



**MAY 2019**

**PRE-KINDERGARTEN THROUGH GRADE TWELVE  
PROGRAM DELIVERY FEASIBILITY STUDY:**

*Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?*

*for the  
Niskayuna  
Central School District*

*Niskayuna,  
New York*

*“Custom tools and research to aid a school district in defining a vision and decision options for serving students in the future.”*

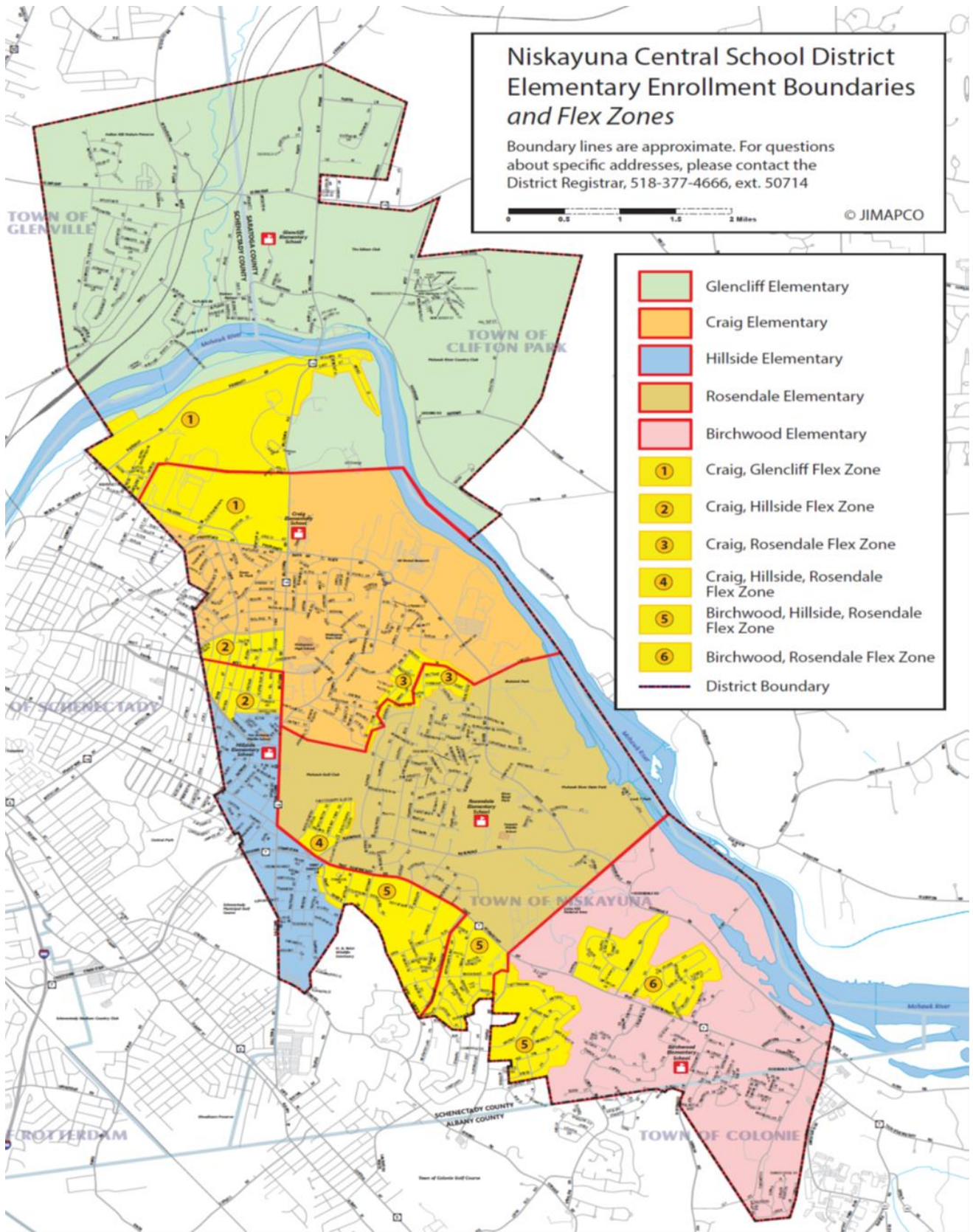
# Niskayuna Central School District Elementary Enrollment Boundaries and Flex Zones

Boundary lines are approximate. For questions about specific addresses, please contact the District Registrar, 518-377-4666, ext. 50714



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- Glenciff Elementary
- Craig Elementary
- Hillside Elementary
- Rosendale Elementary
- Birchwood Elementary
- ① Craig, Glenciff Flex Zone
- ② Craig, Hillside Flex Zone
- ③ Craig, Rosendale Flex Zone
- ④ Craig, Hillside, Rosendale Flex Zone
- ⑤ Birchwood, Hillside, Rosendale Flex Zone
- ⑥ Birchwood, Rosendale Flex Zone
- District Boundary



## PREFACE

### DILIGENT STEWARDSHIP

The Niskayuna Board of Education implemented a comprehensive planning process to identify possible options to:

- ✓ Ensure there is sufficient space for students, especially given a projected increase in enrollment;
- ✓ Provide students with modern learning spaces aligned with the direction of the programs, including more interdisciplinary and hands-on learning in the early/middle grades; and
- ✓ Implement a facilities plan that promotes health, safety and the efficient utilization of space.

In March of 2018, the Board of Education commissioned The SES Study Team, LLC to prepare a study to help the Board, leadership team, and community analyze possible options to organize and deliver the Niskayuna program in the future. The goal of the study is to answer the following question:

***Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?***

At the time the study was commissioned, the Board of Education and the leadership team had no pre-conceived notions about the findings of the study or a pre-conceived advocacy for what the findings should be. The role of SES is to “hold up a mirror” to data about the school district, organize the data without bias into useable planning tools for the school district and the community. SES as a ‘guest outsider’ identifies possible ‘doable’ options, and suggests *opportunities and challenges* of various optional scenarios the district *may* want to consider to implement/deliver the educational program. The role is accomplished with transparency of the data; with no bias toward particular possible options; and without advocacy of which option(s) should be implemented. The only stake the consultant has in what the Board ultimately implements or decides is: ‘Did the work of the study *help the ‘local people, local knowledge’ of the District* make the best decision possible to serve Niskayuna Central students in the future?’

An *integral part* of the comprehensive planning process commissioned by the Board of Education is the appointment of a ***Capital Project Community Advisory Committee*** of residents who applied to help the planning. The Committee is a cross-section of the community including parents of current students and preschool-age children, retirees, residents without children and civic leaders in addition to representative school resident school staff members. The role of the Committee is as a steering committee to help the guest consultant prepare the study to answer the study question. The Advisory Committee has worked with SES from August 2018 through the present in reviewing data and providing insights and feedback about the study. The Advisory Committee work session agendas and the foundation data tools have been posted on the school district website for review by the community since the fall of 2018. Sincere appreciation is extended to the wide range of stakeholders who volunteered their time, insights, and skill sets to help guide the development of the study over the past ten months.

## **DUE DILIGENT PLANNING BY THE NISKAYUNA BOARD OF EDUCATION**

The *Program Implementation Feasibility Study* suggests possible answers to the study question.

The information offered in this study provides a concrete way for the community and the Board of Education to engage data-driven public discussion. An open and transparent discussion about how best to serve K-12 pupils in the future will help determine the very best public policy Board decision about delivering/implementing the Niskayuna Central School District program.

Thank you for the invitation to prepare the study as one tool to help with the on-going planning by the Niskayuna Central School District.

The SES Study Team, LLC  
Dr. Paul M. Seversky  
May 2019

### ***Planning for the Future Workshops***

A foundational step to accomplish the commissioned study was to document an outline of the priorities, values, questions and topics that the Community Advisory Committee, the School District leadership team, and the Board of Education believe that the *Program Delivery Study* and the School District long-term planning process should address.

The result of the three workshops is a written tool that helped guide the study. It is suggested that the same tool is valuable to engage public discussion and staff discussion about the short range and long range future decisions of the School District.

***What are the key questions/data that our school community needs to answer/discuss  
about how best to organize and deliver the grades pre-kindergarten through grade twelve program over the next three years?***

<b>Rank Order</b>	<b>Identified and Rank-Ordered by the Niskayuna Capital Project Community Advisory Committee Who Attended on August 28, 2018</b>	<b>Rank Order</b>	<b>Identified and Rank-Ordered by the Niskayuna Administrative Team Who Attended on October 15, 2018</b>	<b>Rank Order</b>	<b>Identified and Rank-Ordered by the Niskayuna Board of Education Who Attended on January 23, 2019</b>
1	How to have a program that helps all children be successful. Are there enough 'pathways'?	1	How do we create flexible learning spaces with dual use capability (ex. furniture, walls, storages, tech...)?	1	What do we need to achieve the program vision of the district?
2	Have the ability to change; need to be 'nimble' in what we do; focus on documented 'needs' and not 'wants'.	2	What are the current conditions of our buildings?	2	Are there options that will support different pedagogies?
3	Address school safety diligently.	3	How can the options support/enhance specialty instructional areas like PE, STEM, STEAM, art, music AV, sport fields, project-based learning?	3	Scenario options which are 'affordable'.
4	Building conditions of our existing buildings and what might be necessary to be done.	4	Options that include trauma-informed and restorative practices in all buildings including social spaces, and mental wellness support spaces.	4	Scenario options that are scalable: what if 'glass becomes half empty' unexpectedly or 'overflows' unexpectedly?
5	What skill sets will our students need to be productive citizens after graduation?		Can the historical annual program review recommendations help point to possible options?		Are there options that would allow us to deliver the program with more pupil opportunities and efficient use of resources?
6	How much space will be needed to serve a growing enrollment and the program vision?	5	Can we consolidate resources to deliver the program more efficiently?	5	Are there program implementation options that can give us flexibility and 'nimbleness' in program delivery?
7	Are there teaching methods and program delivery models that we are not now employing that should be pursued?		What should be the grade configurations that may address child development needs better?	6	How do we ensure to provide an equitable education experience across grade levels?
8	What are the changing demographics of the population of the district?	6	What do we need to provide meaningful, interdisciplinary collaborative experiences for pupils? (ex. facilities, staff)	7	What programs would be possible and supported with how we use the buildings differently?
9	What resources are necessary to begin STEM, STEAM as early as possible in the elementary?	7	Are there options that allow 'efficient' school day start/end times? Are there scheduling models K-12 that might be supported by various options?	8	What do we expect to be the enrollment growth year to year over the future?
10	Historical enrollment trends and pupil capacity of our current schools.	8	How might we deliver the most 'developmentally appropriate' program to K-1 pupils?	9	How might the various options influence our use of technology vision?
11	What resources in addition to school building space will be needed to achieve the district program vision?	9	Keeping our students safe, balances with a 'warm, welcoming, friendly' climate.	10	Once an option is chosen, create a metric to analyze the pupil service success of the implemented option.

12	What are best practices in delivering elementary and secondary education?		How can we create large meeting spaces for pupils and community to reflect the value of school as community?		Are there options that could support foreign language instruction at earlier grade levels?
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13	How do we recruit highly skilled staff to deliver the program?	10	Options that can support the district's tech plan.	11	Need to plan for an 'upper limit' of expected client pupils.
14	How do we pay for a facility project?	11	What might be the impact of adding Pre-K (UPK) to the program offering?	12	Can we deliver grades 5-6 'better'?
15	Will social-emotional support resources need to change/be adapted/added to?		The option ultimately chosen for implementation should allow architectural design of classrooms with glass walls, white board walls, flexible furniture....		How can we use the study to support collaboration by all stakeholders?
16	What are we doing well and how can we get even 'better'?	12	Options that can support world language at the elementary level.	13	Are there options that can support the music program in grades 4-12 differently and with less logistic 'disruption'?
17	How will the program vision of Niskayuna balance serving trades and non-trades oriented pupils?	13	Schools that all can have the school community come together at once, and spaces for subject specific learning.		Can we utilize our outside building sites better to support instruction?
18	What do we know that we are not doing well?	14	How might enrollment increases influence how K-5, 6-8, and 9-12 are delivered?		Are there elements of the options to enhance security measures?
19	Are there different models in using school buildings to deliver the program?	15	School campus traffic patterns to help ensure student safety.	13	Are there researched data about maximum class size?
20	Do we, should we collaborate with other schools and colleges?	16	Programs that reflect the social-economic characteristics of Niskayuna pupils.		What might be the demographics of the expected new enrollments?
21	Quality of the data we use to choose options to consider.	17	Creating an environment that all students 'feel' respected and 'appreciated'.		
22	Early drop off and stay late programs part of the school district offering?		Are there options that can provide revenue to the district? (revenue enhancements)		
23	Are there other ways to schedule time to allow more activity/course opportunities for pupils?	18	How can the options strengthen our working relations with businesses to enable more 'business' experience for pupils?		
24	Is starting a Pre-K program part of the program vision?	19	How might we deliver the most 'developmentally appropriate program to K-1 pupils?		
25	Is the district program vision a 'leader' vision?	20	Are there options that might need a change in pedagogy and assessment practices?		
26	A construction project plan that will be least disruptive to delivering the program.	21	How might financial forecasts influence the options available to implement?		

27	Addressing the needs of students with special needs including English language learners.	22	Are there areas of the program where we are close to meeting the program vision?	
28	Will adding Pre-K hinder serving a growing K-12 enrollment?		Should RTi, AIS and acceleration polices/delivery models be reviewed?	
<b>Rank Order</b>	<b>Identified and Rank-Ordered by the Niskayuna Capital Project Community Advisory Committee Who Attended on August 28, 2018</b>	<b>Rank Order</b>	<b>Identified and Rank-Ordered by the Niskayuna Administrative Team Who Attended on October 15, 2018</b>	
29	How are our students competitive? What are their achievement levels?	23	What are the skills we expect Niskayuna students to have related to technology?	
30	How will students be involved in the overall two year planning process?	24	Are there other student service models that the options can encourage/support (ex. transportation program, school lunch....)?	
31	What is the role of BOCES shared services in supporting and or expanding home school offerings/program?			
32	What should be the communication strategies with parents and community about the program? Should there be basic standards, expectations, guidelines?			
33	How do we collaborate now with pre-schools?			
34	Will the options help mitigate the use of the flex zone policy tool?			
35	Working with the ever changing directions of the State Education Department.			
36	What is the history of capital projects at Niskayuna?			
37	What are other communities doing to address a similar study question?			
38	Should 'student coasting' be addressed in the district program vision?			

Please note that the complete *Pupil Capacity Analysis Study*  
and the *Enrollment/Demographic Study*  
are on the Niskayuna Central School District Website.

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*“Custom tools and research to aid a school district in defining a vision and decision options for serving students in the future.”*



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Dr. Paul M. Seversky  
[Paul.Seversky@SES-StudyTeam.org](mailto:Paul.Seversky@SES-StudyTeam.org)

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Niskayuna Central School District and its stakeholders.

*“Custom tools and research to aid a school district in defining a vision and  
decision options for serving students in the future.”*

## FINDINGS

### PURPOSE OF THE STUDY

The Niskayuna Central School District Board of Education and the senior administration are engaged in long-range planning for the District. As part of their efforts, they have commissioned a study to research data to help the school District answer the following planning question:

***Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?***

The goal of the analysis and study report is to provide substantiation for suggestions and insights about the current organization and delivery of the K-12 program. The study report identifies various options for action that the Board of Education, senior administration, and the community may want to give further focus and consideration as they identify efficiencies to ensure the most support of K-12 pupils in the delivery of the instructional program with the resources available.

### METHODOLOGY OF THE STUDY

- ✓ First, the study analyzes the use of space by the current program offering in the five elementary schools, two middle schools, and one high school of the District. The principals provided detailed information about how the assets of each building are used in the 2018-2019 school year to implement the grades K-12 program. The detailed space allocation data are benchmarked to the NY State Education Department's school building capacity guidelines as well as to the class size guidelines endorsed by the school District to deliver the program. The school buildings pupil capacity study data and findings are in the *K-12 School Building Capacity Study* published in February 2019. The pupil capacity study is posted on the Niskayuna School District website.
- ✓ Second, the study estimates future enrollment trends of the District based on historical enrollment data, historical live data, and patterns of enrollment at each of the grade levels K-12. The enrollment projection calculations study data and findings are in the *Enrollment Projection/Demographic Study* published in February 2019 posted on the Niskayuna School District website.
- ✓ Third, the senior administration and the building principals of the District were interviewed to learn as comprehensively as possible the short-range and long-range objectives of delivery of the program in the existing facilities. The meeting also provided insights to understand local conditions and points of view that could affect the viability of various suggestions and options to use the current facilities to the very maximum and meet program expectations for pupils. The interview meeting helped to further the understandings about the values and policies that guide the vision of the District and the long-range planning efforts of the District.

## FINDINGS

- ✓ Fourth, a visit was made to each school building hosted by each respective principal. The principals provided data about the scheduling patterns and use of instructional and instructional support staff resources that now exist in the schools to implement the program.
- ✓ Throughout the study development process, the Community Capital Project Community Advisory Committee—“*local people, local knowledge*”-- met with the consultant as a steering committee from August 2018 through May 2019 to review/discuss data, offer perspectives and insights, and ask clarifying questions.

Following are findings of the *School Building Capacity Analysis* and the *Enrollment Projection/Demographic Study* that form the foundation for the rationale of each of the program delivery options suggested by the study. In addition, findings and inferences made based on the visit to the District are also discussed.

### FINDINGS OF THE K-12 PUPIL CAPACITY ANALYSIS

- **Class Size District ‘Targets’**

The combined pupil capacity of the school buildings is charted on page 4. The pupil capacity is benchmarked to how the buildings are used to implement the 2018-2019 school year program. Regulation 5001-R defines *Class-size Targets and Guidelines* for grades K-5. Grade level class size target is defined as: “A grade level class size target is the number of students assigned to a section to achieve an optimal class size for a particular grade. Class size targets may increase gradually each year from kindergarten to fifth grade.”

*The Pupil Capacity Study* uses the ‘class size targets’ to analyze program pupil capacity in each of the Niskayuna CSD school buildings.

GRADE LEVEL	TARGET (FUNCTIONAL OPERATING CLASS SIZE GOAL)	GUIDELINE
Kindergarten	20	22
Grade 1	21	23
Grade 2	22	24
Grade 3	23	25
Grade 4	24	26
Grade 5	25	27

Board Policy does not directly set class size “Targets” or “Guidelines” for grades 6-12.

However, as an extension of the responsibility given to the superintendent in Regulation 5001-R, the following “Targets and Guidelines” are used by the district to define functional operating class sizes for grades 6-12.

## FINDINGS

GRADE LEVEL	TARGET (FUNCTIONAL OPERATING CLASS SIZE GOAL)	GUIDELINE
Grade 6, 7, 8, World Language	25	28
Health	28	30
PE	30	30
General Music	30	30
Home and Careers	20	20
Technology (Engineering)	20	20
Art	24	28

GRADE LEVEL	TARGET (FUNCTIONAL OPERATING CLASS SIZE GOAL)	GUIDELINE
Grade 9, 10, 11, 12, Health, World Language, other classes except as noted below	25	28
ENL w Co-Teaching	22	22
Science	25	26
Chemistry, Physics	20	25
Integrated Algebra, Integrated Algebra B-Geometry A	16	20
PE*	30	30
General Music	25	28
Technology (Engineering)	18	20
Art	24	24
Photo, Film, Computer Arts, Graphic Design	21	24

\*PE specialty electives: life guard training 10, Adventure training 18, Life time Sports

Flexibility of program delivery is an important tool in serving pupils and supporting instruction. First, flexibility is necessary on a case-by-case basis annually to ensure that the pupils of a given school year are served with a focus on what is educationally sound for those pupils in that school year. Second, flexibility is necessary to deal with unforeseen ebbs and flows of seasonal enrollment fluctuations. Third, flexibility is necessary to accommodate program/curriculum improvement ideas of faculty and staff; and new initiatives supported by grants, for example. Such initiatives and ideas often need ‘more space’ instead of ‘more money’ to implement them. Class sizes for self-contained special education classrooms are outlined by SED regulation.

Generally accepted long-range planning assumes that between 7% and 10% of Potential Pupil Capacity is considered/planned for as *unassigned pupil capacity*. This allows flexibility in the delivery of the program and helps to insure the quality of program delivery with the space available if unforeseen annual or seasonal spikes in pupil enrollment occur.

Charted on the next page is a summary of the pupil capacity of each Niskayuna school building based on the local class size guidelines and how the principals deploy the spaces to deliver the 2018-2019 program. Please see the complete *Pupil Capacity Analysis Study* of February 2019 posted on the school District website for the pupil capacity details of each building.

## FINDINGS

### *Summary of the Pupil Capacity of each Niskayuna Central School District School Building 2018-2019*

School Building	2018-2019 Niskayuna CSD Pupil Enrollment (October 1, 2018)	2018-2019 Pupil Capacity K-12 (Does not include rented space to host regional shared programs through the BOCES)		% Of Total Pupil Capacity Used in 2018-2019 As Per: *		Remaining Pupil Capacity Available in 2018-2019 As Per Class Size Goals	
		Functional Operating Capacity Given how the Program is Implemented/Deployed Guided by the Local District Class Size TARGETS	Pupil Capacity Given how the Program is Implemented/Deployed Guided by the Local District Class Size GUIDELINES	TARGETS	GUIDELINES	Estimated Additional Pupil Enrollment that Could be Served as per the TARGETS	Estimated Additional Pupil Enrollment that Could be Served as per the GUIDELINES
<b>Birchwood Elementary (K-5)</b>	360	368	400	97.8%	90%	8	40
<b>Craig Elementary (K-5)</b>	396	405	441	97.8%	89.8%	9	45
<b>Glenclyff Elementary (K-5)</b>	346	381	415	90.8%	83.4%	35	69
<b>Hillside Elementary (K-5)</b>	400	412	448	97.1%	89.3%	12	48
<b>Rosendale Elementary (K-5)</b>	365	392	425	93.1%	85.9%	27	60
<b>TOTAL GRADES K-5</b>	<b>1867</b>	<b>1958</b>	<b>2129</b>	<b>95.3%</b>	<b>87.7%</b>	<b>91</b>	<b>262</b>
<b>Iroquois Middle Grade 6</b>	180	175	196	102.9%	91.8%	-5	16
<b>Van Antwerp Middle Grade 6</b>	161	175	196	92%	82.1%	14	35
<b>TOTAL GRADE 6</b>	<b>341</b>	<b>350</b>	<b>392</b>	<b>97.4%</b>	<b>87%</b>	<b>9</b>	<b>51</b>
<b>Iroquois Middle School 7-8</b>	351	387	438	90.7%	80.1%	36	87
<b>Van Antwerp Middle School 7-8</b>	301	353	394	85.3%	76.4%	52	93
<b>TOTAL GRADES 7-8</b>	<b>652</b>	<b>740</b>	<b>832</b>	<b>88.1%</b>	<b>78.4%</b>	<b>88</b>	<b>180</b>
<i>Iroquois Middle School 6-8</i>	531	562	646	94.5%	82.2%	31	115
<i>Van Antwerp Middle School 6-8</i>	462	528	590	87.5%	78.3%	66	128
<b>TOTAL GRADES 6-8</b>	<b>993</b>	<b>1090</b>	<b>1236</b>	<b>89%</b>	<b>80.3%</b>	<b>97</b>	<b>243</b>
<b>High School 9-12</b>	<b>1395</b>	<b>1412</b>	<b>1562</b>	<b>98.8%</b>	<b>89.3%</b>	<b>17</b>	<b>167</b>
<p><b>*Generally accepted long-range planning assumes that between 7% and 10% of <u>Potential Pupil Capacity</u> is considered/planned for as <i>unassigned pupil capacity</i>. This allows flexibility in the delivery of the program and helps to insure the quality of program delivery with the space available if unforeseen annual or seasonal spikes in pupil enrollment occur.</b></p>							

## FINDINGS

### OBSERVATIONS:

- ✓ The pupil capacities available at each school are a major element in identifying ‘doable’ scenario options that may possibly allow the District to organize and implement the Pre-K-12 program more efficiently. Other variables like the distances between each of the buildings and possible grade configurations that may provide added program opportunities will also have major influence on crafting ‘doable’ scenario options.
- ✓ It is important to note that pupil capacity of a school building is directly related to class size guidelines/targets of the District. Pupil capacity is also related to how many instructional spaces are used for direct instruction and how many spaces are assigned to instructional support programs which do not generate pupil capacity in an elementary or a secondary school. The delivery of the expected curriculum program is the overall driving factor that determines the pupil capacity of the building. The expected curriculum program is defined and approved by the Board of Education.
- ✓ The range of unused pupil capacity in the five elementary schools in 2018-2019 is from 1.2 to 9.2% as guided by the *‘functional operating’ class size targets* set by the school district. There is limited room in each elementary school to accommodate added enrollments. All of the elementary schools have less than a 10% unassigned pupil capacity to allow flexibility in the delivery of the program. The Iroquois Middle School is at 94.5% of pupil capacity. The High School is at 98.8% of pupil capacity. The Van Antwerp Middle School at 87.5% pupil capacity is the sole school that has appropriate sufficient unused pupil capacity for flexibility of program delivery as it is now configured.
- ✓ The *Pupil Capacity Study* is a useful tool to help judge if the current spaces assigned to instructional support activities are equitable across the District. The instructional support space data of the elementary school buildings can aid in local discussion of some typical program discussion questions such as:
  - Are there other instructional support spaces or services that should be authorized as part of the program of each elementary school building? Each secondary school?
  - What should be the reason for the availability of a unique instructional support space and program in a building and not in other buildings?
  - Are the instructional support services in appropriately sized spaces necessary to deliver the pedagogy of the service?
  - Given the program vision for the future of the school district, are the current instructional support spaces sufficient, deficient?
  - Given the program vision of the school district to be delivered in three to five years, are other instructional support spaces required?
  - Should support space nomenclature be consistent across the District?

The chart on the next page identifies spaces assigned to instructional support activities in the elementary buildings in the current school year.

## FINDINGS

### SUMMARY OF ROOMS/SQUARE FOOTAGE ASSIGNED FOR INSTRUCTIONAL SUPPORT SPACE SERVING GRADES K-5 IN 2018-2019

BLANK DENOTES NO ASSIGNED PRESENCE IN THE BUILDING

‘SHADED’ DENOTES SPACES THAT COULD SERVE DIRECT INSTRUCTION AND THUS ADD TO THE PUPIL CAPACITY OF THE BUILDING AS IDENTIFIED BY EACH RESPECTIVE PRINCIPAL

INSTRUCTIONAL SUPPORT SERVICE/PROGRAM	Birchwood Elementary	Craig Elementary	Glenclyff Elementary	Hillside Elementary	Rosendale Elementary
Library	1540	1546	1861	2043	2006
Computer Lab	380	578	498	563	481
Music	1020	926	928	795	824
Music Band and Strings	238	555	162	401	484
Art	1065	969	887	670	847
Physical Education	3840	3389	3804	3980	3637
Cafeteria	1920	2142	1891	1706	2704
Stage	861	542	735	629	805
Nurse	283	284	292	308	279
Psychologist	206	234	200 (shared with book room)	213	210
Counseling Room		335		199	
Counseling		94			
Social Worker	230	358	188		237
Speech	187	186	219	136	254
Speech					467
Reading	150	190	218	290	384
Reading	150	224	218	707	144
English as a New Language	187		333	136	130
Consultant Teacher/Resource Special Education/Learning Center	1010	881		822	
Resource Special Education		321	448		658
Resource Special Education			206		
OT	561	94		162	
PT	210			460	
OT/PT		933			622
OT/PT/Math			946		
Faculty Workroom	319	339	344		247
Faculty Workroom/Copy Room				822	
Conference Room	379	127	203	416	937
Conference Room	132				
All Purpose Room					920
Book Room	154		200 (shared with social worker)		
Copy Room	143		124		201

## FINDINGS

Please note that a blank next to a support service/program indicates that this school building does not have a space assigned to the support service/program and that other elementary buildings in the District do have assigned space.

The Niskayuna pupil capacity analysis finds that there are some support services assigned to spaces which are large enough to serve grade level sections. Instructional *support* space in an elementary building does not have ‘pupil capacity’ assigned to it. Only space that serves grade level sections generates ‘pupil capacity’. If an instructional support space is changed to serve a grade level section instead of a support service, then it does have a pupil capacity assigned to its use as a grade level classroom. A step in the study is to work with the principals to identify spaces that are large enough to serve instructional grade level section classrooms instead of instructional support service and/or could appropriately share with another instructional support service in a different location in the building *without hindering the instructional support service to pupils*. The study step is important to identify if a school could likely accommodate more class sections than it does now *if* enrollment increased for that building.

The redeployment of specific instructional support services to typically sized space for such services could allow additional class level sections if needed because of school building enrollment. **The study, though, is very conservative in suggesting what added pupil capacity that is possible and practicable without hindering the current program.** The pupil capacity represented by the potential re-deployment of current instructional support spaces is not included in the pupil capacity summary chart on page 4. One reason is that the stage area in Rosendale is assigned to serve other instructional purposes (example, PT). Therefore, the spaces below could be legitimately re-assigned for support space now on the stage and thus would not add to the pupil capacity of the building. The number of Resource Spaces at Van and the High School should be an instructional decision. It is very possible one fewer at each school may be possible.

SCHOOL	Potential Reassignment of 2018-2019 Support Service Spaces to Accommodate Added Enrollment and Pupil Capacity	Potential Added Pupil Capacity	Notes:
Rosendale Elementary	Conference Room 143 937 square feet	23	
	All Purpose Room 157 920 square feet	23	
Van Antwerp	Conference Room 251 839 square feet	25	There are five Resource Support Spaces. Use the smallest (430 square feet) as a conference room; remaining four Resource Rooms can accommodate expected pupil services.
High School	Resource Room 242 911 square feet	25	There are seven Resource Support Spaces. Use the remaining six Resource Rooms to accommodate expected pupil services.

- ✓ Niskayuna CSD has a history of collaboration in the rental of classroom spaces to the BOCES to host regional shared programming for special needs pupils. Such a practice suggests the positive role of Niskayuna as a regional partner to help establish quality shared programs. Also, such shared



## FINDINGS

programs allow Niskayuna to provide specialized programs to a unique set of Niskayuna pupils in a program-effective and cost-effective manner *within* the home Niskayuna School District. The pupil capacity represented by the rented space to the BOCES to support regional programming is not included in the chart on page 4.

School Building	Rented Space to the BOCES Consortium for Regional Shared Programming	2018-2019 Estimated* Pupil Capacity K-12 of rented space by Niskayuna to host regional shared programs through the BOCES	
		Potential Functional Operating Capacity of the Rented Space Guided by the Local District Class Size TARGETS	Potential Pupil Capacity of the Rented Space Guided by the Local District Class Size GUIDELINES
Birchwood Elementary	--	--	--
Craig Elementary	--	--	--
Glenclyff Elementary	--	--	--
Hillside Elementary	--	--	--
Rosendale Elementary	--	--	--
<b>TOTAL GRADES K-5</b>	--	--	--
<b>Iroquois</b>	Rm. 130; 8396 sq. ft. Rm. 139; 899 sq. ft.	0 to 25 0 to 25	0 to 28 0 to 28
<b>Van Antwerp</b>	Rm. 228; 690 sq. ft. Rm. 230; 730 sq. ft.	0 to 25 0 to 25	0 to 28 0 to 28
<b>TOTAL GRADE 6-8</b>	<b>Four classrooms</b>	<b>0 to 100</b>	<b>0 to 112</b>
<b>High School GRADES 9-12</b>	Rm. 229; 609 sq. ft. Rm. 231; 609 sq. ft.	0 to 25 0 to 25	0 to 28 0 to 28
<b>TOTAL GRADE 9-12</b>	<b>Two classrooms</b>	<b>0 to 50</b>	<b>0 to 56</b>

✓ **Classroom Sizes Available to Deliver Grade Level and Special Needs Self-contained Instruction in 2018-2019**

Square Footage	900+	800 to 899	770 to 799	700 to 769	550 to 699	Below 550
<b>SCHOOL BUILDING</b>	Above or at standard classroom square footage.			Below standard classroom square footage.		
Birchwood Elementary	18	0	0	0	0	0
Craig Elementary	9	9	0	0	0	0
Glenclyff Elementary	12	5	0	0	0	0
Hillside Elementary	6	12	0	0	0	0
Rosendale Elementary	7	9	0	0	0	0
<b>Total:</b>	<b>52</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## FINDINGS

There are 87 grade level and Special Needs Self-Contained classrooms either serving or available for K-5 in 2018-2019. There are 52 classrooms sized at 900+ square feet and 35 sized between 800 and 899 square feet. The minimum square footage of 770 is suggested to serve an elementary classroom. Past facility planning by the community, Boards of Education, and leadership of the school district are commended for the forethought in providing for all classrooms to be above the minimum square footage to support pedagogy that often requires ample square footage to deliver effectively.

