

#### **APPENDIX A**

#### Community Conversation October 22, 2014 – 7:00 p.m. Roberta S. Ohotnicky Little Theater

**Community Members:** Richard St. John; Cecile Masse; Cynthia Neumann; Michele Cyr; Jeff Bronson; Tom Brodnitzki; Henry Gundlech; Irene Brown; Dawn Bobinski; Kevin Anstett; Laura Carl; Chuck Kreske; Allison Baran; Roxanne Helt; David Helt; Joseph Petrarca; Julie Scharnberg; Ted Bachman; Julie Brodnitzki; John Lavieri; Paul Duran; Stephen Egbertson; Dawn Whalen; Maria Moore; Tom Goddu

First Selectmen: Donald Stein; Susan Dyer; Thomas McKeon

**Board of Education Members:** Molly Sexton Read; Robert Jerram; Donald Torrant; Deborah Bell; Theresa Kenneson; Dennis Spector; Mimi Duran

Regional School District No. 7: Dr. Judith Palmer; Rich Carmelich; Ken Chichester; Mia Haaland

Presentation by Superintendent Dr. Judy Palmer and Director of Finance and Operations, Rich Carmelich on the outline of a Five-Year Plan for the district.

Question on school security on what we have in mind for future improvements. Mr. Carmelich stated that we have received funding from the state to make some improvements, but need to continue looking at our policies and procedures. Also, would like to continue installing cameras and changing door locks as examples.

Mr. Lavieri commented on football. Upon opening of school in 1958, the subject of football was contentious and it was decided not to have football. That remained until recent co-op with Gilbert. Questions around CIAC rules regarding co-op teams. Question as to whether the CIAC rule can be modified. Dr. Palmer stated that she has lobbied for a change in order for co-op to continue and that it is currently under review by the CIAC Board.

Discussion on Northwestern/Gilbert School's viability in football. Gilbert currently has 12-16 participants per year. Question on Gilbert's continuing as a quasi-public school and their strategy of increasing enrollment of foreign students.

Ms. Moore stated that we should survey students. Dr. Palmer stated that the staff has been surveyed and we will get input from students on their interests and needs.

Ms. Cyr asked question on commodities for cafeteria and whether or not they meet new regulations. Mr. Carmelich responded that the new regulations are really more about portion size and the ingredients of meals and snacks (i.e. amount of sugar, protein, etc.). Mr. Carmelich also

explained that we need to follow these regulations in order to receive federal funding for our free and reduced eligible students. Cafeteria is currently in-house and not outsourced. It is a selfsufficient program and is currently not funded by the Board.

Dr. Palmer gave explanation of the STEP program, including grade levels of students attending, the hours of the program and explained that it is not a special education program.

Mr. Lavieri asked question about if the district has researched the possibility of school starting later in the day. Dr. Palmer stated that this has not been addressed to date. Some of the issues in starting later include pushing back the elementary times, difficult for parents and difficulty scheduling after school athletic events with other schools.

Mr. Goddu presented idea about starting an Alumni Association. Dr. Palmer stated that administration has been in contact with Gilbert to see how they have developed their Alumni Association.

Mr. Stein had comments about declining enrollments, increasing special education costs. BOE Chairman, Molly Sexton Read stated that although there is declining enrollment at the elementary level, it has yet to reach Northwestern and the enrollment in the district has remained stable.

Mr. Stein also had comments on technology and using tablets for learning that are provided by the school vs. the budget reality.

Mr. Stein commented on finding cost efficiencies and that we already collaborate on things like oil purchasing, insurance and buses.

Mr. Egbertson had question as to whether or not we should look at having a K-12 regional system. Mr. Stein and Ms. Dyer commented that for that to happen, the cost would have to be on a per pupil basis and that for Barkhamsted that would increase cost significantly.

Mr. Bachman commented that the conversation is missing the cost implications and that taxpayers cannot fund all that is needed. Chairman Sexton Read stated that this Community Conversation was timed such that a discussion could be held that was separate from the budget discussions that occur every spring.

Mr. Lavieri stated that the district is correct to focus on STEM (Science, Technology, Engineering and Math), but it is important to balance with the humanities. Question about the loss of labs from the early days and comment that we should look to reinstate some of those labs.

Ms. Brown had a comment about technology. She states that her children were encouraged to purchase technology, but that it was never used in class.

Mr. Goddu commented on support for an internship program and feels that the business community needs to be more involved.

A question was posed on what happened to initiative years ago to institute more technology labs. Mr. Chichester responded that for various reasons, those labs were no longer viable.

Ms. Scharnberg commented on STEM and liberal arts balance. Further comments on computer programming, Project Lead the Way, and workforce development. Ms. Scharnberg also stated that the district should consider reconfiguring guidance department. (Notes from Ms. Scharnberg are attached).

Mr. Brodnitzki talked about scheduling and the need to begin drafting a schedule now. Dr. Palmer stated that administration was in the process of doing that.

Mr. Brodnitzki said that in terms of the presentation, all of the Mandates (M), Improvements to Program (IP) and Visionary items (V) should be broken out in the budget. He also stated that a core education is essential to develop critical thinking in students.

Mr. Kreske stated that presentation should include timelines illustrating implementation of mandates.

Ms. Cyr indicated that we are not providing enough around computer education. She also commented that district should focus more on gifted and talented programming.

Mr. Stein said that we need to have a great school to attract residents and an educated workforce.

Mr. Lavieri asked if we have data that shows whether or not the district's lack of offerings in French or Latin hurts college acceptance rates for our students. Dr. Palmer stated that she is not aware of any data.

Ms. Masse commented on the experience of her daughter who hoped to take French when she moved to the district, but was unable to do so.

Mr. St. John asked if there are any subjects being lost due to state and federal mandates. Dr. Palmer stated that there were not.

Ms. Haaland talked about scheduling and that the number of "singleton" classes is an issue that needs to be addressed.



#### **APPENDIX B**

November 2014

#### 5-Year Plan Staff Survey Conducted October 14-22, 2014

**Greatest Challenges Over the Next Five Years** (Staff asked to pick 5 out of 12 choices)

- infrastructure, software, applications and support (75%). #1 – Maintaining and improving the technological ۲
- #2 Meeting the social and emotional needs of the student population (55%). •
- #3 Meeting state and federal mandates on standardized testing and/or graduation requirements (49%). 0
- #4 Maintaining and improving the physical facilities (47%) 0
- #5 Providing an educational program that will prepare students for college and career (36%). •

# What measures can be taken to ensure that all students are prepared for Teaching and Learning:

higher education and/or the 21<sup>st</sup> Century workforce?

### Most common responses:

- More partnerships with colleges and businesses/internships/vocational opportunities/exposure to career paths. 0
- More electives
- More hands-on courses for students who enter workforce directly after graduation. Others:
- More flexible schedule Do not tie middle school schedule to high school schedule.
- Continued professional development / collaboration with colleagues
- Curriculum that allows for individualized learning that align with students' future goals.
- Increased staff for library to allow library to remain open longer.
- Requirement for students to take personal finance course.
- Late day transportation for students.
- Make students more accountable for their own learning.
- Reduce class sizes

### Facilities:

What are the facility needs in your classroom or areas you work that you would like to see improved over the next five years?

### Most common responses:

- Heating and cooling repairs
- Air quality remove carpeting
- Improve wireless connections (technology)
- Roofing repairs

- More classrooms
- Replacement of Ag Ed equipment
- Separate announcement systems for middle school and high school
- More copy machines needed
- Relocate circulation desk in library
- Improve drainage in athletic fields

## Technology:

How would you like to improve technology and communication in your classroom in the next five years? What tools would you need for this?

### Most common responses:

- Reliable internet connectivity
- Replace Chrome books, laptops and desktops on a reliable replacement schedule.
- More technology training/professional development

- Increase technology for students with disabilities
- Create fully functional music technology lab.
- More smartboards that are reliable.

# School Security:

years that would make you and your students/parents feel more comfortable? What improvements in school security could be put in place over the next five

Most common responses:

- I already feel safe
- Providing greater mental health services
- Students wearing ID badges / use them to access building

- Make current measures already in place less visible
- Fix timing of exterior lights
- More staff presence in hallways
- Continue to review emergency protocols and drills
- Educating students about responsibly using technology

### Budget:

What should the district's budget priority be in the next five years?

Most common responses:

- Increasing (for more electives and credits)/maintaining teacher staff levels
- Computers/technology
- Reinstitution of late buses

- Resources for STEM (Science, Technology, Engineering, Math) •
- Equipment for Ag Ed
- Support for students with mental and emotional issues
- Improving the facility
- Make the school more green
- More books due to wear and tear

# Extracurricular:

What types of activities will students be interested in over the next five years?

