

Final Report on the Berkshire County Education Task Force Planning Study, Phase One

December 2, 2016

Eliot Levine, Ph.D.



UMASS DONAHUE INSTITUTE
APPLIED RESEARCH & PROGRAM EVALUATION

Phase One

- **Review and confirm evidence that decreased enrollment, rising costs, and declining or flat revenues pose challenges to the quality of education in Berkshire County.**
- **Generate insight into the potential benefits and risks of inter-district shared services and consolidation strategies when used to improve efficiency and sustainability of Berkshire County public school districts.**



UMASS DONAHUE INSTITUTE

2

Phase Two

- **Estimate costs associated with three change strategies:**
 - Tier 1 – Advance collaborative and shared services solutions such as cooperative purchasing, transportation, and shared special education programming
 - Tier 2 – Advance formal partnerships between geographically proximal districts
 - Tier 3 – Advance reorganization of the entire county into a super region of one to three districts
- **Provide implementable recommendations that could be considered by Berkshire County school districts and municipalities.**



Phase One Goals

- **Goal 1 – Inform public awareness and understanding of the current population and fiscal trends that face Berkshire County and individual public school districts within the county.**
- **Goal 2 – Describe the likely effects of these trends on educational programs and services over the next five years.**
- **Goal 3 – Review literature regarding the extent to which inter-district cost sharing, consolidation, and other approaches offer promise to Berkshire County.**
- **Goal 4 – Review literature regarding rigorous and cost effective approaches to the study of potential impacts associated with inter-district cost sharing and consolidation.**



Methods

- Two sets of interviews with Berkshire County school and district administrators
- Numerous meetings, calls, and emails with BCETF and BRPC
- Review and analysis of
 - High school course enrollment data provided by schools
 - Previous findings from BCETF and BRPC
 - Data from the UMDI Population Estimates Program
 - Publicly available data, mostly from ESE and DOR
 - Literature from academic, government, private, and nonprofit sources, as well as blogs, websites, and news media



Administrator Interviews

- Interview #1 – 5-year time frame
 - Changes in educational programs, extracurricular programs, and student support services in the past five years and the next five years due to declining student enrollment and/or revenue shortfalls
 - Steps the district has taken and plans to take in the future to manage costs while sustaining educational quality, including new partnerships or regional agreements
- Interview #2 – 15-year time frame
 - Changes in educational programs, extracurricular programs, and student support services in the past 15 years.
 - Causes and implications of these changes.



Findings

- Literature review – Shared services and district consolidation
- Enrollment trends and population projections
- Cost and revenue trends
- Educational program trends
- Strategies for improving financial sustainability
- Estimating fiscal impacts of change strategies



Shared Services

- Benefit from economies of scale without regionalizing
- Formal and informal collaborations
- Collaboratives (Educational Service Agencies)
- Common domains in Massachusetts currently – special education programs and services, professional development, student transportation, educational technology, cooperative purchasing, and energy management
- Substantial evidence that shared services can save money and that there is interest in doing more.
- More on past and future strategies later...



District Consolidation

- To improve educational quality, reduce costs, or both
- Complicating factors – educational, financial, political, legal
- Literature does not provide clear answer about optimal district size for cost savings and academic achievement
- Positive results in New York
- Positive predictions in Franklin County
- Negative results in Texas
- Mixed or uncertain results elsewhere



District Consolidation

- Taking these complexities into account may increase the chances of successful regionalization:

“Almost all studies completed to date have identified major obstacles to regionalization. These obstacles have generally been identified many times in the past and might have been foreseen and addressed in some fashion” (Carleton et al., 2009).



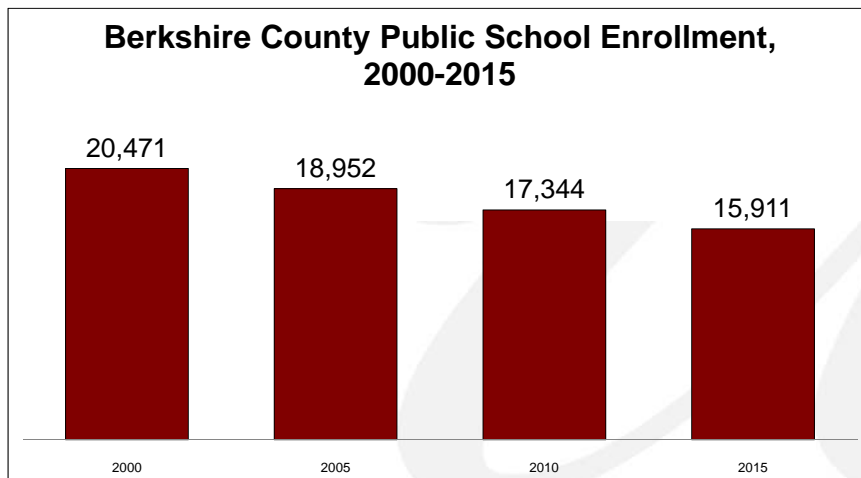
Enrollment, Cost, Revenue, and Program Trends

