



# Regional High School Feasibility Study

Castallo and Silky  
Education Consultants

*Philip Martin and Alan Pole, Associates*

July 2010

• Clyde-Savannah • Gananda • Lyons • Marion • Newark • North Rose-Wolcott •  
• Palmyra-Macedon • Red Creek • Sodus • Wayne • Williamson •

This report was prepared with funds provided by the  
New York State Department of State under the  
Local Government Efficiency Grant Program.

Wayne County, New York

## Table of Contents

Executive Summary	1
Acknowledgements	6
Background and Purpose	8
Study Methodology and Process	12
Student Enrollment History and Projections	18
Instructional Program	32
Regional High School Background	42
Regional High School Locations/Construction	45
Regional High School Transportation Routes/Costs	58
Regional High School Budgets/Cost Sharing Methodologies	67
Annual Costs for Regional High Schools	77
Instructional Program Sharing Options	79
Bell Schedules	112
Extra-Curricular Activities	116
Finance	123
Union Issues with E-Learning	128
Options Analysis	131
Findings and Recommendations	137
Summary Recommendation	142

## Executive Summary

In the summer of 2009, the eleven school districts in Wayne County, New York secured state funding to do a collaborative study through the Wayne-Finger Lakes BOCES. The purpose of this study is to examine ways of maximizing educational opportunities for students, and the potential savings, management improvements, and benefits to the community in developing regional high schools. After all eleven Boards of Education passed resolutions supporting the study, the consulting firm of Castallo and Silky from Syracuse, New York was engaged to conduct the study.

The consultants visited each of the eleven school districts on two occasions meeting with staff, students, and community members. In addition, a community survey was conducted regarding the desirability of regional high schools. Nearly 1,900 people responded to the community survey. The survey results indicated that respondents wanted to:

- 1. maximize educational opportunities for their students by increasing academic rigor, increasing the number of electives, increasing the depth of programs, and increasing the number of specialized program offerings;*
- 2. control the costs of operating schools; and*
- 3. have schools maintain their local identity.*

Enrollment projections were completed for all eleven school districts in the study. Student enrollments in the eleven high schools in 2009-10 total 5,138. This is 8.3% lower than the enrollment of 5,606 in 2004-05. More importantly, the enrollment for each of the eleven high schools is projected to decline for the next nine years. In 2018-19, the high school enrollment is projected to drop to 4,120, a drop of 19.8% for the average high school. It is predicted that four of the high schools will experience enrollment declines of between 24.9 and 30.2%. Business as usual is not an option for the future.

We examined school districts that had larger high school populations than are found in the high schools of Wayne County. The high school program

that is currently offered to the students in the eleven high schools in Wayne County was compared with the program that is offered to students in area high schools that have enrollments of 400, 800, and 1,200 students. It is clear that, as the size of the high school increases, the number of curricular options available to students increases as well. This formed the basis of this study for the many people in Wayne County who are interested in providing a world class education for their young people. It is clear that bigger high schools provide a greater number of opportunities for high school students.

The second major area studied in the modeling of regional high schools for the area was whether or not these larger high schools could operate more cost effectively than the eleven smaller high schools and thereby save money for local high schools. It was determined that the operating budget savings in creating four regional high schools when compared with the eleven existing high schools could save approximately 3% of the costs. This is consistent with other research that has found that significant savings in consolidating school functions is greatest only when the school districts are much smaller than the districts in Wayne County.

One way to create larger high schools to offer more opportunities for students is for school districts to merge. It was clear from the beginning of this study that merging school districts was not an option that these school districts were interested in considering. These districts were interested in exploring ways of creating more opportunities for their students without merging. The regional high school concept would retain all eleven school districts, all eleven Boards of Education, all eleven Superintendents, and would maintain all existing elementary schools and all existing middle schools in their current locations. At the same time, the existing eleven high schools would be combined into larger high school units, thereby increasing the curricular opportunities for students. However, as this concept of regional high schools was discussed in each of the community meetings, it was readily apparent that there was little if any interest in giving up existing high schools in favor of a regional configuration.

In addition to modeling regional high schools in this document, the study recommends ways that the Wayne County school districts might collaborate in order to increase curricular offerings for their students. These models for collaboratively increasing curricular offerings include:

1. *Wayne Student Exchange Program*
2. *New Vision Programs*
3. *Thematic High School Programs*
4. *Electronic Learning Programs*
5. *The Alliance High School Program*

Advantages and disadvantages of each of the cooperative programming options are presented as well as the challenges that face the school districts in implementing any form of collaborative high school programming for their students.

Recommendations that were developed from this study include the following:

*Recommendation #1. Legislation should be enacted in New York State that describes the operation of regional high schools since no such legal guidance currently exists.*

*Recommendation #2. State legislation should be developed that will provide financial incentives for school districts to consider the regional high school model; such legislation would be similar to the financial incentives that are available to school districts which are considering merger.*

*Recommendation #3. School leaders should engage their communities in an ongoing educational process regarding declining enrollment, graduation standards, and the financial challenges currently facing school districts.*

*Recommendation #4. School districts should begin/continue to engage their communities in discussions about what their high schools should offer in the future, given the significant enrollment declines that are projected to occur.*

*Recommendation #5. School districts in Wayne County should collaborate on ways to increase the number of offerings in Advanced Placement, International Baccalaureate, and College level courses for all students in the region.*

*Recommendation #6. School districts must continue to explore methods of collaboration to save taxpayer dollars. In addition, school districts must increase their efforts to communicate with their public about the significant financial challenges that they will face in the future.*

*Recommendation #7. An initiative involving high school principals and guidance counselors should be undertaken to make the high school schedules more compatible in order to support collaborative student programming.*

*Recommendation #8. School districts should continue to explore the sharing of sports teams between districts in order to provide as many extracurricular opportunities for students as possible. School districts must also engage the Section V leaders to ensure that the rules governing athletic class assignments do not act as a deterrent to increasing opportunities for students.*

*Recommendation #9. A study should be undertaken in the very near future that is focused solely on ways that school districts and municipalities can share support services to save taxpayer money across the region.*

*Recommendation #10. Every school district Board of Education member, Superintendent, and other appropriate administrators, should be invited to serve on a committee to develop ways to consider moving forward with these recommendations and the chapter on Instructional Program Options that are contained in this report.*

Our immediate summary recommendation is that each Board of Education reviews this study and has an open, public discussion about the study's findings and recommendations. Input from school staff and the

community should be solicited in beginning to open the dialog about the future of the schools in Wayne County.

We also recommend that a committee be formed in Wayne County to further explore the concept of making schools even more cost effective than they are currently. We recommend that the committee have representation from all of the Wayne County school districts and that this representation constitute a cross section of each of the communities. We recommend that the committee be sub-divided into three subcommittees to study the following issues and make recommendations to the full committee in the following areas:

- a. Shared Instructional Programs
- b. Shared Support Services
- c. Regional High Schools

## Acknowledgements

This study is a bold and innovative undertaking. Without the support, cooperation, and encouragement of many individuals, completion of this report in a timely manner would not have been possible.

We would first like to express our admiration for the Boards of Education of the eleven school districts that participated in this study. Like all responsible school leadership teams, they passed resolutions to support this study knowing that the study itself would create anxiety within their communities. However, the Boards took this risk because they are committed to providing the best possible education for their students in a manner that can be fiscally supported by their communities. The Boards supported the study and actively followed the progress of the study, while always ensuring that all members of their communities would be heard on these most important issues. This was no easy task, but the Boards courageously accepted the challenge!

We also recognize the Wayne-Finger Lakes BOCES Board of Education for its support and commitment to the study. Without the BOCES Board's initiative and approval of the concept of the study, none of this would have occurred. We also acknowledge the efforts of the BOCES District Superintendent Dr. Joseph Marinelli. His vision for school collaboration and his guidance and support throughout the study have been invaluable.

Our gratitude is also expressed to the New York Department of State for their innovative approach to funding the study of regional high schools and shared services to bring efficiency to local government and savings to taxpayers.

We also offer our sincere thanks to the eleven Superintendents who supported our efforts throughout the study. From the beginning, we were committed to having this group act as a steering committee for the evolution of the study. The Superintendents met with the consultants on a regular basis offering their intellect and their insight in order to make this study come to life. For their efforts we offer our heartfelt gratitude.



Last, but certainly not least, we thank Bonnie Lindsay, Associate Superintendent for Instruction at the Wayne-Finger Lakes BOCES. Bonnie spearheaded the study. In conjunction with the Superintendents, Bonnie developed the concept of a regional high school, secured funding for the study, and provided guidance and support to the consultants and the Superintendents throughout the study. Her efforts were invaluable in bringing this study to fruition and for her leadership, we say thank you!

## Background and Purpose

This section of the report provides background as to the impetus for this study. It offers a context within which to place the consideration of various options and their associated costs and benefits. This context offers perspective for the decisions that the participating Boards of Education will consider in the future.

First and foremost, it should be emphasized that this is a feasibility study. As such, this study describes options that might be. It is not a study that describes the steps that the school districts in this study would take to make something happen. Such a study would be a planning study and, should interest develop in the ideas presented in this study, might be the next step that districts would consider to move them toward implementation of one or more of the ideas presented herein.

The Wayne-Finger Lakes BOCES supervisory district includes twenty five public school districts, eleven in Wayne County, nine in Ontario County, three in Seneca County and two in Yates County. The cities and villages in which they are located vary from suburban and small industrial to rural and agrarian with student enrollments varying from 600 to over 4,000. K-12 enrollments of the Wayne County school districts are shown in the following table:

<b>District</b>	<b>2009-10 Enrollment</b>
Clyde-Savannah	855
Gananda	1,162
Lyons	892
Marion	934
Newark	2,197
North Rose-Wolcott	1,380
Palmyra-Macedon	2,034
Red Creek	945
Sodus	1,199
Wayne	2,407
Williamson	1,166
TOTAL	15,171

Wayne County began a Real Property Tax Leadership Summit in response to a report which showed the county had the highest property taxes in the nation. This forum has provided a voice in Wayne County for the taxpayers who are asking that towns, villages, and school districts work together to reduce costs. The Superintendents from the Wayne County school districts met in December, 2008 to discuss how they might ensure that school districts were operating in as cost effective manner as possible, while at the same time, ensuring that the students in these schools were receiving a world class education. In response to this challenge, the Superintendents decided to explore the feasibility of regional high schools. Within six weeks, all eleven school Boards of Education in Wayne County had passed resolutions to pursue a study of regional high schools. The Wayne-Finger Lakes BOCES then secured funding for the study from the New York State Department of State and engaged the education consulting firm of Castallo and Silky from Syracuse, New York to conduct the study. Philip Martin and Alan Pole were the associates from that firm who carried out the study.

At the first meeting that the consultants had with the group of Superintendents, the purpose of the study was defined as follows:

*The purpose of this feasibility study is to examine ways of maximizing educational opportunities for students, and the potential savings, management improvements, and benefits to the community in developing regional high schools.*

The following table identifies the leaders in the eleven school districts in Wayne County that participated in this study:

<b>District</b>	<b>Superintendent</b>	<b>Board President</b>
Clyde-Savannah	Theresa Pulos	Patrick Crowe
Gananda	Shawn Van Scoy	Stephen Nims
Lyons	Richard Amundson	Sharon Tiballi
Marion	Kathy Wegman	Sharon Varalli
Newark	Henry Hann	Roberta Colacino
North Rose-Wolcott	Lucinda Miner	Judi Buckalew
Palmyra-Macedon	Robert Ike	Norbert Miller
Red Creek	David Sholes	Molly Martin
Sodus	Susan Salvaggio	Philip Rose
Wayne	Michael Havens	Joyce Lyke
Williamson	Maria Ehresman	Michael Collins

A number of studies regarding school consolidation in rural areas have been done including “Organizational Alternatives for Small/Rural Schools” conducted by Cornell University and “Does School Consolidation Cut Costs?” conducted by the Center for Policy Research at Syracuse University. In addition, a number of reports to the Governor and the New York State School Boards Association have determined that costs for rural school districts do need to decrease to ease the tax burden on property owners. However, these studies also suggest that consolidation may not be the panacea for reducing costs, depending on the size of the school districts. This study was designed to explore an alternative to school district consolidation through the creation of regional high schools which would still allow for local control of elementary and middle school education.

It should be emphasized that this is a study of regional high schools and not a study of school district mergers. The context for this study is that all eleven school districts in Wayne County would remain as currently constituted. This means that all eleven Boards of Education, all eleven Superintendents, and all eleven school district boundaries would be maintained. Furthermore, this is not a study of the benefits of creating a county-wide school system.

If regional high schools were to be created as a result of this study, the educational system in the county would still have eleven school districts. Each of the eleven school districts would maintain its elementary schools as they

currently exist. In addition, all of the middle schools in the eleven districts would remain as they currently exist. Only the high schools would be changed. Instead of having eleven high schools, this study proposes a structure where these eleven high schools are restructured to form four regional high schools.

As this study is reviewed and as further study is undertaken on regional high schools in New York State, a number of issues will immediately need to be confronted. New York State has legislation for central high school districts but not for regional high schools. These are two different models for educating high school students.

Described by Sections 1901-1917a of the New York State education law, central high school districts are stand alone legal entities that exist to educate high school students from a number of area local school districts. They have their own Board of Education and Superintendent. They possess the authority to operate high schools, grant credit, and award high school diplomas. They generate their revenue to operate their high schools through the allocation of their costs to their component school districts according to the relative assessed valuation of the taxable property in each school district.

Unlike central high school districts, regional high schools have no current legal standing. As a result, numerous questions would arise if regional high schools were to be created. Who would be the legal governing body for the regional high schools....would it have its own Board of Education....would the BOCES Board of Education serve this function....or would one of the local Boards of Education assume the responsibility for the regional high school? Who would be the administrative/executive head for the regional high school? Where would the money come from to support the regional high school? What body would be given the authority to grant credit and award diplomas to the students? It is clear that any move toward regional high schools in New York State would need to have a sound legal framework on which to rest. While legislation has been introduced to guide the formation of regional high schools, no such proposed legislation has ever been passed into law.

## Study Methodology and Process

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

*The purpose of this feasibility study is to examine ways of maximizing educational opportunities for students, and the potential savings, management improvements, and benefits to the community in developing regional high schools.*

Following is a summary of the major activities undertaken as part of the study design:

The eleven school district Superintendents served as a steering committee for the study. This group provided direction, insight, and support for moving the study forward. The consultants held meetings with the Superintendents on September 10, October 8, November 12, and December 3, 2009. Additional meetings of this group were held on January 14, February 11, and March 11, April 8, and May 13, 2010.

From the beginning, it was everyone’s intention that this study be conducted in the full light of day. One of the grant objectives was that public meetings/forums would be held. Subsequent to the first meeting with the Superintendents, public forums were held in each of the eleven school districts. Separate sessions were held with students, school staff, and the community. The purpose of these forums was to introduce the consultants, share the purpose of the study, discuss alternative models of regional high schools, and provide a tentative timeline for the completion of the study. In addition, a question and answer session period was held as part of each forum. The following table provides the dates of each of the forums:

Date	District
September 21, 2009	North Rose-Wolcott
September 22, 2009	Red Creek
September 24, 2009	Gananda
September 24, 2009	Lyons
September 28, 2009	Marion
September 29, 2009	Clyde-Savannah
September 30, 2009	Palmyra-Macedon
September 30, 2009	Sodus
October 1, 2009	Newark
October 1, 2009	Williamson
October 2, 2009	Wayne

In addition to the public forums that were held by the consultants, Mr. Richard Amundson, Superintendent from Lyons and chair of the Superintendents association, met with the Wayne County Tax Leadership Summit group on October 6, 2009 to update them on the progress of the study.

In addition to holding the public forums in each of the eleven districts, the consultants met separately with the following staff in each district to gather information for the study: Superintendent, Business Official, High School Principal, Transportation Supervisor, and Athletic Director. The Superintendents had also gathered packets of information for the consultants that were also used in this study. These data were summarized and analyzed as they were received. The data gathering process was focused by the purpose that was driving the study. These data were regularly shared with the Superintendents to develop common understandings and to check for accuracy.

Once the consultants felt that all relevant data had been obtained, post-data collection analysis was performed, feedback from the Superintendents was received, and then the report-writing began. A draft report was shared with the Superintendents on January 14, 2010. A second draft was shared with the Superintendents on April 8, 2010.

Subsequent to the Superintendents providing feedback on the first draft report, a second round of visits was made to all eleven school districts in order

to share the preliminary findings of the report. Each of the districts convened an evening session where the consultants reviewed the highlights of the study and solicited comments from all who were in attendance. The following table shows the dates for the second district forums:

Date	District
January 19, 2010	Marion
January 21, 2010	Palmyra-Macedon
January 25, 2010	Red Creek
January 26, 2010	North Rose-Wolcott
January 26, 2010	Lyons
January 27, 2010	Williamson
January 28, 2010	Newark
February 1, 2010	Sodus
February 3, 2010	Wayne
February 3, 2010	Clyde-Savannah
February 8, 2010	Gananda

The consultants also made visits to Onondaga-Cortland-Madison BOCES in Syracuse, Oneida-Madison-Herkimer BOCES in Utica, and Tech Valley High School in Troy to investigate distance learning and alternative high school models.

This study was supported by all eleven Boards of Education in Wayne county. Upon completion of the study, copies of the report will be provided to these Boards. At this point, it is completely up to each Board of Education about how to proceed with the report. An individual Board of Education may choose to do nothing as a result of this report. Another Board may decide to refer it to an administrative committee for further investigation and recommendation. Another Board may decide to invite a neighboring Board of Education for a meeting to discuss some of the ideas presented in this report. Each Board of Education is free to use the report in a manner that it believes best serves its district.

Information was also gathered from the public through an on-line survey that was made available through each of the eleven district's web sites. Where computer access to the survey was not available, paper copies of the survey



were made available to individuals who requested them. Nearly 1,900 people responded to the survey. The results of the survey are shown in the next three tables.

District of Residence		
District	Number of Responses	Percentage
Clyde-Savannah	90	4.8
Gananda	39	2.0
Lyons	78	4.2
Marion	58	3.1
Newark	161	8.6
North Rose-Wolcott	108	5.8
Palmyra-Macedon	307	16.4
Red Creek	115	6.1
Sodus	150	8.0
Wayne	123	6.6
Williamson	647	34.4
Total	1876	100

Category That Best Describes Your Role		
Description of Role	Response	Percentage
I am a school board member	12	0.6
I am an instructional staff member in the district	375	20.1
I am a support staff member in the district	161	8.6
I am a student in the district	73	3.9
I am a parent of a child (children) in the district	583	31.1
I am a community member without children in school now	669	35.7
Total	1873	100

Rate how important each of the following characteristics is to you in creating a regional high school in Wayne County						
Category	Not Important At All	Of Little Importance	Of Some Importance	Very Important	Essential	Responses
Maximizing educational opportunities for students	46 2.5%	10 0.5%	141 7.6%	663 35.9%	<b>986</b> <b>53.4%</b>	1846
Increasing opportunities for academic rigor in the high school	44 2.4%	35 1.9%	248 13.6%	<b>817</b> <b>44.7%</b>	684 37.4%	1828
Increasing opportunities for electives in the high school	51 2.8%	65 3.5%	430 23.4%	<b>793</b> <b>43.1%</b>	499 27.1%	1838
Increasing opportunities for depth of coursework in the high school	42 2.3%	43 2.4%	387 21.2%	<b>833</b> <b>45.7%</b>	519 28.5%	1824
Increasing opportunities for Advanced Placement and International Baccalaureate type programs in the high school	78 4.3%	95 5.2%	475 25.9%	<b>702</b> <b>38.3%</b>	481 26.2%	1831
Having the greatest potential for participating on an athletic team	171 9.3%	311 17.0%	<b>731</b> <b>39.9%</b>	435 23.7%	184 10.0%	1832
Having a wide variety of sports which students can participate	169 9.2%	268 14.5%	<b>698</b> <b>37.9%</b>	517 28.0%	192 10.4%	1844
Having a wide variety of clubs and other extracurricular activities for students	100 5.4%	165 9.0%	<b>692</b> <b>37.7%</b>	655 35.7%	225 12.2%	1837
Keeping high schools as small as possible	145 7.9%	284 15.5%	<b>524</b> <b>28.6%</b>	492 26.8%	389 21.2%	1834
Keeping a local community identity through the school	106 5.8%	166 9.0%	414 22.5%	<b>591</b> <b>32.1%</b>	566 30.7%	1843
Minimizing time on school buses for high school students	97 5.3%	200 10.9%	551 29.9%	<b>562</b> <b>30.5%</b>	430 23.3%	1840
Controlling the costs of operating schools	35 1.9%	38 2.1%	311 16.8%	660 35.7%	<b>804</b> <b>43.5%</b>	1848

The results of the survey point out the top priorities for the people in Wayne County. More than anything, they want to maximize educational opportunities for their students. They want to do this by increasing academic rigor, by increasing the number of electives in high school, by increasing the depth of program offerings, and by increasing opportunities for specialized programs such as Advanced Placement and International Baccalaureate. At the same time, however, people want to control the costs of operating schools and have schools maintain their local identity. More opportunities for students to participate in more sports and clubs, while important, were lower priorities.

The results of the survey are challenging at best for school leaders. People want more for their students academically, don't want to change the local school district structure, and want to control costs. This is no easy agenda for the schools of the future.

# Student Enrollment History and Projections

Accurate enrollment projections are essential data for school district long range planning. Virtually all aspects of district operation including program, staffing, facilities, and finances are related to the number of students enrolled. For this reason, updated enrollment projections are crucial and serve as an important aspect of this study.

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

- Six year history of district enrollment by grade level
- Calculation of survival ratios by grade level

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

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

Survival ratios usually have values close to one, but may be less than or greater than one. Where the survival ratio is less than one, fewer students "survived" to the next grade. Where the survival ratio is greater than one, more students "survived" to the next grade. Grade-to-grade survival ratios reflect the net effects of deaths, dropouts, the number of students who are home

schooled, promotion policies, transfers to and from nonpublic schools, and migration patterns in and out of the school district.

Because this is a study of regional high schools, the focus of the enrollment projections is on grades 9-12. As a result, enrollments can be projected nine years into the future using the current Kindergarten through 12th grade enrollments in the 2009-2010 school year. The table which follows shows the projected change in the high school enrollments from both 2009-10 to 2014-15 and from 2009-10 to 2018-19.

<b>Wayne County High School Enrollments</b>							
<b>High School</b>	<b>2004-05</b>	<b>2009-10</b>	<b>Change from 04-05</b>	<b>2014-15</b>	<b>Change from 09-10</b>	<b>2018-19</b>	<b>Change from 09-10</b>
Clyde-Savannah	334	<b>285</b>	-14.7 %	232	-18.6 %	199	-30.2 %
Gananda	337	<b>361</b>	+7.1 %	308	-14.7 %	313	-13.3 %
Lyons	323	<b>305</b>	-5.6 %	241	-21.0 %	214	-29.8 %
Marion	360	<b>314</b>	-12.8 %	263	-16.2 %	271	-13.7 %
Newark	853	<b>741</b>	-13.1 %	621	-16.2 %	637	-14.0 %
North Rose-Wolcott	549	<b>478</b>	-12.9 %	435	-9.0 %	359	-24.9 %
Palmyra-Macedon	712	<b>702</b>	-1.4 %	621	-11.5 %	570	-18.8 %
Red Creek	360	<b>321</b>	-10.8 %	276	-14.0 %	255	-20.6 %
Sodus	452	<b>416</b>	-8.0 %	369	-11.3 %	332	-20.2 %
Wayne	882	<b>809</b>	-8.3 %	699	-13.6 %	667	-17.6 %
Williamson	444	<b>406</b>	-8.6 %	309	-23.9 %	303	-25.4 %
<b>Total</b>	<b>5606</b>	<b>5138</b>	<b>-8.3 %</b>	<b>4374</b>	<b>-14.9%</b>	<b>4120</b>	<b>-19.8%</b>

This table has dramatic implications for the planning initiatives for the eleven school districts in Wayne County. Every school district will see a dramatic decline in its high school enrollment in the next nine years. On average, high school enrollment will decline by 19.8% in the next nine years. Even more dramatically, if one were to examine the enrollment decline from 2004-05 to 2018-19, high school enrollment has diminished by 26.5%. Hardest

hit in this dramatic enrollment decline is the southeast corner of the county where the three districts are projected to lose between 24.9 and 30.2% of their high school population. Whether or not change is desirable will not be the issue for the future; change is inevitable. With high schools losing nearly 20% of their population over the next nine years, business as usual will not be an option.

The tables that follow show the enrollment projections for each of the districts included in this study.

<b>Clyde-Savannah Enrollment History and 7-12 Projections</b> October 2009																	
Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
04-05	65	78	71	64	71	81	81	93	98	98	75	79	82	1036	511	191	334
05-06	61	78	73	73	66	69	87	81	83	97	87	64	75	994	507	164	323
06-07	63	69	71	75	66	69	71	91	80	89	94	61	59	958	484	171	303
07-08	60	72	65	71	67	61	64	73	87	88	90	76	65	939	460	160	319
08-09	55	71	55	60	67	71	72	62	70	84	83	70	78	898	451	132	315
09-10	58	70	59	52	58	69	74	67	63	73	82	68	62	855	440	130	285
	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
10-11		69	62	58	49	59	72	73	64	65	70	65	66			137	266
11-12			61	61	55	49	62	71	70	66	62	55	63			141	246
12-13				60	58	56	51	61	68	72	63	49	53			129	237
13-14					57	59	59	50	59	70	69	50	48			109	237
14-15						58	62	58	48	61	67	55	49			106	232
15-16							61	61	56	49	59	53	53			117	214
16-17								60	59	58	47	47	51			119	203
17-18									58	61	56	37	46				200
18-19										60	59	44	36				199

**Gananda Enrollment History and 7-12 Projections**  
October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
04-05	111	90	82	107	97	93	102	102	84	97	88	80	72	1205	682	186	337
05-06	84	110	94	83	95	101	90	89	103	87	78	77	78	1169	657	192	320
06-07	88	85	97	92	81	95	99	94	95	109	82	73	75	1165	637	189	339
07-08	92	95	77	92	86	84	99	94	89	99	100	70	68	1145	625	183	337
08-09	88	92	92	77	92	85	84	101	101	93	86	89	68	1148	610	202	336
09-10	85	91	88	99	77	90	85	84	102	101	91	84	85	1162	615	186	361
	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
10-11		87	86	88	95	78	90	83	86	106	91	83	81			169	361
11-12			83	86	84	96	78	88	85	89	95	83	80			173	347
12-13				83	83	85	96	76	90	88	80	86	80			166	334
13-14					80	84	85	94	78	94	79	73	83			172	329
14-15						81	84	83	96	81	85	72	70			179	308
15-16							81	82	85	100	73	77	69			167	319
16-17								79	84	88	90	66	74			163	318
17-18									81	87	79	82	63				311
18-19										84	78	72	79				313

## Lyons Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.S.	K-12	K-6	7-8	9-12
04-05	79	73	77	76	83	74	92	93	85	93	83	74	73		1055	554	178	323
05-06	68	73	69	70	78	80	76	87	88	89	78	73	61	12	990	514	175	301
06-07	65	72	72	63	79	78	77	75	84	97	84	80	68	3	994	506	159	329
07-08	46	75	63	69	60	75	78	79	72	98	89	72	77		953	466	151	336
08-09	70	44	75	64	68	61	73	73	80	80	87	79	75		929	455	153	321
09-10	66	69	47	66	62	66	69	70	72	81	78	73	73		892	445	142	305
	K	1	2	3	4	5	6	7	8	9	10	11	12		K-12	K-6	7-8	9-12
10-11		67	67	44	67	61	67	67	68	78	74	70	69				135	291
11-12			65	63	44	66	62	65	65	74	71	67	66				130	278
12-13				61	64	43	67	60	63	71	67	64	63				123	265
13-14					62	63	44	65	58	69	65	60	60				123	254
14-15						61	64	43	63	63	63	59	56				106	241
15-16							62	62	42	69	57	57	55				104	238
16-17								60	60	46	63	51	54				120	214
17-18									58	65	42	57	48					212
18-19										63	59	38	54					214



## Marion Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	72	66	75	76	78	94	74	94	98	114	98	82	66		1	1088	535	192	360
05-06	81	74	63	83	76	71	95	77	94	98	103	95	79	1		1090	543	171	375
06-07	75	74	71	67	69	75	74	94	76	109	95	91	93	1		1064	505	170	388
07-08	65	79	71	68	66	72	76	75	96	91	100	84	94	1	1	1039	497	171	369
08-09	72	65	75	68	65	64	71	72	69	94	75	87	90	1		968	480	141	346
09-10	59	70	64	83	68	64	65	74	72	74	84	66	90	1		934	473	146	314
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		58	74	62	80	71	65	66	73	78	67	76	67					139	288
11-12			61	72	60	84	72	66	65	79	70	60	78					131	287
12-13				59	69	63	86	73	65	70	71	63	61					138	265
13-14					57	72	64	87	72	70	63	64	64					159	261
14-15						60	73	65	86	78	63	57	65					151	263
15-16							61	74	64	93	70	57	58					138	278
16-17								62	73	69	84	63	58					135	274
17-18									61	79	62	76	64						281
18-19										66	71	56	78						271

# Newark Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
04-05	171	176	174	166	182	185	200	209	241	267	217	176	193	2557	1254	450	853
05-06	146	159	164	165	163	170	183	207	210	309	191	192	197	2456	1150	417	889
06-07	159	167	149	159	168	153	161	177	168	257	201	207	175	2301	1116	345	840
07-08	159	167	149	159	168	153	161	177	168	257	201	207	175	2301	1116	345	840
08-09	155	141	177	149	167	166	147	163	166	212	196	188	219	2246	1102	329	815
09-10	185	155	143	175	146	170	158	156	168	188	186	174	193	2197	1132	324	741
	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
10-11		185	150	142	179	140	167	164	148	217	143	179	172			312	711
11-12			179	149	145	172	137	174	156	191	165	137	177			330	670
12-13				177	152	139	169	142	165	201	145	158	136			307	640
13-14					181	146	136	176	135	213	153	139	156			311	661
14-15						174	143	141	167	174	162	147	138			308	621
15-16							171	149	134	215	132	156	146			283	649
16-17								178	142	173	163	127	154			320	617
17-18									169	183	131	156	126				596
18-19										218	139	126	154				637

# North Rose-Wolcott Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	120	115	105	101	118	123	138	124	137	127	146	149	127			1630	820	261	549
05-06	114	107	113	106	95	116	120	140	122	155	138	146	128	1	1	1602	771	262	567
06-07	94	101	114	109	109	95	115	115	134	147	138	108	123		8	1510	738	281	516
07-08	95	91	100	113	114	105	98	122	117	162	124	113	108		2	1464	716	239	507
08-09	106	94	87	102	106	118	96	98	125	134	138	113	106	2	2	1427	709	223	491
09-10	89	108	88	82	109	105	118	101	102	142	114	122	100			1380	699	203	478
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		85	106	87	80	116	100	124	100	115	125	108	110					224	458
11-12			83	105	85	85	110	105	123	113	101	119	97					228	430
12-13				82	103	90	81	116	104	139	99	96	107					220	441
13-14					80	109	86	85	115	118	122	94	86					200	420
14-15						85	104	90	84	130	104	116	85					174	435
15-16							81	109	89	95	114	99	104					198	412
16-17								85	108	101	84	108	89					193	382
17-18									84	122	89	80	97						388
18-19										95	107	85	72						359

# Palmyra-Macedon Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	169	150	132	167	128	190	167	178	187	230	154	160	168			2180	1103	365	712
05-06	144	170	144	133	163	130	193	169	186	215	195	138	158			2138	1077	355	706
06-07	151	151	168	149	142	157	137	191	172	200	179	183	139			2119	1055	363	701
07-08	149	141	150	175	155	140	164	149	187	190	187	179	185		2	2151	1074	336	741
08-09	138	150	134	151	171	150	138	162	151	200	172	172	182			2071	1032	313	726
09-10	147	133	146	132	152	160	148	149	165	152	202	172	176		3	2034	1018	314	702
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		146	129	149	133	147	163	152	150	178	138	192	174					302	682
11-12			142	132	150	129	150	168	154	162	162	131	194					322	649
12-13				145	133	146	132	155	170	166	147	154	132					325	599
13-14					146	129	149	136	157	184	151	140	156					293	631
14-15						142	132	153	137	170	167	143	141					290	621
15-16							145	136	155	148	155	159	144					291	606
16-17								149	137	167	135	147	161					286	610
17-18									150	148	152	128	148						576
18-19										162	135	144	129						570

## Red Creek Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	K-12	K-6	7-8	9-12
04-05	80	80	66	70	74	80	81	100	96	95	98	91	76		1087	531	196	360
05-06	55	87	65	66	74	71	81	81	103	86	86	92	89		1036	499	184	353
06-07	69	73	76	66	68	73	72	88	86	94	93	82	82		1022	497	174	351
07-08	62	78	66	73	68	67	78	73	91	101	88	71	81		997	492	164	341
08-09	53	61	80	63	76	69	66	79	70	101	85	86	69		958	468	149	341
09-10	70	63	47	80	64	75	77	70	78	71	94	73	83		945	476	148	321
	K	1	2	3	4	5	6	7	8	9	10	11	12		K-12	K-6	7-8	9-12
10-11		80	55	47	82	63	78	79	71	80	67	85	70				150	302
11-12			70	54	48	81	66	80	80	72	75	60	82				160	289
12-13				69	56	48	84	68	81	82	68	68	58				149	276
13-14					71	55	50	87	69	83	77	61	65				156	286
14-15						70	57	52	88	70	78	69	59				140	276
15-16							73	59	53	90	66	70	66				112	292
16-17								75	60	54	85	59	67				135	265
17-18									76	61	51	77	57					246
18-19										78	57	46	74					255

# Sodus School District K - 12 Enrollment History and Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	Other	K-12	K-6	7-8	9-12
04-05	103	87	98	87	96	106	97	122	121	147	120	101	84	37	1369	674	243	452
05-06	94	101	87	91	85	97	109	100	119	141	132	106	107	29	1369	664	219	486
06-07	75	92	107	88	83	77	99	111	98	126	129	115	114	33	1314	621	209	484
07-08	91	77	90	102	88	91	81	101	109	110	126	126	115	30	1307	620	210	477
08-09	92	82	79	87	92	86	92	87	99	112	109	113	123	33	1253	610	186	457
09-10	91	85	80	82	91	91	84	95	84	95	116	93	112	30	1199	604	179	416
	K	1	2	3	4	5	6	7	8	9	10	11	12				7-8	9-12
10-11		87	86	78	80	91	93	87	93	90	92	104	95	31			180	381
11-12			88	84	76	80	93	97	85	100	87	83	106	31			182	376
12-13				86	81	76	82	97	95	91	97	78	85	31			192	351
13-14					83	81	78	85	95	102	88	87	80	31			180	357
14-15						83	83	81	83	102	99	79	89	31			164	369
15-16							85	86	79	89	99	89	81				165	358
16-17								88	84	85	86	89	91					351
17-18									86	90	82	77	91					340
18-19										92	87	74	79					332

Note: "Other" includes BOCES/CSE/ACE/GED and ALT School.

K-12 enrollments do not include these numbers.

# Wayne Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	172	178	183	208	194	207	226	210	235	268	214	197	203	6	21	2695	1368	445	882
05-06	184	174	179	187	211	199	199	218	218	262	237	216	205	4	8	2701	1333	436	920
06-07	155	176	172	183	189	210	208	199	218	219	240	250	218	12	12	2661	1293	417	927
07-08	172	162	175	174	182	191	203	201	194	217	216	232	227	24	45	2615	1259	395	892
08-09	163	171	168	174	181	188	192	207	200	187	208	214	225	1	46	2525	1237	407	834
09-10	161	167	176	167	174	178	185	188	202	201	183	210	215			2407	1208	390	809
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		163	169	178	169	176	176	183	188	206	189	185	208					371	788
11-12			165	171	180	171	174	174	183	192	194	191	183					357	760
12-13				167	173	182	169	172	174	187	180	196	189					346	752
13-14					169	175	180	167	172	177	176	182	194					339	729
14-15						171	173	178	167	175	166	178	180					345	699
15-16							169	171	178	170	165	168	176					349	679
16-17								167	171	182	160	167	166					338	675
17-18									167	174	171	162	165						672
18-19										170	164	173	160						667

# Williamson Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	K-12	K-6	7-8	9-12
04-05	89	95	96	90	94	101	110	109	108	130	102	113	99		1336	675	217	444
05-06	82	76	88	91	88	93	102	110	109	110	115	97	100		1261	620	219	422
06-07	100	66	78	81	94	92	91	109	106	111	93	108	98		1227	602	215	410
07-08	74	89	64	79	76	96	95	87	106	120	99	88	110		1183	573	193	417
08-09	95	62	88	67	84	78	95	98	88	110	111	96	88		1160	569	186	405
09-10	103	84	61	86	66	87	82	93	98	94	113	102	97	2	1166	569	191	406
	K	1	2	3	4	5	6	7	8	9	10	11	12		K-12	K-6	7-8	9-12
10-11		88	82	60	86	67	88	83	92	103	86	106	100				175	395
11-12			86	80	60	88	68	89	82	97	94	81	104				171	376
12-13				84	80	61	89	69	88	86	88	88	79				157	341
13-14					84	82	62	90	68	92	78	83	86				158	339
14-15						86	83	63	89	71	84	73	81				152	309
15-16							87	84	62	93	65	79	72				146	309
16-17								88	83	65	85	61	77				171	288
17-18									87	87	59	80	60					286
18-19										91	79	55	78					303



In addition to the enrollment projections presented above, Cornell University has projected the number of young adults that will be living in Wayne County for the next twenty years. This projection, broken down by age ranges, can be seen in the following table:

<b>Age Group</b>	<b>1990 Census</b>	<b>2000 Census</b>	<b>2010 Census</b>	<b>2020 Census</b>	<b>2030 Census</b>
0 to 4	7,193	6,174	5,532	5,376	4,911
5 to 9	7,316	7,353	6,300	6,169	5,804
10 to 14	6,686	7,742	6,727	6,322	6,141
15 to 19	6,053	6,659	6,704	5,905	5,751
<b>Total</b>	89,123	93,765	92,123	91,002	87,792

The direction of the Cornell projections are consistent with the student enrollment projections that were made earlier in the study. The overall population of Wayne County is projected to decline by 4.7% over the next 20 years from 92,123 to 87,792, a loss of 4,331 people.

In summary, there are no indicators that the number of students in the high schools of Wayne County will do anything but decline for the next ten to twenty years. If there are not significant changes in the way educational programs are delivered in the Wayne County schools, costs will continue to rise, fewer people will be living in the county to pay for these increased costs, and the “critical mass” numbers of students that justify the educational offerings in today’s schools will evaporate. Boards of Education will struggle to provide the level of programming that represents the world class education that is the desire of the people living in Wayne County today. In short, schools will be forced to change!

## Instructional Program

The essential function of any school is to educate its students. An important activity in analyzing the school districts in this study is to compare the curricular offerings that they currently provide to their students. Ideally, this study will provide ideas about how to not only maintain the level and quality of the education in each of the districts but also to enhance and/or expand it. This is the way to build toward the world class education system that the Wayne County school leaders have discussed.

The school districts in Wayne County are very good schools. In analyzing the performance of students in these districts with the performance of students in other parts of the state, these schools compare quite favorably. The following table shows graduation rates for the districts in Wayne County:

**2004 Regional Total Cohort Graduation Rate as of August 2008 (After 4 Years)**

	2004 Cohort #’s	Graduated with Regents or Local Diploma		Earned IEP Diploma		Still Enrolled		Transferred to GED Preparation Program		Dropped Out	
	#	#	%	#	%	#	%	#	%	#	%
Clyde-Savannah	82	59	72	3	4	5	6	8	10	7	9
Gananda	74	60	81	0	0	7	9	5	7	2	3
Lyons	91	69	76	4	4	3	3	6	7	9	10
Marion	107	87	81	2	2	6	6	3	3	9	8
Newark	216	160	74	4	2	26	12	6	3	19	9
North Rose-Wolcott	127	91	72	5	4	14	11	3	2	14	11
Palmyra-Macedon	186	169	91	2	1	9	5	4	2	4	2
Red Creek	93	71	76	4	4	2	2	5	5	11	12
Sodus	125	108	86	5	4	4	3	1	1	8	6
Wayne	259	218	84	3	1	21	8	0	0	16	6
Williamson	120	106	88	1	1	5	4	2	2	6	5
Wayne County	1480	1198	81	33	2	102	7	43	3	105	7
Wayne-FL BOCES	3603	2882	80	97	3	237	7	106	3	285	8

This table shows the graduation rate, after four years, for students who entered ninth grade in 2004. The average graduation rate for these Wayne County schools of 81% compares very favorably with the average state graduation rate of 67% after four years.

In addition, the performance of students in Wayne County districts on Regents examinations was also examined. This table shows the percentage of students passing the five most common Regents examinations at a grade of 65 for the students who entered ninth grade after four years:

### **2004 TOTAL COHORT-After Four Years of Instruction (All Students)**

#### **Number of students in cohort in ( )**

#### **Percent of 2004 Cohort Passing 65-100**

<b>District</b>	<b>English</b>	<b>Math</b>	<b>Global History</b>	<b>US History &amp; Gov't</b>	<b>Science</b>
Clyde-Savannah (82)	71	71	68	70	69
Gananda (74)	82	92	85	61	94
Lyons (91)	78	81	81	75	82
Marion (107)	64	74	68	75	71
Newark (216)	73	77	70	70	77
North Rose-Wolcott (127)	63	76	68	69	73
Palmyra-Macedon (186)	84	89	89	62	88
Red Creek (93)	74	80	75	71	87
Sodus (125)	74	75	68	79	76
Wayne (259)	86	90	83	86	90
Williamson (120)	85	89	87	82	91
Wayne County Average	76	81	77	73	82
Wayne-FL BOCES Region	78	81	78	75	83
NYS Statewide Public	75	76	69	72	74

Again, we see that the performance of the students in the Wayne County schools compares favorably with students from other areas of the state who take these Regents examinations.

There are numerous other measures that could be studied to ascertain the performance levels of the students who attend the Wayne County schools. However, that is beyond the scope of this study. The previous two charts were presented as summary data to show that the schools in Wayne County perform well when it comes to student achievement. While the focus of any good school leadership team is to constantly focus on improving student results, these schools are not broken or badly in need of attention to make their students successful. It is the focus of this study to provide ideas for how these very good schools might cooperate to provide their students more than they currently have. We now move to a discussion about current curricular opportunities.

Discussions were held with instructional leaders in each of the school districts including the Superintendent and the High School Principal. In every school district, there is great satisfaction with the core instructional program that is available to students. In English, mathematics, social studies, and the sciences, school administrators believe that their high school offers a very solid program.

The feeling that students receive a very solid high school program was unanimous. On the other hand, people were equally committed to wanting to provide more for their students. Conversations with school leaders consistently revealed the following areas for curriculum expansion:

- ❖ Advanced placement courses
- ❖ More foreign languages
- ❖ Upper level math and science classes
- ❖ International Baccalaureate programs
- ❖ Project Lead the Way
- ❖ More college level courses
- ❖ More electives
- ❖ More opportunities in the arts
- ❖ More business courses

Currently, there are some districts which offer their students some of these programs as shown in the following two tables.

<b>Advanced Placement and International Baccalaureate Courses</b>											
<b>A P Course</b>	CS	Gan	Ly	Mar	Nwk	NRW	PM	RC	Sd	Wy	Wm
Eng. Lang. & Comp.					X		X			X	X
Eng. Lit. & Comp.		X			X					X	X
American History					X		X			X	
World History							X				
European History					X					X	X
Psychology					X						
Calculus AB		X			X		X			X	X
Calculus BC							X				
Statistics										X	
Biology		X			X	X	X			X	X
Chemistry					X					X	X
Physics					X					X	
Art					X					X	
Art - 2D		X				X					X
Art - 3D		X									
Drawing/Painting II											
Music Theory					X		X				
<b>I B Course</b>	CS	Gan	Ly	Mar	Nwk	NRW	PM	RC	Sd	Wy	Wm
English 11							X			X	
English 12							X			X	
Hist. of the Americas							X			X	
Theory of Knowledge							X			X	
Creat, Action, & Serv.							X			X	
Extended Essay							X			X	
Math Studies										X	
Math SL										X	
Pre-Calculus							X				
Biology							X			X	
Psychology							X				
French IV							X				
French V							X				
Spanish B										X	
Spanish AB										X	
Spanish IV							X				
Spanish V							X				
Visual Arts							X			X	

The following table depicts the current offerings that carry college credit.

<b>Wayne County High School Courses for College Credit</b>											
<b>Code: CC-Cayuga CC; FL-Finger Lakes CC; ON-Onondaga CC; MC-Monroe CC</b>											
<b>ESF-College of Environmental Science and Forestry;</b>											
<b>RIT-Rochester Institute of Technology; SU-Syracuse University</b>											
<b>Courses</b>	<b>C-S</b>	<b>Gan</b>	<b>Lyo</b>	<b>Mar</b>	<b>Nwk</b>	<b>NR-W</b>	<b>Pal-Mac</b>	<b>RC</b>	<b>Sds</b>	<b>Way</b>	<b>Wmsn</b>
<b><u>English</u></b>											
Effective Speech									CC		
Intro to College Studies						FL					FL
Project Advance English						SU					
English 101	FL	FL	FL	FL	FL	FL	FL	CC	CC	FL	FL
English 102	FL			FL	FL	FL	FL	CC	CC	FL	FL
English 12											
<b><u>Social Studies</u></b>											
Part in Govt & Politics										FL	
Art History					FL						
Government			FL								
European History 102					FL				CC		
American Studies 102									CC		
US History			FL							FL	
US History 110	FL	FL		FL	FL	CC					FL
US History 111	FL	FL		FL	FL	CC					FL
Economics			FL			FL	FL				FL
Psychology					FL	FL	FL			FL	FL
Sociology							FL			FL	FL
Western Society	FL										
<b><u>Mathematics</u></b>											
Advanced Algebra 104									CC		
Statistics								CC			
Math 4 Honors										FL	
Pre-Calculus	FL	FL	FL	FL				CC	CC	FL	FL
Pre-Calculus 12			FL								
Calculus I	FL		SU	FL		FL	FL		CC		
<b><u>Science</u></b>											
Physics Honors							FL				
Physical Geology								CC			
Meteorology							FL	FL			
Astronomy					FL		FL				
Anatomy & Human Phys I	FL										
Anatomy & Human Phys II	FL										
Forensic Science 108									CC		
Chemistry			CC		FL	FL					
College Biology			CC		FL						
Human Biology 203									CC		
Human Biology 204									CC		
Physics 118		FL			FL		FL		FL		FL
Physics 119		FL							FL		FL

<b>Courses</b>	<b>C-S</b>	<b>Gan</b>	<b>Lyo</b>	<b>Mar</b>	<b>Nwk</b>	<b>NR-W</b>	<b>Pal-Mac</b>	<b>RC</b>	<b>Sds</b>	<b>Way</b>	<b>Wmsn</b>
General Biology I				FL			FL				
General Biology II				FL							
Global Environmental Sci.	ESF										
<b><u>Langs Other Than English</u></b>											
French IV 101		FL					FL				FL
French IV 102		FL									FL
French V							FL				
German IV										FL	
Spanish IV 101		FL				FL	FL			FL	
Spanish IV 102		FL									
Spanish IV 103								CC	CC		
Spanish V 104							FL	CC	CC	FL	
Project Advance Spanish 102	SU										
Project Advance Spanish 201	SU										
<b><u>Art</u></b>											
Art History/Appreciation I				FL							
Art History/Appreciation II				FL							
Computer Imaging in Art							MC				
<b><u>Business</u></b>											
Accounting 2										FL	
Computer Applications	FL						FL	CC	FL	FL	
Business Management									FL		
Intro to Prog & Comp- Java					FL	FL					
<b><u>Health</u></b>											
Child Psychology										FL	
Health										FL	
<b><u>Music</u></b>											
Music Theory I					FL				FL		
<b><u>Technology</u></b>											
Design & Draw for Product.			RIT		RIT		MC				RIT
Comp Integrated Manufact.					RIT		RIT				
Principles of Engineering			RIT		RIT		RIT				RIT
Digital Electronics					RIT		MC				
<b><u>Intro to College Studies</u></b>											FL

It is clear from the tables above that different schools have different opportunities for their students beyond the core academic curriculum. These tables show how the offerings in one Wayne County school district compare with the offerings in the other Wayne County school districts. Obviously, they are different. To give further insight into the comparability of curriculum

offerings, we compared the opportunities for the Wayne County students with schools from other parts of the state.

Both the grant proposal and our conversations with the Wayne County school superintendents centered on preserving, if not enhancing, the quality of existing high school curricula and programs, while demonstrating cost effectiveness. This prompted two related areas of study. The first was an examination of the relationship between the scope of curricular offerings in a high school with its student population size. Conventional wisdom would conclude that the more students in a school, the greater the number of curricular offerings that can be supported by sufficient class sizes. Yet, however logical this conclusion appears, seeking supporting data seemed appropriate.

Second, in looking ahead, it is clear to the Superintendents that future high school graduates will need a greater set of skills than today's graduates, given the increasing global characteristic of our business and political worlds. Accordingly, it was important to compare the curricular opportunities of the current Wayne County high schools with those of relatively nearby, high-achieving high schools of similar, if not greater, size. This comparison seemed especially important since the primary consideration of this study was "regional high schools," implying high schools with greater enrollment than currently exist in the Wayne County high schools. It was a fundamental hypothesis of this study that Wayne County high schools had to be larger in order to provide the types of curriculum offerings that are necessary to educate all children to high standards and the 21<sup>st</sup> century skills being demanded in the world today.

To accomplish this objective, course opportunities of high schools with student populations of 400, 800, and 1200 were examined. In doing so, benchmarks against which course offerings in the eleven Wayne County high schools could be established. In selecting high schools within these three population categories, an attempt was made to locate high-achieving high schools that are geographically proximate, and to the extent reasonably



possible, close in socio-economic characteristics. In the population category of 1200, the nearby schools of Brighton, East Irondequoit, and Victor were selected. In the remaining population categories of 800 and 400, a greater geographical reach was required. For 800 students, Albion (Niagara County), Cortland (Cortland County), and Oneida (Madison County) were selected. In the 400 student category, Bloomfield (Ontario County), Pulaski (Oswego County), and Tully (Onondaga County) were chosen.

Since every high school in New York State offers a standard set of foundation courses, analysis focused on the upper level courses that distinguished these nine schools. Accordingly, Advanced Placement, International Baccalaureate, college credit-bearing, and Project Lead the Way courses were identified. The average numbers of these course offerings by the three population categories are presented in the following table. In addition, the comparable numbers of these courses offered at the Wayne County high schools are presented.