### Most common responses:

- Athletics Including sports like boy's volleyball and lacrosse that are not currently offered.
- Technology / Social Media
- Vocational / Hands-on clubs and activities

- Physical activities that are not competitive sports (i.e. Yoga, dance)
- More STEM clubs and activities
- Environment
- Team building and communications activities

# Special Education:

What challenges do you foresee in providing special education services over the next five years?

### Most common responses:

- High cost / More students identified as special education or 504
- Increased social and emotional needs of students
- Increase in state and federal mandates including standardized testing
- Finding qualified special education staff

- Continuity between RSD7 and elementary schools
- Need for more professional development
- Increased need for technology for students identified as special education
- Finding suitable course options
- Integration of special education students into traditional classroom settings

#### Other:

Please share your ideas on five-year goals for any other district function (for example: cafeteria or transportation)

Most common responses:

- Late buses
- After school snacks in cafeteria



#### **APPENDIX C**

November 2014

#### 5-Year Plan Student Survey Conducted November 12-21, 2014



If Northwestern provided a late bus, would you utilize this service?

71% Yes Maybe 17% 12% No

the best time for the bus to leave Northwestern? If you were to utilize a late bus, what would be



#### Electives:

# Are there any elective courses not currently offered that would be of interest to you?

Most common responses:

- World Languages French, Latin
- CAD / Computer Programming

- Forensics
- Clothing design / Fashion
- Marine Biology
- Public Speaking
- Theater, music, dance, orchestra
- Nursing
- Anatomy and physiology
- Mechanics and other trades
- Financial planning
- Biomedical sciences

### Are there any extracurricular clubs not currently offered that would be of interest to you? Extracurricular Clubs:

Most common responses:

- Fitness and Outdoors Cross Fit training, Hiking, Running, Mountain Biking •
- Glee Club
- Debate Club

- Fencing
- Ultimate Frisbee
- Book Club
- Archery
- Dance Club
- Karate / Yoga
- Chess
- Animal Rights Club

#### Athletics:

# Are there any sports not currently offered that would

# be of interest to you?

Most common responses:

- Lacrosse
- Gymnastics
- Middle School Tennis and Swimming

- Crew
- Hockey
- Archery
- Fencing

### Technology:

# Are there any technology improvements that would help promote your learning?

Most common responses:

- More reliable Wi-Fi and internet connection
- iPad or Chromebook for every student

- Better use of Haiku
- Better access to House Computer Labs

## Are there any improvements you would like to see made to the building and grounds? Building and Grounds:

Most common responses:

- Improve bathroom look and cleanliness
- Additional multi-use field(s)
- New, larger lockers

- Better parking
- Covered area for bus pickups
- Leave the back gate open



#### **APPENDIX D**

November 2014

#### 5-Year Plan Community Survey Conducted October 22-31, 2014

# # of Respondents from Towns



New Hartford Barkhamsted Colebrook Norfolk Winsted

# Greatest Challenges Over the Next Five Years (Respondents asked to pick 5 out of 12 choices)

- #1 Providing an educational program that will prepare students for college and career (71%). •
- infrastructure, software, applications and support (52%). #2 – Maintaining and improving the technological •
- #3 Meeting state and federal mandates on standardized testing and/or graduation requirements (52%). 0
- #4 Maintaining and improving the physical facilities (38%). •
- #5 Creating and passing a fiscal plan for education that meets the needs of the students (38%).

# Teaching and Learning:

What measures can be taken to ensure that all students are prepared for higher education and/or the 21<sup>st</sup> Century workforce?

### Most common responses:

- Provide a curriculum that meets the needs of every learner.
- More opportunities for students to take courses for college credits.
- More opportunities for students in vocational and entrepreneurial careers.
- Improving the STEM program.
- Continue to improve the Arts/Theater/Humanities program.

- Make certain that the district has a highly qualified and prepared teaching staff.
- Get rid of SBAC testing.
- Continue the implementation of the Common Core State Standards.
- Prepare students to be able to write and communicate effectively.

### Facilities:

(

What are the facility needs that you would like to see improved over the next

five years?

Most common responses:

- Heating and cooling repairs
- Air quality
- Improve IT infrastructure (technology)
- School security

- Improvements in FFA greenhouse
- Roof

# Technology:

How would you like to improve technology and communication in the next five years? What tools would you need for this?

Most common responses:

- Universal access
- Reliable internet connectivity
- Use technology more

- Make technology replacement recurring budget line.
- Make all payments to RSD7 online.
- Improve Haiku
- Add camera and phone system for FFA barn.

# School Security:

What improvements in school security could be put in place over the next five years that would make you feel more secure?

Most common responses:

- Present security measures are adequate
- Continued use of School Resource Officer

- Keep focusing on anti-bullying and prevention including cyber-bullying.
- Better secure building after hours
- Better exterior lighting
- Better secure playing fields/grounds.
- Should not have armed security

### Budget:

What should the district's budget priority be in the next five years?

Most common responses:

- Focusing on the required state mandates
- Meeting educational needs of all students
- Minimal budget increases

- Greater focus on careers including engineering, technology and other trades
- Get STEM offerings on par with liberal arts
- Technology
- Building maintenance
- Staff development

# Extracurricular:

What types of activities will students be interested in over the next five years?

Most common responses:

- Athletics
- Robotics / Computer programming
- Drama and the arts

- Lacrosse
- Horseback riding
- Field trips to local farms
- Study of international languages

# Special Education:

What challenges do you foresee in providing special education services

over the next five years?

Most common responses:

- Funding
- Not enough highly qualified teachers

- Lack of understanding about special education needs and process.
- Meeting the diversity of needs among all special education students.
- Parental involvement should be encouraged
- Design programs to draw students from other districts.
# Other:

Please share your ideas on five-year goals for any other district function (for example: cafeteria or transportation)

Most common responses:

- Late buses
- More online textbooks
- Improve parking and traffic flow
- Dedicated guidance counselor for college, internships and employment
- Focus on smooth transition from elementary to middle to high school.
- Focus on non-traditional enrichment activities.
- Combine elementary districts with Region 7



# **APPENDIX E**

## REGION 7 PUBLIC SCHOOLS ENROLLMENT PROJECTED TO 2023



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#### Introduction

This report presents a ten-year projection of enrollment for the Region 7 Public Schools. It is based on students enrolled in Region 7 schools. The projection is divided into the two grade levels that represent how the Region 7 schools are organized: 7-8 and 9-12. Elementary enrollments combined for Barkhamsted, Colebrook, New Hartford and Norfolk are provided. The report includes 44 years of enrollment to place the projection into a wider historical perspective. One of the primary drivers of future enrollment is births to residents. The report examines births and their relationship to kindergarten enrollment. Several factors that influence school enrollment - town population, women of child-bearing age, housing, employment, high school dropouts, non-member enrollment in Region 7 programs, non-public enrollment, resident enrollment in other public schools and migration - are presented. Finally, the accuracy of earlier projections is examined.

Enrollment projections are a valuable planning tool. For budgeting, the numbers can place requested expenditures into a per pupil context. This can inform the public about which expenditures represent continuing expenditures to support on-going programs and expenditures for school improvement and program expansion. They are an essential step in determining the staffing that will be needed in the future. This may facilitate the transfer of teachers from one grade to another or allow the hiring process to start earlier, which can increase the likelihood of attracting the best teachers in the marketplace. Projections are a critical and required step in planning for school facilities. The State of Connecticut requires eight-year school-based projections as a critical component of determining the size of the project for which reimbursement is eligible. This report is appropriate for that purpose for both the middle and high school.

#### Perspective

Enrollment projections typically use the most recent five years of data. While the most recent past is viewed as the best predictor of the near future, it is informative to look at a broader perspective. Figure 1 shows the enrollment in Region 7 from 1970 to date.



Since 1970, enrollment in the Regional District 7 has gone through two up and two down cycles. Enrollment in the Region 7 Public Schools grew from 906 students in 1970 to an all-time high of 1,238 students in 1978. Between then and 1990, enrollment moved downward to 773 students. In those 12 years, enrollment declined by 465 students or 37.6 percent. Between 1990 and 2008 enrollment grew to 1,189 students, an increase of 416 students or 53.8 percent. Enrollment has declined slowly since 2008. In 2013 it was 1,142 students, 4.0 percent below the 2008 high.

