

**Massena Central School District  
Massena, New York**

**A Study to Examine the Utilization of  
the District's Schools**



**Castallo and Silky LLC-Education Consultants  
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## CHAPTER 1 EXECUTIVE SUMMARY

The Massena Central School District, like many upstate school districts, has recently experienced declining student enrollment and financial challenges impacted by the property tax cap and uncertain state aid. To fulfill their responsibilities as stewards of the district’s finances and facilities, the Massena Board of Education wisely chose to engage in a study to ascertain the best use of its facilities for the future. School facilities are expensive and require constant attention. For this reason, proactive boards of education, on a regular, periodic basis, take the time to study their facilities to make sure that these significant investments are used in the most effective way possible. Especially in the past ten years, school districts all across the state have undertaken these facilities studies. The Massena board of education is applauded for initiating this study because:

- ✓ Declining enrollment in the district impacts facilities use;
- ✓ A comprehensive plan must be developed to implement at least some of the work identified in the Building Condition Survey—before this plan can be developed, it is wise to ascertain the condition and use of the current facilities;
- ✓ As program changes are considered, appropriate facilities should be in place.

The main focus of this study was framed by the following “critical question” the Board of Education and administration asked that the consultants address:

*In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?*

*If so, how should the grades and facilities be arranged?*

The timeline called for initiation of this study in September 2017 with the final report due to the Board of Education in June 2018. The Board of Education selected Castallo & Silky LLC, an educational consulting firm from Syracuse, New York to conduct this study. Mr. Alan Pole and Dr. Jessica Cohen led this study for the firm. An advisory committee was appointed by the Board of Education to provide input and context for the report. The consultants met six times with the advisory committee prior to reviewing a draft report with them.

The district has seen declining enrollments that will likely continue for at least the next six years. K-12 enrollment has declined over the past six years (2,825 in 2012-13 to 2,536 in 2017-18) by 289 students or 10.2%. This decline is projected to continue through 2024-25 (-631 students/-22.33%). This future decline will impact all three grade ranges – elementary, middle school, and high school.

The district’s schools are organized into three Pre-K-5th grade buildings serving their neighborhoods as well as a 7th-8th grade junior high school and a 9<sup>th</sup>-12th grade high school serving the entire district. The district’s facilities are generally in good shape although the New York State required Building Condition Survey in 2015 identified approximately \$94,000,000 of work that might be needed over time.

**Options.** Over the course of the study, a number of options were considered for the elementary, junior high, and high schools. Because of the current enrollment at the junior high and high school, there were no feasible and desirable options for those levels at the current time. Options that were discussed for the district’s facilities included:



- **Option 1-Status Quo.** The neighborhood school concept has been embraced by Massena for the location of its elementary schools. Under this model, each elementary school contains all elementary grades and is generally organized around neighborhoods. The status quo option maintains this arrangement.
- **Option 2-Grade Center Plan** that would create one primary school housing grades Pre-K-1, an elementary school housing grades 2-4, and an intermediate school housing grades 5-6. In addition to offering a number of instructional advantages, grade centers create equity of class/section sizes and teacher loads across the district. In addition, moving from the current number of 68 Pre-K-6 sections to 62 with the grade center plan would conservatively reduce six elementary classrooms/teachers equaling annual savings of \$551,910 (average cost of a teacher with salary and benefits = \$91,985 X 6 = \$551,910). However, these staffing savings would be somewhat offset by additional transportation costs for the grade center plan that would equal approximately \$118,831 in local costs. As a result, the net savings of the grade center plan would be approximately \$433,831.
- **Other Options** that were considered include the following; however, all of these options were not recommended because there was not enough space in the current facilities to house the students or the option was simply too expensive to consider further.
  - ✓ Move the 5<sup>th</sup> and 6<sup>th</sup> grades to the junior high and close one of the elementary schools;
  - ✓ Expand the high school to accommodate the 7<sup>th</sup> and 8<sup>th</sup> grades and close the junior high school;
  - ✓ Move the 7<sup>th</sup> grade to the elementary schools, the 8<sup>th</sup> grade to the high schools and close the junior high;
  - ✓ Build either a new 7-12 building and closing the current junior high school or create one campus that would house all of Massena's students Pre-K-12;
  - ✓ Close one of the elementary schools in five years when the enrollment has declined.

### **Recommendations**

1. It is recommended that the Board of Education conduct at least one public hearing/comment period on this study for the general public to express opinions.
2. It is recommended that the district convene a facilities planning committee whose role it will be to develop and monitor a long term facilities plan for the district. This may include the closure of one or more of the school buildings, the scope of work to be performed from the Building Condition Survey, the long-term design of appropriate school facilities and the financing of these initiatives. This committee should be comprised of both school staff and members of the community.
3. It is recommended that the district provide the facilities committee with annual enrollment projections to assist with the facilities planning initiatives.



4. It is recommended that, effective with the beginning of the 2018-19 school year, the Board of Education continue to implement Option 1, the status quo option for all schools.

5. It is recommended that the district use the attrition method for reducing staff should any staff reductions be realized from this initiative.



## CHAPTER 2 ACKNOWLEDGEMENTS

A study with this purpose and magnitude would not be possible without the support, cooperation, and encouragement of many individuals. We would first like to express our appreciation to the members of the advisory committee appointed by the Massena Board of Education. The members of the committee included:

Michael Besaw	Debora LaRose
Steven Booth	McKenzie Lazore
McKay Burley	AnneMarie Miller
Laurel Czajkowski	Carmela Phelix
Kerrie French	Duane Richards
Adrienne Hartman	Elizabeth Kirnie
Rachel Hurlbut	Jeff Stenlake
David Vroman	Kim Wells

These committee members gave generously of their time to help ask the right questions and to provide direction in finding answers. Without their assistance this study would not be nearly as complete and responsive to the information needs of the Board of Education and residents of the Massena Central School District.

Superintendent Patrick Brady, his most helpful secretary Candace Prairie, and his staff were also generous with their time as we often requested information. Without their willingness to accommodate our requests, the timeliness of this study would not have been achieved. Special thanks also go to the principals of each of the schools who provided tours to committee members and guests as well as to Allen Rowledge, Director of Transportation, who provided the review of transportation issues to the advisory committee.

Sincere gratitude is also expressed to Senator Joseph Griffo and Assemblymember Addie Jenne who provided a grant to fund this study.

Finally, we wish to thank the members of the Massena Board of Education. As all responsible school leadership teams, they took the risk of examining the use of their district facilities knowing full well that simply asking questions about how to better use district buildings might raise some uncomfortable issues. Despite this, they supported the study and actively followed the progress of the study, while always ensuring that all members of the community would be heard on this most important issue. This was no easy task, but they accepted the challenge and allowed the study process to run its course!



### CHAPTER 3 BACKGROUND AND PURPOSE

This chapter provides background as to the need for the study. It offers a context within which to place the consideration of various grade/facility options and associated costs and benefits. This context offers perspective for the decisions the Massena Central School District Board of Education has before it over the next few years.

#### Background

The Massena Central School District is located in St. Lawrence County and covers 200 square miles serving primarily the village of Massena as well as part or all of the towns of Massena, Louisville, Norfolk and Brasher. In addition a portion of the St. Regis Mohawk Territory is located in the district. The district's facilities include three Pre-K-6 elementary schools (Jefferson, Madison, and Nightengale), a junior high and a high school.

The Massena Central school community has consistently shown its support for the education of resident students as noted in the historical voting pattern on the school budget in the following table. Residents have passed school budgets in nine of the past ten years as shown in Table 3.1.

<b>Table 3.1 District Budget Vote History</b>			
Year	Yes Votes	No Votes	Total Votes
2018	330	71	401
2017	381	89	470
2016	433	94	527
2015	400	127	527
2014	478	157	635
2013	463	263	726
2012	1,072	533	1605
2011*	607	748	1,355
2010	573	354	927
2009	691	336	1,027
2008	804	259	1,063
<i>* Board adopted a contingency budget</i>			

Nevertheless, finding the balance between the provision of a good education and the ability of a local community to provide the financial resources is an on-going challenge for any board of education and administration. Given the current economic uncertainty of our country and our state and the continuing pressures to educate all children to higher levels, this challenge has become even more daunting over the past few years. It is the Board's appreciation and understanding of the fundamental significance of this challenge that served as the stimulus for this study.

As with all good boards of education, the Massena Central School District Board of Education chose to examine possible ways to organize grades and buildings in the district in light



of the challenges mentioned above. The main focus of this study was framed by the following “critical questions” the Board of Education and administration asked that the consultants address:

***In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?***

***If so, how should the grades and facilities be arranged?***

School facilities are expensive and require constant maintenance and improvement. For this reason, proactive boards of education, on a regular, periodic basis, take the time to study their facilities to make sure that these significant investments are used in the most effective way possible. Especially in the past ten years, school districts all across the state have undertaken these facilities studies. The Massena board of education is applauded for initiating this study because:

- ✓ Declining enrollment in the district impacts facilities use;
- ✓ A comprehensive plan must be developed to implement at least some of the work identified in the Building Condition Survey—before this plan can be developed, it is wise to ascertain the condition and use of the current facilities;
- ✓ As program changes are considered, appropriate facilities should be in place;

The Board of Education selected Castallo & Silky LLC, an educational consulting firm from Syracuse, New York to conduct this study. Mr. Alan Pole and Dr. Jessica Cohen led this study for the firm. The timeline called for initiation of this study in July 2017 with the final report due to the Board of Education in June 2018. Castallo & Silky LLC has extensive experience in working with school districts in New York State that have considered a variety of reorganizational options.

To answer the “critical study questions,” a study design, which is presented in the next chapter, was developed with the express purpose of being transparent and complete. In order to emphasize the openness of this process, the consultants committed to the following guidelines for the study:

1. The study will be conducted in an open and fair manner;
2. All data will be presented to the Board of Education; and
3. Recommendations will:
  - a. benefit student learning,
  - b. be sensitive to the unique cultural context of Massena,
  - c. not be influenced by special interest groups,
  - d. be educationally sound,
  - e. be fiscally responsible and realistic, and
  - f. provide a five to seven year perspective.

The study concludes with this final report to the Board of Education. While the advisory committee had significant input into the development of this study, the recommendations contained in this document represent those of the consultants and are presented as a vehicle for engaging the Board, the staff, and the community in discussion regarding the best organization of the district, its programs, and its facilities.



## CHAPTER 4 STUDY METHODOLOGY

The methodology for this study was based upon what is commonly known as “responsive evaluation.” In essence, this methodology requires the design of data collection methods *in response to* a critical study question. In this specific study, the Board of Education posed the following questions that drove this study.

***In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?***

***If so, how should the grades and facilities be arranged?***

The following is a summary of the major activities undertaken as part of the study design. The consultants gathered considerable data from the district. These data were summarized and analyzed as they were received. The data gathering was focused by the questions that drove the study. A Board appointed advisory committee met with the consultant team on 6 occasions to review data that had been gathered, share thoughts and opinions, and to critique tentative recommendations before the study was concluded. Finally, a draft of this report was shared with the advisory committee to seek final thoughts from the group.

The final report was presented to the Board of Education in a public session on June 21, 2018.



## CHAPTER 5

### STUDENT ENROLLMENTS AND POPULATION TRENDS IN THE AREA

This section of the report provides a picture of the current status of the Massena School District's student enrollment as well as an overview of the population trends in the area. Accurate enrollment projections are essential data for district long-range planning. Virtually all aspects of a district's operation (educational program, staffing, facilities, transportation, finances, etc.) are dependent on the number of students enrolled. For this reason, updated enrollment projections are crucial for this study and serve as the launching pad for our analysis.

The procedure for projecting student enrollments is referred to as the Cohort Survival Methodology. This methodology is highly reliable and is the most frequently used projective technique for making short-term school district enrollment projections. To calculate enrollment projections, the following data and procedures are used:

- Six-year history of district enrollment by grade level
- Calculation of survival ratios by grade level
- Kindergarten enrollment projections based on resident live births

A survival ratio is obtained by dividing a given grade's enrollment into the enrollment of the following grade a year later. For example, the number of students in grade 3 in any year is divided by the number of students in grade 2 of the previous year. The ratios indicate the proportion of the cohort "surviving" to the following year. Cohort refers to the enrollment in a grade for a given year.

Using grade-to-grade survival ratios, an average of these ratios for each cohort progression is obtained. This average is referred to as an average projection survival ratio. This ratio is then multiplied by each current grade enrollment to obtain the projected enrollment for the next successive year. The multiplicative process is continued for each successive year.

Survival ratios usually have values close to one, but may be less than or greater than one. Where the survival ratio is less than one, fewer students "survived" to the next grade. Where the survival ratio is greater than one, more students "survived" to the next grade. Grade-to-grade survival ratios reflect the net effects of deaths, dropouts, the number of students who are home schooled, promotion/retention policies, transfers to and from nonpublic schools, and migration patterns in and out of the school district.

Since estimating births introduces a possible source of error into the model, it is advisable to limit enrollment projections to a period for which existing data on live residential births can be used. This means that enrollment projections are possible for five years into the future for the elementary grades, which is usually sufficient for most planning purposes. Beyond that point, the number of births must be estimated and the projective reliability is greatly reduced.

The methodology considered for this study was to extrapolate to kindergarten enrollment cohorts from live birth data. The New York State Department of Health compiles information on births and sorts it into school district information by using the mother's address. Live birth data for the Massena Central Schools from 2002 to 2016 is shown in the following table:



<b>Table 5.1</b>	
<b>Number of Live Births, 2002 – 2016</b>	
Calendar Year	Year
2002	183
2003	194
2004	198
2005	193
2006	191
2007	210
2008	196
2009	186
2010	203
2011	192
2012	188
2013	204
2014	198
2015	176
2016	151

Over the period of 15 years, the average number of live births was 190. Examining the past five years, it is apparent that there has been a decline in births with the average number of live births at 183.

Live births are then compared with the kindergarten enrollment five years into the future....babies born in 2012 will be in kindergarten in 2017-18, babies born in 2013 will be in kindergarten in 2018-19, and babies born in 2014 will be in kindergarten in 2019-20. An average ratio of live births to kindergarten enrollment five years later is then calculated. This ratio is then used to project future kindergarten enrollments from actual and estimated live births. Now that we can predict future kindergarten enrollments we are able to complete the full table of future school enrollment as shown in the following table. It should be noted that Pre-K enrollments are not factored into the enrollment projections because Pre-K is a voluntary program and as such, the relationship between Pre-K enrollments and enrollments at other grade levels is questionable at best.

The table below provides a history of enrollments since 2012-13 and projected enrollments through the 2024-25 school year. The data in this table was obtained from the New York State Education Department from the Basic Educational Data System (BEDS) information (collected as of the 1<sup>st</sup> Wednesday in October) and from the school district.



<b>Table 5.2</b> <b>Massena</b> <b>K-12 Enrollment History and Projections</b> <b>2012-13 to 2024-25</b>													
Grade	2012 -13	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020 -21	2021 -22	2022 -23	2023 -24	2024 -25
Births 5 Years Before	210	196	186	203	192	188	204	198	176	151	183	183	183
K	246	239	237	223	191	189	206	223	217	193	165	200	200
1	209	210	180	184	171	173	153	167	181	176	156	134	162
2	199	198	198	184	180	168	169	149	163	176	171	152	131
3	193	185	177	202	179	181	162	163	144	157	170	165	147
4	210	192	180	180	197	173	178	160	160	142	155	168	163
5	193	204	180	184	183	193	170	176	157	158	140	152	165
6	200	206	189	192	191	194	199	176	181	162	163	144	157
7	241	210	224	218	223	204	214	220	194	200	179	180	159
8	232	237	192	220	216	216	197	207	213	188	194	173	174
9	231	222	239	184	218	216	212	194	204	209	185	190	170
10	229	227	217	228	196	196	211	207	189	199	204	180	186
11	226	250	230	204	248	201	202	217	214	195	205	211	186
12	201	206	231	214	189	219	184	185	199	196	179	188	193
K-12	2810	2786	2674	2617	2582	2523	2458	2444	2416	2351	2266	2238	2194
Ungr. Elem.	5	6	11	7	6	3							
Ungr. HS	10	7	5	5	7	10							
<b>Total K-12</b>	<b>2825</b>	<b>2799</b>	<b>2690</b>	<b>2629</b>	<b>2595</b>	<b>2536</b>	<b>2458</b>	<b>2444</b>	<b>2416</b>	<b>2351</b>	<b>2266</b>	<b>2238</b>	<b>2194</b>
K-6 Total	1450	1434	1341	1349	1292	1271	1238	1213	1203	1164	1120	1116	1125
7-8 Total	473	447	416	438	439	420	412	427	407	388	373	353	333
9-12 Total	887	905	917	830	851	832	809	804	806	799	773	769	735

Note: 2021-22 to 2024-25 births are the average of the five previous years. Consequently, from 2022-23 to 2024-25 the early grade estimates are quite speculative.

As is apparent from the above table, K-12 enrollment has declined over the past six years (2,825 in 2012-13 to 2,536 in 2017-18; -289 students/-10.2%). This decline is projected to continue through 2024-25 (-342 students/-13.9%). This future decline will impact all three grade ranges-elementary, middle school, and high school.

Additionally, when just the three elementary schools are considered, we see that each has had a decline in student enrollment over the past five years. This decline is noted in the following table. As can be seen, the enrollment decline varies from -7.1% (Jefferson) to -13.5%



(Nightengale) in this timeframe. This is a significant decrease (-172 students/-11.8%) in the number of K-6 students being served in each of these buildings.

School	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	5 year % Change
Jefferson	465	469	464	449	442	432	-7.1%
Madison	510	496	438	456	417	436	-14.5%
Nightengale	481	475	450	451	418	416	-13.5%
Total	1456	1440	1352	1356	1277	1284	-11.8%

Source: NYSED and MCSD

As the focus of this study is on the facilities for the future, it is important to look at the projections by grade level over the next five year period to determine if there are indicators that changes in facility organization will be possible or required. Table 5.4 provides such a summary for the period from 2018-19 to 2022-23.

	2018-19	2019-20	2020-21	2021-22	2022-23	Change from 2017-18
K - 6	1238	1213	1203	1164	1120	151 (11.9%)
7 - 8	412	427	407	388	373	47 (11.2%)
9 - 12	809	804	806	799	733	99 (11.9%)

The enrollments at each level continue to decline by slightly less than 12% over the five year time frame indicating that there may be some possibilities for reorganizing grade levels in buildings or reducing the number of buildings.