**Wayne County High School Courses in  
Advanced Placement, International Baccalaureate,  
College Credit, and Project Lead The Way  
With Comparable Courses at  
High Schools of 400, 800, and 1200 Students**

High Schools	Average Number of AP Courses	Average Number of IB Courses	Average Number of College Courses	Total	Project Lead the Way
High Schools of 1200	15	10	16	41	2 of 3
High Schools of 800	9	0	13	22	1 of 3
High Schools of 400	3	2	9	14	0 of 3
High Schools and Number of Students	Number of AP Courses	Number of IB Courses	Number of College Courses	Total	Project Lead the Way
Wayne 809	10	12	15	37	yes
Newark 741	11	0	9	20	yes
Palmyra-Macedon 702	7	12	20	39	yes
North Rose-Wolcott 468	2	0	12	14	
Sodus 416	0	0	18	18	
Williamson 406	6	0	18	24	yes
Gananda 361	5	0	10	15	
Red Creek 321	0	0	9	9	
Marion 314	0	0	13	13	
Lyons 305	0	0	11	11	yes
Clyde-Savannah 285	0	0	13	13	

The first dimension of analysis is recognizing that this comparison is limited, at best. It focuses on only three schools in each population category, which in itself is limiting.

The second aspect of this analysis is the obvious relationship between high school size and range of upper-level course offerings. The gap between 14 Advanced Placement, International Baccalaureate, and college credit courses in high schools of 400 and 41 similar courses in high schools of 1200 is dramatic. Equally compelling is the difference between the 22 courses in high schools of 800 and 41 in schools of 1200. Although these differences may be attributed

to several other factors such as socio-economic status, income and property wealth within the districts, etc., enrollment, in itself, is a compelling factor. Consistent with the concept of economy of scale, as enrollment increases, so too does the number of specialized curricular offerings.

This concept of economy of scale was one of the driving forces behind this study. Not only could a greater number of courses become available to students in a larger “regional” high school, but a greater economy of scale in terms of cost might also be realized.

Again, given the limited sample of schools studied, the average number of courses available at the three different levels can be summarized as follows:

<b>High School Enrollment</b>	<b>Total Upper Level Courses</b>
400	14
800	22
1200	41

The difference in 400 and 800 pupil high schools is 8 courses or 57%. On the other hand, upper level course offerings at the next 400 student level increase from 22 to 41, an increase of 19 courses or 86%.

In summary, there is a direct relationship between high school enrollment and the range of course offerings; schools with larger enrollments have more opportunities for their students. Given the projected enrollment decline for the Wayne County high schools, continuing attention should be given to the opportunities that will be available to students. Maintaining the current level of course offerings, and even expanding those offerings, will be next to impossible without the cooperation and collaboration of all districts. Lower enrollment and higher cost will preclude other options.

## Regional High School Background

It was clearly understood that one of the options considered when this study was conceived was to build new buildings that would serve as regional high schools. This concept was designed to replace the existing eleven high schools with three to four regional high school buildings. In this model, elementary and middle schools would remain in their current locations. Eleven school districts would remain with the eleven existing Boards of Education also remaining in place. The theory behind creating these larger regional high schools is that a larger number of students would be educated in each facility providing the critical mass to offer a richer curriculum and more electives. It was also hypothesized that larger high schools would be more cost effective thereby reducing the cost of public education in Wayne County with property taxes decreasing as a result. Instead of having the 5,500 high school students in Wayne County spread out across eleven high schools, these students would all be attending four (for example) high schools. The average size of the high schools would increase from approximately 500 to nearly 1,100. This increased enrollment would provide the student base to expand program offerings and possibly reduce costs.

One other clarification about the scope of this study should be made at this time. During several of the conversations that were held with school staff and community members, the concept of a county school district was discussed. A number of states have organized their school districts along county borders. Each county has its own school district with one Board of Education and one Superintendent. However, New York State has never organized its educational system in this manner. As a result, it was never the intent or within the scope of this study to examine the feasibility of a single county-wide school district for Wayne County.

From our first conversations with individuals from the schools and the communities about regional high schools, it became very apparent that this was a model that held little, if any, appeal for most people. Research has consistently shown that while people may not be satisfied with education in the

United States, these same people love their local school district. Such was the case in Wayne County. For the following reasons, people opposed the idea of creating regional high school facilities:

- Loss of identity of the individual high school including the school's name, mascot, and colors;
- Perception that the merged high schools would be incompatible;
- Less personal attention for students in a larger high school;
- Busing time for students would be increased;
- Many capital improvements have recently been made to the high schools in Wayne County.....it would be a colossal waste of money if these buildings were now closed;
- Larger high schools would create too much competition for many students to participate in extra-curricular activities; and
- Having vacant high school buildings would detract from the nature of the communities.

In spite of the apparent resistance to the regional high school concept, this study was commissioned to identify models of what regional high schools might look like. In developing the regional high school model with the eleven school district superintendents, a high school target population range of 900-1,200 students was established. The top end of this range is approximately 50% larger than Wayne High School, currently the largest high school in the county.

The curriculum analysis of high schools with 400, 800, and 1,200 students indicates that the number of courses available to students increases substantially as high school enrollment increases. For Wayne County high schools with current populations of less than 500 students, the curriculum advantages would be most significant. The total number of Advanced Placement, International Baccalaureate, and college credit courses in county schools of less than 500 ranges from 9 to 23, compared with an average of 41 in schools of 1,200 students.

In addition to the curricular advantages, it was believed that the potential long term cost savings achieved by consolidating populations, based on staffing and operating efficiencies, make such regional high schools worthy of serious consideration---this is the foundation of this study.

## Regional High School Locations/Construction

A critical dimension of the regional high school concept is the projected location of the regional high schools. Two different models will be used in projecting locations for the regional high schools. The first model assumes that four new regional high school facilities would be constructed. The second model assumes that four existing high school facilities would house the four regional high schools, allowing for renovation and expansion where necessary. Given the substantial time necessary for school district/community approval and building construction, an initial operational date for regional high schools of 2014-15 is used in this model.

The first option for the location of regional high schools is to construct four new high school facilities for Wayne County. Using the projected 2014-15 high school student populations, as well as general geographic relationships of the eleven school districts, four “regional high schools” are hypothetically designated. These high schools are “Northwest Wayne High School,” “Southwest Wayne High School,” “Southeast Wayne High School,” and “Northeast Wayne High School.” Consistent with the target population range of 900-1,200 students, the following table highlights the four regional high schools, their hypothetical locations, their 2014-15 projected student populations, and the projected 2014-15 student populations of the respective component high schools. None of the regional high schools is more than 12 miles from any of its component high schools.

Location of Regional High Schools				
Regional High School	Regional High School Location	Regional High School Population (2014-15)	Component High Schools	Component High School Populations (2014-15)
<b>Northwest Wayne High School</b>	Route 104 and Fisher Road	1,271	Marion	263
			Wayne	699
			Williamson	309
<b>Southwest Wayne High School</b>	Route 31 and Alderman Road	929	Gananda	308
			Palmyra-Macedon	621
<b>Southeast Wayne High School</b>	Route 31 and Warncke Road	1,094	Clyde-Savannah	232
			Lyons	241
			Newark	621
<b>Northeast Wayne High School</b>	Route 104 and Lasher Road	1,080	North Rose-Wolcott	435
			Red Creek	276
			Sodus	369

An important part of this study is to estimate the cost of constructing a regional high school facility. As these construction costs are estimated, we are, at this time, assuming that four new regional high school facilities are being constructed consistent with the table above. In consultation with a New York State architect and engineering firm that designs school facilities, a construction cost estimate for a 1,200 student high school was obtained. The cost estimate was based on the building having modern classrooms, a full-sized auditorium, a gymnasium, a swimming pool, an appropriate number of athletic



fields, and an all weather track. Given this parameter, it is estimated that a 300,000 square foot high school would be needed. The following shows the cost estimate calculation.

$$\begin{array}{r} 300,000\text{--square foot building} \\ \times \quad \$200\text{--per square foot--construction cost} \\ \hline \$60,000,000\text{--total cost of construction} \\ + \quad 8,000,000\text{--site work} \\ \$68,000,000\text{--total cost of construction and site work} \\ + \quad \$17,000,000\text{--incidental costs @ 25\%} \\ \hline \$85,000,000\text{--estimated total cost of each new high school} \end{array}$$

The four high schools that are modeled in this section of the report would not be built until at least 2014-15. These buildings would be built to serve the student populations at that time and for many years to come. Rather than to project enrollments beyond the point of reliability which would be required for these high school enrollment capacities, we are assuming, for purposes of this model, that each high school would have a 1,200 student capacity. Should the districts eventually build these regional high schools, they will be required to submit documentation regarding enrollment projections to the State Education Department and work with their architects to get updated cost estimates.

The next regional high school building cost element is the annual debt service payment associated with the \$85,000,000 construction cost. A payment schedule, provided by a consultant for the Wayne-Finger Lakes BOCES, based on a thirty year bond amortization and the current bond rate of 5.25% would generate an average principal and interest payment in each of the first ten years of \$6,223,717. This payment would have to be equitably spread across the eleven school districts in order to pay for the construction of these four high schools.

In allocating these debt service costs to the eleven school districts, we have examined two possible models. The first cost allocation model is based on enrollment percentage. Using the 2014-15 enrollments in each of the four

regional high schools, the allocated payments per district are displayed in the following table.

Allocation of Annual \$6,223,717 Debt Service Payments By District Enrollment (2014-15)					
Regional High School	Regional High School Population	Component High School	Component High School Population in 2014-15	Percentage of Regional High School Population	Allocation of \$6,223,717
<b>Northwest Wayne High School</b>	1,271	Marion	263	20.7	\$1,288,309
		Wayne	699	55.0	\$3,423,044
		Williamson	309	24.3	\$1,512,363
<b>Southwest Wayne High School</b>	929	Gananda	308	33.2	\$2,066,274
		Palmyra-Macedon	621	66.8	\$4,157,443
<b>Southeast Wayne High School</b>	1,094	Clyde-Savannah	232	21.2	\$1,319,428
		Lyons	241	22.0	\$1,369,217
		Newark	621	56.8	\$3,535,071
<b>Northeast Wayne High School</b>	1,080	North Rose-Wolcott	435	40.3	\$2,508,158
		Red Creek	276	25.5	\$1,587,047
		Sodus	369	34.2	\$2,128,511

While the previous chart shows the gross annual cost for each school district with respect to the construction of the four regional high schools, it must be noted that the State of New York shares school construction costs to a very significant degree. Furthermore the gross costs shown above may be

significantly reduced if districts have accumulated capital reserve accounts that would ease the financial burden in constructing these buildings. In short, it is very difficult to identify all of the cost factors that would be involved in accurately projecting the costs of constructing these building in 2014-15 or after. However, the state share is so significant that we have prepared the following table to indicate how the state aid would offset the gross annual costs listed in the previous table. Since there is no legislation in New York State that describes regional high schools, there is no single method for determining the building aid for a regional high school in New York State at this time. However, for the sake of this model, we have used the current building aid ratio of the district that currently houses the largest high school of the component high schools that would make up each of the new regional high schools. This means that the following building aid ratios would be used for each high school:

<b>Regional High School</b>	<b>Largest Component High School for this Regional High School</b>	<b>Current Building Aid Ratio of Largest High School</b>
<b>Northwest Wayne High School</b>	Wayne	80.6
<b>Southwest Wayne High School</b>	Palmyra-Macedon	90.8
<b>Southeast Wayne High School</b>	Newark	96.0
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0

The following table shows the net cost of constructing the four regional high schools after the application of building aid as described above. For purposes of this model, we are also assuming that the cost allowance for each high school is 100%.

Net Annual Local Allocation of \$6,223,717 Debt Service Payments By District Enrollment (2014-15)				
Regional High School	Component High School	Building Aid Ratio of Largest High School	Gross Annual Allocation of \$6,223,717	Net Annual Local Allocation of \$6,223,717 after Building Aid
<b>Northwest Wayne High School</b>	Marion	80.6	\$1,288,309	\$249,932
	Wayne	80.6	\$3,423,044	\$664,071
	Williamson	80.6	\$1,512,363	\$293,398
<b>Southwest Wayne High School</b>	Gananda	90.8	\$2,066,274	\$190,097
	Palmyra-Macedon	90.8	\$4,157,443	\$382,485
<b>Southeast Wayne High School</b>	Clyde-Savannah	96.0	\$1,319,428	\$52,777
	Lyons	96.0	\$1,369,217	\$54,769
	Newark	96.0	\$3,535,071	\$141,403
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0	\$2,508,158	\$501,632
	Red Creek	80.0	\$1,587,047	\$317,409
	Sodus	80.0	\$2,128,511	\$425,702

We have also chosen to create a second model for the allocation of capital construction costs to the participating school districts. In this model, we allocate costs according to the relative true value of each of the districts sharing in the construction of each of the regional high schools. This method for allocating capital costs is similar to the manner in which capital improvement costs are shared in the central high school districts on Long

Island. Allocating the same annual \$6,223,717 debt service by the full value of the participating school districts yields the following table.

Allocation of Annual \$6,223,717 Debt Service Payments By District By Full Value Assessment					
Regional High School	Regional High School Population	Component High School	Full Value Assessment 2009-10	Percentage of Full Value Assessment	Allocation of \$6,223,717
<b>Northwest Wayne High School</b>	1,271	Marion	\$251,457,398	17.7	\$1,101,598
		Wayne	\$782,546,752	55.2	\$3,435,492
		Williamson	\$384,435,533	27.1	\$1,686,627
<b>Southwest Wayne High School</b>	929	Gananda	\$291,484,752	31.0	\$1,929,352
		Palmyra-Macedon	\$647,971,209	69.0	\$4,294,365
<b>Southeast Wayne High School</b>	1,094	Clyde-Savannah	\$200,186,215	20.3	\$1,263,415
		Lyons	\$221,604,737	22.5	\$1,400,336
		Newark	\$563,363,033	57.2	\$3,559,966
<b>Northeast Wayne High School</b>	1,080	North Rose-Wolcott	\$536,472,022	44.0	\$2,738,436
		Red Creek	\$269,490,039	22.1	\$1,375,441
		Sodus	\$413,457,122	33.9	\$2,109,840

Regardless of the way capital costs are allocated to the participating school districts, building aid from New York State still plays a significant role in reducing the local costs of construction. As we did when we allocated the costs by enrollment, we have also provided the following table which shows the net cost to school districts after the application of state building aid given the cost allocation according to full value assessment.

Net Annual Local Allocation of \$6,223,717 Debt Service Payments By District (Full Value Assessment)				
Regional High School	Component High School	Building Aid Ratio of Largest High School	Gross Annual Allocation of \$6,223,717-Full Value Assessment	Net Annual Local Allocation of \$6,223,717 after Building Aid
<b>Northwest Wayne High School</b>	Marion	80.6	\$1,101,598	\$213,710
	Wayne	80.6	\$3,435,492	\$666,485
	Williamson	80.6	\$1,686,627	\$327,206
<b>Southwest Wayne High School</b>	Gananda	90.8	\$1,929,352	\$177,500
	Palmyra-Macedon	90.8	\$4,294,365	\$395,082
<b>Southeast Wayne High School</b>	Clyde-Savannah	96.0	\$1,263,415	\$50,537
	Lyons	96.0	\$1,400,336	\$56,013
	Newark	96.0	\$3,559,966	\$142,399
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0	\$2,738,436	\$547,687
	Red Creek	80.0	\$1,375,441	\$275,088
	Sodus	80.0	\$2,109,840	\$421,968

Thus far in this chapter, we have estimated the costs for building four regional high schools as brand new facilities. At this point, we consider another option for housing Wayne County's high school students in four regional high schools. Rather than creating four new facilities, we now examine the feasibility of using four existing high schools as the locations for the four regional high schools.

Earlier in this study, we documented the significant enrollment decline that has occurred in the Wayne County high schools. From 2004-05 to 2009-

10, high school enrollment declined from 5,606 to 5,138, a decrease of 468 students. Between 2009-10 and 2014-15, it is projected that high school enrollments will continue to decline from 5,138 to 4,374, a decrease of another 764 students.

While we fully understand that high school building utilization changes every year, we also know that a larger number of students were attending these high school buildings in years past. In attempting to quantify the capacity of the current high school facilities, we examined the high school enrollment of the four largest high school buildings in 1999-2000. We then assumed that there is space in each of these buildings today to educate a larger number of students because of the significant enrollment decline from 1999-2000 to the present. We also know that these enrollments will continue to decline into the future. Given the capacity of the four largest high schools in 1999-2000 and the projected enrollments for 2014-15, how might students be accommodated in existing high schools? The following table provides one option.

Possible Combinations of High School Populations Based on 1999-00 Student Capacity and 2018-19 Enrollments					
High School	Enrollment/ Capacity in 1999-00	Projected Enrollment in 2018-19	Neighboring High Schools	Enrollment in 2018-19	Combined Enrollment of High Schools
Newark	925	637	Lyons	214	1050
			Clyde- Savannah	199	
North Rose- Wolcott	595	359	Red Creek	255	946
			Sodus	332	
Palmyra- Macedon	700	570	Gananda	313	883
Wayne	882	667	Marion	271	1241
			Williamson	303	

Assuming that the building capacities of these four largest high schools in 1999-2000 could still accommodate the same populations in 2018-19, this

table proves to be very informative. It is immediately clear that none of the buildings could accommodate their own projected populations as well as the projected populations of their regional high school partners; Newark is 125 students short, North Rose-Wolcott is 351 students short, Palmyra-Macedon is 183 students short, and Wayne is 359 students short. However, if these schools were to house the regional high schools and additions were built to accommodate the additional students, this would present a far more cost effective option than building four brand new \$85,000,000 high schools.

How much more cost effective might this option be? When determining the costs of the new, 1,200 student high schools, we assumed that a building of 300,000 square feet would be necessary. In a fairly simplified analysis, this means that the new high schools would have 250 square feet per student. Applying this factor to accommodate the number of additional students that would be part of these regional high schools yields the following table.

<b>Regional High School</b>	<b>Student Capacity</b>	<b>Regional High School Enrollment</b>	<b>Additional Student Spaces Needed</b>	<b>Number of Additional Square Feet Needed (# of student spaces X 250 sq ft/student)</b>
Newark	925	1050	125	31,250 (12.3%)
North Rose-Wolcott	595	946	351	87,750 (34.5%)
Palmyra-Macedon	700	883	183	45,750 (18.0%)
Wayne	882	1241	359	89,750 (35.3%)
<b>TOTAL</b>	<b>3,102</b>	<b>4,120</b>	<b>1,018</b>	<b>254,500 (100%)</b>

This table now shows the construction impact of locating regional high schools in existing high school buildings. Instead of constructing four new high schools with 1,200,000 square feet of new space and costing \$340,000,000, existing high schools can accept additions to accommodate additional students by building only 254,500 square feet of new space. Using the parameters for costing out the construction costs for this option, we apply the same formula used for the construction of new schools as follows:



$$\begin{array}{r}
254,500\text{--square feet of new space} \\
\times \underline{\$200\text{--per square foot--construction cost}} \\
\$50,900,000\text{--total cost of construction} \\
+ \underline{8,000,000\text{--site work}} \\
\$58,900,000\text{--total cost of construction and site work} \\
+ \underline{\$14,725,000\text{--incidental costs @ 25\%}} \\
\$73,625,000\text{--estimated total cost to expand all 4 high schools}
\end{array}$$

In short, we can now estimate that it would cost less to expand **all four** high schools to meet the total high school population in 2018-19 than it would to construct **one** new regional high school at a cost of \$85,000,000. While we understand that these are only estimates of space required and costs, the option of adding space will always be far more cost effective than building new buildings. In addition, at least for the four high schools that would house the regional high schools, the issue of a vacant high school building would go away.

We have provided the following table in order to show how these construction costs would be allocated given this new model. For purposes of this table, we have allocated costs according to enrollment.

Allocation of \$73,625,000 in Construction Costs According to Enrollment						
Regional High School	Component High Schools	Enrollment in 2018-19	% of Total High School Enrollment	% of Total Construction Costs Allocated to High School	Total Cost of High School Addition	Total Cost of High School By District
Newark	Newark	637	60.7%	12.3%	\$9,055,875	\$5,496,916
	Lyons	214	20.4%	12.3%	\$9,055,875	\$1,847,399
	Clyde-Savannah	199	19.0%	12.3%	\$9,055,875	\$1,720,616
North Rose-Wolcott	North Rose-Wolcott	359	37.9%	34.5%	\$25,400,625	\$9,626,837
	Sodus	332	35.1%	34.5%	\$25,400,625	\$8,915,619
	Red Creek	255	27.0%	34.5%	\$25,400,625	\$6,858,169
Palmyra-Macedon	Palmyra-Macedon	570	64.6%	18%	\$13,252,500	\$8,561,115
	Gananda	313	35.4%	18%	\$13,252,500	\$4,691,385
Wayne	Wayne	667	53.7%	35.3%	\$25,989,625	\$13,956,429
	Marion	271	21.8%	35.3%	\$25,989,625	\$5,665,738
	Williamson	303	24.4%	35.3%	\$25,989,625	\$6,341,469

As in our earlier model, these costs would also be significantly offset by building aid provided by New York State. We have again used the building aid ratio for the largest high school in each of the regional high school configurations. These net costs are illustrated in the table that follows.

Net Annual Local Allocation of \$6,223,717 Debt Service Payments By District Enrollment (2014-15)				
Regional High School	Component High School	Building Aid Ratio of Largest High School	Gross Allocation of \$73,625,000	Net Annual Local Allocation of \$71,625,000 after Building Aid
<b>Northwest Wayne High School</b>	Marion	80.6	\$5,665,738	\$1,099,153
	Wayne	80.6	\$13,956,429	\$2,707,547
	Williamson	80.6	\$6,341,469	\$1,230,245
<b>Southwest Wayne High School</b>	Gananda	90.8	\$4,691,385	\$431,607
	Palmyra-Macedon	90.8	\$8,561,115	\$787,623
<b>Southeast Wayne High School</b>	Clyde-Savannah	96.0	\$1,720,616	\$68,825
	Lyons	96.0	\$1,847,399	\$73,896
	Newark	96.0	\$5,496,916	\$219,877
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0	\$9,626,837	\$1,925,967
	Red Creek	80.0	\$6,858,169	\$1,371,634
	Sodus	80.0	\$8,915,619	\$1,783,124

# Regional High School Transportation Routes/Costs

In the previous chapter, locations were determined for the four regional high schools. This section of the study is devoted to a presentation of the bus routes and costs for transporting the high school students from their home school districts to the regional high schools. For purposes of this section, it is assumed that all existing transportation systems in the eleven school districts would be used to transport all high school students to their district's current middle school. We used the middle schools as transfer points for student transportation since the high schools may no longer be in operation given the formation of regional high schools.

The first set of bus routes that follows assumes that four new regional high school facilities will be constructed as described in the previous chapter. These high schools are named Northwest Wayne, Southwest Wayne, Southeast Wayne, and Northeast Wayne. Bus routes to transport all students from their current middle schools to these four regional high schools are as follows:

## **Northwest Wayne High School Route 104 and Fisher Road, Williamson**

From Marion Middle School at 4034 Warner Road, Marion

1. Go EAST on WARNER RD toward WILLIAMSON RD/NY-21. (.3 mi)
2. Turn LEFT onto WILLIAMSON RD/NY-21. Continue to follow NY-21. (4.3 mi)
3. Turn LEFT onto NY-104 W. (3.3 mi)
4. Turn LEFT onto FISHER RD.
5. STATE ROUTE 104 & FISHER RD, arrive at Regional High School

From Wayne Middle School at 6200 Ontario Center Road, Ontario Center

1. Go NORTH on ONTARIO CENTER RD/NY-350 toward CR-103 (.1 mi)
2. Turn RIGHT onto NY-104 E. (2.8 mi)
3. Turn LEFT onto FISHER RD.
4. STATE ROUTE 104 & FISHER RD., arrive at Regional High School

From Williamson Middle School at 4184 Miller Road, Williamson

1. Go WEST on MILLER ST toward MAPLE AVE. (0.0 mi)
2. Turn RIGHT onto MAPLE AVE. (.2 mi)
3. Turn LEFT onto MAIN ST/RIDGE RD/CR-103. (.2 mi)
4. Turn RIGHT onto NY-21/LAKE AVE. (.6 mi)
5. Turn LEFT onto NY-104 W. (3.3 mi)
6. Turn LEFT onto FISHER RD.
7. STATE ROUTE 104 & FISHER RD., arrive at Regional High School

### **Southwest Wayne High School Route 31 and Alderman Road, Palmyra**

From Gananda Middle School at 1500 Day Spring Ridge, Walworth

1. Go SOUTH on DAY SPRING RD toward WATERFORD RD. (.1 mi)
2. Turn LEFT onto WATERFORD RD. (0.0 mi)
3. Turn RIGHT onto WIEDRICK RD. (.4 mi)
4. Turn LEFT onto EDDY RD. (.6 mi)
5. Turn RIGHT onto NY-350/ONTARIO CENTER RD. (1.9 mi)
6. Turn LEFT onto NY-350/ONTARIO CENTER RD/NY-31F. (1.7 mi)
7. Turn LEFT onto MAIN ST/NY-31. Continue to follow NY-31. (1.1 mi)
8. STATE ROUTE 31 & ALDERMAN RD., arrive at Regional High School

From Palmyra-Macedon Middle School at 151 Hyde Parkway, Palmyra

1. Go NORTH on HYDE PKWY toward W JACKSON ST. (.3 mi)
2. Turn LEFT onto W MAIN ST/NY-31. Continue to follow NY-31. (1.9 mi)
3. STATE ROUTE 31 & ALDERMAN RD., arrive at Regional High School

### **Southeast Wayne High School Route 31 and Warncke Road, Lyons**

From Clyde-Savannah middle school at 215 Glasgow Street, Clyde

1. Go SOUTH on GLASGOW ST/NY-414 toward WAYNE AVE. (.3 mi)
2. Turn RIGHT onto N PARK ST/NY-31. (.1 mi)
3. Turn LEFT onto SODUS ST/NY-31. (0 mi)
4. Turn RIGHT onto W GENESEE ST/NY-31 and follow NY-31. (6.1 mi)
5. Arrive at Regional High School

From Lyons Middle School at 10 Clyde Road, Lyons

1. Go east on Clyde Road (.6 mi)
2. Turn LEFT on Route 31 (.4 mi)
3. Arrive at Regional High School

From Newark Middle School at 701 Peirson Avenue, Newark

1. Go NORTH on PEIRSON AVE toward BLOSSOM RD. (.6 mi)
2. Turn RIGHT onto W MILLER ST. (.1 mi)
3. Turn LEFT onto NICHOLAY ST. (.1 mi)
4. Turn RIGHT onto W UNION ST/NY-31 and follow NY-31. (7.7 mi)
5. STATE ROUTE 31 & WARNCKE RD, arrive at Regional High School

## **Northeast Wayne High School Route 104 and Lasher Road, Wolcott**

From Red Creek Middle School at 6608 Church Street, Red Creek

1. Go SOUTH on WOLCOTT ST toward WATER ST and follow NY-104A. (1.1 mi)
2. Turn RIGHT onto NY-104. (7.1 mi)
3. STATE HWY 104 & LASHER RD, arrive at Regional High School

From North Rose-Wolcott Middle School at 5957 New Hartford Street, Wolcott

1. Go SOUTH on NEW HARTFORD ST toward BUTLER ST. (.4 mi)
2. NEW HARTFORD ST becomes WHISKEY HILL RD/CR-258. (.2 mi)
3. Turn RIGHT onto NY-104. (2.2 mi)
4. STATE HWY 104 & LASHER RD., arrive at Regional High School

From Sodus Middle School at 5957 New Hartford Street, Sodus

1. Go NORTH on MILL ST toward BENTON PL. (.4 mi)
2. Turn RIGHT onto W MAIN ST/MAIN ST W. (.1 mi)
3. Stay STRAIGHT to go onto STATE ST. (.2 mi)
4. Turn SLIGHT RIGHT onto RIDGE RD/RIDGE RD E. (1.2 mi)
5. Turn SLIGHT RIGHT onto NY-104. (9.5 mi)
6. STATE HWY 104 & LASHER RD., arrive at Regional High School

The distances from the current middle schools to the regional high schools described above can be summarized in the following table:

<b><i>Distances in miles from current middle school to Regional High School</i></b>											
Regional High School	C/S	GAN	LYO	MAR	NEW	NRW	P-M	RC	SOD	WAY	WMN
<b>Northwest Wayne</b> Rt. 104 & Fisher Road-Williamson				7.9						2.9	4.3
<b>Southwest Wayne</b> Rt. 31 & Alderman Road-Palmyra		5.8					2.2				
<b>Southeast Wayne</b> Rt. 31 & Warncke Road-Lyons	6.5		1.0		8.5						
<b>Northeast Wayne</b> Rt. 104 & Lasher Road-Wolcott						2.8		8.2	11.4		

The next set of bus routes that follows assumes that the four regional high schools will be located at the four largest existing high schools. As a result, Northwest Wayne would be located at the existing Wayne High School, Southwest Wayne would be located at the existing Palmyra-Macedon High School, Southeast Wayne would be located at the existing Newark High School, and Northeast Wayne would be located at the existing North Rose-Wolcott High School. Bus routes to transport all students from their current middle schools to these four regional high schools are as follows:

## **Northwest Wayne High School at Wayne High School**

From Marion Middle School at 4034 Warner Road, Marion

1. Go EAST on WARNER RD toward WILLIAMSON RD/NY-21. (.3 mi)
2. Turn LEFT onto WILLIAMSON RD/NY-21 and follow NY-21. (4.3 mi)
3. Turn LEFT onto NY-104 W. (6.0 mi)
4. Turn LEFT onto ONTARIO CENTER RD. (.1 mi)

From Williamson Middle School at 4184 Miller Road, Williamson

1. Go WEST on MILLER ST toward MAPLE AVE. (0 mi)
2. Turn RIGHT onto MAPLE AVE. (.2 mi)
3. Turn LEFT onto MAIN ST/RIDGE RD/CR-103. (.2 mi)
4. Turn RIGHT onto NY-21/LAKE AVE. (.6 mi)
5. Turn LEFT onto NY-104 W. (6.0 mi)
6. Turn LEFT onto ONTARIO CENTER RD (.1 mi)

## **Southwest Wayne High School at Palmyra-Macedon High School**

From Gananda Middle School at 1500 Day Spring Ridge, Walworth

1. Go SOUTH on DAY SPRING RD toward WATERFORD RD. (.1 mi)
2. Turn LEFT onto WATERFORD RD. (0 mi)
3. Turn RIGHT onto WIEDRICK RD. (.4 mi)
4. Turn LEFT onto EDDY RD. (.6 mi)
5. Turn RIGHT onto NY-350/ONTARIO CENTER RD. (1.9 mi)
6. Turn LEFT onto NY-350/ONTARIO CENTER RD/NY-31F. (1.7 mi)
7. Turn LEFT onto MAIN ST/NY-31. Continue to follow NY-31. (2.9 mi)
8. Turn RIGHT onto HYDE PKWY....151 is on the RIGHT (.3 mi)



## **Southeast Wayne High School at Newark High School**

From Clyde-Savannah Middle School at 215 Glasgow Street, Clyde

1. Go SOUTH on GLASGOW ST/NY-414 toward WAYNE AVE. (.3 mi)
2. Turn RIGHT onto N PARK ST/NY-31. (0.1 mi)
3. Turn LEFT onto SODUS ST/NY-31. (0 mi)
4. Turn RIGHT onto W GENESEE ST/NY-31 and follow NY-31. (13.2 mi)
5. Turn LEFT onto EAST AVE. (.1 mi)
6. Turn RIGHT onto E MILLER ST., Regional High School is on right

From Lyons Middle School at 10 Old Clyde Road, Lyons

1. Go WEST on CLYDE RD toward GENEVA ST/NY-14. (.1 mi)
2. Turn LEFT onto GENEVA ST/NY-14. (.3 mi)
3. Turn LEFT onto NY-31/FORGHAM ST. and follow NY-31. (1.2 mi)

## **Northeast Wayne High School at North Rose-Wolcott High School**

From Red Creek Middle School at 6608 Church Street, Red Creek

1. Go SOUTH on SOUTH ST/CR-268 toward NY-104. (.3 mi)
2. Turn RIGHT onto NY-104. (6.1 mi)
3. Turn LEFT onto LIMEKILN RD. (1.0 mi)
4. Turn RIGHT onto SALTER COLVIN RD. (.2 mi)
5. 11631 SALTER COLVIN RD is on the RIGHT.

From Sodus Middle School at 5957 New Hartford Street, Sodus

1. Go NORTH on MILL ST toward BENTON PL. (.4 mi)
2. Turn RIGHT onto W MAIN ST/MAIN ST W. (.1 mi)
3. Stay STRAIGHT to go onto STATE ST. (.2 mi)
4. Turn SLIGHT RIGHT onto RIDGE RD/RIDGE RD E. (1.2 mi)
5. Turn SLIGHT RIGHT onto NY-104. (7.2 mi)
6. Turn RIGHT onto NY-414. (1.3 mi)
7. Turn LEFT onto SALTER RD/CR-257; follow SALTER RD/CR-257. (2.2 mi)
8. SALTER RD/CR-257 becomes SALTER COLVIN RD. (1.0 mi)
9. 11631 SALTER COLVIN RD is on the LEFT.

The distances from the current middle schools to the regional high schools described above can be summarized in the following table:

<b>Regional High School</b>	<b>C/S</b>	<b>GAN</b>	<b>LYO</b>	<b>MAR</b>	<b>NEW</b>	<b>NRW</b>	<b>P-M</b>	<b>RC</b>	<b>SOD</b>	<b>WAY</b>	<b>WMN</b>
<b>Northwest Wayne</b> at Wayne HS				10.7							7.1
<b>Southwest Wayne</b> at Pal-Mac HS		7.9									
<b>Southeast Wayne</b> at Newark HS	13.7		1.6								
<b>Northeast Wayne</b> at NRW HS								7.6	13.6		

The distances of these regional high schools from their respective component middle schools permit the calculation of estimated additional annual costs of transporting students to the regional high schools. These calculations are based on the distance of each component district middle school from its respective regional high school and assumes that all high school students would be bused to their current middle school building and then transported to their regional high school. The model depicted in the table that follows also includes the number of buses required by each district, two round trips per day, 180 days per school year, the cost per bus transportation mile by district, and 90% state reimbursement. The term “net annual cost” reflects the local cost for transportation after the 90% state reimbursement bus transportation factor has been calculated.

In this table, the “Net Annual Cost” is calculated according to the following formula:

- # of bus miles/day=# of miles from current high school to regional high school multiplied by 4 to cover two round trips/day;
- X # of buses required;
- X cost of bus transportation/mile;

- X 10% = local transportation cost after receiving 90% transportation aid reimbursement from the state.

Cost of Transporting Students to Regional High Schools						
Regional High School	Regional High School Location	Component High Schools	Distance of Regional High Schools from Current High Schools (in miles)	Number of Buses Required	Cost of Bus Transportation per mile	Net Annual Cost of Transporting Component High School Students to Regional High Schools
<b>Northwest Wayne High School</b>	Route 104 and Fisher Road	Marion	4	8	\$3.55	\$8,179
		Wayne	3	20	\$2.81	\$12,139
		Williamson	8	10	\$2.91	\$16,762
<b>Southwest Wayne High School</b>	Route 31 and Alderman Road	Gananda	6	9	\$2.26	\$8,787
		Palmyra-Macedon	2	17	\$2.43	\$5,949
<b>Southeast Wayne High School</b>	Route 31 and Warncke Road	Clyde-Savannah	6.5	9	\$2.35	\$9,898
		Lyons	2	7	\$2.31	\$2,329
		Newark	7	20	\$2.00	\$20,160
<b>Northeast Wayne High School</b>	Route 104 and Lasher Road	North Rose-Wolcott	3	10	\$2.02	\$4,363
		Red Creek	8	7	\$2.79	\$11,249
		Sodus	12	9	\$3.49	\$27,138

This table provides some very valuable information regarding the cost of transporting students to a regional high school. Because the state is so committed to supporting the cost of school districts' transportation of students, this model estimates 90% state reimbursement for busing. Given this large reimbursement rate for the school districts, this table shows how relatively inexpensive it is to transport students in these school districts. While the cost for Sodus would be \$27,138 because it would be located 12 miles from Northeast Wayne High School, the cost for Lyons would be only \$2,329. On average, the eleven districts would spend \$11,441 to transport their students to the regional high school, a very modest cost.

## Regional High School Budgets/Cost Sharing Methodologies

The essence of this study focuses on two critical questions. The first question is whether or not the creation of regional high schools would increase opportunities for students. In reviewing the chapters on The Instructional Program and Extra-Curricular Activities which appear later in the report, it is clear that this question can be answered in the affirmative. High schools with 1,200 students have more academic opportunities than do high schools of 400 or 800 students. Extra-curricular opportunities, whether they are student clubs or inter-scholastic athletics, also increase in number as high school populations increase.

The second important question for this study is whether or not regional high schools save money and can be operated more cost effectively than smaller high schools. This chapter focuses on the answer to that question.

The following table depicts the K-12 enrollment of the eleven Wayne County school districts, the high school enrollments, and the enrollments of the regional high school affiliation for each district.

<b>District</b>	<b>2009-10 Student Enrollment (K-12)</b>	<b>2009-10 High School Enrollment</b>	<b>Wayne Regional High School Enrollment</b>
Clyde-Savannah	855	285	1,094 (SEW)
Gananda	1,162	361	929 (SWW)
Lyons	892	305	1,094 (SEW)
Marion	934	314	1,271 (NWW)
Newark	2,197	741	1,094 (SEW)
North Rose-Wolcott	1,380	478	1,080 (NEW)
Palmyra-Macedon	2,034	702	929 (SWW)
Red Creek	945	321	1,080 (NEW)
Sodus	1,199	416	1,080 (NEW)
Wayne	2,407	809	1,271 (NWW)
Williamson	1,166	406	1,271 (NWW)
AVERAGE	1,379	467	

SEW=Southeast Wayne; SWW=Southwest Wayne; NWW=Northwest Wayne; NEW=Northeast Wayne

The following table displays the 2009-10 high school budgets for the districts in this study.

## 2009-10 High School Budgets

	Clyde-Savannah	Gananda	Lyons	Marion	Newark	North Rose-Wolcott	Palmyra - Macedon	Red Creek	Sodus	Wayne	Williamson
Salaries	2,416,255	2,215,765	1,909,216	2,400,250	4,284,184	2,912,960	3,422,702	2,338,076	2,370,508	3,830,700	2,657,559
Equipment	26,500	8,850	37,618	25,130	155,342	50,790	23,939	7,000	-	46,000	54,483
Materials & Supplies	45,315	37,660	70,526	74,980	100,717	96,462	89,400	75,775	45,180	66,091	50,327
Contractual Items	60,800	16,625	223,831	74,735	172,073	71,437	106,986	89,275	45,350	79,690	81,027
Benefits	845,689	775,518	668,225	840,088	1,499,464	1,295,741	1,197,946	600,610	829,678	1,340,745	930,146
<b>Total HS Costs</b>	<b>3,394,559</b>	<b>3,054,418</b>	<b>2,909,416</b>	<b>3,415,183</b>	<b>6,211,780</b>	<b>4,427,390</b>	<b>4,840,973</b>	<b>3,110,736</b>	<b>3,290,716</b>	<b>5,363,226</b>	<b>3,773,542</b>
O/S Debt (principal only) @ 6/30/09	7,094,240	2,323,896	6,610,000	14,210,000	23,532,379	19,508,505	17,915,000	21,954,389	19,341,880	10,356,091	12,916,068

1. Costs exclude all general support costs, special education, CTE, transportation, community services, debt service, and inter-fund transfers
2. Costs exclude ASI, CSA, and related staff costs (all costs are within the 2020-2999 function codes---2250 and 2280 codes are omitted)
3. BOCES and support costs such as buildings and grounds, transportation, and food services are excluded
4. Debt service includes total district-wide bonds and current BAN's related to capital construction-principal amount only

Salaries	All high school administrators, teachers, substitutes, and support staff including salaries for special schools, instructional media, attendance, guidance, health services, and psychological services. Special education, CTE, co-curricular and inter-scholastic athletic salaries are excluded. Salaries are prorated if assigned to grades other than high school
Equipment	Budgeted equipment for high school only
Materials & Supplies	Budgeted materials and supplies for high school only
Contractual Items	Budgeted contractual for high school only including tuition, textbook, software & hardware, and travel/conference
Benefits	35% of total salaries

We now turn our attention to estimating the cost of the regional high schools. To obtain estimated operating budgets, the operating budget for the current Wayne High School is used as a base. Wayne's current high school total budget of \$4,967,865 serves a student population of 809 students. Using these data, we can project the operating budgets of high schools of varying sizes, assuming economies of scale. For example, a high school of 1,000 students is 25% larger than Wayne High School's student population of approximately 800 ( $1,000/800=1.25$ ). The operating budget for a 1,000 student high school can then be estimated by multiplying Wayne's budget of \$4,967,865 by 1.25. Similarly, a 1,200 student high school can be estimated by multiplying the Wayne High School budget by 1.50 ( $1,200/800=1.50$ ). These calculations provide the cost of the regional high schools without identifying savings or efficiencies that might be available from the consolidations. These are gross costs to the schools since no operating aid or any other form of state aid has been included in these calculations.

The following table shows the projected operating budgets for the four regional high schools, based on their relative size comparison with the current Wayne High School and their respective multiplication factors.

Regional High School Operating Budgets			
Regional High School	Multiplication Factors, Based on Student Populations	Operating Budget for Wayne High School	Operating Budgets for Regional High Schools
<b>Northwest Wayne High School</b>	1.57 (1,271/809)	\$4,967,865	\$7,799,548 <i>(1.57 times \$4,967,865)</i>
<b>Southwest Wayne High School</b>	1.15 (929/809)	\$4,967,865	\$5,713,044 <i>(1.15 times \$4,967,865)</i>
<b>Southeast Wayne High School</b>	1.30 (1,094/809)	\$4,967,865	\$6,458,225 <i>(1.30 times \$4,967,865)</i>
<b>Northeast Wayne High School</b>	1.33 (1,080/809)	\$4,967,865	\$6,607,260 <i>(1.33 times \$4,967,865)</i>

Now that the cost of operating each regional high school has been determined, a method of allocating those costs to each participating school district must be developed. There are a number of options for allocating these costs. The costs could be shared equally among each of the districts; the costs could be allocated according to the relative true value of each district; the costs could be allocated according to each district's RWADA. For purposes of this model, we have chosen a different method of allocating the costs of the regional high schools....we have allocated the costs based on the relative student population percentages, a calculation which is shown in the following table.



<b>Allocation of Annual Operating Regional High School Budgets</b> <b>By District Using Relative Student Population</b>						
Regional High School	Regional High School Operating Budget	Regional High School Population in 2014-15	Component High School	Component High School Population in 2014-15	Percentage of Regional High School Population	Allocation of Regional High School Operating Budget by District
<b>Northwest Wayne High School</b>	\$7,799,548	1271	Marion	263	20.7	\$1,614,506
			Wayne	699	55.0	\$4,289,751
			Williamson	309	24.3	\$1,895,290
<b>Southwest Wayne High School</b>	\$5,713,044	929	Gananda	308	33.2	\$1,896,731
			Palmyra-Macedon	621	66.8	\$3,816,313
<b>Southeast Wayne High School</b>	\$6,458,225	1,094	Clyde-Savannah	232	21.2	\$1,369,144
			Lyons	241	22.0	\$1,420,810
			Newark	621	56.8	\$3,668,272
<b>Northeast Wayne High School</b>	\$6,607,260	1,080	North Rose-Wolcott	435	40.3	\$2,662,726
			Red Creek	276	25.5	\$1,684,851
			Sodus	369	34.2	\$2,259,683

From the data presented above, we can now determine the cost per student for each of the eleven Wayne County districts as follows.

<b>District</b>	<b>2009-10 High School Budget</b>	<b>2009-10 High School Enrollment</b>	<b>High School Cost/Student</b>
Clyde-Savannah	\$3,394,559	285	\$11,911
Gananda	\$3,054,418	361	\$8,461
Lyons	\$2,909,416	305	\$9,539
Marion	\$3,415,183	314	\$10,876
Newark	\$6,211,780	741	\$8,383
North Rose-Wolcott	\$4,427,390	478	\$9,262
Pal-Mac	\$4,840,973	702	\$6,896
Red Creek	\$3,110,736	321	\$9,691
Sodus	\$3,290,716	416	\$7,910
Wayne	\$5,363,226	809	\$6,629
Williamson	\$3,773,542	406	\$9,294
<b>AVERAGE</b>	\$3,981,085	467	\$8,525

The final factor in determining the cost effectiveness of smaller high schools when compared with larger regional high schools is to examine the staffing patterns in the schools. Staffing and fringe benefits for those staff comprise more than 70% of any high school budget so that an analysis of staffing costs provides an insightful look at the relative costs of the high schools. The following table shows the staffing patterns in each of the eleven high schools.

<b>High School Staffing Summary for 2009-10</b>								
High School	# of Students	# of Admins	# of Teachers	# of Tchrg Assts	# of Tchrr Aides	Total Staff	Students/Teacher	Students/Admin.
C-S	285	2.5	35.75	8	3	49.25	8.0	114
Lyons	305	1.7	29	4	0	34.7	10.5	179.4
Marion	314	1.5	29.5	3.4	2.75	37.15	10.6	209.3
Red Creek	321	2	32	3	2	39	10.0	160.5
Gananda	361	2.2	35.7	2	2	41.9	10.1	164.1
Williamson	406	2	42	6.5	5	55.5	9.7	203
Sodus	416	2	42	7	3	54	9.9	208
NR-W	478	3	45	5	3	56	10.6	159.3
Pal-Mac	702	3	67	1	10	81	10.5	234
Newark	741	3	78	12	0	93	9.5	247
Wayne	809	3	64.5	22	5	94.5	12.5	269.7
Total All HS	5,138	25.9	500.45	73.9	35.75	636		
<b>Average All HS</b>	467						<b>10.3</b>	<b>198.4</b>

The important data that emerge from this table are the number of students per teacher in the existing high schools (10.3) and the number of students per administrator in the existing high schools (198.4). It is important to compare these numbers with the same numbers from larger high schools to determine if efficiencies result from larger high schools. To accomplish this comparison, we selected three high schools near Wayne County that had approximately 1,050 to 1,250 students, approximately the sizes of the four regional high schools that are being modeled. The staffing information for those three larger high schools can be seen in the following table.

<b>High School Staffing Summary for 2009-10</b>								
High School	# of Students	# of Admins	# of Teachers	# of Tchg Assts	# of Tchr Aides	Total Staff	Students/Teacher	Students/Admin.
District A	1,063	5	114	n/a	13	132	9.3	212.6
District B	1,175	5	116	11	13	145	10.1	235
District C	1,251	4	100.5	4	14	122.5	12.5	312.75
Total for A, B, and C	3,489	14	330.5		40	399.5		
<b>Average for A, B, and C</b>	1,163						<b>10.6</b>	<b>249.2</b>

The average population of the current Wayne County high schools is 467 students while the average population of the three high schools chosen to model as regional high schools is 1,163 students, more than double the size of the current average high school. However, in the larger high schools, there are 10.6 students per teacher compared to 10.3 students per teacher in the existing Wayne County high schools. The larger high schools have 249.2 students per administrator while the existing Wayne County high schools have 198.4 students per administrator. The following table shows the number of staff that would be required in the regional high schools if the average number of students per teacher and the average number of students per administrator were to be used in these new high schools.

<b>Number of Teachers/Administrators in Regional High Schools vs. Current Component High Schools, 2009-10</b>				
Regional High School	Enrollment of Regional High School	# of Teachers Required in Regional High School	# of Teachers Currently in Component High Schools	Difference in # of Teachers Needed in Regional High School
<b>Northwest Wayne</b>	1,529	$1,529/10.6 =$ <b>144.2</b>	$29.5 + 64.5 + 42 =$ <b>136</b>	+8.2
<b>Southwest Wayne</b>	1,063	$1,063/10.6 =$ <b>100.3</b>	$35.7 + 67 =$ <b>102.7</b>	-2.4
<b>Southeast Wayne</b>	1,331	$1,331/10.6 =$ <b>125.6</b>	$35.75 + 29 + 78 =$ <b>142.8</b>	-17.2
<b>Northeast Wayne</b>	1,215	$1,215/10.6 =$ <b>114.6</b>	$45 + 32 + 42 =$ <b>119</b>	-4.4
<b>Total Difference in # of Teachers Needed in 4 Regional High Schools</b>				<b>-15.8</b>
Regional High School	Enrollment of Regional High School	# of Administrators Required in Regional High School	# of Administrators Currently in Component High Schools	Difference in # of Administrators Needed in Regional High School
<b>Northwest Wayne</b>	1,529	$1,529/249.2 =$ <b>6.1</b>	$1.5 + 3 + 2 =$ <b>6.5</b>	-0.4
<b>Southwest Wayne</b>	1,063	$1,063/249.2 =$ <b>4.3</b>	$2.2 + 3 =$ <b>5.2</b>	-0.9
<b>Southeast Wayne</b>	1,331	$1,331/249.2 =$ <b>5.3</b>	$2.5 + 1.7 + 3 =$ <b>7.2</b>	-1.9
<b>Northeast Wayne</b>	1,215	$1,215/249.2 =$ <b>4.9</b>	$3 + 2 + 2 =$ <b>7</b>	-2.1
<b>Total Difference in # of Administrators Needed in 4 Regional High Schools</b>				<b>-5.3</b>

Based on the information presented in this table, we can now estimate that if four regional high schools were created in Wayne County to replace the

existing eleven high schools, these regional high schools would need approximately 15.8 fewer teachers and 5.3 fewer administrators.

To calculate the cost savings that would result from the creation of regional high schools, the following table is presented.

<b>Regional High School</b>	<b>Difference in # of Teachers</b>	<b>Cost Changes Due to Teachers*</b>	<b>Difference in # of Administrators</b>	<b>Cost Changes Due to Administrators*</b>	<b>Total Cost Changes</b>
<b>Northwest Wayne</b>	+8.2	+\$442,800	0.4	-\$40,500	+\$402,300
<b>Southwest Wayne</b>	-2.4	-\$129,600	0.9	-\$91,125	-\$220,725
<b>Southeast Wayne</b>	-17.2	-\$928,800	1.9	-\$192,375	-\$1,121,175
<b>Northeast Wayne</b>	-4.4	-\$237,600	2.1	-\$212,625	-\$450,225
<b>Total</b>	-15.8	-\$853,200	5.3	-\$536,625	-\$1,389,825

*\*Since less senior teachers would be excessed, teacher salary was calculated at an annual salary of \$40,000 plus 35% for fringe benefits (\$40,000 + \$14,000 = \$54,000)*

.....

*\*\*Administrative salary calculated for an assistant principal with an average salary of \$75,000 plus 35% for fringe benefits (\$75,000 + \$26,250 = \$101,250)*

This is a critical finding in this study. When looking at staffing costs, more teachers would actually be required in Northwest Wayne than the number of teachers that currently work in the high schools in Marion, Wayne, and Williamson, the components of Northwest Wayne. While the other three regional high schools would require fewer teachers, the number of fewer teachers is quite small. Similarly, the number of administrators that could be reduced by creating regional high schools is also quite small. This projected number of administrators also assumes that portions of administrators could be eliminated based on the data in the table above.