### Grade Level Class Section Enrollments Grades K-5 in 2018-2019

The table that follows lists the grade level class section sizes at each of the elementary schools. Also listed is the range in grade level class section sizes and the average grade level class section size at each school. The data help demonstrate the connection among the class size targets of the district; the number of pupil residents in a respective attendance zone; and the grade level class section sizes in each current elementary attendance zone. The chart also illustrates any ‘equity gaps’ in class section sizes among the five elementary attendance zones. The 2018-2019 ‘equity gaps’ are generally a result of the size of a particular age level cohort of students who live in a current attendance zone. The lack of pupils or an abundance of pupils of an age level in an attendance zone usually hinders the effective delivery of the program as close to the class size targets of the district. *Are there program delivery/implementation scenario options that might help to reduce class size equity gaps among schools serving the same grade levels?*

### -2019 SCHOOL YEAR ELEMENTARY GRADE LEVEL CLASS SECTION ENROLLMENTS AS OF OCTOBER 2018

( ) is the number of special needs pupils integrated in the class section with either an Individual Education Program or a 504 Plan\*

GRADE LEVEL	Birchwood	Craig	Glenciff	Hillside	Rosendale
<b>KINDERGARTEN</b>	18(2)	18	18(3)	20	20
Class size goal:	18	20	18	20	21(3)
20	18	20(4)	18	19(5)	19(4)
<b>K Range</b>	18-18	18-20	18	19-20	19-21
<b>K Average</b>	18	19.3	18	19.7	20
<b>GRADE 1</b>	21(1)	20	18(5)	23	23(5)
Class size goal:	19(5)	20(2)	20(1)	22(4)	22
21	21	20	18(1)	23	22(3)
<b>GRADE 1 Range</b>	19-21	20-20	18-20	22-23	22-23
<b>GRADE 1 Average</b>	20.3	20	18.7	22.7	22.3
<b>GRADE 2</b>	21	24	22(2)	23(5)	18(1)
Class size goal:	20(3)	24(4)	24(2)	23(2)	25
22	19	24	24(1)	24(3)	23(7)
<b>GRADE 2 Range</b>	19-21	24-24	22-24	23-24	18-25
<b>GRADE 2 Average</b>	20	24	23.3	23.3	22
<b>GRADE 3</b>	24	22	17	18(2)	22(3)
Class size goal:	24	20(5)	18(4)	17(3)	24
23	21(4)	22	18	19	24(6)
<b>GRADE 3 Range</b>	21-24	20-22	17-18	17-19	22-24
<b>GRADE 3 Average</b>	23	21.3	17.7	18	23.3
<b>GRADE 4</b>	26(3)	22(5)	20	22(7)	25(4)

## FINDINGS

Class size goal: 24	26(2)	22	22(1)	24(1)	25(2)
		23	21(3)	25(1)	
<b>GRADE 4 Range</b>	26-26	22-23	20-22	22-25	25-25
<b>GRADE 4 Average</b>	26	22.3	21	23.7	25
<b>GRADE 5</b>	27(4)	25(3)	26(5)	23(2)	27(4)
Class size goal: 25	27	25	25(3)	24(2)	25(3)
		24(5)		24(1)	
<b>GRADE 5 Range</b>	27-27	24-25	25-26	23-24	25-27
<b>GRADE 5 Average</b>	27	24.7	25.5	23.7	26

The table below rank orders grade level class size average data for 2018-2019 building by building.

<b>GRADE LEVEL</b>	<b>SCHOOL</b>	<b>AVERAGE GRADE LEVEL SECTION SIZE RANK-ORDERED LOWEST TO HIGHEST</b> <b>2018-2019 School Year</b>	<b>NET DIFFERENCE BETWEEN THE LOWEST AND HIGHEST GRADE LEVEL AVERAGE CLASS SIZE AMONG THE ELEMENTARY SCHOOLS</b>
<b>KINDERGARTEN</b> Class size goal: 20	Birchwood	18	Grade Kindergarten Equity Gap: 2 pupils; 11.1% difference low to high
	Glencliff	18	
	Craig	19.3	
	Hillside	19.7	
	Rosendale	20	
<b>GRADE 1</b> Class size goal: 21	Glencliff	18.7	Grade One Equity Gap: 4 pupils; 21.4% difference low to high
	Craig	20	
	Birchwood	20.3	
	Rosendale	22.3	
	Hillside	22.7	
<b>GRADE 2</b> Class size goal: 22	Birchwood	20	Grade Two Equity Gap: 4 pupils 20% difference low to high
	Rosendale	22	
	Glencliff	23.3	
	Hillside	23.3	
	Craig	24	
<b>GRADE 3</b> Class size goal: 23	Glencliff	17.7	Grade Three Equity Gap: 5.6 pupils; 31.6% difference low to high
	Hillside	18	
	Craig	21.3	
	Birchwood	23	
	Rosendale	23.3	
<b>GRADE 4</b> Class size goal: 24	Glencliff	21	Grade Four Equity Gap: 5 pupils; 23.8% difference low to high
	Craig	22.3	
	Hillside	23.7	
	Rosendale	25	
	Birchwood	26	
<b>GRADE 5</b> Class size goal: 25	Hillside	23.7	Grade Five Equity Gap: 3.3 pupils; 13.9% difference low to high
	Craig	24.7	
	Glencliff	25.5	
	Rosendale	26	
	Birchwood	27	

## FINDINGS

The table on the next page lists the on-average ‘efficient deployment’ of instructional staff at each grade level K-5 for 2018-2019. The table is based on the premise that the local Niskayuna ‘functional operating’ class size targets define the ‘*efficient deployment*’ of instructional staff. That is, *unless* there is a clearly defined student need variable that requires a class size lower than the class size goal of the district, an indicator of ‘financial efficiency’ in deploying staff is how close the average of the class sections at each grade level in a school building approaches the district class size target for that grade level.

For example, at grade one 21 pupils is the class size district ‘functional operating’ target. If the average of all of the class sections of grade one at a school equals 20, then the on-average collective utilization of instructional staff assigned at grade one in that school is 20 divided by 21 resulting in a ‘deployment efficiency indicator’ of 95% as defined by the *district ‘functional operating’ class size target goal*. This approach of viewing and discussing ‘efficient deployment’ of instructional staff is not an absolute measure nor should it be an absolute decision guide. Delivering instruction is a human enterprise and flexibility in the implementation of instruction because of pre-defined variables cannot be ignored. At the same time, professional instructional human resources are the backbone of the public school enterprise funded with public resources. The study suggests that an on-average utilization of instructional staff as benchmarked to the district grade level class section size ‘functional operating’ target between 85% and 100% is one reasonable criterion/objective to help define the ‘efficient deployment of teaching staff’. *Are there program delivery/implementation scenario options that might help ensure an equitable and professionally efficient assignment of instructional services across grade levels at different locations within the District?*

<b>2018-2019 ‘Efficient’ Deployment of Staff</b>			
<b>GRADE LEVEL</b>	<b>SCHOOL</b>	<b>AVERAGE GRADE LEVEL SECTION SIZE</b>	<b>On Average ‘Efficient Deployment’ of Instructional Staff Benchmarked to District Functional Operating Class Size Goal for the Grade Level</b>  (average grade level class size at a school divided by the district class size goal for the grade level)
<b>KINDERGARTEN</b> Class size goal: 20	Birchwood	18	90%
	Glencliff	18	90%
	Craig	19.3	97%
	Hillside	19.7	99%
	Rosendale	20	100%
<b>GRADE 1</b> Class size goal: 21	Glencliff	18.7	89%
	Craig	20	95%
	Birchwood	20.3	97%
	Rosendale	22.3	106%
	Hillside	22.7	108%
<b>GRADE 2</b> Class size goal: 22	Birchwood	20	91%
	Rosendale	22	100%
	Glencliff	23.3	106%
	Hillside	23.3	106%
	Craig	24	109%
<b>GRADE 3</b>	Glencliff	17.7	77%

## FINDINGS

Class size goal: 23	Hillside	18	78%
	Craig	21.3	93%
	Birchwood	23	100%
	Rosendale	23.3	101%
<b>GRADE 4</b>			
Class size goal: 24	Glencliff	21	88%
	Craig	22.3	93%
	Hillside	23.7	99%
	Rosendale	25	104%
	Birchwood	26	108%
<b>GRADE 5</b>			
Class size goal: 25	Hillside	23.7	95%
	Craig	24.7	99%
	Glencliff	25.5	102%
	Rosendale	26	104%
	Birchwood	27	108%

## OBSERVATIONS:

✓

Out of the 85 class sections serving grades Kindergarten through grade 5 pupils in 2018-2019, the number of grade level sections that are:		
<i>Below the functional class size targets of the district</i>	<i>At the functional class size targets of the district</i>	<i>Above the functional class size targets of the district</i>
42	13	30
49.4%	15.3%	35.3%
<i>Below the functional class size targets of the district by over 10%</i>		<i>Above the functional class size targets of the district by over 10%</i>
11		1
12.9%		1.1%

The data suggest the commitment of the School District to the class size targets set by the district within each elementary school. The data also suggest how the application of the ‘flex zone’ attendance policy has influenced the low number of grade level class sections with a class size over 10% of the grade level class size target.

- ✓ The district is achieving ‘equity’ (balance) of class sizes within grade levels *within* each building. However, there are equity gaps in grade level class section sizes *between and among* the elementary school buildings and the attendance zones they serve. Grade level equity gaps across the district at the same grade level range from 11.1% or 2 pupils at kindergarten to 31.6% or 5.6 pupils at grade three.
- ✓ ***The grade level section equity gaps are not a result of poor resource allocation or class section assignment. Rather, the gaps occur simply because of the lack of pupils or a high number of pupils at a particular grade level who live within the various elementary attendance zones. Only the district can judge an acceptable difference in average grade level class sizes between and among the elementary schools.***

## FINDINGS

- ✓ There is no one configuration or plan that can guarantee that there will be no equity gaps between grade level section class averages in one school compared to another. However, it is diligent to ask: *Are there grade level building configurations and/or attendance zone change options that might reduce the equity gaps in average grade level section sizes between and among the elementary school buildings? Are there scenario options that can mitigate the use of the ‘flex zone’ policy tool to help keep equitable class sizes among various grade levels?*
  
- ✓ The study suggests that the ‘efficient deployment’ of instructional staff is defined by the local Niskayuna class size ‘functional operating’ targets of the district. An indicator of ‘financial efficiency’ in deploying staff is how close the average of the class sections at each grade level in a school building approaches the district ‘functional operating’ size goal for that grade level. A reasonable exception is when there is a clearly pre-defined student need variable that requires a class size lower than the class size goal of the district at a particular grade level at a particular school in a given year.

In eleven instances across five buildings, grade level staff on-average is deployed above 100% of the ‘functional operating’ class size target for the grade level. In seventeen instances across five buildings, grade level staff on-average is deployed between 88% and 100% of the ‘functional operating’ class size target for the grade level. In only two instances across five buildings, are grade level staff on-average deployed below 85% of the ‘functional operating’ class size target for the grade level.

*Are there grade level building configurations and/or attendance zone change options that might enable the efficient deployment of talented certified staff in K-5 on a consistent basis between 100% and at least 85% of what is expected by Niskayuna’s ‘functional operating’ class section size targets for each grade level? Are there grade level building configurations and/or attendance zone change options that might reduce the number of K-5 grade level averages across the district that require a staff deployment of over 100% of the operational class size goal for a respective grade level?*

Grade; District Class Size Target	Birchwood		Craig		Glenclyff		Hillside		Rosendale	
	Average grade level section size 2018-2019—On-Average ‘Efficiency of Staff Deployment’									
<b>K: 20</b>	18	<b>90%</b>	19.3	<b>97%</b>	18	<b>90%</b>	19.7	<b>99%</b>	20	<b>100%</b>
<b>One: 21</b>	20.3	<b>97%</b>	20	<b>95%</b>	18.7	<b>89%</b>	22.7	<b>108%</b>	22.3	<b>106%</b>
<b>Two: 22</b>	20	<b>91%</b>	24	<b>109%</b>	23.3	<b>106%</b>	23.3	<b>106%</b>	22	<b>100%</b>
<b>Three: 23</b>	23	<b>100%</b>	21.3	<b>93%</b>	17.7	<b>77%</b>	18	<b>78%</b>	23.3	<b>101%</b>
<b>Four: 24</b>	26	<b>108%</b>	22.3	<b>93%</b>	21	<b>88%</b>	23.7	<b>99%</b>	25	<b>104%</b>
<b>Five: 25</b>	27	<b>108%</b>	24.7	<b>99%</b>	25.5	<b>102%</b>	23.7	<b>95%</b>	26	<b>104%</b>

## FINDINGS

### **FINDINGS OF THE ENROLLMENT PROJECTION CALCULATIONS**

**(The complete *Enrollment Projection/Demographic Study* of February 2019 is posted on the website of the School District).**

#### **Variables that can Influence Future School District Enrollments**

The six sources of current and projected school District enrollment are:

- live births within the Niskayuna Central SD and their eventual kindergarten enrollment in the District;
- new household population with children who move to the District;
- new population who move to the District who are at child-bearing age and plan to begin a family;
- enrollment of students from non-public schools or from home-schooling settings;
- school program and academic intervention changes that may increase the success of the school District in keeping existing enrollment as long as possible to culminate in high school graduation;
- a change by other public schools, if any, who tuition students to attend Niskayuna Central School District.

The *Enrollment/Demographic Study* of February 2019 discusses the above variables and the Niskayuna School District. If there are data to suggest that one or more of the variables listed above will not continue into the near future of the next five years in the same historical pattern, then the baseline enrollment projections results are modified to estimate the potential impact the variable(s) may have on future school District enrollments.

#### **Perspective of Annual Grade Level Enrollments**

*Chart One* illustrates the total K-12 enrollment in the six enrollment years since 2013-2014. The change in enrollment is from 4099 pupils in 2013-14 to 4255 in the current school year. The increase of 156 pupils equates to a +3.8% change over the past six years. The six-year average is 4169 pupils and the median is 4160. *Chart Two* illustrates the historical pattern of K-6, and 7-12 enrollments since 2013. Note the pattern of increase in elementary enrollments over the past six years. The steady increase in K-6 enrollment is a harbinger of the possible increasing pattern 7-12 enrollment pattern over the next seven years. *Chart Three* illustrates the historical pattern of K-5, 6-8 and 9-12 enrollments since 2013.

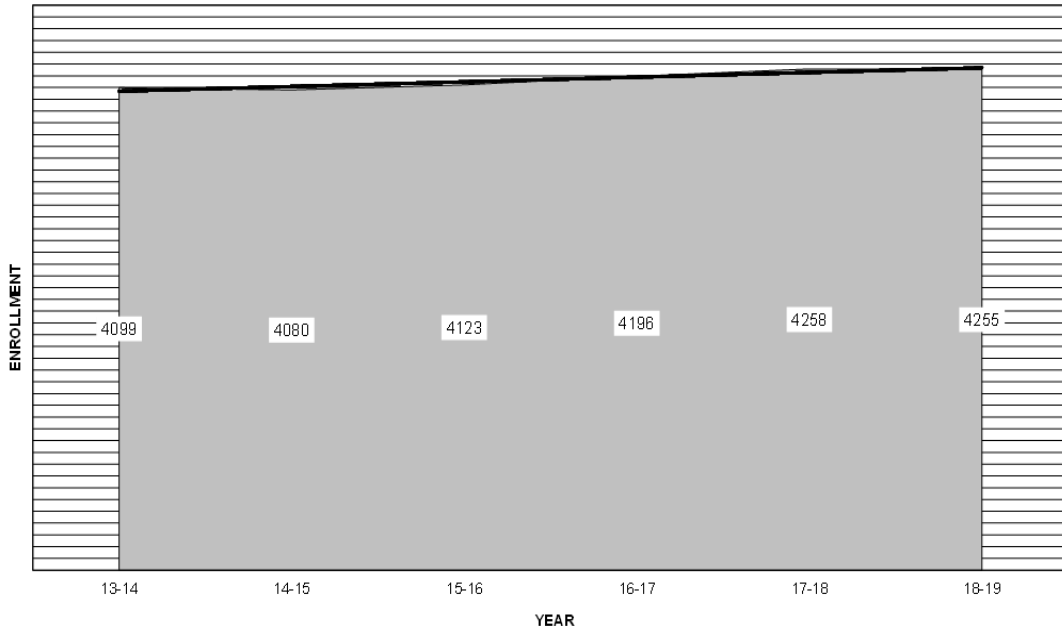
Over the past six school years:

- ✓ K-12 enrollment has increased by 156 pupils or +3.8%
- ✓ Grades K-5 enrollment has increased by 171 pupils or +10.08%
- ✓ Grades 6-8 enrollment has declined by 34 pupils or -3.3%
- ✓ Grades 9-12 enrollment has increased by 19 pupils or by +1.4%

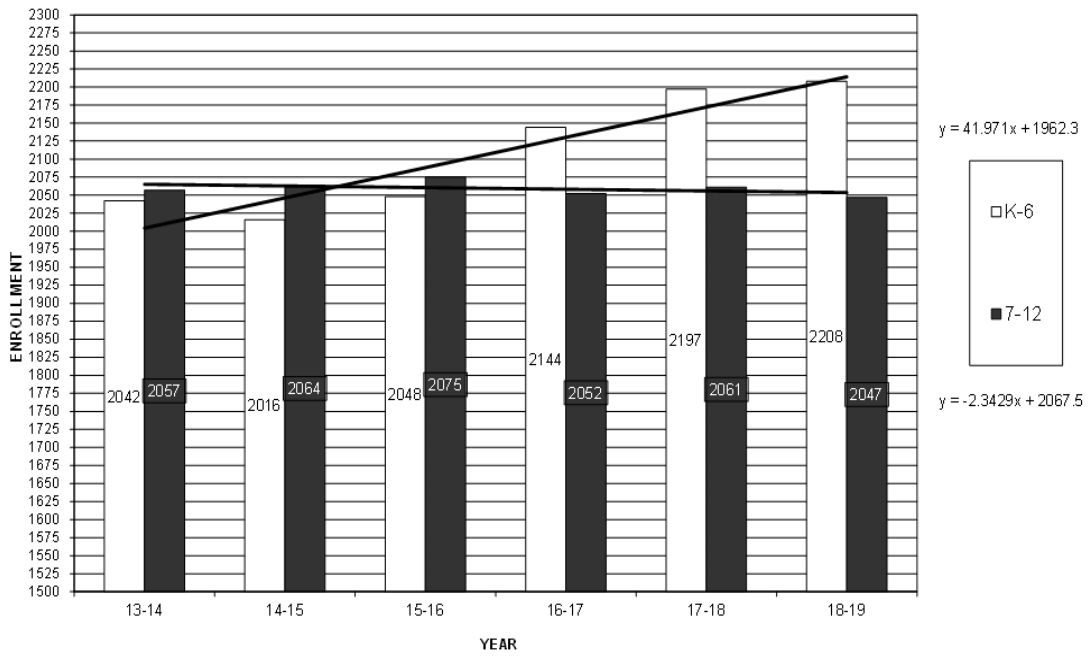
# FINDINGS

**CHART ONE: NISKAYUNA CSD  
HISTORICAL K-12 ENROLLMENT  
2013-2018**

$$y = 39.629x + 4029.8$$



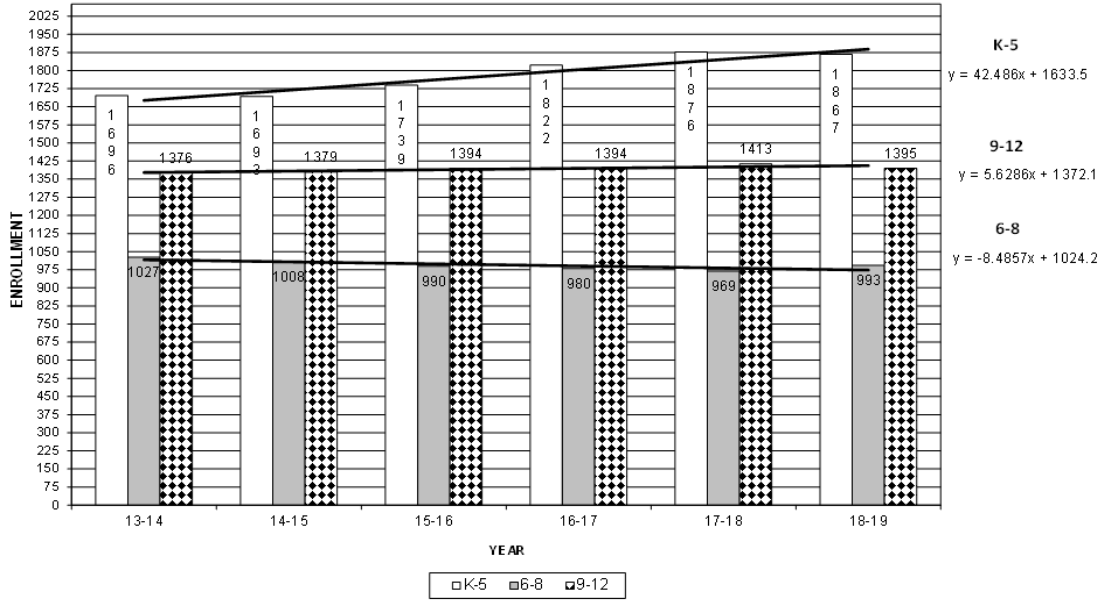
**CHART TWO: NISKAYUNA CSD  
HISTORICAL K-6, 7-12 ENROLLMENT  
2013-2018**





## FINDINGS

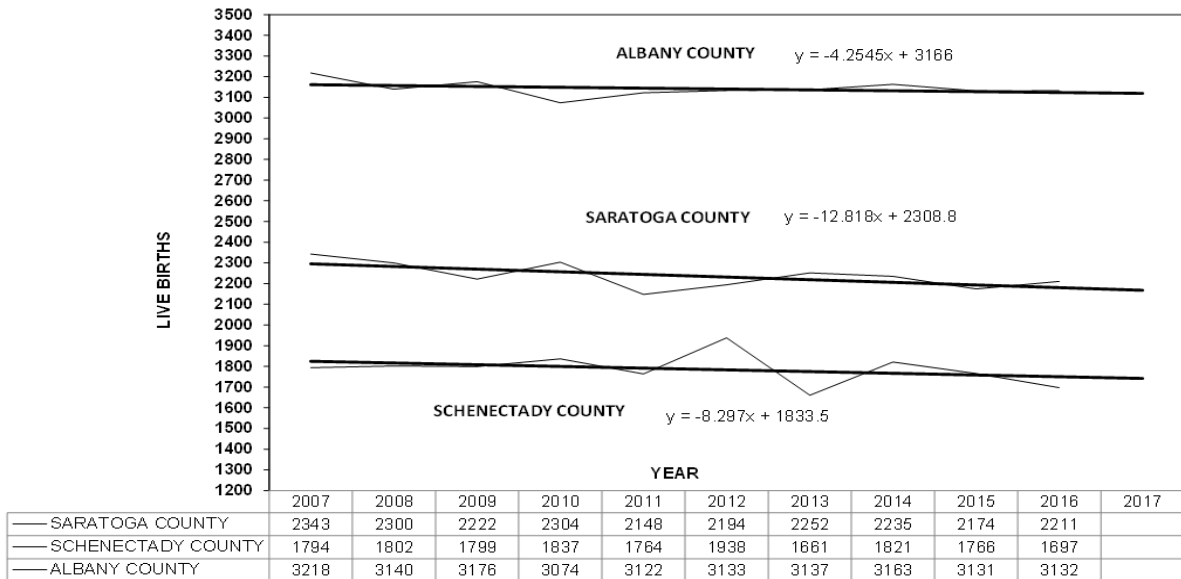
### CHART THREE: NISKAYUNA CSD HISTORICAL K-5, 6-8, 9-12 ENROLLMENT 2013-2018



### Perspective of Live Births in Saratoga, Schenectady and Albany Counties and the Niskayuna School District

*Figure One* below charts the live birth data since 2007 for the three Counties in which Niskayuna serves. The annual totals of live births in each of the three Counties have trended downward from 2007 to 2016. Annual live births in Albany County have decreased by -2.7% over the past ten years; -4.3% in Schenectady County; and by -5.6% in Saratoga County.

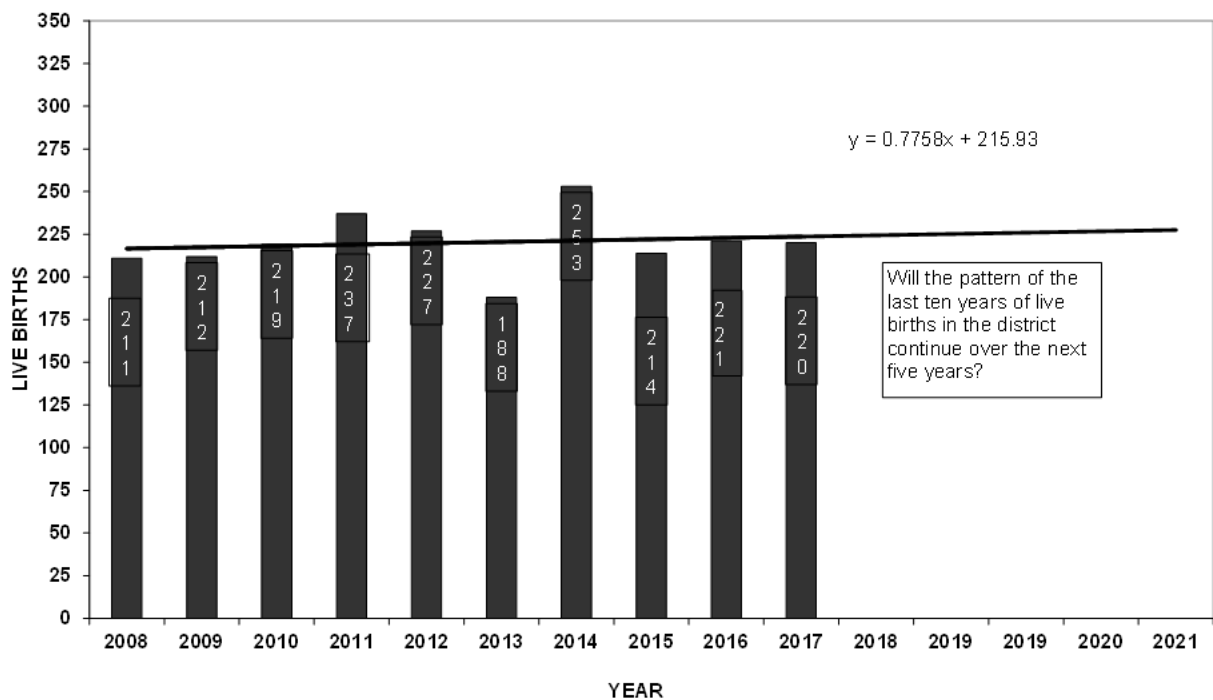
**FIGURE ONE: SARATOGA, SCHENECTADY AND ALBANY COUNTIES  
LIVE BIRTHS 2007-2016**



## FINDINGS

*Figure Two* illustrates the pattern of live births in the enrollment area of the Niskayuna Central School District from 2008 through 2017. The range over ten years is from a high of 253 in 2014 to a low of 188 in 2013. There are nine more births recorded in 2017 compared to 2008 (+4.3%). *Will the historical pattern of live births in the Niskayuna Central School District service area shown in Figure Two for the ten years since 2008 continue for the next five years from 2018 through 2022?*

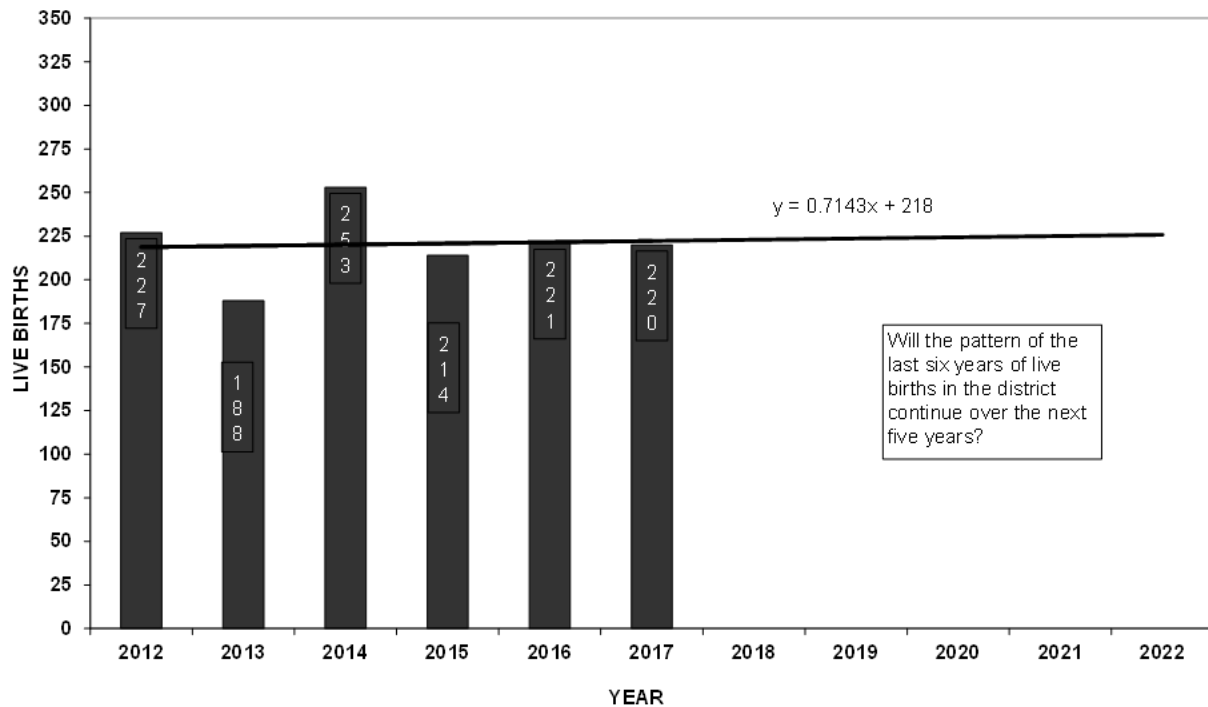
### FIGURE TWO: LIVE BIRTHS IN THE NISKAYUNA CENTRAL SCHOOL DISTRICT ENROLLMENT AREA 2008-2017



*Figure Two-A* on the next page illustrates the pattern of live births in the Niskayuna Central School District over the past six years from 2012-2017. Viewing the live birth data over the past six years instead of ten illustrates the most current influence of demographic variables that may have influenced the annual number of live births in the School District. In 2012 there were 227 live births within the boundaries of the Niskayuna School District. In 2017 there were 220. Note that the Niskayuna has had a steady moderate positive increase in the pattern of annual births since 2008 unlike the three Counties in which the School District is located. *Will the positive historical pattern of live births since 2012 in the Niskayuna School District service area shown in Figure Two-A continue for the next five years through 2022?*