The overall district enrollment decline cannot be attributed to other factors such as increase of students being taught at home or students attending non-public schools.

2014-15	32
2015-16	46
2016-17	43
2017-18	50
Average	42.8

Table 5.5 indicates that the number of home-schooled students has been slowly increasing, ranging from 1.1% to 2.0% of the total enrollment in the district. This is lower than



the state and national average of about 3%. The number of students home schooled should not have a significant impact on enrollment projections.

Slightly more than 5% of the total enrollment of the Massena schools attends non-public schools in the region. Table 5.6 provides a six-year history of non-public school enrollment that

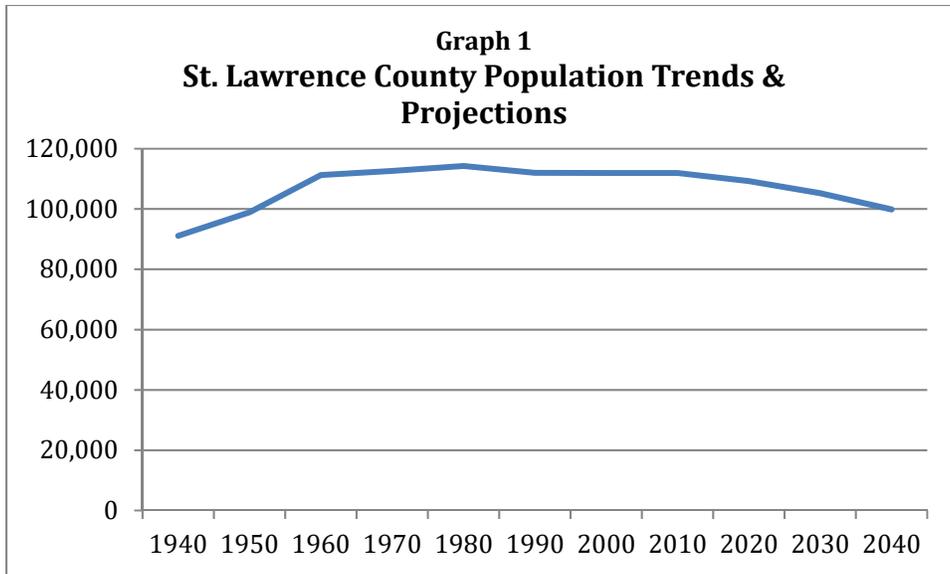
<b>Table 5.6</b>						
<b>Resident Students Attending Non-Public Schools</b>						
<b>2012-13 – 2016-17</b>						
School	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Trinity	168	161	150	150	131	148
Holy Name of Jesus Academy	7	6	6	12	7	10
Total	175	167	156	162	138	158

averaged 159 students a year but has shown a decline of approximately 10% over this period.

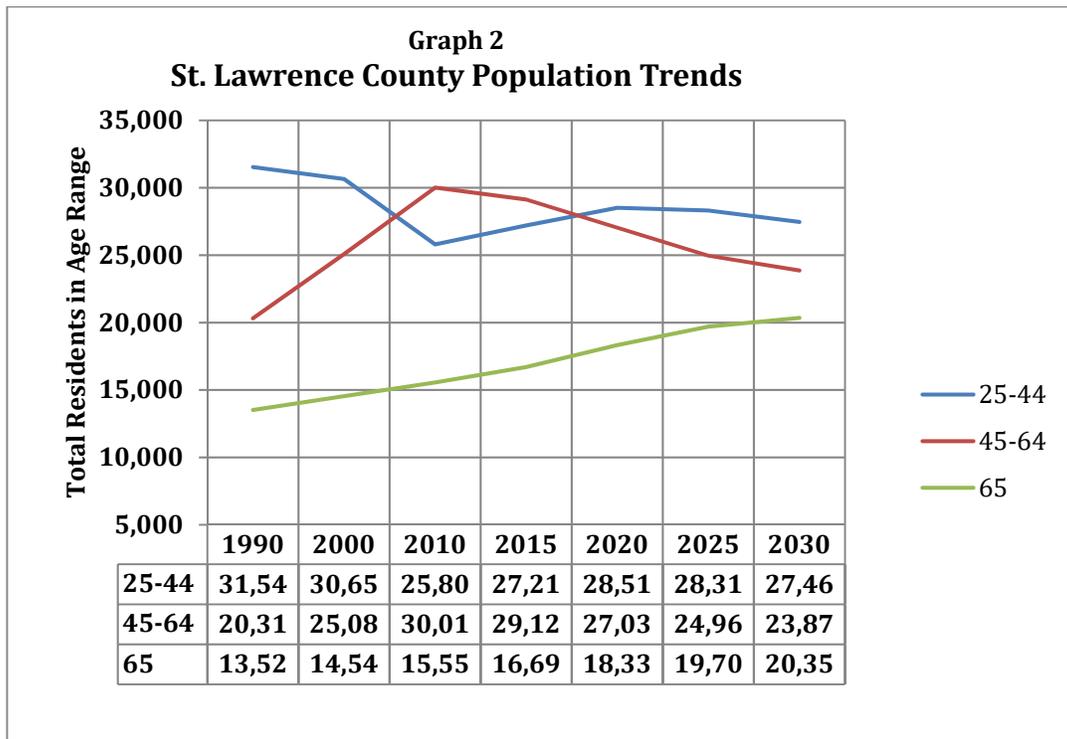
Another factor to consider is the enrollment of students from other public school districts in the Massena schools. This sometimes occurs when parents work in the community and want their children to attend the school near where they work. This does not seem to be a factor in Massena, however. While Massena School District board policy allows for non-resident families to enroll children upon the determination of the superintendent and payment of tuition, there is currently only one non-resident student attending the school district.

The recent decline in school district enrollment is not surprising given the overall St. Lawrence County population trends and the history of school enrollments since the late 70's. Information provided by the St. Lawrence-Lewis BOCES tracking enrollment over time showed enrollment peaking at 4,561 in 1976-77 and slowly declining throughout the next three decades by about 44% to the current enrollment of 2,536. While the enrollment in the schools declined more rapidly than the census information indicates that the county's population did, it may be that demographic changes in families as well as changes in employment opportunities played a role.

As the graphs that follows shows, the total county population has leveled off since the mid-1980's and is projected to decline over the next few decades due to the changes in employment opportunities and the out-migration of New York State residents.



It is important to also examine the age of St. Lawrence County residents since this provides some insight into future school enrollments. Populations that are aging generally mean that there is likely an out-migration of younger residents, hence fewer families that likely will have children entering the school system. In upstate New York, it is very common to find most communities are experiencing this type of out migration resulting in aging local populations.





Graph 2 provides some insight into the impact into the age cohorts in St. Lawrence County on future school enrollments. Adults in the childbearing age are typically 25-44 years of age. As the graph below illustrates, the number of St. Lawrence County residents in this critical age range has declined since the mid-2000's while at the same time county residents in the 65+ age range have been steadily increasing. This indicates a trend that may have some bearing on the Massena Central School District's future enrollment.

Given the recent school district enrollment trends, and in light of the demographic variables studied, there are no adjustments in the future enrollment projections provided in table 5.2 that are currently needed. However, we caution the district to engage in annual enrollment projecting with an eye to current demographic trends in the county and school district.

**Summary:**

- The district has seen declining enrollments and will likely continue to see enrollments drop slightly.
- Enrollments at the elementary, junior high, and high school levels are projected to decrease by 11.2% to 11.9% over the next five years providing some potential opportunities for reorganization.



**CHAPTER 6  
EDUCATIONAL PROGRAM**

The most important function that any school district provides is to give its students a quality educational experience. In today’s educational world, school districts are charged with providing an educational program that will ensure that its students are college and career ready. Being ready for college means that a high school graduate has the knowledge and skills necessary to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework. Being ready for a career means that a high school graduate has the knowledge and skills needed to qualify for and succeed in the postsecondary job training and/or education necessary for their chosen career (i.e., community college, technical/vocational program, apprenticeship or other significant job training). The Massena Central School District provides a comprehensive program for its students in pursuit of this goal.

This chapter provides several descriptors of the educational program at the elementary, middle, and high school levels that will assist in making decisions about future facilities changes or reorganizations.

The district schools are organized in a fairly common grade arrangement, as described in table 6.1. Massena has three elementary schools each housing grades Pre-K-6. The junior high school houses grades 7 – 8 and the high school grades 9-12. While the 7<sup>th</sup> – 8<sup>th</sup> grade organization of two grades in a junior high school is seen less frequently than a three-year grade span in a building, it is not uncommon. While there are a variety of grade configurations used in New York State and across the country, the research on grade arrangements indicates that there is “no one best way” to arrange the grades.

<b>Table 6.1 2017-18 Grade Configuration</b>	
Building	Grade Levels
Jefferson Elementary	PK - 6
Madison Elementary	PK - 6
Nightengale Elementary	PK - 6
Junior High	7 - 8
High School	9 - 12

Most school districts consider reorganization due to changes in available space in schools. An examination of class sizes in the elementary school is important in a facilities study. If class sizes are reasonable or small, it is generally accepted that reorganization of the elementary grades is at least a topic for consideration. On the other hand, if class sizes are very large in the elementary grades, it might be difficult to reorganize grades to achieve any efficiency. In Massena, we find class sizes ranging from 14 – 23 students and averaging 19 to 21 students. These class sizes are considered small to average as compared to other similar schools across the state. Table 6.2 summarizes the number of sections and class size of each section as of October 2017.



Grade	Number of Sections and Class Size of Each Section		
	Jefferson	Madison	Nightengale
Pre-K	18, 18	15, 13	16, 15
K	14*, 16, 17, 17	18, 20, 19	16*, 16, 16, 17
1	18, 18, 16	19, 18, 19	20, 21, 21
2	16, 16, 16	21, 21, 21	20, 19, 19
3	21, 19, 20	22, 22, 22	19, 19, 19
4	18, 19, 21	20, 21, 22	19, 17, 17
5	22, 22, 23	22, 23, 22	22, 18, 20
6	23, 23, 22	22, 22, 22	19, 22, 19
<b>K-6 Total</b>	<b>22/417 (19.0 avg)</b>	<b>21/438 (20.9 avg)</b>	<b>22/415 (18.9 avg)</b>

\*There are two JK classes: one at Jefferson of 14 students and 1 at Nightengale of 16.

The three elementary schools have similar enrollments and therefore generally have 3 sections at every grade level. The one grade level that differs is Kindergarten that has an additional two Junior Kindergarten sections, one at Jefferson and one at Nightengale.

Elementary schools across New York State tend to have many similarities in their curriculum and offerings. The Massena school district is similar to the vast majority of elementary schools across state and provides a comprehensive program for its elementary school students in all three buildings. All students receive the core instructional program in English Language Arts, math, science, and social studies. In addition, students are exposed to the variety of special subjects including art, music, physical education, library, and technology. In the Massena schools, all elementary schools receive the same amount of special subject time. Table 6.3 provides a summary of the art, music, library, and physical education schedules. All students are on a 6-day cycle.

Grade	Art	Library	Music	Physical Education
K/JK	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day
1	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day
2	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day
3	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day
4	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day
5	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day
6	1 X 40/6 Day	1 X 40/6 Day	2 X 40/6 Day	2 X 40/6 Day

To gain a more complete understanding of instructional programs it is somewhat helpful to look at student achievement. This section will review recent results on the New York State standardized tests in English/Language Arts (ELA) and Mathematics. For decades, New York



State has provided standardized assessments to measure the extent to which students in all schools are achieving standards that have been established by the state. For many years, New York tested students in 4<sup>th</sup> and 8<sup>th</sup> grade in English/Language Arts and Mathematics. Since 2005-06, New York State, pursuant to the No Child Left Behind requirement, has tested all students in grades 3-8 in English/ Language Arts and Mathematics.

State assessments are designed to help ensure that all students reach high learning standards. They show whether students are getting the knowledge and skills they need to succeed at the elementary, middle, and high school levels and beyond. The State requires that students who are not making appropriate progress toward the standards receive academic intervention services.

Because of some changes in the format and content of the assessments over the past few years, comparability from year to year is somewhat problematic. However, comparing a district to the state average or to other similar districts will yield some insight into the relative readiness of students to move on to the next level.

Proficiency on these assessments is defined by the state as achieving either Level 3 or Level 4 on the assessments. These levels indicate that at Level 3, the students are meeting the learning standards and demonstrating an understanding of the content expected in the subject and grade level. Students at level 4 demonstrate a thorough understanding of the content expected in the subject and the grade level. Given these performance levels, students who score at Level 3 and Level 4 are deemed to be making adequate progress in school and are on track to successfully complete their school experience. Regulations of the Commissioner of Education require that students who score at Level 1 and Level 2 receive academic intervention services. The purpose of these services is to remediate student learning in order that students might be successful in school. Tables 6.4 and 6.5 provide a summary of the past four years' NYS ELA and Math scores for 3<sup>rd</sup> through 8<sup>th</sup> graders.

<b>Table 6.4</b>				
<b>% of Students Scoring at Levels 3 &amp; 4</b>				
<b>3-6 NYS Assessments in ELA</b>				
	2014	2015	2016	2017
Jefferson	21% (246)	24% (187)	30% (218)	30% (239)
Madison	25% (248)	29% (190)	44% (215)	42% (202)
Nightengale	20% (266)	24% (177)	25% (230)	35% (228)
NYS average	31%	31%	38%	40%
() Number of Students Taking Assessment				

<b>Table 6.5</b>				
<b>% of Students Scoring at Levels 3 &amp; 4</b>				
<b>3-6 NYS Assessments in Math</b>				
	2014	2015	2016	2017
Jefferson	30% (244)	38% (156)	42% (211)	42% (249)
Madison	30% (250)	34% (170)	40% (215)	45% (209)
Nightengale	22% (260)	37% (155)	31% (230)	40% (232)
NYS average	36%	38%	39%	40%
() Number of Students Taking Assessment				



In ELA the assessments show mixed results with some significant differences among the schools each year and scores generally below the state average in two out of three of the elementary schools. Math scores are more consistent and tend to be above the state average.

In summary at the elementary grades, Massena’s three elementary schools are quite similar and provide a comprehensive program.

The next area for analysis involves the program that is available to the junior high and high school students in Massena. The schedule for junior high school students expands beyond the core to give students the opportunity to explore a variety of courses including foreign languages, art, music, technology, family and consumer science, health, and music, as is required in programs for students at this grade level. In addition, school districts in New York State are required to allow acceleration into high school level courses in math and at least one other academic area for their eighth grade students. Massena does this in math, science, French and Spanish. Tables 6.6, 6.7, and 6.8 provide a summary of the offerings by grade level as well as the number of sections and section sizes.

<b>Table 6.6 Junior High 7<sup>th</sup> Grade Course Offerings 2017-18</b>	
Course	# of sections and section sizes
English 7	21, 20, 17, 18, 19, 20, 19, 19, 19, 20
Social Studies 7	20, 21, 19, 19, 20, 20, 20, 17, 19, 21
Math 7	19, 20, 19, 17, 18, 19, 19, 19, 20, 20
Science 7	19, 20, 21, 20, 19, 18, 22, 17, 19, 21
Music	7, 8, 8, 13, 13, 10, 8
Band 7	34
Chorus 7	105
Technology 7	19, 20, 19, 19, 18, 18, 20, 19, 17, 18
Art I	18, 23, 23, 20, 23
Family and Consumer Science I	18, 22, 22, 20, 23
Family and Consumer Science II	20, 20, 19, 20, 20
Reading 7	1, 3, 8, 1, 2, 2, 7, 2, 4, 1, 1
Math Lab 7	4, 6, 6, 3, 4, 1, 2, 4, 6
Resource 7	6, 3, 5, 5, 5, 7, 6, 4, 5, 5, 1, 1, 1

<b>Table 6.7 Junior High 8<sup>th</sup> Grade Course Offerings 2017-18</b>	
Course	# of sections and section sizes
English 8	23, 17, 22, 22, 21, 22, 23, 21, 22, 21
US History 8	21, 23, 17, 22, 23, 21, 22, 21, 23, 22
Math 8	23, 21, 22, 19, 22, 23, 22, 22
Algebra	20, 18
Science 8	21, 21, 23, 22, 22, 23, 22, 22



Physical Setting/Earth Science & Lab	20, 18
Technology 8	20, 20, 21, 20, 22, 22, 22, 22, 21, 23
Health	20, 21, 21, 21, 22, 21, 22, 22, 21, 23
French I	20, 22, 21, 22, 20
Spanish I	20, 20, 19, 17, 19
Band 8	18
Orchestra	29
Chorus 8	75
Art II	19, 20, 19, 19, 19
Reading 8	4, 7, 6, 3, 3, 4, 4, 5, 2, 3, 3
Math Lab 8	6,5, 6, 5, 4, 3, 2, 5, 4, 7, 6, 4
Resource 8	4, 5, 5, 5, 5, 4, 4, 5, 2, 1, 1, 3

<b>Table 6.8 Additional Junior High School Course Offerings 2017-18</b>	
Course	# of sections and section sizes
Physical Education, Boys	20, 19, 20, 13, 18, 20, 21, 16, 8, 14, 17, 16
Physical Education, Girls	22, 15, 19, 24, 14, 25, 20, 17, 16, 9, 16, 21
Math Life Skills	9, 11
Science Life Skills	12
English Life Skills	11, 5
Social Studies Life Skills	11
Skills Development	7, 7, 9, 3, 1
Directed Study	2
NCSTEP-JH	16

The purpose of a high school course of studies is to provide students with the courses necessary to achieve a high school diploma and to provide a variety of electives in order to enrich the high school experience for these students. An overview of the Massena high school program is provided in the tables that follow. The information is taken from enrollments as of October 30, 2017. It should be noted that while the district also offers a program beyond the instructional day from 3 pm to 5 pm to provide support for students at risk of not meeting graduation requirements, these numbers were not included.

