieving child will not be adequately challenged in a more mixed atmosphere. But, if there are freed up resources, then all student populations may be better served.
- Kids/parents understanding of people with different financial needs. More diverse population would engender greater understanding of one another

Class Size:



- Inconsistent class size with neighborhood schools. In other options, there would be greater consistency.
- Studies discuss adding or subtracting 1 or 2 students, but no more. Some studies say that adding 1 or 2 students would adversely affect the classroom. Other studies disagree. "Teacher Quality" seems to be what is most important. (Some teachers teach larger groups of students better than they teach smaller groups.) More teacher training would be in order.
- If we maintain neighborhood schools and do NOT expand or change configuration, only option is to increase class size.
- Sensitivity to enrollment change produces inconsistency of experience - variation of class size within the elementary schools can vary from as small as 16 children in a class to as large as 28 children in a class in extreme cases.

Overall Value:

What is strength of this particular strategy?

We recognize that the neighborhood schools model provides the following positive attributes:

- Emotional attachment to neighborhood
- Fosters a sense of community to attend school with neighborhood kids.
- Potential to walk to school
- Known commodity - people know what they're going to get

However, the inefficient use of staff and space, coupled with the inequality of opportunity and lack of durability of the current model lead us to believe that we need to consider alternative models beyond preserving neighborhood schools.

Areas for Future Exploration:

- How does the possibility of implementing some form of Fielding Nair impact the ability to maintain neighborhood schools?
- <https://savingplaces.org/stories/10-on-tuesday-how-to-save-your-historic-neighborhood-school#.XKvmquv0IAY>
- What is the percentage of families who regularly walk to elementary school?
- How does the long-term housing development impact sustainability
- Question: Title 1 funding: Does this funding change in a Princeton Plan scenario?



Expand Existing Neighborhood Schools

Project Team: Peter So, Adam Stoltz, Sabrina Suero, and Sylvia Wallach

Long-Term Strategy:

This strategy explored opportunities for and possible impacts associated with the physical expansion of existing school facilities in alignment with the current neighborhood schools organizational model. Ways to accommodate the fluidity of future student enrollment, along with associated requirements for faculty and staff were considered according to the following evaluation criteria:

Expand Existing Neighborhood Schools

Durability:

School facilities are constructed with long-term physical durability of more than 40 years, with an intention of ensuring a functional horizon that typically exceeds 15-20 years. With this in mind, and recognizing the financial commitment required to study, plan, and execute educational expanding existing neighborhood schools is not a reliably durable solution to accommodating fluctuations in student enrollment.

Once a project begins, it must be seen through to its completion, often taking X to Y months, while student enrollment projections are considerably more dynamic, changing in some cases considerably from year to year.

Given this fluidity, if enrollment growth were satisfied through expansion(s) of the physical facilities at, say 2 schools, there is no guarantee that enrollment within those neighborhood school boundaries would continue. Growth could shift to a district school where expansion was not or could not be made.

While the internal reconfiguration of space and introduction of flexible pedagogical models could present opportunities to use space more flexibly, including possibly accommodating enrollment growth, this is not the primary focus of this Project team.

Financial Impact:

Expanding our neighborhood schools requires significant capital commitment that must be prioritized to one or more schools, but not likely to be distributed evenly or equitably to all schools.

This prioritized spend has a direct fiscal impact, as well as a moderate longer-term impact on the District's ability to prioritize future spending to address unpredicted needs. There are limitations as to how often and to what degree our community can be tapped for additional district spending, and ultimately could jeopardize the ability to address overcrowding in other places, were it to occur.

Previous school expansion alternatives, such as temporary classrooms (trailers), have been



considered and often have a significant price tag, upwards of \$11-\$13 million per building. While the estimated cost of increasing capacity at each school by 10% is between \$4 and \$5 million. However, these estimates are often based on the ability for construction to be consolidated within a portion of one or more schools, when the reality of construction is that it is spread out throughout a school, resulting in greater cost.

While opportunities to apply fiscal commitments towards the renovation of internal space based on Fielding Nair methodologies could increase capacity in each school by 30%, these practices require further exploration and are not the primary area of focus for this Project team.

Educational Impact:

The expansion of our neighborhood schools could present the opportunity to address new understanding of progressive educational pedagogies, styles, and best practices, including allowing the District to support its goals around class size.

However, many of the opportunities for physical school expansion to address classroom needs would be achieved at the expense of other available space, in some cases green or outdoor space currently available within the lot boundaries of District schools. These tradeoffs make an apples-to-apples evaluation difficult.

Equity of Opportunity for All:

School expansion often presents significant limitations in providing equitable learning environments between schools, as well as within a school. These surgical alterations often results in 'haves' and 'have nots' even within a single educational facility. Within a building, such as in Mamaroneck Avenue School currently, inequities can present across a range of different attributes, from ventilation, to light, to student density, affecting student work and achievement in known and unknown ways.

Class Size:

Class size targets could be achieved and overcrowding avoided in isolation through the addition of classroom space. However, while this may solve for some additional need for teaching space, school expansion does not effectively solve for the variability of class sizes that changing school enrollments result in. This impact is mixed.

Overall Value:

The uncertainty of future enrollment should bring pause to attempts to solve for this through the lens of physical school expansion within the neighborhood schools model. The requirement to build for the long-term, at significant financial expense, without reliable accommodation of future enrollment need makes this solution of moderate to low overall value.



Open Questions / Areas for Future Exploration:

- Adding school capacity without a more reliable, or reliably predictable, understanding of future enrollment pressures does not appear to be an effective solution. All future attempts to create or pursue more sophisticated enrollment modeling should be pursued.
- We must also acknowledge the current neighborhood schools model is based on fixed boundaries and presents inherent limitations to addressing what is a fluid and dynamic need. Being as fluid with ways to move lines or boundaries for neighborhood assignments would allow the District to more reliably consider how the physical expansion of schools could be maximized for long-term benefit.



School Choice

Project Team: Noa Arias, Katherine Braham, Elizabeth Buck, Ryan Fiftal, Hamilton Hadden, Angela Harris, Ann LoBue, and Jirandy Martinez

What is school choice?

“School Choice” occurs when families are required to submit a list of their preferred schools within a wider district. Ideally the district administrators use an algorithm in which families’ 1st, 2nd, 3rd choices are matched with the available facilities as closely to the top one or two selections as possible, while taking student demographics into consideration. Complementing this operational choice system is a subset of voluntary school moves based on programs designed for specific educational needs. This subset of school choice could include programs such as dual language, project-based learning, STEM, Performing Arts, “Actionville”, International Baccalaureate

What was our process?