## FINDINGS

**FIGURE TWO-A: LIVE BIRTHS IN THE  
NISKAYUNA CENTRAL SCHOOL DISTRICT  
ENROLLMENT AREA  
2012-2017**



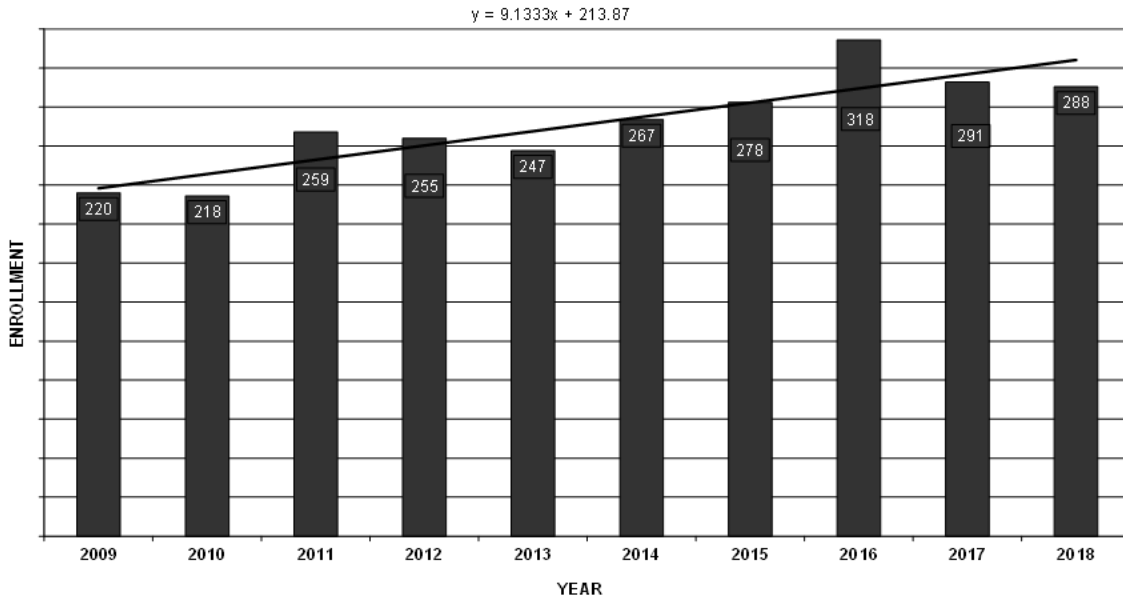
### **Historical Perspective of Live Births and Kindergarten Enrollments in the Niskayuna School District**

*Figure Four* on the next page charts the Niskayuna Central School District kindergarten enrollment from 2009 through 2018. The range over ten years is from a high of 318 in 2016 to a low of 218 in 2010. There are 68 more kindergarten enrollments in 2018 compared to 2009; an increase of +30.9% over the past ten years. *Will the increasing historical pattern of kindergarten enrollments since 2009 in the Niskayuna Central School District service area shown in **Figure Four** continue for the next five years through 2023-2024?*

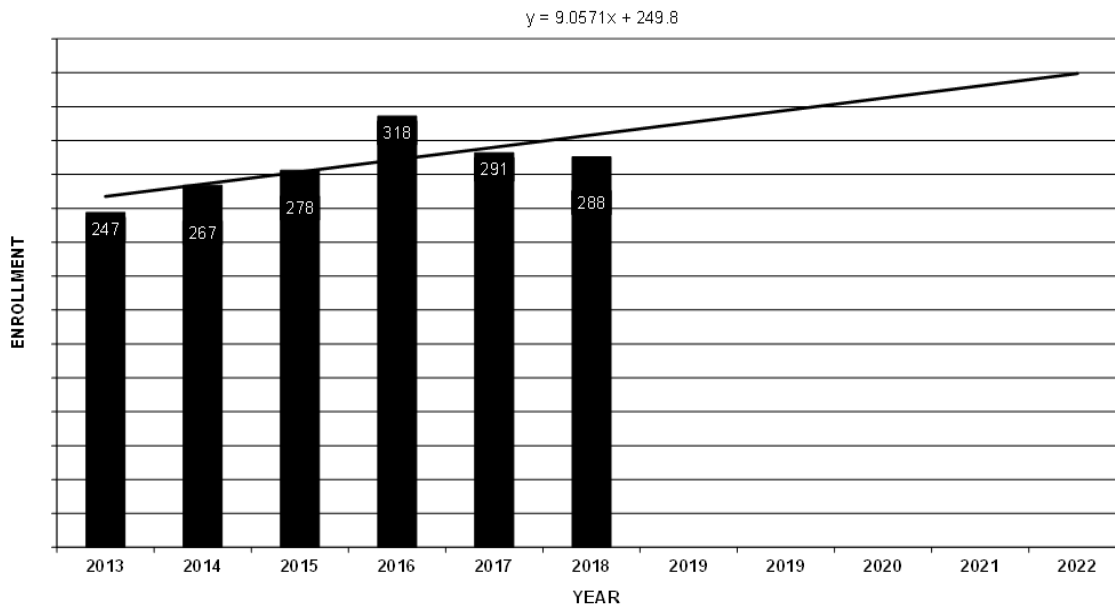
*Figure Five* on the next page charts the Niskayuna Central School District kindergarten enrollment from 2013 through 2018. The increasing pattern of annual kindergarten enrollments continues over the past six school years. The range over six years is from a high of 308 in 2016 to a low of 247 in 2013. There are 41 more kindergarten enrollments in 2018 compared to 2013; an increase of +16.6% over the past six years. *Will the increasing pattern of kindergarten enrollment over the past six years continue into the future?*

## FINDINGS

### FIGURE FOUR: NISKAYUNA SCHOOL DISTRICT KINDERGARTEN ENROLLMENT 2009-2018



### FIGURE FIVE: NISKAYUNA SCHOOL DISTRICT KINDERGARTEN ENROLLMENT 2013-2018

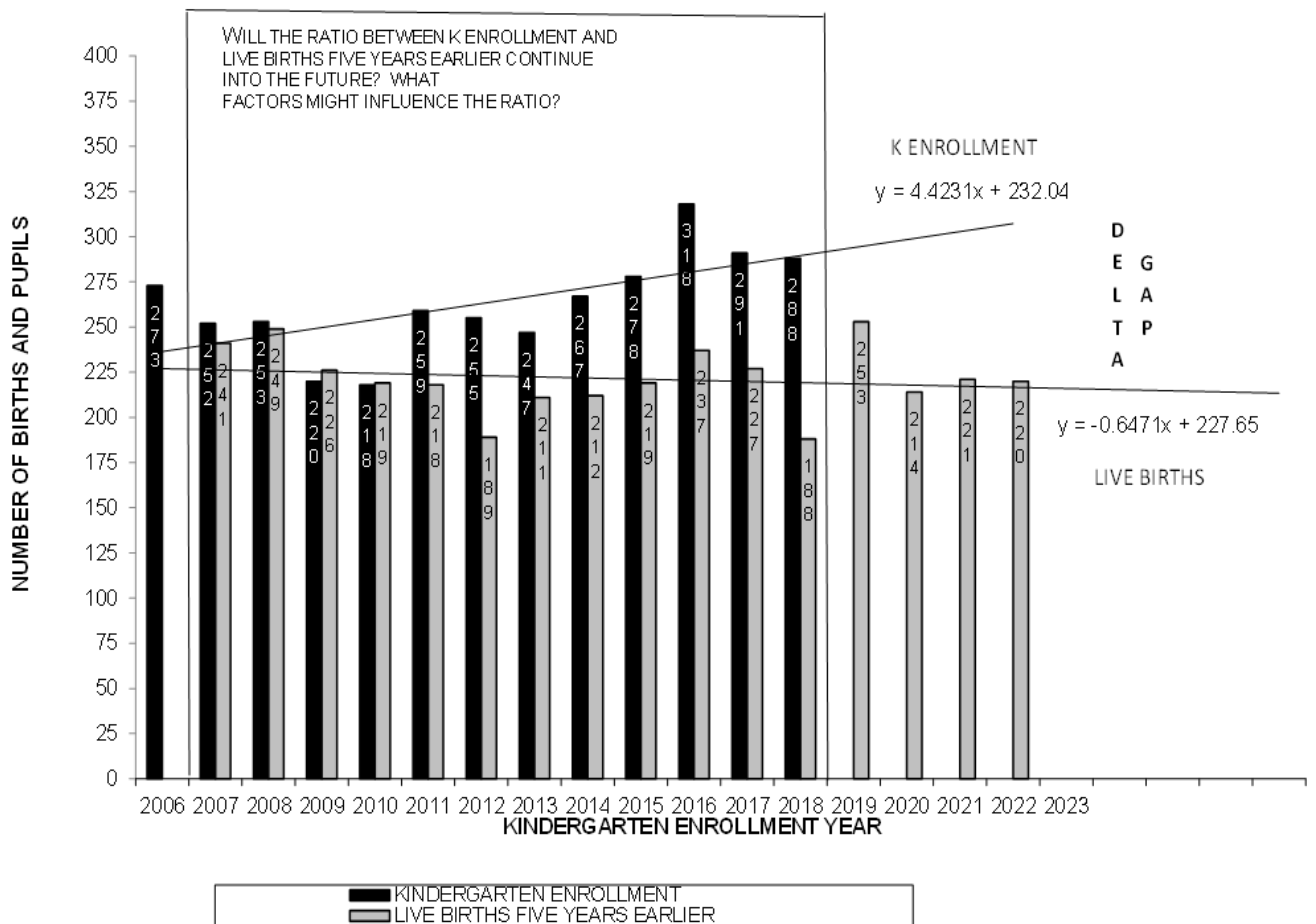


One way to suggest possible answers to the questions about possible birth and kindergarten enrollment patterns in the future of the Niskayuna Central School District is to compare the pattern of kindergarten enrollments at Niskayuna Central School District with the documented live births recorded for the school District enrollment area five years earlier each kindergarten enrollment year. *Figure Six* on the next page illustrates the pattern of kindergarten enrollments and the pattern of live births five years earlier each enrollment year starting in 2006. Note that the pattern of increase in kindergarten enrollments in the school

## FINDINGS

District annually is more pronounced than the pattern live births in the district. This may suggest strongly that children born elsewhere and who enroll in Niskayuna kindergarten classes annually over the past twelve years is a significant factor fueling the increase in Niskayuna pupil enrollments. The pattern of live births since 2002 in Niskayuna has remained close to stable. The historical live birth and kindergarten enrollment patterns suggest that the ongoing impact of kindergarten enrollments of children who are not born in the district is important to *sustain* the pattern of elementary enrollments the district has experienced since at least 2006. Note that the gap between the numbers of live births born five years earlier each kindergarten enrollment year and the kindergarten enrollment of the respective year is getting larger. The housing market increases and the resulting increase of new child-bearing age resident population moving to the district since 2007 has not resulted in a noticeable increase of annual **resident** live birth totals, as yet.

**FIGURE SIX: PATTERN OF KINDERGARTEN ENROLLMENT AND THE PATTERN OF LIVE BIRTHS FIVE YEARS EARLIER IN THE NISKAYUNA SCHOOL DISTRICT**



## FINDINGS

### Low, Mid, and High Kindergarten Enrollment Estimates

The historical kindergarten enrollments of the Niskayuna School District and historical live birth data are analyzed three ways. The three analyses form the basis for three kindergarten enrollment forecasts. The three kindergarten forecasts are used to develop Low, Mid, and High K-12 enrollment projection calculations.

One forecast (*Table 4 of the Enrollment/Demographic Study*) of future kindergarten enrollments assumes that the live births in the school district enrollment area will continue in the same pattern as it has for the past ten years since 2007. It also assumes that the median kindergarten-enrollment-to-live-birth ratio of the total kindergarten enrollments from 2009 through 2018 compared with the live births from 2004 through 2013 (1.26442) is a historically based ratio that is possible to expect in the future. Forecast scenario one is the basis for the **low range** enrollment projection calculations *with a view of five years into the future for the elementary grades*.

A second forecast of estimated future kindergarten enrollments (*Table 5 of the Enrollment/Demographic Study*) assumes that the live births in the school district enrollment area will continue in the same pattern as it has for the past six years from 2012-2017. The forecast also assumes that the ratio derived from the total kindergarten enrollments from 2013-2018 compared to the total live births in the district from 2008-2013 (1.30526) is a historically based ratio that is possible to expect in the future. Forecast scenario two is the basis for the **mid-range** enrollment projection calculations *with a view of five years into the future for the elementary grades*.

A third forecast of kindergarten enrollments assumes that future kindergarten enrollments will follow the historical pattern of kindergarten enrollments from 2013 through 2018 *without* reference to historical live birth trends or kindergarten-to-live-birth ratio patterns (*Table 6 of the Enrollment/Demographic Study*). Forecast scenario three is the basis for the **high range** enrollment projection calculations *with a view of five years into the future for the elementary grades*.

The three methods of estimating possible future kindergarten enrollments along with the historical grade level enrollment patterns K-12 since 2013 form the basis for low, mid and high range **Base Cohort Enrollment Projections**.

The *Enrollment Projection/Demographic Study* of February 2019 collected and analyzed data about the following data patterns.

Data Pattern	Analysis in February 2019 Enrollment Projection/Demographic Study
Migration to and out of the District	p. 21
Home School and Non-Public Enrollment	p. 23
Enrolled Tuition Students	p. 25
Dropout/Non-completion Rates	p. 25
Perspective of the Current Housing Market in the School District	p. 27
Potential New Units to the Housing Market	p. 29

## FINDINGS

Historical patterns of such data may suggest that the baseline enrollment estimates should be adjusted if a major shift in pattern is suspected to occur in the next three to five years. The February 2019 Study concludes that researched information about the data topics and the historical patterns of the data do not suggest any major upcoming changes that might influence future School District enrollments. The Study analyzes and discusses data about the active pattern of the housing market in attracting family households and the data about known new housing development. The *Enrollment Study* suggests that the housing market and documented new housing units coming to the market are ‘**normal and usual**’ of the ten-year historical culture of the district and, therefore, are already reflected in the baseline enrollment projections particularly the ‘high’ projection. No adjustments to the baseline enrollment estimates are made due to the data patterns listed on the previous page.

### **Base Cohort Enrollment Projection Estimates as of February 2019:**

The enrollment estimates are projections and not predictions. Projections for the immediate future are more reliable than for those years further in the future. Enrollment projection totals for K-6 and for 7-12 are more reliable than are those for specific grade levels in specific years. Primary focus should be given to estimates five years into the future for grades K-6, eight years into the future for grades 7-8, and ten years into the future for grades 9-12. The projections do offer a starting point for analyzing and understanding the elements of future school district demographic change. The enrollment projection estimates suggest that it is likely that Niskayuna Central enrollments K-12 will continue to increase.

<b>BASE COHORT ENROLLMENT PROJECTIONS</b>	
<b>Grades K-5</b>	○ <b>Grades K-5 enrollment</b> may increase by about 334 pupils over <b>the next 5 years</b> per the most optimistic estimate. The most conservative estimate suggests enrollment may increase by about 59 pupils in five years compared to 2018-2019.
<b>Grades 6-8</b>	○ <b>Grades 6-8 total enrollment</b> may increase by about 195 pupils over <b>the next 8 years</b> per the most optimistic estimate. The most conservative estimate suggests an enrollment of about 132 more pupils in eight years compared to 2018-2019.
<b>Grades 9-12</b>	○ <b>Grades 9-12 total enrollment</b> may increase by about 213 to about 233 pupils over <b>the next 10 years</b> compared to 2018-2019.

## FINDINGS

Calculation	Year	Grades K-5	Grade 6	Grades 7-8	Grades 9-12
<b>CURRENT ENROLLMENT</b>	2018-2019	1867	341	652	1395
			<b>Grades 6-8: 993</b>		
<b>Baseline Cohort Low Range</b>	2021-2022	1975	346	655	1356
			1001		
	2023-2024	1926	369	755	1370
		1124			
	2026-2027		342	783	1516
	1125				
2028-2029				1615	
<b>Baseline Cohort Mid-Range</b>	2021-2022	2004	346	655	1356
			1001		
	2023-2024	1974	369	755	1370
		1124			
	2026-2027		352	796	1516
	1148				
2028-2029				1628	
<b>Baseline Cohort High Range</b>	2021-2022	2087	346	655	1356
			1007		
	2023-2024	2201	369	755	1370
		1124			
	2026-2027		412	777	1516
	1188				
2028-2029				1608	

Highlighted estimates follow SED planning guidelines with regard to applying enrollment projections to plan anticipated space needs in the future.



## FINDINGS

<b>BASE COHORT ENROLLMENT PROJECTIONS SUMMARY FOR NISKAYUNA CENTRAL SCHOOL DISTRICT</b>																		
<b>LOW RANGE PROJECTION</b>				<b>MID RANGE PROJECTION</b>				<b>HIGH RANGE PROJECTION</b>										
<b>YEAR</b>	<b>K-5</b>	<b>6-8</b>	<b>9-12</b>	<b>TOTAL K-12</b>	<b>K-5</b>	<b>6-8</b>	<b>9-12</b>	<b>TOTAL K-12</b>	<b>K-5</b>	<b>6-8</b>	<b>9-12</b>	<b>TOTAL K-12</b>	<b>TOTAL K-12</b>					
2019	1947	984	1378	4310	1957	984	1378	4320	1942	984	1378	4305	4305					
2020	1966	997	1347	4309	1985	997	1347	4328	2015	997	1347	4359	4359					
2021	1975	1001	1356	4332	2004	1001	1356	4361	2087	1001	1356	4444	4444					
2022	1936	1083	1364	4383	1975	1083	1364	4422	2123	1083	1364	4570	4570					
2023	1926	1124	1370	4420	1974	1124	1370	4468	2201	1124	1370	4695	4695					
2024	1923	1143	1401	4467	1980	1143	1401	4524	2298	1143	1401	4842	4842					
2025	1880	1151	1458	4489	1935	1164	1458	4557	2377	1145	1458	4980	4980					
2026	1899	1125	1516	4540	1954	1148	1516	4618	2457	1188	1516	5162	5162					
2027	1909	1113	1552	4574	1964	1148	1552	4663	2538	1251	1552	5340	5340					
2028	1922	1059	1615	4596	1976	1093	1628	4697	2618	1293	1608	5520	5520					
<b>LOW RANGE PROJECTION</b>				<b>MID RANGE PROJECTION</b>				<b>HIGH RANGE PROJECTION</b>										
<b>YEAR</b>	<b>K-6</b>	<b>7-12</b>	<b>TOTAL K-12</b>	<b>K-6</b>	<b>7-12</b>	<b>TOTAL K-12</b>	<b>K-6</b>	<b>7-12</b>	<b>TOTAL K-12</b>	<b>K-6</b>	<b>7-12</b>	<b>TOTAL K-12</b>	<b>TOTAL K-12</b>					
2019	2261	2048	4310	2271	2048	4320	2256	2048	4305	2256	2048	4305	4305					
2020	2296	2013	4309	2315	2013	4328	2346	2013	4359	2346	2013	4359	4359					
2021	2321	2011	4332	2349	2011	4361	2432	2011	4444	2432	2011	4444	4444					
2022	2331	2052	4383	2370	2052	4422	2518	2052	4570	2518	2052	4570	4570					
2023	2296	2125	4420	2343	2125	4468	2570	2125	4695	2570	2125	4695	4695					
2024	2287	2180	4467	2344	2180	4524	2662	2180	4842	2662	2180	4842	4842					
2025	2285	2205	4489	2352	2205	4557	2776	2205	4980	2776	2205	4980	4980					
2026	2241	2299	4540	2306	2312	4618	2869	2293	5162	2869	2293	5162	5162					
2027	2262	2312	4574	2328	2335	4663	2964	2377	5340	2964	2377	5340	5340					
2028	2273	2323	4596	2339	2358	4697	3058	2462	5520	3058	2462	5520	5520					
<b>LOW RANGE PROJECTION</b>				<b>MID RANGE PROJECTION</b>				<b>HIGH RANGE PROJECTION</b>										
<b>YEAR</b>	<b>K-4</b>	<b>K-3</b>	<b>4-6</b>	<b>5-6</b>	<b>7-8</b>	<b>K-2</b>	<b>K-4</b>	<b>K-3</b>	<b>4-6</b>	<b>5-6</b>	<b>7-8</b>	<b>K-2</b>	<b>K-4</b>	<b>K-3</b>	<b>4-6</b>	<b>5-6</b>	<b>7-8</b>	<b>K-2</b>
2019	1629	1306	955	633	670	948	1639	1316	955	633	670	958	1624	1301	955	633	670	943
2020	1632	1263	1033	664	667	929	1651	1282	1033	664	667	947	1682	1313	1033	664	667	978
2021	1594	1249	1072	727	656	919	1622	1278	1072	727	656	948	1705	1360	1072	727	656	1031
2022	1579	1240	1092	752	688	873	1618	1278	1092	752	688	901	1766	1426	1092	752	688	1065
2023	1575	1197	1098	721	754	887	1622	1233	1110	721	754	913	1849	1478	1092	721	754	1104
2024					779						779						779	
2025					747						747						747	
2026					783						795						776	
2027																		
2028																		

### ESTIMATED FUTURE ENROLLMENTS COMPARED TO EXISTING PUPIL CAPACITY OF THE SCHOOL BUILDINGS

The enrollment projection estimates reported in the *Enrollment Projection/Demographic Study of February 2019* suggest the ranges of pupil capacity that may likely be needed into the future. Pupil capacity is benchmarked to how the Niskayuna program is implemented in 2018-2019. The tables on the next page estimate the potential impact on the use of currently available pupil capacity based on the enrollment projections for grades K-6 five years into the future; for grades (6)7-8 eight years into the future; and for

## FINDINGS

grades 9-12 ten years into the future. The enrollment projections suggest that the current pupil capacity of the district will be insufficient to serve the expected enrollments.

### WORKING SUMMARY OF ENROLLMENT PROJECTION ESTIMATES COMPARED TO EXISTING PUPIL CAPACITY

<b>Estimated K-5 Enrollments and Pupil Capacity in 2023-2024 five years from now</b>			
<b>Grades K-5</b> <i>(October 2018 enrollment)</i>	<b>Functional Operating Capacity Given how the Program is Implemented/Deployed Guided by the Local District Class Size TARGETS</b>	<b>Estimated Enrollment in 2023-2024</b> (low to high projections):	<b>Estimated Unused Pupil Capacity in five years in 2023-2024 with the <u>current</u> grade level and school building configurations:</b>  (Does not factor unassigned pupil capacity to address flexibility of program delivery.)
<b>Birchwood Elementary</b> <i>(360)</i>	368		
<b>Craig Elementary</b> <i>(396)</i>	405		
<b>Glenclyff Elementary</b> <i>(346)</i>	381		
<b>Hillside Elementary</b> <i>(400)</i>	412		
<b>Rosendale Elementary</b> <i>(365)</i>	392		
<b>TOTAL GRADES K-5</b> <i>1867</i>	<b>1958</b>	<b>1926-2201</b>	<b><u>Under</u> available operating pupil capacity by 22 or by 1.1%; up to <u>over</u> available pupil capacity by 243 or by 12.4%</b>

<b>Estimated 6-8 Enrollments and Pupil Capacity in 2026-2027; eight years from now</b>			
<b>Grades 6-8</b> <i>(October 2018 enrollment)</i>	<b>Functional Operating Capacity Given how the Program is Implemented/Deployed Guided by the Local District Class Size TARGETS</b>	<b>Estimated Enrollment In 2026-2027</b> (low to high projections):	<b>Estimated Unused Pupil Capacity in eight years in 2026-2027 with the <u>current</u> grade level and school building configurations:</b>  (Does not factor unassigned pupil capacity to address flexibility of program delivery.)
<b>Iroquois Middle School Grade 6</b> <i>(180)</i>	175		
<b>Iroquois Middle School 7-8</b> <i>(351)</i>	387		
<b>Van Antwerp Middle Grade 6</b> <i>(161)</i>	175		
<b>Van Antwerp Middle School 7-8</b> <i>(301)</i>	353		
<b>TOTAL GRADES 6-8</b> <i>993</i>	<b>1090</b>	<b>1125-1188</b>	<b><u>Over</u> available operating pupil capacity by 35 to 98 or by 3.1% to 9%</b>

## FINDINGS

<b>Estimated 9-12 Enrollments and Pupil Capacity in 2028-2029; ten years from now</b>			
<b>High School 9-12</b>  <i>(October 2018 enrollment)</i>	<b>Functional Operating Capacity Given how the Program is Implemented/Deployed Guided by the Local District Class Size TARGETS</b>	<b>Estimated Enrollment In 2028-2029 (low to high projections):</b>	<b>Estimated Unused Pupil Capacity in ten years in 2028-2029 with the <u>current</u> grade level and school building configurations:</b>  (Does not factor unassigned pupil capacity to address flexibility of program delivery.)
<b>TOTAL GRADES 9-12</b> <i>1395</i>	<b>1412</b>	<b>1608-1628</b>	<b><u>Over available operating pupil capacity by 196 to 216 or by 13.9% to 15.3%</u></b>

<b>FINDINGS, INFERENCES AND OBSERVATIONS BASED ON THE VISITS TO EACH NISKAYUNA SCHOOL BUILDING AND THE INTERVIEWS WITH THE ADMINISTRATIVE TEAM</b>
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- The mileages between the buildings of the District are charted below. The District boundaries serve 20.14 square miles.

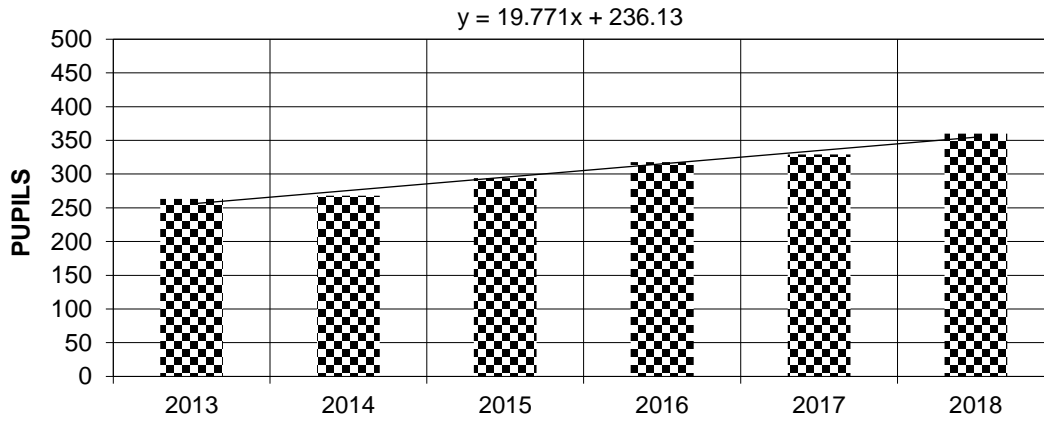
	Birchwood	Van Antwerp Middle School	High School	Craig	Glenclyff	Hillside	Rosendale
Iroquois Middle	3.3	2.8	3.2	3.9	6.2	2.3	.3
Rosendale	3.4	2.5	2.9	4.2	6.3	2.0	
Hillside	4.2	.6	1.2	2.0	4.3		
Glenclyff	8.4	4.4	3.9	2.3			
Craig	6.1	1.8	1.3				
High School	5.2	1.1					
Van Antwerp Middle	4.8						

- Below are the annual October enrollments of the five elementary school buildings since 2013

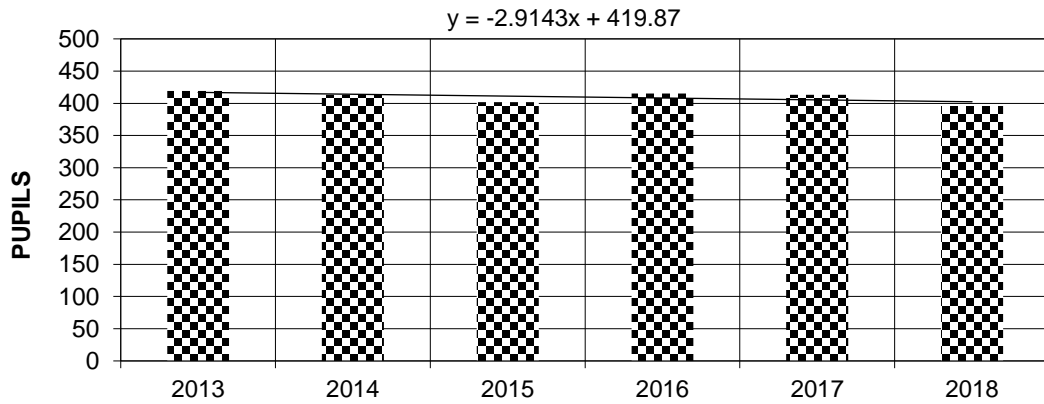
School Year:	Birchwood	Craig	Glenclyff	Hillside	Rosendale
<b>2013</b>	263	419	319	335	360
<b>2014</b>	268	413	319	357	335
<b>2015</b>	294	402	338	374	331
<b>2016</b>	318	415	354	383	352
<b>2017</b>	329	413	362	400	372
<b>2018</b>	360	396	346	400	365

Charted below are the enrollments of each elementary school, grades 6-8, and 9-12 from 2013-2018.