<b>Table 6.9 Massena High School Course Offerings in English &amp; Social Studies 2017-18</b>	
Course	# of sections and section sizes
English I	22, 21, 23, 21, 18, 20, 24, 20, 19, 19, 18
English II	21, 18, 15, 15, 18, 17, 14, 18, 17, 15, 15
English III R	21, 22, 19, 20, 22, 16, 26
English IV	21, 17, 22, 19, 24, 23, 22, 21



Creative Writing <sup>1</sup>	24
Education Careers English IV	4
Film & Literature <sup>1</sup>	22
English AIS	3, 3, 4, 4, 4, 2 6, 5
Global History/Geography I	22, 23, 23, 22, 20, 20, 20, 17, 21, 20, 15
Global History/Geography II	18, 14, 19, 22, 20, 17, 16, 14, 17, 16, 17
US History & Government	25, 24, 23, 19, 20, 18, 10, 9
Participation in Government <sup>1</sup>	21, 26, 26, 26, 15, 22, 24, 10
Economic Decision Making <sup>1</sup>	22, 24, 23, 25, 27
Macroeconomics <sup>1</sup>	18, 21
Psychology <sup>1</sup>	18, 18
Intro to Haudenosaunee Culture and History <sup>1</sup>	14
Sociology <sup>1</sup>	25
Social Studies AIS	9, 1
Education Careers Economics <sup>1</sup>	2
Education Careers Part. in Government <sup>1</sup>	2
<sup>1</sup> One semester courses	

**Table 6.10  
Massena High School Course Offerings in Science & Math  
2017-18**

Course	# of sections and section sizes
Physical Setting/Earth Science & Lab	20, 21, 21, 18, 17, 20
Living Environment/Biology & Lab	20, 22, 20, 19, 18, 14, 22, 22, 12, 18, 16
Physical Setting/Chemistry & Lab	21, 23, 20, 19
Physical Setting/Physics & Lab	17, 12, 11
Exploratory Science	20, 25
Geology	25, 23
Education Careers Science	4
Adaptive Science	3, 3
Forensic Science	19, 21, 24
Intro. College Algebra	18, 21, 20
College Algebra	22
Algebra	19, 22, 21, 18, 20, 19, 16
Algebra 1A	17, 19, 17
Algebra 1B	12, 17, 19, 13,
Geometry	21, 21, 17, 21, 22
Algebra II	20, 23, 21
Education Careers Math	4



<b>Table 6.11 Massena High School Course Offerings in Foreign Languages and Art 2017-18</b>	
<b>Course</b>	<b># of sections and section sizes</b>
French I	21, 9
French II	21, 22, 18, 17
French III	19, 13, 15
French IV	5
French V	10
Spanish I	13
Spanish II	14, 12, 17, 15, 13
Spanish III	15, 14, 16, 14
Spanish IV	18
Spanish V	11
Art Survey I <sup>1</sup>	17, 21, 25, 23, 20, 26, 20
Art Survey II <sup>1</sup>	19, 21, 19, 25, 20, 17, 17
Studio in Art	17, 18, 14
Studio in Drawing	19, 18
Studio in Ceramics I <sup>1</sup>	14, 9
Studio in Photo <sup>1</sup>	17, 15
Video Production	12
Adaptive Art <sup>1</sup>	15, 12
Independent Study in Advanced Studio Art	1, 2, 2,
Independent Study in Advanced Art	1, 2, 2, 1, 1, 1
<sup>1</sup> One semester courses	

<b>Table 6.12 Massena High School Course Offerings in Business &amp; Technology 2017-18</b>	
<b>Course</b>	<b># of sections and section sizes</b>
Keyboarding <sup>1</sup>	16, 15
College Accounting	13
Google Docs <sup>1</sup>	17
Ethics <sup>1</sup>	14
Public Relations	5
Publishing I <sup>1</sup>	10
Publishing II <sup>1</sup>	7
Law	15
Math. Of Finance	23, 15, 17, 21
Principles of Management <sup>1</sup>	19
Career and Financial Management <sup>1</sup>	17, 17, 13, 12, 12, 12, 7, 7
Principles of Marketing <sup>1</sup>	17



Entrepreneurship	18
Sports Marketing <sup>1</sup>	31
Business Communication	18
Electricity <sup>1</sup>	15
Welding <sup>1</sup>	6, 15
Graphic Design <sup>1</sup>	19
Adaptive Technology <sup>1</sup>	10
Design Fabrication/Woods <sup>1</sup>	7
Construction/Theater set Design	17
Intro. To Engineering Design	10, 11
<sup>1</sup> One semester courses	

<b>Table 6.13 Massena High School Course Offerings in Music &amp; Physical Education 2017-18</b>	
Course	# of sections and section sizes
Foundation of Music	8
Concert Band	81
Mixed Choir	112
Women's Chorus	38
Orchestra	41
Jazz Ensemble	21
Music Studio/Lighting/Tech I <sup>1</sup>	12
Music Studio/Lighting Tech II <sup>1</sup>	3
Independent Study in Foundations of Music	1
Freshmen Physical Education	18, 24, 25, 20, 26, 12, 21, 24, 20, 10, 12
Physical Education	16, 21, 18, 23, 25, 23, 23, 14, 13, 12, 14, 21, 26, 19, 26, 21, 14, 19, 12, 20, 23, 16, 24, 25, 23, 26, 19, 23, 23
Sports Medicine <sup>1</sup>	19, 10
Adaptive Physical Education	5, 9
Education Careers PE	4
Health <sup>1</sup>	20, 22, 27, 23, 22, 19, 17, 14, 23, 20, 5, 16



**Table 6.14  
Massena High School Special Education, Remedial & Supplemental Course Offerings  
2017-18**

Course	# of sections and section sizes
CDOS ELA <sup>1</sup>	8, 6, 9, 6, 1, 1
CDOS ELA III <sup>1</sup>	8, 6
ELA	6, 5
CDOS Math <sup>1</sup>	10, 9, 1
CDOS Math II <sup>1</sup>	10, 9, 1
Directed Study <sup>1</sup>	7, 6, 10, 7, 10, 6, 7, 6, 11, 10
Life Skills I <sup>1</sup>	7, 6, 3, 3, 2, 2
Life Skills II <sup>1</sup>	7, 5
Life Skills Math	11, 9
Reading	8, 6
Writing and Spelling	7, 7
Closed Workshop	11, 12, 4, 4
Career Development	4, 4, 11, 11
CBWP I, II, III	1, 1, 1, 1, 2, 4, 2, 2
Community Experience <sup>1</sup>	13, 14, 11, 15, 10, 8, 3, 11, 16, 12,
Resource Room <sup>1</sup>	7, 6, 2, 4, 8, 5,6, 6, 8, 5, 6, 7, 7, 6, 4, 6, 6, 2, 4, 2, 5, 3, 3, 3, 5, 3, 3, 5, 4
Supported Study <sup>1</sup>	2, 2, 6, 4, 5, 5, 7, 7, 1, 4, 2
Math AIS	3, 4, 3, 3, 8, 9, 11, 6, 3, 5, 5, 2
<sup>1</sup> One semester class	



**Table 6.15**  
**Massena High School International Baccalaureate Course Offerings**  
**2017-18**

Course	# of sections and section sizes
IB English HL I	17, 13, 6
IB English HL II	12, 21
IB History of the Americas HL I	15, 17
IB History of the Americas HL II	18
IB Biology HL I & Lab	21
IB Biology HL II	76
IB Biology SL & Lab	21
IB Visual Arts HL I	5
IB Visual Arts HL II	3
IB Theory of Knowledge I	8
IB Theory of Knowledge II	10
IB French SL	11
IB French SL II	4
IB Spanish SL	18
IB Spanish SL II	16
IB Psychology SL	24
IB Music SL	3
IB Math SL I/Pre-Calculus	11, 17
IB Math HL II/Calculus	19
IB Math Studies SL	20

Tables 6.9 – 6.15 above show a very impressive program meeting the needs of a wide variety of interests and aptitudes of high school students in Massena. The district has been able to develop and maintain a very comprehensive list of offerings for its students. The International Baccalaureate program that is offered at Massena High School is a strong, honors level program that is not offered in many of the high schools across the state. In the core academic subjects, the course of study includes the required courses as well as electives. The district offers two foreign languages French and Spanish, for its students. In addition, the district offers a strong number of business courses, a curriculum area that has been eliminated in many of today's high schools. The district also has a number of technology courses for its students as well as strong music and art programs. Students are able to get college credits in a number of courses as well.

Enrollments in the vast majority of core courses are strong. Courses in some of the elective areas are smaller, as is typical. Generally speaking, there are few courses that look as though they are in jeopardy of being cut because of their enrollment.

In addition to the program offered at the high school, Massena students have the opportunity to take career and technical education (CTE) classes at the St. Lawrence-Lewis BOCES. Typically students attend BOCES CTE programs for a half-day every day for two years. One-third of the 11<sup>th</sup> and 12<sup>th</sup> graders attending Massena High took advantage last year of the career and technical education courses at BOCES as evidenced by the following table.



<b>Table 6.16 Participation in St. Lawrence-Lewis BOCES Career &amp; Technical Education Classes 2017-28</b>		
	Juniors	Seniors
# of students in class	207	232
# of students attending BOCES CTE	63	80
% of student attending BOCES	29%	34.5%
Overall BOCES CTE participation	32.6%	

In addition to the educational program that was provided for regular education students, in 2017-18, the district had 487 special education students. This translates to a classification rate of 19.2%, close to the percentage of students classified statewide. Table 6.17 shows the type of special education classrooms, the number of special education classrooms, and the number of students in each of the building in the district. The majority of students with disabilities (278) are provided support through resource rooms. The district also has 6 12:1:1 and 1 15:1:1 classroom.

<b>Table 6.17 Special Education Classes 2017-18</b>			
Building	Type of Classroom	Number of Students	Number of Classrooms/Spaces
Jefferson	12:1:1	9, 9	2
	15:1	6	1
	12:1:1/Resource	28 Resource 15 12:1:1	3
Madison	12:1:1/Resource	45 Resource	5
		40 12:1:1	
Nightengale	12:1:1	13, 12	2
	Special Class for the Deaf	1	1
	Resource	24	2
Junior High	12:1:1	22	1
	Resource	71	5
High School	12:1:1	40	3
	Resource	110	5

Massena, like all school districts is committed to placing students in the “least restrictive environment”. Consequently, few special needs youngsters are placed out-of-district for their educational program. However, in some instances out-of-district placement is determined by the Committee on Special Education to be the most appropriate educational setting. Out-of-district placements in 2016-17 and 2017-18 included the St. Lawrence-Lewis BOCES. Table 6.18



provides a summary of the placements and indicates that about 92% of the students with disabilities are educated within the district.

<b>Table 6.18 Summary of Special Education Classification and Placement 2016-17 and 2017-18</b>		
Placement	2016-17	2017-18
In-District	423	448
Out of District	43	39
Total SWD	466	487

Source: District records using October enrollments. Special education placements change throughout the year. For this snapshot, the October 30 numbers were utilized.

And, finally, a significant component of the educational component in school districts is the opportunities that students have to participate in a variety of athletic and extra-curricular activities. As considerations are made about facilities, it is important to note that the district has a solid participation across a large variety of sports for both girls and boys. Table 6.19 details the athletic participation information for the 2016-17 year.

<b>Table 6.19 Athletic Participation</b>			
Sport	Varsity	Junior Varsity	Modified
Baseball	15	11	15
Basketball, Boys	11	14	25
Basketball, Girls	16	16	16
Cheerleading	16		
Football	44	29	37
Golf	13		
Hockey, Boys	25		32
Hockey, Girls	22		28
Lacrosse, Boys	23		
Lacrosse, Girls	22		
Rifle	11		
Soccer, Boys	20	22	22
Soccer, Girls	23	23	25
Softball	16	15	17
Swimming	22		15
Track, Boys	27		
Track, Girls	28		
Track (Winter), Boys	15		
Track (Winter), Girls	21		
Volleyball	17		12
Wrestling	18		



Similarly, the opportunity for students to explore a wide range of clubs and activities is important to the development of well-rounded students. Massena offers a wide selection of clubs and activities and participation seems to be strong.

<b>Table 6.20 Participation in Clubs and Activities 2016-17</b>	
<b>Club/Activity</b>	<b>Number Of Students</b>
Mock Trial	10
Spanish Club	25
French Club	25
Yearbook	30
Interact	15
Movie Club	7
Art Club	47
Co-Web	264
LGBT	30
Robotics – HS	30
Robotics – JH	23
Robotics – Elem	21
Vocal Selects	70
Marching Band	104
Field Experience	128
JH Student Council	70
HS Student Council	30
Musical	144
Whiz Kids	17
Jefferson Garden Club	15
Jefferson Kids Care	10
Jefferson Marathon Club	65
Jefferson Environmental Club	15

#### Summary

- The grade configuration of buildings in the Massena Central School District (K-6, 7-8, 9-12) is a relatively common arrangement of grades.
- The elementary instructional program is comprehensive and comparable across all three schools.
- The Junior High School program is typical for a school district of this size.
- The High School program provides many alternatives for students including access to the International Baccalaureate program.



## CHAPTER 7 BUILDING ORGANIZATION

Since this study focuses on a possible grade and/or building reconfiguration, the current utilization of district buildings is studied. It is first important to examine how the schools are being used this academic year, and to gauge how enrollments may impact them in the future. Table 7.1 provides an overview of the district's schools.

<b>Table 7.1 Overview of School Buildings</b>					
Schools	Jefferson	Madison	Nightengale	Junior High	High School
Year of Original Building	1954	1958	1958	1959	1959
Major Additions	1999, 2008	1999, 2008	1999, 2008	1980	1999, 2008
Sq. Ft. in Current Building	59,896	59,164	59,164	82,400	197,482
Number of Floors	1	1	1	1	1
Grades Housed	Pre-K-6	Pre-K-6	Pre-K-6	7-8	9-12
Students Served	474	466	445	425	868
BCS Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Current Architect	March Associates				

As can be seen from table 7.1 above, all of the school buildings are approximately the same age having been constructed in the mid to late 50's. The elementary schools are all the same size and currently house approximately the same number of students. All of the buildings are single story facilities and have received satisfactory ratings from the district's architect in the 2015 building condition survey.

Given the capacity of the buildings involved in this study, the consultants then determined the current use of the regular classrooms with respect to class sizes and numbers of sections at each grade level. This analysis produced the following table 7.2 for the elementary school grades.



Grade	Number of Sections and Class Size of Each Section		
	Jefferson	Madison	Nightengale
Pre-K	18, 18	15, 13	16, 15
K	14*, 16, 17, 17	18, 20, 19	16*, 16, 16, 17
1	18, 18, 16	19, 18, 19	20, 21, 21
2	16, 16, 16	21, 21, 21	20, 19, 19
3	21, 19, 20	22, 22, 22	19, 19, 19
4	18, 19, 21	20, 21, 22	19, 17, 17
5	22, 22, 23	22, 23, 22	22, 18, 20
6	23, 23, 22	22, 22, 22	19, 22, 19
<b>K-6 Total</b>	<b>22/417 (19.0 avg)</b>	<b>21/438 (20.9 avg)</b>	<b>22/415 (18.9 avg)</b>
*There are two JK classes: one at Jefferson of 14 students and 1 at Nightengale of 16.			

Massena has embraced the neighborhood school concept for the organization of its elementary schools. This means that students go to the elementary school that is relatively close to the neighborhood in which they live. As can be seen from table 7.2 above, each elementary school has three sections of each grade level from Kindergarten through grade 6. The district has two junior kindergarten classrooms, one at Jefferson and one at Nightengale. These classes are being phased out over the next few years and the students are being integrated into the regular kindergarten classrooms.

While the neighborhood school concept is convenient for parents and for transportation, it often results in unequal class sizes. In Massena, however, all three elementary school buildings average between 19 and 21 students per classroom, an unusual situation.

As different grade level configurations are considered, it is important to understand the thinking behind grade level organization. It is clear that most school districts consider reorganization due to changes in available space and enrollment and that virtually any grade configuration can be found somewhere. The most common grade configuration pattern in New York State is K-5, 6-8, 9-12 while the second most common is K-4, 5-8 and 9-12. Over the past 30 years there has been a shift from the K-6, 7-9, 10-12 grade pattern to a K-5, 6-8, 9-12 arrangement due to the emergence of the middle school movement. Massena has maintained a 7-8 grade junior high school. However, given all the options that exist, researchers agree there is no “one best way” to arrange the grades. “What” a district does with the grade configuration, not “which” grade configuration is used, is what best determines student success.

In addition to the grade alignment by building, it is important to determine how each of the district’s current buildings is currently being utilized. Tables 7.3-7.5 that follow show the current year utilization of the district’s three elementary schools.



<b>Table 7.3</b> <b>Jefferson Elementary School Classroom Usage 2016-17</b> <b>474 Students</b> <b>(Includes Gym, Cafeteria, Media Center, Music Room, &amp; Art Room)</b>				
School Building	No. of Full-Size Rooms	Grade Level Classrooms (21)	Other Usage of Full-Size Rooms (10)	Usage of Small Rooms, Not Full-Size, Other Than Administration
Jefferson	31	K-3 1-3 2-3 3-3 4-3 5-3 6-3	Pre-K-1 Jr-K-1 Special Education-6 Math AIS-1 Reading AIS-1	Band-1 Reading AIS-1 OT/PT-1 Counselor-1 Faculty Room-1

<b>Table 7.4</b> <b>Madison Elementary School Classroom Usage 2016-17</b> <b>466 Students</b> <b>(Includes Gym, Cafeteria, Media Center, Music Room, Band Room, &amp; Art Room)</b>				
School Building	No. of Full-Size Rooms	Grade Level Classrooms (21)	Other Usage of Full-Size Rooms (8)	Usage of Small Rooms, Not Full-Size, Other Than Administration
Madison	29	K-3 1-3 2-3 3-3 4-3 5-3 6-3	Pre-K-1 Special Education-5 Title I Reading-1 AIS Math-1	Speech-1 Special Education-1 OT-1



<b>Table 7.5</b> <b>Nightengale Elementary School Classroom Usage 2016-17</b> <b>445 Students</b> <b>(Includes Gym, Cafeteria, Media Center, 2 Music Rooms, &amp; Art Room)</b>				
School Building	No. of Full-Size Rooms	Grade Level Classrooms (21)	Other Usage of Full-Size Rooms (9)	Usage of Small Rooms, Not Full-Size, Other Than Administration
Nightengale	30	K-3 1-3 2-3 3-3 4-3 5-3 6-3	Pre-K-1 Jr. K-1 Special Education-4 Reading AIS-1 Math AIS-1 OT/PT-1	Faculty Room-1 Speech-1

In looking at tables 7.3 through 7.5, the following table 7.6 shows how many more full size classrooms each elementary school has in addition to those spaces devoted to Pre-K-6 education.