- The slides present most trends at the county level.
- The report also provides most of the trends at the level of individual school districts or municipalities.



Enrollment Trends

Berkshire County Public School Enrollment, 2000-2015

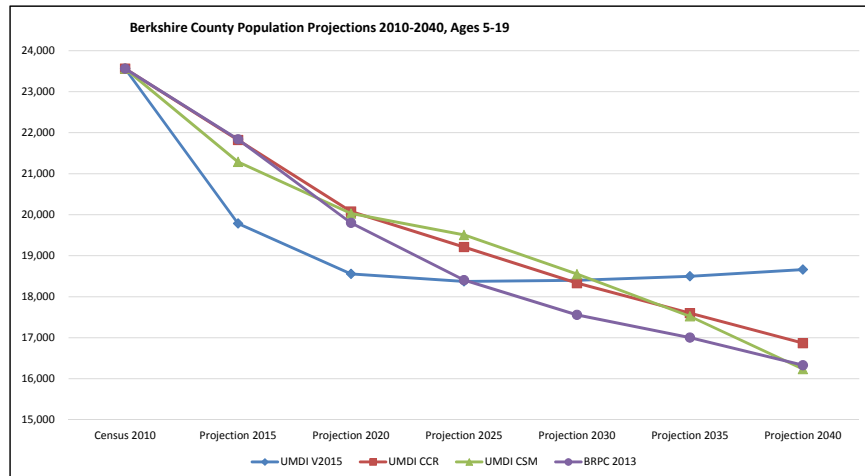


Enrollment Trends

- Enrollment in grades K–12 in Berkshire County public schools declined by 22.3% from 2000 to 2015, a loss of 4,560 students.
- Massachusetts experienced a much smaller 1.7% decline during that time period.
- Enrollment increased at McCann and BART Charter.
- All other districts' enrollment declined, from 16% to 37%.



Population Projections



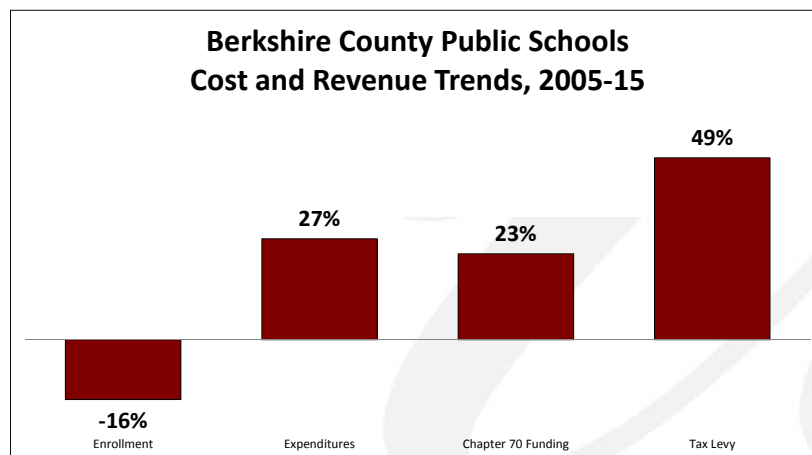
Population Projections

- Average projected declines in the school age population:
 - 2015–25: An 11% decline
 - 2025–35: An additional 7% decline