Region 7's enrollment pattern is fairly similar to that of the state's public schools enrollment in grades 7-12. Between 1979 (the earliest data I have) and 1989, Connecticut public school enrollment declined by 31.4 percent. State enrollment in grades 7-12 hit a secondary peak in 2005. It grew 30.8 percent between the 1988 low and 2006. I project that state enrollment in grades 7-12 will have declined by 4.4 percent between 2004 and 2013. The Region's low came one year later than the state, but was about the same depth. During the growth cycle of the 1990s and early 2000s, the Region's enrollment growth was greater than the state in both duration and magnitude. In the current down cycle, the region's decline in enrollment is similar to the state's. Had Region 7 exactly followed the state pattern of enrollment since 1978, it would have had only 1,000 students in October of 2013 instead of the 1,142 that were enrolled on that date.

#### **Current Enrollment**

Table 1 and Figure 2 provide a picture of where Region 7 residents attended school in grades 7-12 in October of 2012. It is the latest data available. They show that 87.1 percent of Region 7's Middle and high school-age residents attended the Region 7 Public Schools in 2012. Over seven percent of the school-age residents attended non-public schools in state. The number attending private schools out-of-state is not known. Other school-age residents attended a state technical high school (3.5 percent) or public schools in other districts (1.6 percent). Five children were reported as being home schooled. There were 100 students from non-member towns enrolled in the Region 7 Public Schools in 2012. The projections in this report are based upon the 1,142 students who attend the Region 7 Public Schools in 2013. The equivalent number in 2012 was the 1,130 students reported in the "Total Enrollment" category.

Table 1. 2012 Enrollment in Grades 7-12								
	Number	Percent						
Residents								
A. Region 7 Public	1,030	87.1%						
B. Tech	41	3.5%						
C. Other Public	19	1.6%						
D. Non-Public	88	7.4%						
E. Home Schooled	5	0.4%						
Total (A+B+C+D+E)	1,183							
F. Non-Residents	100							
Total Enrollment (A+F)	1,130							



Figure 3 shows the October 2013 grade-by-grade enrollment by of students in the Region 7 Public Schools. The children in pre-kindergarten programs are not shown. Grade 7 had the largest enrollment

with 196 students. This was followed by Grade 9 with 195 students from member towns and Grade 12 with 185 students. Kindergarten was the smallest class with only 102 students followed by Grade 11 with 127 students and Grade 3 with 138 students. This is the pattern for a future decline. If current conditions continue, this year's Kindergarten class of 102 students will have 107 students when it enters Grade 7 at Northwestern Regional Middle School in 2020 and 103 students when it enters Grade 9 at the Northwestern Regional High School in 2022. Both these figures are well below the current enrollment in each of those grades. The current year enrollment by grade is the starting point for this projection. How it moves forward is discussed below.



#### **Projection Method**

The projections in this report were generated primarily using the cohort survival method. This is the standard method used by people running enrollment projections. For the grades above kindergarten, I compute grade-to-grade growth rates for ten years (see Appendices A and B). For example, if the number of eighth graders this year is 172 and the number of seventh graders last year was 170, then the growth rate is 1.012. Growth rates above 1.000 indicate that students moved in, transferred from non-pubic schools or other public schools or were retained. Growth rates below 1.000 mean that students moved out, transferred to private or other public schools, dropped out, or were not promoted from the prior grade. For each grade I calculate four different averages of the year-to-year growth rates: a three-year average, a weighted three-year average, a five-year average and a weighted five-year average. I choose the average that seems to best fit the data. The average growth rate for a grade is applied to the current enrollment from the prior grade. The projection builds grade by grade and year by year. I built the elementary projection from each of the four elementary school districts separately. The projection of Grade 7 enrollment was built up separately from enrollment data from each town. In Grade 9 I calculated growth rates based on students from your member towns only. I applied these rates to the prior year's enrollment in Grade 8 and then assumed that 26 students from non-member towns, the average for the past five years, would enroll in your agriculture science or other special programs.

To project enrollment of students in Region 7 schools, I utilized a five-year average of the annual growth rates. In Region 7 all four of the averages I computed were very close. From separate projections that I did earlier this year for Colebrook and Norfolk, I used an additive approach to project future kindergarten

enrollment. That approach gave me slightly higher projections of kindergarten enrollments in the years births were depressed. In Barkhamsted and New Hartford, I used the standard approach so I projected kindergarten from the five-year average of the growth between kindergarten enrollment and births five years prior. Although the approaches differed, they should make little to no difference in the Region 7 results. In all four towns, I used the five-year averages of the latest annual grade-to-grade growth rates to project enrollment in grades 1-7.

To extend the projections beyond four years, I needed to estimate births for the years 2013 to 2018. I did that separately for each town and then summed the results. The Connecticut State Department of Public Health recorded 82 births to residents of the four towns in 2011. That was the last official count. Their preliminary count of births in 2012 was 89. Based on in-state births recorded through September 2013 in each town, the average number of births in 2011 and 2012 from October to December and the average number of out-of-state births for each town, I estimated there will be only 75 births in the 2013 calendar year in the four towns. If that comes to fruition, it will be the smallest number since I began tracking births in 1980. I estimated births in each town in 2015 by taking the Connecticut State Data Center projections of women of child-bearing ages and multiplied it by my calculation of the fertility rates in similar communities (DRG E for Colebrook and Norfolk and DRG C for Barkhamsted and New Hartford). That resulted in a total of 82 births in the four towns. In each town I set 2014 births to the average of 2013 and 2015 births. To estimate births in 2016 to 2018, I utilized the growth in the projected births in 2015 and 2020. I annualized it by town and applied the annual growth to the prior year's births starting in 2015.

Figure 4 gives a perspective of the grade-to-grade growth rates for students attending the Region 7 schools. An "x" indicates the average growth rate used in this projection. The diamond is the growth observed between last year and this year. The upper line indicates the largest growth rate observed over the past ten years and the lower line, the lowest. In general, the narrower the gap between the two lines is, the greater the accuracy of the projection. The growth rates used in the projection were based on a five-year average of the observed grade-to-grade growth. This was done separately for each town in grades 1-7 and for the district as a whole in grades 8-12.



Most model growth rates are toward the middle of the ten-year range. Grades 4 and 7 appear to be the exceptions. The elementary growth rates are close to 1.00 indicating net zero migration. About 12

percent of 9th graders from the four towns choose a school other than Northwestern Regional High. That combined with a low repeater rate plus 9th graders returning to Region 7 after attending school elsewhere, resulted in a Grade 8 to 9 growth rate of about 95 percent for students from the member towns. The rates in grades 10 and 11 could be a reflection of students transferring out or a small number of dropouts. The average growth rate to project the enrollment in grades 1-7 was 1.006. This compares to the 2013 rate of 1.009 and the median over the past 20 years of 1.010. The average growth rate to project the enrollment in grades 8-12 was 0.986. This compares to the 2013 rate of 0.978 and the median over the past 20 years of 0.980.

Enrollment data from 2003 to 2012 were taken from the files of the Connecticut State Department of Education. The public school data are available on the Department's website at www.sde.ct.gov. Data for 2013 were provided by the Region 7 central office. All enrollment data after 2010 are subject to minor changes as they are reviewed and audited. Births from 1980 to 2013 were provided by the Healthcare Quality, Statistics, Analysis and Reporting Unit of the State Department of Public Health.

#### **Total Enrollment**

Table 2 and Figure 5 present the observed total enrollment (grades 7-12) in Region 7 schools from 2003 to 2013 and projected enrollment through 2023. Detailed grade-by-grade data may be found in Appendix B. Total enrollment in Region 7 grew from 1,106 students in 2003 to 1,188 in 2008 and then started to decline. By 2013 enrollment was 1,142 students. Between 2003 and 2013, enrollment increased by 36 students or 3.4 percent. I project that statewide public school enrollment in grades 7-12 will have decreased 3.4 percent in that period. Between 2002 and 2012 (the latest comparable data available), the enrollment gain in Region 7 was in the middle of similar districts in grades 7-12. The 3.8 percent gain in Region 7 was greater than Region 12 (-22.1 percent) and Region 14 (-6.0 percent) but less than Canton (+6.1 percent), Region 10 (+10.2 percent) and Suffield (+16.8 percent).

I project that enrollment will be fairly level for three years before starting to decline. Next year, I anticipate that enrollment will decrease by 45-50 students. The peak enrollment in the next ten years will be close to 1,135 students in 2015. Enrollment will fall below 1000 students in 2020 and below 900 in 2022. The last time enrollment was below 900 students was 1993. By the year 2023, enrollment should be about 825 students. The projected ten-year decline is about 320 students or about 28 percent. In the state's public schools, I am projecting a 10.7 percent decline in grades 7-12

Table 2.	Table 2. Total Enrollment						
Vear	Students	Percent					
2002	1 104	Change					
2003	1,100	2 70/					
2004	1,150	2.1%					
2005	1,104	2.3%					
2006	1,161	-0.3%					
2007	1,148	-1.1%					
2008	1,188	3.5%					
2009	1,161	-2.3%					
2010	1,168	0.6%					
2011	1,149	-1.6%					
2012	1,130	-1.7%					
2013	1,142	1.1%					
2014	1,094	-4.2%					
2015	1,136	3.8%					
2016	1,131	-0.5%					
2017	1,078	-4.7%					
2018	1,058	-1.9%					
2019	1,012	-4.3%					
2020	959	-5.2%					
2021	902	-5.9%					
2022	865	-4.1%					
2023	824	-4.7%					

between 2013 and 2023. Enrollment in Region 7 should average close to 1,005 students over the ten-year projection period compared to an average total enrollment of 1,154 students over the past ten years.