<b>Table 7.6</b> <b>Summary of Elementary Class Sections by Building</b>				
School	Grade Levels	# of Students	# of Common Branch Classrooms	# of Full Size Classrooms
Jefferson	Pre-K-6	474	21	31
Madison	Pre-K-6	466	21	29
Nightengale	Pre-K-6	445	21	30

Comparing the number of common branch classrooms in each building with the number of full size classrooms, and allowing for Pre-K, special education, remedial, and other spaces, it is apparent that there is not an abundance of space in these buildings. Tables 7.7 and 7.8 that follow shows how the space in the middle school and the high school is currently being used.



<b>Table 7.7</b> <b>JW Leary Junior High School Classroom Usage 2017-18</b> <b>(Includes Gym, Fitness Room, Cafeteria, Band, Chorus, Art, Technology (2) &amp; Library)</b>				
School Building	No. of Full-Size Rooms	Grade Level Classrooms (18)	Other Usage of Full-Size Rooms (13)	Usage of Small Rooms, Not Full-Size, Other Than Offices
JW Leary	31	English-4 Social Studies-4 Math-4 Science-4 LOTE-2	AIS-2 Special Ed-5 Family and Consumer Science-2 Orchestra-1 Study Hall-1 ISS-1 Health-1	JOM-1 Open-1 AIS-2 Special Ed-1 Computer Lab-3

<b>Table 7.8</b> <b>High School Classroom Usage 2017-2018</b> <b>(Includes 2 Gyms, Fitness Center, Pool, Cafeteria, Auditorium, Two Instrumental Music Rooms, Vocal Music, Three Art Rooms, Media Center)</b>				
School Building	No. of Full-Size Rooms	Core Academic Classrooms (34)	Other Usage of Full-Size Rooms (29)	Usage of Small Rooms, Not Full-Size, Other Than Offices
High School	63	English-8 Social Studies-7 Math-6 Science-8 LOTE-5	Special Education-5 Yearbook-1 NCSTEP/JOM-1 Multipurpose Room-1 Business-3 Native Resource-1 Technology-4 Health-1 Teachers Lounge-1 Computer Center-3 Conference Room-3 Wrestling Room-1 Storage Room-4	ISS Testing Center LPP Special Education Bookstore Copier Room Raider Pantry

As can be seen from tables 7.7 and 7.8 above, there are 94 full size classrooms, 52 of which are being used for core academic classrooms. There are 42 other classrooms that are being used for related instructional services including ten special education classrooms, seven business and technology classrooms, two AIS rooms, and three computer labs. While there certainly is some room, there does not appear to be an abundance of space in these two buildings. In addition to the assigned use for each of the rooms in the junior high school and the high school, it is also



important to see how often each of these rooms is used each day. Table 7.9 and 7.10 that follow shows that period-by-period utilization for each room in both schools.

Table 7.9 Room Utilization-Leary Junior High										
Room	1	2	3	4	5&6 or 6&7	7&8 or 8&9	10	11	Total	% Usage
203		1	1	1	1	1		1	6	75%
205	1	1	1	1	1	1	1	1	8	100%
215	1	1			1	1	1	1	6	75%
216	1	1		1	1	1	1		6	75%
217	1	1		1	1	1	1	1	7	88%
218		1	1	1	1		1	1	6	75%
219			1	1	1	1			4	50%
301	1	1	1	1	1	1		1	7	88%
302	1	1	1	1	1	1	1	1	8	100%
303	1	1	1	1	1	1	1	1	8	100%
304	1	1	1	1	1	1	1	1	8	100%
305	1	1	1	1	1	1	1	1	8	100%
306	1	1	1	1	1	0.5	1	1	7.5	94%
307	1	1	1			1	1	1	6	75%
401	1	1	1	1		1	1	1	7	88%
402	1	1	1	1	1	1	1		7	88%
403		1	1	1	1	1		1	6	75%
404			1	1	1	1		1	5	63%
405		1	1	1	1	1		1	6	75%
407	1	1	1	1	1	1	1	1	8	100%
408	1			1	1	1	1	1	6	75%
409		1	1	1			1	1	5	63%
410	1	1	1	1	1	1	1	1	8	100%
412		1	1	1	1	1	1	1	7	88%
413		1	1	1			1	1	5	63%
414		1	1		1	1	1		5	63%
415		1	1	1	1		1	1	6	75%
418	1	1	1	1	1	1	1	1	8	100%
501	1	1		1	1	1		1	6	75%
502		1	1	1	1	1	1	1	7	88%
503	1	1	1		1	1	1		6	75%
504		1	1	1	1	1	1	1	7	88%
506		1	1	1	1	1		1	6	75%
510	1	1		1	1	1	1	1	7	88%
511		1	1	1	1	1		1	6	75%
512	1	1		1	1	1	1	1	7	88%
									Ave.	82%



**Table 7.10**  
**High School Room Utilization-Grades 9-12**

Room	1	2	3	4	5&6 or 6&7	7&8 or 8&9	10	11	Total	% Usage
101	1	1	1		1	1	1	1	7	88%
102	1	1		1		1	1	1	6	75%
103	1	1		1	1	1	1	1	7	88%
104	1	1	1	1	1	1		1	7	88%
105	1		1	1	1	1	1	1	7	88%
106	1	1	1	1	1	1		1	7	88%
107	1	1	1	1	1		1	1	7	88%
108	1		1	1	1	1		1	6	75%
114A	1	1		1	1	1	1	1	7	88%
114C			1	1	1	1	1	1	6	75%
201		1	1	1	1	1	1	1	7	88%
204	1		1	1	1	1	1	1	7	88%
205	1		1	1	1	1	1	1	7	88%
206	1	1	1	1	1	1	1		7	88%
207	1	1	1		1	1		1	6	75%
208	1		1	1	1	1	1	1	7	88%
209		1	1	1	1	1	1	1	7	88%
210		1	1	1	1	1	1		6	75%
211	1	1	1			1	1	1	6	75%
301	1		1	1	1	1	1	1	7	88%
302			1	1	1	1	1	1	6	75%
303		1	1	1		1	1	1	6	75%
304	1	1	1		1		1	1	6	75%
305	1	1	1	1	1	1		1	7	88%
306	1	1	1	1	1	1	1	1	8	100%
308		1	1	1	1	1	1	1	7	88%
311	1	1	1	1		1	1	1	7	88%
314				1			1		2	25%
401	1	1	1	1	1	1	1	1	8	100%
403	1	1	1		1	1		1	6	75%
404	1	1	1			1	1	1	6	75%
405	1		1	1	1	1	1	1	7	88%
406	1	1	1		1	1	1		6	75%
407	1	1	1		1	1	1		6	75%
408	1	1	1		1	1	1	1	7	88%
409	1	1	1			1	1	1	6	75%



410	1	1	1			1	1	1	6	75%
411	1	1	1			1	1	1	6	75%
601		1	1	1	1		1	1	6	75%
602	1	1	1			1	1	1	6	75%
603	1	1	1		1	1		1	6	75%
604	1	1		1	1	1	1	1	7	88%
605	1	1	1	1	1		1	1	7	88%
606	1	1	1	1	1		1	1	7	88%
702	1	1	1	1	1	1	1	1	8	100%
716	1	1	1	1	1		1	1	7	88%
800	1				1	1		1	4	50%
802	1		1	1			1		4	50%
803	1	1	1	1	1	1		1	7	88%
804	1	1	1	1	1		1	1	7	88%
805	1	1	1	1	1	1	1		7	88%
808		1	1	1		1	1	1	6	75%
908	1	1		1		1	1	1	6	75%
910	1	1		1		1	1	1	6	75%
911	1	1	1	1			1	1	6	75%
922	1	1	1	1		1	1	1	7	88%
924								1	1	13%
928	1		1	1	1	1	1		6	75%
									AVG	79%

Tables 7.9 and 7.10 provide another method for measuring the effective utilization of the junior high school and the high school by looking at the use of the rooms on a period-by-period basis. This is a more detailed analysis than simply identifying the major use of the rooms in the building. For example, tables 7.7 and 7.8 show us that a room might be used for English but the tables do not tell us whether the room is used every period of the day or not. The previous tables 7.9 and 7.10 show that analysis for the junior high school and the high school, based on the eleven period schedule for that building.

The data from tables 7.9 and 7.10 show that the typical classroom in the junior high school and the high school is used an average of approximately 80% of the time, the junior high school being used 82% of the time and the high school being used 79% of the time. It is impossible to schedule any school building at 100% utilization. If school districts use their facilities to 80-85% capacity, they generally feel as if they are making good use of the buildings. Therefore, a building that is scheduled at 82% or 79% utilization is a building that has space that is very well utilized. That is not to say that there is not some extra space in both of these buildings. However, the amount of space that might be available would not be sufficient to accommodate a grade level of students, thereby impacting the alignment of grades across the district.



Lastly, a cursory review was undertaken of the district’s athletic facilities. Like nearly every other school district, more athletic space could be used. However, all teams are able to practice in district facilities and no new sports are planned for the immediate future. The district has a field with an artificial playing surface with a useful life expectancy of approximately 5-7 years. Better drainage seems to be a need at the high school fields and another locker room and storage room would be nice. Given these fairly traditional needs for the athletic department, it does not appear that any of these items will impact the grade organization of the school buildings.

***The Building Condition Survey***

In addition to space utilization, another important aspect for determining future facility use is the overall physical condition of the buildings themselves. The New York State Education Department requires all school districts to conduct a Building Condition Survey (BCS) every five years.

The surveys for all school districts were required to be updated in 2015. The table below summarizes the estimated cost of improvements for each of Massena’s school buildings.

<b>Table 7.11</b>				
<b>School Building Priorities from 2015 Building Condition Survey</b>				
Facility	Priority 1*	Priority 2*	Priority 3*	Total
Jefferson	\$4,936,450	\$1,083,800	\$5,995,800	\$12,016,050
Madison	\$6,111,000	\$3,570,950	\$9,823,600	\$19,505,550
Nightengale	\$7,476,340	\$2,970,900	\$6,933,600	\$17,380,840
Leary Junior High	\$7,325,150	\$6,478,900	\$3,956,200	\$17,760,250
High School	\$15,710,148	\$4,695,400	\$7,215,700	\$27,621,248
<b>TOTAL</b>	<b>\$41,559,088</b>	<b>\$18,799,950</b>	<b>\$33,924,900</b>	<b>\$94,283,938</b>
*All items in the BCS are designed to incorporate facilities changes that will enhance the ability of the staff to educate students. Within that goal, priorities are selected based on facility and programming needs following consultation with various stakeholders. Key criteria used in final selections for a capital project will include health and safety, security, and energy efficiency.				

Not all of the items in the Building Condition Survey are urgent. On the other hand, there are items associated with each of the buildings that require attention in the near future and other items that are nearing the end of their useful life. It is just a matter of time before some of these matters become more urgent and major sources of significant expense. In this planning, it is also important to remember that New York State will reimburse Massena at the rate of 93.4% of all approved building expenses.

In any study of a district’s facilities, it is important to identify the issues noted in the Building Condition Survey. Having said that, however, the items identified in the BCS are not an integral matter for this study. Whether or not this study was undertaken, the district would have had to plan for addressing the needs identified in the BCS. The capital work associated with items in the BCS as well as the financing that is necessary to accomplish this work are items that



the district must consider and plan for, whether or not it decides to make any changes to its grade structure and building organization.

As the district considers options for organizing its schools, understanding the current utility costs for each building is important. Table 7.12 that follows shows the 2016-17 utility costs for each of the district’s five school buildings.

<b>Table 7.12 Utility Costs for Five School Buildings-2016-17 School Year</b>					
	Jefferson	Madison	Nightengale	Junior High	High School
Electric	22,167	20,421	20,825	30,157	87,639
Natural Gas	34,978	31,320	35,262	27,072	132,824*
Total	57,145	51,741	56,087	57,229	220,463
Savings @ 40%	22,858	20,696	22,435	22,892	88,185
* Includes CAB					

In considering the possible closure of one of the elementary schools, it is important to calculate the utility cost savings that might accrue to the district. It is assumed that the district will maintain ownership of the closed school, will not be renting the facility, and will be responsible for the cost of the utilities for the closed building so that the building remains in good repair. As a rule, it is estimated that savings of 40% will accrue to the district when comparing an open building versus a closed building. Given the total financial scope of these facilities decisions, the utility savings that accrue to the district are fairly insignificant.

Now that the baseline data about the school facilities has been identified, options for rearranging the grade levels were explored. Table 7.13 that follows is a reminder of the grade configuration by building.

<b>Table 7.13 2017-18 Grade Configuration by Building</b>	
Building	Grade Levels
Jefferson Elementary School	Pre-K-6
Madison Elementary School	Pre-K-6
Nightengale Elementary School	Pre-K-6
Leary Junior High School	7-8
Massena High School	9-12

Within the grade structure identified in table 7.13, the following table summarizes the number of students and the number of sections in each of the district’s elementary schools



School	Grade Levels	# of Students	# of Common Branch Classrooms	# of Full Size Classrooms
Jefferson	Pre-K-6	474	21	31
Madison	Pre-K-6	466	21	29
Nightengale	Pre-K-6	445	21	30

The advisory committee was asked to consider the current grade arrangement as well as other options that might exist. As a reminder, table 7.15 that follows shows the current arrangements of classes across the elementary schools. In this arrangement there are 68 FTE sections of classes when including Pre-K and 65 sections of classes in grades K-6.

Grade	Number of Sections and Class Size of Each Section		
	Jefferson	Madison	Nightengale
Pre-K*	18, 18	15, 13	16, 15
K	14**, 16, 17, 17	18, 20, 19	16**, 16, 16, 17
1	18, 18, 16	19, 18, 19	20, 21, 21
2	16, 16, 16	21, 21, 21	20, 19, 19
3	21, 19, 20	22, 22, 22	19, 19, 19
4	18, 19, 21	20, 21, 22	19, 17, 17
5	22, 22, 23	22, 23, 22	22, 18, 20
6	23, 23, 22	22, 22, 22	19, 22, 19
<b>K-6 Total</b>	<b>22/417 (19.0 avg)</b>	<b>21/438 (20.9 avg)</b>	<b>22/415 (18.9 avg)</b>
*1/2 day classes with morning and afternoon sections using the same classroom			
**There are two JK classes: one at Jefferson of 14 students and 1 at Nightengale of 16.			

Massena has embraced the neighborhood school concept for the location of its elementary schools. Under this model, each elementary school contains all elementary grades and is generally organized around neighborhoods. The advisory committee was asked to identify advantages and disadvantages of the current system and developed the following listing:

**Advantages**

- Smaller class size
- Relationships with families
- Hub of neighborhood
- Many students can walk to school
- All elementary students in each family are in the same school
- One less transition for students
- Sense of family



**Disadvantages**

- Few teachers within grade level for collaboration
- Issues if school is full – students have to transfer to other buildings
- Inconsistency of class size; not easy to even out classes
- Increased staff
- Building administrator is generalist
- Challenge of shared staffing

In addition to the neighborhood concept for organizing elementary schools, another method for organizing schools is called the grade center plan. The grade center plan is also known as the Princeton Plan or as stacking. In this model, each elementary school is generally organized around grades, often creating primary schools and intermediate schools within a school district. In Massena’s case, this would be the creation of a Pre-K-1 building, a 2-4 building, and a 5-6 building. A grade center model could be structured as shown in table 7.16 that follows.

<b>Table 7.16</b>			
<b>Possible Building Structure/Classrooms with Grade Centers</b>			
Grade	Building A	Building B	Building C
Pre-K	3		
Jr. K	2		
K	7		
1	8		
2		8	
3		8	
4		8	
5			9
6			9
<hr/>			
AIS	2	2	2
Special Education	6	3	6
OT/PT			1
<hr/>			
Total Classrooms/ Current Classrooms	28/31	29/29	27/30

When all of the students in a grade level are located in the same building, efficiencies can be realized. As noted in the previous two tables, the current neighborhood school system requires 68 Full-Time Equivalent (FTE) sections of common branch classrooms while the grade center model educates the same number of children with 62 sections. Since each elementary section requires space and staff, reducing six sections can represent a significant savings.

The advisory committee was also asked to provide input on the advantages and disadvantages of grade center schools and developed the following listing.



**Advantages**

- Balanced class /section size
- Special education students served better
- Groupings would improve – socialization for students from K through 12
- Benefit of consistency of instruction at grade levels
- All grade level staff together
- Administrators/counselors could specialize
- Better opportunities for professional development
- After school and music programs would be enhanced
- Minimize problems of shared staff
- More adaptable to fluctuating population
- Decreased staffing and more space
- More cohesive graduating class
- Arts, chorus, orchestra would be together
- Change “labels” of schools
- Socio-economic status students would be more distributed

**Disadvantages**

- Logistical issues
- Increased transitions for students
- Complicates transportation and parent pickups
- Parents might have to go to multiple buildings to drop students off or visit teachers
- Higher class size
- Neighborhood loses school
- Teachers don’t get to know students/families as well as they do in neighborhood schools

As consideration is given to reorganizing the elementary schools, the history of school closures in Massena should be understood. Table 7.17 that follows shows this history.

<b>Table 7.17 History of School Closures in Massena</b>		
School	Year Closed	Comments



Lincoln Elementary	1971	134 students redistributed
Washington Elementary	1977	175 students redistributed
Louisville Elementary	1995	155 students re-distributed to Twin Rivers and Madison Elementary
Twin Rivers Elementary	2000	223 students redistributed to Madison, Jefferson, and Nightengale

Finally, the timing of undertaking capital projects is often tied to the years that current debt is retired by the school district. For example, if new debt is taken on in a year that current debt is being retired, the impact to the taxpayer can be greatly reduced. Massena’s existing debt will drop by approximately \$500,000 in 2023-24, by approximately \$1,100,000 in 2024-25, and by approximately \$600,000 in 2025-26. These are very important milestones in terms of the financial planning for capital projects.



## CHAPTER 8 STAFFING

Education is a people intensive business. School districts routinely spend 70-75% of their operating budgets on salaries and fringe benefits for the people who work in their schools. As school districts examine how to “educationally and fiscally” reconfigure their grades and/or facilities, consideration of the staffing needs of the school district is important. This chapter of the report examines staffing patterns in Massena as well as the staffing implications should changes in grade levels and/or facilities be considered.