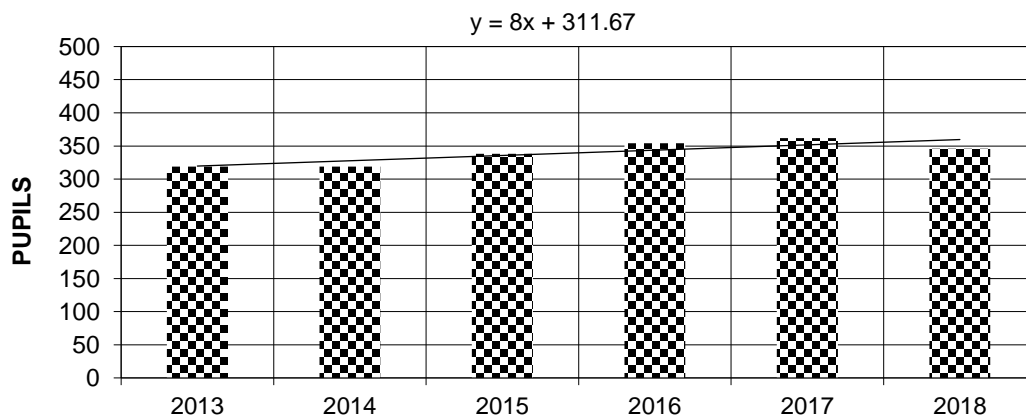
**FINDINGS  
BIRCHWOOD ELEMENTARY  
2013-2018**



**CRAIG ELEMENTARY  
2013-2018**



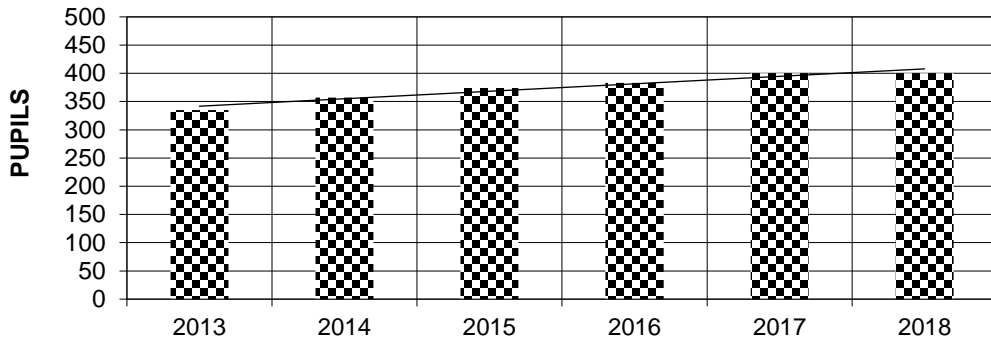
**GLENCLIFF ELEMENTARY  
2013-2018**



# FINDINGS

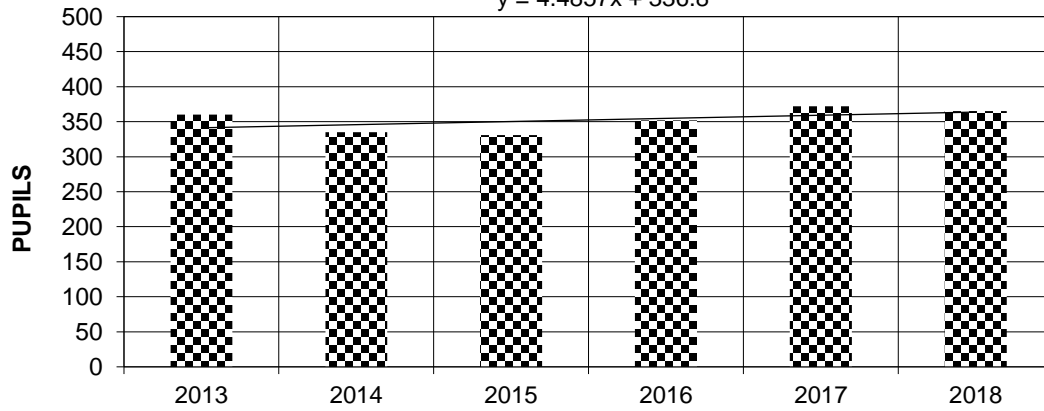
## HILLSIDE ELEMENTARY 2013-2018

$$y = 13.229x + 328.53$$

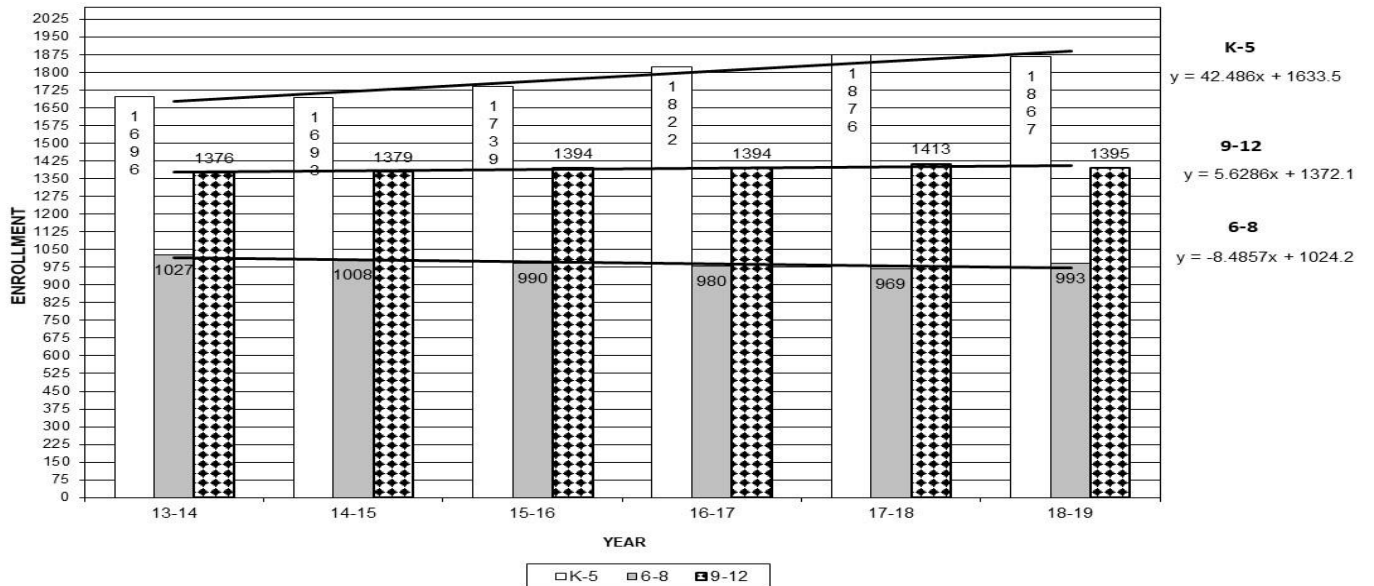


## ROSENDALE ELEMENTARY 2013-2018

$$y = 4.4857x + 336.8$$



## NISKAYUNA CSD HISTORICAL K-5, 6-8, 9-12 ENROLLMENT 2013-2018



## FINDINGS

Below is a rank ordering of the slope of the trend line describing the annual enrollment pattern of each school from 2013 to 2018. A negative slope signifies that over six years the pattern of annual enrollment in the school has decreased.

<b>Elementary School:</b>	<b>Slope of the pattern of six years of annual enrollments:</b>
<b>Birchwood</b>	+19.8
<b>Hillside</b>	+13.23
<b>Glenclyff</b>	+8
<b>Rosendale</b>	+4.49
<b>Craig</b>	-2.9
<b>Secondary School:</b>	
<b>High School</b>	+5.63
<b>Middle Schools</b>	-8.49

Typically, a base step in such studies as this one, is researching for continuous decline or a large continuous increase in enrollment over time in one or more attendance zones or geographic areas of a school District.

### ○ Service to K-12 Pupils with Special Needs:

<b>Special Needs Program</b>	<b>2017-2018</b>		<b>2016-2017</b>		<b>2015-2016</b>	
	#served in the home district <b>by the home district</b>	# served outside the home district <b>(by others, not the home district)</b>	#served in the home district <b>by the home district</b>	# served outside the home district <b>(by others, not the home district)</b>	#served in the home district <b>by the home district</b>	# served outside the home district <b>(by others, not the home district)</b>
15:1	0	0	1	0	0	0
12:1:1	24	2	33	1	14	4
12:1:4 Approved Private School - Day	11	4	0	1	0	2
12:1:3	12	0	2	0	0	0
12:1:2	8	2	2	1	0	0
12:1+6 Approved Private School - Day	0	1	0	1	0	1
10:1 Approved Private School - Day	0	0	0	0	0	1
9:1:3	0	2	0	1	0	2
8:1-3 Approved Private School - Day	0	2	0	0	0	1
8:1:2	0	3	1	2	0	2
8:1+2 Approved Private School - Day	0	3	0	3	0	1
8:1:1 Approved Private School - Day	0	1	0	1	0	0

## FINDINGS

Special Needs Program	2017-2018	2016-2017	2015-2016	Special Needs Program	2017-2018	2016-2017
	#served in the home district <b>by the home district</b>	# served outside the home district <b>(by others, not the home district)</b>	#served in the home district <b>by the home district</b>		#served in the home district <b>by the home district</b>	# served outside the home district <b>(by others, not the home district)</b>
Residential 8:1:1	0	0	0	0	0	1
6:1:1	0	4	10	2	2	1
6:1:2	0	6	1	4	0	1
4:1:2	0	2	0	2		1
Consult teacher services	320	0	269	0	257	0
Others not in a set nomenclature as identified above. (504 PUPILS)*	142	0	147	0	117	0
<b>TOTALS:</b>	<b>517</b>	<b>32</b>	<b>466</b>	<b>19</b>	<b>390</b>	<b>18</b>
<b>% Served by Out of District Programs</b>	<b>5.8%</b>		<b>3.9%</b>		<b>4.4%</b>	

\*An IEP is an Individualized Education Program plan for special needs pupils. A 504 plan is not an IEP. A 504 Plan is a blueprint to provide supports and remove barriers for a student with a disability so the student has equal access to the general education curriculum. If a child has a disability that does not adversely affect educational performance, then the child is not eligible for special education services. However, he/she will usually be entitled to service/accommodations defined by a 504 Plan. Often, for example, 504 Plans include test accommodations. The 504 services/accommodations don't change 'what' pupils learn, but 'how' they learn. The goal is to remove barriers to ensure access to learning.

Disability	# of students 2017-18	# of students 2016-17	# of students 2015-16
Autism	48	46	41
Emotional Disturbance	5	9	11
Learning Disability	113	109	97
Deafness	0	0	0
Hearing Impairment	1	0	0
Speech or Language Impairment	48	41	52
Intellectual Disability	2	1	2
Visual Impairment (Includes blindness)	1	0	1
Orthopedic Impairment	2	2	1
Other Health Impairment	198	206	187
Multiple Disabilities	13	18	20
Deaf-Blindness	0	0	0
Traumatic Brain Injury	1	2	1

## FINDINGS

### ○ The School Buildings:

School Building	Birchwood	Craig	Glenclyff	Hillside	Rosendale	Iroquois MS	Van Ant MS	HS
Year Built	1956	1949	1956	1956	1956	1969	1949	1957
Building Gross Square Footage	46,150	51,400	44,000	59,000	46,150	110,000	103,800`	297,625
<b>Total acres of the school building site:</b>	23.9	14.86	27.8	27.31	24.7	25.3	8.7	54.35
<b>Acres now used for playfields:</b>	1/8 acre	3.96	1/8	1/8	1/8	3.96	5.7	16.28
<b>Acres not used currently:</b>	22 w/parking	9.835 w/p	26.675 w/p	25.3 w/p	23.575 w/p	15.2 w/p		31.225 w/p
<b>Wetlands or Retention Ponds</b>	Wet Lands	No	Pond	No	No	Wet Lands	No	Retention Pond
<b>Est. Net Number of Acres that could support additional classrooms in the future if necessary.</b>	7-9	5-6	10	10-12	7-8	6-7	1?	3-4

NYS base school site standards (Part 155. 1c):

ELEMENTARY SCHOOLS K-6: Three acres base plus one acre for each one hundred pupils, or fraction thereof.

SECONDARY SCHOOLS 7-12; Ten acres base plus one acre for each one hundred pupils, or fraction thereof.

### Building Conditions Surveys:

A Building Conditions Survey is a requirement of all New York State school Districts every five years. **The last survey was completed and filed in 2015.** The Building Conditions Survey is developed by a licensed architect or engineer and filed with the State Education Department. It outlines possible building conditions that may need attention over the next five to ten years. It is a tool for long-range facility planning. All of the Niskayuna School District buildings received a **satisfactory rating** as per the SED Overall Building Rating Scale in 2015.

<b>Excellent:</b>	System is in new or like-new condition and functioning optimally; only routine maintenance and repair is needed.
<b>Satisfactory:</b>	System functioning reliably; routine maintenance and repair needed.
<b>Unsatisfactory:</b>	System is functioning unreliably or has exceeded its useful life. Repair or replacement of some/all components is needed.
<b>Non-Functioning:</b>	System is non-functioning, not functioning as designed, or is unreliable in ways that could endanger occupant health and/or safety. Repair or replacement of some or all components is needed.
<b>Critical Failure:</b>	Same as 'non-functioning' with the addition that the condition of at least one component is so poor that at least part of the building or grounds should not be occupied pending needed repairs/replacement of some or all components is needed.

The surveys report that each of the District instructional buildings has systems that are in need of repair or replacement over the next five years because they are: at capacity; not in working order or are at the end of their useful life; energy inefficient; or are in need of improvement to allow access for individuals with disabilities. The Building Conditions Surveys assess the following major building system categories: site/utilities, architectural, electrical, plumbing, and mechanical. The 2015 Building Conditions Surveys **suggest** that the school buildings of the District may need to accomplish improvements totaling the



## FINDINGS

amounts listed over the five years. Some of the most critical items have been already addressed by the District. Over the next year, the District is planning to address the items along with capital work that may be related to the program delivery option the District may choose to implement. The bus garage is also under study. It is suggested that the Building Conditions Survey data be updated and reviewed during the community-Board deliberations about a possible program delivery scenario option to implement.

	<b>Birchwood</b>	<b>Craig</b>	<b>Glenciff</b>	<b>Hillside</b>	<b>Rosendale</b>	<b>Iroquois</b>	<b>Van Antwerp</b>	<b>HS</b>
<b>Site Systems</b>	\$192,000	\$73,000	\$100,000	\$288,000	\$222,000	\$562,000	\$693,000	\$1,457,000
<b>Exterior Building Envelope</b>	\$1,089,000	\$1,094,000	\$805,000	\$194,000	\$1,072,000	\$46,000	\$1,670,000	\$735,000
<b>Interior</b>	\$388,000	\$230,000	\$241,000	\$370,000	\$424,000	\$885,000	\$610,000	\$521,000
<b>Plumbing</b>	\$306,000	\$347,000	\$278,000	\$269,000	\$258,000	\$132,000	\$639,000	\$238,000
<b>HVAC</b>	\$105,000	\$118,000	\$21,000	\$21,000	\$132,000	\$347,000	\$354,000	\$681,000
<b>Electrical</b>	\$291,000	\$361,000	\$291,000	\$291,000	\$639,000	\$618,000	\$410,000	\$480,000
<b>Fire alarm, PA System, Emergency lighting</b>	\$158,000	\$362,000	\$346,000	\$354,000	\$238,000	\$567,000	\$497,000	\$908,000
<b>ESTIMATED TOTAL</b>	<b>\$2,529,000</b>	<b>\$2,585,000</b>	<b>\$2,082,000</b>	<b>\$1,787,000</b>	<b>\$2,985,000</b>	<b>\$3,157,000</b>	<b>\$4,873,000</b>	<b>\$5,020,000</b>

### Current capital bond debt of the District:

Fiscal Year Ending June 30:	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
2019	\$7,940,000	\$1,763,956	\$9,703,956
2020	\$8,345,000	\$1,576,956	\$9,921,956
2021	\$8,680,000	\$1,245,206	\$9,925,206
2022	\$9,000,000	\$913,606	\$9,913,606
2023	\$9,330,000	\$573,456	\$9,903,456
2024	\$4,310,000	\$221,581	\$4,531,581
2025	\$265,000	\$38,606	\$303,606
2026	\$275,000	\$30,063	\$305,063
2027	\$270,000	\$20,900	\$290,900
2028	\$280,000	\$11,350	\$291,350
2029	\$20,000	\$800	\$20,800

## FINDINGS

### ○ Shared Staffing Among the School Buildings: **35.205 Shared FTE Teachers**

SCHOOL	Birchwood	Craig	Glenclyff	Hillside	Rosendale	Iroquois	Van	HS
<b>Subject/Service</b>	<b>FULL TIME EQUIVALENTS</b>							
Art							0.402	0.198
Art		0.44	0.56					
Art				0.6	0.4			
Art			0.1196	0.4004				
Art						0.65	0.35	
Art							0.2	0.8
Business	0.402		0.198					
Business			0.399		0.301			
Elementary		0.5					0.5	
ENL						0.5	0.3	
ENL						0.3	0.3	
Foreign Language	0.1	0.1	0.1	0.1	0.1			0.5
Health						0.5	0.5	
Health						0.6	0.4	
Library						0.2		0.8
Mathematics			0.35	0.35		0.25	0.05	
Mathematics				0.5		0.5		
Music						0.5	0.2	0.3
Music		0.75					0.25	
Music	0.35				0.35	0.25	0.05	
Music	0.8					0.2		
Music	0.35			0.35		0.25	0.05	
Music			0.726					0.099
Music					0.7	0.175		
Music		0.5				0.05	0.45	
Music						0.43	0.18	0.4
Music		0.35		0.35		0.5	0.25	
Music	0.02	0.35	0.28	0.35				
Music				0.42625	0.34875			
Phys. Ed.							0.1	0.9
Phys. Ed.							0.5	0.5
Phys. Ed.	0.16	0.64						
Special Ed.			0.2	0.6				
Special Ed.			0.45		0.45			
Special Ed.						0.6	0.4	
Special Ed.						0.3135	0.6365	
Technology & Engineering							0.402	0.198
Technology & Engineering		0.44	0.56					
<b>TOTAL SHARED FTE'S</b>	<b>2.902</b>	<b>3.91</b>	<b>3.3826</b>	<b>4.02665</b>	<b>2.64975</b>	<b>7.5685</b>	<b>6.2685</b>	<b>4.497</b>

## FINDINGS

### Free and Reduced Lunch Data:

School	FREE	REDUCED	TOTAL FREE AND REDUCED	TOTAL STUDENTS	FREE/REDUCED %
Birchwood	41	2	43	314	12.04%
Rosendale	44	2	46	316	12.71%
Hillside	52	2	54	351	13.33%
Iroquois	71	2	73	468	13.49%
Van Antwerp	62	5	67	409	14.08%
Glenclyff	50	11	61	290	17.38%
Craig	68	2	70	328	17.59%
<b>HS</b>	187	10	197	1225	13.85%
<b>DISTRICT-WIDE TOTAL:</b>	<b>575</b>	<b>36</b>	<b>611</b>	<b>4312</b>	<b>14.17%</b>

### ○ “Teacher day” and ‘student day’ times for 2018-2019

SCHOOL	Teacher day begins	Teacher day ends	Student day begins	Student day ends
Birchwood	There is no Teacher Contractual language regarding a specific start and end time to the teaching day. Generally, elementary teachers arrive about 7:30 and leave at about 2:30. Grades 6-8 teachers arrive by 8:30 and leave at about 3:30. High School teachers arrive no later than 7:40 and leave soon after 2:45.		7:55 a.m.	2:10 p.m.
Craig			7:55 a.m.	2:10 p.m.
Glenclyff			7:55 a.m.	2:10 p.m.
Hillside			7:55 a.m.	2:10 p.m.
Rosendale			7:55 a.m.	2:10 p.m.
Iroquois MS			8:45 a.m.	3:15 p.m.
Van Antwerp MS			8:45 a.m.	3:15 p.m.
HS			7:40 a.m.	2:45 p.m.
	There are usually two meetings of each faculty each month after pupils leave for home. In addition, Elementary grade level meetings are held five times per year. Elementary Student Study Team meetings are held twice per month. Grades 6-12 teachers also attend respective department meetings twice per month.			

SCHOOL	Length of Teacher day	Length of Student day
Birchwood		6 hours 15 minutes
Craig		6 hours 15 minutes
Glenclyff		6 hours 15 minutes
Hillside		6 hours 15 minutes
Rosendale		6 hours 15 minutes
Iroquois MS		6 hours 30 minutes
Van Antwerp MS		6 hours 30 minutes
HS		7 hours 5 minutes

## FINDINGS

### ○ Full Time Equivalent Cost for Instructional Certified Staff in 2018-2019:

TOTAL FTE K-5	TOTAL SALARY	TOTAL FICA	TOTAL HEALTH INSURANCE	TOTAL RETIREMENT	TOTAL OTHER BENEFITS	Total COST for ALL K-6 FTEs 2018-2019
225	\$12,743,314	\$974,863	\$2,638,793	\$1,353,340	\$107,043	\$17,817,354

TOTAL FTE 6-12	TOTAL SALARY	TOTAL FICA	TOTAL HEALTH INSURANCE	TOTAL RETIREMENT	TOTAL OTHER BENEFITS	Total COST for ALL 7-12 FTEs 2018-2019
237.8	\$15,561,412	\$1,190,448	\$2,788,623	\$1,652,622	\$130,715	\$21,323,821

Average Cost per Full Time Equivalent Kindergarten through grade 5 certified instructional staff in 2018-2019: \$79,188

Average Cost per Full Time Equivalent grade 6 through grade 12 certified instructional staff in 2018-2019: \$89,671

Average Cost per Full Time Equivalent Kindergarten through grade 12 certified building level administrative staff in 2018-2019: \$153,662

#### Building Support Staff:

Average Cost per Full Time Equivalent Civil Service Nurse in 2018-2019: \$62,542

Average Cost per Full Time Equivalent Secretary in 2018-2019: \$42,840

### FTE Numbers of Staff Who Have Left the District for All Reasons Except Reduction in Force:

	Niskayuna Central School				TOTAL OVER 4 YEARS
	2017-2018	2016-2017	2015-2016	2014-2015	
<b>STAFF SEGMENT</b>					
K through grade 6 <b>certified</b> teachers (including counselors, nurses and similar others)	3.4	2	3.7	4	13.1
Grade 7-12 <b>certified</b> teachers (including counselors, nurses and similar others):	12.5	3.95	3.95	3.55	13.95
Grades K-12:					
Teacher Assistants ( <b>certified</b> )	15.3	11.6	4	4	34.9
Teacher Aides (civil service)	8.6	6.5	4.6	3.5	23.2
Grades K-12:					
OT/PT (civil service)			1		1
Social worker (civil service)					
Nurse (civil service)	4	1	1		6
K-12 <b>certified</b> administrators:	1	2	2	1	6
<b>Civil Service:</b>					
Supervisors of any support function	1				1
Bus drivers	8	6			14
Bus aides	4				4
School lunch workers	3	1		1	5
Operations and Maintenance workers	13	4		2	19
Secretaries	4	1	0		5
Business Office not secretarial	1			1	2
Technology support staff	1				1

## FINDINGS

○ **Bus Run Data for September 2018-2019 (‘regular runs’; not including special education customized runs)**

<b>Birchwood Attendance Zone</b>	
Earliest pick up	6:45 a.m.
Estimated longest pupil ride on a bus	60
Number of bus runs AM to school	8
Number of bus runs PM to home	9
Number of ‘walkers’	0

<b>Craig Attendance Zone</b>	
Earliest pick up	7:10 a.m.
Estimated longest pupil ride on a bus	35
Number of bus runs AM to school	9
Number of bus runs PM to home	10
Number of ‘walkers’	0

<b>Glenclyff Attendance Zone</b>	
Earliest pick up	7:05 a.m.
Estimated longest pupil ride on a bus	40
Number of bus runs AM to school	9
Number of bus runs PM to home	9
Number of ‘walkers’	0

<b>Hillside Attendance Zone</b>	
Earliest pick up	7:05 a.m.
Estimated longest pupil ride on a bus	40
Number of bus runs AM to school	8
Number of bus runs PM to home	11
Number of ‘walkers’	0

<b>Rosendale Elementary Attendance Zone</b>	
Earliest pick up	7:10 a.m.
Estimated longest pupil ride on a bus	35
Number of bus runs AM to school	8
Number of bus runs PM to home	9
Number of ‘walkers’	0

<b>Iroquois Middle School</b>	
Earliest pick up	7:55 a.m.
Estimated longest pupil ride on a bus	45
Number of bus runs AM to school	12
Number of bus runs PM to home	12
Number of ‘walkers’	0

<b>Van Antwerp Middle School</b>	
Earliest pick up	8:00 a.m.
Estimated longest pupil ride on a bus	35
Number of bus runs AM to school	9
Number of bus runs PM to home	8
Number of ‘walkers’	92

<b>High School</b>	
Earliest pick up	6:20 a.m.
Estimated longest pupil ride on a bus	40
Number of bus runs AM to school	19
Number of bus runs PM to home	18
Number of ‘walkers’	228

## FINDINGS

Total number of AM bus routes in the District in the AM (NOT SPECIAL ED OR PRIVATE SCHOOL) for elementary and secondary combined	36
Total number of PM bus routes in the District in the PM (NOT SPECIAL ED OR PRIVATE SCHOOL) for elementary and secondary combined	38
Percentage of transportation aid expected as a revenue for 2018-2019 based on transportation expenses submitted for 2017-2018; (2018-2019 Trans. Aid divided by the expenditures submitted for 2017-2018 for aid payable in 2018-2019	75.48%
<b>Total 2018-2019 transportation budget minus</b> cost for special runs, midday runs to the BOCES center, field trips, extracurricular and athletic trips, and other trips including any ‘late bus’ runs. <b>(Result: total cost for Am transportation to school and PM transportation home.)</b>	\$1,740,821
<b>Estimated average cost per bus route for AM route to school and PM route to home transportation in 2018-2019; \$23,525</b>	
<b>Estimated average local Niskayuna taxpayer cost per bus route: \$5768</b>	
<b>Estimated average State support of each Niskayuna bus route: \$17,757</b>	
<i>Where the estimates come from: Take the <b>total</b> transportation budget NOT INCLUDING SPECIAL RUNS FOR SPECIAL NEEDS, FIELD TRIPS, VOCATIONAL CENTER RUNS, ATHLETIC AND CO-CURRICULAR RUNS which can vary yearly based on student programs and needs; divide that resulting expenditure number by the number of bus routes to and from school in 2018-2019.</i>	

- Charted below are the distances of the current students of various elementary schools who live *farthest* from other school buildings.

<b>Distance of the home of the <u>current</u> student attending this school who lives the farthest from the school...</b>		<b>Miles:</b>
<b>Birchwood Elementary</b>	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Birchwood</b> have to travel to get to.....	Craig Elementary
Miles of this student from his/her home to Birchwood: 10.3		Glenclyff Elementary
		Hillside Elementary
		Rosendale Elementary
		Iroquois Middle School
		Van Antwerp Middle School
		High School
<b>Craig Elementary</b>	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Craig</b> have to travel to get to.....	Birchwood Elementary
Miles of this student from his/her home to Craig: 5.9		Glenclyff Elementary
		Hillside Elementary
		Rosendale Elementary
		Iroquois Middle School
		Van Antwerp Middle School
		High School
<b>Glenclyff Elementary</b>	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Glenclyff</b> have to travel to get to.....	Craig Elementary
Miles of this student from his/her home to Glenclyff: 5.5		Birchwood Elementary
		Hillside Elementary
		Rosendale Elementary
		Iroquois Middle School
		Van Antwerp Middle School
		High School

## FINDINGS

<b>Hillside Elementary</b>	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Hillside</b> have to travel to get to.....	Craig	7.5
Miles of this student from his/her home to Hillside: 6.1		Glenclyff Elementary	9.9
		Birchwood Elementary	2.0
		Rosendale Elementary	4.9
		Iroquois Middle School	4.6
		Van Antwerp Middle School	6.3
		High School	7.6

<b>Rosendale Elementary</b>	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Rosendale Street</b> have to travel to get to.....	Craig	4.3
Miles of this student from his/her home to Rosendale: 8.6		Glenclyff Elementary	2.7
		Hillside Elementary	6.3
		Birchwood Elementary	10.3
		Iroquois Middle School	8.4
		Van Antwerp Middle School	6.0
		High School	5.5

○ **‘Flex Zone’ Policy Implementation Enrollment Data 2018-2019 as per Board Policy 5001**

		SWING ZONE SCHOOL OF ATTENDANCE IN 2018-2019—NUMBER OF PUPILS PER GRADE LEVEL																													
		BIRCHWOOD					CRAIG					GLENCLIFF					HILLSIDE					ROSENDALE									
Residence is located in the following attendance zone		K	1	2	3	4	5	K	1	2	3	4	5	K	1	2	3	4	5	K	1	2	3	4	5	K	1	2	3	4	5
		<b>BIRCHWOOD</b>																				1	1			1		1		4	1
<b>CRAIG</b>														9	4	5	4	1	2	4	9	9	6	2				1	2	2	
<b>GLENCLIFF</b>								1	2	3			4																		
<b>HILLSIDE</b>		4	1					2																				1			
<b>ROSENDALE</b>		4	5	2	2				1		1	1								5	4		1	2	3						

○ **Transportation Policies/Regulations 8410 and 8411**

“Bus routes, designated stops, and schedules will be established in accordance with the following considerations: safety of the children, distribution of the student population by school, street conditions, economy of operation, travel time, and type and time availability of equipment. The general practice will be to transport the students of different school levels (elementary, middle school, and high school) and age groups in separate buses....For safety reasons, no student will be required to cross Troy Road or Union Street. No elementary student will be required to cross Balltown road. Door-to-door service is not required.”

○ **Inventory of Bus Equipment used for ‘regular’ to and from AM and PM pupil transportation (not counting spare vehicles):**

Vehicle Size	Number	Number of Pupils on Each Bus for Route Planning			Total Pupils Able to be Served in a single bus run:		
		HS*	MS	EL	HS	MS	EL
72	2	90	60	70	180	120	140
70	14	90	60	65	1260	840	910
66	21	70	55	60	1470	1155	1260
35	11	35	25	30	385	275	330
30	7	30	20	30	210	140	210
27	2	27	27	25	54	54	50
21	3	21	21	20	63	63	60
15	1	15	15	10	15	15	10
<b>TOTAL</b>					<b>3637</b>	<b>2662</b>	<b>2970</b>

\*Higher load numbers are used for planning because of the high number of High School pupils who are driven to school instead of riding the bus.

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### Inferences and Observations Based on the Visit to the School Buildings and the District:

- ✓ The condition of the school buildings is very good. The faculty, staff, and pupils of the buildings practice ‘good housekeeping’ as evidenced by the overall neat, organized condition of the classrooms and instructional support spaces.

The Building Conditions Survey Report data do not suggest that there are District school buildings with current building conditions that could present a danger to health and safety. The District has diligently addressed any health and safety issues that have surfaced (example: roof at Van Antwerp). A first step in the development of possible building use/program delivery scenario options is researching data about any building immediate infrastructure issues that challenge the health and safety of pupils and staff.

- ✓ The annual expenditure for outstanding capital debt **including interest** of the District is about \$9.9 million through 2023. Starting in 2024, the annual bond debt service reduces to \$4.5 million. In 2025 total debt service costs drop to \$300,000 and ends in 2029 at \$20,800. Benchmarking added capital work that may require debt service to begin in 2024-2025 may be an initial capital planning step that prudently addresses the financial roadmap for the District.
- ✓ Commissioner’s Regulations require that the daily sessions for students in full-day kindergarten and grades 1-6 must be a minimum of five hours, exclusive of time for lunch. The daily sessions for grades 7-12 must be a minimum of five and one-half hours, exclusive of time for lunch. Niskayuna elementary pupils receive 5 hours and 45 minutes of daily instruction exclusive of lunch. Niskayuna 6-8 pupils receive 6 hours, and secondary 9-12 pupils receive 6 hours and 35 minutes of daily instruction exclusive of lunch.
- ✓ Research of best teaching-learning practices suggests that contact time with teachers is a prime ingredient and key factor for pupil learning success. Charted below is the elementary and secondary teacher instructional contact time with pupils for 2018-2019. Planning for increasing enrollments is a challenge. It is also an opportunity to review resources and their deployment. As a people-service institution, staffing is a *premier factor* in achieving the mission of a school district. The district may want to discuss and analyze:

*Are there ways to increase instructional contact time with pupils? If so, how can that added instructional contact time with pupils help pupil achieve more or higher learning outcomes?*

The Teachers’ Contract requires that each elementary teacher receive 200 minutes of preparation time over five days; 40 minutes a day. In addition, as is appropriate, 30 minutes of duty-free lunch is provided for each staff member. In the elementary grades, the 40 minutes of preparation time is provided by scheduling ‘specials’ for all pupils. The current Monday-Friday pattern of organizing the elementary day provides preparation time that exceeds the 40 minutes per day. As such,



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instructional contact time with pupils by grade level teachers is reduced. Charted is an example of the current schedule.

Day	Preparation Time/and scheduling of 'specials' for elementary grade level sections
Monday	PE: 30 minutes Student Recess: 20 minutes <b>Total Preparation Time: 50 minutes</b>
Tuesday	Art: 45 minutes Recess: 20 minutes <b>Total Preparation Time: 65 minutes</b>
Wednesday	Music: 30 minutes PE: 30 minutes Recess: 20 minutes <b>Total Preparation Time: 80 minutes</b>
Thursday	Library/Computer (with an aide): 30 minutes PE: 30 minutes Recess: 20 minutes <b>Total Preparation Time: 80 minutes</b>
Friday	Music: 30 minutes PE: 30 minutes Recess: 20 minutes <b>Total Preparation Time: 80 minutes</b>

ELEMENTARY TEACHER DIRECT INSTRUCTION PUPIL CONTACT TIME IN A SCHOOL DAY 2018-2019				
Elementary Pupil Instructional Day	Lunch	Typical example	“Unassigned Time” – includes ‘prep’ time	Total Time Available for Student Instructional Contact Time
375 minutes	-30	Monday	-50	295 minutes; <b>78.7% of the instructional day</b>
		Tuesday	-65	280 minutes; <b>74.7% of the instructional day</b>
		Wednesday	-80	265 minutes; <b>70.7% of the instructional day</b>
		Thursday	-80	265 minutes; <b>70.7% of the instructional day</b>
		Friday	-80	265 minutes; <b>70.7% of the instructional day</b>

The Middle School direct instructional pupil contact time is charted below. The Middle Schools that arrange the instructional day into seven instructional periods, a lunch, and an “Access” period at the end of the student day where each classroom teacher works with groups of students to reinforce instruction and provide added assistance to students to achieve the learning goals.