As stated earlier in this study, there are two major questions that were the impetus for studying the creation of regional high schools. If regional high schools were created in Wayne County, would there be more curricular and extra-curricular opportunities for the students.....**and**.....would the regional

high schools be able to be operated at a reduced cost to the taxpayers? The answers now seem quite clear. Larger high schools are clearly able to offer a greater array of curricular and extra-curricular opportunities for their students. These increased opportunities will become even more evident as high school enrollments in Wayne County continue to decline over the next 9 years and programs that currently exist will be lost.

The answer to the second question appears to be equally clear. If the eleven high schools that currently exist in Wayne County were to reorganize into four regional high schools, the costs to operate those high schools would be nearly the same as the costs to operate the eleven current high schools. The current cost of operating the eleven high schools in Wayne County is currently \$43,791,939. If the number of teachers and administrators were reduced to levels that are currently found in larger area high schools of approximately the same size as the regional high schools modeled in this study, approximately \$1,389,825 (3.2%) might be saved.

The finding that the regional high schools modeled in this study would not save large amounts of money is consistent with previous research done on this topic. Numerous studies have found that significant savings in the consolidation of school districts occur when the K-12 population of the school districts is 600 students or less. These schools typically have high school populations of 125 or less. In Wayne County, the average student population of the districts is 1,379 and the average number of students in the high schools is 476. Wayne County high schools have enough students to run quite efficiently.....but if they were larger, they would have many more opportunities to offer their students. In summary, regional high schools can provide value....many more opportunities at a slightly lower cost.

## Annual Costs for Regional High Schools

The annual cost per district for participation in their respective regional high school can now be calculated. This cost for each district is the sum of the annual operating budget, the net debt service payment after building aid, and the additional cost of transporting students. These costs are shown in the following table.

<b>Regional High School Costs Using Enrollment to Allocate Debt Service</b>				
District	Operating Budget Allocation	Net Debt Service Payment Allocation	Additional Bus Transportation Cost	Total
Clyde-Savannah	\$1,369,144	\$52,777	\$9,898	\$1,431,819
Gananda	\$1,896,731	\$190,097	\$8,787	\$2,095,615
Lyons	\$1,420,810	\$54,769	\$2,329	\$1,477,908
Marion	\$1,614,506	\$249,932	\$8,179	\$1,872,617
Newark	\$3,668,272	\$141,403	\$20,160	\$3,829,835
North Rose-Wolcott	\$2,662,726	\$501,632	\$4,363	\$3,168,721
Palmyra-Macedon	\$3,816,313	\$382,485	\$5,949	\$4,204,747
Red Creek	\$1,684,851	\$317,409	\$11,249	\$2,013,509
Sodus	\$2,259,683	\$425,702	\$27,138	\$2,712,523
Wayne	\$4,289,751	\$664,071	\$12,139	\$4,965,961
Williamson	\$1,895,290	\$293,398	\$16,762	\$2,205,450

Allocating debt service by using full valuation rather than student enrollment would yield the following table.

<b>Regional High School Costs Using Full Valuation to Allocate Debt Service</b>				
District	Operating Budget Allocation	Net Debt Service Payment Allocation	Additional Bus Transportation Cost	Total
Clyde-Savannah	\$1,369,144	\$50,537	\$9,898	\$1,429,579
Gananda	\$1,896,731	\$177,500	\$8,787	\$2,083,018
Lyons	\$1,420,810	\$56,013	\$2,329	\$1,479,152
Marion	\$1,614,506	\$213,710	\$8,179	\$1,836,395
Newark	\$3,668,272	\$142,399	\$20,160	\$3,830,831
North Rose-Wolcott	\$2,662,726	\$547,687	\$4,363	\$3,214,776
Palmyra-Macedon	\$3,816,313	\$395,082	\$5,949	\$4,217,344
Red Creek	\$1,684,851	\$275,088	\$11,249	\$1,971,188
Sodus	\$2,259,683	\$421,968	\$27,138	\$2,708,789
Wayne	\$4,289,751	\$666,485	\$12,139	\$4,968,375
Williamson	\$1,895,290	\$327,206	\$16,762	\$2,239,258



# Instructional Program Sharing Options

It is particularly important that members of the Wayne County school communities are engaging in discussion about increasing options for high school students in a cost-effective manner at this time. This topic is clearly on the front burner for educators nationally and is a major priority for New York State's Board of Regents as well. The following is taken from a November 9, 2009 memorandum from Deputy Commissioner John King to the EMSC Committee of the Board of Regents:

*"It may be time to rethink secondary school design to increase student engagement and to ensure that secondary schools equip students with the skills they will need to succeed in college and the global economy and society of the 21<sup>st</sup> century. Redesigning secondary school means looking at many issues, including, 1) high school diploma requirements, 2) Regents examinations, 3) seat time requirements vs. earning course credit through demonstration of competency, 4) innovative secondary models including virtual high schools and on-line courses, and 5) alternative secondary models designed to engage students including career and technical education (CTE), science, technology, engineering and mathematics (STEM) programs, arts programs, and early college high school programs. It also means developing standards of excellence for all students, including high performing students, that could possibly include the International Baccalaureate (IB), Advanced Placement tests, the British A-level examinations, and others."*

The foundation of this study is maintaining, if not enhancing, the quality of instructional programs available to Wayne County high school students in a cost-effective manner. As stated previously, a projected decline in enrollment will require school districts to consider various forms of sharing of resources, to include instructional programs. Economy of scale becomes especially important in a diminishing enrollment base. After extensive discussion and gathering of information, and assuming that regional high schools are not an attractive option, five alternative sharing or collaborative options are presented.

Many of these sharing options will involve the availability of courses and programs outside the individual school districts. As a result, mileage and student travel time are important to these options. Accordingly, the distances and travel time among Wayne County high schools are presented below as background information. Without this information, program description and cost analysis become problematic. The following table shows the travel time, as well as distances, between high schools in Wayne County.

<b>Distances Among High Schools</b> <b>The first number in each cell is the number of minutes.</b> <b>The second number in each cell is the number of miles.</b>												
<i>MIN/ MIL</i>	Cly-Sav	Gan- anda	Lyo- ns	Mar- ion	New- ark	NR- W	Pal- Mac	Red Crk	Sod- us	Way- ne	Will'- son	BOC ES
Clyde-Sav		48/ 30	13/ 8	37/ 28	26/ 15	13/ 9	38/ 23	25/ 19	25/ 18	38/ 30	33/ 25	30/ 23
Gan- anda	48/ 30		36/ 23	15/ 10	26/ 16	44/ 35	12/ 8	49/ 40	29/ 22	11/ 9	17/ 12	21/ 14
Lyons	13/ 8	36/ 23		25/ 16	14/ 8	23/ 17	27/ 16	31/ 25	22/ 15	34/ 28	28/ 18	27/ 21
Marion	37/ 28	15/ 10	25/ 16		23/ 17	32/ 24	15/ 10	37/ 30	17/ 11	15/ 11	4/ 3	8/ 5
Newark	26/ 15	26/ 16	14/ 8	23/ 17		35/ 23	17/ 10	45/ 32	24/ 15	34/ 23	26/ 19	27/ 17
NR-W	13/ 9	44/ 35	23/ 17	32/ 24	35/ 23		46/ 34	11/ 8	20/ 14	33/ 26	28/ 21	25/ 19
Pal- Mac	38/ 23	12/ 8	27/ 16	15/ 10	17/ 10	46/ 34		51/ 40	30/ 21	20/ 15	18/ 13	21/ 15
Red Creek	25/ 19	49/ 40	31/ 25	37/ 30	45/ 32	11/ 8	51/ 40		25/ 20	38/ 32	33/ 27	31/ 25
Sodus	25/ 18	29/ 22	22/ 15	17/ 11	24/ 15	20/ 14	30/ 21	25/ 20		17/ 13	13/ 8	10/ 6
Wayne	38/ 30	11/ 9	34/ 28	15/ 11	34/ 23	33/ 26	20/ 15	38/ 32	17/ 13		10/ 8	9/ 7
Wil'sn	33/ 25	17/ 12	28/ 18	4/ 3	26/ 19	28/ 21	18/ 13	33/ 27	13/ 8	10/ 8		3/ 2
BOCES	30/ 23	21/ 14	27/ 21	8/ 5	27/ 17	25/ 19	21/ 15	31/ 25	10/ 6	9/ 7	3/ 2	

*Note: Shaded cells indicate high schools within 15 minutes.*

This table is very telling. When school leaders contemplate collaborative programming, the distance that students have to travel when they leave their high school is important. The shaded areas indicating trips of 15 minutes or less are particularly attractive options. The average distance for all students who attend programs at the BOCES campus is 19 minutes and 14 miles.

In addition to the time and distance, it is important to calculate mileage costs. These costs vary from one school district to another. The following table provides the individual mileage rates by school district and the costs associated with school bus travel from one high school to another. The succeeding table shows the costs for both single and double trips.

<b>Times and Distances Between High Schools, and Cost of Bus Transportation Each Way</b>												
Min/Mi (\$/mi.)	Clyde-Sav	Gananda	Lyons	Marion	Newark	NR-W	Pal-Mac	Red Creek	Sodus	Wayne	Will'son	BOCES
Cly-Sv (\$2.35)		48/30 \$70.50	13/8 \$18.80	37/28 \$65.80	26/15 \$35.25	13/9 \$21.15	38/23 \$54.05	25/19 \$44.65	25/18 \$42.30	38/30 \$70.50	33/25 \$58.75	30/23 \$54.05
Gan'da (\$2.26)	48/30 \$67.80		36/23 \$51.98	15/10 \$22.60	26/16 \$36.16	44/35 \$79.10	12/8 \$18.08	49/40 \$90.40	29/22 \$49.72	11/9 \$20.34	17/12 \$27.12	21/14 \$31.64
Lyons (\$2.31)	13/8 \$18.48	36/23 \$53.13		25/16 \$36.96	14/8 \$18.48	23/17 \$39.27	27/16 \$36.96	31/25 \$57.75	22/15 \$34.65	34/28 \$64.68	28/18 \$41.58	27/21 \$48.51
Marion (\$3.55)	37/28 \$99.40	15/10 \$35.50	25/16 \$56.80		24/17 \$60.35	33/24 \$85.40	15/10 \$35.50	37/30 \$106.50	17/11 \$39.05	15/11 \$39.05	4/3 \$10.65	8/5 \$17.75
Newark (\$2.00)	26/15 \$30.00	26/16 \$32.00	14/8 \$16.00	23/17 \$34.00		35/23 \$46.00	17/10 \$20.00	45/32 \$64.00	24/15 \$30.00	34/23 \$46.00	26/19 \$38.00	27/17 \$34.00
NR-W (\$2.02)	13/9 \$18.18	44/35 \$70.70	23/17 \$34.34	33/24 \$48.48	35/23 \$46.46		46/34 \$68.68	11/8 \$16.16	20/14 \$28.28	33/26 \$52.52	28/21 \$42.42	25/19 \$38.38
Pal-Mac (\$2.43)	38/23 \$55.85	12/8 \$19.40	27/16 \$38.88	15/10 \$24.30	17/10 \$24.30	46/34 \$82.62		51/40 \$97.20	30/21 \$51.03	20/15 \$36.45	18/13 \$31.59	21/15 \$36.45
Red Crk (\$2.79)	25/19 \$53.01	49/40 \$111.60	31/25 \$69.75	37/30 \$83.70	45/32 \$89.28	11/8 \$22.32	51/40 \$111.60		25/20 \$55.80	38/32 \$89.28	33/27 \$75.33	31/25 \$69.75
Sodus (\$3.49)	25/18 \$62.82	29/22 \$76.78	22/15 \$52.35	17/11 \$38.39	24/15 \$52.35	20/14 \$48.86	30/21 \$73.29	25/20 \$69.80		17/13 \$45.37	13/8 \$27.92	10/6 \$20.94
Wayne (\$2.81)	38/30 \$84.30	11/9 \$25.29	34/28 \$78.68	15/11 \$30.91	34/23 \$64.63	33/26 \$73.06	20/15 \$42.15	38/32 \$89.92	17/13 \$36.53		10/8 \$22.48	9/7 \$19.67
Wil'sn (\$2.91)	33/25 \$72.75	17/12 \$34.92	28/18 \$52.38	4/3 \$8.73	26/19 \$55.29	28/21 \$61.11	18/13 \$37.83	33/27 \$78.57	13/8 \$23.28	10/8 \$23.28		3/2 \$5.82

*Note: Shaded cells indicate high schools within 15 miles.*

<b>Annual Local Cost of Bus Transportation for One and Two Trips to Other Schools and Return Based on 180 Days and 90% Aid First Line is Local Cost for One Trip and Return Second Line is Local Cost for Two Trips and Return</b>												
	Clyde-Sav	Gan anda	Lyons	Marion	Newark	NR-W	Pal-Mac	Red Creek	Sodus	Wayne	Will'sn	BOCES
Clyde-Sav		\$2,538 \$5,076	\$677 \$1,354	\$2,369 \$4,738	\$1,269 \$2,538	\$761 \$1,523	\$1,946 \$3,892	\$1,607 \$3,215	\$1,523 \$3,046	\$2,538 \$5,076	\$2,115 \$4,230	\$1,946 \$3,892
Gan anda	\$2,441 \$4,882		\$1,872 \$3,743	\$814 \$1,627	\$1,302 \$2,604	\$2,848 \$5,695	\$651 \$1,302	\$3,254 \$6,599	\$1,790 \$3,580	\$732 \$1,464	\$976 \$1,953	\$1,139 \$2,278
Lyons	\$665 \$1,331	\$1,913 \$3,825		\$1,331 \$2,661	\$665 \$1,331	\$1,414 \$2,827	\$1,331 \$2,661	\$2,079 \$4,158	\$1,247 \$2,495	\$2,328 \$4,657	\$1,497 \$2,994	\$1,747 \$3,493
Marion	\$3,578 \$7,159	\$1,278 \$2,556	\$2,045 \$4,090		\$2,173 \$4,345	\$3,074 \$6,149	\$1,278 \$2,556	\$3,834 \$7,668	\$1,406 \$2,812	\$1,406 \$2,812	\$383 \$767	\$639 \$1,278
Newark	\$1,080 \$2,160	\$1,152 \$2,304	\$576 \$1,152	\$1,224 \$2,448		\$1,656 \$3,312	\$720 \$1,440	\$2,304 \$4,608	\$1,080 \$2,160	\$1,656 \$3,312	\$1,368 \$2,736	\$1,224 \$2,448
NR-W	\$654 \$1,309	\$2,545 \$5,090	\$1,237 \$2,472	\$1,745 \$3,491	\$1,673 \$3,345		\$2,472 \$4,945	\$582 \$1,164	\$1,018 \$2,036	\$1,891 \$3,781	\$1,527 \$3,054	\$1,382 \$2,763
Pal-Mac	\$2,011 \$4,021	\$698 \$1,397	\$1,400 \$2,800	\$875 \$1,750	\$875 \$1,750	\$2,974 \$5,949		\$3,499 \$6,998	\$1,837 \$3,674	\$1,312 \$2,624	\$1,137 \$2,274	\$1,312 \$2,624
Red Creek	\$1,908 \$3,817	\$4,018 \$8,035	\$2,511 \$5,022	\$3,013 \$6,026	\$3,214 \$6,428	\$804 \$1,607	\$4,018 \$8,035		\$2,009 \$4,018	\$3,214 \$6,428	\$2,712 \$5,424	\$2,511 \$5,022
Sodus	\$2,262 \$4,524	\$2,764 \$5,528	\$1,885 \$3,769	\$1,382 \$2,764	\$1,885 \$3,769	\$1,759 \$3,518	\$2,638 \$5,277	\$2,513 \$5,026		\$1,633 \$3,267	\$1,005 \$2,010	\$754 \$1,508
Wayne	\$3,035 \$6,070	\$910 \$1,821	\$2,832 \$5,665	\$1,113 \$2,226	\$2,327 \$4,653	\$2,630 \$5,260	\$1,517 \$3,035	\$3,237 \$6,474	\$1,315 \$2,630		\$809 \$1,619	\$708 \$1,416
Will'son	\$2,619 \$5,238	\$1,257 \$2,514	\$1,886 \$3,271	\$314 \$629	\$1990 \$3,981	\$2,200 \$4,400	\$1,362 \$2,724	\$2,829 \$5,657	\$838 \$1,676	\$838 \$1,676		\$210 \$419

*Note: Shaded cells indicate high schools within 15 miles.*

There is little question that the amount of time that students spend on buses being transported to other sites for curriculum opportunities is an important consideration. However, from a financial standpoint, the state's reimbursement of school districts for transportation costs, usually at 90%, makes transporting students to other schools an option worth considering.

With this transportation information as background, the following options are presented.

### **1. Wayne Student Exchange**

The Wayne Student Exchange describes a program option that provides the opportunity for students to attend one or more classes in any other high school in the region. Student enrollment in Wayne County high schools is not sufficiently large to offer all of the courses usually associated with a world class education. In addition, the high school enrollments in all Wayne County school districts will be declining in the next several years. As a result, districts will be challenged to offer even their current level of student programming in the future.

In addition, there are numerous opportunities for students in Wayne County schools to earn college credit for courses that they take in high school. However, it is apparent that students in some districts have greater opportunities to earn college credits than in other districts. College credit courses can enrich a student's high school experience, serve as an incentive to keep a student in high school, and give students a head start on their college careers. For these reasons, it should be a priority to attempt to equalize the opportunities available to students across the region. It is also important to engage area college level personnel in the planning for this initiative to optimize the benefits for students. This could easily be another application of the Wayne Student Exchange program. District leaders are encouraged to develop opportunities for students to take classes in other districts.

One district might be interested in maintaining its French program, another nearby district might be interested in bringing back its German program, and another neighboring district might be interested in beginning a program in Mandarin Chinese. None of these districts on its own may have a sufficient number of students to offer its program of choice. However, by opening its doors to students from the other high schools, each high school might find sufficient student interest to provide the desired programming.

Similar examples could be developed for upper level math courses, advanced science courses, business courses, and nearly any other area where

student enrollment is limited or course offerings are less than any district might desire.

What would the Wayne student exchange program cost? In an attempt to answer that question, a model has been developed. The model assumes that students from one high school are willing to travel up to fifteen minutes each way to participate in a course in a neighboring high school. Other than agreement on the part of both the sending and host high schools, and a convenient scheduling arrangement for the student, the model must account for transportation and program costs.

Transportation costs are taken from the previously presented table. The calculation of tuition assumes that the class in which the student enrolls is one-fifth of the teacher's assignment (this teacher load proportionality varies from school to school), that the average size of such a class is twenty students, and that the teacher has fifteen years of experience with a Masters degree. Given these assumptions, tuition is calculated as though the student were the twentieth in the class (bearing one-twentieth of the class cost) and that the class is one-fifth of the teacher's assignment. This means that the per-class cost would be one one-hundredth of the teacher's compensation for that class. Total compensation in this example is calculated as the teacher's salary increased by thirty-five percent to account for fringe benefits. The course cost by district, based on these assumptions, is shown in the following table. The teacher cost/student/period is based on the one one-hundredth of the total compensation attributed to the salary.

<b>District</b>	<b>Salary at Masters with 15 Years Experience</b>	<b>Fringe Benefits @ 35%</b>	<b>Total Teacher Cost</b>	<b>Teacher Cost/Student/Period</b>
Clyde-Savannah	\$50,390	\$17,637	\$68,026	\$680
Gananda	\$51,746	\$18,111	\$69,857	\$699
Lyons	\$52,381	\$18,333	\$70,714	\$707
Marion	\$48,696	\$17,044	\$65,740	\$657
Newark	\$50,907	\$17,821	\$68,738	\$687
North Rose-Wolcott	\$54,850	\$19,198	\$74,048	\$740
Palmyra-Macedon	\$51,006	\$17,852	\$68,858	\$689
Red Creek	\$50,504	\$17,676	\$68,180	\$682
Sodus	\$62,388	\$21,836	\$84,224	\$842
Wayne	\$54,499	\$19,075	\$73,574	\$736
Williamson	\$54,000	\$18,900	\$72,900	\$729

The following table identifies those high schools within a 15-minute drive from each high school, along with the cost of transporting a student twice (at the beginning of the class and at the end) over the 180 day school year. It further includes the tuition charge per class corresponding with each of the neighboring high schools, as well as the total cost for one student. If multiple students attend the same class or another class during the same time period the total cost to the sending district would increase, and the cost per student would decrease.

<b>Cost of One Student Attending One Class in a Neighboring High School Within 15 Minutes</b>				
District	Neighboring High School Within 15 Minutes	Neighboring High School Program Charge	Bus Transportation Cost	Total
Clyde-Savannah	Lyons	\$707	\$1,354	\$2,061
	N R-W	\$740	\$1,523	\$2,263
Gananda	Marion	\$657	\$1,627	\$2,284
	Pal-Mac	\$689	\$1,302	\$1,991
	Wayne	\$736	\$1,464	\$2,200
Lyons	Clyde-Sav	\$680	\$1,331	\$2,011
	Newark	\$687	\$1,331	\$2,018
Marion	Gananda	\$699	\$2,556	\$3,255
	Pal-Mac	\$689	\$2,556	\$3,245
	Wayne	\$736	\$2,812	\$3,548
	Williamson	\$729	\$ 767	\$1,496
Newark	Lyons	\$707	\$1,152	\$1,859
North Rose-Wolcott	Clyde-Sav	\$680	\$1,309	\$1,989
	Red Creek	\$682	\$1,164	\$1,846
Palmyra-Macedon	Gananda	\$699	\$1,397	\$2,096
	Marion	\$657	\$1,750	\$2,407
Red Creek	N R-W	\$740	\$1,607	\$2,347
Sodus	Williamson	\$729	\$2,010	\$2,739
Wayne	Gananda	\$699	\$1,821	\$2,520
	Marion	\$657	\$2,226	\$2,883
	Williamson	\$729	\$1,619	\$2,348
Williamson	Marion	\$657	\$ 629	\$1,286
	Sodus	\$842	\$1,676	\$2,518
	Wayne	\$736	\$1,676	\$2,412

It should also be noted that some students may be willing to travel more than 15 minutes to enroll in a class of interest. The previous table serves only as an example of the model.

## **2. New Vision Programs**

New Vision programs are designed for students desiring an academic challenge delivered through in-depth exposure to a chosen career area. This interdisciplinary program provides students with two credits in the career and



technical/career field, as well as one credit each for English 12 and Social Studies 12. Contextualized learning is used as the instructional model. New Vision is a half-day program for high school seniors.

Wayne-Finger Lakes BOCES currently offers three New Vision programs for the students in Wayne County: Medical with 17 students, Engineering with 3 students, and Renewable Energy with 4 students. The Medical New Vision program is housed at Newark Community Hospital. The Engineering and Renewable Energy programs are both housed at the Wayne Technical and Career Center with opportunities for collaboration with area businesses.

Given the number of school districts and students in Wayne County, this very promising instructional model seems underutilized in this area. The number of New Vision programs could easily be expanded. In planning for this expansion, BOCES should be closely involved with the eleven component school districts. While a planning committee will certainly decide which programs should be offered, consideration should be given to the following programs:

- a. Law and Government---for students who are interested in pursuing post-secondary careers in the law or government fields.....located at the county office building in Newark.....rotations could include court rooms, law offices, law enforcement agencies, social services, and other governmental human services offices.

- b. Education Professions---for students who are interested in pursuing post-secondary study in the field of education.....located in one of the component school district buildings.....rotations could include elementary and secondary schools, early intervention programs, special education, administration, school finance, transportation, and food service.

- c. Business Management/Entrepreneurship---for students who are interested in pursuing post-secondary study in banking, insurance, management, finance, or business.....located in a major business in the area.....rotations could include banks, insurance companies, real estate offices, investment offices and other area businesses.

d. Communications/Radio and TV---for students who are interested in pursuing post-secondary study as a writer, reporter, English teacher, broadcaster, or TV personality.....located in one or more of the component school districts that have radio and TV studios in their high school.....visitations could include area radio and TV stations.

e. Information Technology---for students who are interested in pursuing post-secondary study as a computer program designer, website designer, computer technician, or gaming technology specialist....located in one or more component school districts....visitations could include area colleges and businesses with these specialties.

f. Green Technologies---for students who are interested in pursuing post-secondary education in the field of energy management....could be coupled with existing programs in renewable energy and wind technologies....located in one or more of the component school districts or BOCES....visitations could include area engineering firms, environmental science firms, and attorneys practicing environmental law.

g. Other areas could also be explored and might include programs in the visual and performing arts, environmental science, bioengineering, and other high tech fields.

Since all New Vision programs are comparable in instructional time and scope, the program cost is the same for all. For 2010, the New Vision program cost through BOCES is \$6,201. If other programs are added, whether located at the BOCES Career and Technical Center or at other sites within the County, their cost would also be \$6,201. However, this cost is diminished by BOCES aid at the district's BOCES aid ratio (different for each district). When applied to the New Vision program cost, the local cost diminishes dramatically. The following table demonstrates the impact that BOCES aid has on the New Vision program cost.

<b>Local Cost of BOCES New Vision Programs with a Tuition of \$6,201, Offset by BOCES Aid</b>		
District	BOCES Aid Ratio	Local Cost of New Vision Program after BOCES aid
Clyde-Savannah	85.9 %	\$ 874
Gananda	83 %	\$1,054
Lyons	83 %	\$1,054
Marion	83.5 %	\$1,023
Newark	82.3%	\$1,098
North Rose-Wolcott	76 %	\$1,488
Palmyra-Macedon	80.8 %	\$1,191
Red Creek	90 %	\$ 620
Sodus	78.9%	\$1,308
Wayne	69.3 %	\$1,904
Williamson	78.9 %	\$1,308

The following table shows both the local portion of the New Vision program cost and the local cost of transporting students to the various schools within the County. The total cost to each district for the participation of one or more students in each of the New Vision programs outside the district can easily be determined. If only one student participates in one of the New Vision programs, then the total local cost would be the sum of the two numbers provided---program and transportation costs. If multiple students participate in a New Vision program at one of the other districts, then the program cost multiplies correspondingly, but the transportation cost would remain the same.

New Vision Costs, by District, at Various Location Within the County												
Local Transportation Costs												
New Vision Cost by District After BOCES Aid, in bold												
	Clyde-Sav	Gananda	Lyons	Marion	Newark	NR-W	Pal-Mac	Red Creek	Sodus	Wayne	Wm'sn	BOCES
Cly-Sav		\$5,076 <b>\$1,183</b>	\$1,354 <b>\$1,183</b>	\$4,738 <b>\$1,183</b>	\$2,538 <b>\$1,183</b>	\$1,523 <b>\$1,183</b>	\$3,892 <b>\$1,183</b>	\$3,215 <b>\$1,183</b>	\$3,046 <b>\$1,183</b>	\$5,076 <b>\$1,183</b>	\$4,230 <b>\$1,183</b>	\$3,892 <b>\$1,183</b>
Gananda	\$4,882 <b>\$1,426</b>		\$3,743 <b>\$1,426</b>	\$1,627 <b>\$1,426</b>	\$2,604 <b>\$1,426</b>	\$5,695 <b>\$1,426</b>	\$1,302 <b>\$1,426</b>	\$6,590 <b>\$1,426</b>	\$3,580 <b>\$1,426</b>	\$1,464 <b>\$1,426</b>	\$1,953 <b>\$1,426</b>	\$2,278 <b>\$1,426</b>
Lyons	\$1,331 <b>\$1,426</b>	\$3,825 <b>\$1,426</b>		\$2,661 <b>\$1,426</b>	\$1,331 <b>\$1,426</b>	\$2,827 <b>\$1,426</b>	\$2,661 <b>\$1,426</b>	\$4,158 <b>\$1,426</b>	\$2,495 <b>\$1,426</b>	\$4,657 <b>\$1,426</b>	\$2,994 <b>\$1,426</b>	\$3,493 <b>\$1,426</b>
Marion	\$7,159 <b>\$1,384</b>	\$2,556 <b>\$1,384</b>	\$4,090 <b>\$1,384</b>		\$4,345 <b>\$1,384</b>	\$6,149 <b>\$1,384</b>	\$2,556 <b>\$1,384</b>	\$7,668 <b>\$1,384</b>	\$2,812 <b>\$1,384</b>	\$2,812 <b>\$1,384</b>	\$767 <b>\$1,384</b>	\$1,278 <b>\$1,384</b>
Newark	\$2,160 <b>\$1,485</b>	\$2,304 <b>\$1,485</b>	\$1,008 <b>\$1,485</b>	\$2,448 <b>\$1,585</b>		\$3,312 <b>\$1,485</b>	\$1,440 <b>\$1,485</b>	\$4,608 <b>\$1,485</b>	\$2,160 <b>\$1,485</b>	\$3,312 <b>\$1,485</b>	\$2,736 <b>\$1,485</b>	\$2,448 <b>\$1,485</b>
NR-W	\$1,309 <b>\$2,013</b>	\$5,090 <b>\$2,013</b>	\$2,472 <b>\$2,013</b>	\$3,491 <b>\$2,013</b>	\$3,345 <b>\$2,013</b>		\$4,945 <b>\$2,013</b>	\$1,164 <b>\$2,013</b>	\$2,036 <b>\$2,013</b>	\$3,781 <b>\$2,013</b>	\$3,054 <b>\$2,013</b>	\$2,763 <b>\$2,013</b>
Pal-Mac	\$4,021 <b>\$1,611</b>	\$1,397 <b>\$1,611</b>	\$2,799 <b>\$1,611</b>	\$1,750 <b>\$1,611</b>	\$1,750 <b>\$1,611</b>	\$5,949 <b>\$1,611</b>		\$6,998 <b>\$1,611</b>	\$3,674 <b>\$1,611</b>	\$2,624 <b>\$1,611</b>	\$2,274 <b>\$1,611</b>	\$2,624 <b>\$1,611</b>
Red Crk	\$3,817 <b>\$838</b>	\$8,035 <b>\$838</b>	\$5,022 <b>\$838</b>	\$6,026 <b>\$838</b>	\$6,428 <b>\$838</b>	\$1,607 <b>\$838</b>	\$8,035 <b>\$838</b>		\$4,018 <b>\$838</b>	\$6,428 <b>\$838</b>	\$5,424 <b>\$838</b>	\$5,022 <b>\$838</b>
Sodus	\$4,524 <b>\$3,355</b>	\$5,528 <b>\$3,355</b>	\$3,769 <b>\$3,355</b>	\$2,764 <b>\$3,355</b>	\$3,769 <b>\$3,355</b>	\$3,518 <b>\$3,355</b>	\$5,277 <b>\$3,355</b>	\$5,026 <b>\$3,355</b>		\$3,267 <b>\$3,355</b>	\$2,010 <b>\$3,355</b>	\$1,508 <b>\$3,355</b>
Wayne	\$6,070 <b>\$3,355</b>	<b>\$1,821</b> <b>\$3,355</b>	\$5,665 <b>\$3,355</b>	\$2,226 <b>\$3,355</b>	\$4,654 <b>\$3,355</b>	\$5,260 <b>\$3,355</b>	\$3,035 <b>\$3,355</b>	\$6,474 <b>\$3,355</b>	\$2,630 <b>\$3,355</b>		\$1,619 <b>\$3,355</b>	\$1416 <b>\$3,355</b>
Wm'son	\$5,238 <b>\$1,770</b>	\$2,514 <b>\$1,770</b>	\$3,271 <b>\$1,770</b>	\$629 <b>\$1,770</b>	\$3,981 <b>\$1,770</b>	\$4,400 <b>\$1,770</b>	\$2,724 <b>\$1,770</b>	\$5,657 <b>\$1,770</b>	\$1,676 <b>\$1,770</b>	\$1,676 <b>\$1,770</b>		\$419 <b>\$1,770</b>

*Note: Shaded cells indicate high schools within 15 miles.*

### **3. Thematic High School Programs**

For purposes of this study, thematic high school programs refer to instructional program emphases or upper-level courses within an individual high school, not those under the BOCES New Vision umbrella. These include, but are not limited to, courses for Advanced Placement, International Baccalaureate, and Project Lead the Way. All three of these opportunities currently exist for some of the students in Wayne County:

*Advanced Placement Courses*-Gananda, Wayne, Williamson, Newark,  
North Rose-Wolcott, and Palmyra-Macedon

*International Baccalaureate*- Palmyra-Macedon and Wayne

*Project Lead the Way*- Gananda, Lyons, Wayne, Palmyra-Macedon, and  
Williamson

The challenge is how to expand these offerings and make them available to a larger segment of the student population in Wayne County.

The visitations made by the consultants in late September and early October gave emphasis to “theme” possibilities other than those mentioned previously. A “theme” program was described as an instructional program of three to four periods per day within an individual high school. The theme would exist for those students within that high school, but would also be available to students from other high schools. The academic schedules of high school freshmen and sophomores are usually packed with courses which are required for graduation. As a result, elective themes would most probably be oriented toward juniors and seniors. On the other hand, for example, it might be possible to develop an arts/humanities theme that could apply to all four high school grades.

During the visitation discussions, students, staff, and community offered suggestions/preferences for possible high school themes. The following themes were proposed, along with the number of times they were proposed.

<b><u>Themes</u></b>	<b><u>Frequency of Proposal</u></b>
Arts	6
Communications/Radio &TV	5
Math/Science/Technology	5
Project Lead The Way	5
Business Careers/Young Entrepreneurs Academy	4
Advanced Placement	3
Medical and Health Services	2
Humanities	2
Aquatic Biology	1
Languages: Chinese, American Sign Language	1
Engineering/Architecture	1
Alternative Energy	1
Wine Agriculture	1
Gaming Technology	1
Bioengineering	1
Environmental Science	1

There are many details that would need to be worked out in order to expand these very attractive offerings. School district bell schedules, financing arrangements, building logistics, and transportation will be just some of the issues that need to be resolved. However, the following are offered as beginning discussion points for this topic of the Wayne student exchange:

- a. Student enrollment is insufficient to offer these specialized programs in each high school;
- b. It has been made consistently clear to the consultants that building new facilities for collaborative programming is not an attractive option for Wayne County schools;

- c. Most of the transportation is equal to or less than the transportation that currently exists for students to get to and from BOCES. The table presented in the introduction of options is repeated here as information; and
- d. Given the state aid formula for student transportation in New York State, buying additional buses and hiring additional bus drivers might be the most cost effective way to expand programming for students.

<b>Distances Among High Schools</b> <b>The first number in each cell is the number of minutes.</b> <b>The second number in each cell is the number of miles.</b> <b>Shaded cells show districts that are 15 minutes or less apart.</b>												
<i>MIN/ MIL</i>	Cly-Sav	Gan- anda	Lyo- ns	Mar- ion	New- ark	NR- W	Pal- Mac	Red Crk	Sod- us	Way- ne	Will'- son	BOC- ES
Clyde-Sav		48/ 30	13/ 8	37/ 28	26/ 15	13/ 9	38/ 23	25/ 19	25/ 18	38/ 30	33/ 25	30/ 23
Gan- anda	48/ 30		36/ 23	15/ 10	26/ 16	44/ 35	12/ 8	49/ 40	29/ 22	11/ 9	17/ 12	21/ 14
Lyons	13/ 8	36/ 23		25/ 16	14/ 8	23/ 17	27/ 16	31/ 25	22/ 15	34/ 28	28/ 18	27/ 21
Marion	37/ 28	15/ 10	25/ 16		23/ 17	32/ 24	15/ 10	37/ 30	17/ 11	15/ 11	4/ 3	8/ 5
Newark	26/ 15	26/ 16	14/ 8	23/ 17		35/ 23	17/ 10	45/ 32	24/ 15	34/ 23	26/ 19	27/ 17
NR-W	13/ 9	44/ 35	23/ 17	32/ 24	35/ 23		46/ 34	11/ 8	20/ 14	33/ 26	28/ 21	25/ 19
Pal- Mac	38/ 23	12/ 8	27/ 16	15/ 10	17/ 10	46/ 34		51/ 40	30/ 21	20/ 15	18/ 13	21/ 15
Red Creek	25/ 19	49/ 40	31/ 25	37/ 30	45/ 32	11/ 8	51/ 40		25/ 20	38/ 32	33/ 27	31/ 25
Sodus	25/ 18	29/ 22	22/ 15	17/ 11	24/ 15	20/ 14	30/ 21	25/ 20		17/ 13	13/ 8	10/ 6
Wayne	38/ 30	11/ 9	34/ 28	15/ 11	34/ 23	33/ 26	20/ 15	38/ 32	17/ 13		10/ 8	9/ 7
Wil'sn	33/ 25	17/ 12	28/ 18	4/ 3	26/ 19	28/ 21	18/ 13	33/ 27	13/ 8	10/ 8		3/ 2
BOCES	30/ 23	21/ 14	27/ 21	8/ 5	27/ 17	25/ 19	21/ 15	31/ 25	10/ 6	9/ 7	3/ 2	

To provide a framework for themed programs, some assumptions are made. First, each high school in the county would have the opportunity to develop a theme which could be made available to all students within the county. However, if some high schools decline this opportunity, then a consortium of those who choose to do so could exist on a more limited basis, but with a similar, although diminished impact.

Second, a theme program would typically have a three consecutive period duration in the daily schedule. This is a starting assumption for the sake of a framework. Clearly, a theme could be longer or shorter than three periods.

Third, Advanced Placement courses, International Baccalaureate, and Project Lead the Way are generally not eligible for BOCES aid. The one exception to the BOCES aid restriction is that a BOCES itinerant teacher could offer Advanced Placement courses and, as a shared teacher, BOCES aid would be available. The cost for a three period themed program is suggested as three times the open enrollment cost, by district, as presented in Option 1, Wayne Student Exchange. The following table shows the corresponding costs for themed programs hosted by each high school, based on the assumptions above.

<b>District</b>	<b>Cost per class period, by district</b>	<b>Cost per themed program by district</b>
Clyde-Savannah	\$680	\$2,040
Gananda	\$699	\$2,097
Lyons	\$707	\$2,121
Marion	\$657	\$1,971
Newark	\$687	\$2,061
North Rose-Wolcott	\$740	\$2,220
Palmyra-Macedon	\$689	\$2,067
Red Creek	\$682	\$2,046
Sodus	\$842	\$2,526
Wayne	\$736	\$2,208
Williamson	\$729	\$2,187



Several points should be made at this juncture in the review of “theme” programs. First, with declining enrollment looming, both shared themes and New Vision programs become cost effective, assuming the district wishes to maintain a quality, even world class, curriculum for its students.

Second, like open enrollment classes, themed program costs may well be generalized across multiple districts---a foundation of BOCES programs themselves. If this is a plausible approach, an average cost for each program could be developed for any format of programming. Going it alone in a declining enrollment environment will result in diminished class enrollment, fewer student options, and increased cost. A themed approach mitigates all factors.

Third, the program cost in this example is an initial starting point. It is relatively consistent with the local cost for participation in a New Vision half-day program. The following table shows the comparison.

<b>District</b>	<b>Cost per themed program by district</b>	<b>Local cost of New Vision programs by district</b>
Clyde-Savannah	\$2,040	\$874
Gananda	\$2,097	\$1,054
Lyons	\$2,121	\$1,054
Marion	\$1,971	\$1,023
Newark	\$2,061	\$1,098
North Rose-Wolcott	\$2,220	\$1,488
Palmyra-Macedon	\$2,067	\$1,191
Red Creek	\$2,046	\$ 620
Sodus	\$2,526	\$1,308
Wayne	\$2,208	\$1,904
Williamson	\$2,187	\$1,308
Average	\$2,140	\$1,175

Themed programs are viable options for school districts facing declining enrollment and a financially challenging future. The themed programs presented here are high quality programs. Finding a way to collaborate to develop programs, equalize opportunities for students, and share costs will be

the challenge. However, if the challenge is met, these programs hold great promise for students of the future.

#### **4. E-learning Option**

E-learning is an emerging term that is being used to describe student learning through a digital medium. High schools that are focused on providing more coursework to students electronically are sometimes referred to as virtual high schools. E-learning can be divided into the following two types of course delivery:

a. *On-line courses*-designed to be taken on a self-paced schedule, these courses can be accessed and completed by students anywhere and anytime. While this type of learning is not for everyone, it is utilized in some Wayne County high schools. Currently, there are a number of applications that might enhance student learning opportunities. These include credit recovery, homebound students, electives, and low enrollment classes.

b. *Distance learning*-designed to have students at various locations take the same course at the same time through the use of technology. Distance learning has been delivered for the past twenty years through specially designed labs in high schools that were very costly to install. This method of delivery is rapidly being replaced by specially equipped moveable carts which are rolled in and out of classrooms as needed.

Accelerate-U from Wayne-Finger Lakes BOCES is a form of online learning. Currently, the following nineteen students are participating in Accelerate-U from Wayne County schools.

Gananda-4 students  
Marion-1 student  
North Rose-Wolcott-2 students  
Wayne-1 student  
Williamson-11 students

The following are the courses that Wayne County students are taking through Accelerate-U.

- Beginning Composition-English 12
- Pre-Calculus
- Health
- Music Appreciation
- English 9
- Coastal Ecology
- Anthropology
- Marketing
- American History
- Career Planning
- Consumer Math

There are numerous online courses that are currently available through the Oneida-Madison-Herkimer BOCES in Utica. The cost for a one semester class is \$450. The cost for a full year class is \$850.

The expensive, space consuming distance learning labs of the past twenty years are rapidly being replaced by portable “electronic learning” systems. These rolling carts are equipped with large flat screen TV’s and related technology that allow a teacher to communicate with students in multiple classrooms in multiple locations and to see and hear each other in real time. There are also many distance learning courses that are currently being offered by the Oneida-Herkimer-Madison BOCES. One of the more innovative distance learning applications through Oneida-Herkimer-Madison BOCES is the Mandarin Chinese courses which are taught to many students from thirteen school districts in the Utica area. In addition to Mandarin Chinese, distance learning courses are also being taught through the Oneida BOCES in American Sign language, Business Law, Psychology, and French 5. Beyond these currently existing courses, the additional possibilities are numerous. Should the school districts in Wayne County choose to pursue some of these course offerings, the Wayne-Finger Lakes BOCES could begin this as a new service or could contract with the Oneida-Herkimer-Madison BOCES on behalf of its component school districts.

The portable, large flat-screen electronic learning systems, with related technology are currently available from two companies, Tandbery and POLYCOM. Both perform at essentially the same level and are available on the State purchasing contract. Since the POLYCOM systems are somewhat less costly, they are used in this analysis. A POLYCOM teaching station costs approximately \$17,000; a receiving station costs approximately \$13,000. If this equipment is purchased as part of a BOCES E-learning service, the equipment and other costs related to this delivery method could be eligible for BOCES aid.

In creating a model for this E-learning option, we have assumed that each high school would serve both as a host site for course transmission as well as a receiving site. Transmission districts would have their students sitting in the classroom where the teacher is teaching the course; receiving districts would have their students sitting in their high schools receiving the course electronically. To illustrate the viability of this distance learning arrangement, a model is provided that identifies one current upper-level course to be transmitted from each high school to other districts in Wayne County. The model incorporates 2009-10 courses available in the eleven Wayne County high schools. If, in the future, the Wayne County schools choose to expand offerings, a totally different menu of courses may be offered.

<b>Host High School</b>	<b>AP or College Credit Course</b>
Clyde-Savannah	Global Environmental Science (ESF)
Gananda	AP English Literature & Composition
Lyons	Calculus I (FLCC)
Marion	Sociology (FLCC)
Newark	AP Psychology
North Rose-Wolcott	Economics (FLCC)
Palmyra-Macedon	AP American History
Red Creek	Statistics (CCC)
Sodus	Spanish V (CCC)
Wayne	AP English Language & Composition
Williamson	AP European History

*ESF=Environmental School of Forestry*  
*FLCC=Finger Lakes Community College*  
*CCC=Cayuga Community College*

This course listing exemplifies the significance of distance learning in at least two ways. First, while only identifying one current upper-level course for which each high school could serve as the host, it exposes the broad base of course opportunities for all students in Wayne County. Advanced Placement courses become available to all.

Second, to maintain the quality of curricular offerings with declining enrollment, there is a significant financial advantage associated with distance learning. For example, a high school of 400 would usually have 4 English, 4 social studies, 4 math, and 4 science teachers. If, in the next five years, the enrollment decreases by 25%, as is projected in some of the Wayne County schools, then the “model” high school would have 300 students. Typically a high school of this size would include 3 English, 3 social studies, 3 math, and 3 science teachers, a decrease of one teacher per academic department. Further, a 400 student high school could offer five to seven Advanced Placement courses. A high school of 300 students might not be able to sustain those Advanced Placement courses. An earlier section of this study confirms that with a population of 400 students Advanced Placement courses are common, yet with high schools of less than 325, none provides an Advanced Placement course.

For this “model” high school, now at 300 students, to offer Advanced Placement courses in 2014-15, it might have to add a 0.2 teacher in English, a 0.2 teacher in social studies, a 0.2 teacher in math, and a 0.2 teacher in science, in order to provide an Advanced Placement course in each of these academic areas. Using \$52,750 as an average salary for a Masters degree teacher with fifteen years experience, (the average within the County), and fringe benefits at 35%, a full time teacher would cost a district \$71,216. The four 0.2 teachers would equal a .8 teacher and would cost the district \$56,973.

If, instead, the district participated in a BOCES distance learning consortium, its costs would be dramatically lower. We assume seven students per distance learning class, bringing the total number of students enrolled in the four classes (one per academic area) to twenty-eight.

The “model” cost calculation assumes that the district would annually purchase one POLYCOM flat screen television with camera through BOCES. The unit purchased in each successive year would serve as an additional unit or as a replacement unit. The current cost of a POLYCOM television with camera is approximately \$17,000. If the district’s BOCES aid ratio is 80% (the approximate average for the eleven Wayne County school districts), the purchase of a POLYCOM flat screen television with camera would be offset by 80% of the cost in BOCES aid received in *the following school year*. In this case the district would receive \$13,600 in BOCES aid the following year. If the district was to use this \$13,600 in BOCES aid as a revenue source for the purchase of an additional \$17,000 unit, the district could purchase this additional unit at a net cost of \$3,400. Continuing to roll over BOCES aid as an annual revenue source, the district can continue to keep state of the art technology as a relatively moderate annual cost. Given the 28 students involved in this example, the purchase of one POLYCOM flat screen television with camera per year is sufficient, since each unit can be relocated from room to room.

Beyond the technology cost, the current BOCES charge for participation per student ranges between \$500 and \$1,000. For this example, \$750 is used.

Accordingly, the total participation cost for the twenty-eight students would be \$21,000. This again is offset by the 80% BOCES aid, bringing the local cost for the participation of 28 students to \$4,200.

In addition to acquiring the technology and the per student participation cost, there is a \$12,000 annual BOCES program participation cost per district. This charge is also eligible for BOCES aid resulting in local cost (at 80%) of \$2,400. Assuming that the district also serves as a host site for another Advanced Placement course each year, it receives a stipend from BOCES of \$1,000 for providing the class. Lastly, the example includes a local cost for supervising the students while they are in the distance learning environment. For this example, we assume supervision is provided by a teaching assistant, at an estimated cost for the four periods of supervision of \$12,150 (assuming a base salary of \$18,000, 35% in benefits, and one half-day of the teaching assistant's assignment). Supervision may include basic supervision of one or more students participating in a distance learning course or ancillary support for a student with a disability. For purposes of the financial model, we are also assuming that the cost of the teaching assistant is not eligible for BOCES aid reimbursement.

The total cost for providing the four Advanced Placement courses to the 28 students via distance learning is illustrated in the table that follows.

<b>Item</b>	<b>Annual Expenditure</b>	<b>Annual Local Cost, after 80% BOCES Aid</b>
POLYCOM cart	\$17,000	\$3,400
Participation of 28 students @ \$750	\$21,000	\$4,200
BOCES Program Charge	\$12,000	\$2,400
Local Supervision	\$12,150	\$12,150
Total	\$62,150	\$22,150
Total, minus \$1,000	\$61,150	\$21,150

This net cost of \$21,150 compares most favorably to the \$56,960 cost for providing the 0.2 teachers in each of the four academic areas. Moreover, it

clearly demonstrates the cost effectiveness through collaboration that can be achieved by the Wayne County high schools in the future as they seek to maintain the quality of their instructional program while facing declining enrollment. Again, it should be remembered that BOCES aid follows the year after the service is purchased so that it is incumbent on the district to generate the full cost of the program in its first year of operation.

Finally, once distance learning is made available in a high school there is no limit to the course opportunities, thereby significantly enhancing the learning opportunities for students. The addition of other distance learning opportunities in a district becomes even more cost effective. Since the BOCES program charge is only paid once per year and since the POLYCOM cart has the capability to serve several classrooms in a day, adding more courses is an attractive, cost effective option. Additional courses can be added for only the local cost of \$150 per student (20% of \$750), and the supervision cost for each course.

It should be noted that this calculation is based upon supervision of the four distance learning courses by a teaching assistant with a base salary of \$18,000. It is important to note that each district would have a different base salary for teaching assistants. Moreover, it may be possible for the district to find an alternative to supervision by the teaching assistant and reduce the local costs even further. One example might be to engage a teacher during a “duty assignment” such as a study hall, which only requires supervision without instruction by the teacher. In such cases, the net local cost to the district for the four distance learning classes would be reduced by the \$12,150 teaching assistant cost, from \$21,150 to \$9,000, demonstrating considerable cost-effectiveness.

The following tables show the distance learning costs per district based on four-fifths of the total compensation of a teacher in each district with fifteen years experience and a Masters degree, seven participating students in four distance learning classes, and the individual BOCES aid ratio for the district. It also assumes that the supervision arrangement and cost are at the district’s



discretion. The table therefore displays two variations of supervision: one with supervision at no additional cost and another with a teaching assistant.