We met with the White Plains administration to learn about the long-standing school choice program that they operate. We reached out to Montclair, NJ and Greenwich, CT, to hear about their program choice models, but were unable to meet with them. We also pulled some informations from the task force’s initial research into program design and magnet options.

Reconfigure by School Choice

Durability:

- Strong - has the potential to be long-lasting and evolve with parental needs and educational trends. Students can be assigned to schools with maximum flexibility, since neighborhood school zones no longer apply.

Financial Impact:

- Operational side gives the administration the opportunity to reduce inefficiencies (distribution of students and resources).
- Unknown busing costs for school choice (voluntary program design doesn’t require busing, ie the current Dos Caminos program).
- Unknown costs of program design expenses (professional development, curriculum materials).

Educational Impact:

- Strong. Allows for an increase in opportunities, balance socioeconomic status, evens the playing field and allows for greater diversity.



- To launch multiple educational programs, administrators would need to engage in a period of program design, followed by curriculum development, teacher training and sourcing of classroom materials.

Equity of Opportunity for All:

- Equitable for a large portion of our district, as it levels the playing field for access to all the elementary schools.
- Lower Socio-Economic Status households may have lesser ability to navigate options, or gain access to information about the best options available for their children, especially in a program choice model.
- Gives the district the ability to balance the schools (both in number of students per school and controlling class sizes, as well as student demographics within each school) and gives people the choice to pick what school works best for their family.

Class Size:

- Gives the administration the ability to balance the schools and maintain reasonable class size across the district.

Overall Value:

- Positive
 - Increased diversity - affects everyone's outcome - the district as a whole shares the benefits as well as individual students learn unique lessons from classmates they wouldn't have been exposed to in a neighborhood school model.
 - Ability to evolve program choice based on parental preferences and educational trends.
 - Program design could be a means of delivering attractive enrichment options at each school.
- Neutral
 - Professional development required in any scenario.
 - Manage student assignments and curriculum conformance district wide.
- Negative
 - Increased cross-town traffic
 - operate busing routes.



Open Questions:

- For the program choice model, what kind of programs (ie. dual language, project based learning, STEM, I.B.) would be valued by the district families as acceptable (and sustainable) options?
- For an operational choice model, what are the best ways to differentiate the schools to entice away from the closest option (ie. in White Plains, some schools have earlier start times reducing the need for before school care)?
- Is it more feasible to add programs within the existing schools to allow the administration more flexibility with distributing students (ie the current Dos Caminos program or the former Actionville program)?
- Would reducing the distance requirement for busing (currently 2 miles for elementary students) make schools outside a family's neighborhood more attractive?
- How does the increased cost in busing balance with the district's ability to have greater control over student distribution?
- In the program design option, how to address the issue of choosing a program at a young age (kindergarten), and knowing if that program works for the child. And how to build in the ability to change schools if needed.



Early Childhood Center

Project Team: Vince Abbatiello, Kelly Brennan, Amy Nofal

Early Childhood Center
Durability: <u>Overall:</u> Positive - Provides utmost flexibility, optimization for class size, and staffing due to changing enrollment. <u>Woodmere Assessment:</u> Positive - Program has been around since 1975 and at least in Franklin child development is positive per the school with flexibility and class size of around 19.
Financial Impact: <u>Overall:</u> Neutral - Would be a significant change to how the district currently delivers education today and thus a thorough impact assessment is recommended to anticipate community questions. The district should explore state or federal grants /fund to explore the implications. Savings could be achieved. As all students in same grade attend the same school building, you will have less total open seats when compared to our current model. <u>Woodmere Assessment:</u> Neutral - Needs to be further explored. Hewlett Woodmere was implemented in 1970's , financial landscape was much different, though the school indicated they do not see it as costlier to run, as indicated above, any plan would need to address this.
Educational Impact: <u>Overall:</u> Positive - Professional development, curriculum activities are tailored for young learners. The model can be evolved much easier. While results of early childhood education are positive, they are limited. <u>Woodmere Assessment:</u> Neutral - Performance diverges after Franklin; any plan would need to address educational continuity to reduce student "fade out" effect upon separation. In the short term: It has a positive impact on young learners. The curriculum (Math, science..) and the day are designed based on their needs, the school layout reflects that too, from makerspace in library, to dedicated lunch and gym spaces per grade.
Equity of Opportunity for All:



Overall: Positive - As it is open to all district students starting together in the same building.

Woodmere Assessment: Positive - Open to all in the district even though a growing population prefer to start their kids in private school. Pre-K to K population similar indicating K students are entering district at Pre-K level.

Class Size:

Overall: Positive - Class size reduction appears to be most effective in the pre-K to second grade and among lower income and ESL cohorts. The model will support the smaller class sizes while providing placement flexibility (limits empty seats of traditional model).

Woodmere Assessment: Positive - 19 average size, maybe less.

Overall Value:

Overall: Positive - For the model to deliver the promised benefits we need to make sure that it is not implemented in isolation but as part of a district wide K-12 philosophy with the right investments in technology, teacher's development, curriculum and facilities and key performance measurements. Opportunity to positively influence and impact learning to provide foundation for lifelong learning.

Benefits:

- Social integration of all our students
- Would deal with enrollment increases/decreases
- Financial benefits (shared services; balance student/teacher ratio across district)
- Stronger academic performance
- Better use of professional development and teacher collaboration

Considerations:

- Maintain continuity and positive academic performance beyond the early childhood center
- Ensure community buy- which is ingrained with a neighborhood school structure
- The reconfiguration ramifications of grades 2-5 students and negative impact that may cause
- Additional costs, such as transportation or technology, and the trade-offs for savings

Woodmere Assessment: Neutral - After Woodmere the students separated into 2 elementary schools, meeting back again in middle school. Academic gains faded in a segment of the population that has kept an achievement gap.



Reconfigure Students by Pairing Elementary Schools

Project Team: Doug Behrens, Nina Bershadker, Joyce Callihan, Michele Metsch, and Jonathan Sacks

We began looking at the 2 options for a Paired Elementary School Model: Mur-Chat/Cen-Mas and Mur-Mas/Cen-Chat. Quickly we determined that the Mur-Chat/Cen-Mas model would not provide any benefit in the area of Equal Opportunity. Therefore we focused on the model of pairing Mur-Mas and Cen-Chat with one school being K-2 and the other being 3-5 to be determined in the future.