#### **Member Town K-6 Enrollment**

Table 3 and Figure 6 present observed combined enrollment in grades K-6 in Barkhamsted, Colebrook, New Hartford and Norfolk in 2003 to 2013 and projected enrollment to 2023. Enrollment by grade may be found in Appendix A. Enrollment in grades K-6 inched upward from 1,186 in 2003 to 1,213 in 2004 and again in 2006. It then declined to 1,018 students by 2013. Between 2003 and 2013, enrollment declined by 168 students or 14.2 percent. I estimate that public school enrollment statewide in grades K-6 declined by 8.5 percent in that period.

In the upcoming years, I expect that enrollment will move downward at an accelerated rate and then level off. Next year, I anticipate that enrollment in these grades will be 40 students less than this year. I project that by 2023, grade K-6 enrollment in the four towns will be about 660 students. This will be about 360 students less than 2013, a loss of over 35 percent. In grades K-6 in the state's public schools, I am projecting an 11.6 percent enrollment decline. Over the ten-year projection period, I believe enrollment in grades K-6 will average 774 students compared to the average of 1,164 students observed over the past ten years.

Table 3. Grade K-6 Enrollment							
Year	Students	Percent					
2003	1,186						
2004	1.213	2.3%					
2005	1,206	-0.6%					
2006	1,213	0.6%					
2007	1.202	-0.9%					
2008	1,199	-0.2%					
2009	1,198	-0.1%					
2010	1,168	-2.5%					
2011	1,124	-3.8%					
2012	1,103	-1.9%					
2013	1,018	-7.7%					
2014	978	-3.9%					
2015	920	-5.9%					
2016	862	-6.3%					
2017	828	-4.0%					
2018	762	-7.9%					
2019	708	-7.2%					
2020	697	-1.5%					
2021	676	-3.0%					
2022	657	-2.8%					
2023	656	-0.2%					



#### Northwestern Regional Middle School Enrollment

Table 4 and Figure 7 present actual enrollment at Northwestern Regional Middle School in grades 7-8 in 2003 to 2013 and projected enrollment to 2023. Enrollment by grade may be found in Appendix B. Between 2003 and 2013 enrollment at the school ranged from 337 in 2010 to 387 in 2004. Between 2003 and 2013 enrollment at the school increased by three students or 0.8 percent. I estimate that enrollment in grades 7-8 declined by 9.4 percent in that period in the state's public schools.

The school is entering a period of declining enrollment. Next year's enrollment will be about ten less than this year's. I expect that enrollment will fall below 300 students in 2020. The last time enrollment was less than 300 students was 1991. At the projection's end, I believe enrollment will be about 225 students. Over the tenyears, I project a net decline of almost 150 students or about 40 percent. Over the ten-year projection period, I believe enrollment at the school will average about 290 students compared to the average of 368 students observed over the past ten years. In the state's public schools, I project that enrollment in grades 7-8 will decline by 14.4 percent in that period.

Table 4. Northwestern Regional Middle School Enrollment							
Year	Students	Percent Change					
2003	369						
2004	387	4.9%					
2005	383	-1.0%					
2006	378	-1.3%					
2007	355	-6.1%					
2008	371	4.5%					
2009	349	-5.9%					
2010	337	-3.4%					
2011	377	11.9%					
2012	371	-1.6%					
2013	372	0.3%					
2014	361	-3.2%					
2015	343	-5.0%					
2016	343	-0.1%					
2017	307	-10.6%					
2018	300	-2.3%					
2019	305	1.8%					
2020	258	-15.3%					
2021	228	-11.6%					
2022	243	6.4%					
2023	223	-8.1%					



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#### Northwestern Regional High School Enrollment

In most districts, Grade 9 is the time when the opportunity to attend state technical high schools first becomes available. In October 2012, 88 percent of Region 7 residents enrolled in Grade 9 were enrolled in the district. Almost six percent were enrolled in non-public schools in state and six percent were enrolled in a state technical high school. One student (0.5 percent) was enrolled in a magnet or another public school.

Table 5 and Figure 8 present enrollment at the Northwestern Regional High School. Grade-by-grade enrollment may be found in Appendix B. Enrollment grew from 737 students in 2003 to 831 in 2010. There were 769 students from member and non-member towns enrolled in 2013. Between 2003 and 2013, grade 9-12 enrollment increased by 32 students or 4.3 percent. Statewide, I estimate that enrollment in grades 9-12 declined 0.1 percent in that ten-year period.

I expect that next year's enrollment at Northwestern Regional High School will be 35-40 students less than this year. I anticipate an enrollment peak of about 795 students in 2015. I then anticipate that enrollment will fall below 700 students in 2021 and to about 600 students in 2023. There will be 168 students (22 percent) less than the October 2013 count. The last time enrollment was below 600 students was 1998. Statewide, I have projected an 8.8 percent decline in public school grade 9-12 enrollment between 2013 and 2023. I believe enrollment at Northwestern Regional High School will average 715 students over the next ten years compared to the average of 787 students observed over the past ten years.

Table 5. Northwestern						
Regiona	I High Scho	01				
Enrolim	ent					
		Percent				
Year	Students	Change				
2003	737					
2004	749	1.6%				
2005	781	4.3%				
2006	783	0.3%				
2007	793	1.3%				
2008	817	3.0%				
2009	812	-0.6%				
2010	831	2.3%				
2011	772	-7.1%				
2012	759	-1.7%				
2013	769	1.3%				
2014	733	-4.7%				
2015	793	8.2%				
2016	788	-0.6%				
2017	771	-2.2%				
2018	758	-1.7%				
2019	707	-6.7%				
2020	701	-0.8%				
2021	674	-3.9%				
2022	622	-7.7%				
2023	601	-3.4%				



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#### Enrollment in Region 7 by Town

Table 6 presents the actual enrollment in grades 7-12 broken down by town for 2003 to 2013 and projected enrollment from 2014 to 2023. The table also provides each town's share of the enrollment observed from 2003 to 2013 and projected from 2014 to 2023. I projected enrollment in Region 7 in two different ways. First, I projected enrollment in the Region separately for Barkhamsted, Colebrook, New Hartford and Norfolk. I then summed each individual projection to get the Region's total. In the table this is the column labeled "Town Total." This total was the basis for determining each town's percentage of enrollment in Region 7.

The second projection was based on the region as a whole starting with Grade 7. The percentage moving from Grade 6 in a town to Grade 7 in the Region was determined by town and then summed. The Region 7 results in the other sections of this report are based on this second projection. The column labeled "Region Total" includes students from non-member towns in the district's agricultural science and other special programs.

The two projections will differ. In the years 2003 to 2013, the difference was the non-resident students enrolled in Region 7. In the projection years, the differences include non-resident students, rounding and the impact of the different enrollment from each town. The differences between the two projections are fairly minor.

Table 6. Enronment in Region 7 by 10wn										
		(	Grade 7-12 H	Enrollment			Town Pe	ercentage	nc.	
October	Bark- Cole- New Town Region Bark- Cole- N				New	Nor-				
of Year	hamsted	Brook	Hartford	Norfolk	Total	Total	hamsted	Brook	Hartford	folk
2003	284	123	517	109	1,033	1,106	27.5%	11.9%	50.0%	10.6%
2004	283	127	543	113	1,066	1,136	26.5%	11.9%	50.9%	10.6%
2005	312	129	512	129	1,082	1,164	28.8%	11.9%	47.3%	11.9%
2006	315	132	538	100	1,085	1,161	29.0%	12.2%	49.6%	9.2%
2007	308	135	522	99	1,064	1,148	28.9%	12.7%	49.1%	9.3%
2008	320	130	529	104	1,083	1,188	29.5%	12.0%	48.8%	9.6%
2009	309	127	512	120	1,068	1,161	28.9%	11.9%	47.9%	11.2%
2010	299	133	513	114	1,059	1,168	28.2%	12.6%	48.4%	10.8%
2011	294	114	531	107	1,046	1,149	28.1%	10.9%	50.8%	10.2%
2012	294	109	522	100	1,025	1,130	28.7%	10.6%	50.9%	9.8%
2013	288	111	528	106	1,033	1,142	27.9%	10.7%	51.1%	10.3%
2014	272	106	528	93	1,000	1,094	27.2%	10.6%	52.8%	9.3%
2015	301	109	543	90	1,043	1,136	28.8%	10.5%	52.1%	8.6%
2016	297	112	544	88	1,042	1,131	28.5%	10.8%	52.2%	8.4%
2017	290	104	517	76	987	1,078	29.4%	10.5%	52.3%	7.7%
2018	284	97	507	80	968	1,058	29.3%	10.0%	52.4%	8.3%
2019	261	93	495	75	923	1,012	28.2%	10.0%	53.6%	8.1%
2020	247	92	459	72	870	959	28.4%	10.5%	52.8%	8.3%
2021	220	89	430	71	810	902	27.2%	10.9%	53.1%	8.8%
2022	195	90	418	68	771	865	25.3%	11.7%	54.3%	8.8%
2023	170	88	404	66	728	824	23.3%	12.0%	55.5%	9.1%