With respect to instructional staff, Massena currently has 218 teachers, 27 teaching assistants, and 58 teacher aides. From a building administrative perspective, Massena has eight building principals. Like all school districts, Massena focuses its resources on the academic program. The data associated with these and other staff members can be seen in table 8.1 that follows.

Title	Number of Staff	Total Salaries	Average Salary
Administrators	10	945,942	94,594
Aides	58	1,197,538	20,647
Bus Drivers	30	751,010	25,034
Bus Mechanics	2	127,790	63,895
Clerical	18	936,057	52,003
Custodians/Cleaners	22	922,147	41,916
Information Tech	5	231,413	46,283
Food Service	25	424,072	16,963
Operations & Maintenance	3	191,685	63,895
Nurses	9	388,907	43,212
11 Month Principals	5	453,761	90,752
10 Month Principals	2	171,948	85,974
12 Month Principals	1	99,029	99,029
Teachers	218	13,641,259	62,575
Teaching Assistants	27	1,088,494	40,315
TOTAL	435	21,571,052	

In addition to salaries paid to employees, there are obligations that accrue to the school district for the cost of fringe benefits. In addition to health insurance costs, the district has costs for employee retirement plans, workers compensation, and social security. The percentage cost of fringe benefits varies greatly for each employee group. In general, employees with lower salaries will have fringe benefit costs that are a larger percentage while higher paid employees may have fringe benefit costs that are higher but represent a lower percentage of costs for the



district. For purposes of this study, it will be estimated that fringe benefit costs for the district represent 47% of all salary costs. Table 8.2 that follows shows staffing costs with fringe benefits included.

<b>Table 8.2</b>				
<b>Average Salaries with 47% Fringe Benefits</b>				
Title	Number of Staff	Total Salaries	Average Salary	Average Salary with 47% Fringe
Administrators	10	945,942	94,594	139,053
Aides	58	1,197,538	20,647	30,351
Bus Drivers	30	751,010	25,034	36,799
Bus Mechanics	2	127,790	63,895	93,926
Clerical	18	936,057	52,003	76,445
Custodians/Cleaners	22	922,147	41,916	61,616
Information Tech	5	231,413	46,283	68,035
Food Service	25	424,072	16,963	24,935
Operations/Maintenance	3	191,685	63,895	93,926
Nurses	9	388,907	43,212	63,521
11 Month Principals	5	453,761	90,752	133,405
10 Month Principals	2	171,948	85,974	126,382
12 Month Principals	1	99,029	99,029	145,573
Teachers	218	13,641,259	62,575	91,985
Teaching Assistants	27	1,088,494	40,315	59,262
<b>TOTAL</b>	<b>435</b>	<b>21,571,052</b>		

One of the options that are considered in any facilities study is the possible closure of one of the district's elementary schools. Should the district decide to close one of the elementary schools, significant cost savings in the area of staffing could be realized. In order to calculate this staff savings, table 8.3 is presented to show the current staffing levels in each of the district's schools.



Title	Jefferson	Madison	Nightengale	J.W. Leary	High School
Aide	13	7	10	8	12
12 mo. Clerical	1	1	1	2	4
Custodian/Cleaner	3	3	3	3	6
Food Service	4	4	4	4	9
Nurse	2	2	1	1	2
11 mo. Principals	1	1	1	1	1
10 mo. Principals				1	
12 mo. Principals					1
Teacher	39	34	41	39	65
Teaching Assistant	3	3	5	2	2

Staff savings raise a number of complicated issues. Generally speaking, there are two different options for reducing staff:

- ✓ Involuntary Reductions-Staff reductions are more predictable, cause more anxiety, and maximize savings.
- ✓ Attrition-Reductions are driven by decisions individual staff make, reductions are generally well accepted, and the savings accrue when appropriate vacancies occur.

Usually districts are reluctant to involuntarily reduce staff. Rather, districts often prefer to realize staff reductions as a result of attrition. Attrition occurs when teachers voluntarily leave their positions and, as a result, vacancies occur. The advisory committee asked for information about the number of teachers that resign annually in Massena to ensure that the attrition methodology would be effective in realizing the staff savings that would be identified. Table 8.4 that follows shows the most recent four-year history of resignations that have occurred in Massena.

Year	Level	Years of Service
2016-17	High School	1
	Junior High	4
11 Total	High School	34*
	Elementary (2)	17*
	Elementary (3)	1
	Elementary	15
	Elementary	12
	Elementary	6



2015-16  21 Total	High School (2)	31*
	Junior High	17*
	Junior High (3)	32*
	Junior High	4
	Elementary (2)	19*
	Elementary	2
	Elementary (3)	32*
	Elementary	18*
	Elementary	33*
	Elementary (2)	10
	Elementary	9
	Elementary	11
	Elementary	8
	Elementary	13
2014-15  11 Total	High School	19
	High School	25*
	Junior High	26*
	Junior High	8
	Junior High	10
	Elementary	10
	Elementary (2)	34*
	Elementary	30*
	Elementary	31*
	Elementary	5
2013-14  10 Total	High School	32*
	High School	3
	High School	4
	Junior High	8
	Junior High	14
	Junior High	30*
	Junior High	5
	Elementary	5
	Elementary	9
	Elementary	7
( ) show areas where more than one person fit that category * denotes retirement as opposed to resignation		

Based on an analysis of table 8.4, it is clear that the attrition approach to reducing staff positions in Massena is a very viable option. As the table shows, an average of 12-13 instructional staff have resigned annually in Massena over the past four years. There is no reason to believe that this general trend will not continue in the future. As a result, it is recommended that Massena use attrition as the method for reducing staff. This means that no staff member's job would be lost involuntarily as a result of the decisions that the board will make related to this study. Given that these staffing benchmarks have been identified for the district, however, it will be shown in other chapters of this report that closing one of the elementary buildings is just not



possible. There is not sufficient room in two elementary schools to house the students that are now educated in three buildings.

**Summary:**

- Education is a people intensive business. School districts routinely spend 70-75% of their operating budgets on salaries and fringe benefits for the people who work in their schools.
- It is recommended that any reductions in positions arising from this study be accomplished through attrition



## CHAPTER 9 TRANSPORTATION

A review of the system of transporting students to and from school becomes important to a facilities study to determine the impact that any changes will have on the length of time that students are on buses and the overall cost of busing. Like most upstate school districts, the Massena Central School District transports many children to school on a daily basis. Massena's transportation fleet consists of 32, 66-passenger buses and 2, 26-passenger buses. In addition, the district operates 7 buses that are owned by the New York State Education Department to transport students to and from the St.Regis Mohawk Territory. Six of the NYSED buses are 66-passenger buses and 1 is a 59-passenger bus.

Maintaining such a complex transportation system in working order is integral to a district's organization. Massena has a long-term plan for school bus replacement that ensures that safe buses are available for student transportation. The district replaces buses every seven or eight years. Similarly, the NYSED buses are on a ten-year replacement program. While transportation is a major expense in school districts, New York State currently aids transportation expenses at about 90% indicating that approximately \$.90 of every dollar spent on allowable transportation costs are reimbursed by New York State.

Not all students in the district are bused to school. The board policy governing transportation provides that students in the Massena School District shall be provided transportation to and from school within the following limits:

- a) For students in Pre-K – 6,  $\frac{3}{4}$  mile or beyond
- b) For students in grades 7 – 12, 1  $\frac{1}{2}$  miles or beyond

As a result of this policy, there are almost 800 students who are not eligible for transportation and walk to school. This includes 177 students at Nightengale, 98 students at Madison, and 166 students at Jefferson. There are 146 students at the junior high who walk and 207 students at the high school who are not eligible for busing and walk to school. Changes to the organization of schools would change these numbers.

To create the most efficient bus routes that minimize time on buses for students, the district uses Versatrans, a school transportation routing and planning software program. This allows the district to plan the most efficient and effective bus routes for students.

The district employs a combination of a single, double and triple daily routing plan to get students to and from school. A double run means that the bus picks up junior high school students on a specific route on an early run, drops the students off at the junior high or high school and then picks up the elementary students on that same route. This route is then reversed in the afternoon with high school students being picked up and dropped off first before the bus returns to pick up elementary students. The district has 18 double morning and afternoon secondary/elementary runs. There are also 3 single secondary runs including late runs and two single elementary runs. And the two triple runs transport students to the high school and then do two elementary runs in the morning. In addition, there are 3 morning/afternoon secondary runs and two morning/afternoon elementary runs serving the Native American students on the St. Regis Mohawk Territory.

Massena conducts bus runs to several locations including the 3 mid-day Pre-K bus routes, 2 morning/mid day/afternoon runs to the BOCES, and 4 late buses from the High School and



Junior High. There are also 4 buses that transport special education students to Ogdensburg, Potsdam, and Canton for specialized BOCES programs.

Finally, one of the questions often asked during facilities studies deals with how the potential changes might impact the length of time that students are on buses. Currently the average ride for students is estimated at between 40 and 45 minutes each way. The longest ride for students is about an hour and impacts primarily secondary students. The shortest ride for students is about 10 minutes for elementary students. It should be noted that the New York State Education department guidelines indicate a recommendation that to the extent possible bus rides should be an hour or less.

#### **Summary**

- The district operates primarily on a double trip system, with a few single and triple trips.
- About 30% of the students walk to and from school every day. 70% of the students are bused on one of the 41 buses in the fleet.
- The average ride for students is about 40-45 minutes.
- Transportation is aided at approximately 90% of allowable costs.



## CHAPTER 10 FINANCE

Effective management of finances is an important requirement for any school district. It is particularly important in a challenging national and state economy like we have seen over the past seven to ten years.

As noted previously, one important measure of a Board of Education's ability to find the balance between the quality of education that the community wants for its children with the community's ability to support this education is the annual school district budget vote. The following table summarizes the results from school district budget votes from 2008 to 2017. As can be seen, the budget has passed every year with 2011 being the lone exception.

<b>Table 10.1 District Budget Vote History</b>			
Year	Yes Votes	No Votes	Total Votes
2018	330	71	401
2017	381	89	470
2016	433	94	527
2015	400	127	527
2014	478	157	635
2013	463	263	726
2012	1,072	533	1605
2011*	607	748	1,355
2010	573	354	927
2009	691	336	1,027
2008	804	259	1,063
<i>* Board adopted contingency budget</i>			

In addition to the outstanding record on school budget votes, the Massena community also supported major capital project votes in 2006. Table 10.2 that follows shows the result of this referendum.

<b>Table 10.2 Capital Project Votes</b>		
Year	Yes	No
May 2006-Capital Project	523	650
August 2006-Capital Project	916	438
August 2006-Field Turf	759	580

While the May 2006 vote was defeated, the district broke out the vote into two different projects and both passed by significant margins in August. All of these expressions of voter support show a school district that is strongly supported by its community.



A second window into the district’s current fiscal situation is through examining the history of the full value tax rate for the district. The five-year history of the tax rate is shown in table 10.3 that follows.

<b>Table 10.3</b>					
<b>Five-Year History of Full-Value Tax Rates Per \$1,000</b>					
	2013-14	2014-15	2015-16	2016-17	2017-18
Tax Levy	\$13,771,827	\$13,997,687	\$14,258,588	\$14,258,588	\$14,399,748
Full Value	\$769,978,649	\$773,212,068	\$784,180,866	\$784,498,994	\$779,968,630
Full Value Tax Rate Per \$1,000	\$17.89	\$18.10	\$18.18	\$18.18	\$18.46
% Change	3.11%	1.17%	0.44%	0%	1.54%

The full value tax rate is determined by dividing the assessed valuation of taxable property of the district by the equalization rate(s) of the city, town(s), or village(s) that make up the school district. This means that the full value tax rate can be increased either by the tax levy increasing, the full value decreasing, or both. This table shows a very consistent and gradual increase in the tax rates, a sign that the finances have been very well managed by the district over time.

The next area that was explored is the history of the assessed value tax rates. The assessed tax rate is calculated by town/city and is the rate that actually shows up on the property owner’s tax bill. The five-year history of assessed tax rates for the Massena Central School District is shown in table 10.4 that follows.

<b>Table 10.4</b>						
<b>Tax Rates Per \$1,000 of Assessed Value</b>						
Town	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Brasher	19.27	20.32	19.68	19.98	19.54	19.85
Louisville	18.26	18.44	18.86	19.98	20.65	20.74
Massena	17.35	17.89	18.10	18.18	18.18	18.46
Norfolk	21.16	21.81	22.08	22.17	22.17	22.51

The reality of financing in virtually every school district is that the tax rate increases every year. Such is generally the case in Massena as well. However, while the tax rates have been increasing, a slow and steady increase is shown. Districts that are not well managed financially will show spikes in these tax rates, something which is never popular with the



taxpayers. The trend of the increases in Massena is another indicator that this district is well managed from a fiscal standpoint.

To assess the district’s overall fiscal position, it is important to focus on the number and amount of reserve accounts the district maintains. Reserve accounts are similar to school district savings accounts and are defined as part of the fund balance that a school district maintains. There are different types of reserve accounts, each with a different focus. The restricted reserve or restricted fund balance is a savings account defined for specific purposes that are defined in the table that follows. The history of the restricted fund balance account in Massena is shown in table 10.5 that follows.

<b>Table 10.5</b>					
<b>Restricted Fund Balance: A Five Year Summary</b>					
Category	6/30/13	6/30/14	6/30/15	6/30/16	6/30/17
Debt Service	0	1,747,995	2,187,658	2,193,479	2,202,786
Unemployment	871,320	872,026	872,158	377,180	377,180
Accrued Liability	9,945,884	8,802,250	8,708,201	8,556,548	8,495,485
Retirement	2,417,529	2,745,501	2,745,501	4,006,465	4,006,465
Workers Comp	0	0	0	1,289,705	1,289,708
Capital	0	0	0	2,250,000	2,741,162
Tax Certiorari	3,000,000	2,000,000	2,000,000	1,000,000	1,000,000
Total	16,234,733	16,167,772	16,513,518	19,673,377	20,112,786

Table 10.5 shows a restricted fund balance that has actually been growing over the past three years. The ability to grow the restricted reserves from approximately \$16-20,000,000 over the past three years is an enviable record and again shows prudent management of the district’s resources.

Next we examine the amount of money Massena uses to hold down the tax rate each year; that is, money the district has on hand at the end of the previous year that it applies to the revenue side of the ledger for the upcoming year. This is called the assigned or designated fund balance. From the 2016-17 general fund budget, Massena applied \$2,389,179 to hold the tax rate down. If it had not done so, the district would have had to raise this additional revenue from the local taxpayers to support the 2017-18 school year operation. The end result however is that the district will again have to have at least \$2,389,179 excess revenue this year to do the same procedure for the 2018-19 school year or the local residents will have to make up any difference that is short of this amount. A five-year history of the designated fund balance is shown in table 10.6 that follows.

<b>Table 10.6</b>	
<b>History of Designated Fund Balance</b>	
Year as of June 30	Designated Fund Balance
2012	\$4,121,840
2013	\$3,147,799
2014	\$3,504,887
2015	\$2,768,956
2016	\$2,500,103
2017	\$2,389,179



Table 10.6 shows that, over the period of six years, Massena has actually decreased the amount of designated fund balance to control the tax rate increase each year. This is quite unusual in the recent economy and is another indicator of planned, prudent management of the district’s finances.

A third type of reserve account that many school districts maintain is the unassigned or undesignated fund balance. This is often referred to as the rainy day fund in that its major purpose is to help school districts deal with unforeseen expenditures that come up during the year. Table 10.7 that follows shows the history of Massena’s undesignated fund balance over a period of the last six years.

<b>Table 10.7</b>	
<b>History of Undesignated Fund Balance</b>	
Year	Undesignated Fund Balance
2012	\$3,753,648
2013	\$2,967,140
2014	\$2,333,654
2015	\$4,602,810
2016	\$2,049,794
2017	\$2,741,163

In a time of financial challenges for school districts, it is admirable that Massena has been able to maintain its unassigned fund balance over the past six years. This is an enviable trend for the school district and again is reflective of a school district that is very well managed with respect to its financial resources. Not all school districts are in this condition! The financial standing of the Massena schools is a tribute to the board of education, the superintendent, and the business official for their outstanding leadership in managing the district’s finances.

Now that the reserve accounts have been examined, it is appropriate to look at an overview of the school district’s budget. The 2017-18 school budget is \$52,640,975, up from the 2016-17 budget of \$51,247,165. Expense categories for the current budget are as follows:

- Instruction-80%
- General Support-13%
- Transportation-6%
- Debt Service-1%

These data show us that the vast majority of money spent in the school district is for supporting the instructional program. This is not surprising in that the core function of schools is to educate children.

Revenue to support the expenses of the school district comes from the following sources:

- State Aid-63%
- Federal Aid-6%
- Property Taxes-31%
- Miscellaneous-3%



It is interesting to note that more than two-thirds of the school district’s revenue is coming from state and federal aid. This makes future revenue projections quite precarious since state and federal aid is often unpredictable. The economy, competing state and federal priorities, and politics often drive decisions about aid that is very much out of the hands of school district officials. This is a crucial factor for school district leaders who do their best to financially plan for the future. Increasing salaries, health insurance premium increases, and pension cost increases will all drive up school district costs in the future. The property tax cap and uncertain increases in state aid will limit revenues for school districts and will make future financial planning very difficult.

School districts in New York State are required to have an independent financial audit every year. The 2016-17 audit in Massena had the following comments.

- Increases in health insurance premiums will continue to rise. The District’s consortium is anticipating that premium increases for 2017-18 will be around 8%. Health insurance accounts for 21.1% of the general budget.
- The uncertainty of federal and state funding can have a profound impact on the financial health of the district.
- The School District is anticipating that it will receive more assessment challenges on commercial properties.
- The School District is limited on the money that it can raise through taxes due to the Tax Levy cap that was implemented.
- The School District has ample reserves to navigate into the future.
- The District completed its Building Condition Survey and Five Year Plan for facilities maintenance and improvement last year. These reports will direct the planning for the next capital project.

These comments summarize the financial condition of the Massena Central School District very well. Expenses in the future will certainly continue to increase; revenues from state and federal sources will be uncertain; the ability to raise revenue locally is limited by the property tax cap; and the district is well prepared for this financial challenge coming in the years ahead.

Finally, table 10.8 that follows summarizes the utility costs for all district schools for the 2016-17 school year.