Paired Elementary Model
<p>Durability: More than current model, because it optimizes the space and spreads the risk of over-population across the schools. It is more durable because as enrollment increases or decreases the population is distributed over more sections at each grade level, which allows for greater efficiency in staffing and space.</p>
<p>Financial Impact: According to the transportation policy, the model needs to consider the cost of transportation for approximately 51 students for K-2 (attending MAS) and 43 grades 3-5 students (attending Murray). There would be no associated transportation costs for Chat/Central. However, the model likely would result in many more families driving to school. The district may need to consider additional transportation options to mitigate perceived inconvenience to residents.</p> <p>--More efficiency of teachers and support staff should have positive financial impact (based on calculation of number of sections per grade level and the net difference between current state and paired model). Number of support staff would need to be reassessed in new structure.</p> <p>-will any infrastructure changes be necessary? We do not know the financial cost of this.</p> <p>--professional development and travelling teachers more efficient because less time spent traveling so there would be less financial waste (e.g. orchestra, band, PT)</p> <p>--support services should be more efficient</p>
<p>Educational Impact</p> <ul style="list-style-type: none">-ICT/Special ed offered in all grades at all schools (consolidation of grades)-more opportunity for shared experiences across grade level-more opportunity for school-wide enrichment based on appropriate level K-2 or 3-5--ENL students do better when integrated with primary English speakers (reference policy research)



-lower SES students perform better when integrated with higher SES students (reference policy research)

Equity of Opportunity for All:

-Need specific data but will be much more diverse than current model (reference: January 2019 data deck):

Mur/Mas: 62% white and 28% Hispanic and 10% other

Chat/Cen: 76% white, 14% Hispanic, 10% other

Poverty:

Mur/MAS: 20% poverty

Chat/Cen: 7% poverty

ELL

Mur/MAS: 7%

Chat/Cen: 3%

-integrating students more is better for all students (ENL and SES) (reference: policy research)

Class Size:

-should diminish and be more even across grade levels because spreading the students out over more sections per 2 buildings than with 4 buildings (January 2019 data deck, page 8).

Based on projected section 2019/20:

Chat/Cen

K: 8 vs 9 sections

1: 7 vs 8 sections

2: 9 vs 10 sections

3: 8 vs 10 sections

4: 8 vs 9 sections

5: 7 vs. 9 sections

Mur/MAS: saves 4 sections overall

-class size does not always matter. It's the quality of the teacher. (Reference policy research)

Overall Value

-reduce overall cost of school district's shared teachers, specialists (per reduced sections, for example)

-students integrated sooner rather than later when get to HMX. Policy research suggests this is



beneficial for all students.

- maintain some aspect of community school in that students will attend their closer neighborhood school for part of their elementary years. This should resonate with the community, per concerns voiced at public meetings.
- Balance diversity in our elementary schools (p. 13 January data dec)
- Budget efficiencies could result in resource re-allocation to increase the opportunity for specialized or specific educational opportunities at each grade level.
- Allow for increasing/decreasing staff and resources based on fluctuating enrollment.

Open Questions:

- Would infrastructure changes be needed to ensure buildings are best equipped for associated grades?
- Only a small group would require busing in this model...what is the impact of increased car traffic and parking challenges? (Need data re traffic patterns) Would increased efficiency allow for additional busing?
- What would happen to Dos Caminos?
- Would we need staggered start and end times to account for multiple drop-offs and pick-ups? (Data from other school districts would be helpful)
- Could the transitions be detrimental to the continuity of education? (Data from other school districts would be helpful)
- Need clear data on curricular and programmatic enhancements that would benefit each child as a result of new structure.



Princeton Plan

Project Team: Neill Alleva, Melany Gray, Andrene Smith, and Rob Weisstuch

Full Princeton Plan

Durability:

Theoretically the Princeton Plan should provide flexibility; however, given the current configuration of schools and classrooms, it doesn't appear that the district can support a full Princeton Plan. Accommodating the number of students currently enrolled would require modifications to alleviate capacity issues.

In other words, if schools were reconstituted by grade level, with more than one grade level in each building, most of the four elementary school populations would exceed the capacities of each of our buildings as they currently exist. For example, in one iteration of the Princeton Plan, each elementary school would be home to grade level cohorts of more than 400 students. Assuming that each school would house two grade levels, three out of the four schools would have an estimated 850-930 students. As it stands in our current model, three out of the four schools are at capacity with populations hovering between 730-750.

If we are looking for a plan to sustain enrollment numbers over time, relative to capacity, it seems that the Princeton Plan fails from a pure numbers point of view.

Financial Impact:

Likely a plus - increased transportation cost, perhaps offset by savings in number of classrooms?

Potential issues - are there enough classrooms for all students, plus adequate space for art, P.E., library, etc?

Educational Impact:

Positives -

- Specialization of staff coordinated by grade level.
- Creates an environment and set of programs wholly focused on a small subset of children.
- Ability to specialize as a teacher and administrator.
- Greater consistency in curriculum across students in each grade.
- Better balanced classes so that all students can benefit from their classmates' diverse strengths (and ENL and lower SES students could benefit from more diverse peers.)
- Greater ability for classified students to access continuum of services while being housed in the same school building as other students in their grade cohort.
- Integration of students would occur before entering Hommocks.

Negatives -

- Many school transitions for kids, families and faculty.
- Potential loss of knowing kids in the round as given the frequent transition to new schools.



- Potential negative impact on parent connectedness.
- Parents will struggle with multiple children across multiple locations.
- Systematic knowledge and a spiraling of knowledge about children and their families would be jeopardized without a systematic approach to anticipating such issues.
- Potential lack of space for specials such as music and art.
- Potentially: one large family could have four busses pick up their children to take them to different schools.

Equity of Opportunity for All:

Increased opportunities for connections between children of a similar age.

Opportunity to promote consistency of curriculum and experiences for all children.

Opportunity for staff and administration to specialize.

Focused PD based on the needs of two grade levels.

Improved racial and SES balance in classrooms. For example, currently 49% of students in poverty are housed at MAS.

Class Size:

The full Princeton Plan model has the potential flexibility to place kids across the schools and balance class sizes, but the size of our grade cohorts (currently ranging from 379-487 students per grade) and the space limitations in our four elementary buildings would limit the efficacy of such a model.

Overall Value:

During our group conversations, we largely agreed that a “traditional” Princeton Plan would decrease and dilute the characteristics that we value here in Mamaroneck. Splitting the entire elementary population into a Princeton Plan could potentially require students to enter four different school buildings before entering HMX. Further, families with multiple children between the ages of 5 and 10 could potentially have children in three or four different schools; thus parent engagement and connectedness could be jeopardized. Moreover, the value of knowing all children in the round would be diluted with high rates of turnover from school to school.

Open Questions:

Are there blended Princeton Plan models that would better suit our district, given our enrollment numbers and existing elementary school buildings? Is further consideration of a Princeton Plan coupled with a specialized elementary school (or two) warranted?