MIDDLE SCHOOL TEACHER DIRECT INSTRUCTION PUPIL CONTACT TIME IN A SCHOOL DAY 2018-2019			
Middle School Pupil Instructional Day	Lunch	‘Prep’ time	Total Time Available for Student Instructional Contact Time
390 minutes	-30	-90	270 minutes; <b>69.2% of the instructional day</b>

The High School student day is 7 hours and five minutes in duration. Unlike the Middle Schools, the High School arranges the instructional day with five 78 minute blocks of time made up of two 39 modules for

## FINDINGS

each block. Generally, instructional staff teaches five classes that are 78 minutes in length over two days, ‘A’ Day and ‘B’ Day or teach four classes plus a lab class (five assignments) similarly over ‘A’ Day and ‘B’ Day. Instructional contact time at the High School is defined in the *Faculty Handbook* as “36,000 minutes in a school year plus “5,000 minutes per year” for instructional support assignments like study halls and student safety assignments.

HIGH SCHOOL TEACHER DIRECT INSTRUCTION PUPIL CONTACT TIME IN A SCHOOL YEAR 2018-2019			
<b>High School Pupil Instructional Day</b>	<b>Lunch</b>		
425 minutes	-30		
<b>High School Pupil Instructional Time in a 180 day school year</b>		<b>‘Prep’ time</b>	<b>Total Time Available for Student Instructional Contact Time</b>
76,500 minutes	-5400	-30,100	36,000 plus 5,000 minutes (41,000 minutes); <b>53.6% of the student instructional day over 180 school days</b>

- ✓ The elementary schools arrange instruction using a Monday through Friday nomenclature. The Middle Schools and High School use an ‘A-B’ nomenclature. When the Elementary school calendar is interrupted with a holiday or a snow emergency day, the day’s schedule of services particular to that day is ‘lost’. For example if elementary art is scheduled for a grade level class on a Tuesday or a physical therapy session is scheduled for a Tuesday and that day requires a snow emergency closing, the pupils will not receive the planned art instruction or physical therapy session for an entire week until the next Tuesday. At the Middle Schools and the High School, the same emergency snow closing on a ‘Tuesday’ does not interrupt the consistency of service to the pupils. If the snow day on the Tuesday is an ‘A’ day, then when the pupils return to school the next day, the day is an ‘A’ day keeping program/instructional services delivery consistent.

It is suggested that the district could gain efficiencies *and more for pupils with the existing staff resources* if all the school buildings were on the same day cycle and/or on day cycles that were multiples of each other. In this way, as described above, a vacation day or snow day does not interrupt the delivery of instruction with services and classes that do not convene every day. If a snow day falls on an ‘A’ Day (for example), the day the pupils return to school is an ‘A’ Day assuring consistency and continuity of services/instruction to pupils. Special elementary areas like library, physical education, art, music, and remedial services which normally do not meet every day will be provided uninterrupted with a cycle organization pattern. Currently, at the Middle Schools, instruction in PE, language, technology or other subjects that do meet every day have consistency of delivery. At the high school, science labs, for example, are delivered consistently and in an uninterrupted manner by the use of a cycle pattern. Special Needs pupils K-12 would receive such support services as physical therapy, occupational therapy, adaptive PE, and speech consistently throughout the year if a cycle pattern is implemented at the elementary level.

A two day ‘A-B’ cycle for all buildings K-12 can provide benefits to allocating resources. A six-day cycle nomenclature in particular may provide benefits in delivering the program at all grade levels.

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There are 30 six-day cycles in a school year. Therefore, pupils who receive a class/subject for 40 minutes on one out of six days of the cycle receive 20 hours of instruction in that class/subject *consistently* over 180 day school year. The Teachers’ Contract requires that each elementary teacher receive 200 minutes of preparation time over five days; 40 minutes a day. In the elementary grades, the 40 minutes of preparation time is provided by scheduling ‘specials’ for all pupils. Below is an example of how a 6-day cycle can provide the ‘specials’ instruction and the required teacher preparation time on a consistent basis.

Cycle Day (To enable staff sharing among buildings as may be needed, each building may have specials on different days of the cycle.)	“Special”	Length of class	Instruction over 30 cycles in a school year:	Length of daily preparation time for each classroom teacher	Recess 20 minutes per day supervised by Aides
A, C, E	PE	40 minutes	60 hours	40 minutes plus 20	60 hours for the school year
B	Art	40 minutes	20 hours	40 minutes plus 20	
D	Music	40 minutes	20 hours	40 minutes plus 20	
F*	Computer	40 minutes	20 hours	40 minutes plus 20	

\*As the district implements its long-range technology plan, this ‘computer class’ may be re-structured and/or eliminated as a one pupil-one computer approach is explored/implemented. Or, the flexibility of the six-day cycle could allow for ‘computer’ once every 12 days and thus allow ‘music’ or ‘art’ offered three times in 12 days (2 cycles) if the district wanted to use the time differently with other priority ‘specials’.

The 6-day cycle elementary example provides more than 40 minutes of preparation per day as per the Teachers’ Contract as it acknowledges the 20 minutes of daily recess valued by the District. The cycle pattern allows 60 minutes of unassigned preparation time daily for all elementary teachers. However, the cycle example compared to the current practice of scheduling ‘specials’ **recovers 55 minutes** of direct instructional contact time for each grade level teacher and his/her pupils over five days. The cycle pattern increases direct instruction to 76% of the instructional day consistently day-to-day.

ELEMENTARY TEACHER DIRECT INSTRUCTION PUPIL CONTACT TIME IN A SCHOOL DAY BASED ON A 6-DAY CYCLE ORGANIZATION OF TIME				
Elementary Pupil Instructional Day	Lunch	‘Prep Time’	Recess Time with Aides	Total Time Available for Student Instructional Contact Time Each School Day
375 minutes	-30	-40	-20	285 minutes; <b>76% of the instructional day</b>

A six-day cycle can help achieve the Physical Education Requirement as per CR 135.4. “...At least 120 minutes in each calendar week “...should be devoted in grades K-6 for physical education. The sample six-day cycle to organize the implementation of “specials” and elementary teacher preparation time can provide 60 hours of Physical Education instruction if PE class is held 3 out of every six days. Over 180 instructional days, CR 135.4 requires (180 x 24 minutes a day) 72 hours. Niskayuna currently schedules 20 minutes of recess per day for grades K-5 or 60 hours over 180

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schooldays. The physical education regulation allows recess-*if well-planned*-to be considered equivalent towards the achievement of the physical education requirement. The six-day cycle example above provides 60 hours of Physical Education instruction and 60 hours of recess for a total of 120 hours of formal and informal physical activity per year as part of the instructional day; or 48 hours more than required as per CR 135.4.

**An option** for consideration is to hold recess on cycle days when a 40 minute Physical Education class with certified instructors is not scheduled. Such an approach honors the value that elementary pupils have physical activity daily and it increases the classroom teacher instructional contact time with pupils to deliver the instructional program. The approach provides 60 hours of physical education with a certified teacher and 30 hours of well-planned recess with the teacher aides in a school year for a total of 90 hours of physical activity; 18 hours more than required by CR 135.4. It also increases direct grade level classroom teacher instructional contact time within the existing student day hours. The 6-day organization pattern allows grade level teacher direct instructional contact time to increase to 76%-81.3% daily from 70.7% to 78.7% as occurs in 2018-2019.

For example:

<b>ELEMENTARY GRADE LEVEL TEACHER DIRECT INSTRUCTION PUPIL CONTACT TIME IN A SCHOOL DAY BASED ON A 6-DAY CYCLE ORGANIZATION OF TIME and ONCE DAILY PHYSICAL ACTIVITY TIME FOR ALL PUPILS</b>						
Elementary Pupil Instructional Day	CYCLE DAY	Lunch	‘Prep Time’	DAILY PHYSICAL ACTIVITY		Total Time Available for Student Instructional Contact Time Each School Day
				Phys Ed. Class	Recess Time With Aides	
375 minutes	<b>A</b>	<b>-30</b>	<b>-40</b>			<b>305 minutes; 81.3% of the instructional day</b>
	<b>B</b>	-30	-40		-20	285 minutes; 76% of the instructional day
	<b>C</b>	<b>-30</b>	<b>-40</b>			<b>305 minutes; 81.3% of the instructional day</b>
	<b>D</b>	-30	-40		-20	285 minutes; 76% of the instructional day
	<b>E</b>	<b>-30</b>	<b>-40</b>			<b>305 minutes; 81.3% of the instructional day</b>
	<b>F</b>	-30	-40		-20	285 minutes; 76% of the instructional day

Summary comparison of grade level instructional contact time with pupils:

Elementary Pupil Instructional Day over five days	Current status 2018-2019 over five instructional days	6-Day Cycle Time Pattern Over Five Days; Recess daily plus Physical Education Class Three out of Six Days	6-Day Cycle Time Pattern over Five Days; With Once Daily 40 minutes Physical Education Class OR a 20 minutes Recess
1875 minutes	1370 minutes	1425 minutes	1485 minutes
		<b>Additional 55 minutes</b> of Grade Level Direct Instruction every five days; <b>+4.1%</b>	<b>Additional 115 minutes</b> of Grade Level Direct Instruction every five days; <b>+8.4%</b>

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### A Six-Day Schedule and the Secondary Grades:

Similar flexibility opportunities are enabled at the secondary level with a six day schedule compared to the current two day 'A-B' schedule in organizing the school year. Such a six day cycle pattern may allow the School District and the Teachers' Association to increase creatively the instruction contact time by teachers with pupils within the existing student day time schedule. Currently, contact time at the Middle School is 69.2% of an instructional FTE and is 53.6% of an instructional FTE at the High School. For example:

- Science labs may be scheduled consistently 2 out of six days, or 3 out of six days as may be appropriate.
  - The scheduling of PE often is scheduled opposite science labs in addition to instrumental lessons, AIS (remedial, Rti) services
  - Options become available to offer half year courses 3 out 6 days for the entire year, or
  - Quarter year electives 3 out of 6 days for half a year.
  - In order to encourage pupils to reach and challenge more difficult courses, such courses can be scheduled to meet seven, eight or nine times in a cycle, thus providing more time and support for pupils wanting/willing to challenge more intense courses.
  - The cycle schedule more easily allows courses to be offered and scheduled that may have a mentorship/on-work site component.
  - May help to schedule music students *within the instructional day* who wish both instrumental and choral lesson opportunities.
- ✓ The District implements the efficient practice of shared staffing among the buildings to help ensure breadth of program offerings for all pupils in a cost-effective manner across the District. In the current 2018-2019 school year, **35.205 full time equivalent staff members are shared** among the school buildings. Elementary and secondary schools share **9.825 FTEs** across two different day schedules: Monday-Friday vs. 'A' Day and 'B' day.

A major efficiency with a common day cycle in place in all the school buildings is the scheduling of shared staff among the buildings. A common day schedule drives more flexibility. A common cycle schedule can facilitate the deployment of many shared staff for an entire day of the cycle without the necessity for travel time. A goal is to have as many possible shared teachers serve in one school the whole day without having to travel between schools. Each begins and ends a school day at one school. Such a practice reduces stress for the teacher; allows more instructional time to be delivered to pupils; reduces the logistical cost for sharing; and allows the shared teacher to be a more inclusive member of the full-day culture of a school building. For specialty services like physical therapy or occupational therapy traveling between buildings daily may still be required.

Appropriate travel time for teachers when shared between two or more schools during the day is necessary. The practice of sharing teachers requires about 1/6 of a Full Time Equivalent Teacher in lost instructional contact time for travel when that teacher is shared between two or more

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buildings during the day. On-average 1/6 of a teacher equals between \$13,198 and \$14,945. Sharing specialists between buildings is a valuable tool to ensure equity of program among school buildings. A common cycle schedule of at least six days per cycle can help reduce the logistical costs to enable the share.

*Are there program implementation scenario options that might help reduce the number of staff shared between and among school buildings to ensure breadth of program offerings consistently across the district?*

- ✓ Niskayuna Central organizes grades 6-8 as a “middle school” in two middle school buildings. The purpose of a middle school is to help 10 to 14 year-olds make the change from childhood to adolescence and from elementary grades to a high school a positive and growth opportunity. A middle school delivery philosophy acknowledges and addresses the physical, intellectual, emotional, social, and psychological changes of 10 to 14 years old pupils. Typically, middle schools are characterized as having (adapted from the Regents Policy Statement on Middle-Level Education):
  - ◇ A focus on the intellectual and developmental needs and characteristics of young adolescents.
  - ◇ A comprehensive, challenging, integrated and relevant educational program
  - ◇ A focus on organizing efforts to support both academic standards and personal development of the pupils.
  - ◇ Classroom instruction that recognizes the learning styles and characteristics of young adolescent pupils.
  - ◇ A strong building leadership that encourages involvement, participation, and partnerships among pupils, staff, parents, and the community.
  - ◇ Academic and personal support services available for all pupils.
  - ◇ On-going professional learning for all staff in a planned and collaborative fashion.

One of the common implementation characteristics of middle schools is the technique of having a set of four core teachers (English, Social Studies, Math and Science) serve the same set of pupils. In this way, the adolescent pupils have a team of caring adult advocates who know each student personally and well to ensure opportunities for added instruction and personal support for all pupils especially those who may need extra help to meet learning standards.

When the ‘middle school model’ was first advanced in NYS it was defined as a grades 5-8 service model. In this way there is an ‘equal’ set of elementary certified instructional staff (grades 5-6) and secondary certified staff (grades 7-8). There is no ‘middle school’ teacher certification, therefore only elementary certified teachers are assigned grades 5-6 pupils and only secondary certified teachers are assigned grades 7-8 pupils.

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The growing challenge with the 5-8 grades model is adhering to local class size functional targets *and* cost-effective deployment of professional staff *as per their respective certifications*. A 6-8 model can exacerbate the challenges since there is only one elementary certification grade served in the building.

An illustration can demonstrate the challenge. The class size operational goal for grades 5-8 is 25 at Niskayuna. Therefore, each instructor serving in a middle school model is assigned 125 pupils to serve. In addition, contract language obligations of the district and the instructional staff are often not the same for elementary teachers and secondary teachers. For example, should contractual obligations for staff preparation time follow elementary contractual obligations for all staff, or secondary contractual obligations for all staff, or separately for each segment of staff who serve under one roof?

Assume there are 161 pupils in grade 6 and 301 pupils in grades 7 and 8 in a 6-8 middle school. The 161 grade six pupils would require about 1.3 to 1.5 teams of four core teachers to serve them in a 'middle school teaming' model. The 301 grades 7-8 students would require about 2.4 to 2.5 teams of four core teachers to serve them in a 'middle school' model. Because the staff have to serve pupils within their certification areas, the core teacher team model in this illustration requires two half teams. One half team for elementary and one half team for secondary would need to be deployed to meet the goals of the core team model and the class size targets of the district. Unfortunately, sometimes blamed on 'logistics', the 161 grade six pupils might be served by two core teams equaling a pupil assignment of only about 80 pupils instead of 125 (36% below class size targets). The 301 grades 7-8 pupils might be served by three core teams equaling a pupil assignment of only 100 pupils instead of 125 (20% below class size targets). In a district that 'rounded up the number of teams' as opposed to deploying half teams the added resource spend is about 2.25 full time equivalents. In Niskayuna an FTE all-inclusive equals about \$89,671. In the sample illustration, then, about \$201,700 in resource is expended to implement the core team model in the easiest fashion. Could the same \$201,700 be used differently to provide more learning opportunities for pupils?

The challenge to implement the core teacher team model across two sets of grades that require different teacher certifications in a cost-effective manner have districts discussing and analyzing the following questions:

- ◇ Have the values and knowledge of child development changed since the 1980's along with expectations for collaborative Learning Communities of teachers at all grade levels such that the seven guiding elements of a 'middle level' education program can be achieved **without** limiting a core set of teachers to be assigned only pupils at one grade level?
- ◇ Does a 'core team approach' produce the measureable learning outcomes expected? Could other methods of using available resources achieve more pupil learning?

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- ◇ What might be the total grade level enrollments at each grade 6, 7, 8 such that a personal, caring learning community can exist without the scheduling/deployment concept of a core teacher team assignment to the same grade level of pupils in a middle level environment?
  - ◇ Are there other ways/options that a middle school can have a volume of pupils to retain the core team approach while maintaining quality delivery of instruction in an affordable manner? How might adding grade 5 to a 6-8 middle school increase learning opportunities for students and enable the delivery of a quality program in an affordable manner? How might having a 5-6 middle school (usually called upper elementary) and a 7-8 middle school retain the core team approach while maintaining quality delivery of instruction in an affordable manner?
- ✓ The *Planning for the Future Workshops* with the Community Advisory Committee, the administrative team, and the Board of Education identified Pre-Kindergarten as a topic to explore as part of the future program vision of the School District.

Niskayuna Central does not offer a Pre-Kindergarten program. Any available Universal Pre-K grants have been awarded by the State strictly based on 'high need' Districts for which Niskayuna does not qualify. Unfortunately, current law provides for no Pre-K funding for Niskayuna. There is no state operating aid to support Pre-K enrollments. Staff for one classroom of Pre-K (1 full day class or 2 half day classes) on average would cost about \$79,188 for a teacher and about \$35,000 for an Aide per class (all-inclusive of salary and benefits).

Another option schools have implemented is partnering with Head Start and private providers to deliver Pre-Kindergarten instruction in the public elementary schools. The community providers pay a cost-effective rent to the school district. The presence of such programs in the schools enhances the articulation of services and curriculum to the Pre-K pupils who in one year will be Kindergarten clients of the School District.

Planning for a Pre-kindergarten program component is a separate element and analysis compared to planning for the K-12 program. Unlike Kindergarten, which has evolved into a *defacto* 'compulsory' enrollment grade for which State attendance aid is given to a District, Pre-kindergarten enrollment rests solely on the availability of such a program at the discretion of a School District and the volition of the parents or guardians. Experience suggests that at most a school district can expect to serve up to about 60 to 70% of the available four-year old resident preschoolers if a pre-school program is offered. The percentage served can vary given the availability of other pre-school options in the geographic area, the social-economic variables of the school district, and if the Pre-K offering is full day or half day.

The scenario options discussed in this study take into account the potential availability of space for the future if Pre-Kindergarten is implemented. The options include the use of five classrooms district-wide to provide ten sections of a half-day Pre-Kindergarten. Ten half-day sections in five classrooms can serve up to 180 preschoolers with one teacher and one aid per section. A potential 180 Pre-K students represent about 62% of the eligible four year olds in the School District. Five



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sections of a full-day Pre-K in five classrooms district-wide could serve up to 90 students or about 31% of the eligible four year olds in the district.

Each scenario option takes into account the accommodation of an increasing pupil enrollment with added grade level classrooms. Having five Pre-Kindergarten rooms district-wide can also be a tool to deal with unexpected enrollment in an elementary attendance zone. Usually, transportation to and from a Pre-K is the responsibility of the parents who wish their child to attend. (Some schools transport Pre-K students only if there is room on an existing bus run which is allowed by the State Education Department without a transportation aid deduct. The addition of bus runs for Pre-K does not receive State transportation aid support.) It is suggested that the locations of the five Pre-K classrooms is a yearly decision based on how many elementary grade level classrooms an attendance zone requires. There may be years where a Pre-Kindergarten classroom is in each attendance zone. In other years, a school may require all available classrooms to serve elementary grade level classes because of an unexpected surge of enrollment. Therefore, it may not host a Pre-K classroom that year while another elementary school might host two instead of one Pre-K classroom that same year. Because of the existence of a Pre-K classroom that could instead serve a grade level that year, the school with the enrollment surge may not have to implement the “Flex Zone” policy to deal with class size equity. It is important to note that the possible attendance of a pupil in a Pre-K not located in the attendance zone of his/her residence **does not** preclude the attendance of the pupil in the attendance zone school that serves his/her home location for kindergarten in the next year after Pre-K.

- ✓ Over the past four school years, 27.05 certified instructional staff, 34.9 certified teacher assistants, 6 administrators, 23.2 aides, and 58 other civil service staff have left the District for all reasons (example: retirement, relocation) **except reduction in force**. The anticipated continued increase in pupil enrollments will likely require additional instructional staff. The on-average annual total of 6-7 instructional FTE who choose to leave the district suggests that normal staff attrition and added pupil enrollment may mitigate some or all reductions in force, *if any*, that may come about from organizing the program and use of the buildings differently.
- ✓ Instructional technology is present and used by the teaching staff in the buildings. It is recommended that the District continue its long-standing on-going practice of analyzing its technology plan and revising it as necessary to reflect the future goals of the District in supporting instruction with technology.

The use of technology to deliver learning is often a prime variable in school building planning and use. Bandwidth (size of data lines), types of equipment, staff training, and pedagogical impact on learning outcomes given the investment are important topics that once decided usually translate into ‘brick and mortar’ decisions. The technology plan of the District will give insights as to the provision of computers for student instruction and video enhanced instructional tools for teachers in the future. The technology plan is often a major part of a District’s blueprint in defining the vision and the instructional goals of infusing technology in the curriculum. It also can give direction as to

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what are the program delivery roles of all the instructional spaces in each school building including the classrooms, library and computer labs as they interrelate with technology to support learning and instruction. For example, school Districts are moving the pedagogy using computers for instruction to the next level. School Districts are moving from the tool of computer labs to the use of chrome books (or other similar tools) by each pupil within each classroom. If Niskayuna institutes a similar approach, then one or more instructional spaces now used as computer labs could be redeployed to serve pupils in different ways.

- ✓ Over the past three school years, Niskayuna has served at least 94.2% of all special needs students in the home District by Niskayuna staff. The District may want to analyze if some or all of the very few pupils now served outside of the District could be served within the District with quality and cost-effectively given possible special education class size numbers for the disability. Another approach is to rent space to the BOCES or other agency that would provide a shared specialized program cost-effectively to serve the small group of Niskayuna pupils *at Niskayuna* along with other similar pupils from the region with the same disability. Another option is Niskayuna CSD to be the lead agency in providing a shared program for one or more specialized special needs programs that would partner with nearby school districts.
- ✓ Music instruction is highly valued by the community and District at all grade levels. The two Middle Schools present a challenge in delivering middle school vocal and instrumental instruction. Middle School band and orchestra students rehearse at the High School in the mornings before the start of the school because of the lack of rehearsal space at either Middle School. There are rehearsals five days a week. Different ensembles rehearse on different days. A very supportive parent community transports their students to the High School daily for the rehearsals. Then, All Middle School band and orchestra students are shuttled on school buses to their respective schools after rehearsal at the High School to begin the school day. Also, parents transport their Middle School chorus students to the Middle Schools for chorus rehearsal which occurs in the morning before the school day.

The athletic program is an offering that is also highly valued by the community. Shuttle buses are provided from the Middle Schools to the High School daily for those Middle School students who play at the HS level (freshmen, JV or Varsity) or play a sport that the only facility is located at the High School (example, swimming, track and field, and wrestling). Niskayuna also offers a 'modified 9 level' level of athletics that takes the place of freshman sports. Grades 7, 8, and 9 students can participate together in this modified level. In addition, Middle School Students are allowed to use the High School Fitness facility for personal training.

Some observations:

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- Are there middle school pupils who do not participate in band, orchestra, and/or chorus because they do not have transportation to the High School and Middle Schools before the school day begins?
- The High School is located in a high traffic area. The before school parent drop off of music pupils increases the traffic.
- What might be the music program opportunities for pupils if all grade 6 students were in one school? If all grade 7-8 students were in one school?
- What might the music program opportunities be for pupils in grades 6, 7, and 8 if chorus, band and orchestra were taught during the regular school day in appropriately sized and resourced space at their home school?
- Neither of the Middle Schools has a fitness center. How might the availability of such an instructional support space provide an opportunity for physical education class instruction and for personal wellness activity for all pupils?
- The yearly cost for the music shuttles back to the Middle Schools from the High School is \$13,854.
- The yearly cost for daily athletic shuttles of Middle School students to the High School or other district playing sites for athletics is \$47,397. The availability of the 'modified 9 level' of interscholastic athletics at the High School is an opportunity for grades 7 and 8 pupils. Duplicating the interscholastic quality fields and facilities at the High School elsewhere in the district is likely not diligent. The athletic shuttle allows/supports interscholastic athletic opportunities for grades 7 and 8 pupils.

*Are there program implementation scenario options that could serve middle school music offerings more effectively and increase the availability of the opportunity to more students?*

- ✓ Currently, there is a range of socio-economic diversity served by each elementary attendance zone as indicated by the Free and Reduced Lunch rate for each school building. The district-wide free and reduced lunch rate is about 14%. The range of elementary school Free and Reduced Lunch rates range from 12.04% at Birchwood to 17.59% at Craig. The district may want to discuss the value and benefits of achieving a closer 'equity' of socio-economic equity of enrollments served by each elementary school. *Are there scenario options for program delivery that may help address this 'equity'?*

	<b>FREE</b>	<b>REDUCED</b>	<b>TOTAL FREE AND REDUCED</b>	<b>TOTAL STUDENTS</b>	<b>FREE/REDUCED %</b>
Birchwood	41	2	43	314	12.04%
Rosendale	44	2	46	316	12.71%
Hillside	52	2	54	351	13.33%
Glen cliff	50	11	61	290	17.38%
Craig	68	2	70	328	17.59%
Iroquois	71	2	73	468	13.49%
Van Antwerp	62	5	67	409	14.08%
HS	187	10	197	1225	13.85%
<b>DISTRICT-WIDE TOTAL:</b>	<b>575</b>	<b>36</b>	<b>611</b>	<b>4312</b>	<b>14.17%</b>

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- ✓ An assumption of the study is that ‘doable’ scenario options might be suggested by looking at the geographic location of the school buildings. The assumption is based on the value of ‘least change impact’ with regard to the geographic region students would attend in a scenario option compared to where they attend now. The ‘least change impact’ and the transportation of students in a scenario option is usually a major consideration. Other variables like pupil capacities of each of the buildings also have major influence on designing ‘doable’ scenario options.

The distances between existing school buildings is a basic and major criterion to develop possible ‘doable’ scenario options to deliver the K-8 program in possibly more efficient ways or patterns with a focus on ‘least change impact’ especially when considering pupil transportation.

Charted below are the distances that the students who live the farthest from their current (2018-2019) school travel to their school from home. Also listed is the +/- distance these same students would travel to attend another current school building in the District.

The chart is a handy tool to discuss ‘least impact’ issues related to the various scenario options suggested by the study for review and discussion by the Board, school leadership and the community. The data charted are about the current students of each current attendance zone *who live the farthest* from the neighboring schools. Therefore, all other students in the District should travel **less than** the mileage listed in the ‘ADDITIONAL TRAVEL DISTANCE’ column. When one or more possible scenarios are identified for possible implementation the same analysis should be duplicated with those specific scenario options.

Distance of the home of the <u>current</u> student attending this school who lives the farthest from the school...		Miles:	Miles now traveled by the student to current home school:	ADDITIONAL TRAVEL DISTANCE in Miles for this student to the alternative building:
<b>Birchwood Elementary</b>  Miles of this student from his/her home to Birchwood: 10.3	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Birchwood</b> have to travel to get to.....	Craig	4.2	-6.1
		Glenclyff	2.7	-7.6
		Hillside	6.3	-4
		Rosendale	8.5	-1.8
		Iroquois Middle	8.3	-2
		Van Antwerp Middle	6.0	-4.3
		High School	5.4	-4.9
		<b>Craig Elementary</b>	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Craig</b> have to travel to get to.....	Birchwood
Miles of this student from his/her home to Craig: 5.6	Glenclyff	8.3		+2.7
	Hillside	4.6		-1
	Rosendale	3.2		-2.4
	Iroquois School	3.0		-2.6
	Van Antwerp Middle	4.8		-8
	High School	6.0		+4

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<b>Glencliff Elementary</b> Miles of this student from his/her home to Glencliff: 5.5	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Glencliff</b> have to travel to get to.....	Craig	3.1	5.5	-2.4
		Birchwood	3.4		-1.1
		Hillside	2.2		-3.3
		Rosendale	1.0		-4.5
		Iroquois Middle	1.2		-4.2
		Van Antwerp Middle	2.4		-3.1
		High School	2.1		-3.4
<b>Hillside Elementary</b> Miles of this student from his/her home to Hillside: 6.1	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Hillside</b> have to travel to get to.....	Craig	7.5	6.1	+1.4
		Glencliff	9.9		+3.8
		Birchwood	2.0		-4.1
		Rosendale	4.9		-1.2
		Iroquois Middle	4.6		-1.5
		Van Antwerp Middle	6.3		+2
		High School	7.6		+1.5
<b>Rosendale Elementary</b> Miles of this student from his/her home to Rosendale: 8.6	If the elementary school listed to the left is used differently, how many miles would the current student who lives the farthest from <b>Rosendale Street</b> have to travel to get to.....	Craig	4.3	8.6	-4.3
		Glencliff	2.7		-5.9
		Hillside	6.3		-2.3
		Birchwood	10.3		+1.7
		Iroquois Middle S	8.4		-.2
		Van Antwerp Middle	6.0		-2.6
		High School	5.5		-3.1

- ✓ The School District provides three district-wide transportation runs in the morning and in the afternoon. Elementary, Middle School, and High School students are transported separately on three district-wide bus routes. The current practice of the three separate districtwide runs is a valuable asset as the program implementation options presented in the study are considered. In addition, because the School District has deemed that Troy Road, Union Street and Balltown Road are not safe thorough fares for pupils to walk/cross, very few pupils are ‘walkers’ to school. Most pupils of the School District are already served by school bus transportation.
- ✓ The development of the *Program Implementation Delivery Study* is step one of a two year planning process. After the Board of Education identifies an option to deliver the Niskayuna program given the program vision and the expected increase in pupil enrollment, year two of planning is with the district architect to define the ‘brick and mortar’ decisions necessary to implement the chosen option and address the findings of the Building Conditions Survey.
- ✓ Three noticeable building attributes can influence the manner of how the district might add classroom space to serve the expected increase in pupil enrollment and the Program Vision of the District. The first is the high school cafeteria. The high school cafeteria is located in the middle of a wing of the building that primarily has academic subject classrooms. The hallway to get to the cafeteria is bounded by academic classrooms. The multiple lunch sessions and the volume of students that need to get to the cafeteria are disruptive to the classrooms. The high school has a large area adjacent to the gymnasium that is now used as a café type location. It is in an area of the building with few academic classrooms. A pupil services office that is adjacent to this area could

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easily be re-located to help enable the space needed for the cafeteria, In addition, there is an expanse of lawn outside this area that likely could sustain an addition to the existing space to provide the appropriately size cafeteria necessary for the population of the high school. The existing cafeteria can likely be renovated to create at least three added classrooms to the high school. It is one viable option to add classroom space in an existing classroom area of the building. The scenario options listed in the study refers to the possibility of adding three classrooms to the high school in this manner. Adding three classrooms in this manner would add at least 75 pupil capacity to the high school. Also, the creation of the cafeteria in the location across the gymnasium provides added flexibility and options in hosting large crowds to the high school for sports and other community events.

The second and third building attributes involve Van Antwerp. If the school solely served elementary grades, the pupil capacity of the building guided by local class size target values becomes at least 700.