Table 6 Encollment in Regi

In 2013, Barkhamsted students comprised 27.9 percent of the Region 7 member town enrollment in grades 7-12 compared to 10.7% for Colebrook, 51.1 percent for New Hartford and 10.3 percent for Norfolk. Over the 2004 to 2013 period, Barkhamsted students were 28.5 percent of the combined enrollment, Colebrook students were 11.8 percent, New Hartford students were 49.5 percent and Norfolk students were 10.3 percent.

In October 2014, I project that Barkhamsted students will comprise 27.2 percent of the combined enrollment, Colebrook students will comprise 10.6 percent, New Hartford students will comprise 52.8 percent and Norfolk students will comprise 9.3 percent. Over the ten-year projection period, I project that Barkhamsted students will comprise 27.7 percent of the combined enrollment, Colebrook students will comprise 10.7 percent, New Hartford students will comprise 53.0 percent and Norfolk students will comprise 8.5 percent.

#### **Factors Affecting the Elementary Projection**

The primary reasons for elementary enrollment change and subsequently the change in Region 7's schools lie in the births and yield from the birth cohort. Figure 9 presents the births from 1980 to 2010 and preliminary, estimated and projected births through 2018. Births ranged from a low of 82 in 2011 to a high of 178 in 1996. Preliminary data indicate there will be a rebound to 89 births in 2012. Based on births through September of 2013, I estimate there will be only 69 births in 2013. In the 1990s there was an average of 149 births annually. In the five years from 2004 to 2008 (this fall's kindergarten through 4<sup>th</sup> graders) births averaged 123. Births in the 2009 through 2013 period will likely average 88. The projection in years 2019 to 2023 assumes an average of 82 births annually between 2014 and 2018.



Figure 10 depicts the kindergarten yield from the births five-years prior for Barkhamsted, Colebrook, New Hartford and Norfolk residents combined. It is for illustrative purposes, as the projections were built from birth to kindergarten growth in each town separately. For example, there were 86 births in 2008 and 102 children enrolled in the four town's kindergartens 2013. That is a yield of 119 percent. The yield from births five-years prior ranged from a low 102 percent in 2009 to a high of 133 percent in 2004. For the kindergarten class of 2013, the yield from births in 2008 was 105 percent in Barkhamsted, 200 percent in Colebrook, 106 percent in New Hartford and 156 percent in Norfolk.



Yields above 100 percent generally mean that parents move into town after giving birth elsewhere. In the five-year look-back period for the projection, the kindergarten yield was 113 percent in Barkhamsted, 141 percent in Colebrook, 107 percent in New Hartford and 122 percent in Norfolk. In Colebrook and Norfolk, I did not use the standard birth to kindergarten growth rate but instead used an additive model. This approach of projecting kindergarten when births are small will have very little impact on the Region 7 results.

The correlation between births and kindergarten enrollment five-year later was only moderate in each of the four towns. Over the past 11 years it was 0.47 in Barkhamsted, 0.52 in Colebrook, 0.79 in New Hartford and 0.47 in Norfolk. The cohort survival method cannot overcome the underlying unpredictability of kindergarten enrollment from earlier births.

#### **Context of the Projection**

The cohort-survival method typically needs only births and a few years of recent enrollment data to generate a projection. Mathematically, nothing else matters. But enrollment changes do not occur in a vacuum. Events and policies in the district, community and region all have some bearing on enrollment. Remember that a basic assumption of the cohort-survival method is that the recent past can be a good predictor of the near future. It is incumbent for every receiver of a projection to determine what events happened in the past five years and whether they are likely to change.

To assist in this endeavor, this report examines several factors that could affect enrollment: town population, women of child-bearing age; people in the labor market; new home construction; sales of existing homes; non-member enrollment in Region 7; high school dropouts; non-public enrollment; residents attending other public schools and student migration.

Figure 11 presents the US Census Bureau estimate of Barkhamsted, Colebrook, New Hartford and Norfolk population growth between July, 2010 and 2012. In that interval, the towns' population was estimated to have fallen by 142 people or 1.02 percent. That growth would have been ranked 152nd in the state. In contrast, Litchfield County fell by 1.17 percent, similar communities (DRG C) fell by 0.36 percent and the state grew by 0.42 percent. The 2010 census population data show that from April 2000 to April 2010 four towns' population grew from 12,713 people to 13,963. The 1,250-person growth was the second smallest in the past six decades. The 9.8 percent increase between 2000 and 2010 would have been 39th ranked in the state.

Figure 12 presents the Connecticut State Data Center's population projections for the four towns' residents 0-19 years of age in the years 2015 and 2020 along with the 2010 Census population. They project that population ages 0-4 will decline from 609 children in 2010 to about 450 children in 2015 and to about 425 children in 2020. They project the population ages 5-9 will decline from 912 children in 2010 to 507 children in 2020, a loss of 44 percent. The number of children ages 10-14 is projected to change relatively little between 2010 and 2015 and then decrease 24 percent between 2015 and 2020. The number of youth ages 15-19 is projected to grow 18 percent from 2010 to 2015 and then level off.





Figure 13 presents for Barkhamsted, Colebrook, New Hartford and Norfolk combined the number of women of childbearing age from the 2000 and 2010 censuses and the Connecticut State Data Center projection for 2015. There were 191 births to these residents in 2000 and 100 in 2010. I have projected there will be 83 births in 2015. In the key 25-34 ages, the number of women fell from 733 in 2000 to 503 in 2010. The Center projects a further decline to 367 women in 2015. The number in the 35 to 44 age range also fell dramatically. The number of women 15-24 increased between 2000 and 2010 to increase in 2015. These ages contribute modestly to the number of births in the four towns.

Figure 14 examines the number of people in the labor market from the US Department of Labor, Bureau of Labor Statistics. These are people 16 years of age or older who were working or actively seeking employment. Since it excludes most students and the elderly, I find it a very rough proxy of the number of schoolage families. The Region 7 labor force increased 1.0 percent between 2008 and 2012. This was better than the state (0.3)percent) and Litchfield County (-1.0 percent). The 2012 unemployment rate was 8.3 percent in Barkhamsted, 5.7 percent in Colebrook, 6.8 percent in New Hartford and 6.6 percent in Norfolk. These all are better than the state rate of 8.4 percent and all but Barkhamsted are better than the Litchfield County rate of 7.7 percent.

Figure 15 presents the net new housing units constructed from 2002 to 2012 from the State Department of Economic and Community Development. In the past ten years the number of net (of demolitions) new housing units constructed in the four towns ranged from a high 86 in 2002 to a low of four in 2012. In the five-year lookback period for this projection, there was an average of 13 net new housing units constructed. There were 6,201 housing units in the four towns according to the 2010 census. Eighty-seven percent were occupied. Only 32.4 percent of the occupied units had children under 18.







Figure 16 presents my estimate of the number of sales of existing homes. I derived it by taking the number of real estate transactions from The Warren Group/Commercial Record and subtracting the number of new single-family housing units authorized. This is an estimate because of the lag between the time a new house is authorized and it is sold. The estimated number of sales of existing homes ranged from a low of 115 in 2011 to a high of 268 in 2005. There were 158 sales in 2012. In the five-year look back period for the projection, there were 148 sales annually.

Figure 17 presents the non-public enrollment in grades 7-12 over the past ten years for students from the towns of Region 7. The data are from the records of the Connecticut State Department of Education. Non-public enrollment ranged from a high of 136 in 2003 to a low of 80 students in 2011. There were 88 students recorded in 2012. In the 2002 to 2012 period enrollment in grades 7-12 in nonpublic schools decreased by 38 students or 30.2 percent. The 2012 enrollment represented 7.5 percent of all grade 7-12 students from the four towns. That is up from 6.8 percent in 2011 but below 11.1 percent recent high set in 2003.