Grade 5-8 Middle School

Project Team: Rina Beder, Stephanie Chaice, Jed Dorfman, and Cary Sleeper

5-8 Middle School Model

Durability:

Durability looked at through 2 lenses:

1. Creating available space at the elementary schools
opens class space at the elementary level to handle enrollment increases. In the 2019-2020 school year there will be 399 fifth grade students across 18 sections. The 5th grade cohort in successive years is predicted to be 487 in 2020-2021 and 441 in 2021-2022. The number of “open” or “freed up” classrooms would vary from year to year in each elementary depending on the size of the cohort at any given school. For example, if the 2019-20 Murray fifth grade of 102 students had been moved to Hommocks this September, there would be 4 open classrooms. In the event of decreasing enrollment, an even greater number of classrooms would become available. For purposes of this analysis, we leave aside discussion of how and whether open classroom spaces would be repurposed for additional learning opportunities or whether it would be economically feasible to reduce class size guidelines resulting in additional class sections..
2. The feasibility of HMX absorbing 5th grade - Durability to withstand enrollment pressures is not as great of a concern because teachers can move classrooms and not “own” a particular classroom. Current classroom utilization at Hommocks is about 60%, with classrooms sitting vacant during various times of the school day. We believe that with creative scheduling Hommocks could accommodate the 5th grade. However, we don’t have enough insight to know if Hommocks would be able to continue to accommodate 5-8th grades if class size cohorts continue to increase in the future. We did question whether HMX can absorb the additional students in other building areas (lunch, halls, gyms). However, after a tour of Hommocks, it appears that lunch and recess would present a challenge for adding a 5th grade. Outdoor space is mostly limited to the back parking lot. There are times (though limited) when a front and back grass area are permitted for use. In addition, auditorium space is limited. Scheduling considerations would need to be made for class changes, assemblies and lunch. In addition, locker space is also limited and it is unclear if there is space to accommodate additional lockers.

Financial Impact:

1. HMX - Staffing - There are variabilities in elementary class sizes District wide. The actual class size does not always align with class size guidelines (both plus and minus). This variability would impact Hommocks staffing levels if the 5th grade were to move to the Hommocks. For example, the 2018-2019 fifth grade class is comprised of 482 students in 19 sections District wide. When that cohort enters Hommocks in 2019-2020 they will have 5 teams with 20 core subject teachers (4 per team). Assuming we maintain the current team structure, the result is an increase of 1 teacher over the current number of nineteen 5th grade sections. However, for



2019-2020, there are 18 projected sections of 5th grade with 399 students at the elementary schools. When that same cohort goes to Hommocks, given the current team model, they will be divided into 4 teams which would include 16 core teachers with a potential reduction of 2 teachers. Note, this does not account for additional unified arts and world language teachers.

2. At the elementary level, freeing space and eliminating necessity for capital projects.
3. Transportation costs for 5th grade - Using 2018-2019 data, 34 grade 5 students qualify for transportation. We do not have data to analyze the per student cost for bussing.

Additional Question

4. Will money need to be spent to make the space compatible for 5th grade? Is that cheaper than capital expenditures at all 4 elementary schools to handle increases? What happens if the following year, the 4th grade is much smaller?

Educational Impact:

1. Elementary - impact of space on educational deliverables. Freeing common area space (i.e. lunchrooms) might lead to better experience in the elementary. Extra classrooms could be used for a number of different purposes which could improve the educational experience.
2. HMX - Opportunity to switch classes and more specialized instruction. For example, 5th graders could have the opportunity to experience teachers who are teaching their specific area of specialty, as opposed to the current 5th grade experience of having one teacher in a single classroom.

Questions

Would it be possible to expand curriculum. For example, exposure to foreign language? Would schedule for 5th grade be constructed the same as 6th-8th? Opportunities for pairing 5th/6th and 7th/8th utilizing a developmentally appropriate model. Can the current 5th grade curriculum fit into the core class (math, science, english, social studies) model? Will 5th graders have the opportunity to access UAs?

Equity of Opportunity for All - adding 5th grade to HMX will:

1. Create a greater pool of students to draw upon to create inter-grade mentorship programs.
2. Allow for a greater diversity of students in an academic environment a year earlier than our k-5 current model

Class Size:

1. Elementary - frees up classroom space and common space but doesn't change other resource considerations. If having additional space was coupled with additional sections and lower class sizes, it may or may not provide academic benefits (depending on which studies you read, but it would have an additional financial



burden.)

2. HMX - It does not appear that this model will make an appreciable difference in class size provided current 5th grade teachers (not clear how many) are moved up to teach at HMX.

Lessons from Chappaqua visit (Seven Bridges Middle School)

In our meeting with the new Principal at Seven Bridges, he emphasized that he believes the following factors are important in designing a successful 5-8 middle school:

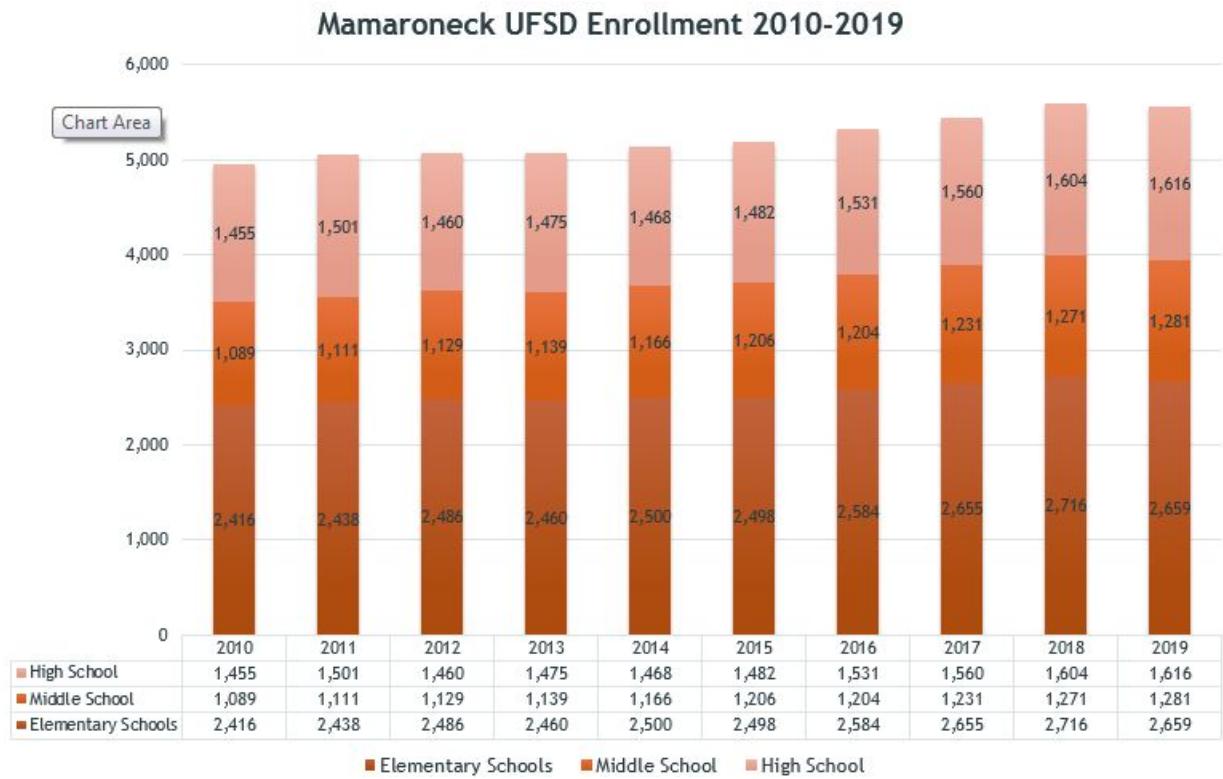
1. Separate houses- in terms of physical space, each grade should ideally have a separate space/wing of the building. Need to have fidelity to the middle school model. If it is merely a 5-8 school without a developmentally appropriate structure the result is a junior high.
2. Lunch/recess- a larger or second lunchroom would be needed. It is important to have outdoor space. In Chappaqua, 8th graders have lunch at 10:00 am. Unless a snack time is provided, this is not appropriate for a constructive academic day.
3. Developmentally appropriate schedule- a schedule would need to be created that is developmentally appropriate for each grade.
4. Teacher certification - teacher certifications are typically K-6 or 7-12. Due to this certification, there is not a lot of flexibility in teacher movement across grades in this model.
5. Consistency - it is beneficial for a student to have a consistent adult throughout their middle school journey. Currently at HMX, this is achieved with the guidance counselor. Is there another approach that is more effective? (Advisory).

Overall Value:

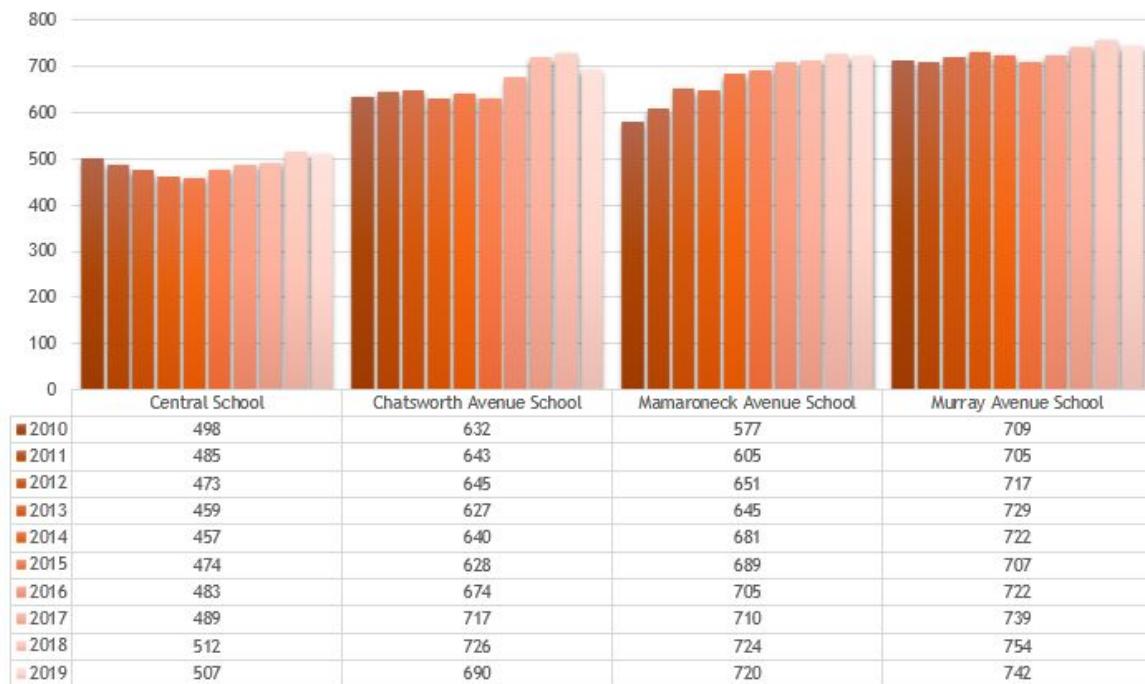
Based on all of the information above, we agreed that there are limited benefits (ie, bringing together students earlier, potential expanded course offerings) to moving the Fifth grade to Hommocks and these benefits are outweighed by the stress on the building, as presently constructed. The model's primary benefit is to free up a variable amount of classroom space at the elementary level each year this benefit could also be a detriment in future years should enrollment decrease.



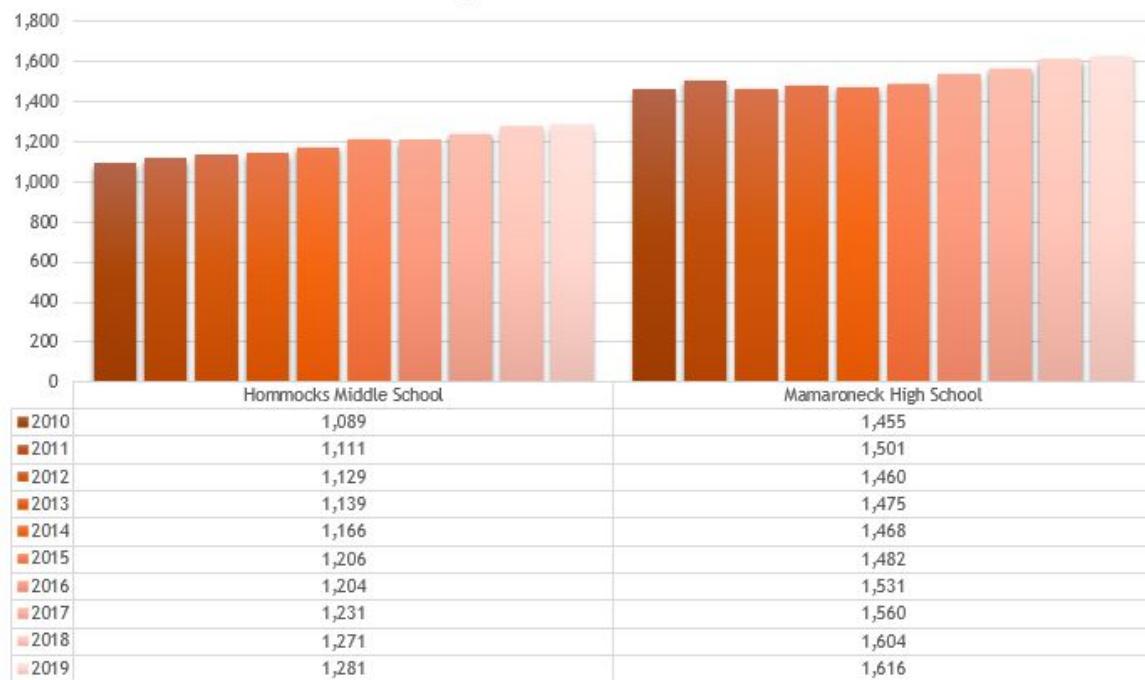
III. Enrollment Trends, Space Utilization, and Demographic Information