<b>Clyde-Savannah</b>		
Teacher Cost for 4 Classes		\$54,422
Distance Learning Item	Annual Expenditure	Annual Local Cost, After 85.9% BOCES aid
POLYCOM cart	\$17,000	\$ 2,397
Participation of 28 students @ \$750	\$21,000	\$ 2,961
BOCES Program Charge	\$12,000	\$ 1,692
Subtotal	\$50,000	\$ 7,050
Host revenue	(\$1,000)	(\$1,000)
Total Cost without a TA	\$49,000	\$ 6,050
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$18,200

<b>Gananda</b>		
Teacher Cost for 4 Classes		\$55,886
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 83% BOCES aid
POLYCOM cart	\$17,000	\$2,890
Participation of 28 students @ \$750	\$21,000	\$3,570
BOCES Program Charge	\$12,000	\$2,040
Subtotal	\$50,000	\$8,500
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,500
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$19,150

<b>Lyons</b>		
Teacher Cost for 4 Classes		\$55,491
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 83% BOCES aid
POLYCOM cart	\$17,000	\$2,890
Participation of 28 students @ \$750	\$21,000	\$3,570
BOCES Program Charge	\$12,000	\$2,040
Subtotal	\$50,000	\$8,500
Host revenue	(1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,500
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$19,650

<b>Marion</b>		
Teacher Cost for 4 Classes		\$52,592
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 83.5% BOCES aid
POLYCOM cart	\$17,000	\$2,805
Participation of 28 students @ \$750	\$21,000	\$3,465
BOCES Program Charge	\$12,000	\$1,980
Subtotal	\$50,000	\$8,250
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,250
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$19,400

<b>Newark</b>		
Teacher Cost for 4 Classes		\$54,979
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 82.3% BOCES aid
POLYCOM cart	\$17,000	\$3,009
Participation of 28 students @\$750	\$21,000	\$3,717
BOCES Program Charge	\$12,000	\$2,124
Subtotal	\$50,000	\$8,850
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,850
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$20,000

<b>North Rose-Wolcott</b>		
Teacher Cost for 4 Classes		\$59,238
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 76% BOCES aid
POLYCOM cart	\$17,000	\$4,080
Participation of 28 students @ \$750	\$21,000	\$5,040
BOCES Program Charge	\$12,000	\$2,880
Subtotal	\$50,000	\$12,000
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$11,000
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$23,150

<b>Palmyra-Macedon</b>		
Teacher Cost for 4 Classes		\$55,086
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 80.8% BOCES aid
POLYCOM cart	\$17,000	\$3,264
Participation of 28 students @ \$750	\$21,000	\$4,032
BOCES Program Charge	\$12,000	\$2,304
Subtotal	\$50,000	\$9,600
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$8,600
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$20,750

<b>Red Creek</b>		
Teacher Cost for 4 Classes		\$54,544
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 90% BOCES aid
POLYCOM cart	\$17,000	\$1,700
Participation of 28 students @ \$750	\$21,000	\$2,100
BOCES Program Charge	\$12,000	\$1,200
Subtotal	\$50,000	\$5,000
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$4,000
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$16,150

<b>Sodus</b>		
Teacher Cost for 4 Classes		\$67,379
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 78.9% BOCES aid
POLYCOM cart	\$17,000	\$3,587
Participation of 28 students @ \$750	\$21,000	\$4,431
BOCES Program Charge	\$12,000	\$2,532
Subtotal	\$50,000	\$10,550
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$ 9,550
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$21,700

<b>Wayne</b>		
Teacher Cost for 4 Classes		\$58,859
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 69.3% BOCES aid
POLYCOM cart	\$17,000	\$5,219
Participation of 28 students @ \$750	\$21,000	\$6,447
BOCES Program Charge	\$12,000	\$3,684
Subtotal	\$50,000	\$15,350
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$ 14,530
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$26,680

<b>Williamson</b>		
Teacher Cost for 4 Classes		\$58,320
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 78.9% BOCES aid
POLYCOM cart	\$17,000	\$3,587
Participation of 28 students @ \$750	\$21,000	\$4,431
BOCES Program Charge	\$12,000	\$2,532
Subtotal	\$50,000	\$10,550
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$ 9,550
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$21,700

The previous eleven charts clearly point out the advantages of collaborative programming through BOCES using E-learning. Instructional opportunities for students are clearly enhanced. Financial advantages are also significant and can be summarized in the following table:

<b>District</b>	<b>Teacher Cost for 4 Classes</b>	<b>Annual Cost without a TA</b>	<b>Annual Cost with a TA</b>
Clyde-Savannah	\$54,422	\$6,050	\$18,200
Gananda	\$55,886	\$7,500	\$19,650
Lyons	\$55,491	\$7,500	\$19,650
Marion	\$52,592	\$7,250	\$19,400
Newark	\$54,979	\$7,850	\$20,000
North Rose-Wolcott	\$59,238	\$11,000	\$23,150
Palmyra-Macedon	\$55,086	\$8,600	\$20,750
Red Creek	\$54,544	\$4,000	\$16,150
Sodus	\$67,379	\$9,550	\$21,700
Wayne	\$58,859	\$14,530	\$26,680
Williamson	\$58,320	\$9,550	\$21,700

### **5. Alliance High School**

Many students do not see the relevance of their high school education. They don't understand why they have to learn many of the things educators ask them to learn. They desire a hands-on, meaningful, relevant learning experience and they do not see their local high schools providing that type of program. Some want to be engaged in a career field from their first year in high school....others don't want to wait until their junior year to access a career and technical education course at BOCES.

For this reason, the Wayne County school districts should investigate the possibility of creating a four year "regional high school" at the current BOCES campus in Williamson. To distinguish this program option from a regional high school based on the consolidation of component high schools, it is termed "Alliance High School." Such a school, operated under the aegis of BOCES, would offer a full-day, four year program for students that would result in them achieving a high school diploma. Students would be required to achieve the

same course and credit requirements that are currently in place for all other high school students. The difference is that the learning in the Alliance High School would be hands-on, contextualized, connected to the area world of work, and project based.

Capital Region BOCES and Questar BOCES in the Albany area have recently created Tech Valley High School for the students in that two BOCES region. We propose replicating the Tech Valley model in Wayne County but rather than having a high tech orientation, the Wayne County Regional High School would have an orientation toward the health careers.

We base our model of a health careers Alliance High School on a number of factors. Given the aging population of the United States, it is clear that the number of jobs in the health care field will continue to grow substantially. In addition, the Department of Labor has recently completed occupational projections through 2014. Of the four occupations expected to grow the most over the next five years, health related positions make up three of those occupations as illustrated in the following table.

<b>Rank</b>	<b>Title</b>	<b>2004</b>	<b>2014</b>	<b>Change</b>	<b>Annual Growth</b>
1	Home Health Aides	6,100	7,980	1,880	188
2	Teacher Assistants	10,860	11,950	1,090	109
3	Nurse Aides/Orderlies/Attendants	6,990	7,910	920	92
4	Personal/Home Care Aides	3,980	4,840	860	86

Clearly many new jobs in the health careers field will be created in the Finger Lakes region in the next five years. While we believe that there is ample justification for an Alliance High School with a health careers focus, health is simply used as an illustrative model for purposes of discussion. The high school could have any career focus that leaders in the area deem appropriate. The structure and learning environment of the high school are far more important than the career focus for this approach.

Students attending the four year high school at BOCES are young adults who would like to be a doctor, a nurse, a therapist, or a hospital administrator. Students would still have to accumulate four English credits....but these students would be reading, writing, and speaking about issues related to the health field. Students would still have to accumulate four credits of social studies....but they would be researching issues related to the health field. Participation in Government students might be actively engaged in the current debate about national health care policy.

Furthermore, this contextualized learning would not take place in teacher centered classes that meet for 40 minutes every day in discrete subject areas. Rather, the learning would take place with the teachers acting as leaders, mentors, and coaches in defining projects related to the student learning and assisting the students to complete those projects. Hands-on laboratory learning experiences would permeate the school. Job shadowing, work experiences and community service would be generally accepted ways to acquire real world learning experiences and high school credits. Working in teams, using technology to access information, solving problems, and interacting with health care customers and professionals would provide the model opportunity for students to acquire 21<sup>st</sup> century skills.

The model assumes that, at full operation, the program would have 100 students in grades 9–12 and would be housed at the BOCES Wayne Career and Technical Campus. Correspondingly, the model includes the following staffing.

- 1.0 English teacher
- 1.0 Social studies teacher
- 1.0 Math teacher
- 1.0 Science teacher
- 1.0 Health teacher
- 1.0 Special education teacher
- 0.5 Physical education teacher
- 0.5 Art teacher

0.5 Language Other Than English teacher

1.0 Principal

1.0 Secretary

0.5 Custodian

In addition, the budget would include \$67,800 for operation and maintenance costs associated with the program's location at the Technical Center, \$50,000 for equipment, \$25,000 for consulting services related to the health services field, \$10,000 for annual curriculum development, \$10,000 for supplies, \$5,000 for certified substitutes, \$1,000 for non-certified substitutes, \$5,000 for field trips, as well as liability insurance, and the customary technology assistance services within the BOCES system. The aforementioned costs were established in conjunction with the Wayne-Finger Lakes BOCES staff. They assume a program that has been in operation for a number of years, and thus do not include start-up costs.

Salary and supplemental benefit calculations are based on a Wayne-Finger Lakes BOCES teacher with fifteen years experience, a Masters degree, and thirty-six graduate credits. Accordingly, the program would operate with a budget of \$966,975, and the tuition would be \$9,670.

It is important to recall the offset of BOCES program aid. Consistent with previous tables, the following table shows the local net cost per student by district.



<b>Cost of Regional High School-Tuition of \$9,670</b>		
District	BOCES Aid Ratio	Local Cost after BOCES aid
Clyde-Savannah	85.9 %	\$1,363
Gananda	83 %	\$1,644
Lyons	83 %	\$1,644
Marion	83.5 %	\$1,596
Newark	82.3%	\$1,712
North Rose-Wolcott	76 %	\$2,321
Palmyra-Macedon	80.8 %	\$1,857
Red Creek	90 %	\$967
Sodus	78.9 %	\$2,040
Wayne	69.3 %	\$2,969
Williamson	78.9 %	\$2,040

Beyond the tuition, there is no additional cost, since each district already transports students to the Career and Technical Education Center at BOCES. It should also be noted that the amount of BOCES aid is somewhat overstated in the chart above. There is a cap on the amount of an individual's salary that is eligible for BOCES aid. That cap currently stands at \$30,000. Not knowing the BOCES salary structure prevents us from being more specific about the aid reduction but we believe it important to note that such a limitation does exist.

The second compelling dimension of this option is that students retain their identity with their home school. After participation in the program during the academic day, students return to their home school for after school activities. They graduate from their home school in the home school ceremony with a home school diploma. Accordingly, this option provides a regional high school program for students, while maintaining home school affiliation for the students.

## Bell Schedules

It is a fundamental finding of this study that sharing between school districts will be the norm in the future. Given the declining enrollment projections, the desire to provide students with a world class education, and the financial pressures to control taxes, sharing is a must.

Sharing is not easy. Regardless of the model used, shared student programming takes a great deal of planning and commitment from the districts involved to do the best they can for their students. One of the major obstacles to collaborative student programming is time. If teachers are being moved to students, the amount of travel time for teachers must be minimized. If students are being moved to programs, the amount of travel time for students must be minimized. In addition, however, there is another time challenge...the time at which programming is offered.

We have examined the bell schedules for all eleven districts in the study and have presented those data in the following chart. The importance of this analysis is to determine the starting and ending times of teaching periods. If two districts plan to collaborate on a distance learning opportunity for any given period, their bell schedules for that period must be somewhat compatible. If students take classes in other districts, the bell schedules must be similar enough to allow the student to travel back and forth and still have the time to accumulate all necessary credits. In short, the table which follows is a critical part of the sharing puzzle for the future.

## Bell Schedules

	C-S	Gan (1)	Lyons	Mar	New	NR-W (1)	Pal- Mac (1)	Red Crk (3)	Sod	Way (1)	Wm'sn
Start of period 1 (Length)	7:47 (48)	8:04 (84)	7:57 (43)	7:25 (44)	7:30 (44)	7:20 (40)	7:45 (85)	7:47 (91)	7:40 (44)	7:50 (89)	7:46 (41)
Start of period 2 (Length)	8:39 (41)	9:32 (84)	8:43 (43)	8:12 (44)	8:24 (44)	8:17 (75)	9:15 (85)	9:22 (88)	8:28 (41)	9:24 (44)	8:31 (39)
Start of period 3 (Length)	9:24 (41)	11:00 (2) (108)	9:29 (43)	8:59 (44)	9:12 (44)	9:36 (75)	10:45 (2) (60)	10:54 (2) (120)	9:13 (41)	10:13 (43)	9:32 (4) (39)
Start of period 4 (Length)	10:09 (41)	12:52 (80)	10:15 (43)	9:46 (44)	10:00 (44)	10:55 (2) (75)	12:20 (25)	12:58 (85)	9:58 (41)	11:01 (2) (82)	10:15 (39)
Start of period 5 (Length)	10:54 (41)		11:01 (43)	10:33 (44)	10:48 (2) (44)	11:29 (2) (75)	12:50 (85)		10:43 (2) (41)	11:32 (2) (82)	10:58 (39)
Start of period 6 (Length)	11:39 (41)		11:47 (2) (43)	11:20 (2) (44)	11:36 (2) (44)	12:48 (78)			12:02 (2) (41)	1:02 (81)	11:41 (39)
Start of period 7 (Length)	12:24 (41)		12:17 (2) (43)	11:51 (2) (44)	12:24 (2) (44)	2:10 (45)			12:47 (41)		12:24 (39)
Start of period 8 (Length)	1:09 (41)		1:03 (43)	12:38 (44)	12:58 (44)				1:32 (41)		1:07 (39)
Start of period 9 (Length)	1:54 (41)		1:49 (43)	1:25 (44)	1:46 (44)				2:16 (41)		1:50 (40)
Start of period 10 (Length)	2:38 (37)			2:12 (41)							2:33 (27)

(1)-Alternate Day      (2)-Includes lunch periods      (3)-Semestered      (4)-DEAR from 9:10-9:28

In analyzing this table, many complicating factors become readily apparent:

1. No two of the 11 high schools in Wayne County have common class schedules.
2. Red Creek is the only district with a semestered schedule.
3. Gananda has a block schedule, with 84 minute blocks throughout the day.
4. North Rose-Wolcott, Palmyra-Macedon, and Wayne have modified block schedules. North Rose-Wolcott starts and ends the day with

40 and 45 minute periods, respectively, while their blocks are 75 minutes in length. Palmyra-Macedon has 85 minute blocks, with 60 minute and 25 minute periods between the 2<sup>nd</sup> and 3<sup>rd</sup> blocks. Wayne has blocks of 89, 82, 82, and 81 minutes, with 44 and 43 minutes periods between the first and second blocks.

5. Five of the remaining six schools (Clyde-Savannah, Lyons, Marion, Newark, and Sodus) have consistent length periods throughout the day, varying from 41 to 44 minutes.
6. Williamson has a consistent 39 minute period schedule, except during 2<sup>nd</sup> period where everyone “Drops Everything And Reads” for 20 minutes.
7. Of the 6 schools with the standard period schedules, class starting times in the morning vary from 7:20 at Marion to 7:57 at Lyons.
8. Marion’s starting time of 7:20 causes its period schedule to be out of sync with every other school on the period schedule. If it delayed its first period by 12 minutes its schedule would reasonably match that of Newark.

There are two basic options for sharing instruction on a period by period basis between two or more schools. The first is transporting students to a nearby school for the purpose of taking one or more specific classes. This option is simple from the standpoint of instruction, because the student is transported to and from the other school, and receives “in person” instruction in the classroom. The drawback is lost instructional time while in transport. This drawback may be minimized by scheduling the shared classes around lunch periods, with the students eating lunch on the bus. This drawback also may be minimized when these classes are scheduled at the beginning or end of the day. In these cases, varying starting times in the morning is advantageous.

The second option is distance learning, utilizing specific times during the day when class schedules between schools are closely matched, and intentionally and cooperatively, scheduling shared classes at those times.

It is clear that there are creative ways to minimize the barriers that these dramatically different bell schedules cause. However, there are also limits to this creativity. Left unchanged, the current high school schedules will always be a major factor that will inhibit sharing. We believe that serious

consideration must be given to developing a county-wide bell schedule that is not necessarily exactly the same from district to district but is one that is much more alike than different. Should this “common” schedule be developed, many more shared opportunities for students will become available. We understand that this is a major undertaking but one that we believe will pay significant dividends for the students in the future.

## Extra-Curricular Activities

The involvement of students in extra-curricular activities is an important aspect of any school district. Extra-curricular activities play an important role in supplementing the instructional program by allowing students the opportunity to expand their horizons of learning and to showcase talents they possess in areas other than in the classroom. Research has consistently shown that students who are involved in extra-curricular activities have a greater likelihood of being successful in school. These students also have a greater probability of completing their school experience and acquiring a high school diploma.

The availability of extra-curricular opportunities for students increases as the size of the school increases. There are more clubs and other activities in which students can participate in a larger district than in a smaller district. On the other hand, while opportunities to participate are greater in a larger district, the competition to participate in any single activity will also increase.

For purposes of this study, we have divided extra-curricular activities into two groups, athletics and clubs. Athletic participation is shown in the following tables for fall, winter and spring participation.

## Athletic Participation for 2008-09 (Fall Sports)

	C-S	GAN	LYO	MAR	NEW	NR-W	P-M	RC	SOD	WAY	WIL
Boys Soccer-MOD-A		15		18	21	12	14	17	26	14	18
Boys Soccer-MOD-B		14				13	16			14	14
Boys Soccer-JV		13		19	16	18	16	19	18	24	24
Boys Soccer-VAR		20		18	19	15	23	19	21	19	22
Football-VAR	31		16		27		22			25	
Football-JV	28		20		39		23			23	
Football-MOD					27						
Football-JV/VAR		25 <sup>1</sup>								35	
Girls Soccer-MOD-A		24	19	14	28	14	15	15	21	20	12
Girls Soccer-MOD-B				14		14	17			19	12
Girls Soccer-JV		14		18	18	14	27	16	15	18	24
Girls Soccer-VAR		14	17	18	18	15	16	16	22	20	19
Girls Swimming-MOD		16			17	15	16				
Girls Swimming-VAR		11			24	28	20		4		
Boys Volleyball-MOD						16			8	5	
Boys Volleyball-JV						10			8	6	
Boys Volleyball-VAR						8			12	9	
Girls Volleyball-MOD	14	16	17	19	13	18	13		12	15	14
Girls Volleyball-JV	10	15	14	13	12	12	11		8	11	8
Girls Volleyball-VAR	11	15	13	12	11	8	12		8	13	11
Co-Ed X Country-VAR					13		19		15	30	
Co-Ed X Country-MOD			3		25	6				18	
Boys X Country-MOD	18			3				11			18
Boys X Country-VAR	6		2	19		10		9			22
Girls X Country-MOD	6			4				10			14
Girls X Country-VAR	12		5	10				11			13
Girls Tennis-MOD	7		13			10	8		6		
Girls Tennis-JV					10		9			8	
Girls Tennis-VAR	10		9		9	8	13		12	8	
Cheerleading-VAR	15		12		12		12			25	
Cheerleading-JV			14				8			16	

1. Gananda shares football with East Rochester

## Athletic Participation for 2008-09 (Winter Sports)

	C-S	GAN	LYO	MAR	NEW	NR-W	P-M	RC	SOD	WAY	WIL
Boys Basketball-MOD-A	12	15	10	15		12		10	9		
Boys Basketball-MOD-B	11	16	10			12		16			
Boys Basketball-Frosh					11		13			14	
Boys Basketball-7 <sup>th</sup> Gr					13		14			16	14
Boys Basketball-8 <sup>th</sup> Gr					12		12			13	14
Boys Basketball-JV	12	16	11	11	12	12	11	11	9	11	11
Boys Basketball-VAR	10	11	7	7	12	12	11	14	12	12	9
Girls Basketball-MOD-A	9	9	8	11	13	10	13	10	13	14	12
Girls Basketball-MOD-B	8	15	8	11	12	10	12	12		14	12
Girls Basketball-JV	10	8	14	11	11	12	11	11	11	12	10
Girls Basketball-VAR	10	10	11	11	12	10	11	8	8	13	10
Wrestling-MOD			7			20	17	18	18	25	15
Wrestling-JV/VAR					24	35	14			27	
Wrestling-JV					9		28	15			7
Wrestling-VAR			8	12	19		24	15	18		17
Boys Swimming-MOD	8	17			13		22		4		
Boys Swimming-VAR	17	20			25	10	28		4		
Boys Indoor Track-VAR	19										
Girls Indoor Track-VAR	9			27							
Indoor Track-VAR			7	15	49	22	65			42	43
Indoor Track-MOD				12	19						
Boys Bowling-VAR	10				12	8		7	13	21	
Girls Bowling-VAR	9					4		5			
Bowling-VAR			15			12					
Cheerleading-JV	8				12	6	13		4	17	12
Cheerleading-VAR	12	16	15		15	14	14	12	12	26	18
Alpine Skiing			1		15				12	12	
Nordic Skiing									9		



## Athletic Participation for 2008-09 (Spring Sports)

	C-S	GAN	LYO	MAR	NEW	NR-W	P-M	RC	SOD	WAY	WIL
Baseball-MOD A	14	15			16	15	14	17	15	14	17
Baseball-MOD-B		15	17			15		13		13	
Baseball-JV	14	16	13	11	11	15	13		12	19	13
Baseball-VAR	13	12	12		16	12	14	17	15	13	13
Softball-MOD A	14	10		15	16	16	17	12	19	15	14
Softball-MOD-B		13	12							14	
Softball-JV	12	14	13		12	16	10	17	14	12	9
Softball-VAR	13	11	11	17	16	14	14		13	11	10
Golf-VAR	8	15	14	13	17*	8	9*	12	8	10*	12
Golf-JV										6*	
Boys Track-MOD	16	14		14	39	18	15	6	8	28	20
Boys Track-VAR	25	24	4	25	62	20	40	20	20	46	34
Girls Track-MOD	15	18	11	20		18	15	14	14	42	20
Girls Track-VAR	21	30	14	28		24	36	20	27	41	29
Boys Tennis-MOD	8		9			16	17		10	15	10
Boys Tennis-JV					18		11			6	
Boys Tennis-VAR	9		7	22	13	9	9		6		12
Boys Lax-VAR					25		20				
Boys Lax-JV					18		21				
Boys Lax-MOD					27		24			32	
Girls Lax-VAR					15		17				
Girls Lax-JV					15		22				
Girls Lax-MOD					35		22			17	

*\*Newark, Palmyra-Macedon, and Wayne play golf in the fall*

An analysis of these participation rates for the 2008-09 school year indicates that students in Wayne County are fortunate to have a wide variety of athletic activities in which to participate. All school districts participate in Section V. Clyde-Savannah, Gananda, Lyons, Marion, North Rose-Wolcott, Red Creek, Sodus, and Williamson, the eight smaller districts, all participate in the Wayne County Athletic Association. Newark, Palmyra-Macedon, and Wayne play in the Finger Lakes High School Athletic Association. There are some inter-league contests that are played and some of the Wayne County Athletic

Association districts are associate members of the Finger Lakes High School Athletic Association. In addition, there are “team of one” arrangements that are made from one district and league to another. The only true sharing of athletic teams that exists is that Gananda and East Rochester students play on the same football team.

There are two issues that exist with the participation of students in athletic endeavors. First, many of the schools would like to offer more opportunities for their students.....and their students would like to have more opportunities. Several districts would like to start lacrosse programs, some districts would like to play football, and others would like to start ice hockey as an inter-scholastic sport.

The second issue, which impacts the first issue also, is the projected decline in student enrollment. With respect to the first concern, it will be difficult for districts to begin new athletic programs when the number of students in their high schools is declining. More dramatically, because of the enrollment decline, districts will find it difficult to maintain the programs that are currently being offered. Baseball and softball teams of 10, 11, and 12 players will be challenged to field a team as enrollments decline. The same can be said of current football teams with 16, 20, and 22 players.

In short, enrollment decline will pose a significant challenge to not only trying to increase athletic opportunities but also to maintaining those programs that currently exist. Again, the answer to providing increased athletic opportunities for students seems to be in sharing teams. This will not be an easy undertaking. Districts are fiercely proud of their athletic teams. Rivalries with area schools have existed for decades. To many, the school’s athletic teams are the face of the community. When school districts merge athletic teams, the two high school enrollments have to be combined, often resulting in teams playing in a higher, more competitive class. Where will the combined teams practice and play their games? What color uniforms will they wear? What mascot will the teams use? The challenges are many, and they are real.

Given the challenges, however, the courageous school leader who truly has the student as the top priority will open discussions about how to maintain and enhance athletic opportunities for students. Planning should begin soon. The problems should be discussed openly, and solutions sought. We recommend the formal establishment of a county-wide committee to study the inter-scholastic athletics issues that we have identified.....and we know there are more. There are solutions to these issues and the students will be the winners in the end.

The following table shows the clubs that existed in schools in the 2008-09 school year. Again we notice that larger schools have more opportunities for students than do smaller districts. However, the discrepancy in opportunities does not seem to be as great. School leaders told us that they are willing to support new clubs whenever there is interest....and the costs, commitments, and logistics are far less than trying to start an athletic team.

## Extracurricular Clubs and Organizations for 2009-10

	C-S	GAN	LY	MAR	NEW	NRW	P-M	RC	SOD	WAY	WIL
National Honor Society	X	X	X	X	X	X	X	X	X	X	X
Student Council/Congress	X	X	X	X	X	X	X	X	X	X	X
Model United Nations		X		X			X				
Drama Club	X	X	X	X	X	X	X	X	X	X	X
Varsity Club	X	X	X	X	X	X	X		X	X	X
Yearbook	X	X	X	X	X	X	X	X	X	X	X
SEE Club		X									
Math Nat'l Honor Society		X									
For. Lang. Honor Society					X						
Speech/Debate Club										X	
Science Club		X				X	X		X	X	
Foreign Language Club	X			X			X		X	X	X
Friends of Rachel		X									X
Math League/Club	X	X			X		X			X	
Art Club		X	X			X	X	X	X	X	X
Reflections		X									
Interact Club		X			X	X	X		X	X	
AV/Tech Club	X				X	X	X	X		X	
Robotics							X				
Chess Club	X					X			X		
Future Business Leaders							X	X		X	X
Library Club						X					
Literary Magazine/Paper			X	X		X		X	X	X	X
Masterminds	X		X		X	X	X		X	X	X
Outdoor Adventure Club						X					
Peer Mentors						X				X	
SADD			X		X	X	X				X
Ski Club	X			X	X	X	X	X	X	X	X
Student Athlete Mentors						X					
Youth to Youth Club					X	X	X			X	
Various Bands	X		X	X	X		X	X	X	X	X
Various Choral Groups	X		X	X	X		X	X	X	X	X
Future Homemakers Club	X							X			
Baseball Card Club								X			
Guitar Club								X			
Video Game Club								X			
Community Service Club								X		X	
Boys Club								X			
Skirt Club								X			
Literacy Club			X						X		
Environthon	X										
Garden Club									X		
Inventive Minds									X		

## Finance

This is not an in depth study of the financial status of the school districts in Wayne County. Detailed analysis of the fiscal condition of these districts is left for another study. However, we did gather some basic information about the school districts which would lead us to the conclusion that the districts are in sound financial condition and are generally enjoying the support of their communities. The following table depicts the budget status of the districts.

<b>Budget, Full Value Assessment, Tax Levy, and True Tax Rate (2009-10)</b>						
District	2009-10 Student Enrollment	Budget	Tax Levy	Full Value Assessment	True Value Tax Rate	2009 Budget Vote
Clyde-Savannah	855	\$17,896,916	\$4,838,725	\$200,186,215	\$24.13	268-93
Gananda	1,162	\$19,312,788	\$8,357,001	\$291,484,752	\$28.67	301-187
Lyons	892	\$18,747,452	\$4,273,843	\$221,604,737	\$18.88	328-138
Marion	934	\$17,980,455	\$5,392,440	\$251,457,398	\$21.44	369-135
Newark	2,197	\$40,833,219	\$11,427,202	\$563,363,033	\$20.28	1065-372
North Rose-Wolcott	1,380	\$26,956,786	\$8,090,428	\$536,472,022	\$15.08	250-130
Palmyra-Macedon	2,034	\$33,332,068	\$15,548,433	\$647,971,209	\$24.00	692-153
Red Creek	945	\$17,375,000	\$3,717,000	\$269,490,039	\$14.31	254-56
Sodus	1,199	\$25,250,857	\$7,848,880	\$413,457,122	\$18.97	411-143
Wayne	2,407	\$40,970,917	\$16,550,000	\$782,546,752	\$20.52	624-193
Williamson	1,166	\$20,617,865	\$8,476,023	\$384,435,533	\$22.05	598-222

As can be seen from the table above, all of the school budgets were approved by significant margins in 2009. The same budget vote support can be shown over time by the following table which shows the five year history of school budget votes.

## 5 Year History of School District Budget Votes

	Clyde-Savannah		Gananda		Lyons		Marion		Newark		North Rose-Wolcott	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>2009</b>	268	93	301	187	328	138	369	135	1065	372	250	130
<b>2008</b>	494	165	259	130	256	171	277	139	701	358	305	123
<b>2007</b>	327	132	271	133	256	140	304	142	709	404	305	85
<b>2006</b>	235	101	335	193	281	171	421	206	778	601	414	218
<b>2005</b>	302	125	388	421	311	185	551	510	1088	372	478	294
	Palmyra-Macedon		Red Creek		Sodus		Wayne		Williamson		Total	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>2009</b>	692	153	254	56	411	141	624	193	598	222	5160	1820
<b>2008</b>	534	392	250	55	349	197	811	275	462	213	4698	2218
<b>2007</b>	709	242	255	63	334	130	595	296	296	119	4361	1886
<b>2006</b>	790	507	434	157	268	127	801	506	354	178	5111	2965
<b>2005</b>	870	705	420	153	288	143	635	485	297	86	5628	3479

In the past five years, the eleven school districts in Wayne County have had a total of 55 public budget votes and 54 of them have been approved. This is a most enviable record that would be embraced by any eleven school districts in any county in the state. The school districts should be proud of this record. It is reflective of the institutional and personal credibility that the schools and their staff enjoy in their communities. It is further testament to the support that these communities give their schools and their satisfaction with what happens at school.

The financial challenge for schools, of course, lies in the future. State aid for public schools in New York State, as a percentage of the cost of operating schools, has been on the decline for many years. Property taxes are high in New York State and, according to reports being published locally, are especially high in Wayne County. How long will we continue to fund public education in New York State with the local property tax? When will our national economy rebound? These and others are very difficult questions to answer when it

comes to funding our public schools. The answers will not get easier. The pressure to reduce school spending will continue to mount, especially as enrollments decline.

As school districts prepared their budgets for the 2010-11 school year, the significant reductions in state aid which were proposed by the Governor dramatically impacted the development of these budgets. School districts lost millions of dollars in state aid. Given the state of the economy, districts were also very reluctant to raise local property taxes by other than the smallest of amounts. As a result, school districts eliminated large numbers of positions and closed school buildings. The funding of New York State public schools is perhaps more precarious than it has ever been.

Given today's dire circumstances for school funding described above, it is quite conceivable that things will only get worse. The American Recovery and Reinvestment Act (ARRA) which was passed into law in Washington provides significant federal funding to school districts across the country. Often referred to as stimulus funding, these monies have been available to school districts for the 2009-10 and 2010-11 school years. These funds have had the effect of lessening the negative impact of reduced state aid for the school districts in Wayne County and all other districts in New York State. However, while no relief from state aid cuts is projected, the ARRA funding for schools will cease with the 2010-11 school year. This perfect storm of reduced state aid for schools and the elimination of ARRA funding is being described as the "funding cliff."

The effect of the "funding cliff" on school districts in Wayne County can be shown in the following table:

<b>ARRA Allocations to Wayne County Schools Districts</b>								
<b>District</b>	<b>ARRA Stabilization Fund</b>	<b>ARRA Title I Part A 2009-2010</b>	<b>ARRA Title I Part A 2010- 2011</b>	<b>ARRA IDEA Part B 611 2009- 2010</b>	<b>ARRA IDEA Part B 611 2010- 2011</b>	<b>ARRA IDEA Part B 619 2009- 2010</b>	<b>ARRA IDEA Part B 2010- 2011</b>	<b>Total</b>
Clyde-Savannah	1,032,579	110,488	110,488	115,497	115,497	5,327	5,327	<b>1,495,203</b>
Gananda	664,848	36,975	39,975	129,575	129,575	5,977	5,977	<b>1,012,902</b>
Lyons	507,912	123,640	123,640	127,774	127,774	5,893	5,893	<b>1,022,526</b>
Marion	497,096	72,102	72,102	126,899	126,899	5,893	5,893	<b>906,884</b>
Newark	1,151,579	325,379	325,379	305,058	305,058	14,071	14,071	<b>2,440,595</b>
North Rose Wolcott	805,956	182,236	182,236	187,684	187,684	8,657	8,656	<b>1,563,109</b>
Palmyra-Macedon	1,301,829	143,588	143,588	251,927	251,927	11,620	11,620	<b>2,116,099</b>
Red Creek	772,807	134,214	134,214	124,993	124,993	5,765	5,765	<b>1,302,751</b>
Sodus	641,111	167,563	167,563	160,843	160,843	7,419	7,419	<b>1,312,761</b>
Wayne	1,473,272	133,112	133,112	297,139	297,139	13,705	13,705	<b>2,361,184</b>
Williamson	623,534	61,626	61,626	139,996	139,996	6,457	6,457	<b>1,039,692</b>
<b>Total</b>	<b>9,472,523</b>	<b>1,490,923</b>	<b>1,493,923</b>	<b>1,967,385</b>	<b>1,967,385</b>	<b>90,784</b>	<b>90,783</b>	<b>16,573,706</b>

The challenge of future school funding is obvious. State aid is predicted to continue to decline given the precarious financial condition of the state. The potential for Race to the Top funding aside, federal funding will decline significantly after the 2010-11 school year. Property owners in New York State do not want their school taxes to increase. Business as usual will clearly not be an option.

School leaders would do well to continue/expand their long term financial planning. We recommend that the school districts in Wayne County undertake an in-depth study on how to reduce costs in the non-instructional areas of the school operations. Consolidation and sharing are ripe in the areas of food services, operation and maintenance, transportation, business office operations, etc. From our informal observations only, we believe that there are efficiencies to be realized in these areas in ways that will not affect student programming. We also believe that not only can expenses be reduced but



revenues can be increased. There are numerous examples in the state where support functions have been consolidated through BOCES to cut costs and also increase revenues through the generation of BOCES aid for the local school district. We understand that this sharing will not come without some pain. However, cost effective support systems will maximize the educational dollar and drive more revenues to the students.

## Union Issues with E-learning

Throughout the course of this study, the consultants have been asked to respond to the restrictions that might exist with respect to distance learning offerings. The source of the questions is a memorandum of agreement that has been entered into by the Wayne County school districts and their teacher unions. The following analysis is based on the March 15, 2007 Memorandum of Agreement between the Wayne Finger Lakes BOCES and the BOCES Educators' Association regarding the Accelerate-U program offered by the Wayne-Finger Lakes BOCES.

The first portion of the agreement discusses a German IV course which was offered at Newark during the 2006-07 school year. After the German course ended on June 30, 2007, BOCES agreed not to offer the German IV course again to Newark without the approval of the union. This was the only course that was being offered by BOCES that did not have the approval of the component district's union.

The memorandum refers to the Participating District Verification Form that must be signed by the local district and the local union certifying that participation in the Accelerate-U program will not result in any bargaining unit member being the subject of a reduction in force. The memorandum also suggests that the district can provide an Accelerate-U program if it cannot find a certified individual locally to provide the course of study.

In the event that the local teachers' union refuses to sign the certification form within 10 days, the Superintendent may submit the form to BOCES for submission to a review committee. This review committee is composed of two individuals selected by the District Superintendent and two individuals selected by the BOCES union. The investigation by the review committee is to decide if the local union's decision not to sign the form was made in good faith in accordance with the criteria set forth on the form.

If the review committee finds that the withholding of the union signature was unreasonable under the circumstances or that the educational needs of the student justify the waiver, the review committee can override the failure of the local teachers' union to sign the agreement and allow the district to offer the Accelerate-U program. If no waiver is granted by the review committee, BOCES cannot offer the Accelerate-U program.

The Participating District Verification Form specifies that both the superintendent and the local teacher union president must sign the form prior to the delivery of the Accelerate-U program. However, the signatures only verify that no employee will be subject to a reduction in force as a result of the program being offered.

The form also provides that the district can offer an Accelerate-U program if the district is unable to hire a certified teacher to provide instructional programming.

The documents which we have been provided are not written in a very clear manner. However, our summary interpretation of the Accelerate-U memorandum of understanding is as follows:

1. The superintendent and the local union president must sign the Participating District Verification Form before an Accelerate-U program can be offered in any component district.
2. The signatures on the form only certify that no bargaining unit member shall be laid off as a result of the district's participation in the Accelerate-U program.
3. The district is free to offer an Accelerate-U program if a certified person cannot be found to teach the program for the district.
4. While the signature of the local teacher union president is required on the form, it appears that the signature should not be unreasonably withheld.

In the event that the Accelerate-U program is ever considered for significant expansion, it would be prudent to get a legal opinion on all the documents that exist on this topic. However, it appears that any number of Accelerate-U courses can be offered in any district as long as no bargaining unit member is laid off as a result of this programming.

# Options Analysis for Shared Instructional Programs

After gathering information for this study and developing feasible shared instructional program options, it is appropriate to identify the advantages and challenges associated with each of the options. This helps to lay the groundwork for eventual recommendations and frames opportunities for further study in this area.

## ***Option 1--Wayne Student Exchange***

As an option, the Wayne Student Exchange is founded on the premise that all high school students in Wayne County should have comparable opportunity for course participation and that all eleven high schools should make their courses available to all other students in the county. Accordingly, this option has several advantages.

a. Implementation is relatively simple. Once class schedules are arranged the district provides bus transportation to and from the host high school.

b. Cost is easily determined through a standard formula or a fixed county-wide course tuition established collectively by the school districts.

c. Although intended as a county-wide program, this option does not require participation of all eleven high schools. It can operate on any combination of participating high schools.

d. Participating students maintain their home school identity.

At the same time there are several obstacles in implementing this option.

a. To function comprehensively across the county, bell schedules and scheduling formats must be made much more similar.

b. Each year the county school districts must agree upon a common tuition rate or formula.

c. This option becomes more involved if a student with a disability opts to take a course in another school, and requires special support which was not necessary for the class cohort in the host school.

d. Differences in grading practices, parent notification, and disciplinary practices among high schools need to be resolved.

### ***Option 2--New Vision Programs***

As a current Wayne-Finger Lakes BOCES instructional program option for high school seniors, this option has several advantages.

a. The instructional format, grading procedures, program operation and supervision, and cost for New Vision programs are established and common for all high schools and their students.

b. Unless operated at a site other than the Williamson Career and Technical Center, student transportation is already in place, with no increased costs associated with additional New Vision programs.

c. Most importantly, the New Vision program format provides opportunity for expanding into curricular areas that may fall by the wayside in component school districts due to declining enrollment or finances.

d. As BOCES programs, the tuition for New Vision programs is significantly offset by aid from the State.

On the other side of the ledger, there are at least three disadvantages.

a. For some students, the additional time on a bus diminishes the desirability of this option.

b. As an additional program, there is an additional, associated cost.

c. For a New Vision program offered at a site other than the Williamson Career and Technical Center, additional transportation costs would be incurred.

### ***Option 3--Thematic High School Programs***

As a concept similar in design to New Vision programs, this option is intended to provide expanded, equitable instructional opportunities to students across the County. Each high school would be encouraged to host a specific program “theme” that would be made available to all Wayne County students. Thematic programs have two significant advantages.

a. Thematic programs offer component high schools the opportunity to showcase or highlight special curricular areas associated with their local community demographics, or of distinctive interest to their high schools. By making these curricular areas available to students from other Wayne County high schools, the corresponding increase in class size and revenue may sustain these programs that otherwise may fall by the wayside due to declining enrollment or resources.

b. The potential diversity of thematic programs across the County would provide students the opportunity to participate in upper level or low-enrollment courses not offered in their home high school.

As with all options, there are disadvantages.

a. For some students, the additional bus travel time diminishes the attractiveness of this option.

b. The increased curricular opportunity associated with a thematic program would have an additional cost. This option would require a common tuition rate or formula established prior to the beginning of each school year.

c. This option becomes more involved if a student with a disability opts to take a thematic program in another school, and requires special support which was not necessary for the class cohort in the host school.

d. Differences in grading practices, parent notification, and disciplinary practices among high schools would need to be resolved.

#### ***Option 4--E-learning***

Since busing students from one high school to another is not required, distance learning has significant advantages.

a. Students remain in their home high school buildings.

b. The range of courses available is substantial and varied.

c. Given the current advances in technology, distance learning is relatively simple to implement.

d. Distance learning can be provided under the aegis of BOCES and, by including BOCES aid, has a significant cost-effective dimension.

e. After school and summer options can be great and districts can provide credit recovery and credit acceleration with the learning taking place at home with web-based learning, in local libraries, or in community based organizations during the summer or evenings.

Although the advantages of distance learning are compelling, there are disadvantages.

a. For students in remote locations, the relationship with the teacher is not face-to-face, in-person.

b. The process of completing homework and tests is not as simple as it is in-class.



c. Unless closely compatible, class scheduling differences between high schools impair a student's ability to participate.

d. Although relatively cost-effective, additional cost exists.

e. Since distance learning is outside regular class operation, technology coordination and class supervision need to be arranged and provided. Students with special needs must be accommodated.

f. Homework, testing, and grading practices, parent notification, and disciplinary practices among high schools would need to be resolved.

g. Teacher union contract issues may need to be addressed in some school districts.

### ***Option 5--Alliance High School***

As a four-year, full-day program with a different instructional context, Alliance High School is comparatively distinctive. It has many advantages.

a. It provides an instructional context that is appealing to many students who do not thrive in traditional high schools.

b. If located at the Williamson Career and Technical Center, student transportation currently exists.

c. Even though students are not in their home school during the school day, they can participate in extra-curricular activities at and graduate from their home high school.

d. Under the aegis of BOCES, the mechanisms for program coordination, supervision, and cost determination already exist.

e. Under the aegis of BOCES, the program would be eligible for BOCES aid.

At the same time there are disadvantages.

- a. If the program is not operated at the Williamson Career and Technical Center, additional transportation arrangements and cost are required.
- b. Regardless of state aid, there is an additional, associated cost with the program.
- c. For some students, returning to their home high school in time for participation in extra-curricular activities may be difficult.

## Findings and Recommendations

**Finding #1.** Undertaking this study was a major initiative by the school districts in Wayne County. In studying the concept of regional high schools, these districts have begun the discussion in New York State about boldly changing the way that high schools are structured. In many ways, this is the first time that this collaborative concept has been studied as a way to provide regional instructional programs other than those operated under the aegis of BOCES.

There is no current legislation in New York State that describes how regional high schools should operate. While there is legislation for “Central High School Districts” that exist on Long Island that might serve as a model for developing regional high school legislation, there is no legislation that describes the type of regional high school that is contemplated in this study.

A number of topics need to be addressed in this legislation. Who would be the LEA for the regional high school.....one of the component district Boards of Education, the BOCES Board of Education, or would a new Board of Education be elected to oversee the regional high school? How would the regional high school be funded? How would credit be awarded to students? Who would award the high school diploma?

**Recommendation #1.** Legislation should be enacted in New York State that describes the operation of regional high schools since no such legal guidance currently exists.

**Finding #2.** Developing regional high schools is one method of reorganizing secondary education. But many people are resistant to change. While people may be unhappy about education in general, numerous studies have shown that most people are very happy with their own school districts. This affection for local school districts was clearly shown in the community

survey that was a part of this study. Convincing people to change will be a major undertaking.

There are no financial incentives in place that would incent school districts to consider the regional high school model. In order to encourage school districts to merge, New York State offers significant financial incentives to school districts. Without such financial incentives, school district consideration of regional high schools will be slow to occur.

**Recommendation #2.** State legislation should be developed that will provide financial incentives for school districts to consider the regional high school model; such legislation would be similar to the financial incentives that are available to school districts which are considering merger.

**Finding #3.** The community survey that was administered as part of this study indicates that the public wants more opportunities for their high school students. They also want the costs of operating their schools to be controlled and they want their schools to maintain their local identity. To attempt to meet these needs, school leaders will be significantly challenged.

**Recommendation #3.** School leaders should engage their communities in an ongoing educational dialog regarding declining enrollment, graduation standards, and the financial challenges currently facing school districts.

**Finding #4.** Since 2004-05, high school enrollments have declined in the Wayne County school districts from 5606 to 5138, a decline of 8.3%. Between 2009-10 and 2018-19, high school enrollments are projected to decrease even further, from 5,138 to 4,120, a decline of 19.8%. Four of the high school enrollments will decrease between 24.9% and 30.2%.

**Recommendation #4.** School districts should begin/continue to engage their communities in discussions about what their high schools should

offer in the future, given the significant enrollment declines that are projected to occur.

**Finding #5.** High school enrollments are projected to decline into the future. School districts will find it difficult to offer the current level of programming to their students let alone increasing curricular opportunities. There is currently a significant inequity in the number and types of higher level courses that are available to students in the eleven school districts across the county.

**Recommendation #5.** School districts in Wayne County should collaborate on ways to increase the number of offerings in Advanced Placement, International Baccalaureate, and College level courses for all students in the region.

**Finding #6.** School districts in New York State face monumental financial challenges. Budgets are being slashed in many school districts resulting in staff losing their jobs and school buildings being closed. These challenges will only get worse as current federal funding will be discontinued at the end of the 2010-11 school year.

**Recommendation #6.** School districts must continue to explore methods of collaboration to save taxpayer dollars. In addition, school districts must increase their efforts to communicate with their public about the significant financial challenges that they will face in the future.

**Finding #7.** The bell schedules that are currently in place in the eleven high schools are very different. Some districts have a traditional schedule, others have block schedules, while another district has a semestered schedule. Starting times, ending times, and length of periods are very different in the eleven high schools. These different bell schedules present a major obstacle to developing collaborative instructional programs between the area high schools.

**Recommendation #7.** An initiative involving high school principals and guidance counselors should be undertaken to make the high school schedules more compatible in order to support collaborative student programming.

**Finding #8.** Extra curricular activities in the high schools are being impacted by declining enrollments and financial challenges much like the instructional programs are being impacted. Fewer sports teams are being offered than in past years and teams have fewer participants than they had in previous years. Given the projected declining enrollments of the future, fewer extracurricular opportunities will be available for students.

**Recommendation #8.** School districts should continue to explore the sharing of sports teams between districts in order to provide as many extracurricular opportunities for students as possible. School districts must also engage the Section V leaders to ensure that the rules governing class assignments do not act as a deterrent to increasing opportunities for students.

**Finding #9.** This study had two components, one to create a world class education for the high school students in Wayne County and one to examine the potential cost savings of creating regional high schools. Much of the study focused on instructional models that might be considered by leaders in the region to build toward the world class education that is desired in the region. The study also describes cost effective ways that these programs might be developed by asking school districts to collaborate in the development of these programs. Cooperation will save a great deal of money compared to the cost of each of the school districts developing these programs on their own. Nevertheless, there are other areas of school operations that should be studied in order to ensure that school districts are operating as efficiently as possible.

While there are numerous examples of sharing that exist in the schools in Wayne County, there are more possibilities. The same finding can be made for the sharing that exists between school districts and local municipalities.

Much more sharing is possible. While this study has focused on the instructional program, there are numerous opportunities for sharing that exist in the support service/non-instructional area.

**Recommendation #9.** A study should be undertaken in the very near future that is focused solely on ways that school districts and municipalities can share support services to save money across the region.

**Finding #10.** Once completed, this study will be shared with every school district in Wayne County. District Boards of Education will decide how to proceed with the results of this study so that their school district is best served. However, we believe that leadership must be forthcoming that encourages school districts to discuss this report collectively. To date, there has been a great deal of attention paid to this study collectively by the eleven Superintendents in Wayne County. More collaborative conversation is necessary to effect any change.

**Recommendation #10.** Every school district Board of Education, Superintendent, and other appropriate administrators, should be invited to serve on a committee to develop ways to consider moving forward with the recommendations and the chapter on Instructional Program Options that are contained in this report.

## Summary Recommendation

From its inception, the central focus of this study was to examine the feasibility of creating regional high schools in Wayne County. This was a bold undertaking and, to the understanding of the consultants, the first study in New York State to examine the regional high school concept. Congratulations to the school leaders in Wayne County!

We believe that the regional high school concept has merit in New York State. While our study found that the savings in creating four regional high schools would only be approximately 3%, we also found that opportunities for students would be greatly expanded. We see this as value for the taxpayers who support our public schools.

We believe that the regional high school concept has great merit and should be pursued in Wayne County. We stop short of calling for a regional high school plan to be implemented because there are too many unknowns at this time. Because of a lack of state statutes on regional high schools, we cannot ascertain with certainty the extent to which a capital investment in regional high schools will result in a reduction in costs which would save the taxpayers of Wayne County significant amounts of money. Only further study at the state and county level will provide the information necessary to definitively define the cost savings that can be achieved and we urge the school districts to pursue this study.

While we believe that there is merit to further study of regional high schools, we were also made keenly aware that the people who provided input on this study from across Wayne County like their high schools just the way they are! Change is difficult and the admiration that communities have for their schools is laudable.

The conflict in the value that regional high schools offer and the resistance to changing current school structures must be resolved. This can only occur through ongoing study and communication between the



stakeholders in Wayne County. This dialog will become easier as school enrollments decline, resources for schools become even scarcer, and opportunities that students have now begin to disappear.

It is our recommendation that each Board of Education reviews this study and has an open, public discussion about the study's findings and recommendations. Input from school staff and the community should be solicited in beginning to open the dialog about the future of the schools in Wayne County.

We also recommend that a committee be formed in Wayne County to further explore the concept of making schools even more cost effective than they are currently. We recommend that the committee have representation from all of the Wayne County school districts and that this representation constitute a cross section of each of the communities. We recommend that the committee be sub-divided into three subcommittees to study the following issues and make recommendations to the full committee in the following areas:

a. ***Shared Instructional Programs***-This study has outlined a number of opportunities to increase curricular offerings for high school students through sharing and collaboration. The ideas in this study, and other ideas, should be investigated by a subcommittee to determine which options to pursue and what it would take to implement the most promising options.

b. ***Shared Support Services***-It was beyond the scope of this study to examine the potential cost savings that might be realized by school districts sharing management/support services. These services might include shared business offices, shared maintenance or transportation supervisors, shared athletic directors, sharing of major equipment, and numerous others. Other parts of New York State have undertaken major sharing initiatives in the management services area. We are convinced that savings could be realized through such sharing and that a subcommittee should explore these opportunities.

c. ***Regional High Schools***-This study contains many specific recommendations that should be implemented to move the regional high school concept forward. Some of these recommendations focus on state policy issues and some focus on local matters. The creation of regional high schools in Wayne County is, in our opinion, a long-term project. However, we believe it has enough promise that it should be an ongoing investigation of one of the subcommittees.

Throughout the entire course of this study, there appeared to be a strong desire to provide Wayne County students with a world class education. At the same time, there was an equally strong desire to make schools affordable. Both of these desires are possible, but not without a great deal of conversation, collaboration, and planning. Should Wayne County commit to these activities, however, it could be a model for New York State and the nation on how to cost effectively reinvent our school systems to provide the greatest opportunities for our students.