Pupil Capacity of Van Antwerp as a 6-8 Middle		Base Capacity of Van Antwerp as an Elementary School	
7 grade six classrooms	175	7 classrooms	175
14 grades seven and eight subject classrooms	353	14 classrooms	350
<ul style="list-style-type: none"> <li>• Family and Consumer Science</li> <li>• Family and Consumer Science</li> <li>• Technology</li> <li>• Technology</li> <li>• Technology</li> </ul>	0	5 classrooms	125
Art classroom	0	Instructional Support Space-Art	0
Instrumental Music	0	Instructional Support Space-Instrumental Music	0
General Music	0	Instructional Support Space-General Music	0
Technology Podcast Studio	0	Instructional Support Space	0
Media Center	0	Media Center	0
Gym (1 station)	0	Gym	0
Instructional Support Space	0	Instructional Support Space	0
Computer Lab		Computer Lab	
Art (grade 6)		Art (grade 6)	
Gym (grade 6)		Gym (grade 6)	
Auditorium		Auditorium	
Resource		Resource	
Resource		Resource	
Resource		Resource	
Resource		Resource	
Speech		Speech	
Nurse		Nurse	
Reading (Grade 6)		Reading (Grade 6)	
BOCES Speech and Social Worker		Instructional Support Space	
BOCES Psychologist		Instructional Support Space	
Social Worker		Social Worker	
Counseling Center		Counseling Center	
Stage		Stage	
Cafeteria		Cafeteria	
Faculty Work Room		Faculty Work Room	
Conference Room		Conference Room	
BOCES 9:1:2 rental*		1 classroom	25
BOCES 9:1:2 rental*		1 classroom	25
Pupil Capacity	528	Pupil Capacity	700

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\* Three year age span for the programs offered is now for grades 6-8. It is assumed that Van Antwerp as an elementary school would not meet the age span needs of the BOCES programs in rented space,

A second Van Antwerp building attribute identified by the Community Advisory Committee as a viable method to add classrooms to serve the expected increase in student enrollment is the area that now houses the district offices of the School District at the Van Antwerp Middle School. An initial review of the total space now occupied by the district offices by the architect suggests that at least 10 classrooms with appropriate hallways and bathrooms could be supported by the total square footage. The scenario options listed in the study refers to the possibility of adding ten classrooms to Van Antwerp in this manner. The District has acquired a location that is now in the planning stage to house the transportation services of the District. The focus of this study is student program delivery. Details about the possibility of including appropriate space for District Offices in the plan to house transportation services now being studied separately would be addressed by the School District team and the architect.

Renovating the existing space at Van Antwerp that houses the District Offices would add significant pupil capacity to the building. As a building that now houses elementary grade 6 and secondary grades 7-8, the pupil capacity of Van Antwerp is 590. (Please see pages 27-29 of the *Pupil Capacity Study* for details.) If the building continued to house grades 6-8, the pupil capacity of the building would increase by about 250 minus any space that might be needed to renovate/add to existing instructional support spaces (having no pupil capacity). If Van Antwerp were to serve elementary grades only and the space now used for District Offices was reclaimed for pupil service, the pupil capacity of the building could likely be 850 including allocating about 3200 more square feet to renovate existing instructional support space and/or add new instructional support space to support the Program Vision of the District.

- ✓ In 2018-2019, there are 121 pupils attending K-5 in another elementary school than the school that is designated to serve the geographic area where their residences are located. The assignment of the students per Board Policy 5001 helps achieve the district goal “to promote class size balance by grade level across the district and optimum use of the district’s staff and facilities.”

*Are there scenario options for program implementation that could reduce the application of the ‘flex zone’ policy and achieve the district goal for class size balance?*

RESIDENCE SCHOOL ZONE	TOTAL K-5 PUPILS ATTENDING A DESIGNATED FLEX ZONE SCHOOL IN 2018-2019	‘Flex Zone’ School of Attendance
<b>BIRCHWOOD</b>	12	Hillside, 3 pupils
		Rosendale, 9 pupils
<b>CRAIG</b>	60	Glencliff, 25 pupils
		Hillside, 30 pupils
		Rosendale, 5 pupils
<b>GLENCLIFF</b>	10	Craig, 10 pupils

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<b>HILLSIDE</b>	8	Birchwood, 5 pupils
		Craig, 2 pupils
		Rosendale, 1 pupil
<b>ROSENDALE</b>	31	Birchwood, 13 pupils
		Craig, 3 pupils
		Hillside, 15 pupils
<b>TOTAL</b>	<b>121</b>	

<b>SOME POSSIBLE OPTIONS TO EXPLORE TO DELIVER THE NISKAYUNA CENTRAL SCHOOL DISTRICT Pre-K-12 PROGRAM OVER THE NEXT THREE YEARS</b>
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An important asset to the District in engaging an outside guest consultant is that the District receives a perspective not influenced by the history of the District, or by knowledge of the preferences of various school District community stakeholders. This study ‘holds up a mirror’ in an unbiased manner to: collect and analyze the pupil capacity data of the existing school buildings; inventory and review the program deployment in those facilities; and estimate future pupil enrollments. The results of the analyses provide for a data driven rationale in looking at other ways to organize the delivery of the K-12 program. The purpose of the study is to offer suggestions that could answer:

***Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?***

The Board of Education and senior administration do have knowledge of the District’s history, its culture, and the preferences held by school District stakeholders. They are ultimately responsible and are most able to determine, with engagement of the District community, which delivery option, adapted delivery option, or set of options for the future will be best--as judged by local values--to deliver instruction to the children of the District.

It falls upon the Board of Education, as the responsible public policy body, and the District leadership team to provide open, transparent communication regarding the possible options. A program implementation delivery change can lead to a range of data and emotional responses and it is incumbent upon the District to pursue all avenues of communication in order to listen to and respond to questions/concerns that parents and community members bring forth to help the Board make the best possible policy decision for all the pupils of the School District.

The body of the study refers to and suggests ways to use or deploy existing resources differently that may enable more opportunities for pupils in a more program-effective and cost-effective manner. The suggestions can be implemented at the volition of the District with any of the scenario options. The baseline variables that guide the identification of the scenarios suggested for consideration by the study are the current pupil capacity assets of the Niskayuna school buildings; the current class size targets



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of the District; the current educational program; and the estimated future enrollments of the District over the next five to ten years. Other related example variables analyzed to suggest the ‘doable’ scenario options for community/Board review include: equity gaps in grade level section class sizes, if any; the condition of the buildings; historical annual enrollment changes in each of the elementary schools; the school sites; distances between each school building; the culture of sharing instructional staff among the schools, and elements of the program the District envisions for the future.

Common to each scenario option is the assumption that the District wishes to continue the District ‘functional operating’ class size targets in place for grades kindergarten through grade 12. The study does not take the liberty of increasing those values in the analyses or in the suggestions for program delivery options. The scenario options do take a conservative planning approach by including a 7 to 10% flexibility in lower ‘functional operating’ class sizes for sets of grade levels.

GRADE LEVEL	TARGET (FUNCTIONAL OPERATING CLASS SIZE GOAL)	GUIDELINE
Kindergarten	20	22
Grade 1	21	23
Grade 2	22	24
Grade 3	23	25
Grade 4	24	26
Grade 5	25	27

GRADE LEVEL	TARGET (FUNCTIONAL OPERATING CLASS SIZE GOAL)	GUIDELINE
Grade 6, 7, 8, World Language	25	28
Health	28	30
PE	30	30
General Music	30	30
Home and Careers	20	20
Technology (Engineering)	20	20
Art	24	28
Grade 9, 10, 11, 12, Health, World Language, other classes except as noted below	25	28
ENL w Co-Teaching	22	22
Science	25	26
Chemistry, Physics	20	25
GRADE LEVEL	TARGET (FUNCTIONAL OPERATING CLASS SIZE GOAL)	GUIDELINE
Integrated Algebra, Integrated Algebra B-Geometry A	16	20
PE*	30	30
General Music	25	28
Technology (Engineering)	18	20
Art	24	24
Photo, Film, Computer Arts, Graphic Design	21	24

The last section summarizes the number of newly constructed classrooms and/or major renovations that each scenario likely will require to implement the option. The estimated spaces listed reflect the high

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enrollment estimates for the future and the changes to or additions to the instructional support spaces suggested by the program vision of the of the Niskayuna School District.

The Capital Project Community Advisory Committee has met since August 28, 2018. The Advisory Committee has reviewed and discussed School District data about the Program Vision of the District, Enrollment/Demographic Projections, Pupil Capacity of the Buildings of the District, and various data about pupils, staffing, the buildings, district debt, and transportation. On February 25, 2019 the Advisory Committee as a steering committee for the study suggested that the following items, ideas, and themes should be addressed by one or more of the scenario options suggested by the *Program Implementation Study* for consideration by the school district.

- Niskayuna will have a significant principal and debt obligation reduction starting in 2023-2024.
- Possible use of the transportation/bus garage space for adults. Move the District Office from Van Antwerp to increase space to serve pupils.
- Options must address and account for the instructional space requirements that are necessary to implement the Program Vision of the School District.
- The items listed/suggested by the Buildings Conditions Surveys should be taken care of at the same time that a program implementation plan to serve a growing enrollment is implemented.
- The scenario options should use what we have and add space as may be necessary.
- Explore the reallocation of space at the elementary schools to include a potential Pre-Kindergarten program, different grade level configurations, and provide adequate instructional support space to implement the Program Vision. Craig, Hillside, and Rosendale might be prime schools to add space.
- Explore the ‘do ability’ of combinations of grade level configurations like: K-8, K-4, 5-6, 7-8, and 9-12.
- Address the option of added new space at many sites or consolidated at a few sites.
- Initial information about attendance zones and how bus transportation might be influenced.
- Music instruction space at both of the current middle schools.

*The following chart of scenarios reflects those options the study suggests to be educationally sound and cost-effective avenues to pursue given the data and inferences gained throughout the research for the study. The local perspective is the only perspective that is important in the final balance of determining what is ‘educationally sound’ and ‘cost-effective’ for Niskayuna . **The scenarios are not listed in any priority order or advocacy order.** The value judgment that balances how the scenario options might ‘best’ serve the pupils of Niskayuna Central and how the scenario options might ‘best’ reduce operating expenditures must rest with the local Board and the community it serves and not with a guest consultant. **The study is a tool and a ‘roadmap’ to help the local public policy discussion with “local people, and local knowledge” to identify/develop an option, if any, to implement.***

The scenario option charts are provided in a format such that this document can be used as a tool to analyze and add to each possible scenario as the school community ponders what actions should be taken, if any.

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Local school District community discussion and analysis of the perceived instructional impact of each scenario will likely identify additional ‘Opportunities and Challenges’ not listed in the charts. It is important to note and encourage that some elements of the scenarios could possibly be combined logistically to produce another adapted scenario option for consideration by the Board of Education. The study methodology and format provides a tool to discuss/evaluate locally identified adapted options for consideration.

### **All of the Scenario Options listed below:**

- ✓ Adhere and reflect the ‘functional operating’ class size targets currently followed by the Niskayuna Central School District.
- ✓ Reflect the low to high future enrollment projections for 2021-2022 and 2023-2024
- ✓ Reflect the pupil capacities of the current school buildings.
- ✓ Allow flexibility in the delivery of the program and helps to ensure the quality of program delivery with the space available if unforeseen annual or seasonal spikes in pupil enrollment occur. Generally accepted long-range planning assumes that at least 7% to 10% of potential pupil capacity is considered/planned for as unassigned pupil capacity.
- ✓ Estimate the additional square feet necessary to renovate and/or add to instructional support spaces to implement the Program Vision of the Niskayuna Central School District. It is suggested that the square feet estimated is conservative and an ‘ample’ resource to identify appropriate changes to instructional support spaces. If identified instructional support space is not needed for instructional support space, then the pupil capacity of a particular school increases, thus requiring fewer new classrooms to be built.

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<b>SCENARIOS FOR CONSIDERATION BY THE NISKAYUNA CENTRAL SCHOOL DISTRICT TO ANSWER THE QUESTION:</b>  <i>Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?</i>	Birchwood Elementary	Rosendale Elementary	Glenciff Elementary	Hillside Elementary	Craig Elementary	Van Antwerp Middle School	Iroquois Middle School	High School
<b>Benchmark: Current facility assets, the current program configuration, and estimated enrollments three and five years from now.</b>	K-5	K-5	K-5	K-5	K-5	6-8	6-8	9-12
<b>Scenario A: Add classroom and instructional support space at each currently configured school to accommodate estimated growing enrollments and the Program Vision of the School District.</b>	Pre-K-5	Pre-K-5	Pre-K-5	Pre-K-5	Pre-K-5	6-8	6-8	9-12
<b>Scenario B: Provide five Pre-K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.</b>	Pre-K-4	Pre-K-4	Pre-K-4	Pre-K-4	Pre-K-4	5-6	7-8	9-12
<b>Scenario C: Provide five Pre-K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.</b>	Pre-K-3	Pre-K-3	Pre-K-3	Pre-K-3	Pre-K-3	4-6	7-8	9-12

## FINDINGS

<b>SCENARIOS FOR CONSIDERATION BY THE NISKAYUNA CENTRAL SCHOOL DISTRICT TO ANSWER THE QUESTION:</b>  <i>Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?</i>	Birchwood Elementary	Rosendale Elementary	Glenciff Elementary	Hillside Elementary	Craig Elementary	Van Antwerp Middle School	Iroquois Middle School	High School
<b>Scenario D: Provide four K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glenciff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glenciff.</b>	K-4	K-4	Pre-K Center and District Offices	K-4	K-4	5-6	7-8	9-12
<b>Scenario E: Provide four K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glenciff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glenciff.</b>	K-3	K-3	Pre-K Center and District Offices	K-3	K-3	4-6	7-8	9-12
<b>Scenario F: Birchwood and Rosendale become ‘sister schools’ that serve half of the School District for grades K-2 and 3-4. Hillside and Craig become ‘sister schools’ for grades K-2 and 3-4 and serve the other half of the School District. A Pre-K Center is hosted at Glenciff that also houses the Central Offices for the School District. Van Antwerp serves grades 5-6, Iroquois grades 7-8, and grades 9-12 are served at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glenciff.</b>	‘Sister Schools’		Pre-K Center and District Offices	‘Sister Schools’		5-6	7-8	9-12
	K-2	3-4		K-2	3-4			

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<b>Benchmark: Current facility assets, the current program configuration, and estimated enrollments three, five and ten years from now.</b>					
Pupil Capacity Available (Benchmarked to local Niskayuna ‘functional operating’ class size targets and the instructional program offerings of 2018-2019.)					
<b>Location</b>	<b>Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-22</b>	<b>Estimated Pupil Capacity Use in 2021-22</b>	<b>Estimated K-5 Enrollment In 2023-24</b>	<b>Estimated Pupil Capacity Use in 2023-24</b>
<b>K-5</b> Oct. 2018 <i>enrollment: 1867</i>					
Birchwood Elementary	368	1975 - 2087	100.9% - 106.6%	1926 - 2201	98.4% - 112.4%
Craig Elementary	405				
Glencliff Elementary	381				
Hillside Elementary	412				
Rosendale Elementary	392				
<b>Total K-5:</b>	<b>1958</b>				

	<b>Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b>Estimated Enrollment In 2023-2024</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</b>	<b>Estimated Enrollment In 2026-2027</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)</b>	<b>Estimated Enrollment In 2028-2029</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)</b>
<b>Van Antwerp Middle School 6-8 (528)</b>	528	1001	90.8%	1124	102%	1125-1188	102.1% - 107.8%		
<b>Iroquois Middle School 6-8 (462)</b>	574								
<b>Total 6-8:</b>	<b>1102</b>								
<b>High School 9-12 (1395)</b>	<b>1412</b>	1356	96%	1370	97%	1516	107.4%	1608 - 1628	113.9% - 115.3%

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<b>SCENARIO A:</b>			
<b>Add classroom and instructional support space at each currently configured school to accommodate estimated growing enrollments and the Program Vision of the School District.</b>			
<b>RATIONALE FOR SCENARIO A</b>			
<ul style="list-style-type: none"> <li>✓ Enrollment Projection Estimates suggest that Niskayuna will experience increasing elementary grades enrollments over the next five years and resulting grades 7-12 enrollment increases over the next 5 to 10 years. Additional grade level classrooms necessary to accommodate growing enrollments.</li> <li>✓ Renovations or added instructional support spaces are necessary to accommodate the estimated growing enrollments and to address the Program Delivery Vision of the School District.</li> <li>✓ No change in current attendance zone boundaries and grade level configurations of the schools.</li> </ul>			
<p><b>ESTIMATED SPACE RENOVATIONS/NEW CONSTRUCTION TO ACHIEVE SCENARIO A:</b>  <i>(Please note that each 'existing classroom estimated to renovate and/or add to existing instructional support spaces' equals about 800 square feet.). Also, note that Pre-Kindergarten classrooms do not add to elementary K-6 pupil capacity.)</i></p>			
Pre-K-5	Purpose:	Renovations/New Construction Estimate	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Birchwood Elementary</b>	Pre-K classrooms	Build 1 classroom	<b>Existing: 368</b> <b>+3 times 22</b> <b>=new capacity of 434</b>
	Anticipated K-5 enrollment growth	Build 3 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 4 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>Rosendale Elementary</b>	Pre-K classrooms	Build 1 classroom	<b>Existing: 392</b> <b>+4 times 22</b> <b>=new capacity of 480</b>
	Anticipated K-5 enrollment growth	Build 4 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 4 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>Glenclyff Elementary</b>	Pre-K classrooms	Build 1 classroom	<b>Existing: 381</b> <b>+3 times 22</b> <b>=new capacity of 447</b>
	Anticipated K-5 enrollment growth	Build 3 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 4 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>Hillside Elementary</b>	Pre-K classrooms	Build 1 classroom	<b>Existing: 412</b> <b>+4 times 22</b> <b>=new capacity of 500</b>
	Anticipated K-5 enrollment growth	Build 4 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 4 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>Craig Elementary</b>	Pre-K classrooms	Build 1 classroom	<b>Existing: 405</b> <b>+3 times 22</b> <b>=new capacity of 471</b>
	Anticipated K-5 enrollment growth	Build 3 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 4 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>Van Antwerp Middle School 6-8</b>	Anticipated enrollment growth	Build 4 classrooms	<b>Existing: 528</b> <b>+4 times 25</b> <b>=new capacity of 628</b>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	

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<b>Iroquois Middle School 6-8</b>	Anticipated enrollment growth	Build 4 classrooms	<i>Existing: 574 + 4 times 25 =new capacity of 674</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>High School 9-12</b>	Anticipated enrollment growth	Build 10 classrooms	<i>Existing: 1412 +10 times 25 +3 times 25 =new capacity of 1737</i>
	Current Pupil Capacity Space used to renovate/add to existing instructional support space to support the Program Vision of the District.	Renovate cafeteria to create at least 3 classrooms; renovate/add to cafeteria by gym.	

### ESTIMATED PUPIL CAPACITY RESULTS OF IMPLEMENTING SCENARIO A:

#### Build/renovate at each school to accommodate expected enrollment and achieve 'Program Vision Items'

Pre K-5 organization	ESTIMATED RESULTING K-5 Pupil Operating Capacity Based on Class Size Targets of the District	Estimated Enrollment In 2021-2022	Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)	Estimated Enrollment In 2023-2024	Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)
<b>Birchwood</b>	434	1975 -2087	84.7% to 89.5%	1926 - 2201	82.6% to 94.4%
<b>Rosendale</b>	480				
<b>Glenclyff</b>	447				
<b>Hillside</b>	500				
<b>Craig</b>	471				
<b>Total K-5: + Pre-K capacity:</b>	<b>2332 180 half-day; 90 full day</b>				

	ESTIMATED RESULTING Pupil Operating Capacity Based on Class Size Targets of the District	Estimated Enrollment In 2021-2022	Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)	Estimated Enrollment In 2023-2024	Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)	Estimated Enrollment In 2026-2027	Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)	Estimated Enrollment In 2028-2029	Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)
<b>Van Antwerp Middle School 6-8</b>	628	1001	76.9%	1124	86.3%	1125-1188	86.4% - 91.2%		
<b>Iroquois Middle School 6-8</b>	674								
<b>Total 6-8:</b>	<b>1302</b>								
<b>High School 9-12</b>	<b>1737</b>	1356	78.1%	1370	78.9%	1516	87.3%	1608 - 1628	92.6% - 93.7%



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<b>SCENARIO A: OPPORTUNITIES AND CHALLENGES</b>	
<b>Build/renovate at each school to accommodate expected enrollment and achieve 'Program Vision Items'</b>	
<b>OPPORTUNITIES:</b>	<b>CHALLENGES:</b>
<ul style="list-style-type: none"> <li>✓ Added instructional space resource necessary to address current Program Vision Elements is addressed.</li> <li>✓ All current patterns of staff deployment stay the same.</li> <li>✓ Attendance zones remain the same.</li> <li>✓ No major changes in current bus transportation patterns likely.</li> </ul>	<ul style="list-style-type: none"> <li>✓ New construction at each school site</li> <li>✓ Sizes of sites may not support the best pupil focused design for new space.</li> <li>✓ All current patterns of staff deployment stay the same; no new opportunity for curricular and instructional innovations encouraged by different grade level configurations.</li> <li>✓ Affordability.</li> <li>✓ Equity gaps in average grade level class sizes among the elementary buildings will likely remain.</li> <li>✓ 'Flex Zone' Policy will likely need to be used as a tool to balance class sizes among the elementary schools</li> <li>✓ Two grades 6-8 schools will continue the challenge to provide a comprehensive and cohesive 6-8 music program and athletic program.</li> <li>✓ Social-economic diversity inequity among the elementary schools will likely continue.</li> <li>✓ The Niskayuna student community does not come together until grade 9.</li> </ul>
✓	✓
✓	✓
✓	✓
✓	✓
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**SCENARIO B:**

**Provide five Pre-K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.**

**RATIONALE FOR SCENARIO B**

- ✓ Enrollment Projection Estimates suggest that Niskayuna will experience increasing elementary grades enrollments over the next five years and resulting grades 7-12 enrollment increases over the next 5 to 10 years. Additional grade level classrooms necessary to accommodate growing enrollments.
- ✓ Renovations or added instructional support spaces are necessary to accommodate the estimated growing enrollments and to address the Program Delivery Vision of the School District.
- ✓ Current K-5 attendance zones become K-4 attendance zones.
- ✓ Serve grades 5-6 district-wide at the Van Antwerp School; Serve grades 7-8 district-wide at the Iroquois School. Such centralization helps bring about efficient staff deployment and consistency of program/curriculum delivery as now achieved in serving grades 9-12 at one central district-wide site.
- ✓ Provide added program delivery options for grade 5.
- ✓ Eliminate the challenge of having two different sets of teacher certifications serving one student population in a school.
- ✓ Reduce the number of new classrooms necessary to be built at five elementary school sites to accommodate increasing enrollments and addressing instructional support spaces to implement the Program Vision of the School District. Current year grade 5 classrooms can be re-deployed to address increasing enrollments, instructional support space renovations and/or added instructional support space to help implement the Program Vision of the District.
- ✓ Re-allocate Central District Offices space at the Van Antwerp School to add conservatively 10 classrooms within existing space at the school to serve pupils. New added construction is not necessary at Van Antwerp. Van Antwerp has a limited site for new construction.
- ✓ The playfields at Van Antwerp are limited for secondary grades and may be more suited to serve all elementary grade levels.
- ✓ The existing pupil capacity of Van Antwerp as a school that just serves elementary grades and not secondary grades is 700 applying the class size targets of the School District. PAGE 51 FOR SPECIFIC DETAILS
- ✓ The music and athletic programs may be implemented with more quality and efficiency all pupils grades 5-6, 7-8, and 9-12 in three respective school buildings.

***ESTIMATED SPACE RENOVATIONS/NEW CONSTRUCTION TO ACHIEVE SCENARIO B:***

*(Please note that each 'existing classroom estimated to renovate and/or add to existing instructional support spaces' equals about 800 square feet. Also, note that Pre-Kindergarten classrooms do not add to elementary K-6 pupil capacity.)*

<b>Pre-K-4</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Birchwood Elementary</b>	Pre-K classrooms	Build 1 classroom	<b>Existing: 368 +2 times 22 - 3 times 22 +1 times 22 =new capacity of 368</b>
	Anticipated K-4 enrollment growth	Build 2 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space. Two grade 5 classrooms vacated net build one classroom.	

<b>Pre-K-4</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Rosendale Elementary</b>	Pre-K classrooms	Build 1 classroom	<i>Existing: 392</i> <i>+2 times 22</i> <i>-3 times 22</i> <i>+1 times 22</i> <i>=new capacity of 392</i>
	Anticipated K-4 enrollment growth	Build 2 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space. Two grade 5 classrooms vacated net build one classroom.	
<b>Glenclyff Elementary</b>	Pre-K classrooms	Build 1 classroom	<i>Existing: 381</i> <i>+2 times 22</i> <i>-3 times 22</i> <i>+1 times 22</i> <i>=new capacity of 381</i>
	Anticipated K-4 enrollment growth	Build 2 classroom	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces vacated by grade 5 to accommodate renovated or added instructional support spaces in the existing space. Three grade 5 classrooms vacated net build one classroom.	
<b>Hillside Elementary</b>	Pre-K classrooms	Build 1 classroom	<i>Existing: 412</i> <i>+2 times 22</i> <i>-3 times 22</i> <i>+1 times 22</i> <i>=new capacity of 412</i>
	Anticipated K-4 enrollment growth	Build 2 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate three existing classroom spaces vacated by grade 5 to accommodate renovated or added instructional support spaces in the existing space. Three grade 5 classrooms vacated net build one classroom.	
<b>Craig Elementary</b>	Pre-K classrooms	Build 1 classroom	<i>Existing: 405</i> <i>+2 times 22</i> <i>-3 times 22</i> <i>+1 times 22</i> <i>=new capacity of 405</i>
	Anticipated K-4 enrollment growth	Build 2 classrooms	
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate three existing classroom spaces vacated by grade 5 to accommodate renovated or added instructional support spaces in the existing space. Three grade 5 classrooms vacated net build one classroom.	
<b>Van Antwerp Upper Elementary School 5-6</b>	Anticipated enrollment growth	Allocate 6 classrooms from the re-deployment of District Office space to serve pupils	<i>Existing: 700 (as an elementary school only)</i> <i>+6 times 25</i> <i>=new capacity of 850</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Allocate 4 classrooms from the re-deployment of District Office space to serve pupils to accommodate renovated or added instructional support spaces in the existing space.	
<b>Iroquois Middle School 7-8</b>	Anticipated enrollment growth and all grades 7-8 in one school.	Build 11 classrooms	<i>Existing: 574</i> <i>+11 times 25</i> <i>=new capacity 849</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>High School 9-12</b>	Anticipated enrollment growth	Build 10 classrooms	<i>Existing: 1412</i> <i>+10 times 25</i> <i>+3 times 25</i> <i>=new capacity of 1737</i>
	Current Pupil Capacity Space used to renovate/add to existing instructional support space to support the Program Vision of the District.	Renovate cafeteria to create at least 3 classrooms; renovate/add to cafeteria by gym.	

**ESTIMATED PUPIL CAPACITY RESULTS OF IMPLEMENTING SCENARIO B:**

**Provide five Pre-K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.**

<b>Pre K-4 organization</b>	<b>ESTIMATED RESULTING K-4 Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b>Estimated Enrollment In 2023-2024</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</b>
<b>Birchwood</b>	368	1594 -1705	81.4% to 87.1%	1575 -1849	80.4% to 94.4%
<b>Rosendale</b>	392				
<b>Glen cliff</b>	381				
<b>Hillside</b>	412				
<b>Craig</b>	405				
<b>Total K-4: + Pre-K capacity:</b>	<b>1958 180 half-day; 90 full day</b>				

	<b>ESTIMATED RESULTING Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b>Estimated Enrollment In 2023-2024</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</b>	<b>Estimated Enrollment In 2026-2027</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)</b>	<b>Estimated Enrollment In 2028-2029</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)</b>
<b>Van Antwerp Middle School 5-6</b>	<b>850</b>	727	85.5%	721	84.8%				
<b>Iroquois Middle School 7-8</b>	<b>849</b>	656	77.3%	754	88.8%	776-795	91.4% - 93.4%		
<b>High School 9-12</b>	<b>1737</b>	1356	78.1%	1370	78.9%	1516	87.3%	1608 - 1628	92.6% - 93.7%

**SCENARIO B: OPPORTUNITIES AND CHALLENGES**

**Provide five Pre-K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.**

**OPPORTUNITIES:**

**CHALLENGES:**

- ✓ Added instructional space resource necessary to address current Program Vision Elements is addressed.
- ✓ School building space built to serve pupils can be re-claimed to serve pupils from the space that now services the School District Central Offices at VanAntwerp.
- ✓ Reduces the amount of new construction required to deal with increasing enrollments.
- ✓ All current patterns of staff deployment K-4 stay the same. Grade 5 now in one location.
- ✓ Cost-effective deployment of grade 5 staff. In 2018-2019 there are 13 grade 5 grade level classes serving 303 grade five pupils; average of 23.3 pupils per class. If all the 2018-19 grade pupils were served in one location it is likely that 12 grade level sections could be deployed for an average class of 25.25 pupils per class. Given the expected increases the district can expect, more classroom section staff will need to be hired. Centralization of grade 5 does not excess a staff position; it allows fewer new staff to be hired to serve the expected increase in enrollment.
- ✓ Attendance zones K-4 remain the same.
- ✓ No major changes in current bus transportation patterns likely for grades K-4.
- ✓ Equity of grade 5 class sizes able to be achieved.
- ✓ Program grade configuration K-4 allows a more consistent education program delivery and focus of five building staffs on five grade levels instead of six.
- ✓ Collaboration among grade 5 staff in delivering a common grade 5 program in one building instead of five buildings.
- ✓ The Niskayuna student community comes together in grade 5.
- ✓ Establishing an ‘Upper Elementary Intermediate’ school has more options of how best to serve pupils in grades 5-6. For example:
  - ◇ Grade 5 served in self-contained classrooms as is done in 2018-2019.
  - ◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in grades 5 and 6.
  - ◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in 6.
- ✓ A grades 5-6 program opportunity becomes more ‘doable’. Part 100.4 of Commissioner’s Regulations with regard to grades 7-8 identifies various unit of study (seat time) subjects. They include home and career skills, languages other than English, technology which

- ✓ New construction at each elementary school site.
- ✓ Equity gaps in average grade level class sizes among the elementary buildings will likely remain K-4.
- ✓ ‘Flex Zone’ Policy will likely need to be used as a tool to balance class sizes among the elementary schools K-4; now for only 5 grades and not six grades, however.
- ✓ Social-economic diversity inequity among the elementary schools will likely continue; maybe more narrow with grade 5 being centralized.
- ✓ Grade 5 pupils served at a central location with grade 6 pupils.
- ✓ Re-design the existing K-5 elementary routes to K-4 transportation routes to meet the expectations the district has for pupil transportation. Re-design the existing 6-8 routes to 5-8 transportation routes to meet the expectations the district has for pupil transportation.
- ✓ There are now three location transitions for Niskayuna pupils: K-5 to 6-8 to 9-12. Scenario Option B has four location transitions for Niskayuna pupils: K-4 to 5-6 to 7-8 to 9-12.
- ✓ A plan to relocate School District Central Offices from pupil space to space for adult use at the Transportation building or other non-pupil site.