K-5 Elementary Enrollment 2010-2019

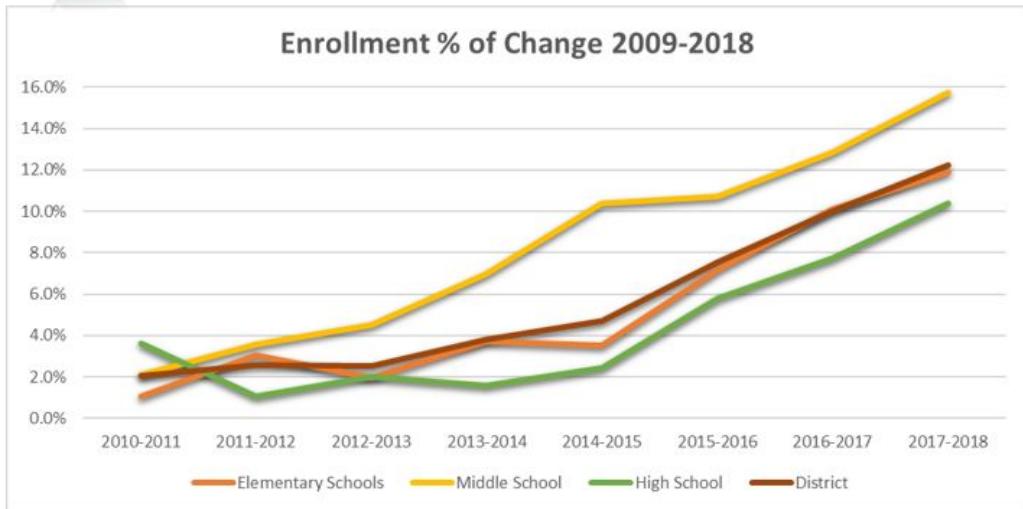


Secondary Enrollment 2010-2019





Mamaroneck UFSD



	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Elementary Schools	1.1%	3.0%	1.9%	3.7%	3.5%	7.2%	10.1%	11.9%
Middle School	2.1%	3.6%	4.5%	7.0%	10.4%	10.7%	12.8%	15.7%
High School	3.6%	1.0%	2.0%	1.6%	2.4%	5.8%	7.7%	10.4%
District	2.0%	2.6%	2.5%	3.8%	4.7%	7.6%	10.0%	12.3%

District Enrollment 2018-2022

Mamaroneck K-12 Enrollment 2018-2019													
School	K	1	2	3	4	5	6	7	8	9	10	11	12 Students
Central School	67	91	81	88	84	96							507
Chatsworth Avenue School	88	126	129	123	108	116							690
Mamaroneck Ave School	112	126	117	127	105	133							720
Murray Ave School	112	128	114	149	102	137							742
Hommocks Middle School					421	435	425						1281
Mamaroneck High School							411	397	402	406			1616
District	379	471	441	487	399	482	421	435	425	411	397	402	406
													5556

Mamaroneck K-12 Enrollment 2019-2020													
School	K*	1	2	3	4	5	6	7	8	9	10	11	12 Students
Central School	79	67	91	81	88	84							490
Chatsworth Avenue School	104	88	126	129	123	108							678
Mamaroneck Ave School	132	112	126	117	127	105							719
Murray Ave School	132	112	128	114	149	102							737
Hommocks Middle School					482	421	435						1338
Mamaroneck High School							425	411	397	402			1635
District	447	379	471	441	487	399	482	421	435	425	411	397	402
													5597



District Enrollment 2018-2022

School	Mamaroneck K-12 Enrollment 2020-2021												Students	
	K*	1*	2	3	4	5	6	7	8	9	10	11	12	
Central School	71	79	67	91	81	88								477
Chatsworth Avenue School	92	104	88	126	129	123								662
Mamaroneck Ave School	117	132	112	126	117	127								731
Murray Ave School	117	132	112	128	114	149								752
Hommocks Middle School							399	482	421					1302
Mamaroneck High School										435	425	411	397	1668
District	397	447	379	471	441	487	399	482	421	435	425	411	397	5592

School	Mamaroneck K-12 Enrollment 2021-2022												Students	
	K*	1*	2*	3	4	5	6	7	8	9	10	11	12	
Central School	71	71	79	67	91	81								460
Chatsworth Avenue School	93	92	104	88	126	129								632
Mamaroneck Ave School	119	117	132	112	126	117								723
Murray Ave School	119	117	132	112	128	114								722
Hommocks Middle School							487	399	482					1368
Mamaroneck High School										421	435	425	411	1692
District	402	397	447	379	471	441	487	399	482	421	435	425	411	5597



Kindergarten Enrollment Projections

Three Year Average of Enrollment/Live Birth Ratio

	History (Fiscal Year)											Current	Projected (Fiscal Year)				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		2019	2020	2021	2022	2023
Total Live births	373	416	375	366	354	336	328	342	332	351	327	297	337	294	305	312	304
Enrollment/Live Births Ratio	104.3%	99.0%	110.7%	104.9%	123.2%	117.0%	128.5%	115.2%	137.7%	126.2%	144.3%	127.6%	132.7%	134.9%	131.7%	133.1%	133.2%
KG Enrollment	389	412	415	384	436	393	415	394	457	443	472	379	447	397	402	415	405
Annual Change	5.6%	0.7%	-8.1%	11.9%	-10.9%	5.3%	-5.3%	13.8%	-3.2%	6.1%	-24.5%	15.3%	-12.8%	1.3%	3.3%	-2.6%	