<b>Table 10.8</b>					
<b>Utility Costs for Five School Buildings-2016-17 School Year</b>					
	Jefferson	Madison	Nightengale	Junior High	High School
Electric	22,167	20,421	20,825	30,157	87,639
Natural Gas	34,978	31,320	35,262	27,072	132,824*
Total	57,145	51,741	56,087	57,229	220,463
Savings @ 40%	22,858	20,696	22,435	22,892	88,185
* Includes Central Administration Building					

As stated earlier in this report, in considering the possible closure of one of the elementary schools, it is important to calculate the utility cost savings that might accrue to the



district. It is assumed that the district will maintain ownership of the closed school, will not be renting the facility, and will be responsible for the cost of the utilities for the closed building so that the building remains in good repair. As a rule, it is estimated that savings of 40% will accrue to the district when comparing an open building versus a closed building. Given the total financial scope of these facilities decisions, the utility savings that accrue to the district are fairly insignificant.

In summary, we have concluded that the Massena Central School District is in good condition from a financial standpoint. District staff have provided the type of leadership in managing the district's finances that has positioned the district well for the future. Having said that, the financing of public schools in New York State has a very challenging future. The uncertainty of state aid, the ever-increasing costs associated with operating school districts, and the local tax cap that realistically limits the ability of a school district to raise local revenues will make the future financing of schools most daunting.



## CHAPTER 11 RESEARCH AND LITERATURE ON GRADE REORGANIZATION

Before the feasible options are presented, a brief overview of the relevant research and literature that were fundamental to the study is presented. Grade configuration study is common for school districts around the country; thus substantial research and literature exist. Key research findings were presented to the advisory committee.

First, it is important to note that most school districts that embark on grade configuration study do so because of too much or too little capacity in their schools. In other words, space rather than educational considerations drives the decision. Massena is the exception. It approached the study of grade configurations with one primary purpose in mind—how the district can arrange the K-12 schools to achieve more positive educational outcomes for students while balancing the community’s ability to financially support any new grade/facility arrangement. Massena’s Board of Education and Superintendent are to be commended for addressing grade configuration for the right reasons.

Examination of school districts around the country finds virtually any possible grade configuration. For example, a K-4, 5-8, 9-12 pattern is common in suburban school districts. Some districts have adopted a grade center plan, with all K-2 students in one building and all 3-5 students in another. The K-8, 9-12 grade arrangement is still found in many small rural districts and is a recent trend in the urban areas. The oldest grade configuration is K-12, and is still seen in many small rural districts, even in New York State. The most common pattern of organizing grades in New York State today is K-5, 6-8, 9-12.

Over the past thirty years there has been a trend by districts to change from the K-6, 7-9, 10-12 configuration to K-5, 6-8, 9-12. The impetus for this large scale and pervasive shift has been due to what is commonly known as “the middle school movement.” The middle school movement is an effort to provide a transition phase of schooling—taking children from the cloistered setting of an elementary school to the less structured environment of a high school. Middle school age children have unique needs during this rapidly changing phase of life that may not be adequately addressed in either the typical elementary school or high school.

Unfortunately, school district planners cannot look to the research for the “one best way” to configure the grades. While there is evidence that one can locate to support any grade configuration, there is no conclusive research that indicates that one alignment is necessarily any better than another. A general conclusion that most researchers have reached is that it is “what” a district does with the grade configuration that ultimately determines success or failure, rather than “which” grade arrangement is endorsed. For example, many districts that changed their grade configuration to either a 5-8 or 6-8 middle school never adopted the philosophy and necessary practices to have a true middle school (for example, team teaching, advisor-advisee programs). Consequently, these districts have been unsuccessful in achieving the positive outcomes advanced by middle school advocates.

Finally, the research indicates that school districts studying grade configuration typically must confront a set of common issues. Indeed, some of these surfaced as this study progressed. Specifically, the cost and length of travel for children to get to and from school; how long will students be on the school bus is always a concern that must be addressed if a reconfiguration is to occur. The favorable or unfavorable impact of parent involvement in a child’s schooling is an



element that arises in every instance. The manner in which students will be grouped for instruction (i.e., teaming at the middle school level) is a frequent issue.

Research has found that the number of transitions during a student's K-12 experience should be considered. Each time a student moves from one school to another the educational process is disrupted. Although the student recovers, it is important to minimize the number of transitions in a student's education.

Interaction between various age groups and the influence of older students on younger is usually a significant consideration for districts considering reconfiguration. How will fifth or sixth graders be impacted by proximity to eighth graders?

And finally, the relationship of a building's design for accommodating the instructional program of different grade configurations must be examined.





## CHAPTER 12

### OPTIONS FOR MAINTAINING AND/OR RECONFIGURING THE BUILDING/GRADE ORGANIZATION OF THE DISTRICT

When evaluating the current status of Massena’s grade and facility organization, the consultants first attempted to identify “feasible” options—in other words, how *could* the grades/facilities be arranged. Following this, the next step was to identify the “desirable” options—among the feasible ways, what is/are the option(s) that make the most educational and fiscal sense. Following is a discussion of the “feasible” options with advantages and disadvantages of each followed by the consultants’ prioritization of the “desirable” options.

#### *The Purpose of the Study*

In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?

If so, how should the grades and facilities be arranged?

#### *Identification and Discussion about Feasible Grade/Facility Options*

The consultants and the advisory committee identified options throughout the study process. These options were then the focus of discussion with members of the advisory committee. The advisory committee was asked to critique the options, either agree or disagree with the options, and critique the advantages and disadvantages. The advisory committee was also asked to add additional advantages and disadvantages to each option. Finally, the advisory committee was asked to add any additional options that they thought would be appropriate.

#### *Background for Considering Facilities Options*

Examining the district direction for class size, it is apparent that no firm limits for class size exist in Massena. As a result, in generating options for the future, the guideline of 23 students for grades K-6 was used.

It is also assumed that the district will accept the recommendation of the consultants that any reductions in staff be accomplished through attrition.

Before considering alternatives, the starting point is to again review the elementary structure for the current year as shown in table 12.1 that follows.



Grade	Number of Sections and Class Size of Each Section		
	Jefferson	Madison	Nightengale
Pre-K	18, 18	15, 13	16, 15
K	14*, 16, 17, 17	18, 20, 19	16*, 16, 16, 17
1	18, 18, 16	19, 18, 19	20, 21, 21
2	16, 16, 16	21, 21, 21	20, 19, 19
3	21, 19, 20	22, 22, 22	19, 19, 19
4	18, 19, 21	20, 21, 22	19, 17, 17
5	22, 22, 23	22, 23, 22	22, 18, 20
6	23, 23, 22	22, 22, 22	19, 22, 19
<b>K-6 Total</b>	<b>22/417 (19.0 avg)</b>	<b>21/438 (20.9 avg)</b>	<b>22/415 (18.9 avg)</b>
*There are two JK classes: one at Jefferson of 14 students and 1 at Nightengale of 16.			

It should be noted that the current organization of the elementary schools has 65 sections/common branch classrooms for grades K-6 and six half-day Pre-K sections occupying three classrooms, one in each elementary building.

### ***Option 1-Status Quo***

Massena has embraced the neighborhood school concept for the location of its elementary schools. Under this model, each elementary school contains all elementary grades and is generally organized around neighborhoods. The advisory committee was asked to identify Advantages and disadvantages of the current system and developed the following listing:

#### **Advantages**

- Smaller class size
- Relationships with families
- Hub of neighborhood
- Many students can walk to school
- All elementary students in each family are in the same school
- One less transition for students
- Sense of family

#### **Disadvantages**

- Few teachers within grade level for collaboration
- Issues if school is full – students have to transfer to other buildings
- Inconsistency of class size; not easy to even out classes
- Increased staff
- Building administrator is generalist
- Challenge of shared staffing



**Option 2-Grade Center Plan**

The grade center plan is also known as the Princeton Plan or as stacking. In this model, each elementary school is generally organized around grades rather than neighborhoods. In Massena’s case, this would be the creation of one elementary school with grades Pre-K-1, one elementary school with grades 2-4, and one elementary school with grades 5 and 6. Assuming an equal distribution of students across the school buildings, a grade center model would be structured as shown in table 12.2 that follows for Massena.

Grade	Building A	Building B	Building C
Pre-K	3		
Jr. K	2		
K	7		
1	8		
2		8	
3		8	
4		8	
5			9
6			9
AIS	2	2	2
Special Education	6	3	6
OT/PT			1
Total Classrooms/ Current Classrooms	28/31	29/29	27/30

The grade center concept is based on putting more children at the same grade level in the same building. When that happens, class sizes can be maximized using school district limits and efficiencies can result. Table 12.3 that follows shows how the structure of the elementary schools changes with grade centers being compared with the current arrangement of classrooms. Table 12.3 shows that the number of sections required to educate elementary children drops from 68 to 62. At the same time, it is apparent that the class sizes at some grade levels increase. Even with grade centers, however, all of the average class sizes are within the range of class sizes that currently exist within the district.



Grade Level	# of Students	Number of Classrooms- Currently	Average Section Size- Currently	# of Classrooms with Grade Centers	Average Section Size with Grade Centers
Pre-K	95	3	15.8	3	15.8
Jr. K	30	2	15.0	2	15
K	156	9	17.3	7	22.2
1	170	9	18.8	8	21.2
2	171	9	19.0	8	21.4
3	183	9	20.3	8	22.9
4	174	9	19.3	8	21.8
5	194	9	21.5	9	21.5
6	194	9	21.5	9	21.5
TOTAL	1,367	68	19.3	62	22.0

The advisory committee was asked to provide the advantages and disadvantages of a grade center plan which resulted in the following list.

**Advantages**

- Balanced class /section size
- Special education students served better
- Groupings would improve – socialization for students from K through 12
- Benefit of consistency of instruction at grade levels
- All grade level staff together
- Administrators/counselors could specialize
- Better opportunities for professional development
- After school and music programs would be enhanced
- Minimize problems of shared staff
- More adaptable to fluctuating population
- Decreased staffing and more space
- More cohesive graduating class
- Arts, chorus, orchestra would be together
- Change “labels” of schools
- Socio-economic status students would be more distributed

**Disadvantages**

- Logistical issues
- Increased transitions for students
- Complicates transportation and parent pickups
- Parents might have to go to multiple buildings to drop students off or visit teachers
- Higher class size



- Neighborhood loses school
- Teachers get to know students/families better

### *Other Options*

Throughout the study process, discussions with the advisory committee yielded additional options that were not discussed or studied with the depth that the first two options received. Some of these additional options included the following:

a. Move the 5<sup>th</sup> and 6<sup>th</sup> grades to the junior high and close one of the elementary schools-- The 5<sup>th</sup> and 6<sup>th</sup> grades have approximately 384 students and 18 sections of classrooms. The current junior high has 431 students. Adding the 5<sup>th</sup> and 6<sup>th</sup> grades to the junior high would nearly double the number of students in the building. There is not room in the junior high to add the 5<sup>th</sup> and 6<sup>th</sup> grades. This option is not feasible.

b. Expand the high school to accommodate the 7<sup>th</sup> and 8<sup>th</sup> grades and close the junior high school—The junior high currently has 431 students and the high school has 864 students. To accommodate the junior high students, the high school would have to be expanded by approximately 50%. This would be a very expensive option and there are questions about whether or not the state would aid this option given the satisfactory condition of the junior high.

c. Move the 7<sup>th</sup> grade to the elementary schools, the 8<sup>th</sup> grade to the high schools, and close the junior high—The elementary schools would have to accommodate approximately 213 7<sup>th</sup> graders occupying approximately 10-11 sections/classrooms. The high school would have to accommodate approximately 218 8<sup>th</sup> graders occupying approximately 11 sections. There does not appear to be room in either building to accommodate these proposed changes.

d. There was also a suggestion from the advisory committee that would include building either a new 7-12 building and closing the current junior high school or creating one campus that would house all of Massena's students Pre-K-12. These two ideas were appealing because of the ability to create the type of facilities that would serve 21<sup>st</sup> century needs as well as the ability to spend resources on new facilities rather than on repairing and renovating the current, older buildings.

Several issues need to be addressed when considering these as feasible and desirable options. The first issue relates to the availability of space on the current high school/Nightengale Elementary campus. The New York State Education Department requires a minimum of 10 acres plus 1 acre for every 100 students in schools housing 7<sup>th</sup>-12<sup>th</sup> grades. Similarly, a minimum of 3 acres plus one acre for every 100 students is required for elementary students. Table 12.4 that follows indicates that a minimum of 39 acres would be required if a Pre-K-12 campus were to be constructed and 23 acres would be required to build a new 7-12 building.



<b>Table 12.4</b> <b>Acreage Required by NYSED</b> <b>By Grade Level</b>		
Grade levels	Enrollment 2017-18	Acres required
9-12	832	
7-8	420	
Total 7-12	1252	23 acres
K-6	1271	16 acres
Total		39 acres

Current acreage at the high school and Nightengale Elementary complex is divided into three tax map sections. The first section includes Nightengale and the turf field and is 34.8 acres. The second section with the majority of the high school building and grass playing fields is 27.24 acres and the third parcel is 16.1 acres. Based on this information, it appears that there is enough space for new buildings although it would clearly require reconfiguration of the use of the lots for playing fields.

The second issue deals with the need for approval of this type of project to receive state aid for capital construction. Earlier in this report, we indicate that the state typically aids capital construction that it approves at approximately 93.4% for Massena. The question that is difficult to predict is whether the state would approve construction of new facilities when enrollment is declining and the current facilities are in reasonable condition. Informal discussions with State Education Department representatives indicated that aid approval would not necessarily be automatic for this type of project. They cautioned that the need for the project would have to be justified and project plans developed prior to making any final decision.

The third issue deals with the ability of the district to gain support from its voters to expend funds to build new buildings when the current buildings are in good condition. With estimated costs of \$300 a square foot for new construction, a new 7-12 building would cost approximately \$90 million. Somewhat lesser costs are estimated for an elementary building. Together, the costs to construct a new campus equaling the current square footage of the buildings of approximately 460,000 square feet could easily cost upwards of \$140,000,000. When the advisory committee discussed the possibility of new construction, there was a sense that the community would not perceive it positively in this age of declining enrollments and increasing costs for education.

Finally, should this option be implemented, the community would be faced with three elementary schools and an empty junior high school.

e. Close one of the elementary schools in five years when the enrollment has declined— Enrollment projections were completed for the 2022-23 school year and are shown in table 12.5 that follows.



<b>Table 12.5</b>			
<b>2022-23 Class Sizes for each Elementary School-61 Sections Equal Distribution/Maximum of 23 Students/Class/No JK 373 Students in Junior High; 773 Students in High School</b>			
Grade	Number of Sections and Class Size of Each Section		
	Jefferson	Madison	Nightengale
Pre-K	18, 18	15, 13	16, 15
K	18, 18, 19	18, 18, 19	18, 18, 19
1	17, 17, 18	17, 17, 18	17, 17, 18
2	19, 19, 19	19, 19, 19	19, 19, 19
3	19, 19, 19	19, 19, 19	19, 19, 18
4	17, 17, 18	17, 17, 18	17, 17, 17
5	23, 23	23, 23	16, 16, 16
6	18, 18, 18	18, 18, 18	18, 18, 19
<b>K-6 Total</b>	<b>20/383 (19.2 avg)</b>	<b>20/383 (19.2 avg)</b>	<b>21/384 (18.3 avg)</b>

As can be seen from table 12.5, enrollments are indeed projected to decline in five years from the 2017-18 level of 1,270 elementary school students to the 1,150 elementary students projected in 2022-23. However, the reduction in the number of students does not translate to saving a significant amount of building space. In 2017-18, the 1,270 elementary students are educated in 65 sections. In 2022-23, using Massena’s guideline of a maximum of 23 students per section/classroom, the 1,150 would need 61 sections, a reduction of four sections. This reduction of four classrooms is nowhere near the number of classrooms needed to consider closing one of the elementary buildings.

***Summary of Financial Savings by Option***

Financial savings of the options under consideration may be summarized as follows in table 12.6.



<b>Table 12.6 Staffing and Transportation Implications by Option-Includes Fringe Benefits</b>	
Option	Staffing/Transportation Implications
1-Status Quo	None
2-Grade Center Plan	<p><i>Staffing savings:</i> Reduction of 6 sections/teachers @ \$91,985/teacher = \$551,910</p> <p><i>Additional transportation costs:</i> -8 additional buses @ \$120,000=\$960,000 minus 90% state aid=\$96,000 -8 additional bus drivers @ \$36,799=\$294,392 minus 90% state aid=\$29,439</p> <p>-Total additional costs=\$125,439</p> <p><i>Net savings:</i> \$551,910 - \$125,439 = \$426,471</p>

Table 12.6 above shows that the status quo option saves no money. The grade center option, on the other hand, saves six sections/teachers at the elementary level amounting to savings of \$551,910. However, offsetting the staffing savings are significant additional costs for transportation including the purchase of eight new school buses and the hiring of eight additional bus drivers. The only factor that makes this option even worth considering from a financial standpoint is that the state reimburses Massena 90% of its expenditures for transportation. In the end, however, the district will have to weigh the savings of \$426,471 on a \$54,000,000 budget against the break up of the neighborhood school concept and the disruption that will be felt by many families.

***Discussion of Options***

Massena is an unusual district in that all of its school facilities were built in the 1950’s and have had significant renovations completed in each building. In addition, each of the three elementary schools have the same number of sections at every grade level and the class sizes of those sections are unusually similar across the three schools. Each of the buildings is also utilized to near maximum capacity. In short, the three elementary schools look like replicas of each other. Because of these similarities, there really were no “problems to fix” as part of this study and, as a result, the number of options was quite limited.

The status quo option is an option that is considered in every facilities study. It is often the option that is favored by staff because it can be implemented without any change. The downside of the status quo option is that because there is no change, no financial gains are realized, one of the factors that was to be considered as part of this study.

A grade center approach provides for all students in the district at specific grade levels to be educated in the same building. In Massena, a grade center or stacking approach would mean



that the Pre-K to Grade 1 students would all be in one building, Grades 2 - 4 would be in a second building, and Grades 5 and 6 would be in a third building. While the advantages of this type of approach include the ability to equalize class sizes and to provide staff from similar levels to collaborate together, the disadvantages in Massena include significant transportation issues including additional time on buses for all students and increased costs for transportation. Grade center or stacking approaches have been used primarily in districts as a response to enrollment issues. The research on grade centers is not extensive and a review of the existing literature on the grade center approach shows mixed results in achievement. Adding to these factors are the impact on parents and the loss of the neighborhood school concept. Based on all of these reasons, we would not recommend this model at this time.