Figure 18 presents the enrollment of Barkhamsted, Colebrook, New Hartford and Norfolk residents in other public schools in grades 7-12 in Connecticut from 2002 to 2012. The number educated outof-district unevenly rose from 44 in 2002 to 70 in 2008 and eased to 60 students in 2012. The number enrolled in a State Technical High School peaked at 57 students in 2006 and was 41 in 2012. In 2012, in addition to the students at Oliver Wolcott, eight attended a CREC magnet, five attended a Hartford magnet, and two attended a special education program run by CREC.







Figure 19 presents non-member enrollment in Region 7 programs from 2003 to 2013. This includes students in the agriculture science program, private pay or the AIM, LINKS, STEP or Intensive Learning programs. Total non-member enrollment rose from 70 in 2003 to 109 in 2013. The number in the agriculture science program (plus private pay) rose from 59 in 2003 to 91 in 2013. The number in special programs rose from 11 in 2003 to 18 in 2013. In 2012, the towns of Canton, Hartland, Torrington and Winchester sent students to Region 7.

Figure 20 examines the percentage of high school students who were reported as dropping out in any one school year. The annual drop-out rate ranged from a high of 1.3 percent in 2003-04 to a low of zero in three years. It was 0.1 percent in 2011-12, the most recent data available from the State. An average of two students per year has dropped out over the past nine years. In the five-year look-back period of this projection, the rate averaged 0.08 percent. Another factor that affects high school enrollment is the percentage of Grade 9 students classified in the grade for two years. The percentage ranged from a high of 3.1 percent in 2011 to a low of zero percent in 2005, 2009 and 2012. In the five-year look-back period, the percentage of students in Grade 9 for a second year was 0.7 percent.

Figure 21 presents the estimated migration of students from Region 7's towns. Estimated migration ranged from a low of -0.2 percent in 2007 to a high of +3.4 percent in 2004. The migration rate in 2013 was 0.7 percent. The data behind these figures may be found in Appendices A and B. The average migration over the five-year look-back period for the projection was a low +0.87 percent. The median five-year migration rate for the towns over the past 19 years was 0.71 percent.







#### **Prior Projections of Enrollment**

The cohort-survival projection method works by moving forward the pattern of recent events that are subsumed within the grade-by-grade enrollment. This works very well when communities are stable. That includes places that are growing or declining at a steady rate. One way to know if that assumption is valid is to examine how past projections have fared. Figure 22 presents the enrollment projections that I have run for Region 7 since 2000. The two enrollment projections that I did between 2000 and 2011 had one-year error rates that averaged 1.2 percent. The two projections done between 2000 and 2008 had an average five-year error rate of 5.0 percent, which is 0.98 percent annualized.

My 2004 projection for Region 7 is running 1.1 percent high after nine years. In that analysis, I projected that grade K-6 enrollment in the member towns would be 1,267 students in 2013. The actual enrollment of 1,018 students was 249 students less than projected. The projection was high by 24.5 percent, or 2.5 percent per year. In that analysis, I projected that grade 7-8 enrollment would be 404 students in 2013. The actual enrollment of 373 was 31 students less than projected. The projection was high by 8.3 percent over nine years or 0.9 percent per year. In 2004, I projected that high school enrollment would be 751 students in 2013. The actual enrollment of 769 was 18 students more than projected. The projection was low by 2.34 percent over nine years or 0.3 percent per year.



In my work I have found the cohort-survival method provides estimates that are sufficiently accurate for intermediate-range policy planning. The eight-year planning horizon for school construction grants is at the limit of the useful accuracy of the method. I analyzed the eight-year accuracy of the district projections from across the state that I ran in 2004. I found for the 67 district-level projections that I ran in 2004 the median projection was 5.5 percent high in predicting 2012 enrollment. That is an annual error rate of 0.7 percent. The absolute error rate (regardless of whether it was high or low) averaged 8.6 percent. That error was less than five percent in 46 percent of the projections and more than 15 percent in 15percent of the projections. Among the 87 elementary projections run, the median projection was 9.5 percent high (1.1 percent annually). Among the 70 middle school projections run, the median projection was 8.2 percent high (1.0 percent annually). Among the 72 high school projections run, the median projection was 0.4 percent was 3.1 percent high (0.4 percent per year). This illustrates what an economic downturn can do to projections run with the cohort-survival method.

#### Summary

I project that total enrollment in grades 7-12 will decrease 28 percent, going from 1,142 students in 2013 to about 825 students in 2023. I believe that future enrollment in the Northwestern Regional Middle School will decline from 372 students in 2013 to about 225 in 2023. The ten-year decline will be about 150 students or about 40 percent. Over the ten-year projection period, I believe enrollment at the school will average about 290 students. Between 2013 and 2023, I project that enrollment at the Northwestern Regional High School will decline from 769 students to about 600 students in 2023. That will be 168 students (22 percent) less than the October 2013 count. Enrollment at Northwestern Regional High School will average about 715 students over the next ten years.

In 2013, Barkhamsted students comprised 27.9 percent of the member town Region 7 enrollment in grades 7-12 compared to 10.7% for Colebrook, 51.1 percent for New Hartford and 10.3 percent for Norfolk. In October 2014, I project that Barkhamsted students will comprise 27.2 percent of the combined enrollment, Colebrook students will comprise 10.6 percent, New Hartford students will comprise 52.8 percent and Norfolk students will comprise 9.6 percent. Over the ten-year projection period, I project that Barkhamsted students will comprise 27.7 percent of the combined enrollment, Colebrook students will comprise 27.7 percent of the combined enrollment, Norfolk students will comprise 53.0 percent and Norfolk students will comprise 53.0 percent and Norfolk students will comprise 53.0 percent and Norfolk students will comprise 8.5 percent.

This report is projecting a significant decline in enrollment. It is critical to remember that a projection is just a moving forward of recent trends. Is the forecast too severe? In the five years from 2004 to 2008 (this fall's kindergarten through 4<sup>th</sup> graders) births averaged 123. Births in the 2009 through 2013 period will average 88. The projection in the years 2019 to 2023 is based on an average of 82 births in the 2014 to 2018 period. Then elementary projection was based upon an average of 11.9 percent growth from births to kindergarten. The average rate across the four towns was 18.6 percent from births in 2008 to kindergarten in 2013. The median growth over the past 15 years was 14.9 percent. The average of the grade-to grade growth rates across grades 1-7 that I used to grow future elementary enrollment was 1.006. The annual elementary average growth rates across grades 8-12 that I used to grow future secondary enrollment was 0.986. The annual secondary average growth rate was 0.978 in 2013 and the median over the last 20 years was 0.980. Taking these three key factors into consideration, I cannot consider the projection for the middle and high schools as overly pessimistic. I think it is possible that the elementary enrollment could come in very slightly higher than the report has projected.

These projections are based upon several other assumptions revolving around the notion that the recent past is a good predictor of the near future. The projection assumes that the following school policies will continue: retention policies will not change; no expansion of area magnet schools and no change in the low drop-out rate. The projection assumes the following population growth factors will not change appreciably: births will average 88 over the 2009 to 2013 period; an average increase of 12 percent increase between the number of births and subsequent kindergarten enrollment; and a student migration of +0.81 percent. Additionally, there will be little change in non-public school enrollment; 13 new housing units will be constructed annually; there will be an average of 148 sales of existing homes in the three towns and a slowly increasing labor force.

It is important to remember that the cohort survival method relies on observed data from the recent past. Its key assumption is that those conditions will persist. It does not try to predict when the economic conditions might change. We cannot know today how long these conditions will continue. This projection should be used as a starting point for local planning. Examine the factors and assumptions underlying the method. You know your community best. Apply your knowledge of the specific conditions in the towns of Region 7 and then make adjustments as necessary.