## Table of Contents

Executive Summary	1
Acknowledgements	6
Background and Purpose	8
Study Methodology and Process	12
Student Enrollment History and Projections	18
Instructional Program	32
Regional High School Background	42
Regional High School Locations/Construction	45
Regional High School Transportation Routes/Costs	58
Regional High School Budgets/Cost Sharing Methodologies	67
Annual Costs for Regional High Schools	77
Instructional Program Sharing Options	79
Bell Schedules	112
Extra-Curricular Activities	116
Finance	123
Union Issues with E-Learning	128
Options Analysis	131
Findings and Recommendations	137
Summary Recommendation	142

## Executive Summary

In the summer of 2009, the eleven school districts in Wayne County, New York secured state funding to do a collaborative study through the Wayne-Finger Lakes BOCES. The purpose of this study is to examine ways of maximizing educational opportunities for students, and the potential savings, management improvements, and benefits to the community in developing regional high schools. After all eleven Boards of Education passed resolutions supporting the study, the consulting firm of Castallo and Silky from Syracuse, New York was engaged to conduct the study.

The consultants visited each of the eleven school districts on two occasions meeting with staff, students, and community members. In addition, a community survey was conducted regarding the desirability of regional high schools. Nearly 1,900 people responded to the community survey. The survey results indicated that respondents wanted to:

- 1. maximize educational opportunities for their students by increasing academic rigor, increasing the number of electives, increasing the depth of programs, and increasing the number of specialized program offerings;*
- 2. control the costs of operating schools; and*
- 3. have schools maintain their local identity.*

Enrollment projections were completed for all eleven school districts in the study. Student enrollments in the eleven high schools in 2009-10 total 5,138. This is 8.3% lower than the enrollment of 5,606 in 2004-05. More importantly, the enrollment for each of the eleven high schools is projected to decline for the next nine years. In 2018-19, the high school enrollment is projected to drop to 4,120, a drop of 19.8% for the average high school. It is predicted that four of the high schools will experience enrollment declines of between 24.9 and 30.2%. Business as usual is not an option for the future.

We examined school districts that had larger high school populations than are found in the high schools of Wayne County. The high school program

that is currently offered to the students in the eleven high schools in Wayne County was compared with the program that is offered to students in area high schools that have enrollments of 400, 800, and 1,200 students. It is clear that, as the size of the high school increases, the number of curricular options available to students increases as well. This formed the basis of this study for the many people in Wayne County who are interested in providing a world class education for their young people. It is clear that bigger high schools provide a greater number of opportunities for high school students.

The second major area studied in the modeling of regional high schools for the area was whether or not these larger high schools could operate more cost effectively than the eleven smaller high schools and thereby save money for local high schools. It was determined that the operating budget savings in creating four regional high schools when compared with the eleven existing high schools could save approximately 3% of the costs. This is consistent with other research that has found that significant savings in consolidating school functions is greatest only when the school districts are much smaller than the districts in Wayne County.

One way to create larger high schools to offer more opportunities for students is for school districts to merge. It was clear from the beginning of this study that merging school districts was not an option that these school districts were interested in considering. These districts were interested in exploring ways of creating more opportunities for their students without merging. The regional high school concept would retain all eleven school districts, all eleven Boards of Education, all eleven Superintendents, and would maintain all existing elementary schools and all existing middle schools in their current locations. At the same time, the existing eleven high schools would be combined into larger high school units, thereby increasing the curricular opportunities for students. However, as this concept of regional high schools was discussed in each of the community meetings, it was readily apparent that there was little if any interest in giving up existing high schools in favor of a regional configuration.

In addition to modeling regional high schools in this document, the study recommends ways that the Wayne County school districts might collaborate in order to increase curricular offerings for their students. These models for collaboratively increasing curricular offerings include:

1. *Wayne Student Exchange Program*
2. *New Vision Programs*
3. *Thematic High School Programs*
4. *Electronic Learning Programs*
5. *The Alliance High School Program*

Advantages and disadvantages of each of the cooperative programming options are presented as well as the challenges that face the school districts in implementing any form of collaborative high school programming for their students.

Recommendations that were developed from this study include the following:

*Recommendation #1. Legislation should be enacted in New York State that describes the operation of regional high schools since no such legal guidance currently exists.*

*Recommendation #2. State legislation should be developed that will provide financial incentives for school districts to consider the regional high school model; such legislation would be similar to the financial incentives that are available to school districts which are considering merger.*

*Recommendation #3. School leaders should engage their communities in an ongoing educational process regarding declining enrollment, graduation standards, and the financial challenges currently facing school districts.*

*Recommendation #4. School districts should begin/continue to engage their communities in discussions about what their high schools should offer in the future, given the significant enrollment declines that are projected to occur.*

*Recommendation #5. School districts in Wayne County should collaborate on ways to increase the number of offerings in Advanced Placement, International Baccalaureate, and College level courses for all students in the region.*

*Recommendation #6. School districts must continue to explore methods of collaboration to save taxpayer dollars. In addition, school districts must increase their efforts to communicate with their public about the significant financial challenges that they will face in the future.*

*Recommendation #7. An initiative involving high school principals and guidance counselors should be undertaken to make the high school schedules more compatible in order to support collaborative student programming.*

*Recommendation #8. School districts should continue to explore the sharing of sports teams between districts in order to provide as many extracurricular opportunities for students as possible. School districts must also engage the Section V leaders to ensure that the rules governing athletic class assignments do not act as a deterrent to increasing opportunities for students.*

*Recommendation #9. A study should be undertaken in the very near future that is focused solely on ways that school districts and municipalities can share support services to save taxpayer money across the region.*

*Recommendation #10. Every school district Board of Education member, Superintendent, and other appropriate administrators, should be invited to serve on a committee to develop ways to consider moving forward with these recommendations and the chapter on Instructional Program Options that are contained in this report.*

Our immediate summary recommendation is that each Board of Education reviews this study and has an open, public discussion about the study's findings and recommendations. Input from school staff and the

community should be solicited in beginning to open the dialog about the future of the schools in Wayne County.

We also recommend that a committee be formed in Wayne County to further explore the concept of making schools even more cost effective than they are currently. We recommend that the committee have representation from all of the Wayne County school districts and that this representation constitute a cross section of each of the communities. We recommend that the committee be sub-divided into three subcommittees to study the following issues and make recommendations to the full committee in the following areas:

- a. Shared Instructional Programs
- b. Shared Support Services
- c. Regional High Schools



## Acknowledgements

This study is a bold and innovative undertaking. Without the support, cooperation, and encouragement of many individuals, completion of this report in a timely manner would not have been possible.

We would first like to express our admiration for the Boards of Education of the eleven school districts that participated in this study. Like all responsible school leadership teams, they passed resolutions to support this study knowing that the study itself would create anxiety within their communities. However, the Boards took this risk because they are committed to providing the best possible education for their students in a manner that can be fiscally supported by their communities. The Boards supported the study and actively followed the progress of the study, while always ensuring that all members of their communities would be heard on these most important issues. This was no easy task, but the Boards courageously accepted the challenge!

We also recognize the Wayne-Finger Lakes BOCES Board of Education for its support and commitment to the study. Without the BOCES Board's initiative and approval of the concept of the study, none of this would have occurred. We also acknowledge the efforts of the BOCES District Superintendent Dr. Joseph Marinelli. His vision for school collaboration and his guidance and support throughout the study have been invaluable.

Our gratitude is also expressed to the New York Department of State for their innovative approach to funding the study of regional high schools and shared services to bring efficiency to local government and savings to taxpayers.

We also offer our sincere thanks to the eleven Superintendents who supported our efforts throughout the study. From the beginning, we were committed to having this group act as a steering committee for the evolution of the study. The Superintendents met with the consultants on a regular basis offering their intellect and their insight in order to make this study come to life. For their efforts we offer our heartfelt gratitude.

Last, but certainly not least, we thank Bonnie Lindsay, Associate Superintendent for Instruction at the Wayne-Finger Lakes BOCES. Bonnie spearheaded the study. In conjunction with the Superintendents, Bonnie developed the concept of a regional high school, secured funding for the study, and provided guidance and support to the consultants and the Superintendents throughout the study. Her efforts were invaluable in bringing this study to fruition and for her leadership, we say thank you!

## Background and Purpose

This section of the report provides background as to the impetus for this study. It offers a context within which to place the consideration of various options and their associated costs and benefits. This context offers perspective for the decisions that the participating Boards of Education will consider in the future.

First and foremost, it should be emphasized that this is a feasibility study. As such, this study describes options that might be. It is not a study that describes the steps that the school districts in this study would take to make something happen. Such a study would be a planning study and, should interest develop in the ideas presented in this study, might be the next step that districts would consider to move them toward implementation of one or more of the ideas presented herein.

The Wayne-Finger Lakes BOCES supervisory district includes twenty five public school districts, eleven in Wayne County, nine in Ontario County, three in Seneca County and two in Yates County. The cities and villages in which they are located vary from suburban and small industrial to rural and agrarian with student enrollments varying from 600 to over 4,000. K-12 enrollments of the Wayne County school districts are shown in the following table:

<b>District</b>	<b>2009-10 Enrollment</b>
Clyde-Savannah	855
Gananda	1,162
Lyons	892
Marion	934
Newark	2,197
North Rose-Wolcott	1,380
Palmyra-Macedon	2,034
Red Creek	945
Sodus	1,199
Wayne	2,407
Williamson	1,166
TOTAL	15,171

Wayne County began a Real Property Tax Leadership Summit in response to a report which showed the county had the highest property taxes in the nation. This forum has provided a voice in Wayne County for the taxpayers who are asking that towns, villages, and school districts work together to reduce costs. The Superintendents from the Wayne County school districts met in December, 2008 to discuss how they might ensure that school districts were operating in as cost effective manner as possible, while at the same time, ensuring that the students in these schools were receiving a world class education. In response to this challenge, the Superintendents decided to explore the feasibility of regional high schools. Within six weeks, all eleven school Boards of Education in Wayne County had passed resolutions to pursue a study of regional high schools. The Wayne-Finger Lakes BOCES then secured funding for the study from the New York State Department of State and engaged the education consulting firm of Castallo and Silky from Syracuse, New York to conduct the study. Philip Martin and Alan Pole were the associates from that firm who carried out the study.

At the first meeting that the consultants had with the group of Superintendents, the purpose of the study was defined as follows:

*The purpose of this feasibility study is to examine ways of maximizing educational opportunities for students, and the potential savings, management improvements, and benefits to the community in developing regional high schools.*

The following table identifies the leaders in the eleven school districts in Wayne County that participated in this study:

<b>District</b>	<b>Superintendent</b>	<b>Board President</b>
Clyde-Savannah	Theresa Pulos	Patrick Crowe
Gananda	Shawn Van Scoy	Stephen Nims
Lyons	Richard Amundson	Sharon Tiballi
Marion	Kathy Wegman	Sharon Varalli
Newark	Henry Hann	Roberta Colacino
North Rose-Wolcott	Lucinda Miner	Judi Buckalew
Palmyra-Macedon	Robert Ike	Norbert Miller
Red Creek	David Sholes	Molly Martin
Sodus	Susan Salvaggio	Philip Rose
Wayne	Michael Havens	Joyce Lyke
Williamson	Maria Ehresman	Michael Collins

A number of studies regarding school consolidation in rural areas have been done including “Organizational Alternatives for Small/Rural Schools” conducted by Cornell University and “Does School Consolidation Cut Costs?” conducted by the Center for Policy Research at Syracuse University. In addition, a number of reports to the Governor and the New York State School Boards Association have determined that costs for rural school districts do need to decrease to ease the tax burden on property owners. However, these studies also suggest that consolidation may not be the panacea for reducing costs, depending on the size of the school districts. This study was designed to explore an alternative to school district consolidation through the creation of regional high schools which would still allow for local control of elementary and middle school education.

It should be emphasized that this is a study of regional high schools and not a study of school district mergers. The context for this study is that all eleven school districts in Wayne County would remain as currently constituted. This means that all eleven Boards of Education, all eleven Superintendents, and all eleven school district boundaries would be maintained. Furthermore, this is not a study of the benefits of creating a county-wide school system.

If regional high schools were to be created as a result of this study, the educational system in the county would still have eleven school districts. Each of the eleven school districts would maintain its elementary schools as they

currently exist. In addition, all of the middle schools in the eleven districts would remain as they currently exist. Only the high schools would be changed. Instead of having eleven high schools, this study proposes a structure where these eleven high schools are restructured to form four regional high schools.

As this study is reviewed and as further study is undertaken on regional high schools in New York State, a number of issues will immediately need to be confronted. New York State has legislation for central high school districts but not for regional high schools. These are two different models for educating high school students.

Described by Sections 1901-1917a of the New York State education law, central high school districts are stand alone legal entities that exist to educate high school students from a number of area local school districts. They have their own Board of Education and Superintendent. They possess the authority to operate high schools, grant credit, and award high school diplomas. They generate their revenue to operate their high schools through the allocation of their costs to their component school districts according to the relative assessed valuation of the taxable property in each school district.

Unlike central high school districts, regional high schools have no current legal standing. As a result, numerous questions would arise if regional high schools were to be created. Who would be the legal governing body for the regional high schools....would it have its own Board of Education....would the BOCES Board of Education serve this function....or would one of the local Boards of Education assume the responsibility for the regional high school? Who would be the administrative/executive head for the regional high school? Where would the money come from to support the regional high school? What body would be given the authority to grant credit and award diplomas to the students? It is clear that any move toward regional high schools in New York State would need to have a sound legal framework on which to rest. While legislation has been introduced to guide the formation of regional high schools, no such proposed legislation has ever been passed into law.

## Study Methodology and Process

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

*The purpose of this feasibility study is to examine ways of maximizing educational opportunities for students, and the potential savings, management improvements, and benefits to the community in developing regional high schools.*

Following is a summary of the major activities undertaken as part of the study design:

The eleven school district Superintendents served as a steering committee for the study. This group provided direction, insight, and support for moving the study forward. The consultants held meetings with the Superintendents on September 10, October 8, November 12, and December 3, 2009. Additional meetings of this group were held on January 14, February 11, and March 11, April 8, and May 13, 2010.

From the beginning, it was everyone’s intention that this study be conducted in the full light of day. One of the grant objectives was that public meetings/forums would be held. Subsequent to the first meeting with the Superintendents, public forums were held in each of the eleven school districts. Separate sessions were held with students, school staff, and the community. The purpose of these forums was to introduce the consultants, share the purpose of the study, discuss alternative models of regional high schools, and provide a tentative timeline for the completion of the study. In addition, a question and answer session period was held as part of each forum. The following table provides the dates of each of the forums:

Date	District
September 21, 2009	North Rose-Wolcott
September 22, 2009	Red Creek
September 24, 2009	Gananda
September 24, 2009	Lyons
September 28, 2009	Marion
September 29, 2009	Clyde-Savannah
September 30, 2009	Palmyra-Macedon
September 30, 2009	Sodus
October 1, 2009	Newark
October 1, 2009	Williamson
October 2, 2009	Wayne

In addition to the public forums that were held by the consultants, Mr. Richard Amundson, Superintendent from Lyons and chair of the Superintendents association, met with the Wayne County Tax Leadership Summit group on October 6, 2009 to update them on the progress of the study.

In addition to holding the public forums in each of the eleven districts, the consultants met separately with the following staff in each district to gather information for the study: Superintendent, Business Official, High School Principal, Transportation Supervisor, and Athletic Director. The Superintendents had also gathered packets of information for the consultants that were also used in this study. These data were summarized and analyzed as they were received. The data gathering process was focused by the purpose that was driving the study. These data were regularly shared with the Superintendents to develop common understandings and to check for accuracy.

Once the consultants felt that all relevant data had been obtained, post-data collection analysis was performed, feedback from the Superintendents was received, and then the report-writing began. A draft report was shared with the Superintendents on January 14, 2010. A second draft was shared with the Superintendents on April 8, 2010.

Subsequent to the Superintendents providing feedback on the first draft report, a second round of visits was made to all eleven school districts in order



to share the preliminary findings of the report. Each of the districts convened an evening session where the consultants reviewed the highlights of the study and solicited comments from all who were in attendance. The following table shows the dates for the second district forums:

Date	District
January 19, 2010	Marion
January 21, 2010	Palmyra-Macedon
January 25, 2010	Red Creek
January 26, 2010	North Rose-Wolcott
January 26, 2010	Lyons
January 27, 2010	Williamson
January 28, 2010	Newark
February 1, 2010	Sodus
February 3, 2010	Wayne
February 3, 2010	Clyde-Savannah
February 8, 2010	Gananda

The consultants also made visits to Onondaga-Cortland-Madison BOCES in Syracuse, Oneida-Madison-Herkimer BOCES in Utica, and Tech Valley High School in Troy to investigate distance learning and alternative high school models.

This study was supported by all eleven Boards of Education in Wayne county. Upon completion of the study, copies of the report will be provided to these Boards. At this point, it is completely up to each Board of Education about how to proceed with the report. An individual Board of Education may choose to do nothing as a result of this report. Another Board may decide to refer it to an administrative committee for further investigation and recommendation. Another Board may decide to invite a neighboring Board of Education for a meeting to discuss some of the ideas presented in this report. Each Board of Education is free to use the report in a manner that it believes best serves its district.

Information was also gathered from the public through an on-line survey that was made available through each of the eleven district's web sites. Where computer access to the survey was not available, paper copies of the survey

were made available to individuals who requested them. Nearly 1,900 people responded to the survey. The results of the survey are shown in the next three tables.

District of Residence		
District	Number of Responses	Percentage
Clyde-Savannah	90	4.8
Gananda	39	2.0
Lyons	78	4.2
Marion	58	3.1
Newark	161	8.6
North Rose-Wolcott	108	5.8
Palmyra-Macedon	307	16.4
Red Creek	115	6.1
Sodus	150	8.0
Wayne	123	6.6
Williamson	647	34.4
Total	1876	100

Category That Best Describes Your Role		
Description of Role	Response	Percentage
I am a school board member	12	0.6
I am an instructional staff member in the district	375	20.1
I am a support staff member in the district	161	8.6
I am a student in the district	73	3.9
I am a parent of a child (children) in the district	583	31.1
I am a community member without children in school now	669	35.7
Total	1873	100

Rate how important each of the following characteristics is to you in creating a regional high school in Wayne County						
Category	Not Important At All	Of Little Importance	Of Some Importance	Very Important	Essential	Responses
Maximizing educational opportunities for students	46 2.5%	10 0.5%	141 7.6%	663 35.9%	<b>986</b> <b>53.4%</b>	1846
Increasing opportunities for academic rigor in the high school	44 2.4%	35 1.9%	248 13.6%	<b>817</b> <b>44.7%</b>	684 37.4%	1828
Increasing opportunities for electives in the high school	51 2.8%	65 3.5%	430 23.4%	<b>793</b> <b>43.1%</b>	499 27.1%	1838
Increasing opportunities for depth of coursework in the high school	42 2.3%	43 2.4%	387 21.2%	<b>833</b> <b>45.7%</b>	519 28.5%	1824
Increasing opportunities for Advanced Placement and International Baccalaureate type programs in the high school	78 4.3%	95 5.2%	475 25.9%	<b>702</b> <b>38.3%</b>	481 26.2%	1831
Having the greatest potential for participating on an athletic team	171 9.3%	311 17.0%	<b>731</b> <b>39.9%</b>	435 23.7%	184 10.0%	1832
Having a wide variety of sports which students can participate	169 9.2%	268 14.5%	<b>698</b> <b>37.9%</b>	517 28.0%	192 10.4%	1844
Having a wide variety of clubs and other extracurricular activities for students	100 5.4%	165 9.0%	<b>692</b> <b>37.7%</b>	655 35.7%	225 12.2%	1837
Keeping high schools as small as possible	145 7.9%	284 15.5%	<b>524</b> <b>28.6%</b>	492 26.8%	389 21.2%	1834
Keeping a local community identity through the school	106 5.8%	166 9.0%	414 22.5%	<b>591</b> <b>32.1%</b>	566 30.7%	1843
Minimizing time on school buses for high school students	97 5.3%	200 10.9%	551 29.9%	<b>562</b> <b>30.5%</b>	430 23.3%	1840
Controlling the costs of operating schools	35 1.9%	38 2.1%	311 16.8%	660 35.7%	<b>804</b> <b>43.5%</b>	1848

The results of the survey point out the top priorities for the people in Wayne County. More than anything, they want to maximize educational opportunities for their students. They want to do this by increasing academic rigor, by increasing the number of electives in high school, by increasing the depth of program offerings, and by increasing opportunities for specialized programs such as Advanced Placement and International Baccalaureate. At the same time, however, people want to control the costs of operating schools and have schools maintain their local identity. More opportunities for students to participate in more sports and clubs, while important, were lower priorities.

The results of the survey are challenging at best for school leaders. People want more for their students academically, don't want to change the local school district structure, and want to control costs. This is no easy agenda for the schools of the future.

# Student Enrollment History and Projections

Accurate enrollment projections are essential data for school district long range planning. Virtually all aspects of district operation including program, staffing, facilities, and finances are related to the number of students enrolled. For this reason, updated enrollment projections are crucial and serve as an important aspect of this study.

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

- Six year history of district enrollment by grade level
- Calculation of survival ratios by grade level

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

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

Survival ratios usually have values close to one, but may be less than or greater than one. Where the survival ratio is less than one, fewer students "survived" to the next grade. Where the survival ratio is greater than one, more students "survived" to the next grade. Grade-to-grade survival ratios reflect the net effects of deaths, dropouts, the number of students who are home

schooled, promotion policies, transfers to and from nonpublic schools, and migration patterns in and out of the school district.

Because this is a study of regional high schools, the focus of the enrollment projections is on grades 9-12. As a result, enrollments can be projected nine years into the future using the current Kindergarten through 12th grade enrollments in the 2009-2010 school year. The table which follows shows the projected change in the high school enrollments from both 2009-10 to 2014-15 and from 2009-10 to 2018-19.

<b>Wayne County High School Enrollments</b>							
<b>High School</b>	<b>2004-05</b>	<b>2009-10</b>	<b>Change from 04-05</b>	<b>2014-15</b>	<b>Change from 09-10</b>	<b>2018-19</b>	<b>Change from 09-10</b>
Clyde-Savannah	334	<b>285</b>	-14.7 %	232	-18.6 %	199	-30.2 %
Gananda	337	<b>361</b>	+7.1 %	308	-14.7 %	313	-13.3 %
Lyons	323	<b>305</b>	-5.6 %	241	-21.0 %	214	-29.8 %
Marion	360	<b>314</b>	-12.8 %	263	-16.2 %	271	-13.7 %
Newark	853	<b>741</b>	-13.1 %	621	-16.2 %	637	-14.0 %
North Rose-Wolcott	549	<b>478</b>	-12.9 %	435	-9.0 %	359	-24.9 %
Palmyra-Macedon	712	<b>702</b>	-1.4 %	621	-11.5 %	570	-18.8 %
Red Creek	360	<b>321</b>	-10.8 %	276	-14.0 %	255	-20.6 %
Sodus	452	<b>416</b>	-8.0 %	369	-11.3 %	332	-20.2 %
Wayne	882	<b>809</b>	-8.3 %	699	-13.6 %	667	-17.6 %
Williamson	444	<b>406</b>	-8.6 %	309	-23.9 %	303	-25.4 %
<b>Total</b>	<b>5606</b>	<b>5138</b>	<b>-8.3 %</b>	<b>4374</b>	<b>-14.9%</b>	<b>4120</b>	<b>-19.8%</b>

This table has dramatic implications for the planning initiatives for the eleven school districts in Wayne County. Every school district will see a dramatic decline in its high school enrollment in the next nine years. On average, high school enrollment will decline by 19.8% in the next nine years. Even more dramatically, if one were to examine the enrollment decline from 2004-05 to 2018-19, high school enrollment has diminished by 26.5%. Hardest

19.

hit in this dramatic enrollment decline is the southeast corner of the county where the three districts are projected to lose between 24.9 and 30.2% of their high school population. Whether or not change is desirable will not be the issue for the future; change is inevitable. With high schools losing nearly 20% of their population over the next nine years, business as usual will not be an option.

The tables that follow show the enrollment projections for each of the districts included in this study.

<b>Clyde-Savannah Enrollment History and 7-12 Projections</b> October 2009																	
Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
04-05	65	78	71	64	71	81	81	93	98	98	75	79	82	1036	511	191	334
05-06	61	78	73	73	66	69	87	81	83	97	87	64	75	994	507	164	323
06-07	63	69	71	75	66	69	71	91	80	89	94	61	59	958	484	171	303
07-08	60	72	65	71	67	61	64	73	87	88	90	76	65	939	460	160	319
08-09	55	71	55	60	67	71	72	62	70	84	83	70	78	898	451	132	315
09-10	58	70	59	52	58	69	74	67	63	73	82	68	62	855	440	130	285
	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
10-11		69	62	58	49	59	72	73	64	65	70	65	66			137	266
11-12			61	61	55	49	62	71	70	66	62	55	63			141	246
12-13				60	58	56	51	61	68	72	63	49	53			129	237
13-14					57	59	59	50	59	70	69	50	48			109	237
14-15						58	62	58	48	61	67	55	49			106	232
15-16							61	61	56	49	59	53	53			117	214
16-17								60	59	58	47	47	51			119	203
17-18									58	61	56	37	46				200
18-19										60	59	44	36				199

**Gananda Enrollment History and 7-12 Projections**  
October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
04-05	111	90	82	107	97	93	102	102	84	97	88	80	72	1205	682	186	337
05-06	84	110	94	83	95	101	90	89	103	87	78	77	78	1169	657	192	320
06-07	88	85	97	92	81	95	99	94	95	109	82	73	75	1165	637	189	339
07-08	92	95	77	92	86	84	99	94	89	99	100	70	68	1145	625	183	337
08-09	88	92	92	77	92	85	84	101	101	93	86	89	68	1148	610	202	336
09-10	85	91	88	99	77	90	85	84	102	101	91	84	85	1162	615	186	361
	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
10-11		87	86	88	95	78	90	83	86	106	91	83	81			169	361
11-12			83	86	84	96	78	88	85	89	95	83	80			173	347
12-13				83	83	85	96	76	90	88	80	86	80			166	334
13-14					80	84	85	94	78	94	79	73	83			172	329
14-15						81	84	83	96	81	85	72	70			179	308
15-16							81	82	85	100	73	77	69			167	319
16-17								79	84	88	90	66	74			163	318
17-18									81	87	79	82	63				311
18-19										84	78	72	79				313



## Lyons Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.S.	K-12	K-6	7-8	9-12
04-05	79	73	77	76	83	74	92	93	85	93	83	74	73		1055	554	178	323
05-06	68	73	69	70	78	80	76	87	88	89	78	73	61	12	990	514	175	301
06-07	65	72	72	63	79	78	77	75	84	97	84	80	68	3	994	506	159	329
07-08	46	75	63	69	60	75	78	79	72	98	89	72	77		953	466	151	336
08-09	70	44	75	64	68	61	73	73	80	80	87	79	75		929	455	153	321
09-10	66	69	47	66	62	66	69	70	72	81	78	73	73		892	445	142	305
	K	1	2	3	4	5	6	7	8	9	10	11	12		K-12	K-6	7-8	9-12
10-11		67	67	44	67	61	67	67	68	78	74	70	69				135	291
11-12			65	63	44	66	62	65	65	74	71	67	66				130	278
12-13				61	64	43	67	60	63	71	67	64	63				123	265
13-14					62	63	44	65	58	69	65	60	60				123	254
14-15						61	64	43	63	63	63	59	56				106	241
15-16							62	62	42	69	57	57	55				104	238
16-17								60	60	46	63	51	54				120	214
17-18									58	65	42	57	48					212
18-19										63	59	38	54					214

## Marion Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	72	66	75	76	78	94	74	94	98	114	98	82	66		1	1088	535	192	360
05-06	81	74	63	83	76	71	95	77	94	98	103	95	79	1		1090	543	171	375
06-07	75	74	71	67	69	75	74	94	76	109	95	91	93	1		1064	505	170	388
07-08	65	79	71	68	66	72	76	75	96	91	100	84	94	1	1	1039	497	171	369
08-09	72	65	75	68	65	64	71	72	69	94	75	87	90	1		968	480	141	346
09-10	59	70	64	83	68	64	65	74	72	74	84	66	90	1		934	473	146	314
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		58	74	62	80	71	65	66	73	78	67	76	67					139	288
11-12			61	72	60	84	72	66	65	79	70	60	78					131	287
12-13				59	69	63	86	73	65	70	71	63	61					138	265
13-14					57	72	64	87	72	70	63	64	64					159	261
14-15						60	73	65	86	78	63	57	65					151	263
15-16							61	74	64	93	70	57	58					138	278
16-17								62	73	69	84	63	58					135	274
17-18									61	79	62	76	64						281
18-19										66	71	56	78						271

# Newark Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
04-05	171	176	174	166	182	185	200	209	241	267	217	176	193	2557	1254	450	853
05-06	146	159	164	165	163	170	183	207	210	309	191	192	197	2456	1150	417	889
06-07	159	167	149	159	168	153	161	177	168	257	201	207	175	2301	1116	345	840
07-08	159	167	149	159	168	153	161	177	168	257	201	207	175	2301	1116	345	840
08-09	155	141	177	149	167	166	147	163	166	212	196	188	219	2246	1102	329	815
09-10	185	155	143	175	146	170	158	156	168	188	186	174	193	2197	1132	324	741
	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12	K-6	7-8	9-12
10-11		185	150	142	179	140	167	164	148	217	143	179	172			312	711
11-12			179	149	145	172	137	174	156	191	165	137	177			330	670
12-13				177	152	139	169	142	165	201	145	158	136			307	640
13-14					181	146	136	176	135	213	153	139	156			311	661
14-15						174	143	141	167	174	162	147	138			308	621
15-16							171	149	134	215	132	156	146			283	649
16-17								178	142	173	163	127	154			320	617
17-18									169	183	131	156	126				596
18-19										218	139	126	154				637

**North Rose-Wolcott Enrollment History and 7-12 Projections**  
October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	120	115	105	101	118	123	138	124	137	127	146	149	127			1630	820	261	549
05-06	114	107	113	106	95	116	120	140	122	155	138	146	128	1	1	1602	771	262	567
06-07	94	101	114	109	109	95	115	115	134	147	138	108	123		8	1510	738	281	516
07-08	95	91	100	113	114	105	98	122	117	162	124	113	108		2	1464	716	239	507
08-09	106	94	87	102	106	118	96	98	125	134	138	113	106	2	2	1427	709	223	491
09-10	89	108	88	82	109	105	118	101	102	142	114	122	100			1380	699	203	478
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		85	106	87	80	116	100	124	100	115	125	108	110					224	458
11-12			83	105	85	85	110	105	123	113	101	119	97					228	430
12-13				82	103	90	81	116	104	139	99	96	107					220	441
13-14					80	109	86	85	115	118	122	94	86					200	420
14-15						85	104	90	84	130	104	116	85					174	435
15-16							81	109	89	95	114	99	104					198	412
16-17								85	108	101	84	108	89					193	382
17-18									84	122	89	80	97						388
18-19										95	107	85	72						359

# **Palmyra-Macedon Enrollment History and 7-12 Projections**

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	169	150	132	167	128	190	167	178	187	230	154	160	168			2180	1103	365	712
05-06	144	170	144	133	163	130	193	169	186	215	195	138	158			2138	1077	355	706
06-07	151	151	168	149	142	157	137	191	172	200	179	183	139			2119	1055	363	701
07-08	149	141	150	175	155	140	164	149	187	190	187	179	185		2	2151	1074	336	741
08-09	138	150	134	151	171	150	138	162	151	200	172	172	182			2071	1032	313	726
09-10	147	133	146	132	152	160	148	149	165	152	202	172	176		3	2034	1018	314	702
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		146	129	149	133	147	163	152	150	178	138	192	174					302	682
11-12			142	132	150	129	150	168	154	162	162	131	194					322	649
12-13				145	133	146	132	155	170	166	147	154	132					325	599
13-14					146	129	149	136	157	184	151	140	156					293	631
14-15						142	132	153	137	170	167	143	141					290	621
15-16							145	136	155	148	155	159	144					291	606
16-17								149	137	167	135	147	161					286	610
17-18									150	148	152	128	148						576
18-19										162	135	144	129						570

## Red Creek Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	K-12	K-6	7-8	9-12
04-05	80	80	66	70	74	80	81	100	96	95	98	91	76		1087	531	196	360
05-06	55	87	65	66	74	71	81	81	103	86	86	92	89		1036	499	184	353
06-07	69	73	76	66	68	73	72	88	86	94	93	82	82		1022	497	174	351
07-08	62	78	66	73	68	67	78	73	91	101	88	71	81		997	492	164	341
08-09	53	61	80	63	76	69	66	79	70	101	85	86	69		958	468	149	341
09-10	70	63	47	80	64	75	77	70	78	71	94	73	83		945	476	148	321
	K	1	2	3	4	5	6	7	8	9	10	11	12		K-12	K-6	7-8	9-12
10-11		80	55	47	82	63	78	79	71	80	67	85	70				150	302
11-12			70	54	48	81	66	80	80	72	75	60	82				160	289
12-13				69	56	48	84	68	81	82	68	68	58				149	276
13-14					71	55	50	87	69	83	77	61	65				156	286
14-15						70	57	52	88	70	78	69	59				140	276
15-16							73	59	53	90	66	70	66				112	292
16-17								75	60	54	85	59	67				135	265
17-18									76	61	51	77	57					246
18-19										78	57	46	74					255

# Sodus School District K - 12 Enrollment History and Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	Other	K-12	K-6	7-8	9-12
04-05	103	87	98	87	96	106	97	122	121	147	120	101	84	37	1369	674	243	452
05-06	94	101	87	91	85	97	109	100	119	141	132	106	107	29	1369	664	219	486
06-07	75	92	107	88	83	77	99	111	98	126	129	115	114	33	1314	621	209	484
07-08	91	77	90	102	88	91	81	101	109	110	126	126	115	30	1307	620	210	477
08-09	92	82	79	87	92	86	92	87	99	112	109	113	123	33	1253	610	186	457
09-10	91	85	80	82	91	91	84	95	84	95	116	93	112	30	1199	604	179	416
	K	1	2	3	4	5	6	7	8	9	10	11	12				7-8	9-12
10-11		87	86	78	80	91	93	87	93	90	92	104	95	31			180	381
11-12			88	84	76	80	93	97	85	100	87	83	106	31			182	376
12-13				86	81	76	82	97	95	91	97	78	85	31			192	351
13-14					83	81	78	85	95	102	88	87	80	31			180	357
14-15						83	83	81	83	102	99	79	89	31			164	369
15-16							85	86	79	89	99	89	81				165	358
16-17								88	84	85	86	89	91					351
17-18									86	90	82	77	91					340
18-19										92	87	74	79					332

Note: "Other" includes BOCES/CSE/ACE/GED and ALT School.

K-12 enrollments do not include these numbers.

# Wayne Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	U.S.	K-12	K-6	7-8	9-12
04-05	172	178	183	208	194	207	226	210	235	268	214	197	203	6	21	2695	1368	445	882
05-06	184	174	179	187	211	199	199	218	218	262	237	216	205	4	8	2701	1333	436	920
06-07	155	176	172	183	189	210	208	199	218	219	240	250	218	12	12	2661	1293	417	927
07-08	172	162	175	174	182	191	203	201	194	217	216	232	227	24	45	2615	1259	395	892
08-09	163	171	168	174	181	188	192	207	200	187	208	214	225	1	46	2525	1237	407	834
09-10	161	167	176	167	174	178	185	188	202	201	183	210	215			2407	1208	390	809
	K	1	2	3	4	5	6	7	8	9	10	11	12			K-12	K-6	7-8	9-12
10-11		163	169	178	169	176	176	183	188	206	189	185	208					371	788
11-12			165	171	180	171	174	174	183	192	194	191	183					357	760
12-13				167	173	182	169	172	174	187	180	196	189					346	752
13-14					169	175	180	167	172	177	176	182	194					339	729
14-15						171	173	178	167	175	166	178	180					345	699
15-16							169	171	178	170	165	168	176					349	679
16-17								167	171	182	160	167	166					338	675
17-18									167	174	171	162	165						672
18-19										170	164	173	160						667



# Williamson Enrollment History and 7-12 Projections

October 2009

Yr/Gr	K	1	2	3	4	5	6	7	8	9	10	11	12	U.E.	K-12	K-6	7-8	9-12
04-05	89	95	96	90	94	101	110	109	108	130	102	113	99		1336	675	217	444
05-06	82	76	88	91	88	93	102	110	109	110	115	97	100		1261	620	219	422
06-07	100	66	78	81	94	92	91	109	106	111	93	108	98		1227	602	215	410
07-08	74	89	64	79	76	96	95	87	106	120	99	88	110		1183	573	193	417
08-09	95	62	88	67	84	78	95	98	88	110	111	96	88		1160	569	186	405
09-10	103	84	61	86	66	87	82	93	98	94	113	102	97	2	1166	569	191	406
	K	1	2	3	4	5	6	7	8	9	10	11	12		K-12	K-6	7-8	9-12
10-11		88	82	60	86	67	88	83	92	103	86	106	100				175	395
11-12			86	80	60	88	68	89	82	97	94	81	104				171	376
12-13				84	80	61	89	69	88	86	88	88	79				157	341
13-14					84	82	62	90	68	92	78	83	86				158	339
14-15						86	83	63	89	71	84	73	81				152	309
15-16							87	84	62	93	65	79	72				146	309
16-17								88	83	65	85	61	77				171	288
17-18									87	87	59	80	60					286
18-19											91	79	55	78				303

In addition to the enrollment projections presented above, Cornell University has projected the number of young adults that will be living in Wayne County for the next twenty years. This projection, broken down by age ranges, can be seen in the following table:

<b>Age Group</b>	<b>1990 Census</b>	<b>2000 Census</b>	<b>2010 Census</b>	<b>2020 Census</b>	<b>2030 Census</b>
0 to 4	7,193	6,174	5,532	5,376	4,911
5 to 9	7,316	7,353	6,300	6,169	5,804
10 to 14	6,686	7,742	6,727	6,322	6,141
15 to 19	6,053	6,659	6,704	5,905	5,751
<b>Total</b>	89,123	93,765	92,123	91,002	87,792

The direction of the Cornell projections are consistent with the student enrollment projections that were made earlier in the study. The overall population of Wayne County is projected to decline by 4.7% over the next 20 years from 92,123 to 87,792, a loss of 4,331 people.

In summary, there are no indicators that the number of students in the high schools of Wayne County will do anything but decline for the next ten to twenty years. If there are not significant changes in the way educational programs are delivered in the Wayne County schools, costs will continue to rise, fewer people will be living in the county to pay for these increased costs, and the “critical mass” numbers of students that justify the educational offerings in today’s schools will evaporate. Boards of Education will struggle to provide the level of programming that represents the world class education that is the desire of the people living in Wayne County today. In short, schools will be forced to change!

## Instructional Program

The essential function of any school is to educate its students. An important activity in analyzing the school districts in this study is to compare the curricular offerings that they currently provide to their students. Ideally, this study will provide ideas about how to not only maintain the level and quality of the education in each of the districts but also to enhance and/or expand it. This is the way to build toward the world class education system that the Wayne County school leaders have discussed.

The school districts in Wayne County are very good schools. In analyzing the performance of students in these districts with the performance of students in other parts of the state, these schools compare quite favorably. The following table shows graduation rates for the districts in Wayne County:

**2004 Regional Total Cohort Graduation Rate as of August 2008 (After 4 Years)**

	2004 Cohort #’s	Graduated with Regents or Local Diploma		Earned IEP Diploma		Still Enrolled		Transferred to GED Preparation Program		Dropped Out	
	#	#	%	#	%	#	%	#	%	#	%
Clyde-Savannah	82	59	72	3	4	5	6	8	10	7	9
Gananda	74	60	81	0	0	7	9	5	7	2	3
Lyons	91	69	76	4	4	3	3	6	7	9	10
Marion	107	87	81	2	2	6	6	3	3	9	8
Newark	216	160	74	4	2	26	12	6	3	19	9
North Rose-Wolcott	127	91	72	5	4	14	11	3	2	14	11
Palmyra-Macedon	186	169	91	2	1	9	5	4	2	4	2
Red Creek	93	71	76	4	4	2	2	5	5	11	12
Sodus	125	108	86	5	4	4	3	1	1	8	6
Wayne	259	218	84	3	1	21	8	0	0	16	6
Williamson	120	106	88	1	1	5	4	2	2	6	5
Wayne County	1480	1198	81	33	2	102	7	43	3	105	7
Wayne-FL BOCES	3603	2882	80	97	3	237	7	106	3	285	8

This table shows the graduation rate, after four years, for students who entered ninth grade in 2004. The average graduation rate for these Wayne County schools of 81% compares very favorably with the average state graduation rate of 67% after four years.

In addition, the performance of students in Wayne County districts on Regents examinations was also examined. This table shows the percentage of students passing the five most common Regents examinations at a grade of 65 for the students who entered ninth grade after four years:

**2004 TOTAL COHORT-After Four Years of Instruction (All Students)**

**Number of students in cohort in ( )**

**Percent of 2004 Cohort Passing 65-100**

District	English	Math	Global History	US History & Gov't	Science
Clyde-Savannah (82)	71	71	68	70	69
Gananda (74)	82	92	85	61	94
Lyons (91)	78	81	81	75	82
Marion (107)	64	74	68	75	71
Newark (216)	73	77	70	70	77
North Rose-Wolcott (127)	63	76	68	69	73
Palmyra-Macedon (186)	84	89	89	62	88
Red Creek (93)	74	80	75	71	87
Sodus (125)	74	75	68	79	76
Wayne (259)	86	90	83	86	90
Williamson (120)	85	89	87	82	91
Wayne County Average	76	81	77	73	82
Wayne-FL BOCES Region	78	81	78	75	83
NYS Statewide Public	75	76	69	72	74

Again, we see that the performance of the students in the Wayne County schools compares favorably with students from other areas of the state who take these Regents examinations.

There are numerous other measures that could be studied to ascertain the performance levels of the students who attend the Wayne County schools. However, that is beyond the scope of this study. The previous two charts were presented as summary data to show that the schools in Wayne County perform well when it comes to student achievement. While the focus of any good school leadership team is to constantly focus on improving student results, these schools are not broken or badly in need of attention to make their students successful. It is the focus of this study to provide ideas for how these very good schools might cooperate to provide their students more than they currently have. We now move to a discussion about current curricular opportunities.

Discussions were held with instructional leaders in each of the school districts including the Superintendent and the High School Principal. In every school district, there is great satisfaction with the core instructional program that is available to students. In English, mathematics, social studies, and the sciences, school administrators believe that their high school offers a very solid program.

The feeling that students receive a very solid high school program was unanimous. On the other hand, people were equally committed to wanting to provide more for their students. Conversations with school leaders consistently revealed the following areas for curriculum expansion:

- ❖ Advanced placement courses
- ❖ More foreign languages
- ❖ Upper level math and science classes
- ❖ International Baccalaureate programs
- ❖ Project Lead the Way
- ❖ More college level courses
- ❖ More electives
- ❖ More opportunities in the arts
- ❖ More business courses

Currently, there are some districts which offer their students some of these programs as shown in the following two tables.

<b>Advanced Placement and International Baccalaureate Courses</b>											
<b>A P Course</b>	CS	Gan	Ly	Mar	Nwk	NRW	PM	RC	Sd	Wy	Wm
Eng. Lang. & Comp.					X		X			X	X
Eng. Lit. & Comp.		X			X					X	X
American History					X		X			X	
World History							X				
European History					X					X	X
Psychology					X						
Calculus AB		X			X		X			X	X
Calculus BC							X				
Statistics										X	
Biology		X			X	X	X			X	X
Chemistry					X					X	X
Physics					X					X	
Art					X					X	
Art - 2D		X				X					X
Art - 3D		X									
Drawing/Painting II											
Music Theory					X		X				
<b>I B Course</b>	CS	Gan	Ly	Mar	Nwk	NRW	PM	RC	Sd	Wy	Wm
English 11							X			X	
English 12							X			X	
Hist. of the Americas							X			X	
Theory of Knowledge							X			X	
Creat, Action, & Serv.							X			X	
Extended Essay							X			X	
Math Studies										X	
Math SL										X	
Pre-Calculus							X				
Biology							X			X	
Psychology							X				
French IV							X				
French V							X				
Spanish B										X	
Spanish AB										X	
Spanish IV							X				
Spanish V							X				
Visual Arts							X			X	

The following table depicts the current offerings that carry college credit.

<b>Wayne County High School Courses for College Credit</b>											
<b>Code: CC-Cayuga CC; FL-Finger Lakes CC; ON-Onondaga CC; MC-Monroe CC</b>											
<b>ESF-College of Environmental Science and Forestry;</b>											
<b>RIT-Rochester Institute of Technology; SU-Syracuse University</b>											
<b>Courses</b>	<b>C-S</b>	<b>Gan</b>	<b>Lyo</b>	<b>Mar</b>	<b>Nwk</b>	<b>NR-W</b>	<b>Pal-Mac</b>	<b>RC</b>	<b>Sds</b>	<b>Way</b>	<b>Wmsn</b>
<b><u>English</u></b>											
Effective Speech									CC		
Intro to College Studies						FL					FL
Project Advance English						SU					
English 101	FL	FL	FL	FL	FL	FL	FL	CC	CC	FL	FL
English 102	FL			FL	FL	FL	FL	CC	CC	FL	FL
English 12											
<b><u>Social Studies</u></b>											
Part in Govt & Politics										FL	
Art History					FL						
Government			FL								
European History 102					FL				CC		
American Studies 102									CC		
US History			FL							FL	
US History 110	FL	FL		FL	FL	CC					FL
US History 111	FL	FL		FL	FL	CC					FL
Economics			FL			FL	FL				FL
Psychology					FL	FL	FL			FL	FL
Sociology							FL			FL	FL
Western Society	FL										
<b><u>Mathematics</u></b>											
Advanced Algebra 104									CC		
Statistics								CC			
Math 4 Honors										FL	
Pre-Calculus	FL	FL	FL	FL				CC	CC	FL	FL
Pre-Calculus 12			FL								
Calculus I	FL		SU	FL		FL	FL		CC		
<b><u>Science</u></b>											
Physics Honors							FL				
Physical Geology								CC			
Meteorology							FL	FL			
Astronomy					FL		FL				
Anatomy & Human Phys I	FL										
Anatomy & Human Phys II	FL										
Forensic Science 108									CC		
Chemistry			CC		FL	FL					
College Biology			CC		FL						
Human Biology 203									CC		
Human Biology 204									CC		
Physics 118		FL			FL		FL		FL		FL
Physics 119		FL							FL		FL

<b>Courses</b>	<b>C-S</b>	<b>Gan</b>	<b>Lyo</b>	<b>Mar</b>	<b>Nwk</b>	<b>NR-W</b>	<b>Pal-Mac</b>	<b>RC</b>	<b>Sds</b>	<b>Way</b>	<b>Wmsn</b>
General Biology I				FL			FL				
General Biology II				FL							
Global Environmental Sci.	ESF										
<b><u>Langs Other Than English</u></b>											
French IV 101		FL					FL				FL
French IV 102		FL									FL
French V							FL				
German IV										FL	
Spanish IV 101		FL				FL	FL			FL	
Spanish IV 102		FL									
Spanish IV 103								CC	CC		
Spanish V 104							FL	CC	CC	FL	
Project Advance Spanish 102	SU										
Project Advance Spanish 201	SU										
<b><u>Art</u></b>											
Art History/Appreciation I				FL							
Art History/Appreciation II				FL							
Computer Imaging in Art							MC				
<b><u>Business</u></b>											
Accounting 2										FL	
Computer Applications	FL						FL	CC	FL	FL	
Business Management									FL		
Intro to Prog & Comp- Java					FL	FL					
<b><u>Health</u></b>											
Child Psychology										FL	
Health										FL	
<b><u>Music</u></b>											
Music Theory I					FL				FL		
<b><u>Technology</u></b>											
Design & Draw for Product.			RIT		RIT		MC				RIT
Comp Integrated Manufact.					RIT		RIT				
Principles of Engineering			RIT		RIT		RIT				RIT
Digital Electronics					RIT		MC				
<b><u>Intro to College Studies</u></b>											FL

It is clear from the tables above that different schools have different opportunities for their students beyond the core academic curriculum. These tables show how the offerings in one Wayne County school district compare with the offerings in the other Wayne County school districts. Obviously, they are different. To give further insight into the comparability of curriculum



offerings, we compared the opportunities for the Wayne County students with schools from other parts of the state.

Both the grant proposal and our conversations with the Wayne County school superintendents centered on preserving, if not enhancing, the quality of existing high school curricula and programs, while demonstrating cost effectiveness. This prompted two related areas of study. The first was an examination of the relationship between the scope of curricular offerings in a high school with its student population size. Conventional wisdom would conclude that the more students in a school, the greater the number of curricular offerings that can be supported by sufficient class sizes. Yet, however logical this conclusion appears, seeking supporting data seemed appropriate.

Second, in looking ahead, it is clear to the Superintendents that future high school graduates will need a greater set of skills than today's graduates, given the increasing global characteristic of our business and political worlds. Accordingly, it was important to compare the curricular opportunities of the current Wayne County high schools with those of relatively nearby, high-achieving high schools of similar, if not greater, size. This comparison seemed especially important since the primary consideration of this study was "regional high schools," implying high schools with greater enrollment than currently exist in the Wayne County high schools. It was a fundamental hypothesis of this study that Wayne County high schools had to be larger in order to provide the types of curriculum offerings that are necessary to educate all children to high standards and the 21<sup>st</sup> century skills being demanded in the world today.

To accomplish this objective, course opportunities of high schools with student populations of 400, 800, and 1200 were examined. In doing so, benchmarks against which course offerings in the eleven Wayne County high schools could be established. In selecting high schools within these three population categories, an attempt was made to locate high-achieving high schools that are geographically proximate, and to the extent reasonably

possible, close in socio-economic characteristics. In the population category of 1200, the nearby schools of Brighton, East Irondequoit, and Victor were selected. In the remaining population categories of 800 and 400, a greater geographical reach was required. For 800 students, Albion (Niagara County), Cortland (Cortland County), and Oneida (Madison County) were selected. In the 400 student category, Bloomfield (Ontario County), Pulaski (Oswego County), and Tully (Onondaga County) were chosen.

Since every high school in New York State offers a standard set of foundation courses, analysis focused on the upper level courses that distinguished these nine schools. Accordingly, Advanced Placement, International Baccalaureate, college credit-bearing, and Project Lead the Way courses were identified. The average numbers of these course offerings by the three population categories are presented in the following table. In addition, the comparable numbers of these courses offered at the Wayne County high schools are presented.