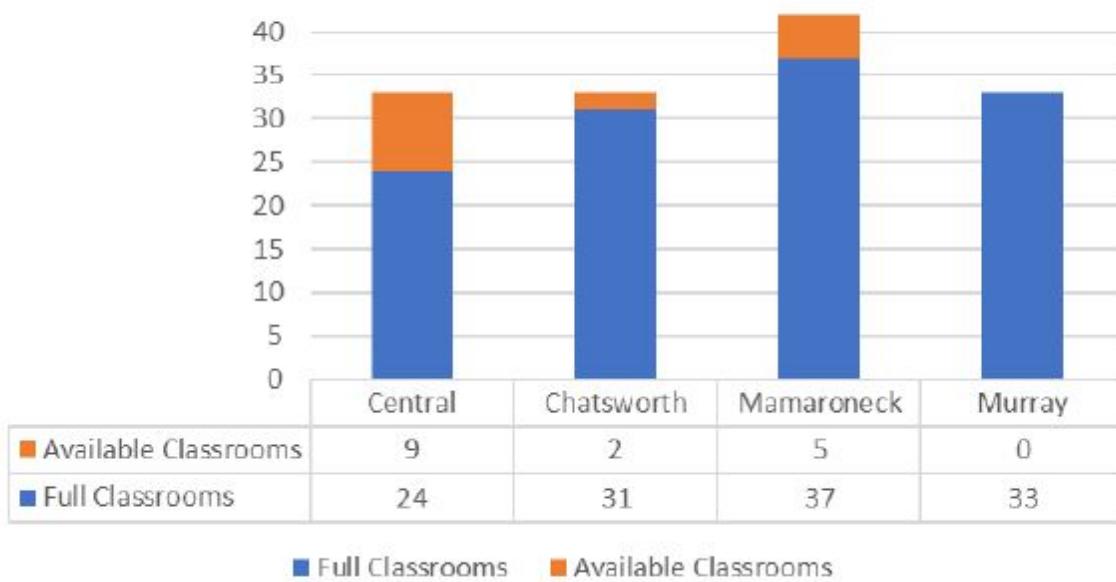


Methodology: How do schools measure changes in populations?

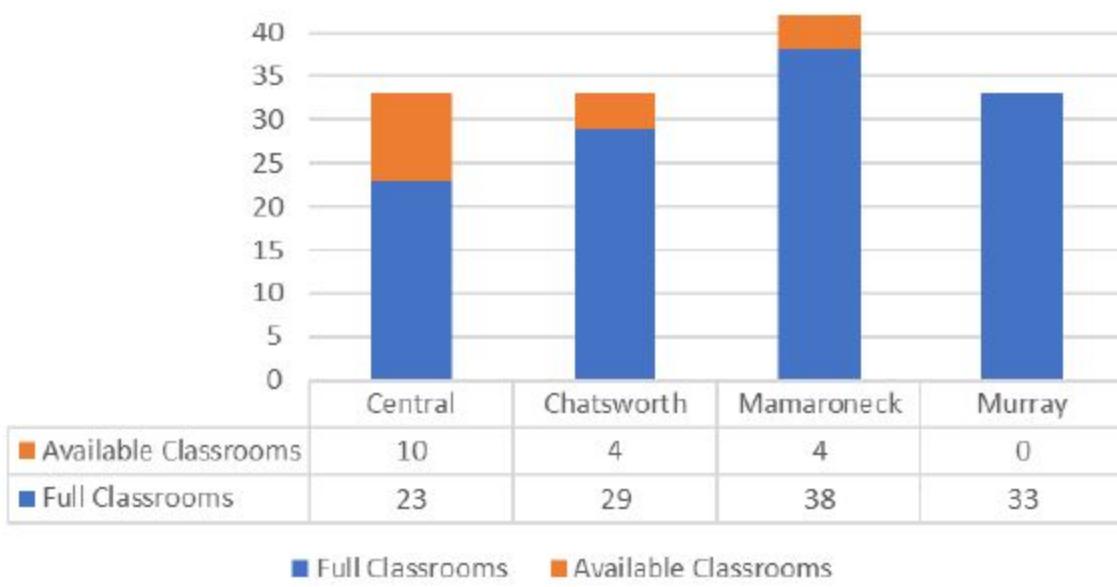
A standard practice for K-12 Demography is use of the cohort survival projection method. This method forecasts a future population based upon the survival (continuation within the school system) of the existing population and the births that occur. Mamaroneck Public Schools subscribes to Forecast5 Analytic software to analyze data for long-term strategic planning. Specifically, Forecast5 provides a tool for projecting future populations based on cohort survival rates.