<p>may be initiated as early as grade 5 (and/or grade 6) if taught by teachers certified in those areas. Such an approach allows more time in the student day in grades 7 and 8 for other opportunities. In particular it allows more opportunity for grade 8 pupils to accelerate with grade 9 for-HS-credit courses. The approach helps pupils needing extra help to receive that extra help during the regular school day in grades 7-8.</p> <ul style="list-style-type: none"> <li>✓ All teaching staff in the “Upper Intermediate School” have the same elementary teacher certification range of responsibilities.</li> <li>✓ The grades 7-8 Middle School can deliver instruction unchanged if so determined. All teaching staff in the Grades 7-8 Middle School have the same secondary teacher certification range of responsibilities.</li> <li>✓ The K-12 music instruction program can have a continuum of four program development skill benchmarks: K-4, 5-6, 7-8, 9-12 with similar or unique distinctions (examples: four bands, four orchestras, four choruses, various ensembles for appropriate age levels).</li> <li>✓ The music instruction at the 5-6 and 7-8 schools can be delivered during the instructional day. Morning classes by grades 6-8 at the high school before the school day can end. Certainly, for <i>special projects</i> (ex. yearly K-12 music concert or a large musical production) meeting at the high school can still be a tool.</li> <li>✓ There are now four student community cultural transitions for Niskayuna pupils: K-5 to one of two 6-8 buildings, and two from two 6-8 schools to one 9-12 school. Scenario Option Scenario B reduces these student community cultural transitions for Niskayuna pupils to one: K-4 to 5-12.</li> <li>✓ May reduce the number of shared specialty teachers who need to be shared during each day.</li> </ul>	
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**SCENARIO C:**

**Provide five Pre-K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.**

**RATIONALE FOR SCENARIO C**

- ✓ Enrollment Projection Estimates suggest that Niskayuna will experience increasing elementary grades enrollments over the next five years and resulting grades 7-12 enrollment increases over the next 5 to 10 years. Additional grade level classrooms necessary to accommodate growing enrollments.
- ✓ Renovations or added instructional support spaces are necessary to accommodate the estimated growing enrollments and to address the Program Delivery Vision of the School District.
- ✓ Current K-5 attendance zones become K-3 attendance zones. The youngest of pupils attend school closest to home. May be able to reduce reliance on ‘Flex Zone’ Policy to help balance class sizes among the five K-3 schools.
- ✓ Serve grades 4-6 district-wide at the Van Antwerp School; Serve grades 7-8 district-wide at the Iroquois School. Such centralization helps bring about efficient staff deployment and consistency of program/curriculum delivery as now achieved in serving grades 9-12 at one central district-wide site.
- ✓ Provide added program delivery options for grade 5.
- ✓ Eliminate the challenge of having two different sets of teacher certifications serving one student population in a school.
- ✓ Reduce the number of new classrooms necessary to be built at five elementary school sites to accommodate increasing enrollments and addressing instructional support spaces to implement the Program Vision of the School District. Current year grades 4 and 5 classrooms can be re-deployed to address increasing enrollments, instructional support space renovations and/or added instructional support space to help implement the Program Vision of the District.
- ✓ Re-allocate Central District Offices space at the Van Antwerp School to add conservatively 10 classrooms within existing space at the school to serve pupils. Added construction is necessary at Van Antwerp. Van Antwerp has a limited site for new construction. The potential to add 10 classrooms will need to be creatively addressed.
- ✓ The playfields at Van Antwerp are limited for secondary grades and may be more suited to serve all elementary grade levels.
- ✓ The existing pupil capacity (before changes or additions) of Van Antwerp as a school that just serves elementary grades and not secondary grades is 700 applying the class size targets of the School District. SEE PAGE 51 FOR SPECIFIC DETAILS.
- ✓ The music and athletic programs may be implemented with more quality and efficiency with all pupils grades 4-6, 7-8, and 9-12 in three respective school buildings.
- ✓ The NYS scope and sequence of standards can support a transition at the end of grade 3 as pupils enter grade 4, a benchmark year for assessing learning attainment.

***ESTIMATED SPACE RENOVATIONS/NEW CONSTRUCTION TO ACHIEVE SCENARIO C:***  
*(Please note that each ‘existing classroom estimated to renovate and/or add to existing instructional support spaces’ equals about 800 square feet. Also, note that Pre-Kindergarten classrooms do not add to elementary K-6 pupil capacity.)*

<b>Pre-K-3</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Birchwood Elementary</b>	Pre-K classrooms	Reallocate 1 classroom from the four vacated by grades 4 and 5.	<b>Existing: 368 -1 times 22 - 2 times 22 =new capacity of 302</b>
	Anticipated K-3 enrollment growth		
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the four vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	

<b>Pre-K-3</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Rosendale Elementary</b>	Pre-K classrooms	Reallocate 1 classroom from the four vacated by grades 4 and 5.	<i>Existing: 392 -1 times 22 -2 times 22 =new capacity of 326</i>
	Anticipated K-3 enrollment growth		
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the four vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Glenciff Elementary</b>	Pre-K classrooms	Reallocate 1 classroom from the five vacated by grades 4 and 5.	<i>Existing: 381 -1 times 22 -2 times 22 =new capacity of 315</i>
	Anticipated K-3 enrollment growth		
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the five vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Hillside Elementary</b>	Pre-K classrooms	Reallocate 1 classroom from the six vacated by grades 4 and 5.	<i>Existing: 412 -1 times 22 -3 times 22 =new capacity of 324</i>
	Anticipated K-3 enrollment growth		
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces from the six vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Craig Elementary</b>	Pre-K classrooms	Reallocate 1 classroom from the six vacated by grades 4 and 5.	<i>Existing: 405 -1 times 22 -3 times 22 =new capacity of 317</i>
	Anticipated K-3 enrollment growth		
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces from the six vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Van Antwerp Upper Elementary School 4-6</b>	Anticipated enrollment growth	Allocate 6 classrooms from the re-deployment of District Office space to serve pupils. Build 14 classrooms.	<i>Existing: 700 (as an elementary school only) +6 times 25 +14 times 25 =new capacity of 1200</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Allocate 4 classrooms from the re-deployment of District Office space to serve pupils to accommodate renovated or added instructional support spaces in the existing space.	
<b>Iroquois Middle School 7-8</b>	Anticipated enrollment growth and all grades 7-8 in one school.	Build 11 classrooms	<i>Existing: 574 + 11 times 25 =new capacity 849</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>High School 9-12</b>	Anticipated enrollment growth	Build 10 classrooms	<i>Existing: 1412 +10 times 25 +3 times 25 =new capacity of 1737</i>
	Current Pupil Capacity Space used to renovate/add to existing instructional support space to support the Program Vision of the District.	Renovate cafeteria to create at least 3 classrooms; renovate/add to cafeteria by gym.	



**ESTIMATED PUPIL CAPACITY RESULTS OF IMPLEMENTING SCENARIO C:**

**Provide five Pre-K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.**

<b>Pre K-3 organization</b>	<b>ESTIMATED RESULTING K-3 Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b><i>Estimated Enrollment In 2023-2024</i></b>	<b><i>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</i></b>
<b>Birchwood</b>	302	1249 -1360	78.9 to 85.9%	<i>1197 -1478</i>	<i>75.6% to 93.3%</i>
<b>Rosendale</b>	326				
<b>Glencliff</b>	315				
<b>Hillside</b>	324				
<b>Craig</b>	317				
<b>Total K-3: + Pre-K capacity:</b>	<b>1584 180 half-day; 90 full day</b>				

	<b>ESTIMATED RESULTING Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b><i>Estimated Enrollment In 2023-2024</i></b>	<b><i>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</i></b>	<b>Estimated Enrollment In 2026-2027</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)</b>	<b><i>Estimated Enrollment In 2028-2029</i></b>	<b><i>Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)</i></b>
<b>Van Antwerp Upper Elementary School 4-6</b>	<b>1200</b>	1072	89.3%	<i>1092 - 1110</i>	<i>91%- 92.5%</i>				
<b>Iroquois Middle School 7-8</b>	<b>849</b>	656	77.3%	<i>754</i>	<i>88.8%</i>	776-795	91.4% - 93.4%		
<b>High School 9-12</b>	<b>1737</b>	1356	78.1%	<i>1370</i>	<i>78.9%</i>	1516	87.3%	<i>1608 - 1628</i>	<i>92.6% - 93.7%</i>

**SCENARIO C: OPPORTUNITIES AND CHALLENGES**

**Provide five Pre-K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.**

**OPPORTUNITIES:**

**CHALLENGES:**

- ✓ Added instructional space resource necessary to address current Program Vision Elements is addressed.
- ✓ School building space built to serve pupils can be re-claimed to serve pupils from the space that now services the School District Central Offices at Antwerp.
- ✓ Reduces the amount of new construction required to deal with increasing enrollments. No new construction likely will be needed at any of the elementary schools.
- ✓ All current patterns of staff deployment K-3 stay the same. Grades 4 and 5 now in one location.
- ✓ Cost-effective deployment of grade 5 staff. In 2018-2019 there are 13 grade 5 grade level classes serving 303 grade five pupils; average of 23.3 pupils per class. If all the 2018-19 grade 5 pupils were served in one location it is likely that 12 grade level sections could be deployed for an average class of 25.25 pupils per class. Given the expected increases the district can expect, more classroom section staff will need to be hired. Centralization of grade 5 does not exceed a staff position. It allows fewer new staff to be hired to serve the expected increase in enrollment. In 2018, there are 308 grade four pupils served by 12 class sections averaging 25.67 pupils—over the class size target of 24. Centralizing grade 4 with grade 5 and 6 will aid in helping to deploy staff to achieve the grade level class size targets.
- ✓ Attendance zones K-3 can remain similar to the current K-5 zones.
- ✓ No major changes in current bus transportation patterns likely for grades K-3. They become shorter with fewer elementary pupils on the elementary district-wide run.
- ✓ Equity of grade 5 class sizes able to be achieved.
- ✓ Program grade configuration K-3 allows a more concentrated education program delivery and focus of five building staffs on 4 grade levels instead of six.
- ✓ Collaboration among grades 4 and 5 staff in delivering a common grades 4 and 5 program in one building instead of five buildings.
- ✓ The Niskayuna student community comes together in grade 4.
- ✓ Establishing an ‘Upper Elementary Intermediate’ school would have more options of how best to serve pupils in grades 4-6. For example:
  - ◇ Grades 4 and/or 5 served in self-contained classrooms as is done in 2018-2019.

- ✓ Equity gaps in average grade level class sizes among the elementary buildings will likely remain K-3.
- ✓ Van Antwerp has a limited site for new construction.
- ✓ Social-economic diversity inequity among the elementary schools will likely narrow with grades 4 and 5 served centrally.
- ✓ Grades 4 and 5 pupils served at a central location with grade 6 pupils.
- ✓ Re-design the existing K-5 elementary routes to K-3 transportation routes to meet the expectations the district has for pupil transportation. Re-design the existing 6-8 routes to 4-8 transportation routes to meet the expectations the district has for pupil transportation.
- ✓ There are now three location transitions for Niskayuna pupils: K-5 to 6-8 to 9-12. Scenario Option C has four location transitions for Niskayuna pupils: K-3 to 4-6 to 7-8 to 9-12.
- ✓ A plan to relocate School District Central Offices from pupil space to space for adult use at the Transportation building or other non-pupil site.

<ul style="list-style-type: none"> <li>◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in grades 4, 5 and 6.</li> <li>◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in 5 and 6.</li> <li>✓ A grades 4-6 program opportunity becomes more ‘doable’. Part 100.4 of Commissioner’s Regulations with regard to grades 7-8 identifies various unit of study (seat time) subjects. They include home and career skills, languages other than English, technology which may be initiated as early as grade 5 (and/ or grade 6) if taught by teachers certified in those areas. Such an approach allows more time in the student day in grades 7 and 8 for other opportunities. In particular it allows more opportunity for grade 8 pupils to accelerate with grade 9 for-HS-credit courses. The approach helps pupils needing extra help to receive that extra help during the regular school day in grades 7-8.</li> <li>✓ All teaching staff in the “Upper Intermediate School” have the same elementary teacher certification range of responsibilities.</li> <li>✓ The grades 7-8 Middle School can deliver instruction unchanged if so determined. All teaching staff in the Grades 7-8 Middle School have the same secondary teacher certification range of responsibilities.</li> <li>✓ The K-12 music instruction program can have a continuum of four program development skill benchmarks: K-3, 4-6, 7-8, 9-12 with similar or unique distinctions (examples: four bands, four orchestras, four choruses, various ensembles for appropriate age levels).</li> <li>✓ The music instruction at the 4-6 and 7-8 schools can be delivered during the instructional day. Morning classes by grades 6-8 at the high school before the school day can end. Certainly, for <i>special projects</i> (ex. yearly K-12 music concert or a large musical production) meeting at the high school can still be a tool.</li> <li>✓ There are now four student community cultural transitions for Niskayuna pupils: K-5 to one of two 6-8 buildings, and two from two 6-8 schools to one 9-12 school. Scenario Option Scenario C reduces these student community cultural transitions for Niskayuna pupils to one: K-3 to 4-12.</li> <li>✓ ‘Flex Zone’ Policy will likely need to be used less as a tool to balance class sizes among the elementary schools K-3</li> </ul>	
✓	✓
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**SCENARIO D:**

**Provide four K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

**RATIONALE FOR SCENARIO D**

- ✓ Enrollment Projection Estimates suggest that Niskayuna will experience increasing elementary grades enrollments over the next five years and resulting grades 7-12 enrollment increases over the next 5 to 10 years. Additional grade level classrooms necessary to accommodate growing enrollments.
- ✓ Renovations or added instructional support spaces are necessary to accommodate the estimated growing enrollments and to address the Program Delivery Vision of the School District.
- ✓ Current five K-5 attendance zones become four K-4 attendance zones.
- ✓ Serve grades 5-6 district-wide at the Van Antwerp School; Serve grades 7-8 district-wide at the Iroquois School. Such centralization helps bring about efficient staff deployment and consistency of program/curriculum delivery as now achieved in serving grades 9-12 at one central district-wide site.
- ✓ Provide added program delivery options for grade 5.
- ✓ Eliminate the challenge of having two different sets of teacher certifications serving one student population in a school.
- ✓ Centralize the Pre-Kindergarten program opportunity to one location district-wide to create an early childhood center with program delivery focus on all pre-schoolers district-wide at one school.
- ✓ Housing the District Offices at Glencliff along with the Pre-K program allows a level of State Aid to support any renovations needed for the Pre-K program as well as for the administrative support space.
- ✓ Glencliff becomes an asset ‘in the bank’ in case future pupil enrollments outpace what has been estimated for five years from now or beyond.
- ✓ Reduce the number of sites necessary for new construction.
- ✓ Re-allocate Central District Offices space at the Van Antwerp School to add conservatively 10 classrooms within existing space at the school to serve pupils. New added construction is not necessary at Van Antwerp. Van Antwerp has a limited site for new construction.
- ✓ The playfields at Van Antwerp are limited for secondary grades and may be more suited to serve all elementary grade levels.
- ✓ The existing pupil capacity of Van Antwerp as a school that just serves elementary grades and not secondary grades is 700 applying the class size targets of the School District. SEE PAGE 51 FOR SPECIFIC DETAILS.
- ✓ The music and athletic programs may be implemented with more quality and efficiency with all pupils grades 5-6, 7-8, and 9-12 in three respective school buildings.

***ESTIMATED SPACE RENOVATIONS/NEW CONSTRUCTION TO ACHIEVE SCENARIO D:***

***(Please note that each ‘existing classroom estimated to renovate and/or add to existing instructional support spaces’ equals about 800 square feet. Also, note that Pre-Kindergarten classrooms do not add to elementary K-6 pupil capacity.)***

<b>Pre-K-4</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b><i>ESTIMATED RESULTING K-12 PUPIL CAPACITY</i></b>
<b>Birchwood Elementary</b>	Anticipated K-4 enrollment growth	Build 6 classrooms	<i>Existing: 368</i>
			<i>+6 times 22</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space. Two grade 5 classrooms vacated, net build 1 classroom.	<i>- 3 times 22</i>
			<i>+1 times 22</i>
			<b><i>=new capacity of 456</i></b>

<b>Pre-K-4</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Rosendale Elementary</b>	Anticipated K-4 enrollment growth	Build 8 classrooms	<i>Existing: 392 +8 times 22 - 3 times 22 +1 times 22 =new capacity of 524</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space. Two grade 5 classrooms vacated, net build 1 classroom.	
<b>Glenclyff Pre-K and District Offices</b>	Pre-Kindergarten classrooms.	Allocate 5 classrooms.	<i>Existing: 381 – 381 =new capacity of 0</i>
	Allocate space appropriate for District offices, staff development, records storage, storage.		
<b>Hillside Elementary</b>	Anticipated K-4 enrollment growth	Build 6 classrooms	<i>Existing: 412 +6 times 22 -3 times 22 =new capacity of 478</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate the 3 existing classroom spaces vacated by grade 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Craig Elementary</b>	Anticipated K-4 enrollment growth	Build 8 classrooms	<i>Existing: 405 +8 times 22 -3 times 22 =new capacity of 515</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate the 3 existing classroom spaces vacated by grade 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Van Antwerp Upper Elementary School 5-6</b>	Anticipated enrollment growth	Allocate 6 classrooms from the re-deployment of District Office space to serve pupils	<i>Existing: 700 (as an elementary school only) +6 times 25 =new capacity of 850</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Allocate 4 classrooms from the re-deployment of District Office space to serve pupils to accommodate renovated or added instructional support spaces in the existing space.	
<b>Iroquois Middle School 7-8</b>	Anticipated enrollment growth and all grades 7-8 in one school.	Build 11 classrooms	<i>Existing: 574 + 11 times 25 = new capacity 849</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>High School 9-12</b>	Anticipated enrollment growth	Build 10 classrooms	<i>Existing: 1412 +10 times 25 +3 times 25 =new capacity of 1737</i>
	Current Pupil Capacity Space used to renovate/add to existing instructional support space to support the Program Vision of the District.	Renovate cafeteria to create at least 3 classrooms; renovate/add to cafeteria by gym.	

**ESTIMATED PUPIL CAPACITY RESULTS OF IMPLEMENTING SCENARIO D:**

**Scenario D: Provide four K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

<b>Pre K-4 organization</b>	<b>ESTIMATED RESULTING K-4 Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b><i>Estimated Enrollment In 2023-2024</i></b>	<b><i>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</i></b>
<b>Birchwood</b>	456	1594 -1705	80.8% to 86.4%	<i>1575 -1849</i>	<i>79.8% to 93.7%</i>
<b>Rosendale</b>	524				
<b>Glencliff</b>	0				
<b>Hillside</b>	478				
<b>Craig</b>	515				
<b>Total K-4: + Pre-K capacity:</b>	<b>1973 180 half-day; 90 full day</b>				

	<b>ESTIMATED RESULTING Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b><i>Estimated Enrollment In 2023-2024</i></b>	<b><i>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</i></b>	<b>Estimated Enrollment In 2026-2027</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)</b>	<b><i>Estimated Enrollment In 2028-2029</i></b>	<b><i>Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)</i></b>
<b>Van Antwerp Upper Elementary School 5-6</b>	<b>850</b>	727	85.5%	<i>721</i>	<i>84.8%</i>				
<b>Iroquois Middle School 7-8</b>	<b>849</b>	656	77.3%	<i>754</i>	<i>88.8%</i>	776-795	91.4% - 93.4%		
<b>High School 9-12</b>	<b>1737</b>	1356	78.1%	<i>1370</i>	<i>78.9%</i>	1516	87.3%	<i>1608 - 1628</i>	<i>92.6% - 93.7%</i>

**SCENARIO D: OPPORTUNITIES AND CHALLENGES**

**Scenario D: Provide four K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

**OPPORTUNITIES:**

**CHALLENGES:**

- ✓ Added instructional space resource necessary to address current Program Vision Elements is addressed.
- ✓ School building space built to serve pupils can be re-claimed to serve pupils from the space that now services the School District Central Offices at Van Antwerp.
- ✓ Cost-effective deployment of grade 5 staff. In 2018-2019 there are 13 grade 5 grade level classes serving 303 grade five pupils; average of 23.3 pupils per class. If all the 2018-19 grade pupils were served in one location it is likely that 12 grade level sections could be deployed for an average class of 25.25 pupils per class. Given the expected increases the district can expect, more classroom section staff will need to be hired. Centralization of grade 5 does not excess a staff position; it allows fewer new staff to be hired to serve the expected increase in enrollment.
- ✓ Reduction of 1 FTE principal and related office staff and 1 FTE nurse; about \$181,330 to \$259,044 in annual savings.
- ✓ Four K-4 attendance zones will help address socio-economic equity among pupils.
- ✓ Four K-4 attendance with each school having adequate pupil capacity for flexibility may likely reduce the use of the ‘Flex Zone’ Policy.
- ✓ Equity of grade 5 class sizes able to be achieved. Equity of grades K-4 with four schools instead of five may be more possible.
- ✓ Program grade configuration K-4 allows a more consistent education program delivery and focus of four (instead of five) building staffs on five grade levels instead of six.
- ✓ Centralizing the delivery of Pre-Kindergarten enables an early childhood teaching-learning community to efficiently organize resources and staff skill sets. The site is ‘equitable’ in that all parents drive to one location for Pre-K attendance. In addition, a central site helps the program more easily offer such support efforts as parenting/reading/nutrition/high school equivalency and other adult education opportunities.
- ✓ Collaboration among grade 5 staff in delivering a common grade 5 program in one building instead of five buildings.
- ✓ The Niskayuna student community comes together in grade 5.
- ✓ Establishing an ‘Upper Elementary Intermediate’ school has more options of how best to serve pupils in grades 5-6. For example:
  - ◇ Grade 5 served in self-contained classrooms as is done in 2018-2019.
  - ◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in grades 5 and 6.

- ✓ Equity gaps in average grade level class sizes among the elementary buildings will likely remain K-4.
- ✓ ‘Flex Zone’ Policy will likely need to be used as a tool to balance class sizes among the elementary schools K-4; now for only 5 grades and not six grades, however.
- ✓ Social-economic diversity inequity among the elementary schools will likely continue; maybe more narrow with grade 5 being centralized.
- ✓ Grade 5 pupils served at a central location with grade 6 pupils.
- ✓ Re-design the existing five K-5 elementary routes to four K-4 transportation routes to meet the expectations the district has for pupil transportation. Re-design the existing 6-8 routes to 5-8 transportation routes to meet the expectations the district has for pupil transportation.
- ✓ There are now three location transitions for Niskayuna pupils: K-5 to 6-8 to 9-12. Scenario Option D has four location transitions for Niskayuna pupils: K-4 to 5-6 to 7-8 to 9-12.
- ✓ A plan to relocate School District Central Offices from pupil space to space for adult use at the Transportation building or other non-pupil site.
- ✓ Preparing Glencliff to host the Pre-Kindergarten program and the District Central Offices.

<ul style="list-style-type: none"> <li>◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in 6.</li> <li>✓ A grades 5-6 program opportunity becomes more ‘doable’. Part 100.4 of Commissioner’s Regulations with regard to grades 7-8 identifies various unit of study (seat time) subjects. They include home and career skills, languages other than English, technology which may be initiated as early as grade 5 (and/or grade 6) if taught by teachers certified in those areas. Such an approach allows more time in the student day in grades 7 and 8 for other opportunities. In particular it allows more opportunity for grade 8 pupils to accelerate with grade 9 for-HS-credit courses. The approach helps pupils needing extra help to receive that extra help during the regular school day in grades 7-8.</li> <li>✓ All teaching staff in the “Upper Intermediate School” has the same elementary teacher certification range of responsibilities.</li> <li>✓ The grades 7-8 Middle School can deliver instruction unchanged if so determined. All teaching staff in the Grades 7-8 Middle School have the same secondary teacher certification range of responsibilities.</li> <li>✓ The K-12 music instruction program can have a continuum of four program development skill benchmarks: K-4, 5-6, 7-8, 9-12 with similar or unique distinctions (examples: four bands, four orchestras, four choruses, various ensembles for appropriate age levels).</li> <li>✓ The music instruction at the 5-6 and 7-8 schools can be delivered during the instructional day. Morning classes by grades 6-8 at the high school before the school day can end. Certainly, for <i>special projects</i> (ex. yearly K-12 music concert or a large musical production) meeting at the high school can still be a tool.</li> <li>✓ There are now four student community cultural transitions for Niskayuna pupils: K-5 to one of two 6-8 buildings, and two from two 6-8 schools to one 9-12 school. Scenario Option Scenario B reduces these student community cultural transitions for Niskayuna pupils to one: K-4 to 5-12.</li> <li>✓ May reduce the number of shared specialty teachers who need to be shared during each day. Instructional and instructional support staff from Glencliff redeployed to the other four elementary schools.</li> </ul>	
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**SCENARIO E:**

**Provide four K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

**RATIONALE FOR SCENARIO E**

- ✓ Enrollment Projection Estimates suggest that Niskayuna will experience increasing elementary grades enrollments over the next five years and resulting grades 7-12 enrollment increases over the next 5 to 10 years. Additional grade level classrooms necessary to accommodate growing enrollments.
- ✓ Renovations or added instructional support spaces are necessary to accommodate the estimated growing enrollments and to address the Program Delivery Vision of the School District.
- ✓ Current five K-5 attendance zones become four K-3 attendance zones.
- ✓ Serve grades 4-6 district-wide at the Van Antwerp School; Serve grades 7-8 district-wide at the Iroquois School. Such centralization helps bring about efficient staff deployment and consistency of program/curriculum delivery as now achieved in serving grades 9-12 at one central district-wide site.
- ✓ Provide added program delivery options for grade 5.
- ✓ Eliminate the challenge of having two different sets of teacher certifications serving one student population in a school.
- ✓ Centralize the Pre-Kindergarten program opportunity to one location district-wide to create an early childhood center with program delivery focus on all pre-schoolers district-wide at one school.
- ✓ Housing the District Offices at Glencliff along with the Pre-K program allows a level of State Aid to support any renovations needed for the Pre-K program as well as for the administrative support space.
- ✓ Glencliff becomes an asset ‘in the bank’ in case future pupil enrollments outpace what has been estimated for five years from now or beyond.
- ✓ Reduce the number of sites necessary for new construction.
- ✓ Re-allocate Central District Offices space at the Van Antwerp School to add conservatively 10 classrooms within existing space at the school to serve pupils. New added construction is not necessary at Van Antwerp. Van Antwerp has a limited site for new construction.
- ✓ The playfields at Van Antwerp are limited for secondary grades and may be more suited to serve all elementary grade levels.
- ✓ The existing pupil capacity of Van Antwerp as a school that just serves elementary grades and not secondary grades is 700 applying the class size targets of the School District. SEE PAGE 51 FOR SPECIFIC DETAILS.
- ✓ The music and athletic programs may be implemented with more quality and efficiency with all pupils grades 4-6, 7-8, and 9-12 in three respective school buildings.

**ESTIMATED SPACE RENOVATIONS/NEW CONSTRUCTION TO ACHIEVE SCENARIO E:**

*(Please note that each ‘existing classroom estimated to renovate and/or add to existing instructional support spaces’ equals about 800 square feet. Also, note that Pre-Kindergarten classrooms do not add to elementary K-6 pupil capacity.)*

<b>Pre-K-3</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Birchwood Elementary</b>	Anticipated K-3 enrollment growth	Build 2 classrooms	<b>Existing: 368 + 2 times 22 – 2 times 22 =new capacity of 368</b>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the four vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	

<b>Pre-K-3</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Rosendale Elementary</b>	Anticipated K-3 enrollment growth	Build 2 classrooms	<i>Existing: 392 + 2 times 22 - 2 times 22 =new capacity of 392</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the four vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Glenciff Pre-K and District Offices</b>	Pre-Kindergarten classrooms.	Allocate 5 classrooms.	<i>Existing: 381 – 381 =new capacity of 0</i>
	Allocate space appropriate for District offices, staff development, records storage, storage.		
<b>Hillside Elementary</b>	Anticipated K-3 enrollment growth	Build 2 classrooms.	<i>Existing: 412 + 2 times 22 - 2 times 22 =new capacity of 412</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the six vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Craig Elementary</b>	Anticipated K-3 enrollment growth	Build 2 classrooms.	<i>Existing: 405 + 2 times 22 - 2 times 22 =new capacity of 405</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 2 existing classroom spaces from the six vacated by grades 4 and 5 to accommodate renovated or added instructional support spaces in the existing space.	
<b>Van Antwerp Upper Elementary School 4-6</b>	Anticipated enrollment growth	Allocate 6 classrooms from the re-deployment of District Office space to serve pupils. Build 14 classrooms.	<i>Existing: 700 (as an elementary school only) + 6 times 25 + 14 times 25 =new capacity of 1200</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Allocate 4 classrooms from the re-deployment of District Office space to serve pupils to accommodate renovated or added instructional support spaces in the existing space.	
<b>Iroquois Middle School 7-8</b>	Anticipated enrollment growth and all grades 7-8 in one school.	Build 11 classrooms	<i>Existing: 574 + 11 times 25 =new capacity 849</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>High School 9-12</b>	Anticipated enrollment growth	Build 10 classrooms	<i>Existing: 1412 + 10 times 25 + 3 times 25 =new capacity of 1737</i>
	Current Pupil Capacity Space used to renovate/add to existing instructional support space to support the Program Vision of the District.	Renovate cafeteria to create at least 3 classrooms; renovate/add to cafeteria by gym.	

**ESTIMATED PUPIL CAPACITY RESULTS OF IMPLEMENTING SCENARIO E**

**Provide four K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

<b>Pre K-3 organization</b>	<b>ESTIMATED RESULTING K-3 Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b>Estimated Enrollment In 2023-2024</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</b>
<b>Birchwood</b>	368	1249 -1360	79.2% to 86.2%	1197 -1478	75.9% to 93.7%
<b>Rosendale</b>	392				
<b>Glencliff</b>	0				
<b>Hillside</b>	412				
<b>Craig</b>	405				
<b>Total K-3: + Pre-K capacity:</b>	<b>1577 180 half-day; 90 full day</b>				

	<b>ESTIMATED RESULTING Pupil Operating Capacity Based on Class Size Targets of the District</b>	<b>Estimated Enrollment In 2021-2022</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)</b>	<b>Estimated Enrollment In 2023-2024</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)</b>	<b>Estimated Enrollment In 2026-2027</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)</b>	<b>Estimated Enrollment In 2028-2029</b>	<b>Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)</b>
<b>Van Antwerp Upper Elementary School 4-6</b>	<b>1200</b>	1072	89.3%	1092 - 1110	91%-92.5%				
<b>Iroquois Middle School 7-8</b>	<b>849</b>	656	77.3%	754	88.8%	776-795	91.4% - 93.4%		
<b>High School 9-12</b>	<b>1737</b>	1356	78.1%	1370	78.9%	1516	87.3%	1608 - 1628	92.6% - 93.7%

**SCENARIO E: OPPORTUNITIES AND CHALLENGES**

**Provide four K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

**OPPORTUNITIES:**

**CHALLENGES:**

- ✓ Added instructional space resource necessary to address current Program Vision Elements is addressed.
- ✓ School building space built to serve pupils can be re-claimed to serve pupils from the space that now services the School District Central Offices at Antwerp.
- ✓ Cost-effective deployment of grade 5 staff. In 2018-2019 there are 13 grade 5 grade level classes serving 303 grade five pupils; average of 23.3 pupils per class. If all the 2018-19 grade 5 pupils were served in one location it is likely that 12 grade level sections could be deployed for an average class of 25.25 pupils per class. Given the expected increases the district can expect, more classroom section staff will need to be hired. Centralization of grade 5 does not excess a staff position. It allows fewer new staff to be hired to serve the expected increase in enrollment. In 2018, there are 308 grade four pupils served by 12 class sections averaging 25.67 pupils—over the class size target of 24. Centralizing grade 4 with grade 5 and 6 will aid in helping to deploy staff to achieve the grade level class size targets.
- ✓ Reduction of 1 FTE principal and related office staff and 1 FTE nurse; about \$181,330 to \$259,044 in annual savings.
- ✓ Four K-3 attendance zones will help address socio-economic equity among pupils.
- ✓ Bus transportation patterns for grades K-3 may become shorter with fewer elementary pupils on the elementary district-wide run.
- ✓ Equity of grades 4 and 5 class sizes able to be achieved.
- ✓ Program grade configuration K-3 allows a more concentrated education program delivery and focus of five building staffs on 4 grade levels instead of six.
- ✓ Centralizing the delivery of Pre-Kindergarten enables an early childhood teaching-learning community to efficiently organize resources and staff skill sets. The site is ‘equitable’ in that all parents drive to one location for Pre-K attendance. In addition, a central site helps the program more easily offer such support efforts as parenting/reading/nutrition/high school equivalency and other adult education opportunities.
- ✓ Collaboration among grades 4 and 5 staff in delivering a common grades 4 and 5 program in one building instead of five buildings.
- ✓ The Niskayuna student community comes together in grade 4.
- ✓ Establishing an ‘Upper Elementary Intermediate’ school would have more options of how best to serve pupils in grades 4-6. For example:
  - ◇ Grades 4 and/or 5 served in self-contained classrooms as is done in 2018-2019.
  - ◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in grades 4, 5 and 6.