### ***Recommendations***

1. It is recommended that the Board of Education conduct at least one public hearing/comment period on this study for the general public to express opinions.
2. It is recommended that the district convene a facilities planning committee whose role it will be to develop and monitor a long term facilities plan for the district. This may include the closure of one or more of the school buildings, the scope of work to be performed from the Building Condition Survey, the long-term design of appropriate school facilities and the financing of these initiatives. This committee should be comprised of both school staff and members of the community.
3. It is recommended that the district provide the facilities committee with annual enrollment projections to assist with the facilities planning initiatives.
4. It is recommended that, effective with the beginning of the 2018-19 school year, the Board of Education continue to implement Option 1, the status quo option for all schools.
5. It is recommended that the district use the attrition method for reducing staff should any staff reductions be realized from this initiative.



## **APPENDIX**



Appendix A: Minutes from Advisory Committee Meetings



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of September 20, 2017  
DATE: September 22, 2017

**Attendance:** Committee Members: Michael Besaw, Steven Booth, McKay Burley, Kerrie French, Rachel Hurlbut, Bess Kirnie, Debora LaRose, AnneMarie Miller, Carmela Phelix, Duane Richards, Jeff Stenlake, David Vroman, and Kim Wells.

Consultants: Alan Pole and Jessica Cohen

Observers: Craig Chevalier, Bob Beckstead, Paul Haggett, and Patrick Brady

Location: Massena High School

1. Superintendent Pat Brady welcomed everyone to the meeting, provided an overview for the purpose of the study, and introduced the study consultants. Committee members were asked to introduce themselves and discuss their connection with the school district.

2. Alan Pole reviewed the purpose of the study that is to answer the following question:

***In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future? If so, how should the grades and facilities be arranged?***

3. Meetings of the Advisory Committee will be held from 6:30-8:30 pm as follows:

Date	Topic	Location
September 20	General overview of the study process including the committee's role; student enrollment projections	High School
November 1	The instructional program	Jefferson
December 20	The district's facilities	Nightengale
January 31	Transportation; Begin exploring possible future facility options	Madison
March 1	Staffing; Continued implications of options	Junior High
April 11	Finances; Continued implications of options	High School



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May 30	Review of draft report and tentative recommendations	High School
June 21	Presentation of final report to the Board of Education	High School

While the meetings of the advisory committee will begin at 6:30 pm, optional tours of the five schools will be held before each of the next five meetings beginning at 5:45 pm. These tours are for committee members and for anyone that will be observing the business meeting that will follow.

4. A contact list of the members of the advisory committee was shared with email addresses. Members of the group were asked to verify the accuracy of the information since email will serve as the primary means of communication between the consultants and the committee members. Meeting materials will be emailed to all committee members prior to the meeting. Paper copies of the materials will also be made available at each meeting.

5. Meeting notes will be provided after each meeting. The notes will be emailed to all committee members and copied to the superintendent. It will be the responsibility of the superintendent to distribute the notes within the district, as he deems appropriate. It is anticipated that, at a minimum, notes will be provided to board members and posted on the district’s website. The PowerPoint that is used at each meeting will also be posted on the district’s website after the meeting occurs.

6. All meetings of the advisory committee will be open. Members of the public will be welcome at these meetings. At the conclusion of each meeting, the observers will have the opportunity to offer comments or ask questions.

7. Alan Pole presented a PowerPoint overview of the study process and the role of the advisory committee. He indicated that the function of the committee is to advise the Board of Education and the consultants and to communicate with the public about the process. In addition, the committee will add a cultural context for Massena as the various aspects of the study emerge. The superintendent is not a member of the committee but serves as a resource to the committee. Committee members are expected to attend all committee meetings, freely express their points of view, be key communicators with stakeholder groups, and be a respectful, contributing member of the committee.



He emphasized that the consultants bring an outside, unbiased perspective and will ensure that the process is open. They will produce meeting notes after each committee meeting and will be responsible for the final report. The recommendations in the report will benefit student learning and will be educationally sound and fiscally responsible. They will also be independent of special interest groups.

8. Jessica Cohen presented an overview of past enrollments for Massena as well as projected future enrollments for the district. The study begins by reviewing enrollment trends since enrollments influence all decisions regarding staffing, course and curricular offerings, facilities, transportation, and finances.

Enrollment has been declining slightly since at least 2011-12 when the analysis began. Since 2011-2012, the enrollment in Massena has declined from 2,740 students to 2,595 students in the 2016-17 school year, a decrease of 145 students or 5%.

To predict future enrollment, the consultants employ the Cohort Survival Projection method that uses information on the number of births in each school district over a period of years and calculates patterns of enrollment. A cohort survival ratio is developed that tracks how each cohort of students changes as it moves through the grade levels. This ratio, used with the live birth information, predicts what the enrollment will be for a period of years given consistent and predictable conditions. It does not take into account significant economic development changes such as a major employer leaving or entering the area and other similar changes.

Using this method, the enrollment in Massena is predicted to decrease from 2,595 in 2016-17 to 2,401 students in the 2023-2024 school year, an additional decrease of 194 students or 7.5%. The number of home schooled students, non-resident students, and resident students enrolled in non-public schools are all factors that are considered in projecting enrollment. It does not appear that any of these factors will significantly influence the enrollment projections that were made for Massena. Jessica also reviewed demographic information for St. Lawrence County. This review clearly demonstrated that the county is aging and a slight decrease in the population of the county and the school district are anticipated for the future. Jessica mentioned that updated live birth counts and enrollment numbers for this school year will be collected and projections will be updated at a later meeting. This is a process we are going through and the consultants will make corrections and updates at the beginning of each meeting.



Jessica also reviewed the “big picture take-aways” that were identified for this meeting as follows:

- The purpose of the study is to answer the question, “In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future? If so, how should the grades and facilities be arranged?”
- The study process will be open to ensure there is not a perception it is being conducted behind closed doors.
- The Advisory Committee was formed to assist the consultants throughout the process, but the final recommendations will be the consultants.
- The district has seen declining enrollments and will likely continue to see enrollments drop slightly.

9. In response to questions from committee members, additional information on enrollments prior to 2011 will be provided at the next meeting. In addition, during the discussion of finances, information on costs per pupil will be considered. The meeting was then opened up to the observers for questions and comments.

10. The next advisory committee meeting will be held on Wednesday, November 1, 2017 at the Jefferson Elementary School. An optional tour of the school will begin at 5:45 for anyone who is interested. The meeting of the advisory committee will begin at 6:30 p.m.

We believe this covers the essence of the discussions at our meeting on September 20. If you have questions with these notes, please feel free to contact us. We will also review these notes as the first agenda item at our next meeting.

Thanks again for agreeing to serve on this committee. Looking forward to seeing you again on November 1. The tour will begin at 5:45 and the meeting will start at 6:30!!

C: Pat Brady



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of November 1, 2017  
DATE: November 3, 2017

**Attendance:**

Committee Members: Michael Besaw, Steven Booth, Laurel Czajkowski, Adrienne Hartman, Rachel Hurlbut, Bess Kirnie, Debora LaRose, AnneMarie Miller, Carmela Phelix, Duane Richards, Jeff Stenlake, and Kim Wells.

Consultants: Alan Pole and Jessica Cohen

Observers: Patrick Brady, Patrick Bronchetti, Paul Haggett, and Kevin Perretta

Location: Jefferson Elementary School

1. Alan Pole started the meeting by thanking Duane Richards, Principal of Jefferson Elementary School, for hosting the meeting and conducting the tour of the school for interested committee members. The agenda for the meeting was presented and reviewed as well.

2. Alan then reviewed the purpose of the study which is to answer the following question:

*In considering 2-3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future? If so, how should the grades and facilities be arranged?*

He indicated that this purpose will be shared at each meeting to keep the committee focused on what the Board has asked the consultants to accomplish.

3. The September 20 meeting notes were approved by the committee without any changes.

4. Jessica Cohen reviewed the enrollment history for the school district. Comparing enrollment changes from 1998-99 until 2016-17, Jessica noted that the district's enrollment has decreased from 2,924 to 2,595, a decrease of 11.3%.

5. The grade organization of the district (Pre-K-6, 7-8, 9-12) was shared with the committee and it was noted this is a very common grade arrangement pattern in New York. Jessica provided a brief overview of the educational research on grade level patterns. She reported that the bottom line is that there is no one best way to organize school grades and that "what" a district does with



its grade arrangement is more critical to student success than “which” grade organization it has adopted.

6. Jessica then provided an overview of the 2017-18 elementary class sizes in each of the three elementary schools. Jessica said that the class sizes are reasonable; current average class sizes are 16.4 at Jefferson, 20.9 at Madison, and 18.9 at Nightengale. Jefferson and Nightengale have Junior Kindergarten programs. Prior to the 2016-17 school year, all three elementary schools had Junior Kindergarten programs.

7. A summary of recent elementary (grades 3-6) student scores on the New York State ELA and math tests was shared with the committee. It was pointed out that it is difficult to make comparisons on these assessments because of the large number of students who opted-out of the tests beginning in the 2015 school year. Comparisons are also difficult to make because of the changes in the assessments.

8. The elementary school special area subject offerings were presented to the committee as an indicator of the curricular breadth in grades K-6. Jessica noted that these opportunities are part of providing a rich program of study for students. There is comparability across all three elementary schools in art, music, library, and physical education.

9. An overview of the district’s special education program was discussed. Jessica offered a two-year summary of the number of students in the district that have special educational needs and whether they are receiving their educational program in the district or elsewhere. She indicated that the district currently has 487 students (or 17% of total enrollment) identified as having special educational needs. This is the same as the state average of 17%. About 92% of the students with disabilities are educated in-district.

10. Jessica reviewed the junior high school and the high school curricular offerings. This included a review of the number of students in each course section for all subject areas this year including English, Social Studies, Math, Science, Foreign Language, Family & Consumer Science, Technology, Music, Art, PE, and Health as well as a few other electives. She pointed out that the district offers a very comprehensive secondary program.

11. A summary of the number of high school junior and seniors that attend the BOCES for various career and technical education classes was presented. In 2017-18, there are 63 juniors (29% of the class) and 80 seniors (34.5%) of the class.



12. Athletic participation in the district was also reviewed. There are a large number of interscholastic opportunities available to the students in Massena. The most popular sports have varsity, junior varsity, and modified teams. There are no athletic teams that are shared with other school districts.

13. The presentation concluded with five big ideas or take-aways that the consultants reviewed:

- a. The grade configuration (K-6, 7-8, 9-12) is a somewhat common arrangement.
- b. The most common grade configuration of schools in New York and the U.S. is K-5, 6-8, 9 -12 although there is no research that indicates that one grade pattern is necessarily better for student learning than another.
- c. The elementary instructional program is comparable across all three schools.
- d. The Junior High School program is typical for a school district of this size. The High School Program provides many alternatives for students including the International Baccalaureate.
- e. There are an extensive number of interscholastic athletic opportunities available to the students in Massena

14. Alan asked the committee to meet in small groups and answer the following questions:

- a. What is your initial impression of the facilities (buildings and fields) in Massena?
- b. What questions about facilities do you want to make sure we answer at the next meeting?

Responses from the group included the following:

- Initial impressions of the facilities are that they are modern, up-to-date, clean, safe, well maintained, and adequate to meet current students' needs. It was noted that as the educational model changes (with the inclusion of programs and services such as community schools), the space in the schools may not be adequate and the district will need additional and different types of spaces. It was also noted that the space seems to be tight and at capacity.
- Questions that were raised about whether the rooms are being fully utilized and if the room usage is authentic? A committee member asked if there is a building closer to the end of its life than others? And, the final question raised regarded the differing demographics of each of the elementary zone areas. Is it possible to identify the differing amounts of poverty and related characteristics in each of the three elementary school areas?



15. The next advisory committee meeting will be held on Wednesday, December 20 in the Nightengale Elementary School. An optional tour of the school will begin at 5:45 for anyone who is interested. The meeting of the advisory committee will begin at 6:30 p.m.

We believe this covers the essence of the discussions at our meeting on November 1. If you have questions with these notes, please feel free to contact me. We will also review these notes as an agenda item at our next meeting.

Looking forward to seeing you again on December 20 at Nightengale Elementary School.

C: Pat Brady



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of December 20, 2017  
DATE: December 28, 2017

**Attendance:**

Committee Members: Steven Booth, Laurel Czajkowski, Adrienne Hartman, Elizabeth Kirnie, Deborah LaRose, AnneMarie Miller, Duane Richards, Jeff Stenlake, David Vroman, and Kim Wells

Consultants: Alan Pole and Jessica Cohen

Observers: Patrick Bronchetti, Patrick Brady, and Sarah Boyce

Location: Nightengale Elementary School

1. Jessica Cohen started the meeting by thanking Amy Hornung, Principal of the Nightengale Elementary School, for hosting the meeting and conducting the tour of the school for interested committee members. The agenda for the meeting was presented and reviewed as well.

2. Jessica then reviewed the purpose of the study that is to answer the following question:

*In considering 2 – 3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?*

*If so, how should the grades and facilities be arranged?*

She indicated that this purpose would be shared at each meeting to keep the committee focused on what the Board has asked the consultants to accomplish.

3. The November 1 meeting notes were approved by the committee without any changes.

4. Jessica reviewed the takeaways for the last two meetings regarding student enrollment and the instructional program. She also reviewed two tables created as a follow up to questions at the previous meeting regarding student participation in clubs and activities and school building closures.

5. Alan Pole provided an overview of the district's facilities. He began with a table providing information on the age, square footage, grades housed, and students served in each of the six buildings. He noted that all of the buildings are of similar age and have had some renovations



since they were built in the mid-to-late 1950s. All of the buildings are located on one level. He also noted that it is apparent that the district has been taking care of its facilities.

6. Alan then reviewed the school classroom usage in each of the five buildings. The three elementary schools are very similar; Madison and Nightengale are replicas of each other. Jefferson Elementary School has 31 full-size rooms with 21 used for grade level classrooms and six used for special education classes, one for Pre-K and one for Jr. Kindergarten. There are 29 full-size classrooms in Madison Elementary with 21 being used for grade level classes, 1 for a Pre-K classroom and 5 for special education classrooms. Nightengale Elementary has 30 full size classrooms with 21 being used for grade level classes, 1 Pre-K, 1 Jr. K, and 4 special education classes. At the Junior High School, there are 31 full-size classrooms with 18 being used for core courses and 13 being used for special education, AIS, and other similar classes. The High School has 63 full size classrooms with 34 being used for core academic classes and 29 used for special education, computer centers, and other similar courses as well as for storage, conference rooms, and a teachers lounge. Alan talked about the concept of classroom usage and indicated that one type of analysis would be to look at how many periods of the day classrooms were used. The analysis that has been done thus far just examines the stated use of the rooms but not the percentage of class periods that the room is used. Depending on the options considered, that type of analysis might be done in the future.

7. A brief review of the athletic facilities indicated drainage problems exist in the soccer practice fields, baseball, and softball fields. There is also a need for a weight room, another locker room, and a dedicated storage facility for equipment and uniforms. He also noted that the turf field's useful life is ending within the next 5-7 years.

8. Alan explained that all school districts and BOCES have a building condition survey (BCS) done every five years that provides an analysis of building needs by an architect. NYS law requires this. A summary of the projected costs of repairs/renovations listed in Massena's 2015 BCS survey indicated that a cost of approximately \$94 million dollars would be required to address all of the issues. He also said that no district ever addresses all of the issues. Alan explained that this was a typical type of listing for a district the size of Massena.

9. In order to provide information to assist the committee in considering alternative arrangements, Alan provided information on the requirements regarding class size from the



teachers' contract. The teacher contract provides for "where administratively feasible, class sizes shall conform to the regulations of the Commissioner of Education. There is no current class size policy in the district beyond the language in the teachers contract.

10. A review of the current elementary section sizes in each building, average section sizes and the total students per grade level were discussed. Across the three buildings there are 3 section of each grade level K-5 for a total of 48 sections. There are also two Junior Kindergarten sections. The average section size ranges from 19.0 in Jefferson (corrected from original presentation), 20.9 at Madison, and 19.9 at Nightengale. The average section size overall is 19.3 students.

11. Alan then discussed the two common approaches to organizing elementary attendance zones: (A) the neighborhood school concept in which each elementary school contains all elementary grades and is generally organized around "neighborhoods;" and (B) the grade center concept or Princeton plan/stacking in which each elementary school is generally organized around grades, often creating primary schools and intermediate schools within a school district. An analysis of a potential grade center plan for Massena's elementary schools was shared assuming an equal distribution of students and a maximum class size of 23 students per section. This would result in 62 sections and an average section size of 22.0 students. A possible building structure would have a Pre-K to 1 building with 28 classrooms, a 2 -4 building with 29 classrooms and a 5-6 building with 27 classrooms.

12. The presentation concluded with three big ideas or take-aways that the consultants reviewed: 1-The neighborhood school concept has been embraced by Massena for the location of its elementary schools. 2-The Building Condition Survey has identified approximately \$94,000,000 of work to be considered for completion in the district's facilities. 3-The concept of grade center schools would reduce the number of elementary sections by approximately 6.

13. Alan asked the committee to divide up into groups to discuss three questions:

- What are the advantages and disadvantages of the way the elementary schools are currently configured?
- What are the advantages and disadvantages of organizing the elementary schools in a grade center plan?
- What other options should be considered?



After discussion, the groups of committee members identified the following:

**Current system of grade level organization**

**Advantages**

- Smaller class size
- Relationships with families
- Hub of neighborhood
- Many students can walk to school
- All elementary students in each family are in the same school
- One less transition for students
- Sense of family

**Cons**

- Few teachers within grade level for collaboration
- Issues if school is full – students have to transfer to other buildings
- Inconsistency of class size; not easy to even out classes
- Increased staff
- Building administrator is generalist
- Challenge of shared staffing

**Grade Center organization**

**Advantages**

- Balanced class /section size
- Special education students served better
- Groupings would improve – socialization for students from K through 12
- Benefit of consistency of instruction at grade levels
- All grade level staff together
- Administrators/counselors could specialize
- Better opportunities for professional development
- After school and music programs would be enhanced
- Minimize problems of shared staff
- More adaptable to fluctuating population
- Decreased staffing and more space
- More cohesive graduating class
- Arts, chorus, orchestra would be together
- Change “labels” of schools
- Socio-economic status students would be more distributed

**Cons**

- Logistical issues
- Increased transitions for students



- Complicates transportation and parent pickups
- Parents might have to go to multiple buildings to drop students off or visit teachers
- Higher class size
- Neighborhood loses school
- Teachers get to know students/families better

**Other options to consider**

- Explore a 6 – 8 middle school – move a grade to the junior high school
- Build a brand new 7 – 12 school

14. Alan asked the committee and the audience for comments and/or questions.

15. The next advisory committee meeting will be held on Wednesday, January 31, 2018 in the Madison Elementary School. An optional tour of the school will begin at 5:45 for anyone who is interested. The meeting of the advisory committee will begin at 6:30 p.m.