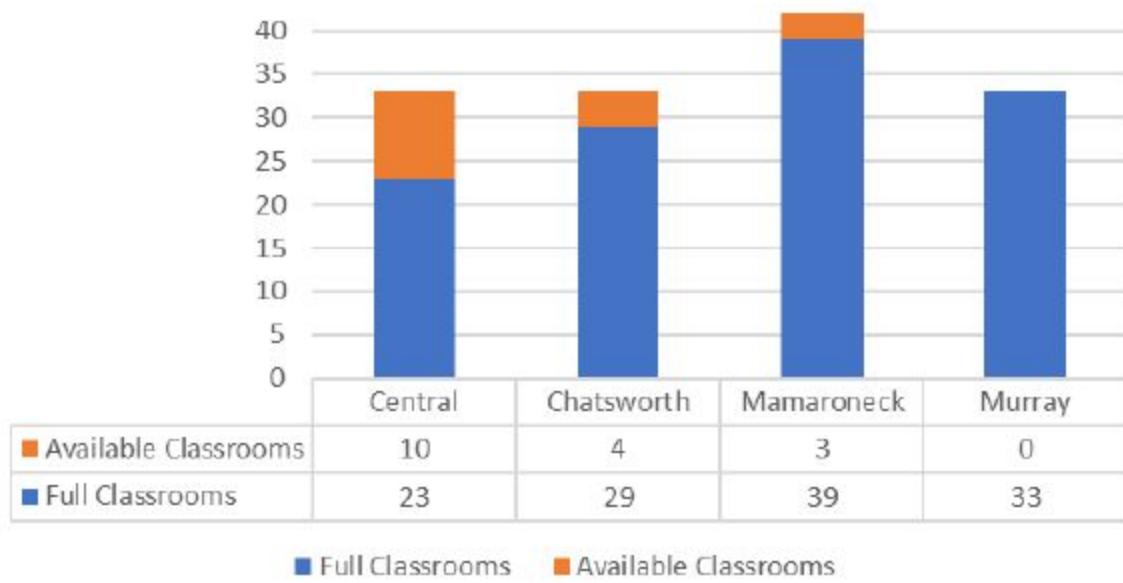
Elementary Classroom Usage 2019-2020



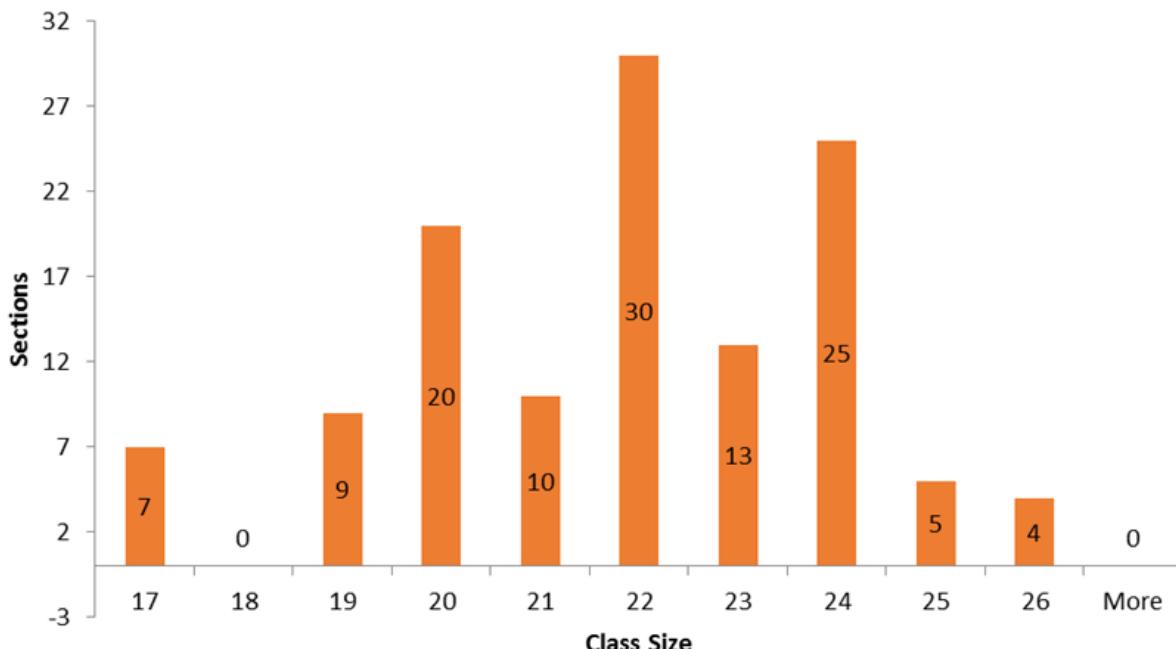
Elementary Classroom Usage 2020-2021



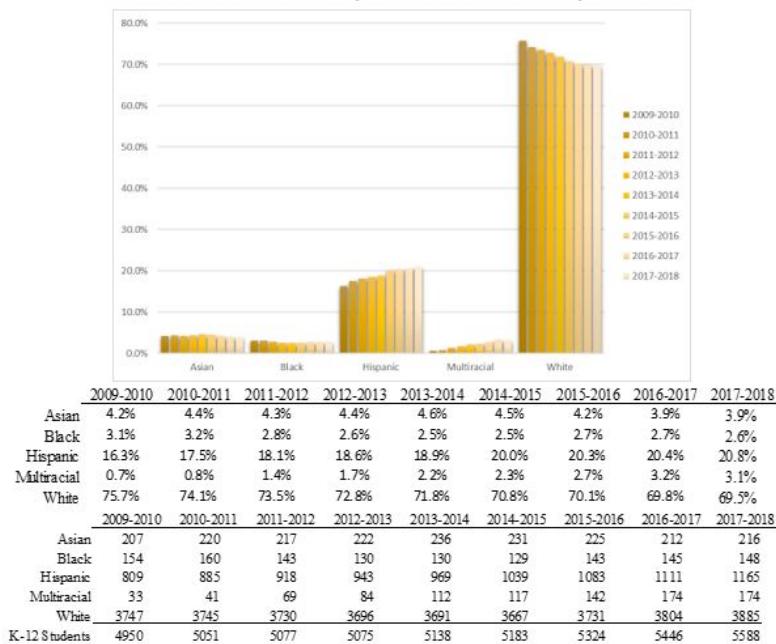
Elementary Classroom Usage 2021-2022



2018-2019 Elementary Class Size Frequency



Mamaroneck UFSD K-12 Enrollment by Race-Ethnicity Over Time



IV. Review of Literature - Educational Policy and Program Research Studies

Demographic Studies

[Mamaroneck UFSD Long Range Planning Study 2011- 2020](#)

[Empire Center Report on New York State Student Population Trends 2018](#)

[Changing Hudson Valley Population Trends 2015](#)

Research on the Impact of Class Size

[Leuvan, E., & LØkken,S.\(2017\). Long Term Impacts of Class Size in Compulsory School](#)

[Jepson, C. \(2015\). Class Size: does it matter for student achievement?](#)

Diversity and Equity of Opportunity to Learn

[Phillips, K.\(2014\). How Diversity Works](#)

[Cordova-Cobo, D., Fox, L., & Wells, A.S. \(2016\). How Racially Diverse Schools and Classrooms Benefit All Students](#)

[Princeton's Lesson: School Integration Is Not Enough. New York Times \(1964\)](#)

Impact of Teacher Quality

[Chetty, R., Friedman, J., & Rockoff, J. \(2014\). Measuring the Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood.](#)

[Delgado, R., Hightower, A., Lloyd, S., Sellers, K., Swanson, C., & Wittenstein \(2011\). Improving Student Learning by Supporting Quality Teaching.](#)

Impact of Poverty on Student Performance

[Reardon, S. \(2013\). The Widening Income Achievement Gap.](#)

[Ladd, H. \(2012\). Impact of Poverty on Learning.](#)



[Detailed New National Maps Show How Neighborhoods Shape Children for Life.](#)
[New York Times \(2018\).](#)

School Configuration Models

[Best Practices in School District Configuration.](#) Hanover Research (2016).

[Review of Literature on Grade Configuration and School Transitions - Center for Applied Research and Educational Improvement \(2011\).](#)

[Research on School Configuration - Cache County School District.](#)

Research on School Choice

[Cobb, C. & Garn, G. \(2008\). School Choice - Evidence and Recommendations.](#)

[Bell, C., Bifulco, R. & Cobb, C. \(2009\). Can Interdistrict Choice Boost Student Achievement - The Case of Connecticut's Interdistrict Magnet School Program.](#)

Early Childhood Education

[Duncan, G. & Magnuson, K. \(2017\). Can Early Childhood Interventions Decrease Inequality Of Economic Opportunity?](#)

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[Karoly, L. \(2016\). The Economic Returns to Early Childhood Education.](#)