- ✓ Equity gaps in average grade level class sizes among the elementary buildings will likely remain K-3.
- ✓ Van Antwerp has a limited site for new construction.
- ✓ ‘Flex Zone’ Policy will likely need to be used less as a tool to balance class sizes among the elementary schools K-3.
- ✓ Social-economic diversity inequity among the elementary schools will likely narrow with grades 4 and 5 served centrally.
- ✓ Grades 4 and 5 pupils served at a central location with grade 6 pupils.
- ✓ Re-design the existing K-5 elementary routes to K-3 transportation routes to meet the expectations the district has for pupil transportation. Re-design the existing 6-8 routes to 4-8 transportation routes to meet the expectations the district has for pupil transportation.
- ✓ There are now three location transitions for Niskayuna pupils: K-5 to 6-8 to 9-12. Scenario Option E has four location transitions for Niskayuna pupils: K-3 to 4-6 to 7-8 to 9-12.
- ✓ A plan to relocate School District Central Offices from pupil space to Glencliff.
- ✓ Preparing Glencliff to host the Pre-Kindergarten program and the District Central Offices.

<ul style="list-style-type: none"> <li>◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in 5 and 6.</li> <li>✓ A grades 4-6 program opportunity becomes more ‘doable’. Part 100.4 of Commissioner’s Regulations with regard to grades 7-8 identifies various unit of study (seat time) subjects. They include home and career skills, languages other than English, technology which may be initiated as early as grade 5 (and/ or grade 6) if taught by teachers certified in those areas. Such an approach allows more time in the student day in grades 7 and 8 for other opportunities. In particular it allows more opportunity for grade 8 pupils to accelerate with grade 9 for-HS-credit courses. The approach helps pupils needing extra help to receive that extra help during the regular school day in grades 7-8.</li> <li>✓ All teaching staff in the “Upper Intermediate School” have the same elementary teacher certification range of responsibilities.</li> <li>✓ The grades 7-8 Middle School can deliver instruction unchanged if so determined. All teaching staff in the Grades 7-8 Middle School have the same secondary teacher certification range of responsibilities.</li> <li>✓ The K-12 music instruction program can have a continuum of four program development skill benchmarks: K-3, 4-6, 7-8, 9-12 with similar or unique distinctions (examples: four bands, four orchestras, four choruses, various ensembles for appropriate age levels).</li> <li>✓ The music instruction at the 4-6 and 7-8 schools can be delivered during the instructional day. Morning classes by grades 6-8 at the high school before the school day can end. Certainly, for <i>special projects</i> (ex. yearly K-12 music concert or a large musical production) meeting at the high school can still be a tool.</li> <li>✓ There are now four student community cultural transitions for Niskayuna pupils: K-5 to one of two 6-8 buildings, and two from two 6-8 schools to one 9-12 school. Scenario Option Scenario D reduces these student community cultural transitions for Niskayuna pupils to one: K-3 to 4-12.</li> <li>✓ May reduce the number of shared specialty teachers who need to be shared during each day. Instructional and instructional support staff from Glencliff redeployed to the other four elementary schools.</li> </ul>	
✓	✓
✓	✓
✓	✓
✓	✓

**SCENARIO F**

**Birchwood and Rosendale become ‘sister schools’ that serve half of the School District for grades K-2 and 3-4. Hillside and Craig become ‘sister schools’ for grades K-2 and 3-4 and serve the other half of the School District. A Pre-K Center is hosted at Glenclyff that also houses the Central Offices for the School District. Van Antwerp serves grades 5-6, Iroquois grades 7-8, and grades 9-12 are served at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glenclyff.**

**RATIONALE FOR SCENARIO F**

- ✓ Enrollment Projection Estimates suggest that Niskayuna will experience increasing elementary grades enrollments over the next five years and resulting grades 7-12 enrollment increases over the next 5 to 10 years. Additional grade level classrooms necessary to accommodate growing enrollments.
- ✓ K-2 curriculum focuses on “learning to read” and the 3-4 curriculum focuses on “reading to learn”. The curriculum transition can support naturally a building transition for pupils.
- ✓ Increase program/curriculum articulation between pairs of same grade level schools instead of five same grade level schools.
- ✓ Only two schools serving K-2 and 3-4 each will likely have very small equity gaps in class section sizes.
- ✓ Multiple number of class sections at a grade level provides more flexibility in matching teacher skill sets and strengths with unique needs of various pupils.
- ✓ Likely that the ‘Flex Zone’ Policy will seldom be needed.
- ✓ Renovations or added instructional support spaces are necessary to accommodate the estimated growing enrollments and to address the Program Delivery Vision of the School District.
- ✓ Serve grades 5-6 district-wide at the Van Antwerp School; Serve grades 7-8 district-wide at the Iroquois School. Such centralization helps bring about efficient staff deployment and consistency of program/curriculum delivery as now achieved in serving grades 9-12 at one central district-wide site.
- ✓ Provide added program delivery options for grade 5.
- ✓ Eliminate the challenge of having two different sets of teacher certifications serving one student population in a school.
- ✓ Re-allocate Central District Offices space at the Van Antwerp School to add conservatively 10 classrooms within existing space at the school to serve pupils.
- ✓ The existing pupil capacity of Van Antwerp as a school that just serves elementary grades and not secondary grades is 700 applying the class size targets of the School District. SEE PAGE 51 FOR SPECIFIC DETAILS.

***ESTIMATED SPACE RENOVATIONS/NEW CONSTRUCTION TO ACHIEVE SCENARIO F:***  
*(Please note that each ‘existing classroom estimated to renovate and/or add to existing instructional support spaces’ equals about 800 square feet. Also, note that Pre-Kindergarten classrooms do not add to elementary K-6 pupil capacity.)*

<b>K-2 3-4</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Birchwood Elementary K-2</b>	Anticipated K-2 enrollment growth	Build 12 classrooms	<i>Existing: 368 +12 times 21 – 3 times 21 =new capacity of 557</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space.	

<b>K-2 3-4</b>	<b>Purpose:</b>	<b>Renovations/New Construction Estimate</b>	<b>ESTIMATED RESULTING K-12 PUPIL CAPACITY</b>
<b>Rosendale Elementary 3-4</b>	Anticipated 3-4 enrollment growth	Build 4 classrooms	<i>Existing: 392 +4 times 22 - 3 times 22 =new capacity of 414</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space.	
<b>Glenclyff Pre-K and District Offices</b>	Pre-Kindergarten classrooms.	Allocate 5 classrooms.	<i>Existing: 381 – 381 =new capacity of 0</i>
	Allocate space appropriate for District offices, staff development, records storage, storage.		
<b>Hillside Elementary K-2</b>	Anticipated K-2 enrollment growth	Build 12 classrooms.	<i>Existing: 412 +12 times 21 - 3 times 21 =new capacity of 601</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space.	
<b>Craig 3-4</b>	Anticipated 3-4 enrollment growth	Build 4 classrooms	<i>Existing: 405 +4 times 22 -3 times 22 =new capacity of 427</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Reallocate 3 existing classroom spaces to accommodate renovated or added instructional support spaces in the existing space.	
<b>Van Antwerp Upper Elementary School 5-6</b>	Anticipated enrollment growth	Allocate 6 classrooms from the re-deployment of District Office space to serve pupils	<i>Existing: 700 (as an elementary school only) +6 times 25 =new capacity of 850</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Allocate 4 classrooms from the re-deployment of District Office space to serve pupils to accommodate renovated or added instructional support spaces in the existing space.	
<b>Iroquois Middle School 7-8</b>	Anticipated enrollment growth and all grades 7-8 in one school.	Build 11 classrooms	<i>Existing: 574 +11 times 25 =new capacity 849</i>
	Current Pupil Capacity Space used to renovate or add to existing instructional support space to support the Program Vision of the District.	Build 5 classrooms to accommodate renovated or added instructional support spaces in the existing space.	
<b>High School 9-12</b>	Anticipated enrollment growth	Build 10 classrooms	<i>Existing: 1412 +10 times 25 +3 times 25 =new capacity of 1737</i>
	Current Pupil Capacity Space used to renovate/add to existing instructional support space to support the Program Vision of the District.	Renovate cafeteria to create at least 3 classrooms; renovate/add to cafeteria by gym.	

**ESTIMATED PUPIL CAPACITY RESULTS OF IMPLEMENTING SCENARIO F:**

**Birchwood and Rosendale become ‘sister schools’ that serve half of the School District for grades K-2 and 3-4. Hillside and Craig become ‘sister schools’ for grades K-2 and 3-4 and serve the other half of the School District. A Pre-K Center is hosted at Glencliff that also houses the Central Offices for the School District. Van Antwerp serves grades 5-6, Iroquois grades 7-8, and grades 9-12 are served at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

K-2 3-4 organization	ESTIMATED RESULTING K-2 AND 3-4 Pupil Operating Capacity Based on Class Size Targets of the District		Estimated Enrollment In 2021-2022	Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)	Estimated Enrollment In 2023-2024	Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)
	K-2	3-4				
Birchwood K-2	557		K-2 919 -1031	K-2 79.4% to 89.3%	K-2 887 -1104	K-2 76.6% to 95.3%
Rosendale 3-4		414				
Glencliff	0	0	3-4 675	3-4 89.2%	3-4 688 - 745	3-4 81.8% - 88.6%
Hillside K-2	601					
Craig 3-4		427				
<b>Total:</b>	<b>1158</b>	<b>841</b>				
+ Pre-K capacity:	<b>180 half-day; 90 full day</b>					

	ESTIMATED RESULTING Pupil Operating Capacity Based on Class Size Targets of the District	Estimated Enrollment In 2021-2022	Estimated Pupil Capacity Use with this Scenario in 2021-2022 (3 yrs.)	Estimated Enrollment In 2023- 2024	Estimated Pupil Capacity Use with this Scenario in 2023-2024 (5 yrs.)	Estimated Enrollment In 2026- 2027	Estimated Pupil Capacity Use with this Scenario in 2026-2027 (8 yrs.)	Estimated Enrollment In 2028- 2029	Estimated Pupil Capacity Use with this Scenario in 2028-2029 (10 yrs.)
Van Antwerp Upper Elementary School 5-6	850	727	85.5%	721	84.8%				
Iroquois Middle School 7-8	849	656	77.3%	754	88.8%	776-795	91.4% - 93.4%		
High School 9-12	1737	1356	78.1%	1370	78.9%	1516	87.3%	1608 - 1628	92.6% - 93.7%



**SCENARIO F: OPPORTUNITIES AND CHALLENGES**

**Birchwood and Rosendale become ‘sister schools’ that serve half of the School District for grades K-2 and 3-4. Hillside and Craig become ‘sister schools’ for grades K-2 and 3-4 and serve the other half of the School District. A Pre-K Center is hosted at Glencliff that also houses the Central Offices for the School District. Van Antwerp serves grades 5-6, Iroquois grades 7-8, and grades 9-12 are served at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.**

**OPPORTUNITIES:**

**CHALLENGES:**

- ✓ Added instructional space resource necessary to address current Program Vision Elements is addressed.
- ✓ Program grade configuration K-2 and 3-4 allows a more concentration education program delivery with a logical program transition: K-2 curriculum focus is primarily ‘learning to read’ while 3-4 focus is primarily ‘reading to learn’. Collaboration and consistency of staff in delivering a common K-2 program in two schools and two schools grades 3-4 instead of K-5 in five buildings easier to organize.
- ✓ School building space built to serve pupils can be reclaimed to serve pupils from the space that now services the School District Central Offices.
- ✓ Cost-effective deployment of grade 5 staff. In 2018-2019 there are 13 grade 5 grade level classes serving 303 grade five pupils; average of 23.3 pupils per class. If all the 2018-19 grade pupils were served in one location it is likely that 12 grade level sections could be deployed for an average class of 25.25 pupils per class. Given the expected increases the district can expect, more classroom section staff will need to be hired. Centralization of grade 5 does not excess a staff position; it allows fewer new staff to be hired to serve the expected increase in enrollment.
- ✓ Two attendance zones for K-2 and two attendance zones for 3-4. More agile in serving the district with growth spurts in the housing market at various locations and at various times.
- ✓ Equity of grade 5 class sizes able to be achieved.
- ✓ Collaboration among grade 5 staff in delivering a common grade 5 program in one building instead of five buildings.
- ✓ The Niskayuna student community comes together in grade 5.
- ✓ Establishing an ‘Upper Elementary Intermediate’ school would have more options of how best to serve pupils in grades 5-6. For example:
  - ◇ Grade 5 served in self-contained classrooms as is done in 2018-2019.
  - ◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in grades 5 and 6.

- ✓ New construction at six schools
- ✓ Grade 5 pupils served at a central location with grade 6 pupils.
- ✓ Re-design the transportation routes to meet the expectations the district has for pupil transportation.
- ✓ There are now three location transitions for Niskayuna pupils: K-5 to 6-8 to 9-12. Scenario Option F has five location transitions for Niskayuna pupils: K-2 to 3-4 to 5-6 to 7-8 to 9-12.
- ✓ A plan to relocate School District Central Offices from pupil space to Glencliff.
- ✓ Preparing Glencliff to host the Pre-Kindergarten program and the District Central Offices.

<ul style="list-style-type: none"> <li>◇ Apply a teaming model where teams of core subject teachers serve the same set of pupils in 6.</li> <li>✓ A grades 5-6 program opportunity becomes more ‘doable’. Part 100.4 of Commissioner’s Regulations with regard to grades 7-8 identifies various unit of study (seat time) subjects. They include home and career skills, languages other than English, technology which may be initiated as early as grade 5 (and/ or grade 6) if taught by teachers certified in those areas. Such an approach allows more time in the student day in grades 7 and 8 for other opportunities. In particular it allows more opportunity for grade 8 pupils to accelerate with grade 9 for-HS-credit courses. The approach helps pupils needing extra help to receive that extra help during the regular school day in grades 7-8.</li> <li>✓ All teaching staff in the “Upper Intermediate School” have the same elementary teacher certification range of responsibilities.</li> <li>✓ The grades 7-8 Middle School can deliver instruction unchanged if so determined. All teaching staff in the Grades 7-8 Middle School have the same secondary teacher certification range of responsibilities.</li> <li>✓ The K-12 music instruction program can have a continuum of four program development skill benchmarks: K-4, 5-6, 7-8, 9-12 with similar or unique distinctions (examples: four bands, four orchestras, four choruses, various ensembles for appropriate age levels.</li> <li>✓ The music instruction at the 5-6 and 7-8 schools can be delivered during the instructional day. Morning classes by grades 6-8 at the high school before the school day can end. Certainly, for <i>special projects</i> (ex. yearly K-12 music concert or a large musical production, meeting at the high school can still be a tool.</li> <li>✓ There are now four student community cultural transitions for Niskayuna pupils: K-5 to one of two 6-8 buildings, and two from two 6-8 schools to one 9-12 school. Scenario Option Scenario F reduces these student community cultural transitions for Niskayuna pupils to three: K-2 to 3-4 to 5-12.</li> </ul>	
✓	✓
✓	✓
✓	✓
✓	✓

## Summary of Estimated New Classroom Construction Related to the Scenario Options

The six scenario options require new construction of classrooms to enable each option to be implemented. Charted below are the numbers of newly constructed classrooms each scenario includes. Given the Program Vision of the District, an estimate is provided for an estimated total square footage of non-pupil capacity spaced that may be needed either to renovate current instructional spaces or add to the number of instructional support spaces.

The chart below is a road map for district discussion about potential new construction which is a likely by-product of the scenario options described in the study to deliver the program in the future. More intense instructional support space analysis is undertaken with staff when the district focuses in on one or two scenario options for further discussion and consideration.

The program analysis of instructional support spaces to enable the implementation of the Program Vision will influence the final/net pupil capacities of each school building. Each scenario includes added space for instructional support services taking into account what is now available in each school building. It is important to note that in scenarios that include large sets of added classrooms to a school will also need to include instructional support space to accommodate the respective set of classrooms added (example: non-capacity space like bathrooms, hallways, enlarged cafeteria –if needed; gym space-if needed, small instructional support spaces for reading, speech, and other services). The kinds and number of such support spaces to support added new classrooms is part of the curriculum/facility design step in phase 2 of the planning. Once a scenario option or an adaptation of an option is chosen for implementation, a key step is clearly defining the instructional support spaces to be renovated or added to each school given the grade levels and pupil enrollment to be served in each specific school building. Instructional support space does not add to the pupil capacity of a school.

The chart is a useful tool to represent which school sites will require construction as per each scenario option. The chart also helps to answer ‘the why’ for new construction by itemizing the categories of new construction described in each scenario option.

Pre-Kindergarten program addition
Grade level classrooms due to anticipated enrollment growth
Space to renovate deficient and/or add to instructional support to implement the Program Vision of the District

The summary chart may also support discussion about the possible financial aspects of the number of sites and size of new construction projects at the number of sites identified by the scenario option descriptions.

SCENARIOS FOR CONSIDERATION BY THE NISKAYUNA SCHOOL DISTRICT TO ANSWER THE QUESTION:										
<i>Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?</i>										
	BIRCHWOOD	ROSENDALE	GLENCLIFF	HILLSIDE	CRAIG	VAN ANTWERP	IROQUOIS	HIGH SCHOOL	ESTIMATED TOTAL	
	ESTIMATED NUMBER OF NEW CLASSROOMS FOR CONSTRUCTION									
<b>Scenario A: Add classroom and instructional support space at each currently configured school to accommodate estimated growing enrollments and the Program Vision of the School District.</b>	Pre-K at 60% enrollment of 4 year olds	1	1	1	1	1				5
	Grade level classrooms due to enrollment growth and implement the scenario option configuration	3	4	3	4	3	4	4	13	38
	Grade level classrooms to renovate/add to instructional support spaces in the existing building	4	4	4	4	4	5	5		30
	<b>Estimated Total Newly Constructed Classrooms</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>13*</b>	<b>73</b>
	Estimated Square Feet to renovate/add to instructional support space	3200	3200	3200	3200	3200	4000	4000		24,000
<b>Scenario B: Provide five Pre-K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.</b>	Pre-K at 60% enrollment of 4 year olds	1	1	1	1	1				5
	Grade level classrooms due to enrollment growth and implement the scenario option configuration	2	2	2	2	2		11	13	3431
	Grade level classrooms to renovate/add to instructional support spaces in the existing building	1	1	1	1	1		5		10
	<b>Estimated Total Newly Constructed Classrooms</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>		<b>16</b>	<b>13*</b>	<b>49</b>
	Estimated Square Feet to renovate/add to instructional support space	3200	3200	3200	3200	3200	3200	4000		23,200

\*Includes 10 newly constructed classrooms plus 3 from renovating the current cafeteria. The more central cafeteria space near the gym is renovated and added to as may be necessary.

<b>SCENARIOS FOR CONSIDERATION BY THE NISKAYUNA SCHOOL DISTRICT TO ANSWER THE QUESTION:</b>  <i>Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?</i>		BIRCHWOOD	ROSENDALE	GLENCLIFF	HILLSIDE	CRAIG	VAN ANTWERP	IROQUOIS	HIGH SCHOOL	ESTIMATED TOTAL
		ESTIMATED NUMBER OF NEW CLASSROOMS FOR CONSTRUCTION								
<b>Scenario C: Provide five Pre-K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and grades 9-12 at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Transportation Facility location.</b>	Pre-K at 60% enrollment of 4 year olds									
	Grade level classrooms due to enrollment growth and implement the scenario option configuration						14	11	13	38
	Grade level classrooms to renovate/add to instructional support spaces in the existing building							5		5
	<b>Estimated Total Newly Constructed Classrooms</b>						<b>14</b>	<b>16</b>	<b>13*</b>	<b>43</b>
	Estimated Square Feet to renovate/add to instructional support space	1600	1600	1600	2400	2400	3200	4000		16,800
<b>Scenario D: Provide four K-4 elementary schools, an upper elementary grades 5-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glencliff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glencliff.</b>	Grade level classrooms due to enrollment growth and implement the scenario option configuration	6	8		6	8		11	13	52
	Grade level classrooms to renovate/add to instructional support spaces in the existing building	1	1					5		7
	<b>Estimated Total Newly Constructed Classrooms</b>	<b>7</b>	<b>9</b>		<b>6</b>	<b>8</b>		<b>16</b>	<b>13*</b>	<b>59</b>
	Estimated Square Feet to renovated/add to instructional support space	2400	2400		2400	2400	3200	4000		16,800

<b>SCENARIOS FOR CONSIDERATION BY THE NISKAYUNA SCHOOL DISTRICT TO ANSWER THE QUESTION:</b>  <i>Are there options that might provide quality and cost-effective ways to implement/deliver Pre-K-12 instruction over the next three years given the program vision of the district and an estimated increase in pupil enrollments?</i>		BIRCHWOOD	ROSENDALE	GLENCLIFF	HILLSIDE	CRAIG	VAN ANTWERP	IROQUOIS	HIGH SCHOOL	ESTIMATED TOTAL
		ESTIMATED NUMBER OF NEW CLASSROOMS FOR CONSTRUCTION								
<b>Scenario E: Provide four K-3 elementary schools, an upper elementary grades 4-6 school at Van Antwerp, a middle school grades 7-8 at Iroquois, and a Pre-K Center at Glenciff that also houses the Central Offices for the School District. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glenciff.</b>	Pre-K at 60% enrollment of 4 year olds									
	Grade level classrooms due to enrollment growth and implement the scenario option configuration	2	2		2	2	14	11	13	46
	Grade level classrooms to renovate/add to instructional support spaces in the existing building							5		5
	<b>Estimated Total Newly Constructed Classrooms</b>	<b>2</b>	<b>2</b>		<b>2</b>	<b>2</b>	<b>14</b>	<b>16</b>	<b>13*</b>	<b>51</b>
	Estimated Square Feet to renovate/add to instructional support space	1600	1600		1600	1600	3200	4000		13,600
<b>Scenario F: Birchwood and Rosendale become ‘sister schools’ that serve half of the School District for grades K-2 and 3-4. Hillside and Craig become ‘sister schools’ for grades K-2 and 3-4 and serve the other half of the School District. A Pre-K Center is hosted at Glenciff that also houses the Central Offices for the School District. Van Antwerp serves grades 5-6, Iroquois grades 7-8, and grades 9-12 are served at the High School. Add new space/renovate existing space to accommodate estimated growing enrollments and the Program Vision of the School District. District Offices relocated from Van Antwerp to Glenciff.</b>	Pre-K at 60% enrollment of 4 year olds									
	Grade level classrooms due to enrollment growth and implement the scenario option configuration	12	4		12	4		11	13	56
	Grade level classrooms to renovate/add to instructional support spaces in the existing building							5		5
	<b>Estimated Total Newly Constructed Classrooms</b>	<b>12</b>	<b>4</b>		<b>12</b>	<b>4</b>		<b>16</b>	<b>13*</b>	<b>61</b>
	Estimated Square Feet to renovated/add to instructional support space	2400	2400		2400	2400	3200	4000		16,800

## **Pupil Transportation and the Various Scenario Options**

The scenarios require new attendance zones and/or fewer attendance zones to be determined. The study is cautious about estimating savings or any added expenditures to the transportation program at this time. Currently, the district provides **three separate district-wide-routings in the morning and in the afternoon**. One is for Elementary, one is for the Middle Schools and one is for the High School. This existing practice is a resource asset as the district reviews the scenario options. The current practice of three separate routings by sets of grade levels is a key practice to implement any of the scenarios suggested for consideration. The current practice of three separate district-wide routings will likely be a sufficient resource to serve the various scenarios. An important element will be for the District to analyze the traffic patterns of the various school areas respective to the various scenario options. Traffic congestion is a major element to contend with currently. It likely will continue to be a major element for the transportation services.

Where grade levels are served, and where the attendance zone lines are drawn based on the grade pupil capacities of the school buildings will define the pupil transportation plan. When and if the Board focuses on a few scenarios for possible implementation, the district transportation staff can implement the routing software to suggest possible attendance zones, and safe and economical bus routes for review by the Board and Superintendent along with the community. Such sample bus routing examples should be shared and discussed before an option is identified for implementation.

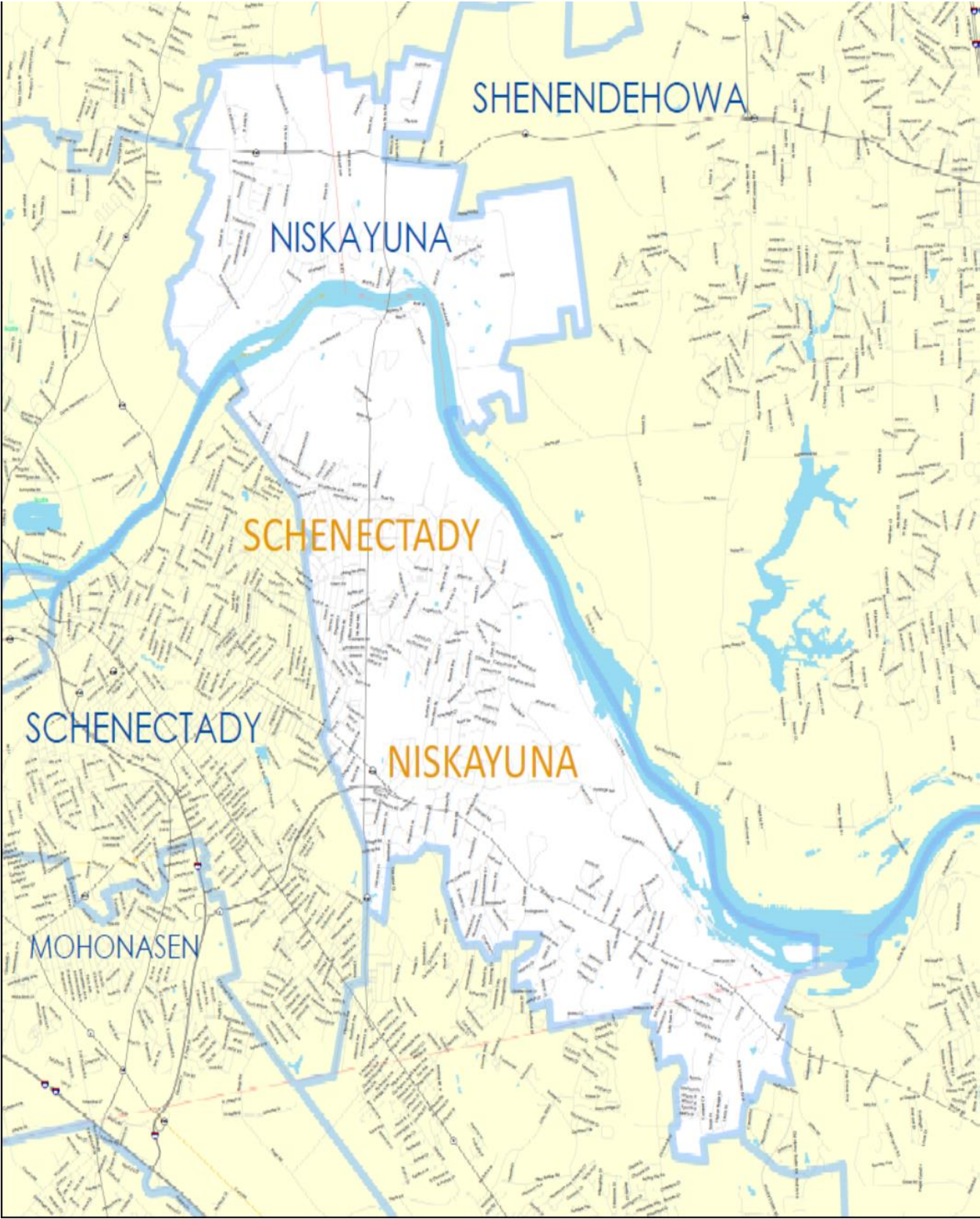
The 2018-2019 transportation costs to provide the 36 single bus routes for a.m. and 38 single bus routes for p.m. transportation to school and home totals \$1,740,821. The average cost per single bus route is \$23,525 all inclusive. In 2018-2019, Niskayuna receives 75.48% of the transportation expenditures made in 2017-2018 as State transportation aid. The local cost per regular bus route on average is \$5,768; the State support of each regular bus route on average is \$17,757.

**NISKAYUNA CENTRAL SCHOOL DISTRICT CAPITAL PROJECT ADVISORY  
COMMITTEE MEMBERS AND ADVISORY STEERING COMMITTEE FOR THE STUDY**

Aburas-Khafaga	Layla	Preschool Parent
Agamy	Mohammed	Rosendale Parent
Baldwin-Nye	Shelley	Glenclyff Principal
Bender	Lindsay	Community Member
Bordon	Rebecca	Van Antwerp and High School Parent
Bryant	Jim	Hillside Parent
Bryant	Dana	Community Member
Byrne	Tara	Rosendale Parent
Cesare	Jim	Community Member, Parent of graduate
Chen	Feng	Craig and High School Parent
Christian	Joe	Van Antwerp and HS graduate Parent
Colby	Bryce	Teacher, Coach and High School Parent
Davila-Webster	Taryn	High School Parent
Delano	Chris	Teacher, Coach and Birchwood Parent
Evanoff	Kate	High School Parent
Felczak	Lynne	Niskayuna Support Staff Member
Fogarty	Jim	Community Member, Parent of graduate
Gaspary	Callie	Elementary Parent
Golden	Kristopher	Preschool and Craig Parent
Hartman	Tom	Community Member, Parent of graduate
Hehir	Joseph	Elementary and High School Grandparent
Hover	Adam	Preschool and Craig Parent
Keller	Jeff	Birchwood Parent
Kelly	Mark	Glenclyff, Iroquois, and High School Parent
Krasodomski	Michelle	Niskayuna Graduate
McGrath	Kevin	Preschool Parent
Moore	Russell	Parent of K-5, 6-8, 9-12
Nicpon	Sharon	Community Member, Parent of graduate
Orcutt	David	Retired Teacher, Grandparent
Patel	Ketan	Preschool Parent
Petrangelo	Matthew	Hillside and Van Antwerp Parent
Polikoski	Andrea	Glenclyff Parent
Quinn	Dennis	High School and Graduate Parent
Reilly	John	Community Member, Parent of graduate
Rosenthal	Darcy	Glenclyff and Iroquois Parent
Schmidt	Stephen	Community member, private school and Niskayuna graduate Parent
Svare	John	Preschool and Craig Parent
Teichman	Denise	Iroquois and High School Parent
Tiffany	Beth	Craig Parent
Titsworth	Tom	Van Antwerp and High School Parent
Tolbert	Aaron	Preschool Parent
Vachon	Greg	Middle School Parent
Van Alstyne	Andrew	Hillside and Van Antwerp Parent
Vertigan	Joan	Niskayuna Support Staff Member
Welch	Tim	Community Member







*“Custom tools and research to aid a school district in defining a vision and decision options for serving students in the future.”*