We believe this covers the essence of the discussions at our meeting on December 20. If you have questions with these notes, please feel free to contact me. We will also review these notes as the first agenda item at our next meeting.

Looking forward to seeing you again on January 31 at Madison Elementary School.

Happy Holidays!

C: Pat Brady



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of January 31, 2018  
DATE: February 5, 2018

**Attendance:**

Committee Members: Steven Booth, Kerry French, Adrienne Hartman, Elizabeth Kirnie, Deborah LaRose, AnneMarie Miller, Carmela Phelix, Duane Richards, Jeff Stenlake, and David Vroman.

Consultants: Alan Pole and Jessica Cohen

Observers: Danielle Chapman, Patrick Bronchetti, Patrick Brady, Paul Haggett, and Allen Rowledge

Location: Madison Elementary School

1. Alan Pole began the meeting by thanking Danielle Chapman, Principal of the Madison Elementary School, for hosting the meeting and conducting the tour of the school for interested committee members. The agenda for the meeting was presented and reviewed as well.

2. Alan then reviewed the purpose of the study that is to answer the following question:

*In considering 2 – 3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?*

*If so, how should the grades and facilities be arranged?*

3. The December 20 meeting notes were approved by the committee without any changes.

4. Alan reviewed the summary of the takeaways for the first three meetings regarding student enrollment, the instructional program, and facilities. He provided information regarding exploring the feasibility and desirability of creating a new 300,000 square foot 7 – 12 facility including an approximate cost for new construction of \$300/sq. ft. He also provided a summary of utility costs for each of the five school buildings as well as an estimate of savings of approximately 40% of these utility costs if a building was closed.

5. Jessica Cohen introduced the topic of transportation. She explained that the discussion on transportation is designed to answer questions about the impact of any of the discussed facilities changes on the costs and efficiency of the transportation system. She introduced Allen



Rowledge, Director of Transportation for the district to provide the overview of the transportation system. He explained that the district operates about 41 buses including 7 owned by the New York State Education Department that transport students from the Akwasasne Mohawk Reservation to and from the Massena schools. Buses are replaced approximately every seven years.

6. The district has board policies governing transportation that indicate that Pre K- 6<sup>th</sup> grade students are transported if they live more than  $\frac{3}{4}$  mile from their school. Students in grades 7 – 12 are transported if they live 1  $\frac{1}{2}$  miles or more from their school. As a result 441 elementary students, 146 junior high school students and 207 high school students are not eligible for busing.

7. Allen Rowledge described the system of busing as a combination of single, double, and triple bus runs. In addition, the district provides mid-day pre-K bus routes, BOCES runs, and late buses from the junior high and high school. He estimated that the average ride for students is between 40 and 45 minutes with the longest bus ride being slightly more than 1 hour for high school students. The district is about 220 square miles and is divided up into 3 elementary attendance zones.

8. The grade center plan would increase the amount of time many of the elementary students would be on school buses by between 10 and 20 minutes, increasing the average bus rides to between 55 and 65 minutes for most elementary students. Adding buses/routes might decrease the amount of time students were on buses but would not be cost efficient in terms of the number of students riding each bus. Allen Rowledge also estimated that 6 additional buses would be needed to accommodate the 295 additional students who would need to be bused. The number of walkers would decrease significantly (by approximately  $\frac{2}{3}$ ) as students would no longer be walking to their neighborhood school. It was also estimated that 2 additional buses would be needed because the ability to double trip Madison Elementary students would be lost.

9. Questions were asked by the committee regarding single tripping and making the start times in all of the schools the same. Allen explained that would require approximately 72 buses and additional drivers. Currently there are 12 full-time and 22 part-time bus drivers.

10. The presentation concluded with five big ideas or takeaways that the consultants reviewed: 1- About 30% of the students walk to and from school every day and 70% are bused on one of the



41 buses in the fleet. The average ride for students is about 40-45 minutes; 2 – The district operates on a double trip system, with a few single and triple trips; 3- Moving to a grade center plan would add an extra 295 students who would need to be bused and would require the addition of approximately 6 extra buses; 4-The length of time that many elementary students would be on the bus would increase by approximately 20 minutes; 5- A grade center plan would increase the cost of transportation.

11. Alan asked the committee to divide up into groups to discuss three questions:

- What are the advantages and disadvantages of creating a new 7 – 12 facility?
- What are the advantages and disadvantages of moving the 6<sup>th</sup> grade to the junior high school and creating a 6<sup>th</sup> – 8<sup>th</sup> grade middle school?
- What other options should be considered?

After discussion, the groups of committee members identified the following:

#### **Brand new 7 – 12 building**

##### **Advantages**

- New infrastructure; less need for repair
- Would not have to invest in the BCS costs of \$27 million
- New lay out that would be optimally designed to meet the needs of students
- Possibility of better behavior of students because of newer building and pride
- Potential staff savings by combining 7 – 12 grade staffing needs
- Could potentially offer more electives because of staffing efficiencies
- Savings because of shared administration
- Improved safety

##### **Cons**

- \$90 million price tag
- Tax payers would most likely be against the cost
- What would we do with the old structures
- Where would it be located
- Would not save anything in transportation

It was the consensus of the group that the option of creating a new 7 – 12 building not be pursued. It was not viewed as realistic to explore. A question was asked about the ability of the current location to serve as the location for a larger building. Pat Brady indicated that SED requires that grade 7 – 12 buildings be located on a parcel that has 10 acres plus 1 acre for every



100 students. SED requires elementary schools to have a parcel of land that is 3 acres plus an additional acre for every 100 students.

### **Moving 6<sup>th</sup> grade to middle school**

#### **Advantages**

- It is a legitimate option
- Could provide more advancement classes
- Have additional collaboration for 6<sup>th</sup> – 8<sup>th</sup> grade students and teachers
- Having three years in a building would help ease transitions
- It would benefit extracurricular activities
- It would assist the district in providing the CTE, family and consumer sciences, and technology changes that SED is now allowing.

#### **Cons**

- Is it financially viable
- Would parents buy in
- Would faculty be welcoming
- Space seems to be an issue
- It might result in larger class size to accommodate all of the students
- There would potentially be overcrowding at the junior high
- This would cause underutilization of the elementary schools
- Certification issues (6<sup>th</sup> grade teachers might not be able to teach 7<sup>th</sup> – 8<sup>th</sup> grade courses).

The group requested an exploration of the utilization of classrooms to see if there was space.

#### **Other options to consider**

- Explore including 5<sup>th</sup> and 6<sup>th</sup> grade in the Junior High School and closing 1 elementary school. This would result in 2 Pre-K – 4 elementary schools, a 5<sup>th</sup> – 8<sup>th</sup> grade middle school, and a 9<sup>th</sup> – 12<sup>th</sup> grade high school.
- Expand high school to accommodate the 7<sup>th</sup> and 8<sup>th</sup> grades and close the junior high building
- Move the 7<sup>th</sup> grade to the elementary school and 8<sup>th</sup> grade to high school and close the junior high.

14. Alan asked the committee and the audience for comments and/or questions.



15. The next advisory committee meeting will be held on Thursday, March 1, 2018 in the Junior High School. An optional tour of the school will begin at 5:45 for anyone who is interested. The meeting of the advisory committee will begin at 6:30 p.m.

We believe this covers the essence of the discussions at our meeting on January 31. If you have questions with these notes, please feel free to contact me. We will also review these notes as the first agenda item at our next meeting.

Looking forward to seeing you again on March 1 at the Junior High School.

C: Pat Brady



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of March 1, 2018  
DATE: March 7, 2018

**Attendance:**

Committee Members: Steven Booth, Laurel Czajkowski, Adrienne Hartman, Rachel Hurlbut, Elizabeth Kirnie, Deborah LaRose, McKenzie Lazore, AnneMarie Miller, Duane Richards, Jeff Stenlake, and David Vroman.

Consultants: Alan Pole and Jessica Cohen

Observers: Patrick Bronchetti, Patrick Brady, Kevin Perretta and Alan Oliver

Location: J. W. Leary Junior High School

1. Jessica Cohen began the meeting by thanking Alan Oliver, Principal of the J.W. Leary Junior High School, for hosting the meeting and conducting the tour of the school for interested committee members. The agenda for the meeting was presented and reviewed as well.

2. Jessica then reviewed the purpose of the study that is to answer the following question:

*In considering 2 – 3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future?*

*If so, how should the grades and facilities be arranged?*

3. The January 31 meeting notes were approved by the committee without any changes.

4. Jessica reviewed the summary of the takeaways for the first four meetings regarding student enrollment, the instructional program, facilities and transportation. She provided an update on the enrollment projections based on the new information on the number of births in 2016 (151) and the 2017-18 BEDS day (October 4, 2017) enrollment. Enrollment is continuing to decline with a total K – 12 enrollment of 2,536, down 59 students from the previous year.

5. Alan Pole reminded the advisory committee that the purpose of the study was to look at both the educational impact of facilities changes as well as the fiscal impact. Since about 75% of school budgets are costs for staffing, it is important to look at staff costs. An overview of building level staffing was discussed indicating teachers, teaching assistants, and aides comprise



the majority of staff. He discussed the average salary of each grouping of staff (teachers, administrators, aides, custodians, etc.) as well as the average cost of fringe benefits for health insurance, pension, workers compensation, unemployment insurance, and social security, etc. Based on the information provided by the district, an average cost of fringe benefits is approximately 47% of salary. (This figure does not include what the district pays for health insurance for retirees.)

6. He indicated that there are two options typically used for implementing staff reductions: involuntary reductions and attrition. While involuntary reductions are more predictable and maximize savings, they also cause more anxiety. Attrition is driven by decisions individual staff members make and is generally well accepted. Savings accrue when appropriate vacancies occur. Alan stated that we would recommend that the district use attrition if any positions are to be reduced. He provided a table of resignations/retirements from Massena teachers over the past four years that indicated the number of staff resigning/retiring and their length of service in the district.

7. Alan Pole followed up by talking about the feasibility – *Is it possible* and the desirability of options – *Is it a good idea?* He then reviewed the four options discussed to date. The status quo is described as Option 1 and maintains the 68 common branch sections in the three elementary schools. Moving to a grade center plan is the second option and would organize the schools around grades with one school serving Pre-K – 1, another school serving 2 – 4, and one serving grades 5 – 6. This would move the district from the current neighborhood schools approach to an approach organized around grade levels. Because this option would allow equalizing of section sizes, the grade center option would have 62 sections, or 6 fewer than the status quo.

8. Other options discussed at previous meetings include exploring the inclusion of 5<sup>th</sup> and 6<sup>th</sup> grade in the Junior High School and closing one elementary school. The 5<sup>th</sup> and 6<sup>th</sup> grades have 194 students and 9 sections each so this option would add another 384 students to the junior high. It does not appear that this is a feasible option. Another suggestion was to expand the high school to accommodate the 7<sup>th</sup> and 8<sup>th</sup> grades and close the junior high building. This option would require an expansion of the high school to make it 50% larger. The third option would be to move the 7<sup>th</sup> grade to the elementary school and the 8<sup>th</sup> grade to the high school. The elementary schools would have to accommodate approximately 10 sections of 7<sup>th</sup> graders and the



high school would have to accommodate approximately 10 sections. Neither of these options is feasible without additions at each of the schools.

9. Questions were asked at the previous meeting about the usage of classrooms in the junior high and high school buildings, Alan provided two tables that looked at how the current junior and high school classrooms are being used and found that junior high school classrooms are used about 82% of the day and high school classrooms are being utilized approximately 79% of the day. Alan concluded that the buildings are being extremely well utilized.

10. Information on staff savings by option was discussed. In summary, there would be no savings if the status quo were maintained. If the grade center plan were implemented, there would be a reduction of 6 sections/teachers for a savings of approximately \$551,910.

10. The presentation concluded with three big ideas or takeaways that the consultants reviewed:  
1- Two feasible options have been identified: status quo and grade centers. 2 – It is recommended that any reduction in positions arising from this study be accomplished through attrition. 3- Staff savings can be realized by creating grade center schools.

11. Alan asked the committee and the audience for comments and/or questions.

12. The next advisory committee meeting will be held on Wednesday, April 11, 2018 in the high school. An optional tour of the school will begin at 5:45 for anyone who is interested. The meeting of the advisory committee will begin at 6:30 p.m.

We believe this covers the essence of the discussions at our meeting on March 1. If you have questions with these notes, please feel free to contact me. We will also review these notes as the first agenda item at our next meeting.

Looking forward to seeing you again on April 11 at the high school.

C: Pat Brady



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of April 11, 2018  
DATE: April 19, 2018

**Attendance:**

Committee Members: Steven Booth, Laurel Czajkowski, Kerrie French, Adrienne Hartman, Deborah LaRose, AnneMarie Miller, Carmela Phelix, Duane Richards, and Jeff Stenlake

Consultants: Alan Pole and Jessica Cohen

Observers: Patrick Bronchetti, Patrick Brady, Kevin Perretta, Nick Brouillette, and Sarah Boyce

Location: Massena High School

1. Alan Pole began the meeting by thanking Sarah Boyce for being available to do a tour of the high school and for hosting the meeting. The agenda for the meeting was presented and reviewed.

2. Alan then reviewed the purpose of the study:

*In considering 2 – 3 prioritized options, is there a better way educationally and fiscally to reconfigure the grades and facilities to provide a sound instructional program now and in the future? If so, how should the grades and facilities be arranged?*

3. The March 1 meeting notes were approved by the committee without any changes.

4. Alan reviewed the summary of the takeaways for the first five meetings regarding student enrollment, instructional program, facilities, transportation, and staffing. He indicated that this is the last meeting that will deal with new content; the next committee meeting on May 30 will focus on a review of the draft report.

5. The updated enrollment projections were used to determine projected class sizes in the 2022-23 school year. The total number of elementary sections is projected to go from 65 sections to 61 sections. This would allow for maintaining 3 sections at each grade level in each K – 6 building with the exception of 5<sup>th</sup> grade, that would have a total of 7 sections across the three buildings. The junior high building would go from 420 students to 373, and the high school would go from 832 students to 773 students. A question was asked about the number of sections



if the elementary schools were stacked (using grade center approach). Also asked was what is the point at which the enrollment in the junior high is small enough to allow the 6<sup>th</sup> grades to move in to that building. Alan indicated that we would provide information about those questions at the next meeting.

6. Alan reminded the advisory committee that the purpose of the study was to look at both the educational impact of facilities changes as well as the fiscal impact. To provide a financial overview, Alan began with a summary of the budget vote history indicating strong positive support for the school district for the past 10 or more years. Similar conclusions can be drawn from examining the history of the capital project votes. The picture is really one of a community that supports its schools.

7. To provide a full picture of the financial overview of the district, Alan shared information on the history of full value tax rates over the past five years as well as the history of the tax rates per \$1,000 of assessed value. He noted that the trend in the fiscal oversight of the district is to manage the budget so that there are small incremental increases every year. He emphasized the very competent fiscal management of the district in budgeting and in implementing the budget.

8. An important part of the fiscal picture of the district is the way that the district plans for future expenditures. He discussed the history of the restricted fund balance as well as the designated and undesignated fund balance. These are all similar to savings accounts that the district uses to plan for anticipated expenses (restricted fund balances) like unemployment insurance, accrued liability, retirement, workers' compensation, capital expenses, and tax certiorari as well as funds to help hold down future years' tax rates (designated fund balance). Also discussed was the undesignated fund balance that is used as a "rainy day" fund for those occasions when emergencies occur. Alan emphasized that the financial management of the Massena Central School District is excellent.

9. The 2017-18 budget for the district is \$52,640,975. The vast majority of the budget is spent on direct instruction. Revenue for the district comes from state aid (63%), federal aid (6%) and property taxes (31%). Reviewing the comments from the 2016-17 audit, Alan indicated that the audit pointed out the uncertainty of federal and state funding having a significant impact of the financial health of the district. As expenses continue to rise, the uncertainties of state aid and the



property tax cap will pressure the district to consider changes in facilities and in other areas as well.

10. Alan reviewed the staffing savings by option for maintaining the status quo and for the grade center plan. He indicated that moving to the grade center option immediately will allow a reduction of six sections and savings of approximately \$433,831.

11. Alan asked the committee and the audience for comments and/or questions.

12. The next advisory committee meeting will be held on Wednesday, May 30, 2018 in the high school beginning at 6:30 p.m. The meeting will focus on a review of the report.

We believe this covers the essence of the discussions at our meeting on April 12. If you have questions with these notes, please feel free to contact me. We will also review these notes as the first agenda item at our next meeting.

Looking forward to seeing you again on May 30 at the high school.

C: Pat Brady



**MEMORANDUM**

TO: Massena Facilities Study Advisory Committee  
FROM: Alan Pole and Jessica Cohen  
RE: Meeting Notes-Meeting of May 30, 2018  
DATE: June 11, 2018

**Attendance:**

Committee Members: Steven Booth, Adrienne Hartman, Rachel Hurlbut, Elizabeth Kirnie, Deborah LaRose, McKenzee Lazore, Carmela Phelix, Duane Richards, and Jeff Stenlake

Consultants: Alan Pole and Jessica Cohen

Observers: Patrick Bronchetti, Patrick Brady

Location: Massena High School

1. Alan Pole began the meeting by thanking the advisory committee members for their participation in the facilities study process. He indicated that their contributions were essential to developing a report that will meet the needs of the district.
2. Alan then reviewed the draft report that was distributed prior to the meeting. He highlighted the findings and the options considered. Jessica Cohen reviewed the recommendations made in the report.
3. The committee discussed the report and indicated that it was consistent with the information shared and the committee discussions.
4. The report will be finalized and presented to the Board of Education on June 21. All committee members are encouraged to attend the meeting.
5. Alan once again thanked all of the committee members for their participation.

C: Pat Brady