Appendix A. Towns of Region 7 Enrollment Projected by Grade to 2023: Grades PK-6											
School	Birth					di.		- 5		<u> </u>	T
Year	Year	Births	K	1	2	3	4	5	6	PK	K-6
2003-04	1998	129	158	154	166	169	168	182	189	56	1,186
2004-05	1999	144	191	164	143	179	178	170	188	60	1.213
2005-06	2000	144	166	189	168	142	187	179	175	62	1.206
2006-07	2001	162	174	167	195	170	142	188	177	61	1,213
2007-08	2002	139	147	180	174	197	171	144	189	60	1,202
2008-09	2003	148	170	153	181	173	201	170	151	54	1 199
2009-10	2004	144	147	171	151	186	172	196	175	61	1 198
2010-11	2005	135	152	146	171	150	190	169	190	64	1 168
2011-12	2006	127	146	144	154	170	149	188	173	38	1,100
2012-13	2007	121	139	147	142	155	174	155	191	36	1 103
2013-14	2008	86	102	141	149	138	156	175	157	75	1,105
						150	150	175	1.57	15	1,010
Projected			5								
2014-15	2009	102	116	101	142	149	138	156	176	75	078
2015-16	2010	100	113	115	103	143	150	130	157	75	020
2016-17	2011	82	96	113	116	103	144	150	140	75	860
2017-18	2012	89	104	95	115	116	103	144	151	75	878
2018-19	2013	69	82	103	97	116	116	103	145	75	762
2019-20	2014	75	89	81	105	97	116	116	104	75	702
2020-21	2015	82	93	87	82	105	07	116	117	75	607
2021-22	2016	82	94	93	89	81	105	07	117	75	676
2022-23	2017	83	95	03	95	80	82	105	08	75	657
2023-24	2018	84	96	01	95	95	80	81	106	75	656
			20	21		20	02	01	100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	020
<b>Projection Gro</b>	owth Rate	s <sup>2</sup>			-	,					
Annual Crowd	b Datas									Esti	mated
Annual Growi	in Rates									Migr	ation'
2004			1.326	1.038	0.929	1.078	1.053	1.012	1.033		3.37%
2005			1.153	0.990	1.024	0.993	1.045	1.006	1.029		1.33%
2006			1.074	1.006	1.032	1.012	1.000	1.005	0.989		1.44%
2007			1.058	1.034	1.042	1.010	1.006	1.014	1.005	ų.	0.19%
2008			1.149	1.041	1.006	0.994	1.020	0.994	1.049		1.72%
2009			1.021	1.006	0.987	1.028	0.994	0.975	1.029		0.65%
2010			1.126	0.993	1.000	0.993	1.022	0.983	0.969	-(	0.10%
2011			1.150	0.947	1.055	0.994	0.993	0.989	1.024	(	0.76%
2012			1.149	1.007	0.986	1.006	1.024	1.040	1.016		2.33%
2013			1.186	1.014	1.014	0.972	1.006	1.006	1.013	(	0.70%
3-Year Ave.			1.161	0.990	1.018	0.991	1.008	1.012	1.018		
Weighted 3-Ye	ar		1.168	1.001	1.011	0.987	1.010	1.015	1.016		
5-Year Ave.			1.126	0.994	1.008	0.999	1.008	0.999	1.010		
Weighted 5-yea	ar		1.150	0.996	1.011	0.992	1.010	1.007	1.011		

<sup>1</sup> The 2013 births were based upon in-state births through September.
<sup>2</sup> Based on sum of individual town projections.
<sup>3</sup> Kindergarten based on sum of individual towns projections.
<sup>3</sup> Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year with an adjustment for non-members in and residents out.

Appendix B. Region 7 Enrollment Projected by Grade to 2023: Grades 7-12									
				1000-01		-1000.000	7-8	9-12	7-12
School Year	7	8	9	10	11	12	Total	Total	Total
2003-04	191	178	196	198	172	171	369	737	1,106
2004-05	192	195	187	199	193	170	387	749	1,136
2005-06	188	195	204	189	198	190	383	781	1,164
2006-07	185	193	199	203	178	203	378	783	1,161
2007-08	170	185	212	187	205	189	355	793	1,148
2008-09	196	175	198	206	198	215	371	817	1,188
2009-10	154	195	194	205	214	199	349	812	1,161
2010-11	180	157	219	193	208	211	337	831	1,168
2011-12	193	184	163	217	189	203	377	772	1,149
2012-13	175	196	204	156	211	188	371	759	1,130
2013-14	198	175	217	180	149	223	373	769	1,142
Projected								harman a constant	
2014-15	161	200	193	211	179	150	361	733	1,094
2015-16	180	163	216	188	209	180	343	793	1,136
2016-17	161	182	181	210	187	210	343	788	1,131
2017-18	144	163	199	176	208	188	307	771	1,078
2018-19	155	145	181	193	175	209	300	758	1,058
2019-20	149	156	164	176	191	176	305	707	1,012
2020-21	107	151	175	159	175	192	258	701	959
2021-22	120	108	170	170	158	176	228	674	902
2022-23	121	122	129	165	169	159	243	622	865
2023-24	101	122	142	125	164	170	223	601	824
Projection Growth	Rates <sup>1</sup>	1.010	0.952	0.972	0.992	1.004			
Annual Growth Ra	tes								Migration <sup>2</sup>
2004	1.016	1.021	0.938	1.015	0.975	0.988			3.37%
2005	1.000	1.016	0.897	1.011	0.995	0.984			1.33%
2006	1.057	1.027	0.944	0.995	0.942	1.025			1.44%
2007	0.960	1.000	0.959	0.940	1.010	1.062			-0.19%
2008	1.037	1.029	0.935	0.972	1.059	1.049		L.	1.72%
2009	1.020	0.995	0.994	1.035	1.039	1.005			0.65%
2010	1.029	1.019	0.944	0.995	1.015	0.986			-0.10%
2011	1.016	1.022	0.873	0.991	0.979	0.976			0.76%
2012	1.012	1.016	0.957	0.957	0.972	0.995			2.33%
2013	1.037	1.000	0.995	0.882	0.955	1.057			0.70%
3-Year Ave.	1.021	1.013	0.941	0.943	0.969	1.009			
Weighted 3-Year	1.025	1.009	0.962	0.925	0.965	1.023			
5-Year Ave.	1.022	1.010	0.952	0.972	0.992	1.004			
Weighted 5-year	1.024	1.011	0.953	0.949	0.978	1.011			

<sup>1</sup> Grade 7 based on individual towns. Grades 8-2 based on 5-year averages of annual growth rates by grade. Grade 9 rate based on member towns only. Projection assumed 26 students from non-member towns would enter Grade 9 annually.
 <sup>2</sup> Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year with an adjustment for non-members in and residents out.



# **APPENDIX F**

## **Understanding PPACA & the 2018 Excise Tax On High Cost Health Plans**



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SHARED SERVICES









Town of Norfolk



Norfolk BOE





**Colebrook BOE** 



**Town of Colebrook** 



## **Session Overview**



- PPACA Law
- Taxes & Fees
- What is the 2018 Excise Tax ("Cadillac Tax") on High Cost Health Plans and when does it take effect?
- Who is responsible for paying the tax?
- How will the tax be calculated and assessed?
- What are employers doing to prepare for the Cadillac tax ?



## ACA Taxes and Fees – Current and Future

**Comparative Effectiveness Research Fee (CERF)** Health Insurance Fee **Transitional Reinsurance High Cost Plan Excise Tax** or a.k.a. Assessment a.k.a. Patient Centered Outcomes Health Insurance Tax (HIT) Cadillac Tax **Research Institute (PCORI) Fee** PPACA/HCERA ACA Sec. 6301 ACA Sec. 9001 ACA Sec. 9010 ACA Sec. 1341 - IRC Sec 4375-77 IRC Sec. 49801 Annual, temporary fee Annual, permanent fee Annual, temporary fee Annual, permanent tax What is it? on insured and self-insured plans on health insurers beginning 1/1/14 on insured and self-insured plans, to begin in 2018 for high-cost beginning on/after 10/2/11 to fund to help offset impact of exchange imposed for years 2014, 2015, and employer-sponsored health plans. the Patient Centered Outcomes subsidies and Medicaid . 2016. Fees collected to fund Research Institute (PCORI) To generate \$88 in 2014 up to reinsurance program to help stabilize \$14.38 in 2018. premiums in individual market. Excludes Demal/Vision Excludes Dental/Vision Includes Dental/Vision **Excludes** Dental/Vision \$1 PMPY: increases to \$2 PMPY Estimated costs: Costs: 40% excise tax on health plans with How much? on 10/2/12; indexed to medical 2 to 2.5% of premium for 2014 \$63 PMPY in 2014 (\$10B) premiums exceeding an annual cost . inflation until 2019 3 to 4% for later years of \$10,200 for an individual plan or . \$44 PMPY in 2015 (\$6B) . First payable July 2013 IRS will bill each carrier annually \$25 to \$35 PMPY in 2016 (\$4B) \$27,500 for a family plan (2018); . thresholds indexed for inflation after 2018. Tax-deductible Tax-deductible/permissible plan Tax-deductible Not tax-deductible (as part of premium expense) expense. Fully Insured: Carrier pays, built . Insurance company /policy issuer Fully Insured: Full amount built . Fully Insured: Carrier pays, built Who pays? into rates into rates for 1/1/14+; partial into rates pays load in 2013 Self-Funded: Per regulations. Applies only to insured business. Self-Funded: Employer pays employers must calculate and based upon each insurer's Self-Funded: Employer is Payment instructions not yet pay own fee (submit on Form market share of premium responsible. Plan submits count available. 720) revenue (among all health to HHS by November 15, 2014. insurers of U.S. health risks) HHS will invoice in two installments for the 2014 fee. Carrier submits Form 8963 to IRS • First installment of \$52.50 due by April 14, then pays by 1/15/15; second installment **IRS/Treasury before October 1** 

of \$10.50 due in the 4th quarter of 2015. Option to make single combined payment by 1/15/15.