**Wayne County High School Courses in  
Advanced Placement, International Baccalaureate,  
College Credit, and Project Lead The Way  
With Comparable Courses at  
High Schools of 400, 800, and 1200 Students**

High Schools	Average Number of AP Courses	Average Number of IB Courses	Average Number of College Courses	Total	Project Lead the Way
High Schools of 1200	15	10	16	41	2 of 3
High Schools of 800	9	0	13	22	1 of 3
High Schools of 400	3	2	9	14	0 of 3
High Schools and Number of Students	Number of AP Courses	Number of IB Courses	Number of College Courses	Total	Project Lead the Way
Wayne 809	10	12	15	37	yes
Newark 741	11	0	9	20	yes
Palmyra-Macedon 702	7	12	20	39	yes
North Rose-Wolcott 468	2	0	12	14	
Sodus 416	0	0	18	18	
Williamson 406	6	0	18	24	yes
Gananda 361	5	0	10	15	
Red Creek 321	0	0	9	9	
Marion 314	0	0	13	13	
Lyons 305	0	0	11	11	yes
Clyde-Savannah 285	0	0	13	13	

The first dimension of analysis is recognizing that this comparison is limited, at best. It focuses on only three schools in each population category, which in itself is limiting.

The second aspect of this analysis is the obvious relationship between high school size and range of upper-level course offerings. The gap between 14 Advanced Placement, International Baccalaureate, and college credit courses in high schools of 400 and 41 similar courses in high schools of 1200 is dramatic. Equally compelling is the difference between the 22 courses in high schools of 800 and 41 in schools of 1200. Although these differences may be attributed

to several other factors such as socio-economic status, income and property wealth within the districts, etc., enrollment, in itself, is a compelling factor. Consistent with the concept of economy of scale, as enrollment increases, so too does the number of specialized curricular offerings.

This concept of economy of scale was one of the driving forces behind this study. Not only could a greater number of courses become available to students in a larger “regional” high school, but a greater economy of scale in terms of cost might also be realized.

Again, given the limited sample of schools studied, the average number of courses available at the three different levels can be summarized as follows:

<b>High School Enrollment</b>	<b>Total Upper Level Courses</b>
400	14
800	22
1200	41

The difference in 400 and 800 pupil high schools is 8 courses or 57%. On the other hand, upper level course offerings at the next 400 student level increase from 22 to 41, an increase of 19 courses or 86%.

In summary, there is a direct relationship between high school enrollment and the range of course offerings; schools with larger enrollments have more opportunities for their students. Given the projected enrollment decline for the Wayne County high schools, continuing attention should be given to the opportunities that will be available to students. Maintaining the current level of course offerings, and even expanding those offerings, will be next to impossible without the cooperation and collaboration of all districts. Lower enrollment and higher cost will preclude other options.

## Regional High School Background

It was clearly understood that one of the options considered when this study was conceived was to build new buildings that would serve as regional high schools. This concept was designed to replace the existing eleven high schools with three to four regional high school buildings. In this model, elementary and middle schools would remain in their current locations. Eleven school districts would remain with the eleven existing Boards of Education also remaining in place. The theory behind creating these larger regional high schools is that a larger number of students would be educated in each facility providing the critical mass to offer a richer curriculum and more electives. It was also hypothesized that larger high schools would be more cost effective thereby reducing the cost of public education in Wayne County with property taxes decreasing as a result. Instead of having the 5,500 high school students in Wayne County spread out across eleven high schools, these students would all be attending four (for example) high schools. The average size of the high schools would increase from approximately 500 to nearly 1,100. This increased enrollment would provide the student base to expand program offerings and possibly reduce costs.

One other clarification about the scope of this study should be made at this time. During several of the conversations that were held with school staff and community members, the concept of a county school district was discussed. A number of states have organized their school districts along county borders. Each county has its own school district with one Board of Education and one Superintendent. However, New York State has never organized its educational system in this manner. As a result, it was never the intent or within the scope of this study to examine the feasibility of a single county-wide school district for Wayne County.

From our first conversations with individuals from the schools and the communities about regional high schools, it became very apparent that this was a model that held little, if any, appeal for most people. Research has consistently shown that while people may not be satisfied with education in the

United States, these same people love their local school district. Such was the case in Wayne County. For the following reasons, people opposed the idea of creating regional high school facilities:

- Loss of identity of the individual high school including the school's name, mascot, and colors;
- Perception that the merged high schools would be incompatible;
- Less personal attention for students in a larger high school;
- Busing time for students would be increased;
- Many capital improvements have recently been made to the high schools in Wayne County.....it would be a colossal waste of money if these buildings were now closed;
- Larger high schools would create too much competition for many students to participate in extra-curricular activities; and
- Having vacant high school buildings would detract from the nature of the communities.

In spite of the apparent resistance to the regional high school concept, this study was commissioned to identify models of what regional high schools might look like. In developing the regional high school model with the eleven school district superintendents, a high school target population range of 900-1,200 students was established. The top end of this range is approximately 50% larger than Wayne High School, currently the largest high school in the county.

The curriculum analysis of high schools with 400, 800, and 1,200 students indicates that the number of courses available to students increases substantially as high school enrollment increases. For Wayne County high schools with current populations of less than 500 students, the curriculum advantages would be most significant. The total number of Advanced Placement, International Baccalaureate, and college credit courses in county schools of less than 500 ranges from 9 to 23, compared with an average of 41 in schools of 1,200 students.

In addition to the curricular advantages, it was believed that the potential long term cost savings achieved by consolidating populations, based on staffing and operating efficiencies, make such regional high schools worthy of serious consideration---this is the foundation of this study.

## Regional High School Locations/Construction

A critical dimension of the regional high school concept is the projected location of the regional high schools. Two different models will be used in projecting locations for the regional high schools. The first model assumes that four new regional high school facilities would be constructed. The second model assumes that four existing high school facilities would house the four regional high schools, allowing for renovation and expansion where necessary. Given the substantial time necessary for school district/community approval and building construction, an initial operational date for regional high schools of 2014-15 is used in this model.

The first option for the location of regional high schools is to construct four new high school facilities for Wayne County. Using the projected 2014-15 high school student populations, as well as general geographic relationships of the eleven school districts, four “regional high schools” are hypothetically designated. These high schools are “Northwest Wayne High School,” “Southwest Wayne High School,” “Southeast Wayne High School,” and “Northeast Wayne High School.” Consistent with the target population range of 900-1,200 students, the following table highlights the four regional high schools, their hypothetical locations, their 2014-15 projected student populations, and the projected 2014-15 student populations of the respective component high schools. None of the regional high schools is more than 12 miles from any of its component high schools.



Location of Regional High Schools				
Regional High School	Regional High School Location	Regional High School Population (2014-15)	Component High Schools	Component High School Populations (2014-15)
<b>Northwest Wayne High School</b>	Route 104 and Fisher Road	1,271	Marion	263
			Wayne	699
			Williamson	309
<b>Southwest Wayne High School</b>	Route 31 and Alderman Road	929	Gananda	308
			Palmyra-Macedon	621
<b>Southeast Wayne High School</b>	Route 31 and Warncke Road	1,094	Clyde-Savannah	232
			Lyons	241
			Newark	621
<b>Northeast Wayne High School</b>	Route 104 and Lasher Road	1,080	North Rose-Wolcott	435
			Red Creek	276
			Sodus	369

An important part of this study is to estimate the cost of constructing a regional high school facility. As these construction costs are estimated, we are, at this time, assuming that four new regional high school facilities are being constructed consistent with the table above. In consultation with a New York State architect and engineering firm that designs school facilities, a construction cost estimate for a 1,200 student high school was obtained. The cost estimate was based on the building having modern classrooms, a full-sized auditorium, a gymnasium, a swimming pool, an appropriate number of athletic

fields, and an all weather track. Given this parameter, it is estimated that a 300,000 square foot high school would be needed. The following shows the cost estimate calculation.

$$\begin{array}{r} 300,000\text{--square foot building} \\ \times \quad \$200\text{--per square foot--construction cost} \\ \hline \$60,000,000\text{--total cost of construction} \\ + \quad 8,000,000\text{--site work} \\ \hline \$68,000,000\text{--total cost of construction and site work} \\ + \quad \$17,000,000\text{--incidental costs @ 25\%} \\ \hline \$85,000,000\text{--estimated total cost of each new high school} \end{array}$$

The four high schools that are modeled in this section of the report would not be built until at least 2014-15. These buildings would be built to serve the student populations at that time and for many years to come. Rather than to project enrollments beyond the point of reliability which would be required for these high school enrollment capacities, we are assuming, for purposes of this model, that each high school would have a 1,200 student capacity. Should the districts eventually build these regional high schools, they will be required to submit documentation regarding enrollment projections to the State Education Department and work with their architects to get updated cost estimates.

The next regional high school building cost element is the annual debt service payment associated with the \$85,000,000 construction cost. A payment schedule, provided by a consultant for the Wayne-Finger Lakes BOCES, based on a thirty year bond amortization and the current bond rate of 5.25% would generate an average principal and interest payment in each of the first ten years of \$6,223,717. This payment would have to be equitably spread across the eleven school districts in order to pay for the construction of these four high schools.

In allocating these debt service costs to the eleven school districts, we have examined two possible models. The first cost allocation model is based on enrollment percentage. Using the 2014-15 enrollments in each of the four

regional high schools, the allocated payments per district are displayed in the following table.

Allocation of Annual \$6,223,717 Debt Service Payments By District Enrollment (2014-15)					
Regional High School	Regional High School Population	Component High School	Component High School Population in 2014-15	Percentage of Regional High School Population	Allocation of \$6,223,717
<b>Northwest Wayne High School</b>	1,271	Marion	263	20.7	\$1,288,309
		Wayne	699	55.0	\$3,423,044
		Williamson	309	24.3	\$1,512,363
<b>Southwest Wayne High School</b>	929	Gananda	308	33.2	\$2,066,274
		Palmyra-Macedon	621	66.8	\$4,157,443
<b>Southeast Wayne High School</b>	1,094	Clyde-Savannah	232	21.2	\$1,319,428
		Lyons	241	22.0	\$1,369,217
		Newark	621	56.8	\$3,535,071
<b>Northeast Wayne High School</b>	1,080	North Rose-Wolcott	435	40.3	\$2,508,158
		Red Creek	276	25.5	\$1,587,047
		Sodus	369	34.2	\$2,128,511

While the previous chart shows the gross annual cost for each school district with respect to the construction of the four regional high schools, it must be noted that the State of New York shares school construction costs to a very significant degree. Furthermore the gross costs shown above may be

significantly reduced if districts have accumulated capital reserve accounts that would ease the financial burden in constructing these buildings. In short, it is very difficult to identify all of the cost factors that would be involved in accurately projecting the costs of constructing these building in 2014-15 or after. However, the state share is so significant that we have prepared the following table to indicate how the state aid would offset the gross annual costs listed in the previous table. Since there is no legislation in New York State that describes regional high schools, there is no single method for determining the building aid for a regional high school in New York State at this time. However, for the sake of this model, we have used the current building aid ratio of the district that currently houses the largest high school of the component high schools that would make up each of the new regional high schools. This means that the following building aid ratios would be used for each high school:

<b>Regional High School</b>	<b>Largest Component High School for this Regional High School</b>	<b>Current Building Aid Ratio of Largest High School</b>
<b>Northwest Wayne High School</b>	Wayne	80.6
<b>Southwest Wayne High School</b>	Palmyra-Macedon	90.8
<b>Southeast Wayne High School</b>	Newark	96.0
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0

The following table shows the net cost of constructing the four regional high schools after the application of building aid as described above. For purposes of this model, we are also assuming that the cost allowance for each high school is 100%.

Net Annual Local Allocation of \$6,223,717 Debt Service Payments By District Enrollment (2014-15)				
Regional High School	Component High School	Building Aid Ratio of Largest High School	Gross Annual Allocation of \$6,223,717	Net Annual Local Allocation of \$6,223,717 after Building Aid
<b>Northwest Wayne High School</b>	Marion	80.6	\$1,288,309	\$249,932
	Wayne	80.6	\$3,423,044	\$664,071
	Williamson	80.6	\$1,512,363	\$293,398
<b>Southwest Wayne High School</b>	Gananda	90.8	\$2,066,274	\$190,097
	Palmyra-Macedon	90.8	\$4,157,443	\$382,485
<b>Southeast Wayne High School</b>	Clyde-Savannah	96.0	\$1,319,428	\$52,777
	Lyons	96.0	\$1,369,217	\$54,769
	Newark	96.0	\$3,535,071	\$141,403
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0	\$2,508,158	\$501,632
	Red Creek	80.0	\$1,587,047	\$317,409
	Sodus	80.0	\$2,128,511	\$425,702

We have also chosen to create a second model for the allocation of capital construction costs to the participating school districts. In this model, we allocate costs according to the relative true value of each of the districts sharing in the construction of each of the regional high schools. This method for allocating capital costs is similar to the manner in which capital improvement costs are shared in the central high school districts on Long

Island. Allocating the same annual \$6,223,717 debt service by the full value of the participating school districts yields the following table.

Allocation of Annual \$6,223,717 Debt Service Payments By District By Full Value Assessment					
Regional High School	Regional High School Population	Component High School	Full Value Assessment 2009-10	Percentage of Full Value Assessment	Allocation of \$6,223,717
<b>Northwest Wayne High School</b>	1,271	Marion	\$251,457,398	17.7	\$1,101,598
		Wayne	\$782,546,752	55.2	\$3,435,492
		Williamson	\$384,435,533	27.1	\$1,686,627
<b>Southwest Wayne High School</b>	929	Gananda	\$291,484,752	31.0	\$1,929,352
		Palmyra-Macedon	\$647,971,209	69.0	\$4,294,365
<b>Southeast Wayne High School</b>	1,094	Clyde-Savannah	\$200,186,215	20.3	\$1,263,415
		Lyons	\$221,604,737	22.5	\$1,400,336
		Newark	\$563,363,033	57.2	\$3,559,966
<b>Northeast Wayne High School</b>	1,080	North Rose-Wolcott	\$536,472,022	44.0	\$2,738,436
		Red Creek	\$269,490,039	22.1	\$1,375,441
		Sodus	\$413,457,122	33.9	\$2,109,840

Regardless of the way capital costs are allocated to the participating school districts, building aid from New York State still plays a significant role in reducing the local costs of construction. As we did when we allocated the costs by enrollment, we have also provided the following table which shows the net cost to school districts after the application of state building aid given the cost allocation according to full value assessment.

Net Annual Local Allocation of \$6,223,717 Debt Service Payments By District (Full Value Assessment)				
Regional High School	Component High School	Building Aid Ratio of Largest High School	Gross Annual Allocation of \$6,223,717- Full Value Assessment	Net Annual Local Allocation of \$6,223,717 after Building Aid
<b>Northwest Wayne High School</b>	Marion	80.6	\$1,101,598	\$213,710
	Wayne	80.6	\$3,435,492	\$666,485
	Williamson	80.6	\$1,686,627	\$327,206
<b>Southwest Wayne High School</b>	Gananda	90.8	\$1,929,352	\$177,500
	Palmyra-Macedon	90.8	\$4,294,365	\$395,082
<b>Southeast Wayne High School</b>	Clyde-Savannah	96.0	\$1,263,415	\$50,537
	Lyons	96.0	\$1,400,336	\$56,013
	Newark	96.0	\$3,559,966	\$142,399
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0	\$2,738,436	\$547,687
	Red Creek	80.0	\$1,375,441	\$275,088
	Sodus	80.0	\$2,109,840	\$421,968

Thus far in this chapter, we have estimated the costs for building four regional high schools as brand new facilities. At this point, we consider another option for housing Wayne County's high school students in four regional high schools. Rather than creating four new facilities, we now examine the feasibility of using four existing high schools as the locations for the four regional high schools.

Earlier in this study, we documented the significant enrollment decline that has occurred in the Wayne County high schools. From 2004-05 to 2009-

10, high school enrollment declined from 5,606 to 5,138, a decrease of 468 students. Between 2009-10 and 2014-15, it is projected that high school enrollments will continue to decline from 5,138 to 4,374, a decrease of another 764 students.

While we fully understand that high school building utilization changes every year, we also know that a larger number of students were attending these high school buildings in years past. In attempting to quantify the capacity of the current high school facilities, we examined the high school enrollment of the four largest high school buildings in 1999-2000. We then assumed that there is space in each of these buildings today to educate a larger number of students because of the significant enrollment decline from 1999-2000 to the present. We also know that these enrollments will continue to decline into the future. Given the capacity of the four largest high schools in 1999-2000 and the projected enrollments for 2014-15, how might students be accommodated in existing high schools? The following table provides one option.

Possible Combinations of High School Populations Based on 1999-00 Student Capacity and 2018-19 Enrollments					
High School	Enrollment/ Capacity in 1999-00	Projected Enrollment in 2018-19	Neighboring High Schools	Enrollment in 2018-19	Combined Enrollment of High Schools
Newark	925	637	Lyons	214	1050
			Clyde- Savannah	199	
North Rose- Wolcott	595	359	Red Creek	255	946
			Sodus	332	
Palmyra- Macedon	700	570	Gananda	313	883
Wayne	882	667	Marion	271	1241
			Williamson	303	

Assuming that the building capacities of these four largest high schools in 1999-2000 could still accommodate the same populations in 2018-19, this



table proves to be very informative. It is immediately clear that none of the buildings could accommodate their own projected populations as well as the projected populations of their regional high school partners; Newark is 125 students short, North Rose-Wolcott is 351 students short, Palmyra-Macedon is 183 students short, and Wayne is 359 students short. However, if these schools were to house the regional high schools and additions were built to accommodate the additional students, this would present a far more cost effective option than building four brand new \$85,000,000 high schools.

How much more cost effective might this option be? When determining the costs of the new, 1,200 student high schools, we assumed that a building of 300,000 square feet would be necessary. In a fairly simplified analysis, this means that the new high schools would have 250 square feet per student. Applying this factor to accommodate the number of additional students that would be part of these regional high schools yields the following table.

<b>Regional High School</b>	<b>Student Capacity</b>	<b>Regional High School Enrollment</b>	<b>Additional Student Spaces Needed</b>	<b>Number of Additional Square Feet Needed (# of student spaces X 250 sq ft/student)</b>
Newark	925	1050	125	31,250 (12.3%)
North Rose-Wolcott	595	946	351	87,750 (34.5%)
Palmyra-Macedon	700	883	183	45,750 (18.0%)
Wayne	882	1241	359	89,750 (35.3%)
<b>TOTAL</b>	<b>3,102</b>	<b>4,120</b>	<b>1,018</b>	<b>254,500 (100%)</b>

This table now shows the construction impact of locating regional high schools in existing high school buildings. Instead of constructing four new high schools with 1,200,000 square feet of new space and costing \$340,000,000, existing high schools can accept additions to accommodate additional students by building only 254,500 square feet of new space. Using the parameters for costing out the construction costs for this option, we apply the same formula used for the construction of new schools as follows:

$$\begin{array}{r}
254,500\text{--square feet of new space} \\
\times \underline{\$200\text{--per square foot--construction cost}} \\
\$50,900,000\text{--total cost of construction} \\
+ \underline{8,000,000\text{--site work}} \\
\$58,900,000\text{--total cost of construction and site work} \\
+ \underline{\$14,725,000\text{--incidental costs @ 25\%}} \\
\$73,625,000\text{--estimated total cost to expand all 4 high schools}
\end{array}$$

In short, we can now estimate that it would cost less to expand **all four** high schools to meet the total high school population in 2018-19 than it would to construct **one** new regional high school at a cost of \$85,000,000. While we understand that these are only estimates of space required and costs, the option of adding space will always be far more cost effective than building new buildings. In addition, at least for the four high schools that would house the regional high schools, the issue of a vacant high school building would go away.

We have provided the following table in order to show how these construction costs would be allocated given this new model. For purposes of this table, we have allocated costs according to enrollment.

Allocation of \$73,625,000 in Construction Costs According to Enrollment						
Regional High School	Component High Schools	Enrollment in 2018-19	% of Total High School Enrollment	% of Total Construction Costs Allocated to High School	Total Cost of High School Addition	Total Cost of High School By District
Newark	Newark	637	60.7%	12.3%	\$9,055,875	\$5,496,916
	Lyons	214	20.4%	12.3%	\$9,055,875	\$1,847,399
	Clyde-Savannah	199	19.0%	12.3%	\$9,055,875	\$1,720,616
North Rose-Wolcott	North Rose-Wolcott	359	37.9%	34.5%	\$25,400,625	\$9,626,837
	Sodus	332	35.1%	34.5%	\$25,400,625	\$8,915,619
	Red Creek	255	27.0%	34.5%	\$25,400,625	\$6,858,169
Palmyra-Macedon	Palmyra-Macedon	570	64.6%	18%	\$13,252,500	\$8,561,115
	Gananda	313	35.4%	18%	\$13,252,500	\$4,691,385
Wayne	Wayne	667	53.7%	35.3%	\$25,989,625	\$13,956,429
	Marion	271	21.8%	35.3%	\$25,989,625	\$5,665,738
	Williamson	303	24.4%	35.3%	\$25,989,625	\$6,341,469

As in our earlier model, these costs would also be significantly offset by building aid provided by New York State. We have again used the building aid ratio for the largest high school in each of the regional high school configurations. These net costs are illustrated in the table that follows.

Net Annual Local Allocation of \$6,223,717 Debt Service Payments By District Enrollment (2014-15)				
Regional High School	Component High School	Building Aid Ratio of Largest High School	Gross Allocation of \$73,625,000	Net Annual Local Allocation of \$71,625,000 after Building Aid
<b>Northwest Wayne High School</b>	Marion	80.6	\$5,665,738	\$1,099,153
	Wayne	80.6	\$13,956,429	\$2,707,547
	Williamson	80.6	\$6,341,469	\$1,230,245
<b>Southwest Wayne High School</b>	Gananda	90.8	\$4,691,385	\$431,607
	Palmyra-Macedon	90.8	\$8,561,115	\$787,623
<b>Southeast Wayne High School</b>	Clyde-Savannah	96.0	\$1,720,616	\$68,825
	Lyons	96.0	\$1,847,399	\$73,896
	Newark	96.0	\$5,496,916	\$219,877
<b>Northeast Wayne High School</b>	North Rose-Wolcott	80.0	\$9,626,837	\$1,925,967
	Red Creek	80.0	\$6,858,169	\$1,371,634
	Sodus	80.0	\$8,915,619	\$1,783,124

# Regional High School Transportation Routes/Costs

In the previous chapter, locations were determined for the four regional high schools. This section of the study is devoted to a presentation of the bus routes and costs for transporting the high school students from their home school districts to the regional high schools. For purposes of this section, it is assumed that all existing transportation systems in the eleven school districts would be used to transport all high school students to their district's current middle school. We used the middle schools as transfer points for student transportation since the high schools may no longer be in operation given the formation of regional high schools.

The first set of bus routes that follows assumes that four new regional high school facilities will be constructed as described in the previous chapter. These high schools are named Northwest Wayne, Southwest Wayne, Southeast Wayne, and Northeast Wayne. Bus routes to transport all students from their current middle schools to these four regional high schools are as follows:

## **Northwest Wayne High School Route 104 and Fisher Road, Williamson**

From Marion Middle School at 4034 Warner Road, Marion

1. Go EAST on WARNER RD toward WILLIAMSON RD/NY-21. (.3 mi)
2. Turn LEFT onto WILLIAMSON RD/NY-21. Continue to follow NY-21. (4.3 mi)
3. Turn LEFT onto NY-104 W. (3.3 mi)
4. Turn LEFT onto FISHER RD.
5. STATE ROUTE 104 & FISHER RD, arrive at Regional High School

From Wayne Middle School at 6200 Ontario Center Road, Ontario Center

1. Go NORTH on ONTARIO CENTER RD/NY-350 toward CR-103 (.1 mi)
2. Turn RIGHT onto NY-104 E. (2.8 mi)
3. Turn LEFT onto FISHER RD.
4. STATE ROUTE 104 & FISHER RD., arrive at Regional High School

From Williamson Middle School at 4184 Miller Road, Williamson

1. Go WEST on MILLER ST toward MAPLE AVE. (0.0 mi)
2. Turn RIGHT onto MAPLE AVE. (.2 mi)
3. Turn LEFT onto MAIN ST/RIDGE RD/CR-103. (.2 mi)
4. Turn RIGHT onto NY-21/LAKE AVE. (.6 mi)
5. Turn LEFT onto NY-104 W. (3.3 mi)
6. Turn LEFT onto FISHER RD.
7. STATE ROUTE 104 & FISHER RD., arrive at Regional High School

### **Southwest Wayne High School Route 31 and Alderman Road, Palmyra**

From Gananda Middle School at 1500 Day Spring Ridge, Walworth

1. Go SOUTH on DAY SPRING RD toward WATERFORD RD. (.1 mi)
2. Turn LEFT onto WATERFORD RD. (0.0 mi)
3. Turn RIGHT onto WIEDRICK RD. (.4 mi)
4. Turn LEFT onto EDDY RD. (.6 mi)
5. Turn RIGHT onto NY-350/ONTARIO CENTER RD. (1.9 mi)
6. Turn LEFT onto NY-350/ONTARIO CENTER RD/NY-31F. (1.7 mi)
7. Turn LEFT onto MAIN ST/NY-31. Continue to follow NY-31. (1.1 mi)
8. STATE ROUTE 31 & ALDERMAN RD., arrive at Regional High School

From Palmyra-Macedon Middle School at 151 Hyde Parkway, Palmyra

1. Go NORTH on HYDE PKWY toward W JACKSON ST. (.3 mi)
2. Turn LEFT onto W MAIN ST/NY-31. Continue to follow NY-31. (1.9 mi)
3. STATE ROUTE 31 & ALDERMAN RD., arrive at Regional High School

### **Southeast Wayne High School Route 31 and Warncke Road, Lyons**

From Clyde-Savannah middle school at 215 Glasgow Street, Clyde

1. Go SOUTH on GLASGOW ST/NY-414 toward WAYNE AVE. (.3 mi)
2. Turn RIGHT onto N PARK ST/NY-31. (.1 mi)
3. Turn LEFT onto SODUS ST/NY-31. (0 mi)
4. Turn RIGHT onto W GENESEE ST/NY-31 and follow NY-31. (6.1 mi)
5. Arrive at Regional High School

From Lyons Middle School at 10 Clyde Road, Lyons

1. Go east on Clyde Road (.6 mi)
2. Turn LEFT on Route 31 (.4 mi)
3. Arrive at Regional High School

From Newark Middle School at 701 Peirson Avenue, Newark

1. Go NORTH on PEIRSON AVE toward BLOSSOM RD. (.6 mi)
2. Turn RIGHT onto W MILLER ST. (.1 mi)
3. Turn LEFT onto NICHOLAY ST. (.1 mi)
4. Turn RIGHT onto W UNION ST/NY-31 and follow NY-31. (7.7 mi)
5. STATE ROUTE 31 & WARNCKE RD, arrive at Regional High School

## **Northeast Wayne High School Route 104 and Lasher Road, Wolcott**

From Red Creek Middle School at 6608 Church Street, Red Creek

1. Go SOUTH on WOLCOTT ST toward WATER ST and follow NY-104A. (1.1 mi)
2. Turn RIGHT onto NY-104. (7.1 mi)
3. STATE HWY 104 & LASHER RD, arrive at Regional High School

From North Rose-Wolcott Middle School at 5957 New Hartford Street, Wolcott

1. Go SOUTH on NEW HARTFORD ST toward BUTLER ST. (.4 mi)
2. NEW HARTFORD ST becomes WHISKEY HILL RD/CR-258. (.2 mi)
3. Turn RIGHT onto NY-104. (2.2 mi)
4. STATE HWY 104 & LASHER RD., arrive at Regional High School

From Sodus Middle School at 5957 New Hartford Street, Sodus

1. Go NORTH on MILL ST toward BENTON PL. (.4 mi)
2. Turn RIGHT onto W MAIN ST/MAIN ST W. (.1 mi)
3. Stay STRAIGHT to go onto STATE ST. (.2 mi)
4. Turn SLIGHT RIGHT onto RIDGE RD/RIDGE RD E. (1.2 mi)
5. Turn SLIGHT RIGHT onto NY-104. (9.5 mi)
6. STATE HWY 104 & LASHER RD., arrive at Regional High School

The distances from the current middle schools to the regional high schools described above can be summarized in the following table:

<b><i>Distances in miles from current middle school to Regional High School</i></b>											
Regional High School	C/S	GAN	LYO	MAR	NEW	NRW	P-M	RC	SOD	WAY	WMN
<b>Northwest Wayne</b> Rt. 104 & Fisher Road-Williamson				7.9						2.9	4.3
<b>Southwest Wayne</b> Rt. 31 & Alderman Road-Palmyra		5.8					2.2				
<b>Southeast Wayne</b> Rt. 31 & Warncke Road-Lyons	6.5		1.0		8.5						
<b>Northeast Wayne</b> Rt. 104 & Lasher Road-Wolcott						2.8		8.2	11.4		

The next set of bus routes that follows assumes that the four regional high schools will be located at the four largest existing high schools. As a result, Northwest Wayne would be located at the existing Wayne High School, Southwest Wayne would be located at the existing Palmyra-Macedon High School, Southeast Wayne would be located at the existing Newark High School, and Northeast Wayne would be located at the existing North Rose-Wolcott High School. Bus routes to transport all students from their current middle schools to these four regional high schools are as follows:



## **Northwest Wayne High School at Wayne High School**

From Marion Middle School at 4034 Warner Road, Marion

1. Go EAST on WARNER RD toward WILLIAMSON RD/NY-21. (.3 mi)
2. Turn LEFT onto WILLIAMSON RD/NY-21 and follow NY-21. (4.3 mi)
3. Turn LEFT onto NY-104 W. (6.0 mi)
4. Turn LEFT onto ONTARIO CENTER RD. (.1 mi)

From Williamson Middle School at 4184 Miller Road, Williamson

1. Go WEST on MILLER ST toward MAPLE AVE. (0 mi)
2. Turn RIGHT onto MAPLE AVE. (.2 mi)
3. Turn LEFT onto MAIN ST/RIDGE RD/CR-103. (.2 mi)
4. Turn RIGHT onto NY-21/LAKE AVE. (.6 mi)
5. Turn LEFT onto NY-104 W. (6.0 mi)
6. Turn LEFT onto ONTARIO CENTER RD (.1 mi)

## **Southwest Wayne High School at Palmyra-Macedon High School**

From Gananda Middle School at 1500 Day Spring Ridge, Walworth

1. Go SOUTH on DAY SPRING RD toward WATERFORD RD. (.1 mi)
2. Turn LEFT onto WATERFORD RD. (0 mi)
3. Turn RIGHT onto WIEDRICK RD. (.4 mi)
4. Turn LEFT onto EDDY RD. (.6 mi)
5. Turn RIGHT onto NY-350/ONTARIO CENTER RD. (1.9 mi)
6. Turn LEFT onto NY-350/ONTARIO CENTER RD/NY-31F. (1.7 mi)
7. Turn LEFT onto MAIN ST/NY-31. Continue to follow NY-31. (2.9 mi)
8. Turn RIGHT onto HYDE PKWY....151 is on the RIGHT (.3 mi)

## **Southeast Wayne High School at Newark High School**

From Clyde-Savannah Middle School at 215 Glasgow Street, Clyde

1. Go SOUTH on GLASGOW ST/NY-414 toward WAYNE AVE. (.3 mi)
2. Turn RIGHT onto N PARK ST/NY-31. (0.1 mi)
3. Turn LEFT onto SODUS ST/NY-31. (0 mi)
4. Turn RIGHT onto W GENESEE ST/NY-31 and follow NY-31. (13.2 mi)
5. Turn LEFT onto EAST AVE. (.1 mi)
6. Turn RIGHT onto E MILLER ST., Regional High School is on right

From Lyons Middle School at 10 Old Clyde Road, Lyons

1. Go WEST on CLYDE RD toward GENEVA ST/NY-14. (.1 mi)
2. Turn LEFT onto GENEVA ST/NY-14. (.3 mi)
3. Turn LEFT onto NY-31/FORGHAM ST. and follow NY-31. (1.2 mi)

## **Northeast Wayne High School at North Rose-Wolcott High School**

From Red Creek Middle School at 6608 Church Street, Red Creek

1. Go SOUTH on SOUTH ST/CR-268 toward NY-104. (.3 mi)
2. Turn RIGHT onto NY-104. (6.1 mi)
3. Turn LEFT onto LIMEKILN RD. (1.0 mi)
4. Turn RIGHT onto SALTER COLVIN RD. (.2 mi)
5. 11631 SALTER COLVIN RD is on the RIGHT.

From Sodus Middle School at 5957 New Hartford Street, Sodus

1. Go NORTH on MILL ST toward BENTON PL. (.4 mi)
2. Turn RIGHT onto W MAIN ST/MAIN ST W. (.1 mi)
3. Stay STRAIGHT to go onto STATE ST. (.2 mi)
4. Turn SLIGHT RIGHT onto RIDGE RD/RIDGE RD E. (1.2 mi)
5. Turn SLIGHT RIGHT onto NY-104. (7.2 mi)
6. Turn RIGHT onto NY-414. (1.3 mi)
7. Turn LEFT onto SALTER RD/CR-257; follow SALTER RD/CR-257. (2.2 mi)
8. SALTER RD/CR-257 becomes SALTER COLVIN RD. (1.0 mi)
9. 11631 SALTER COLVIN RD is on the LEFT.

The distances from the current middle schools to the regional high schools described above can be summarized in the following table:

<b>Regional High School</b>	<b>C/S</b>	<b>GAN</b>	<b>LYO</b>	<b>MAR</b>	<b>NEW</b>	<b>NRW</b>	<b>P-M</b>	<b>RC</b>	<b>SOD</b>	<b>WAY</b>	<b>WMN</b>
<b>Northwest Wayne</b> at Wayne HS				10.7							7.1
<b>Southwest Wayne</b> at Pal-Mac HS		7.9									
<b>Southeast Wayne</b> at Newark HS	13.7		1.6								
<b>Northeast Wayne</b> at NRW HS								7.6	13.6		

The distances of these regional high schools from their respective component middle schools permit the calculation of estimated additional annual costs of transporting students to the regional high schools. These calculations are based on the distance of each component district middle school from its respective regional high school and assumes that all high school students would be bused to their current middle school building and then transported to their regional high school. The model depicted in the table that follows also includes the number of buses required by each district, two round trips per day, 180 days per school year, the cost per bus transportation mile by district, and 90% state reimbursement. The term “net annual cost” reflects the local cost for transportation after the 90% state reimbursement bus transportation factor has been calculated.

In this table, the “Net Annual Cost” is calculated according to the following formula:

- # of bus miles/day=# of miles from current high school to regional high school multiplied by 4 to cover two round trips/day;
- X # of buses required;
- X cost of bus transportation/mile;

- X 10% = local transportation cost after receiving 90% transportation aid reimbursement from the state.

Cost of Transporting Students to Regional High Schools						
Regional High School	Regional High School Location	Component High Schools	Distance of Regional High Schools from Current High Schools (in miles)	Number of Buses Required	Cost of Bus Transportation per mile	Net Annual Cost of Transporting Component High School Students to Regional High Schools
<b>Northwest Wayne High School</b>	Route 104 and Fisher Road	Marion	4	8	\$3.55	\$8,179
		Wayne	3	20	\$2.81	\$12,139
		Williamson	8	10	\$2.91	\$16,762
<b>Southwest Wayne High School</b>	Route 31 and Alderman Road	Gananda	6	9	\$2.26	\$8,787
		Palmyra-Macedon	2	17	\$2.43	\$5,949
<b>Southeast Wayne High School</b>	Route 31 and Warncke Road	Clyde-Savannah	6.5	9	\$2.35	\$9,898
		Lyons	2	7	\$2.31	\$2,329
		Newark	7	20	\$2.00	\$20,160
<b>Northeast Wayne High School</b>	Route 104 and Lasher Road	North Rose-Wolcott	3	10	\$2.02	\$4,363
		Red Creek	8	7	\$2.79	\$11,249
		Sodus	12	9	\$3.49	\$27,138

This table provides some very valuable information regarding the cost of transporting students to a regional high school. Because the state is so committed to supporting the cost of school districts' transportation of students, this model estimates 90% state reimbursement for busing. Given this large reimbursement rate for the school districts, this table shows how relatively inexpensive it is to transport students in these school districts. While the cost for Sodus would be \$27,138 because it would be located 12 miles from Northeast Wayne High School, the cost for Lyons would be only \$2,329. On average, the eleven districts would spend \$11,441 to transport their students to the regional high school, a very modest cost.

## Regional High School Budgets/Cost Sharing Methodologies

The essence of this study focuses on two critical questions. The first question is whether or not the creation of regional high schools would increase opportunities for students. In reviewing the chapters on The Instructional Program and Extra-Curricular Activities which appear later in the report, it is clear that this question can be answered in the affirmative. High schools with 1,200 students have more academic opportunities than do high schools of 400 or 800 students. Extra-curricular opportunities, whether they are student clubs or inter-scholastic athletics, also increase in number as high school populations increase.

The second important question for this study is whether or not regional high schools save money and can be operated more cost effectively than smaller high schools. This chapter focuses on the answer to that question.

The following table depicts the K-12 enrollment of the eleven Wayne County school districts, the high school enrollments, and the enrollments of the regional high school affiliation for each district.

<b>District</b>	<b>2009-10 Student Enrollment (K-12)</b>	<b>2009-10 High School Enrollment</b>	<b>Wayne Regional High School Enrollment</b>
Clyde-Savannah	855	285	1,094 (SEW)
Gananda	1,162	361	929 (SWW)
Lyons	892	305	1,094 (SEW)
Marion	934	314	1,271 (NWW)
Newark	2,197	741	1,094 (SEW)
North Rose-Wolcott	1,380	478	1,080 (NEW)
Palmyra-Macedon	2,034	702	929 (SWW)
Red Creek	945	321	1,080 (NEW)
Sodus	1,199	416	1,080 (NEW)
Wayne	2,407	809	1,271 (NWW)
Williamson	1,166	406	1,271 (NWW)
AVERAGE	1,379	467	

SEW=Southeast Wayne; SWW=Southwest Wayne; NWW=Northwest Wayne; NEW=Northeast Wayne

The following table displays the 2009-10 high school budgets for the districts in this study.

## 2009-10 High School Budgets

	Clyde-Savannah	Gananda	Lyons	Marion	Newark	North Rose-Wolcott	Palmyra - Macedon	Red Creek	Sodus	Wayne	Williamson
Salaries	2,416,255	2,215,765	1,909,216	2,400,250	4,284,184	2,912,960	3,422,702	2,338,076	2,370,508	3,830,700	2,657,559
Equipment	26,500	8,850	37,618	25,130	155,342	50,790	23,939	7,000	-	46,000	54,483
Materials & Supplies	45,315	37,660	70,526	74,980	100,717	96,462	89,400	75,775	45,180	66,091	50,327
Contractual Items	60,800	16,625	223,831	74,735	172,073	71,437	106,986	89,275	45,350	79,690	81,027
Benefits	845,689	775,518	668,225	840,088	1,499,464	1,295,741	1,197,946	600,610	829,678	1,340,745	930,146
<b>Total HS Costs</b>	<b>3,394,559</b>	<b>3,054,418</b>	<b>2,909,416</b>	<b>3,415,183</b>	<b>6,211,780</b>	<b>4,427,390</b>	<b>4,840,973</b>	<b>3,110,736</b>	<b>3,290,716</b>	<b>5,363,226</b>	<b>3,773,542</b>
O/S Debt (principal only) @ 6/30/09	7,094,240	2,323,896	6,610,000	14,210,000	23,532,379	19,508,505	17,915,000	21,954,389	19,341,880	10,356,091	12,916,068

1. Costs exclude all general support costs, special education, CTE, transportation, community services, debt service, and inter-fund transfers
2. Costs exclude ASI, CSA, and related staff costs (all costs are within the 2020-2999 function codes---2250 and 2280 codes are omitted)
3. BOCES and support costs such as buildings and grounds, transportation, and food services are excluded
4. Debt service includes total district-wide bonds and current BAN's related to capital construction-principal amount only

Salaries	All high school administrators, teachers, substitutes, and support staff including salaries for special schools, instructional media, attendance, guidance, health services, and psychological services. Special education, CTE, co-curricular and inter-scholastic athletic salaries are excluded. Salaries are prorated if assigned to grades other than high school
Equipment	Budgeted equipment for high school only
Materials & Supplies	Budgeted materials and supplies for high school only
Contractual Items	Budgeted contractual for high school only including tuition, textbook, software & hardware, and travel/conference
Benefits	35% of total salaries

We now turn our attention to estimating the cost of the regional high schools. To obtain estimated operating budgets, the operating budget for the current Wayne High School is used as a base. Wayne's current high school total budget of \$4,967,865 serves a student population of 809 students. Using these data, we can project the operating budgets of high schools of varying sizes, assuming economies of scale. For example, a high school of 1,000 students is 25% larger than Wayne High School's student population of approximately 800 ( $1,000/800=1.25$ ). The operating budget for a 1,000 student high school can then be estimated by multiplying Wayne's budget of \$4,967,865 by 1.25. Similarly, a 1,200 student high school can be estimated by multiplying the Wayne High School budget by 1.50 ( $1,200/800=1.50$ ). These calculations provide the cost of the regional high schools without identifying savings or efficiencies that might be available from the consolidations. These are gross costs to the schools since no operating aid or any other form of state aid has been included in these calculations.

The following table shows the projected operating budgets for the four regional high schools, based on their relative size comparison with the current Wayne High School and their respective multiplication factors.



Regional High School Operating Budgets			
Regional High School	Multiplication Factors, Based on Student Populations	Operating Budget for Wayne High School	Operating Budgets for Regional High Schools
<b>Northwest Wayne High School</b>	1.57 (1,271/809)	\$4,967,865	\$7,799,548 <i>(1.57 times \$4,967,865)</i>
<b>Southwest Wayne High School</b>	1.15 (929/809)	\$4,967,865	\$5,713,044 <i>(1.15 times \$4,967,865)</i>
<b>Southeast Wayne High School</b>	1.30 (1,094/809)	\$4,967,865	\$6,458,225 <i>(1.30 times \$4,967,865)</i>
<b>Northeast Wayne High School</b>	1.33 (1,080/809)	\$4,967,865	\$6,607,260 <i>(1.33 times \$4,967,865)</i>

Now that the cost of operating each regional high school has been determined, a method of allocating those costs to each participating school district must be developed. There are a number of options for allocating these costs. The costs could be shared equally among each of the districts; the costs could be allocated according to the relative true value of each district; the costs could be allocated according to each district's RWADA. For purposes of this model, we have chosen a different method of allocating the costs of the regional high schools....we have allocated the costs based on the relative student population percentages, a calculation which is shown in the following table.

Allocation of Annual Operating Regional High School Budgets By District Using Relative Student Population						
Regional High School	Regional High School Operating Budget	Regional High School Population in 2014-15	Component High School	Component High School Population in 2014-15	Percentage of Regional High School Population	Allocation of Regional High School Operating Budget by District
<b>Northwest Wayne High School</b>	\$7,799,548	1271	Marion	263	20.7	\$1,614,506
			Wayne	699	55.0	\$4,289,751
			Williamson	309	24.3	\$1,895,290
<b>Southwest Wayne High School</b>	\$5,713,044	929	Gananda	308	33.2	\$1,896,731
			Palmyra-Macedon	621	66.8	\$3,816,313
<b>Southeast Wayne High School</b>	\$6,458,225	1,094	Clyde-Savannah	232	21.2	\$1,369,144
			Lyons	241	22.0	\$1,420,810
			Newark	621	56.8	\$3,668,272
<b>Northeast Wayne High School</b>	\$6,607,260	1,080	North Rose-Wolcott	435	40.3	\$2,662,726
			Red Creek	276	25.5	\$1,684,851
			Sodus	369	34.2	\$2,259,683

From the data presented above, we can now determine the cost per student for each of the eleven Wayne County districts as follows.

<b>District</b>	<b>2009-10 High School Budget</b>	<b>2009-10 High School Enrollment</b>	<b>High School Cost/Student</b>
Clyde-Savannah	\$3,394,559	285	\$11,911
Gananda	\$3,054,418	361	\$8,461
Lyons	\$2,909,416	305	\$9,539
Marion	\$3,415,183	314	\$10,876
Newark	\$6,211,780	741	\$8,383
North Rose-Wolcott	\$4,427,390	478	\$9,262
Pal-Mac	\$4,840,973	702	\$6,896
Red Creek	\$3,110,736	321	\$9,691
Sodus	\$3,290,716	416	\$7,910
Wayne	\$5,363,226	809	\$6,629
Williamson	\$3,773,542	406	\$9,294
<b>AVERAGE</b>	\$3,981,085	467	\$8,525

The final factor in determining the cost effectiveness of smaller high schools when compared with larger regional high schools is to examine the staffing patterns in the schools. Staffing and fringe benefits for those staff comprise more than 70% of any high school budget so that an analysis of staffing costs provides an insightful look at the relative costs of the high schools. The following table shows the staffing patterns in each of the eleven high schools.

<b>High School Staffing Summary for 2009-10</b>								
High School	# of Students	# of Admins	# of Teachers	# of Tchrg Assts	# of Tchrr Aides	Total Staff	Students/Teacher	Students/Admin.
C-S	285	2.5	35.75	8	3	49.25	8.0	114
Lyons	305	1.7	29	4	0	34.7	10.5	179.4
Marion	314	1.5	29.5	3.4	2.75	37.15	10.6	209.3
Red Creek	321	2	32	3	2	39	10.0	160.5
Gananda	361	2.2	35.7	2	2	41.9	10.1	164.1
Williamson	406	2	42	6.5	5	55.5	9.7	203
Sodus	416	2	42	7	3	54	9.9	208
NR-W	478	3	45	5	3	56	10.6	159.3
Pal-Mac	702	3	67	1	10	81	10.5	234
Newark	741	3	78	12	0	93	9.5	247
Wayne	809	3	64.5	22	5	94.5	12.5	269.7
Total All HS	5,138	25.9	500.45	73.9	35.75	636		
<b>Average All HS</b>	467						<b>10.3</b>	<b>198.4</b>

The important data that emerge from this table are the number of students per teacher in the existing high schools (10.3) and the number of students per administrator in the existing high schools (198.4). It is important to compare these numbers with the same numbers from larger high schools to determine if efficiencies result from larger high schools. To accomplish this comparison, we selected three high schools near Wayne County that had approximately 1,050 to 1,250 students, approximately the sizes of the four regional high schools that are being modeled. The staffing information for those three larger high schools can be seen in the following table.

<b>High School Staffing Summary for 2009-10</b>								
High School	# of Students	# of Admins	# of Teachers	# of Tchg Assts	# of Tchr Aides	Total Staff	Students/Teacher	Students/Admin.
District A	1,063	5	114	n/a	13	132	9.3	212.6
District B	1,175	5	116	11	13	145	10.1	235
District C	1,251	4	100.5	4	14	122.5	12.5	312.75
Total for A, B, and C	3,489	14	330.5		40	399.5		
<b>Average for A, B, and C</b>	1,163						<b>10.6</b>	<b>249.2</b>

The average population of the current Wayne County high schools is 467 students while the average population of the three high schools chosen to model as regional high schools is 1,163 students, more than double the size of the current average high school. However, in the larger high schools, there are 10.6 students per teacher compared to 10.3 students per teacher in the existing Wayne County high schools. The larger high schools have 249.2 students per administrator while the existing Wayne County high schools have 198.4 students per administrator. The following table shows the number of staff that would be required in the regional high schools if the average number of students per teacher and the average number of students per administrator were to be used in these new high schools.

<b>Number of Teachers/Administrators in Regional High Schools vs. Current Component High Schools, 2009-10</b>				
Regional High School	Enrollment of Regional High School	# of Teachers Required in Regional High School	# of Teachers Currently in Component High Schools	Difference in # of Teachers Needed in Regional High School
<b>Northwest Wayne</b>	1,529	$1,529/10.6 =$ <b>144.2</b>	$29.5 + 64.5 + 42 =$ <b>136</b>	+8.2
<b>Southwest Wayne</b>	1,063	$1,063/10.6 =$ <b>100.3</b>	$35.7 + 67 =$ <b>102.7</b>	-2.4
<b>Southeast Wayne</b>	1,331	$1,331/10.6 =$ <b>125.6</b>	$35.75 + 29 + 78 =$ <b>142.8</b>	-17.2
<b>Northeast Wayne</b>	1,215	$1,215/10.6 =$ <b>114.6</b>	$45 + 32 + 42 =$ <b>119</b>	-4.4
<b>Total Difference in # of Teachers Needed in 4 Regional High Schools</b>				<b>-15.8</b>
Regional High School	Enrollment of Regional High School	# of Administrators Required in Regional High School	# of Administrators Currently in Component High Schools	Difference in # of Administrators Needed in Regional High School
<b>Northwest Wayne</b>	1,529	$1,529/249.2 =$ <b>6.1</b>	$1.5 + 3 + 2 =$ <b>6.5</b>	-0.4
<b>Southwest Wayne</b>	1,063	$1,063/249.2 =$ <b>4.3</b>	$2.2 + 3 =$ <b>5.2</b>	-0.9
<b>Southeast Wayne</b>	1,331	$1,331/249.2 =$ <b>5.3</b>	$2.5 + 1.7 + 3 =$ <b>7.2</b>	-1.9
<b>Northeast Wayne</b>	1,215	$1,215/249.2 =$ <b>4.9</b>	$3 + 2 + 2 =$ <b>7</b>	-2.1
<b>Total Difference in # of Administrators Needed in 4 Regional High Schools</b>				<b>-5.3</b>

Based on the information presented in this table, we can now estimate that if four regional high schools were created in Wayne County to replace the

existing eleven high schools, these regional high schools would need approximately 15.8 fewer teachers and 5.3 fewer administrators.

To calculate the cost savings that would result from the creation of regional high schools, the following table is presented.

<b>Regional High School</b>	<b>Difference in # of Teachers</b>	<b>Cost Changes Due to Teachers*</b>	<b>Difference in # of Administrators</b>	<b>Cost Changes Due to Administrators*</b>	<b>Total Cost Changes</b>
<b>Northwest Wayne</b>	+8.2	+\$442,800	0.4	-\$40,500	+\$402,300
<b>Southwest Wayne</b>	-2.4	-\$129,600	0.9	-\$91,125	-\$220,725
<b>Southeast Wayne</b>	-17.2	-\$928,800	1.9	-\$192,375	-\$1,121,175
<b>Northeast Wayne</b>	-4.4	-\$237,600	2.1	-\$212,625	-\$450,225
<b>Total</b>	<b>-15.8</b>	<b>-\$853,200</b>	<b>5.3</b>	<b>-\$536,625</b>	<b>-\$1,389,825</b>

*\*Since less senior teachers would be excessed, teacher salary was calculated at an annual salary of \$40,000 plus 35% for fringe benefits (\$40,000 + \$14,000 = \$54,000)*

.....

*\*\*Administrative salary calculated for an assistant principal with an average salary of \$75,000 plus 35% for fringe benefits (\$75,000 + \$26,250 = \$101,250)*

This is a critical finding in this study. When looking at staffing costs, more teachers would actually be required in Northwest Wayne than the number of teachers that currently work in the high schools in Marion, Wayne, and Williamson, the components of Northwest Wayne. While the other three regional high schools would require fewer teachers, the number of fewer teachers is quite small. Similarly, the number of administrators that could be reduced by creating regional high schools is also quite small. This projected number of administrators also assumes that portions of administrators could be eliminated based on the data in the table above.