## **2018 Excise Tax on High Cost Health Plans**



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- 40% annual, <u>permanent</u> excise tax on employers who sponsor "Cadillac plans" – high-cost plans with annual premiums exceeding:
  - \$10,200 per individual and/or \$27,500 per family
  - \$13,850 per individual and/or \$30,950 per family for high risk professionals (e.g. Police and Fire)
  - Includes employer and employee-paid premiums <u>and</u> employer contributions to Health Savings Accounts (HSAs); Health Reimbursement Arrangements (HRAs) or Flexible Spending Accounts (FSAs).
  - Thresholds will be indexed for inflation in future years.
- Purpose of the Cadillac tax is to help finance ACA, and reduce employer offerings of "benefit rich" plans.
- Expected to generate \$80B over first 10 years.
- Not tax-deductible.







# More than half of companies will trigger the excise tax by 2020 without changes to their benefit strategy

How concerned are you that your organization will hit the 2018 excise tax based on plans currently offered?



43% report that avoiding the excise tax is their top priority in 2015

Source: Towers Watson Health Care Changes Ahead Survey 2014

## Why Most Employers are Concerned...



When will your organization trigger the excise tax if no changes are made to the health care benefit strategy?



## **A CONCERN FOR CT CITIES AND TOWNS?**



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Average premiums nearly
50% higher in CT Public
Sector vs. Private plans

- Benefits plans subject to collective bargaining
- Average length of labor contract is 3 years

2014 AVERAGE ANNUAL HEALTH INSURANCE PREMIUMS CT PUBLIC SECTOR VS. PRIVATE (ALL PLANS)



Source: CT Public Sector premium ; DBA 2014 Benchmark Data Source: Private Sector premiums; KFF 2014 Employee Benefit Survey, Summary of Findings

### First group plans to trigger 2018 Excise tax?
### **A CONCERN FOR CT CITIES AND TOWNS?**



### 2018 Excise Tax Comparison

Private Sector Premiums vs CT Public Sector Premiums

Average Premiums ALL Plans 2014

	Using Average Private Plan Premiums			Using Average CT Public Sector Premiums	
Year	Single	Family	Year	Single	<u>Family</u>
2014	\$6,025	\$16,834	2014	\$9,096	\$25,166
1/1/2015	\$6,567	\$18,349	1/1/2015	\$9,915	\$27,431
1/1/2016	\$7,158	\$20,000	1/1/2016	\$10,807	\$29,900
1/1/2017	\$7,803	\$21,801	1/1/2017	\$11,780	\$32,591
1/1/2018	\$8,505	\$23,763	1/1/2018	\$12,840	\$35,524
1/1/2019	\$9,270	\$25,901	1/1/2019		
1/1/2020	\$10,105	\$28,232	1/1/2020		
Excise Tax Treshhold	\$10,200	\$27,500	Excise Tax Treshhold	\$10,200	\$27,500
Premium Overage per unit	\$0	\$0	Premium Overage per unit	\$2,640	\$8,024
Excise Tax Rate	40%	40%	Excise Tax Rate	40%	40%
Excise Tax per unit	\$0	\$0	Excise Tax per unit	\$1,056	\$3,210

- Assumes average annual inflation of 9%
- On average Private plan premiums will exceed threshold in 2020
- On average CT Public Sector plan premiums will exceed threshold in 2016



# What's your strategy?



### **Points for Negotiation:**

- Plan design changes to reduce costs
- Plan management provisions
  - Wellness incentives, disease management, prescription drug edits, etc.
- Plan options/platforms
  - High deductible plans; tiered networks, etc.
- Responsibility for payment of excise taxes



### Sample Proposal:

 "If the total cost of a group health plan or plans offered under this contract triggers an excise tax under Internal Revenue Code Section 4980I, or any other local, state or federal statute or regulation, the Board reserves the right to offer an alternate group health plan(s) with a lower total cost, such that the total cost of the alternate plan(s) falls below the excise tax thresholds or reduces the amount of any applicable excise tax. Eligible employees will be given the option to enroll in the lower cost coverage option(s). If an employee chooses to enroll in any coverage option that triggers an excise tax, 100% of any such excise tax will be borne by the employee."



### **Mitigation vs. Avoidance:**

- Plan design changes
- Employee/Employer share of premium costs
- Anticipated effect of interest arbitration on outcomes



Bending the Health Insurance Premium Cost Curve

- Manage the Annual Renewal Increase
- Implement High Deductible Health Plans
- Worksite Health Improvement (Incentivized Wellness)



Managing the Annual Renewal Increase

- Renewal Negotiations
- Request for Proposal (RFP)
  - Carrier change?



2018 Excise Tax Comparison - CT Public Sector Premiums Traditional Non High Deductible Health Plan vs. HDHP WITH Employer Funding Average Premiums 2014

	CT Public - Non-HDHP			CT Public - HDHP WITH ER Funding	
Year	Single	Family	Year	Single	Family
2014	\$10,015	\$27,901	2014	\$8,179	\$22,431
1/1/2015	\$10,916	\$30,412	1/1/2015	\$8,915	\$24,450
1/1/2016	\$11,899	\$33,149	1/1/2016	\$9,717	\$26,650
1/1/2017	\$12,970	\$36,133	1/1/2017	\$10,592	\$29,049
1/1/2018	\$14,137	\$39,385	1/1/2018	\$11,545	\$31,663
	NA	NA	Employer Deductible Funding (50% of \$2000/4000)	\$1,000	\$2,000
Total Cost 2018	\$14,137	\$39,385	Total Cost 2018	\$12,545	\$33,663
Excise Tax Treshhold	\$10,200	\$27,500	Excise Tax Treshhold	\$10,200	\$27,500
Premium Overage per unit	\$3,937	\$11,885	Premium Overage per unit	\$2,345	\$6,163
Excise Tax Rate	40%	40%	Excise Tax Rate	40%	40%
Excise Tax per unit	\$1,575	\$4,754	Excise Tax per unit	\$938	\$2,465

- Assumes average annual inflation of 9%
- Average HDHP deductible level is \$2000 I/\$4000 F
- Average ER funding for HSA/HDHP is 50% of the deductible level



2018 Excise Tax Comparison - CT Public Sector Premiums HDHP (WITH ER Funding) vs. HDHP (NO ER Funding) Average Premiums 2014

	CT Public - HDHP WITH ER Funding			CT Public - HDHP NO ER Funding	
Year	Single	<u>Family</u>	Year	Single	Family
2014	\$8,179	\$22,431	2014	\$8,179	\$22,431
1/1/2015	\$8,915	\$24,450	1/1/2015	\$8,915	\$24,450
1/1/2016	\$9,717	\$26,650	1/1/2016	\$9,717	\$26,650
1/1/2017	\$10,592	\$29,049	1/1/2017	\$10,592	\$29,049
1/1/2018	\$11,545	\$31,663	1/1/2018	\$11,545	\$31,663
Employer Deductible Funding (50% of \$2000/4000)	\$1,000	\$2,000	Employer Deductible Funding NONE	\$0	\$0
Total Cost 2018	\$12,545	\$33,663	Total Cost 2018	\$11,545	\$31,663
Excise Tax Treshhold	\$10,200	\$27,500	Excise Tax Treshhold	\$10,200	\$27,500
Premium Overage per unit	\$2,345	\$6,163	Premium Overage per unit	\$1,345	\$4,163
Excise Tax Rate	40%	40%	Excise Tax Rate	40%	40%
Excise Tax per unit	\$938	\$2,465	Excise Tax per unit	\$538	\$1,665

- Assumes average annual inflation of 9%
- 2018 Excise tax for HDHP and NO funding is 1/3 that of a non-HDHP
- Eliminating the ER Funding lowers 2018 Excise tax liability by more than 40%



Incentivized Health Improvement

**Outcomes Based Wellness Programs:** 

- <u>Targeted Population</u>: All Employees and Spouses (with programing elements designed to move those at highest risk to lower risk)
- Programs/Measurements:
  - Cholesterol
  - BMI
  - Blood Pressure
  - Glucose/A1c
- Goals/Outcomes:
  - "Achieve significant reduction in clinical measurements."
  - "Reduce heart attacks and strokes (to save lives and to reduce healthcare costs.)"



# QUESTIONS?

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