As stated earlier in this study, there are two major questions that were the impetus for studying the creation of regional high schools. If regional high schools were created in Wayne County, would there be more curricular and extra-curricular opportunities for the students.....**and**.....would the regional

high schools be able to be operated at a reduced cost to the taxpayers? The answers now seem quite clear. Larger high schools are clearly able to offer a greater array of curricular and extra-curricular opportunities for their students. These increased opportunities will become even more evident as high school enrollments in Wayne County continue to decline over the next 9 years and programs that currently exist will be lost.

The answer to the second question appears to be equally clear. If the eleven high schools that currently exist in Wayne County were to reorganize into four regional high schools, the costs to operate those high schools would be nearly the same as the costs to operate the eleven current high schools. The current cost of operating the eleven high schools in Wayne County is currently \$43,791,939. If the number of teachers and administrators were reduced to levels that are currently found in larger area high schools of approximately the same size as the regional high schools modeled in this study, approximately \$1,389,825 (3.2%) might be saved.

The finding that the regional high schools modeled in this study would not save large amounts of money is consistent with previous research done on this topic. Numerous studies have found that significant savings in the consolidation of school districts occur when the K-12 population of the school districts is 600 students or less. These schools typically have high school populations of 125 or less. In Wayne County, the average student population of the districts is 1,379 and the average number of students in the high schools is 476. Wayne County high schools have enough students to run quite efficiently.....but if they were larger, they would have many more opportunities to offer their students. In summary, regional high schools can provide value.....many more opportunities at a slightly lower cost.

## Annual Costs for Regional High Schools

The annual cost per district for participation in their respective regional high school can now be calculated. This cost for each district is the sum of the annual operating budget, the net debt service payment after building aid, and the additional cost of transporting students. These costs are shown in the following table.

<b>Regional High School Costs Using Enrollment to Allocate Debt Service</b>				
District	Operating Budget Allocation	Net Debt Service Payment Allocation	Additional Bus Transportation Cost	Total
Clyde-Savannah	\$1,369,144	\$52,777	\$9,898	\$1,431,819
Gananda	\$1,896,731	\$190,097	\$8,787	\$2,095,615
Lyons	\$1,420,810	\$54,769	\$2,329	\$1,477,908
Marion	\$1,614,506	\$249,932	\$8,179	\$1,872,617
Newark	\$3,668,272	\$141,403	\$20,160	\$3,829,835
North Rose-Wolcott	\$2,662,726	\$501,632	\$4,363	\$3,168,721
Palmyra-Macedon	\$3,816,313	\$382,485	\$5,949	\$4,204,747
Red Creek	\$1,684,851	\$317,409	\$11,249	\$2,013,509
Sodus	\$2,259,683	\$425,702	\$27,138	\$2,712,523
Wayne	\$4,289,751	\$664,071	\$12,139	\$4,965,961
Williamson	\$1,895,290	\$293,398	\$16,762	\$2,205,450



Allocating debt service by using full valuation rather than student enrollment would yield the following table.

<b>Regional High School Costs Using Full Valuation to Allocate Debt Service</b>				
District	Operating Budget Allocation	Net Debt Service Payment Allocation	Additional Bus Transportation Cost	Total
Clyde-Savannah	\$1,369,144	\$50,537	\$9,898	\$1,429,579
Gananda	\$1,896,731	\$177,500	\$8,787	\$2,083,018
Lyons	\$1,420,810	\$56,013	\$2,329	\$1,479,152
Marion	\$1,614,506	\$213,710	\$8,179	\$1,836,395
Newark	\$3,668,272	\$142,399	\$20,160	\$3,830,831
North Rose-Wolcott	\$2,662,726	\$547,687	\$4,363	\$3,214,776
Palmyra-Macedon	\$3,816,313	\$395,082	\$5,949	\$4,217,344
Red Creek	\$1,684,851	\$275,088	\$11,249	\$1,971,188
Sodus	\$2,259,683	\$421,968	\$27,138	\$2,708,789
Wayne	\$4,289,751	\$666,485	\$12,139	\$4,968,375
Williamson	\$1,895,290	\$327,206	\$16,762	\$2,239,258

# Instructional Program Sharing Options

It is particularly important that members of the Wayne County school communities are engaging in discussion about increasing options for high school students in a cost-effective manner at this time. This topic is clearly on the front burner for educators nationally and is a major priority for New York State's Board of Regents as well. The following is taken from a November 9, 2009 memorandum from Deputy Commissioner John King to the EMSC Committee of the Board of Regents:

*"It may be time to rethink secondary school design to increase student engagement and to ensure that secondary schools equip students with the skills they will need to succeed in college and the global economy and society of the 21<sup>st</sup> century. Redesigning secondary school means looking at many issues, including, 1) high school diploma requirements, 2) Regents examinations, 3) seat time requirements vs. earning course credit through demonstration of competency, 4) innovative secondary models including virtual high schools and on-line courses, and 5) alternative secondary models designed to engage students including career and technical education (CTE), science, technology, engineering and mathematics (STEM) programs, arts programs, and early college high school programs. It also means developing standards of excellence for all students, including high performing students, that could possibly include the International Baccalaureate (IB), Advanced Placement tests, the British A-level examinations, and others."*

The foundation of this study is maintaining, if not enhancing, the quality of instructional programs available to Wayne County high school students in a cost-effective manner. As stated previously, a projected decline in enrollment will require school districts to consider various forms of sharing of resources, to include instructional programs. Economy of scale becomes especially important in a diminishing enrollment base. After extensive discussion and gathering of information, and assuming that regional high schools are not an attractive option, five alternative sharing or collaborative options are presented.

Many of these sharing options will involve the availability of courses and programs outside the individual school districts. As a result, mileage and student travel time are important to these options. Accordingly, the distances and travel time among Wayne County high schools are presented below as background information. Without this information, program description and cost analysis become problematic. The following table shows the travel time, as well as distances, between high schools in Wayne County.

<b>Distances Among High Schools</b> <b>The first number in each cell is the number of minutes.</b> <b>The second number in each cell is the number of miles.</b>												
<i>MIN/ MIL</i>	Cly-Sav	Gan- anda	Lyo- ns	Mar- ion	New- ark	NR- W	Pal- Mac	Red Crk	Sod- us	Way- ne	Will'- son	BOC ES
Clyde-Sav		48/ 30	13/ 8	37/ 28	26/ 15	13/ 9	38/ 23	25/ 19	25/ 18	38/ 30	33/ 25	30/ 23
Gan- anda	48/ 30		36/ 23	15/ 10	26/ 16	44/ 35	12/ 8	49/ 40	29/ 22	11/ 9	17/ 12	21/ 14
Lyons	13/ 8	36/ 23		25/ 16	14/ 8	23/ 17	27/ 16	31/ 25	22/ 15	34/ 28	28/ 18	27/ 21
Marion	37/ 28	15/ 10	25/ 16		23/ 17	32/ 24	15/ 10	37/ 30	17/ 11	15/ 11	4/ 3	8/ 5
Newark	26/ 15	26/ 16	14/ 8	23/ 17		35/ 23	17/ 10	45/ 32	24/ 15	34/ 23	26/ 19	27/ 17
NR-W	13/ 9	44/ 35	23/ 17	32/ 24	35/ 23		46/ 34	11/ 8	20/ 14	33/ 26	28/ 21	25/ 19
Pal- Mac	38/ 23	12/ 8	27/ 16	15/ 10	17/ 10	46/ 34		51/ 40	30/ 21	20/ 15	18/ 13	21/ 15
Red Creek	25/ 19	49/ 40	31/ 25	37/ 30	45/ 32	11/ 8	51/ 40		25/ 20	38/ 32	33/ 27	31/ 25
Sodus	25/ 18	29/ 22	22/ 15	17/ 11	24/ 15	20/ 14	30/ 21	25/ 20		17/ 13	13/ 8	10/ 6
Wayne	38/ 30	11/ 9	34/ 28	15/ 11	34/ 23	33/ 26	20/ 15	38/ 32	17/ 13		10/ 8	9/ 7
Wil'sn	33/ 25	17/ 12	28/ 18	4/ 3	26/ 19	28/ 21	18/ 13	33/ 27	13/ 8	10/ 8		3/ 2
BOCES	30/ 23	21/ 14	27/ 21	8/ 5	27/ 17	25/ 19	21/ 15	31/ 25	10/ 6	9/ 7	3/ 2	

*Note: Shaded cells indicate high schools within 15 minutes.*

This table is very telling. When school leaders contemplate collaborative programming, the distance that students have to travel when they leave their high school is important. The shaded areas indicating trips of 15 minutes or less are particularly attractive options. The average distance for all students who attend programs at the BOCES campus is 19 minutes and 14 miles.

In addition to the time and distance, it is important to calculate mileage costs. These costs vary from one school district to another. The following table provides the individual mileage rates by school district and the costs associated with school bus travel from one high school to another. The succeeding table shows the costs for both single and double trips.

<b>Times and Distances Between High Schools, and Cost of Bus Transportation Each Way</b>												
Min/Mi (\$/mi.)	Clyde-Sav	Gananda	Lyons	Marion	Newark	NR-W	Pal-Mac	Red Creek	Sodus	Wayne	Will'son	BOCES
Cly-Sv (\$2.35)		48/30 \$70.50	13/8 \$18.80	37/28 \$65.80	26/15 \$35.25	13/9 \$21.15	38/23 \$54.05	25/19 \$44.65	25/18 \$42.30	38/30 \$70.50	33/25 \$58.75	30/23 \$54.05
Gan'da (\$2.26)	48/30 \$67.80		36/23 \$51.98	15/10 \$22.60	26/16 \$36.16	44/35 \$79.10	12/8 \$18.08	49/40 \$90.40	29/22 \$49.72	11/9 \$20.34	17/12 \$27.12	21/14 \$31.64
Lyons (\$2.31)	13/8 \$18.48	36/23 \$53.13		25/16 \$36.96	14/8 \$18.48	23/17 \$39.27	27/16 \$36.96	31/25 \$57.75	22/15 \$34.65	34/28 \$64.68	28/18 \$41.58	27/21 \$48.51
Marion (\$3.55)	37/28 \$99.40	15/10 \$35.50	25/16 \$56.80		24/17 \$60.35	33/24 \$85.40	15/10 \$35.50	37/30 \$106.50	17/11 \$39.05	15/11 \$39.05	4/3 \$10.65	8/5 \$17.75
Newark (\$2.00)	26/15 \$30.00	26/16 \$32.00	14/8 \$16.00	23/17 \$34.00		35/23 \$46.00	17/10 \$20.00	45/32 \$64.00	24/15 \$30.00	34/23 \$46.00	26/19 \$38.00	27/17 \$34.00
NR-W (\$2.02)	13/9 \$18.18	44/35 \$70.70	23/17 \$34.34	33/24 \$48.48	35/23 \$46.46		46/34 \$68.68	11/8 \$16.16	20/14 \$28.28	33/26 \$52.52	28/21 \$42.42	25/19 \$38.38
Pal-Mac (\$2.43)	38/23 \$55.85	12/8 \$19.40	27/16 \$38.88	15/10 \$24.30	17/10 \$24.30	46/34 \$82.62		51/40 \$97.20	30/21 \$51.03	20/15 \$36.45	18/13 \$31.59	21/15 \$36.45
Red Crk (\$2.79)	25/19 \$53.01	49/40 \$111.60	31/25 \$69.75	37/30 \$83.70	45/32 \$89.28	11/8 \$22.32	51/40 \$111.60		25/20 \$55.80	38/32 \$89.28	33/27 \$75.33	31/25 \$69.75
Sodus (\$3.49)	25/18 \$62.82	29/22 \$76.78	22/15 \$52.35	17/11 \$38.39	24/15 \$52.35	20/14 \$48.86	30/21 \$73.29	25/20 \$69.80		17/13 \$45.37	13/8 \$27.92	10/6 \$20.94
Wayne (\$2.81)	38/30 \$84.30	11/9 \$25.29	34/28 \$78.68	15/11 \$30.91	34/23 \$64.63	33/26 \$73.06	20/15 \$42.15	38/32 \$89.92	17/13 \$36.53		10/8 \$22.48	9/7 \$19.67
Wil'sn (\$2.91)	33/25 \$72.75	17/12 \$34.92	28/18 \$52.38	4/3 \$8.73	26/19 \$55.29	28/21 \$61.11	18/13 \$37.83	33/27 \$78.57	13/8 \$23.28	10/8 \$23.28		3/2 \$5.82

*Note: Shaded cells indicate high schools within 15 miles.*

<b>Annual Local Cost of Bus Transportation for One and Two Trips to Other Schools and Return Based on 180 Days and 90% Aid First Line is Local Cost for One Trip and Return Second Line is Local Cost for Two Trips and Return</b>												
	Clyde-Sav	Gan anda	Lyons	Marion	Newark	NR-W	Pal-Mac	Red Creek	Sodus	Wayne	Will'sn	BOCES
Clyde-Sav		\$2,538 \$5,076	\$677 \$1,354	\$2,369 \$4,738	\$1,269 \$2,538	\$761 \$1,523	\$1,946 \$3,892	\$1,607 \$3,215	\$1,523 \$3,046	\$2,538 \$5,076	\$2,115 \$4,230	\$1,946 \$3,892
Gan anda	\$2,441 \$4,882		\$1,872 \$3,743	\$814 \$1,627	\$1,302 \$2,604	\$2,848 \$5,695	\$651 \$1,302	\$3,254 \$6,599	\$1,790 \$3,580	\$732 \$1,464	\$976 \$1,953	\$1,139 \$2,278
Lyons	\$665 \$1,331	\$1,913 \$3,825		\$1,331 \$2,661	\$665 \$1,331	\$1,414 \$2,827	\$1,331 \$2,661	\$2,079 \$4,158	\$1,247 \$2,495	\$2,328 \$4,657	\$1,497 \$2,994	\$1,747 \$3,493
Marion	\$3,578 \$7,159	\$1,278 \$2,556	\$2,045 \$4,090		\$2,173 \$4,345	\$3,074 \$6,149	\$1,278 \$2,556	\$3,834 \$7,668	\$1,406 \$2,812	\$1,406 \$2,812	\$383 \$767	\$639 \$1,278
Newark	\$1,080 \$2,160	\$1,152 \$2,304	\$576 \$1,152	\$1,224 \$2,448		\$1,656 \$3,312	\$720 \$1,440	\$2,304 \$4,608	\$1,080 \$2,160	\$1,656 \$3,312	\$1,368 \$2,736	\$1,224 \$2,448
NR-W	\$654 \$1,309	\$2,545 \$5,090	\$1,237 \$2,472	\$1,745 \$3,491	\$1,673 \$3,345		\$2,472 \$4,945	\$582 \$1,164	\$1,018 \$2,036	\$1,891 \$3,781	\$1,527 \$3,054	\$1,382 \$2,763
Pal-Mac	\$2,011 \$4,021	\$698 \$1,397	\$1,400 \$2,800	\$875 \$1,750	\$875 \$1,750	\$2,974 \$5,949		\$3,499 \$6,998	\$1,837 \$3,674	\$1,312 \$2,624	\$1,137 \$2,274	\$1,312 \$2,624
Red Creek	\$1,908 \$3,817	\$4,018 \$8,035	\$2,511 \$5,022	\$3,013 \$6,026	\$3,214 \$6,428	\$804 \$1,607	\$4,018 \$8,035		\$2,009 \$4,018	\$3,214 \$6,428	\$2,712 \$5,424	\$2,511 \$5,022
Sodus	\$2,262 \$4,524	\$2,764 \$5,528	\$1,885 \$3,769	\$1,382 \$2,764	\$1,885 \$3,769	\$1,759 \$3,518	\$2,638 \$5,277	\$2,513 \$5,026		\$1,633 \$3,267	\$1,005 \$2,010	\$754 \$1,508
Wayne	\$3,035 \$6,070	\$910 \$1,821	\$2,832 \$5,665	\$1,113 \$2,226	\$2,327 \$4,653	\$2,630 \$5,260	\$1,517 \$3,035	\$3,237 \$6,474	\$1,315 \$2,630		\$809 \$1,619	\$708 \$1,416
Will'son	\$2,619 \$5,238	\$1,257 \$2,514	\$1,886 \$3,271	\$314 \$629	\$1990 \$3,981	\$2,200 \$4,400	\$1,362 \$2,724	\$2,829 \$5,657	\$838 \$1,676	\$838 \$1,676		\$210 \$419

*Note: Shaded cells indicate high schools within 15 miles.*

There is little question that the amount of time that students spend on buses being transported to other sites for curriculum opportunities is an important consideration. However, from a financial standpoint, the state's reimbursement of school districts for transportation costs, usually at 90%, makes transporting students to other schools an option worth considering.

With this transportation information as background, the following options are presented.

## **1. Wayne Student Exchange**

The Wayne Student Exchange describes a program option that provides the opportunity for students to attend one or more classes in any other high school in the region. Student enrollment in Wayne County high schools is not sufficiently large to offer all of the courses usually associated with a world class education. In addition, the high school enrollments in all Wayne County school districts will be declining in the next several years. As a result, districts will be challenged to offer even their current level of student programming in the future.

In addition, there are numerous opportunities for students in Wayne County schools to earn college credit for courses that they take in high school. However, it is apparent that students in some districts have greater opportunities to earn college credits than in other districts. College credit courses can enrich a student's high school experience, serve as an incentive to keep a student in high school, and give students a head start on their college careers. For these reasons, it should be a priority to attempt to equalize the opportunities available to students across the region. It is also important to engage area college level personnel in the planning for this initiative to optimize the benefits for students. This could easily be another application of the Wayne Student Exchange program. District leaders are encouraged to develop opportunities for students to take classes in other districts.

One district might be interested in maintaining its French program, another nearby district might be interested in bringing back its German program, and another neighboring district might be interested in beginning a program in Mandarin Chinese. None of these districts on its own may have a sufficient number of students to offer its program of choice. However, by opening its doors to students from the other high schools, each high school might find sufficient student interest to provide the desired programming.

Similar examples could be developed for upper level math courses, advanced science courses, business courses, and nearly any other area where

student enrollment is limited or course offerings are less than any district might desire.

What would the Wayne student exchange program cost? In an attempt to answer that question, a model has been developed. The model assumes that students from one high school are willing to travel up to fifteen minutes each way to participate in a course in a neighboring high school. Other than agreement on the part of both the sending and host high schools, and a convenient scheduling arrangement for the student, the model must account for transportation and program costs.

Transportation costs are taken from the previously presented table. The calculation of tuition assumes that the class in which the student enrolls is one-fifth of the teacher's assignment (this teacher load proportionality varies from school to school), that the average size of such a class is twenty students, and that the teacher has fifteen years of experience with a Masters degree. Given these assumptions, tuition is calculated as though the student were the twentieth in the class (bearing one-twentieth of the class cost) and that the class is one-fifth of the teacher's assignment. This means that the per-class cost would be one one-hundredth of the teacher's compensation for that class. Total compensation in this example is calculated as the teacher's salary increased by thirty-five percent to account for fringe benefits. The course cost by district, based on these assumptions, is shown in the following table. The teacher cost/student/period is based on the one one-hundredth of the total compensation attributed to the salary.

<b>District</b>	<b>Salary at Masters with 15 Years Experience</b>	<b>Fringe Benefits @ 35%</b>	<b>Total Teacher Cost</b>	<b>Teacher Cost/Student/Period</b>
Clyde-Savannah	\$50,390	\$17,637	\$68,026	\$680
Gananda	\$51,746	\$18,111	\$69,857	\$699
Lyons	\$52,381	\$18,333	\$70,714	\$707
Marion	\$48,696	\$17,044	\$65,740	\$657
Newark	\$50,907	\$17,821	\$68,738	\$687
North Rose-Wolcott	\$54,850	\$19,198	\$74,048	\$740
Palmyra-Macedon	\$51,006	\$17,852	\$68,858	\$689
Red Creek	\$50,504	\$17,676	\$68,180	\$682
Sodus	\$62,388	\$21,836	\$84,224	\$842
Wayne	\$54,499	\$19,075	\$73,574	\$736
Williamson	\$54,000	\$18,900	\$72,900	\$729

The following table identifies those high schools within a 15-minute drive from each high school, along with the cost of transporting a student twice (at the beginning of the class and at the end) over the 180 day school year. It further includes the tuition charge per class corresponding with each of the neighboring high schools, as well as the total cost for one student. If multiple students attend the same class or another class during the same time period the total cost to the sending district would increase, and the cost per student would decrease.



<b>Cost of One Student Attending One Class in a Neighboring High School Within 15 Minutes</b>				
District	Neighboring High School Within 15 Minutes	Neighboring High School Program Charge	Bus Transportation Cost	Total
Clyde-Savannah	Lyons	\$707	\$1,354	\$2,061
	N R-W	\$740	\$1,523	\$2,263
Gananda	Marion	\$657	\$1,627	\$2,284
	Pal-Mac	\$689	\$1,302	\$1,991
	Wayne	\$736	\$1,464	\$2,200
Lyons	Clyde-Sav	\$680	\$1,331	\$2,011
	Newark	\$687	\$1,331	\$2,018
Marion	Gananda	\$699	\$2,556	\$3,255
	Pal-Mac	\$689	\$2,556	\$3,245
	Wayne	\$736	\$2,812	\$3,548
	Williamson	\$729	\$ 767	\$1,496
Newark	Lyons	\$707	\$1,152	\$1,859
North Rose-Wolcott	Clyde-Sav	\$680	\$1,309	\$1,989
	Red Creek	\$682	\$1,164	\$1,846
Palmyra-Macedon	Gananda	\$699	\$1,397	\$2,096
	Marion	\$657	\$1,750	\$2,407
Red Creek	N R-W	\$740	\$1,607	\$2,347
Sodus	Williamson	\$729	\$2,010	\$2,739
Wayne	Gananda	\$699	\$1,821	\$2,520
	Marion	\$657	\$2,226	\$2,883
	Williamson	\$729	\$1,619	\$2,348
Williamson	Marion	\$657	\$ 629	\$1,286
	Sodus	\$842	\$1,676	\$2,518
	Wayne	\$736	\$1,676	\$2,412

It should also be noted that some students may be willing to travel more than 15 minutes to enroll in a class of interest. The previous table serves only as an example of the model.

## **2. New Vision Programs**

New Vision programs are designed for students desiring an academic challenge delivered through in-depth exposure to a chosen career area. This interdisciplinary program provides students with two credits in the career and

technical/career field, as well as one credit each for English 12 and Social Studies 12. Contextualized learning is used as the instructional model. New Vision is a half-day program for high school seniors.

Wayne-Finger Lakes BOCES currently offers three New Vision programs for the students in Wayne County: Medical with 17 students, Engineering with 3 students, and Renewable Energy with 4 students. The Medical New Vision program is housed at Newark Community Hospital. The Engineering and Renewable Energy programs are both housed at the Wayne Technical and Career Center with opportunities for collaboration with area businesses.

Given the number of school districts and students in Wayne County, this very promising instructional model seems underutilized in this area. The number of New Vision programs could easily be expanded. In planning for this expansion, BOCES should be closely involved with the eleven component school districts. While a planning committee will certainly decide which programs should be offered, consideration should be given to the following programs:

- a. Law and Government---for students who are interested in pursuing post-secondary careers in the law or government fields.....located at the county office building in Newark.....rotations could include court rooms, law offices, law enforcement agencies, social services, and other governmental human services offices.

- b. Education Professions---for students who are interested in pursuing post-secondary study in the field of education.....located in one of the component school district buildings.....rotations could include elementary and secondary schools, early intervention programs, special education, administration, school finance, transportation, and food service.

- c. Business Management/Entrepreneurship---for students who are interested in pursuing post-secondary study in banking, insurance, management, finance, or business.....located in a major business in the area.....rotations could include banks, insurance companies, real estate offices, investment offices and other area businesses.

d. Communications/Radio and TV---for students who are interested in pursuing post-secondary study as a writer, reporter, English teacher, broadcaster, or TV personality.....located in one or more of the component school districts that have radio and TV studios in their high school.....visitations could include area radio and TV stations.

e. Information Technology---for students who are interested in pursuing post-secondary study as a computer program designer, website designer, computer technician, or gaming technology specialist....located in one or more component school districts....visitations could include area colleges and businesses with these specialties.

f. Green Technologies---for students who are interested in pursuing post-secondary education in the field of energy management....could be coupled with existing programs in renewable energy and wind technologies....located in one or more of the component school districts or BOCES....visitations could include area engineering firms, environmental science firms, and attorneys practicing environmental law.

g. Other areas could also be explored and might include programs in the visual and performing arts, environmental science, bioengineering, and other high tech fields.

Since all New Vision programs are comparable in instructional time and scope, the program cost is the same for all. For 2010, the New Vision program cost through BOCES is \$6,201. If other programs are added, whether located at the BOCES Career and Technical Center or at other sites within the County, their cost would also be \$6,201. However, this cost is diminished by BOCES aid at the district's BOCES aid ratio (different for each district). When applied to the New Vision program cost, the local cost diminishes dramatically. The following table demonstrates the impact that BOCES aid has on the New Vision program cost.

<b>Local Cost of BOCES New Vision Programs with a Tuition of \$6,201, Offset by BOCES Aid</b>		
District	BOCES Aid Ratio	Local Cost of New Vision Program after BOCES aid
Clyde-Savannah	85.9 %	\$ 874
Gananda	83 %	\$1,054
Lyons	83 %	\$1,054
Marion	83.5 %	\$1,023
Newark	82.3%	\$1,098
North Rose-Wolcott	76 %	\$1,488
Palmyra-Macedon	80.8 %	\$1,191
Red Creek	90 %	\$ 620
Sodus	78.9%	\$1,308
Wayne	69.3 %	\$1,904
Williamson	78.9 %	\$1,308

The following table shows both the local portion of the New Vision program cost and the local cost of transporting students to the various schools within the County. The total cost to each district for the participation of one or more students in each of the New Vision programs outside the district can easily be determined. If only one student participates in one of the New Vision programs, then the total local cost would be the sum of the two numbers provided---program and transportation costs. If multiple students participate in a New Vision program at one of the other districts, then the program cost multiplies correspondingly, but the transportation cost would remain the same.

New Vision Costs, by District, at Various Location Within the County												
Local Transportation Costs												
New Vision Cost by District After BOCES Aid, in bold												
	Clyde-Sav	Gananda	Lyons	Marion	Newark	NR-W	Pal-Mac	Red Creek	Sodus	Wayne	Wm'sn	BOCES
Cly-Sav		\$5,076 <b>\$1,183</b>	\$1,354 <b>\$1,183</b>	\$4,738 <b>\$1,183</b>	\$2,538 <b>\$1,183</b>	\$1,523 <b>\$1,183</b>	\$3,892 <b>\$1,183</b>	\$3,215 <b>\$1,183</b>	\$3,046 <b>\$1,183</b>	\$5,076 <b>\$1,183</b>	\$4,230 <b>\$1,183</b>	\$3,892 <b>\$1,183</b>
Gananda	\$4,882 <b>\$1,426</b>		\$3,743 <b>\$1,426</b>	\$1,627 <b>\$1,426</b>	\$2,604 <b>\$1,426</b>	\$5,695 <b>\$1,426</b>	\$1,302 <b>\$1,426</b>	\$6,590 <b>\$1,426</b>	\$3,580 <b>\$1,426</b>	\$1,464 <b>\$1,426</b>	\$1,953 <b>\$1,426</b>	\$2,278 <b>\$1,426</b>
Lyons	\$1,331 <b>\$1,426</b>	\$3,825 <b>\$1,426</b>		\$2,661 <b>\$1,426</b>	\$1,331 <b>\$1,426</b>	\$2,827 <b>\$1,426</b>	\$2,661 <b>\$1,426</b>	\$4,158 <b>\$1,426</b>	\$2,495 <b>\$1,426</b>	\$4,657 <b>\$1,426</b>	\$2,994 <b>\$1,426</b>	\$3,493 <b>\$1,426</b>
Marion	\$7,159 <b>\$1,384</b>	\$2,556 <b>\$1,384</b>	\$4,090 <b>\$1,384</b>		\$4,345 <b>\$1,384</b>	\$6,149 <b>\$1,384</b>	\$2,556 <b>\$1,384</b>	\$7,668 <b>\$1,384</b>	\$2,812 <b>\$1,384</b>	\$2,812 <b>\$1,384</b>	\$767 <b>\$1,384</b>	\$1,278 <b>\$1,384</b>
Newark	\$2,160 <b>\$1,485</b>	\$2,304 <b>\$1,485</b>	\$1,008 <b>\$1,485</b>	\$2,448 <b>\$1,585</b>		\$3,312 <b>\$1,485</b>	\$1,440 <b>\$1,485</b>	\$4,608 <b>\$1,485</b>	\$2,160 <b>\$1,485</b>	\$3,312 <b>\$1,485</b>	\$2,736 <b>\$1,485</b>	\$2,448 <b>\$1,485</b>
NR-W	\$1,309 <b>\$2,013</b>	\$5,090 <b>\$2,013</b>	\$2,472 <b>\$2,013</b>	\$3,491 <b>\$2,013</b>	\$3,345 <b>\$2,013</b>		\$4,945 <b>\$2,013</b>	\$1,164 <b>\$2,013</b>	\$2,036 <b>\$2,013</b>	\$3,781 <b>\$2,013</b>	\$3,054 <b>\$2,013</b>	\$2,763 <b>\$2,013</b>
Pal-Mac	\$4,021 <b>\$1,611</b>	\$1,397 <b>\$1,611</b>	\$2,799 <b>\$1,611</b>	\$1,750 <b>\$1,611</b>	\$1,750 <b>\$1,611</b>	\$5,949 <b>\$1,611</b>		\$6,998 <b>\$1,611</b>	\$3,674 <b>\$1,611</b>	\$2,624 <b>\$1,611</b>	\$2,274 <b>\$1,611</b>	\$2,624 <b>\$1,611</b>
Red Crk	\$3,817 <b>\$838</b>	\$8,035 <b>\$838</b>	\$5,022 <b>\$838</b>	\$6,026 <b>\$838</b>	\$6,428 <b>\$838</b>	\$1,607 <b>\$838</b>	\$8,035 <b>\$838</b>		\$4,018 <b>\$838</b>	\$6,428 <b>\$838</b>	\$5,424 <b>\$838</b>	\$5,022 <b>\$838</b>
Sodus	\$4,524 <b>\$3,355</b>	\$5,528 <b>\$3,355</b>	\$3,769 <b>\$3,355</b>	\$2,764 <b>\$3,355</b>	\$3,769 <b>\$3,355</b>	\$3,518 <b>\$3,355</b>	\$5,277 <b>\$3,355</b>	\$5,026 <b>\$3,355</b>		\$3,267 <b>\$3,355</b>	\$2,010 <b>\$3,355</b>	\$1,508 <b>\$3,355</b>
Wayne	\$6,070 <b>\$3,355</b>	<b>\$1,821</b> <b>\$3,355</b>	\$5,665 <b>\$3,355</b>	\$2,226 <b>\$3,355</b>	\$4,654 <b>\$3,355</b>	\$5,260 <b>\$3,355</b>	\$3,035 <b>\$3,355</b>	\$6,474 <b>\$3,355</b>	\$2,630 <b>\$3,355</b>		\$1,619 <b>\$3,355</b>	\$1416 <b>\$3,355</b>
Wm'son	\$5,238 <b>\$1,770</b>	\$2,514 <b>\$1,770</b>	\$3,271 <b>\$1,770</b>	\$629 <b>\$1,770</b>	\$3,981 <b>\$1,770</b>	\$4,400 <b>\$1,770</b>	\$2,724 <b>\$1,770</b>	\$5,657 <b>\$1,770</b>	\$1,676 <b>\$1,770</b>	\$1,676 <b>\$1,770</b>		\$419 <b>\$1,770</b>

*Note: Shaded cells indicate high schools within 15 miles.*

### **3. Thematic High School Programs**

For purposes of this study, thematic high school programs refer to instructional program emphases or upper-level courses within an individual high school, not those under the BOCES New Vision umbrella. These include, but are not limited to, courses for Advanced Placement, International Baccalaureate, and Project Lead the Way. All three of these opportunities currently exist for some of the students in Wayne County:

*Advanced Placement Courses*-Gananda, Wayne, Williamson, Newark,  
North Rose-Wolcott, and Palmyra-Macedon

*International Baccalaureate*- Palmyra-Macedon and Wayne

*Project Lead the Way*- Gananda, Lyons, Wayne, Palmyra-Macedon, and  
Williamson

The challenge is how to expand these offerings and make them available to a larger segment of the student population in Wayne County.

The visitations made by the consultants in late September and early October gave emphasis to “theme” possibilities other than those mentioned previously. A “theme” program was described as an instructional program of three to four periods per day within an individual high school. The theme would exist for those students within that high school, but would also be available to students from other high schools. The academic schedules of high school freshmen and sophomores are usually packed with courses which are required for graduation. As a result, elective themes would most probably be oriented toward juniors and seniors. On the other hand, for example, it might be possible to develop an arts/humanities theme that could apply to all four high school grades.

During the visitation discussions, students, staff, and community offered suggestions/preferences for possible high school themes. The following themes were proposed, along with the number of times they were proposed.

<b><u>Themes</u></b>	<b><u>Frequency of Proposal</u></b>
Arts	6
Communications/Radio &TV	5
Math/Science/Technology	5
Project Lead The Way	5
Business Careers/Young Entrepreneurs Academy	4
Advanced Placement	3
Medical and Health Services	2
Humanities	2
Aquatic Biology	1
Languages: Chinese, American Sign Language	1
Engineering/Architecture	1
Alternative Energy	1
Wine Agriculture	1
Gaming Technology	1
Bioengineering	1
Environmental Science	1

There are many details that would need to be worked out in order to expand these very attractive offerings. School district bell schedules, financing arrangements, building logistics, and transportation will be just some of the issues that need to be resolved. However, the following are offered as beginning discussion points for this topic of the Wayne student exchange:

- a. Student enrollment is insufficient to offer these specialized programs in each high school;
- b. It has been made consistently clear to the consultants that building new facilities for collaborative programming is not an attractive option for Wayne County schools;

- c. Most of the transportation is equal to or less than the transportation that currently exists for students to get to and from BOCES. The table presented in the introduction of options is repeated here as information; and
- d. Given the state aid formula for student transportation in New York State, buying additional buses and hiring additional bus drivers might be the most cost effective way to expand programming for students.

<b>Distances Among High Schools</b> <b>The first number in each cell is the number of minutes.</b> <b>The second number in each cell is the number of miles.</b> <b>Shaded cells show districts that are 15 minutes or less apart.</b>												
MIN/ MIL	Cly- Sav	Gan anda	Lyo ns	Mar ion	New ark	NR- W	Pal- Mac	Red Crk	Sod us	Way ne	Will' son	BOC ES
Clyde- Sav		48/ 30	13/ 8	37/ 28	26/ 15	13/ 9	38/ 23	25/ 19	25/ 18	38/ 30	33/ 25	30/ 23
Gan anda	48/ 30		36/ 23	15/ 10	26/ 16	44/ 35	12/ 8	49/ 40	29/ 22	11/ 9	17/ 12	21/ 14
Lyons	13/ 8	36/ 23		25/ 16	14/ 8	23/ 17	27/ 16	31/ 25	22/ 15	34/ 28	28/ 18	27/ 21
Marion	37/ 28	15/ 10	25/ 16		23/ 17	32/ 24	15/ 10	37/ 30	17/ 11	15/ 11	4/ 3	8/ 5
Newark	26/ 15	26/ 16	14/ 8	23/ 17		35/ 23	17/ 10	45/ 32	24/ 15	34/ 23	26/ 19	27/ 17
NR-W	13/ 9	44/ 35	23/ 17	32/ 24	35/ 23		46/ 34	11/ 8	20/ 14	33/ 26	28/ 21	25/ 19
Pal- Mac	38/ 23	12/ 8	27/ 16	15/ 10	17/ 10	46/ 34		51/ 40	30/ 21	20/ 15	18/ 13	21/ 15
Red Creek	25/ 19	49/ 40	31/ 25	37/ 30	45/ 32	11/ 8	51/ 40		25/ 20	38/ 32	33/ 27	31/ 25
Sodus	25/ 18	29/ 22	22/ 15	17/ 11	24/ 15	20/ 14	30/ 21	25/ 20		17/ 13	13/ 8	10/ 6
Wayne	38/ 30	11/ 9	34/ 28	15/ 11	34/ 23	33/ 26	20/ 15	38/ 32	17/ 13		10/ 8	9/ 7
Wil'sn	33/ 25	17/ 12	28/ 18	4/ 3	26/ 19	28/ 21	18/ 13	33/ 27	13/ 8	10/ 8		3/ 2
BOCES	30/ 23	21/ 14	27/ 21	8/ 5	27/ 17	25/ 19	21/ 15	31/ 25	10/ 6	9/ 7	3/ 2	



To provide a framework for themed programs, some assumptions are made. First, each high school in the county would have the opportunity to develop a theme which could be made available to all students within the county. However, if some high schools decline this opportunity, then a consortium of those who choose to do so could exist on a more limited basis, but with a similar, although diminished impact.

Second, a theme program would typically have a three consecutive period duration in the daily schedule. This is a starting assumption for the sake of a framework. Clearly, a theme could be longer or shorter than three periods.

Third, Advanced Placement courses, International Baccalaureate, and Project Lead the Way are generally not eligible for BOCES aid. The one exception to the BOCES aid restriction is that a BOCES itinerant teacher could offer Advanced Placement courses and, as a shared teacher, BOCES aid would be available. The cost for a three period themed program is suggested as three times the open enrollment cost, by district, as presented in Option 1, Wayne Student Exchange. The following table shows the corresponding costs for themed programs hosted by each high school, based on the assumptions above.

<b>District</b>	<b>Cost per class period, by district</b>	<b>Cost per themed program by district</b>
Clyde-Savannah	\$680	\$2,040
Gananda	\$699	\$2,097
Lyons	\$707	\$2,121
Marion	\$657	\$1,971
Newark	\$687	\$2,061
North Rose-Wolcott	\$740	\$2,220
Palmyra-Macedon	\$689	\$2,067
Red Creek	\$682	\$2,046
Sodus	\$842	\$2,526
Wayne	\$736	\$2,208
Williamson	\$729	\$2,187

Several points should be made at this juncture in the review of “theme” programs. First, with declining enrollment looming, both shared themes and New Vision programs become cost effective, assuming the district wishes to maintain a quality, even world class, curriculum for its students.

Second, like open enrollment classes, themed program costs may well be generalized across multiple districts---a foundation of BOCES programs themselves. If this is a plausible approach, an average cost for each program could be developed for any format of programming. Going it alone in a declining enrollment environment will result in diminished class enrollment, fewer student options, and increased cost. A themed approach mitigates all factors.

Third, the program cost in this example is an initial starting point. It is relatively consistent with the local cost for participation in a New Vision half-day program. The following table shows the comparison.

<b>District</b>	<b>Cost per themed program by district</b>	<b>Local cost of New Vision programs by district</b>
Clyde-Savannah	\$2,040	\$874
Gananda	\$2,097	\$1,054
Lyons	\$2,121	\$1,054
Marion	\$1,971	\$1,023
Newark	\$2,061	\$1,098
North Rose-Wolcott	\$2,220	\$1,488
Palmyra-Macedon	\$2,067	\$1,191
Red Creek	\$2,046	\$ 620
Sodus	\$2,526	\$1,308
Wayne	\$2,208	\$1,904
Williamson	\$2,187	\$1,308
Average	\$2,140	\$1,175

Themed programs are viable options for school districts facing declining enrollment and a financially challenging future. The themed programs presented here are high quality programs. Finding a way to collaborate to develop programs, equalize opportunities for students, and share costs will be

the challenge. However, if the challenge is met, these programs hold great promise for students of the future.

#### **4. E-learning Option**

E-learning is an emerging term that is being used to describe student learning through a digital medium. High schools that are focused on providing more coursework to students electronically are sometimes referred to as virtual high schools. E-learning can be divided into the following two types of course delivery:

a. *On-line courses*-designed to be taken on a self-paced schedule, these courses can be accessed and completed by students anywhere and anytime. While this type of learning is not for everyone, it is utilized in some Wayne County high schools. Currently, there are a number of applications that might enhance student learning opportunities. These include credit recovery, homebound students, electives, and low enrollment classes.

b. *Distance learning*-designed to have students at various locations take the same course at the same time through the use of technology. Distance learning has been delivered for the past twenty years through specially designed labs in high schools that were very costly to install. This method of delivery is rapidly being replaced by specially equipped moveable carts which are rolled in and out of classrooms as needed.

Accelerate-U from Wayne-Finger Lakes BOCES is a form of online learning. Currently, the following nineteen students are participating in Accelerate-U from Wayne County schools.

Gananda-4 students  
Marion-1 student  
North Rose-Wolcott-2 students  
Wayne-1 student  
Williamson-11 students

The following are the courses that Wayne County students are taking through Accelerate-U.

- Beginning Composition-English 12
- Pre-Calculus
- Health
- Music Appreciation
- English 9
- Coastal Ecology
- Anthropology
- Marketing
- American History
- Career Planning
- Consumer Math

There are numerous online courses that are currently available through the Oneida-Madison-Herkimer BOCES in Utica. The cost for a one semester class is \$450. The cost for a full year class is \$850.

The expensive, space consuming distance learning labs of the past twenty years are rapidly being replaced by portable “electronic learning” systems. These rolling carts are equipped with large flat screen TV’s and related technology that allow a teacher to communicate with students in multiple classrooms in multiple locations and to see and hear each other in real time. There are also many distance learning courses that are currently being offered by the Oneida-Herkimer-Madison BOCES. One of the more innovative distance learning applications through Oneida-Herkimer-Madison BOCES is the Mandarin Chinese courses which are taught to many students from thirteen school districts in the Utica area. In addition to Mandarin Chinese, distance learning courses are also being taught through the Oneida BOCES in American Sign language, Business Law, Psychology, and French 5. Beyond these currently existing courses, the additional possibilities are numerous. Should the school districts in Wayne County choose to pursue some of these course offerings, the Wayne-Finger Lakes BOCES could begin this as a new service or could contract with the Oneida-Herkimer-Madison BOCES on behalf of its component school districts.

The portable, large flat-screen electronic learning systems, with related technology are currently available from two companies, Tandbery and POLYCOM. Both perform at essentially the same level and are available on the State purchasing contract. Since the POLYCOM systems are somewhat less costly, they are used in this analysis. A POLYCOM teaching station costs approximately \$17,000; a receiving station costs approximately \$13,000. If this equipment is purchased as part of a BOCES E-learning service, the equipment and other costs related to this delivery method could be eligible for BOCES aid.

In creating a model for this E-learning option, we have assumed that each high school would serve both as a host site for course transmission as well as a receiving site. Transmission districts would have their students sitting in the classroom where the teacher is teaching the course; receiving districts would have their students sitting in their high schools receiving the course electronically. To illustrate the viability of this distance learning arrangement, a model is provided that identifies one current upper-level course to be transmitted from each high school to other districts in Wayne County. The model incorporates 2009-10 courses available in the eleven Wayne County high schools. If, in the future, the Wayne County schools choose to expand offerings, a totally different menu of courses may be offered.

<b>Host High School</b>	<b>AP or College Credit Course</b>
Clyde-Savannah	Global Environmental Science (ESF)
Gananda	AP English Literature & Composition
Lyons	Calculus I (FLCC)
Marion	Sociology (FLCC)
Newark	AP Psychology
North Rose-Wolcott	Economics (FLCC)
Palmyra-Macedon	AP American History
Red Creek	Statistics (CCC)
Sodus	Spanish V (CCC)
Wayne	AP English Language & Composition
Williamson	AP European History

*ESF=Environmental School of Forestry*  
*FLCC=Finger Lakes Community College*  
*CCC=Cayuga Community College*

This course listing exemplifies the significance of distance learning in at least two ways. First, while only identifying one current upper-level course for which each high school could serve as the host, it exposes the broad base of course opportunities for all students in Wayne County. Advanced Placement courses become available to all.

Second, to maintain the quality of curricular offerings with declining enrollment, there is a significant financial advantage associated with distance learning. For example, a high school of 400 would usually have 4 English, 4 social studies, 4 math, and 4 science teachers. If, in the next five years, the enrollment decreases by 25%, as is projected in some of the Wayne County schools, then the “model” high school would have 300 students. Typically a high school of this size would include 3 English, 3 social studies, 3 math, and 3 science teachers, a decrease of one teacher per academic department. Further, a 400 student high school could offer five to seven Advanced Placement courses. A high school of 300 students might not be able to sustain those Advanced Placement courses. An earlier section of this study confirms that with a population of 400 students Advanced Placement courses are common, yet with high schools of less than 325, none provides an Advanced Placement course.

For this “model” high school, now at 300 students, to offer Advanced Placement courses in 2014-15, it might have to add a 0.2 teacher in English, a 0.2 teacher in social studies, a 0.2 teacher in math, and a 0.2 teacher in science, in order to provide an Advanced Placement course in each of these academic areas. Using \$52,750 as an average salary for a Masters degree teacher with fifteen years experience, (the average within the County), and fringe benefits at 35%, a full time teacher would cost a district \$71,216. The four 0.2 teachers would equal a .8 teacher and would cost the district \$56,973.

If, instead, the district participated in a BOCES distance learning consortium, its costs would be dramatically lower. We assume seven students per distance learning class, bringing the total number of students enrolled in the four classes (one per academic area) to twenty-eight.

The “model” cost calculation assumes that the district would annually purchase one POLYCOM flat screen television with camera through BOCES. The unit purchased in each successive year would serve as an additional unit or as a replacement unit. The current cost of a POLYCOM television with camera is approximately \$17,000. If the district’s BOCES aid ratio is 80% (the approximate average for the eleven Wayne County school districts), the purchase of a POLYCOM flat screen television with camera would be offset by 80% of the cost in BOCES aid received in *the following school year*. In this case the district would receive \$13,600 in BOCES aid the following year. If the district was to use this \$13,600 in BOCES aid as a revenue source for the purchase of an additional \$17,000 unit, the district could purchase this additional unit at a net cost of \$3,400. Continuing to roll over BOCES aid as an annual revenue source, the district can continue to keep state of the art technology as a relatively moderate annual cost. Given the 28 students involved in this example, the purchase of one POLYCOM flat screen television with camera per year is sufficient, since each unit can be relocated from room to room.

Beyond the technology cost, the current BOCES charge for participation per student ranges between \$500 and \$1,000. For this example, \$750 is used.

Accordingly, the total participation cost for the twenty-eight students would be \$21,000. This again is offset by the 80% BOCES aid, bringing the local cost for the participation of 28 students to \$4,200.

In addition to acquiring the technology and the per student participation cost, there is a \$12,000 annual BOCES program participation cost per district. This charge is also eligible for BOCES aid resulting in local cost (at 80%) of \$2,400. Assuming that the district also serves as a host site for another Advanced Placement course each year, it receives a stipend from BOCES of \$1,000 for providing the class. Lastly, the example includes a local cost for supervising the students while they are in the distance learning environment. For this example, we assume supervision is provided by a teaching assistant, at an estimated cost for the four periods of supervision of \$12,150 (assuming a base salary of \$18,000, 35% in benefits, and one half-day of the teaching assistant's assignment). Supervision may include basic supervision of one or more students participating in a distance learning course or ancillary support for a student with a disability. For purposes of the financial model, we are also assuming that the cost of the teaching assistant is not eligible for BOCES aid reimbursement.

The total cost for providing the four Advanced Placement courses to the 28 students via distance learning is illustrated in the table that follows.

<b>Item</b>	<b>Annual Expenditure</b>	<b>Annual Local Cost, after 80% BOCES Aid</b>
POLYCOM cart	\$17,000	\$3,400
Participation of 28 students @ \$750	\$21,000	\$4,200
BOCES Program Charge	\$12,000	\$2,400
Local Supervision	\$12,150	\$12,150
Total	\$62,150	\$22,150
Total, minus \$1,000	\$61,150	\$21,150

This net cost of \$21,150 compares most favorably to the \$56,960 cost for providing the 0.2 teachers in each of the four academic areas. Moreover, it



clearly demonstrates the cost effectiveness through collaboration that can be achieved by the Wayne County high schools in the future as they seek to maintain the quality of their instructional program while facing declining enrollment. Again, it should be remembered that BOCES aid follows the year after the service is purchased so that it is incumbent on the district to generate the full cost of the program in its first year of operation.

Finally, once distance learning is made available in a high school there is no limit to the course opportunities, thereby significantly enhancing the learning opportunities for students. The addition of other distance learning opportunities in a district becomes even more cost effective. Since the BOCES program charge is only paid once per year and since the POLYCOM cart has the capability to serve several classrooms in a day, adding more courses is an attractive, cost effective option. Additional courses can be added for only the local cost of \$150 per student (20% of \$750), and the supervision cost for each course.

It should be noted that this calculation is based upon supervision of the four distance learning courses by a teaching assistant with a base salary of \$18,000. It is important to note that each district would have a different base salary for teaching assistants. Moreover, it may be possible for the district to find an alternative to supervision by the teaching assistant and reduce the local costs even further. One example might be to engage a teacher during a “duty assignment” such as a study hall, which only requires supervision without instruction by the teacher. In such cases, the net local cost to the district for the four distance learning classes would be reduced by the \$12,150 teaching assistant cost, from \$21,150 to \$9,000, demonstrating considerable cost-effectiveness.

The following tables show the distance learning costs per district based on four-fifths of the total compensation of a teacher in each district with fifteen years experience and a Masters degree, seven participating students in four distance learning classes, and the individual BOCES aid ratio for the district. It also assumes that the supervision arrangement and cost are at the district’s

discretion. The table therefore displays two variations of supervision: one with supervision at no additional cost and another with a teaching assistant.

<b>Clyde-Savannah</b>		
Teacher Cost for 4 Classes		\$54,422
Distance Learning Item	Annual Expenditure	Annual Local Cost, After 85.9% BOCES aid
POLYCOM cart	\$17,000	\$ 2,397
Participation of 28 students @ \$750	\$21,000	\$ 2,961
BOCES Program Charge	\$12,000	\$ 1,692
Subtotal	\$50,000	\$ 7,050
Host revenue	(\$1,000)	(\$1,000)
Total Cost without a TA	\$49,000	\$ 6,050
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$18,200

<b>Gananda</b>		
Teacher Cost for 4 Classes		\$55,886
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 83% BOCES aid
POLYCOM cart	\$17,000	\$2,890
Participation of 28 students @ \$750	\$21,000	\$3,570
BOCES Program Charge	\$12,000	\$2,040
Subtotal	\$50,000	\$8,500
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,500
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$19,150

<b>Lyons</b>		
Teacher Cost for 4 Classes		\$55,491
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 83% BOCES aid
POLYCOM cart	\$17,000	\$2,890
Participation of 28 students @ \$750	\$21,000	\$3,570
BOCES Program Charge	\$12,000	\$2,040
Subtotal	\$50,000	\$8,500
Host revenue	(1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,500
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$19,650

<b>Marion</b>		
Teacher Cost for 4 Classes		\$52,592
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 83.5% BOCES aid
POLYCOM cart	\$17,000	\$2,805
Participation of 28 students @ \$750	\$21,000	\$3,465
BOCES Program Charge	\$12,000	\$1,980
Subtotal	\$50,000	\$8,250
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,250
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$19,400

<b>Newark</b>		
Teacher Cost for 4 Classes		\$54,979
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 82.3% BOCES aid
POLYCOM cart	\$17,000	\$3,009
Participation of 28 students @\$750	\$21,000	\$3,717
BOCES Program Charge	\$12,000	\$2,124
Subtotal	\$50,000	\$8,850
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$7,850
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$20,000

<b>North Rose-Wolcott</b>		
Teacher Cost for 4 Classes		\$59,238
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 76% BOCES aid
POLYCOM cart	\$17,000	\$4,080
Participation of 28 students @ \$750	\$21,000	\$5,040
BOCES Program Charge	\$12,000	\$2,880
Subtotal	\$50,000	\$12,000
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$11,000
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$23,150

<b>Palmyra-Macedon</b>		
Teacher Cost for 4 Classes		\$55,086
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 80.8% BOCES aid
POLYCOM cart	\$17,000	\$3,264
Participation of 28 students @ \$750	\$21,000	\$4,032
BOCES Program Charge	\$12,000	\$2,304
Subtotal	\$50,000	\$9,600
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$8,600
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$20,750

<b>Red Creek</b>		
Teacher Cost for 4 Classes		\$54,544
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 90% BOCES aid
POLYCOM cart	\$17,000	\$1,700
Participation of 28 students @ \$750	\$21,000	\$2,100
BOCES Program Charge	\$12,000	\$1,200
Subtotal	\$50,000	\$5,000
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$4,000
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$16,150

<b>Sodus</b>		
Teacher Cost for 4 Classes		\$67,379
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 78.9% BOCES aid
POLYCOM cart	\$17,000	\$3,587
Participation of 28 students @ \$750	\$21,000	\$4,431
BOCES Program Charge	\$12,000	\$2,532
Subtotal	\$50,000	\$10,550
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$ 9,550
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$21,700

<b>Wayne</b>		
Teacher Cost for 4 Classes		\$58,859
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 69.3% BOCES aid
POLYCOM cart	\$17,000	\$5,219
Participation of 28 students @ \$750	\$21,000	\$6,447
BOCES Program Charge	\$12,000	\$3,684
Subtotal	\$50,000	\$15,350
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$ 14,530
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$26,680

<b>Williamson</b>		
Teacher Cost for 4 Classes		\$58,320
Distance Learning Item	Annual Expenditure	Annual Local Cost, after 78.9% BOCES aid
POLYCOM cart	\$17,000	\$3,587
Participation of 28 students @ \$750	\$21,000	\$4,431
BOCES Program Charge	\$12,000	\$2,532
Subtotal	\$50,000	\$10,550
Host revenue	(\$1,000)	(\$1,000)
Total cost without a TA	\$49,000	\$ 9,550
TA supervision	\$12,150	\$12,150
Total cost with a TA	\$61,150	\$21,700

The previous eleven charts clearly point out the advantages of collaborative programming through BOCES using E-learning. Instructional opportunities for students are clearly enhanced. Financial advantages are also significant and can be summarized in the following table:

<b>District</b>	<b>Teacher Cost for 4 Classes</b>	<b>Annual Cost without a TA</b>	<b>Annual Cost with a TA</b>
Clyde-Savannah	\$54,422	\$6,050	\$18,200
Gananda	\$55,886	\$7,500	\$19,650
Lyons	\$55,491	\$7,500	\$19,650
Marion	\$52,592	\$7,250	\$19,400
Newark	\$54,979	\$7,850	\$20,000
North Rose-Wolcott	\$59,238	\$11,000	\$23,150
Palmyra-Macedon	\$55,086	\$8,600	\$20,750
Red Creek	\$54,544	\$4,000	\$16,150
Sodus	\$67,379	\$9,550	\$21,700
Wayne	\$58,859	\$14,530	\$26,680
Williamson	\$58,320	\$9,550	\$21,700

### **5. Alliance High School**

Many students do not see the relevance of their high school education. They don't understand why they have to learn many of the things educators ask them to learn. They desire a hands-on, meaningful, relevant learning experience and they do not see their local high schools providing that type of program. Some want to be engaged in a career field from their first year in high school....others don't want to wait until their junior year to access a career and technical education course at BOCES.

For this reason, the Wayne County school districts should investigate the possibility of creating a four year "regional high school" at the current BOCES campus in Williamson. To distinguish this program option from a regional high school based on the consolidation of component high schools, it is termed "Alliance High School." Such a school, operated under the aegis of BOCES, would offer a full-day, four year program for students that would result in them achieving a high school diploma. Students would be required to achieve the

same course and credit requirements that are currently in place for all other high school students. The difference is that the learning in the Alliance High School would be hands-on, contextualized, connected to the area world of work, and project based.

Capital Region BOCES and Questar BOCES in the Albany area have recently created Tech Valley High School for the students in that two BOCES region. We propose replicating the Tech Valley model in Wayne County but rather than having a high tech orientation, the Wayne County Regional High School would have an orientation toward the health careers.

We base our model of a health careers Alliance High School on a number of factors. Given the aging population of the United States, it is clear that the number of jobs in the health care field will continue to grow substantially. In addition, the Department of Labor has recently completed occupational projections through 2014. Of the four occupations expected to grow the most over the next five years, health related positions make up three of those occupations as illustrated in the following table.

<b>Rank</b>	<b>Title</b>	<b>2004</b>	<b>2014</b>	<b>Change</b>	<b>Annual Growth</b>
1	Home Health Aides	6,100	7,980	1,880	188
2	Teacher Assistants	10,860	11,950	1,090	109
3	Nurse Aides/Orderlies/Attendants	6,990	7,910	920	92
4	Personal/Home Care Aides	3,980	4,840	860	86

Clearly many new jobs in the health careers field will be created in the Finger Lakes region in the next five years. While we believe that there is ample justification for an Alliance High School with a health careers focus, health is simply used as an illustrative model for purposes of discussion. The high school could have any career focus that leaders in the area deem appropriate. The structure and learning environment of the high school are far more important than the career focus for this approach.

Students attending the four year high school at BOCES are young adults who would like to be a doctor, a nurse, a therapist, or a hospital administrator. Students would still have to accumulate four English credits....but these students would be reading, writing, and speaking about issues related to the health field. Students would still have to accumulate four credits of social studies....but they would be researching issues related to the health field. Participation in Government students might be actively engaged in the current debate about national health care policy.

Furthermore, this contextualized learning would not take place in teacher centered classes that meet for 40 minutes every day in discrete subject areas. Rather, the learning would take place with the teachers acting as leaders, mentors, and coaches in defining projects related to the student learning and assisting the students to complete those projects. Hands-on laboratory learning experiences would permeate the school. Job shadowing, work experiences and community service would be generally accepted ways to acquire real world learning experiences and high school credits. Working in teams, using technology to access information, solving problems, and interacting with health care customers and professionals would provide the model opportunity for students to acquire 21<sup>st</sup> century skills.

The model assumes that, at full operation, the program would have 100 students in grades 9–12 and would be housed at the BOCES Wayne Career and Technical Campus. Correspondingly, the model includes the following staffing.

- 1.0 English teacher
- 1.0 Social studies teacher
- 1.0 Math teacher
- 1.0 Science teacher
- 1.0 Health teacher
- 1.0 Special education teacher
- 0.5 Physical education teacher
- 0.5 Art teacher



0.5 Language Other Than English teacher

1.0 Principal

1.0 Secretary

0.5 Custodian

In addition, the budget would include \$67,800 for operation and maintenance costs associated with the program's location at the Technical Center, \$50,000 for equipment, \$25,000 for consulting services related to the health services field, \$10,000 for annual curriculum development, \$10,000 for supplies, \$5,000 for certified substitutes, \$1,000 for non-certified substitutes, \$5,000 for field trips, as well as liability insurance, and the customary technology assistance services within the BOCES system. The aforementioned costs were established in conjunction with the Wayne-Finger Lakes BOCES staff. They assume a program that has been in operation for a number of years, and thus do not include start-up costs.

Salary and supplemental benefit calculations are based on a Wayne-Finger Lakes BOCES teacher with fifteen years experience, a Masters degree, and thirty-six graduate credits. Accordingly, the program would operate with a budget of \$966,975, and the tuition would be \$9,670.

It is important to recall the offset of BOCES program aid. Consistent with previous tables, the following table shows the local net cost per student by district.

<b>Cost of Regional High School-Tuition of \$9,670</b>		
District	BOCES Aid Ratio	Local Cost after BOCES aid
Clyde-Savannah	85.9 %	\$1,363
Gananda	83 %	\$1,644
Lyons	83 %	\$1,644
Marion	83.5 %	\$1,596
Newark	82.3%	\$1,712
North Rose-Wolcott	76 %	\$2,321
Palmyra-Macedon	80.8 %	\$1,857
Red Creek	90 %	\$967
Sodus	78.9 %	\$2,040
Wayne	69.3 %	\$2,969
Williamson	78.9 %	\$2,040

Beyond the tuition, there is no additional cost, since each district already transports students to the Career and Technical Education Center at BOCES. It should also be noted that the amount of BOCES aid is somewhat overstated in the chart above. There is a cap on the amount of an individual's salary that is eligible for BOCES aid. That cap currently stands at \$30,000. Not knowing the BOCES salary structure prevents us from being more specific about the aid reduction but we believe it important to note that such a limitation does exist.

The second compelling dimension of this option is that students retain their identity with their home school. After participation in the program during the academic day, students return to their home school for after school activities. They graduate from their home school in the home school ceremony with a home school diploma. Accordingly, this option provides a regional high school program for students, while maintaining home school affiliation for the students.

## Bell Schedules

It is a fundamental finding of this study that sharing between school districts will be the norm in the future. Given the declining enrollment projections, the desire to provide students with a world class education, and the financial pressures to control taxes, sharing is a must.

Sharing is not easy. Regardless of the model used, shared student programming takes a great deal of planning and commitment from the districts involved to do the best they can for their students. One of the major obstacles to collaborative student programming is time. If teachers are being moved to students, the amount of travel time for teachers must be minimized. If students are being moved to programs, the amount of travel time for students must be minimized. In addition, however, there is another time challenge...the time at which programming is offered.

We have examined the bell schedules for all eleven districts in the study and have presented those data in the following chart. The importance of this analysis is to determine the starting and ending times of teaching periods. If two districts plan to collaborate on a distance learning opportunity for any given period, their bell schedules for that period must be somewhat compatible. If students take classes in other districts, the bell schedules must be similar enough to allow the student to travel back and forth and still have the time to accumulate all necessary credits. In short, the table which follows is a critical part of the sharing puzzle for the future.

## Bell Schedules

	C-S	Gan (1)	Lyons	Mar	New	NR-W (1)	Pal- Mac (1)	Red Crk (3)	Sod	Way (1)	Wm'sn
Start of period 1 (Length)	7:47 (48)	8:04 (84)	7:57 (43)	7:25 (44)	7:30 (44)	7:20 (40)	7:45 (85)	7:47 (91)	7:40 (44)	7:50 (89)	7:46 (41)
Start of period 2 (Length)	8:39 (41)	9:32 (84)	8:43 (43)	8:12 (44)	8:24 (44)	8:17 (75)	9:15 (85)	9:22 (88)	8:28 (41)	9:24 (44)	8:31 (39)
Start of period 3 (Length)	9:24 (41)	11:00 (2) (108)	9:29 (43)	8:59 (44)	9:12 (44)	9:36 (75)	10:45 (2) (60)	10:54 (2) (120)	9:13 (41)	10:13 (43)	9:32 (4) (39)
Start of period 4 (Length)	10:09 (41)	12:52 (80)	10:15 (43)	9:46 (44)	10:00 (44)	10:55 (2) (75)	12:20 (25)	12:58 (85)	9:58 (41)	11:01 (2) (82)	10:15 (39)
Start of period 5 (Length)	10:54 (41)		11:01 (43)	10:33 (44)	10:48 (2) (44)	11:29 (2) (75)	12:50 (85)		10:43 (2) (41)	11:32 (2) (82)	10:58 (39)
Start of period 6 (Length)	11:39 (41)		11:47 (2) (43)	11:20 (2) (44)	11:36 (2) (44)	12:48 (78)			12:02 (2) (41)	1:02 (81)	11:41 (39)
Start of period 7 (Length)	12:24 (41)		12:17 (2) (43)	11:51 (2) (44)	12:24 (2) (44)	2:10 (45)			12:47 (41)		12:24 (39)
Start of period 8 (Length)	1:09 (41)		1:03 (43)	12:38 (44)	12:58 (44)				1:32 (41)		1:07 (39)
Start of period 9 (Length)	1:54 (41)		1:49 (43)	1:25 (44)	1:46 (44)				2:16 (41)		1:50 (40)
Start of period 10 (Length)	2:38 (37)			2:12 (41)							2:33 (27)

(1)-Alternate Day      (2)-Includes lunch periods      (3)-Semestered      (4)-DEAR from 9:10-9:28

In analyzing this table, many complicating factors become readily apparent:

1. No two of the 11 high schools in Wayne County have common class schedules.
2. Red Creek is the only district with a semestered schedule.
3. Gananda has a block schedule, with 84 minute blocks throughout the day.
4. North Rose-Wolcott, Palmyra-Macedon, and Wayne have modified block schedules. North Rose-Wolcott starts and ends the day with

40 and 45 minute periods, respectively, while their blocks are 75 minutes in length. Palmyra-Macedon has 85 minute blocks, with 60 minute and 25 minute periods between the 2<sup>nd</sup> and 3<sup>rd</sup> blocks. Wayne has blocks of 89, 82, 82, and 81 minutes, with 44 and 43 minutes periods between the first and second blocks.

5. Five of the remaining six schools (Clyde-Savannah, Lyons, Marion, Newark, and Sodus) have consistent length periods throughout the day, varying from 41 to 44 minutes.
6. Williamson has a consistent 39 minute period schedule, except during 2<sup>nd</sup> period where everyone “Drops Everything And Reads” for 20 minutes.
7. Of the 6 schools with the standard period schedules, class starting times in the morning vary from 7:20 at Marion to 7:57 at Lyons.
8. Marion’s starting time of 7:20 causes its period schedule to be out of sync with every other school on the period schedule. If it delayed its first period by 12 minutes its schedule would reasonably match that of Newark.

There are two basic options for sharing instruction on a period by period basis between two or more schools. The first is transporting students to a nearby school for the purpose of taking one or more specific classes. This option is simple from the standpoint of instruction, because the student is transported to and from the other school, and receives “in person” instruction in the classroom. The drawback is lost instructional time while in transport. This drawback may be minimized by scheduling the shared classes around lunch periods, with the students eating lunch on the bus. This drawback also may be minimized when these classes are scheduled at the beginning or end of the day. In these cases, varying starting times in the morning is advantageous.

The second option is distance learning, utilizing specific times during the day when class schedules between schools are closely matched, and intentionally and cooperatively, scheduling shared classes at those times.

It is clear that there are creative ways to minimize the barriers that these dramatically different bell schedules cause. However, there are also limits to this creativity. Left unchanged, the current high school schedules will always be a major factor that will inhibit sharing. We believe that serious

consideration must be given to developing a county-wide bell schedule that is not necessarily exactly the same from district to district but is one that is much more alike than different. Should this “common” schedule be developed, many more shared opportunities for students will become available. We understand that this is a major undertaking but one that we believe will pay significant dividends for the students in the future.

## Extra-Curricular Activities

The involvement of students in extra-curricular activities is an important aspect of any school district. Extra-curricular activities play an important role in supplementing the instructional program by allowing students the opportunity to expand their horizons of learning and to showcase talents they possess in areas other than in the classroom. Research has consistently shown that students who are involved in extra-curricular activities have a greater likelihood of being successful in school. These students also have a greater probability of completing their school experience and acquiring a high school diploma.

The availability of extra-curricular opportunities for students increases as the size of the school increases. There are more clubs and other activities in which students can participate in a larger district than in a smaller district. On the other hand, while opportunities to participate are greater in a larger district, the competition to participate in any single activity will also increase.

For purposes of this study, we have divided extra-curricular activities into two groups, athletics and clubs. Athletic participation is shown in the following tables for fall, winter and spring participation.

## Athletic Participation for 2008-09 (Fall Sports)

	C-S	GAN	LYO	MAR	NEW	NR-W	P-M	RC	SOD	WAY	WIL
Boys Soccer-MOD-A		15		18	21	12	14	17	26	14	18
Boys Soccer-MOD-B		14				13	16			14	14
Boys Soccer-JV		13		19	16	18	16	19	18	24	24
Boys Soccer-VAR		20		18	19	15	23	19	21	19	22
Football-VAR	31		16		27		22			25	
Football-JV	28		20		39		23			23	
Football-MOD					27						
Football-JV/VAR		25 <sup>1</sup>								35	
Girls Soccer-MOD-A		24	19	14	28	14	15	15	21	20	12
Girls Soccer-MOD-B				14		14	17			19	12
Girls Soccer-JV		14		18	18	14	27	16	15	18	24
Girls Soccer-VAR		14	17	18	18	15	16	16	22	20	19
Girls Swimming-MOD		16			17	15	16				
Girls Swimming-VAR		11			24	28	20		4		
Boys Volleyball-MOD						16			8	5	
Boys Volleyball-JV						10			8	6	
Boys Volleyball-VAR						8			12	9	
Girls Volleyball-MOD	14	16	17	19	13	18	13		12	15	14
Girls Volleyball-JV	10	15	14	13	12	12	11		8	11	8
Girls Volleyball-VAR	11	15	13	12	11	8	12		8	13	11
Co-Ed X Country-VAR					13		19		15	30	
Co-Ed X Country-MOD			3		25	6				18	
Boys X Country-MOD	18			3				11			18
Boys X Country-VAR	6		2	19		10		9			22
Girls X Country-MOD	6			4				10			14
Girls X Country-VAR	12		5	10				11			13
Girls Tennis-MOD	7		13			10	8		6		
Girls Tennis-JV					10		9			8	
Girls Tennis-VAR	10		9		9	8	13		12	8	
Cheerleading-VAR	15		12		12		12			25	
Cheerleading-JV			14				8			16	

1. Gananda shares football with East Rochester



## Athletic Participation for 2008-09 (Winter Sports)

	C-S	GAN	LYO	MAR	NEW	NR-W	P-M	RC	SOD	WAY	WIL
Boys Basketball-MOD-A	12	15	10	15		12		10	9		
Boys Basketball-MOD-B	11	16	10			12		16			
Boys Basketball-Frosh					11		13			14	
Boys Basketball-7 <sup>th</sup> Gr					13		14			16	14
Boys Basketball-8 <sup>th</sup> Gr					12		12			13	14
Boys Basketball-JV	12	16	11	11	12	12	11	11	9	11	11
Boys Basketball-VAR	10	11	7	7	12	12	11	14	12	12	9
Girls Basketball-MOD-A	9	9	8	11	13	10	13	10	13	14	12
Girls Basketball-MOD-B	8	15	8	11	12	10	12	12		14	12
Girls Basketball-JV	10	8	14	11	11	12	11	11	11	12	10
Girls Basketball-VAR	10	10	11	11	12	10	11	8	8	13	10
Wrestling-MOD			7			20	17	18	18	25	15
Wrestling-JV/VAR					24	35	14			27	
Wrestling-JV					9		28	15			7
Wrestling-VAR			8	12	19		24	15	18		17
Boys Swimming-MOD	8	17			13		22		4		
Boys Swimming-VAR	17	20			25	10	28		4		
Boys Indoor Track-VAR	19										
Girls Indoor Track-VAR	9			27							
Indoor Track-VAR			7	15	49	22	65			42	43
Indoor Track-MOD				12	19						
Boys Bowling-VAR	10				12	8		7	13	21	
Girls Bowling-VAR	9					4		5			
Bowling-VAR			15			12					
Cheerleading-JV	8				12	6	13		4	17	12
Cheerleading-VAR	12	16	15		15	14	14	12	12	26	18
Alpine Skiing			1		15				12	12	
Nordic Skiing									9		

## Athletic Participation for 2008-09 (Spring Sports)

	C-S	GAN	LYO	MAR	NEW	NR-W	P-M	RC	SOD	WAY	WIL
Baseball-MOD A	14	15			16	15	14	17	15	14	17
Baseball-MOD-B		15	17			15		13		13	
Baseball-JV	14	16	13	11	11	15	13		12	19	13
Baseball-VAR	13	12	12		16	12	14	17	15	13	13
Softball-MOD A	14	10		15	16	16	17	12	19	15	14
Softball-MOD-B		13	12							14	
Softball-JV	12	14	13		12	16	10	17	14	12	9
Softball-VAR	13	11	11	17	16	14	14		13	11	10
Golf-VAR	8	15	14	13	17*	8	9*	12	8	10*	12
Golf-JV										6*	
Boys Track-MOD	16	14		14	39	18	15	6	8	28	20
Boys Track-VAR	25	24	4	25	62	20	40	20	20	46	34
Girls Track-MOD	15	18	11	20		18	15	14	14	42	20
Girls Track-VAR	21	30	14	28		24	36	20	27	41	29
Boys Tennis-MOD	8		9			16	17		10	15	10
Boys Tennis-JV					18		11			6	
Boys Tennis-VAR	9		7	22	13	9	9		6		12
Boys Lax-VAR					25		20				
Boys Lax-JV					18		21				
Boys Lax-MOD					27		24			32	
Girls Lax-VAR					15		17				
Girls Lax-JV					15		22				
Girls Lax-MOD					35		22			17	

*\*Newark, Palmyra-Macedon, and Wayne play golf in the fall*

An analysis of these participation rates for the 2008-09 school year indicates that students in Wayne County are fortunate to have a wide variety of athletic activities in which to participate. All school districts participate in Section V. Clyde-Savannah, Gananda, Lyons, Marion, North Rose-Wolcott, Red Creek, Sodus, and Williamson, the eight smaller districts, all participate in the Wayne County Athletic Association. Newark, Palmyra-Macedon, and Wayne play in the Finger Lakes High School Athletic Association. There are some inter-league contests that are played and some of the Wayne County Athletic

Association districts are associate members of the Finger Lakes High School Athletic Association. In addition, there are “team of one” arrangements that are made from one district and league to another. The only true sharing of athletic teams that exists is that Gananda and East Rochester students play on the same football team.

There are two issues that exist with the participation of students in athletic endeavors. First, many of the schools would like to offer more opportunities for their students.....and their students would like to have more opportunities. Several districts would like to start lacrosse programs, some districts would like to play football, and others would like to start ice hockey as an inter-scholastic sport.

The second issue, which impacts the first issue also, is the projected decline in student enrollment. With respect to the first concern, it will be difficult for districts to begin new athletic programs when the number of students in their high schools is declining. More dramatically, because of the enrollment decline, districts will find it difficult to maintain the programs that are currently being offered. Baseball and softball teams of 10, 11, and 12 players will be challenged to field a team as enrollments decline. The same can be said of current football teams with 16, 20, and 22 players.

In short, enrollment decline will pose a significant challenge to not only trying to increase athletic opportunities but also to maintaining those programs that currently exist. Again, the answer to providing increased athletic opportunities for students seems to be in sharing teams. This will not be an easy undertaking. Districts are fiercely proud of their athletic teams. Rivalries with area schools have existed for decades. To many, the school’s athletic teams are the face of the community. When school districts merge athletic teams, the two high school enrollments have to be combined, often resulting in teams playing in a higher, more competitive class. Where will the combined teams practice and play their games? What color uniforms will they wear? What mascot will the teams use? The challenges are many, and they are real.

Given the challenges, however, the courageous school leader who truly has the student as the top priority will open discussions about how to maintain and enhance athletic opportunities for students. Planning should begin soon. The problems should be discussed openly, and solutions sought. We recommend the formal establishment of a county-wide committee to study the inter-scholastic athletics issues that we have identified.....and we know there are more. There are solutions to these issues and the students will be the winners in the end.

The following table shows the clubs that existed in schools in the 2008-09 school year. Again we notice that larger schools have more opportunities for students than do smaller districts. However, the discrepancy in opportunities does not seem to be as great. School leaders told us that they are willing to support new clubs whenever there is interest....and the costs, commitments, and logistics are far less than trying to start an athletic team.

## Extracurricular Clubs and Organizations for 2009-10

	C-S	GAN	LY	MAR	NEW	NRW	P-M	RC	SOD	WAY	WIL
National Honor Society	X	X	X	X	X	X	X	X	X	X	X
Student Council/Congress	X	X	X	X	X	X	X	X	X	X	X
Model United Nations		X		X			X				
Drama Club	X	X	X	X	X	X	X	X	X	X	X
Varsity Club	X	X	X	X	X	X	X		X	X	X
Yearbook	X	X	X	X	X	X	X	X	X	X	X
SEE Club		X									
Math Nat'l Honor Society		X									
For. Lang. Honor Society					X						
Speech/Debate Club										X	
Science Club		X				X	X		X	X	
Foreign Language Club	X			X			X		X	X	X
Friends of Rachel		X									X
Math League/Club	X	X			X		X			X	
Art Club		X	X			X	X	X	X	X	X
Reflections		X									
Interact Club		X			X	X	X		X	X	
AV/Tech Club	X				X	X	X	X		X	
Robotics							X				
Chess Club	X					X			X		
Future Business Leaders							X	X		X	X
Library Club						X					
Literary Magazine/Paper			X	X		X		X	X	X	X
Masterminds	X		X		X	X	X		X	X	X
Outdoor Adventure Club						X					
Peer Mentors						X				X	
SADD			X		X	X	X				X
Ski Club	X			X	X	X	X	X	X	X	X
Student Athlete Mentors						X					
Youth to Youth Club					X	X	X			X	
Various Bands	X		X	X	X		X	X	X	X	X
Various Choral Groups	X		X	X	X		X	X	X	X	X
Future Homemakers Club	X							X			
Baseball Card Club								X			
Guitar Club								X			
Video Game Club								X			
Community Service Club								X		X	
Boys Club								X			
Skirt Club								X			
Literacy Club			X						X		
Environthon	X										
Garden Club									X		
Inventive Minds									X		

## Finance

This is not an in depth study of the financial status of the school districts in Wayne County. Detailed analysis of the fiscal condition of these districts is left for another study. However, we did gather some basic information about the school districts which would lead us to the conclusion that the districts are in sound financial condition and are generally enjoying the support of their communities. The following table depicts the budget status of the districts.

<b>Budget, Full Value Assessment, Tax Levy, and True Tax Rate (2009-10)</b>						
District	2009-10 Student Enrollment	Budget	Tax Levy	Full Value Assessment	True Value Tax Rate	2009 Budget Vote
Clyde-Savannah	855	\$17,896,916	\$4,838,725	\$200,186,215	\$24.13	268-93
Gananda	1,162	\$19,312,788	\$8,357,001	\$291,484,752	\$28.67	301-187
Lyons	892	\$18,747,452	\$4,273,843	\$221,604,737	\$18.88	328-138
Marion	934	\$17,980,455	\$5,392,440	\$251,457,398	\$21.44	369-135
Newark	2,197	\$40,833,219	\$11,427,202	\$563,363,033	\$20.28	1065-372
North Rose-Wolcott	1,380	\$26,956,786	\$8,090,428	\$536,472,022	\$15.08	250-130
Palmyra-Macedon	2,034	\$33,332,068	\$15,548,433	\$647,971,209	\$24.00	692-153
Red Creek	945	\$17,375,000	\$3,717,000	\$269,490,039	\$14.31	254-56
Sodus	1,199	\$25,250,857	\$7,848,880	\$413,457,122	\$18.97	411-143
Wayne	2,407	\$40,970,917	\$16,550,000	\$782,546,752	\$20.52	624-193
Williamson	1,166	\$20,617,865	\$8,476,023	\$384,435,533	\$22.05	598-222

As can be seen from the table above, all of the school budgets were approved by significant margins in 2009. The same budget vote support can be shown over time by the following table which shows the five year history of school budget votes.

## 5 Year History of School District Budget Votes

	Clyde-Savannah		Gananda		Lyons		Marion		Newark		North Rose-Wolcott	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>2009</b>	268	93	301	187	328	138	369	135	1065	372	250	130
<b>2008</b>	494	165	259	130	256	171	277	139	701	358	305	123
<b>2007</b>	327	132	271	133	256	140	304	142	709	404	305	85
<b>2006</b>	235	101	335	193	281	171	421	206	778	601	414	218
<b>2005</b>	302	125	388	421	311	185	551	510	1088	372	478	294
	Palmyra-Macedon		Red Creek		Sodus		Wayne		Williamson		Total	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>2009</b>	692	153	254	56	411	141	624	193	598	222	5160	1820
<b>2008</b>	534	392	250	55	349	197	811	275	462	213	4698	2218
<b>2007</b>	709	242	255	63	334	130	595	296	296	119	4361	1886
<b>2006</b>	790	507	434	157	268	127	801	506	354	178	5111	2965
<b>2005</b>	870	705	420	153	288	143	635	485	297	86	5628	3479

In the past five years, the eleven school districts in Wayne County have had a total of 55 public budget votes and 54 of them have been approved. This is a most enviable record that would be embraced by any eleven school districts in any county in the state. The school districts should be proud of this record. It is reflective of the institutional and personal credibility that the schools and their staff enjoy in their communities. It is further testament to the support that these communities give their schools and their satisfaction with what happens at school.

The financial challenge for schools, of course, lies in the future. State aid for public schools in New York State, as a percentage of the cost of operating schools, has been on the decline for many years. Property taxes are high in New York State and, according to reports being published locally, are especially high in Wayne County. How long will we continue to fund public education in New York State with the local property tax? When will our national economy rebound? These and others are very difficult questions to answer when it

comes to funding our public schools. The answers will not get easier. The pressure to reduce school spending will continue to mount, especially as enrollments decline.

As school districts prepared their budgets for the 2010-11 school year, the significant reductions in state aid which were proposed by the Governor dramatically impacted the development of these budgets. School districts lost millions of dollars in state aid. Given the state of the economy, districts were also very reluctant to raise local property taxes by other than the smallest of amounts. As a result, school districts eliminated large numbers of positions and closed school buildings. The funding of New York State public schools is perhaps more precarious than it has ever been.

Given today's dire circumstances for school funding described above, it is quite conceivable that things will only get worse. The American Recovery and Reinvestment Act (ARRA) which was passed into law in Washington provides significant federal funding to school districts across the country. Often referred to as stimulus funding, these monies have been available to school districts for the 2009-10 and 2010-11 school years. These funds have had the effect of lessening the negative impact of reduced state aid for the school districts in Wayne County and all other districts in New York State. However, while no relief from state aid cuts is projected, the ARRA funding for schools will cease with the 2010-11 school year. This perfect storm of reduced state aid for schools and the elimination of ARRA funding is being described as the "funding cliff."

The effect of the "funding cliff" on school districts in Wayne County can be shown in the following table:



<b>ARRA Allocations to Wayne County Schools Districts</b>								
<b>District</b>	<b>ARRA Stabilization Fund</b>	<b>ARRA Title I Part A 2009-2010</b>	<b>ARRA Title I Part A 2010- 2011</b>	<b>ARRA IDEA Part B 611 2009- 2010</b>	<b>ARRA IDEA Part B 611 2010- 2011</b>	<b>ARRA IDEA Part B 619 2009- 2010</b>	<b>ARRA IDEA Part B 2010- 2011</b>	<b>Total</b>
Clyde-Savannah	1,032,579	110,488	110,488	115,497	115,497	5,327	5,327	<b>1,495,203</b>
Gananda	664,848	36,975	39,975	129,575	129,575	5,977	5,977	<b>1,012,902</b>
Lyons	507,912	123,640	123,640	127,774	127,774	5,893	5,893	<b>1,022,526</b>
Marion	497,096	72,102	72,102	126,899	126,899	5,893	5,893	<b>906,884</b>
Newark	1,151,579	325,379	325,379	305,058	305,058	14,071	14,071	<b>2,440,595</b>
North Rose Wolcott	805,956	182,236	182,236	187,684	187,684	8,657	8,656	<b>1,563,109</b>
Palmyra- Macedon	1,301,829	143,588	143,588	251,927	251,927	11,620	11,620	<b>2,116,099</b>
Red Creek	772,807	134,214	134,214	124,993	124,993	5,765	5,765	<b>1,302,751</b>
Sodus	641,111	167,563	167,563	160,843	160,843	7,419	7,419	<b>1,312,761</b>
Wayne	1,473,272	133,112	133,112	297,139	297,139	13,705	13,705	<b>2,361,184</b>
Williamson	623,534	61,626	61,626	139,996	139,996	6,457	6,457	<b>1,039,692</b>
<b>Total</b>	<b>9,472,523</b>	<b>1,490,923</b>	<b>1,493,923</b>	<b>1,967,385</b>	<b>1,967,385</b>	<b>90,784</b>	<b>90,783</b>	<b>16,573,706</b>

The challenge of future school funding is obvious. State aid is predicted to continue to decline given the precarious financial condition of the state. The potential for Race to the Top funding aside, federal funding will decline significantly after the 2010-11 school year. Property owners in New York State do not want their school taxes to increase. Business as usual will clearly not be an option.

School leaders would do well to continue/expand their long term financial planning. We recommend that the school districts in Wayne County undertake an in-depth study on how to reduce costs in the non-instructional areas of the school operations. Consolidation and sharing are ripe in the areas of food services, operation and maintenance, transportation, business office operations, etc. From our informal observations only, we believe that there are efficiencies to be realized in these areas in ways that will not affect student programming. We also believe that not only can expenses be reduced but

revenues can be increased. There are numerous examples in the state where support functions have been consolidated through BOCES to cut costs and also increase revenues through the generation of BOCES aid for the local school district. We understand that this sharing will not come without some pain. However, cost effective support systems will maximize the educational dollar and drive more revenues to the students.

## Union Issues with E-learning

Throughout the course of this study, the consultants have been asked to respond to the restrictions that might exist with respect to distance learning offerings. The source of the questions is a memorandum of agreement that has been entered into by the Wayne County school districts and their teacher unions. The following analysis is based on the March 15, 2007 Memorandum of Agreement between the Wayne Finger Lakes BOCES and the BOCES Educators' Association regarding the Accelerate-U program offered by the Wayne-Finger Lakes BOCES.

The first portion of the agreement discusses a German IV course which was offered at Newark during the 2006-07 school year. After the German course ended on June 30, 2007, BOCES agreed not to offer the German IV course again to Newark without the approval of the union. This was the only course that was being offered by BOCES that did not have the approval of the component district's union.

The memorandum refers to the Participating District Verification Form that must be signed by the local district and the local union certifying that participation in the Accelerate-U program will not result in any bargaining unit member being the subject of a reduction in force. The memorandum also suggests that the district can provide an Accelerate-U program if it cannot find a certified individual locally to provide the course of study.

In the event that the local teachers' union refuses to sign the certification form within 10 days, the Superintendent may submit the form to BOCES for submission to a review committee. This review committee is composed of two individuals selected by the District Superintendent and two individuals selected by the BOCES union. The investigation by the review committee is to decide if the local union's decision not to sign the form was made in good faith in accordance with the criteria set forth on the form.

If the review committee finds that the withholding of the union signature was unreasonable under the circumstances or that the educational needs of the student justify the waiver, the review committee can override the failure of the local teachers' union to sign the agreement and allow the district to offer the Accelerate-U program. If no waiver is granted by the review committee, BOCES cannot offer the Accelerate-U program.

The Participating District Verification Form specifies that both the superintendent and the local teacher union president must sign the form prior to the delivery of the Accelerate-U program. However, the signatures only verify that no employee will be subject to a reduction in force as a result of the program being offered.

The form also provides that the district can offer an Accelerate-U program if the district is unable to hire a certified teacher to provide instructional programming.

The documents which we have been provided are not written in a very clear manner. However, our summary interpretation of the Accelerate-U memorandum of understanding is as follows:

1. The superintendent and the local union president must sign the Participating District Verification Form before an Accelerate-U program can be offered in any component district.
2. The signatures on the form only certify that no bargaining unit member shall be laid off as a result of the district's participation in the Accelerate-U program.
3. The district is free to offer an Accelerate-U program if a certified person cannot be found to teach the program for the district.
4. While the signature of the local teacher union president is required on the form, it appears that the signature should not be unreasonably withheld.

In the event that the Accelerate-U program is ever considered for significant expansion, it would be prudent to get a legal opinion on all the documents that exist on this topic. However, it appears that any number of Accelerate-U courses can be offered in any district as long as no bargaining unit member is laid off as a result of this programming.

# Options Analysis for Shared Instructional Programs

After gathering information for this study and developing feasible shared instructional program options, it is appropriate to identify the advantages and challenges associated with each of the options. This helps to lay the groundwork for eventual recommendations and frames opportunities for further study in this area.

## ***Option 1--Wayne Student Exchange***

As an option, the Wayne Student Exchange is founded on the premise that all high school students in Wayne County should have comparable opportunity for course participation and that all eleven high schools should make their courses available to all other students in the county. Accordingly, this option has several advantages.

a. Implementation is relatively simple. Once class schedules are arranged the district provides bus transportation to and from the host high school.

b. Cost is easily determined through a standard formula or a fixed county-wide course tuition established collectively by the school districts.

c. Although intended as a county-wide program, this option does not require participation of all eleven high schools. It can operate on any combination of participating high schools.

d. Participating students maintain their home school identity.

At the same time there are several obstacles in implementing this option.

a. To function comprehensively across the county, bell schedules and scheduling formats must be made much more similar.

b. Each year the county school districts must agree upon a common tuition rate or formula.

c. This option becomes more involved if a student with a disability opts to take a course in another school, and requires special support which was not necessary for the class cohort in the host school.

d. Differences in grading practices, parent notification, and disciplinary practices among high schools need to be resolved.

### ***Option 2--New Vision Programs***

As a current Wayne-Finger Lakes BOCES instructional program option for high school seniors, this option has several advantages.

a. The instructional format, grading procedures, program operation and supervision, and cost for New Vision programs are established and common for all high schools and their students.

b. Unless operated at a site other than the Williamson Career and Technical Center, student transportation is already in place, with no increased costs associated with additional New Vision programs.

c. Most importantly, the New Vision program format provides opportunity for expanding into curricular areas that may fall by the wayside in component school districts due to declining enrollment or finances.

d. As BOCES programs, the tuition for New Vision programs is significantly offset by aid from the State.

On the other side of the ledger, there are at least three disadvantages.

a. For some students, the additional time on a bus diminishes the desirability of this option.

b. As an additional program, there is an additional, associated cost.

c. For a New Vision program offered at a site other than the Williamson Career and Technical Center, additional transportation costs would be incurred.

### ***Option 3--Thematic High School Programs***

As a concept similar in design to New Vision programs, this option is intended to provide expanded, equitable instructional opportunities to students across the County. Each high school would be encouraged to host a specific program “theme” that would be made available to all Wayne County students. Thematic programs have two significant advantages.

a. Thematic programs offer component high schools the opportunity to showcase or highlight special curricular areas associated with their local community demographics, or of distinctive interest to their high schools. By making these curricular areas available to students from other Wayne County high schools, the corresponding increase in class size and revenue may sustain these programs that otherwise may fall by the wayside due to declining enrollment or resources.

b. The potential diversity of thematic programs across the County would provide students the opportunity to participate in upper level or low-enrollment courses not offered in their home high school.

As with all options, there are disadvantages.

a. For some students, the additional bus travel time diminishes the attractiveness of this option.

b. The increased curricular opportunity associated with a thematic program would have an additional cost. This option would require a common tuition rate or formula established prior to the beginning of each school year.



c. This option becomes more involved if a student with a disability opts to take a thematic program in another school, and requires special support which was not necessary for the class cohort in the host school.

d. Differences in grading practices, parent notification, and disciplinary practices among high schools would need to be resolved.

#### ***Option 4--E-learning***

Since busing students from one high school to another is not required, distance learning has significant advantages.

a. Students remain in their home high school buildings.

b. The range of courses available is substantial and varied.

c. Given the current advances in technology, distance learning is relatively simple to implement.

d. Distance learning can be provided under the aegis of BOCES and, by including BOCES aid, has a significant cost-effective dimension.

e. After school and summer options can be great and districts can provide credit recovery and credit acceleration with the learning taking place at home with web-based learning, in local libraries, or in community based organizations during the summer or evenings.

Although the advantages of distance learning are compelling, there are disadvantages.

a. For students in remote locations, the relationship with the teacher is not face-to-face, in-person.

b. The process of completing homework and tests is not as simple as it is in-class.

c. Unless closely compatible, class scheduling differences between high schools impair a student's ability to participate.

d. Although relatively cost-effective, additional cost exists.

e. Since distance learning is outside regular class operation, technology coordination and class supervision need to be arranged and provided. Students with special needs must be accommodated.

f. Homework, testing, and grading practices, parent notification, and disciplinary practices among high schools would need to be resolved.

g. Teacher union contract issues may need to be addressed in some school districts.

### ***Option 5--Alliance High School***

As a four-year, full-day program with a different instructional context, Alliance High School is comparatively distinctive. It has many advantages.

a. It provides an instructional context that is appealing to many students who do not thrive in traditional high schools.

b. If located at the Williamson Career and Technical Center, student transportation currently exists.

c. Even though students are not in their home school during the school day, they can participate in extra-curricular activities at and graduate from their home high school.

d. Under the aegis of BOCES, the mechanisms for program coordination, supervision, and cost determination already exist.

e. Under the aegis of BOCES, the program would be eligible for BOCES aid.

At the same time there are disadvantages.

- a. If the program is not operated at the Williamson Career and Technical Center, additional transportation arrangements and cost are required.
- b. Regardless of state aid, there is an additional, associated cost with the program.
- c. For some students, returning to their home high school in time for participation in extra-curricular activities may be difficult.

## Findings and Recommendations

**Finding #1.** Undertaking this study was a major initiative by the school districts in Wayne County. In studying the concept of regional high schools, these districts have begun the discussion in New York State about boldly changing the way that high schools are structured. In many ways, this is the first time that this collaborative concept has been studied as a way to provide regional instructional programs other than those operated under the aegis of BOCES.

There is no current legislation in New York State that describes how regional high schools should operate. While there is legislation for “Central High School Districts” that exist on Long Island that might serve as a model for developing regional high school legislation, there is no legislation that describes the type of regional high school that is contemplated in this study.

A number of topics need to be addressed in this legislation. Who would be the LEA for the regional high school.....one of the component district Boards of Education, the BOCES Board of Education, or would a new Board of Education be elected to oversee the regional high school? How would the regional high school be funded? How would credit be awarded to students? Who would award the high school diploma?

**Recommendation #1.** Legislation should be enacted in New York State that describes the operation of regional high schools since no such legal guidance currently exists.

**Finding #2.** Developing regional high schools is one method of reorganizing secondary education. But many people are resistant to change. While people may be unhappy about education in general, numerous studies have shown that most people are very happy with their own school districts. This affection for local school districts was clearly shown in the community

survey that was a part of this study. Convincing people to change will be a major undertaking.

There are no financial incentives in place that would incent school districts to consider the regional high school model. In order to encourage school districts to merge, New York State offers significant financial incentives to school districts. Without such financial incentives, school district consideration of regional high schools will be slow to occur.

**Recommendation #2.** State legislation should be developed that will provide financial incentives for school districts to consider the regional high school model; such legislation would be similar to the financial incentives that are available to school districts which are considering merger.

**Finding #3.** The community survey that was administered as part of this study indicates that the public wants more opportunities for their high school students. They also want the costs of operating their schools to be controlled and they want their schools to maintain their local identity. To attempt to meet these needs, school leaders will be significantly challenged.

**Recommendation #3.** School leaders should engage their communities in an ongoing educational dialog regarding declining enrollment, graduation standards, and the financial challenges currently facing school districts.

**Finding #4.** Since 2004-05, high school enrollments have declined in the Wayne County school districts from 5606 to 5138, a decline of 8.3%. Between 2009-10 and 2018-19, high school enrollments are projected to decrease even further, from 5,138 to 4,120, a decline of 19.8%. Four of the high school enrollments will decrease between 24.9% and 30.2%.

**Recommendation #4.** School districts should begin/continue to engage their communities in discussions about what their high schools should

offer in the future, given the significant enrollment declines that are projected to occur.

**Finding #5.** High school enrollments are projected to decline into the future. School districts will find it difficult to offer the current level of programming to their students let alone increasing curricular opportunities. There is currently a significant inequity in the number and types of higher level courses that are available to students in the eleven school districts across the county.

**Recommendation #5.** School districts in Wayne County should collaborate on ways to increase the number of offerings in Advanced Placement, International Baccalaureate, and College level courses for all students in the region.

**Finding #6.** School districts in New York State face monumental financial challenges. Budgets are being slashed in many school districts resulting in staff losing their jobs and school buildings being closed. These challenges will only get worse as current federal funding will be discontinued at the end of the 2010-11 school year.

**Recommendation #6.** School districts must continue to explore methods of collaboration to save taxpayer dollars. In addition, school districts must increase their efforts to communicate with their public about the significant financial challenges that they will face in the future.

**Finding #7.** The bell schedules that are currently in place in the eleven high schools are very different. Some districts have a traditional schedule, others have block schedules, while another district has a semestered schedule. Starting times, ending times, and length of periods are very different in the eleven high schools. These different bell schedules present a major obstacle to developing collaborative instructional programs between the area high schools.

**Recommendation #7.** An initiative involving high school principals and guidance counselors should be undertaken to make the high school schedules more compatible in order to support collaborative student programming.

**Finding #8.** Extra curricular activities in the high schools are being impacted by declining enrollments and financial challenges much like the instructional programs are being impacted. Fewer sports teams are being offered than in past years and teams have fewer participants than they had in previous years. Given the projected declining enrollments of the future, fewer extracurricular opportunities will be available for students.

**Recommendation #8.** School districts should continue to explore the sharing of sports teams between districts in order to provide as many extracurricular opportunities for students as possible. School districts must also engage the Section V leaders to ensure that the rules governing class assignments do not act as a deterrent to increasing opportunities for students.

**Finding #9.** This study had two components, one to create a world class education for the high school students in Wayne County and one to examine the potential cost savings of creating regional high schools. Much of the study focused on instructional models that might be considered by leaders in the region to build toward the world class education that is desired in the region. The study also describes cost effective ways that these programs might be developed by asking school districts to collaborate in the development of these programs. Cooperation will save a great deal of money compared to the cost of each of the school districts developing these programs on their own. Nevertheless, there are other areas of school operations that should be studied in order to ensure that school districts are operating as efficiently as possible.

While there are numerous examples of sharing that exist in the schools in Wayne County, there are more possibilities. The same finding can be made for the sharing that exists between school districts and local municipalities.

Much more sharing is possible. While this study has focused on the instructional program, there are numerous opportunities for sharing that exist in the support service/non-instructional area.

**Recommendation #9.** A study should be undertaken in the very near future that is focused solely on ways that school districts and municipalities can share support services to save money across the region.

**Finding #10.** Once completed, this study will be shared with every school district in Wayne County. District Boards of Education will decide how to proceed with the results of this study so that their school district is best served. However, we believe that leadership must be forthcoming that encourages school districts to discuss this report collectively. To date, there has been a great deal of attention paid to this study collectively by the eleven Superintendents in Wayne County. More collaborative conversation is necessary to effect any change.

**Recommendation #10.** Every school district Board of Education, Superintendent, and other appropriate administrators, should be invited to serve on a committee to develop ways to consider moving forward with the recommendations and the chapter on Instructional Program Options that are contained in this report.



## Summary Recommendation

From its inception, the central focus of this study was to examine the feasibility of creating regional high schools in Wayne County. This was a bold undertaking and, to the understanding of the consultants, the first study in New York State to examine the regional high school concept. Congratulations to the school leaders in Wayne County!

We believe that the regional high school concept has merit in New York State. While our study found that the savings in creating four regional high schools would only be approximately 3%, we also found that opportunities for students would be greatly expanded. We see this as value for the taxpayers who support our public schools.

We believe that the regional high school concept has great merit and should be pursued in Wayne County. We stop short of calling for a regional high school plan to be implemented because there are too many unknowns at this time. Because of a lack of state statutes on regional high schools, we cannot ascertain with certainty the extent to which a capital investment in regional high schools will result in a reduction in costs which would save the taxpayers of Wayne County significant amounts of money. Only further study at the state and county level will provide the information necessary to definitively define the cost savings that can be achieved and we urge the school districts to pursue this study.

While we believe that there is merit to further study of regional high schools, we were also made keenly aware that the people who provided input on this study from across Wayne County like their high schools just the way they are! Change is difficult and the admiration that communities have for their schools is laudable.

The conflict in the value that regional high schools offer and the resistance to changing current school structures must be resolved. This can only occur through ongoing study and communication between the

stakeholders in Wayne County. This dialog will become easier as school enrollments decline, resources for schools become even scarcer, and opportunities that students have now begin to disappear.

It is our recommendation that each Board of Education reviews this study and has an open, public discussion about the study's findings and recommendations. Input from school staff and the community should be solicited in beginning to open the dialog about the future of the schools in Wayne County.

We also recommend that a committee be formed in Wayne County to further explore the concept of making schools even more cost effective than they are currently. We recommend that the committee have representation from all of the Wayne County school districts and that this representation constitute a cross section of each of the communities. We recommend that the committee be sub-divided into three subcommittees to study the following issues and make recommendations to the full committee in the following areas:

a. ***Shared Instructional Programs***-This study has outlined a number of opportunities to increase curricular offerings for high school students through sharing and collaboration. The ideas in this study, and other ideas, should be investigated by a subcommittee to determine which options to pursue and what it would take to implement the most promising options.

b. ***Shared Support Services***-It was beyond the scope of this study to examine the potential cost savings that might be realized by school districts sharing management/support services. These services might include shared business offices, shared maintenance or transportation supervisors, shared athletic directors, sharing of major equipment, and numerous others. Other parts of New York State have undertaken major sharing initiatives in the management services area. We are convinced that savings could be realized through such sharing and that a subcommittee should explore these opportunities.

c. ***Regional High Schools***-This study contains many specific recommendations that should be implemented to move the regional high school concept forward. Some of these recommendations focus on state policy issues and some focus on local matters. The creation of regional high schools in Wayne County is, in our opinion, a long-term project. However, we believe it has enough promise that it should be an ongoing investigation of one of the subcommittees.

Throughout the entire course of this study, there appeared to be a strong desire to provide Wayne County students with a world class education. At the same time, there was an equally strong desire to make schools affordable. Both of these desires are possible, but not without a great deal of conversation, collaboration, and planning. Should Wayne County commit to these activities, however, it could be a model for New York State and the nation on how to cost effectively reinvent our school systems to provide the greatest opportunities for our students.



Wayne-Finger Lakes BOCES  
Regional Support Center  
131 Drumlin Court  
Newark, NY 14513

315.332.7400  
[www.wflboces.org](http://www.wflboces.org)