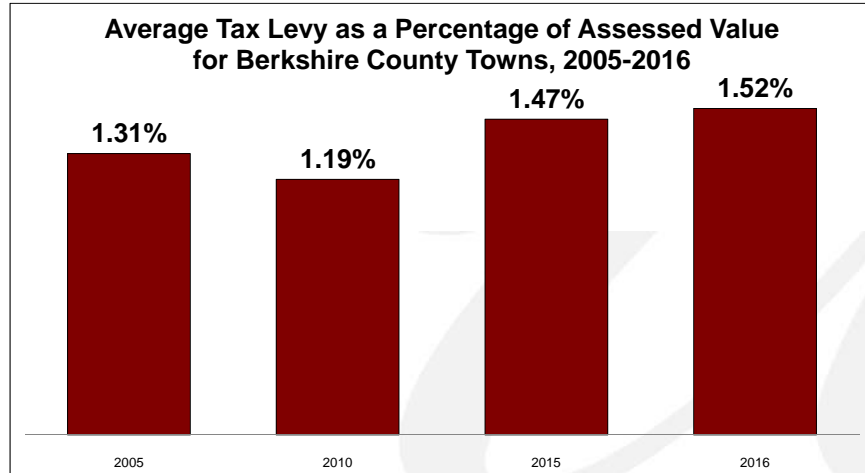
- Based on three models from the UMass Donahue Institute Population Estimates Program, and one model from the Berkshire Regional Planning Commission



Cost and Revenue Trends



Tax Levy Limits and Capacity



Tax Levy Limits and Capacity, 2005–16

- Average change in tax levy as a percentage of assessed value increased by 0.21 percentage points.
- District values ranged from -0.30 to 0.62 percentage points.



Tax Levy Limits and Capacity

Average Changes for Berkshire County School Districts, 2005–16

Span of Years	Override Capacity	Total Assessed Value	Tax Levy as a % of Assessed Value
2005-10	49.9%	37.6%	-9.2%
2010-15	-27.6	-3.9	23.5
2015-16	-3.7	0.5	3.4



Tax Levy Limits and Capacity, 2005–16

- Average change in assessed value county-wide was 33%, but district values ranged from 17% to 76%
- Average excess levy capacity increased by \$215,000, but ranged from -\$1.4 million to +\$4.3 million
- Average override capacity increased by 4%, but ranged from -100% to +99%



Functional Expenditures by Category

- Annual financial reporting to ESE by school districts in 11 functional categories:
 - Administration
 - Instructional leadership
 - Classroom and specialist teachers
 - Other teaching services
 - Professional development
 - Instructional materials, equipment, and technology
 - Guidance, counseling, and testing
 - Pupil services
 - Operations and maintenance
 - Insurance, retirement programs, and other
 - Payments to out-of-school districts



Functional Expenditures by Category

Function	Percentage of Functional Expenditures by Category, County vs. State Comparison, 2005–15						
	2005			2015			
	Berkshire County	State	County Relative to State	Berkshire County	State	County Relative to State	
Administration	3.1%	3.2%	-3.1%	3.2%	3.3%	-3.0%	
Instructional Leadership	5.7	6.2	-8.1	6.1	6.1	0.0	
Classroom and Specialist Teachers	34.1	36.8	-7.3	31.3	35.0	-10.6	
Other Teaching Services	7.4	6.4	15.6	8.4	7.3	15.1	
Professional Development	0.8	1.6	-50.0	1.0	1.2	-16.7	
Instruct. Materials, Equipment, Tech	2.8	3.0	-6.7	2.1	2.7	-22.2	
Guidance, Counseling, and Testing	1.9	2.7	-29.6	2.0	2.8	-28.6	
Pupil Services	8.1	8.7	-6.9	8.3	8.9	-6.7	
Operations and Maintenance	7.4	8.1	-8.6	6.5	7.1	-8.5	
Insurance, Retirement Programs, Other	14.4	14.8	-2.7	18.3	15.4	18.8	
Payments to Out-of-School Districts	14.2	8.4	69.0	12.8	10.2	25.5	



Functional Expenditures by Category

- District-level tables enable comparisons within each district over time, as well as across districts in the county and the state
- Example: North Adams' expenditures on administration increased from 1.7% to 3.2% of their total budget from 2005 to 2015. Their spending on administration at the beginning of this time period was far below the county average of 3.1%, but by 2015 their spending on administration equaled the county average.
- Example: County expenditures on "insurance, retirement programs, and other" were 2.7% lower than state expenditures in 2005 but 18.8% higher than state expenditures in 2015.



Functional Expenditures by Category

- The trends for each district could serve as a source of information for strategic planning regarding financial sustainability and educational quality.
- This could include understanding how the figures reflect local circumstances (e.g., district size, average age of personnel, geographic spread, infrastructure needs), but also whether they adequately reflect local priorities, needs, and goals.



Selected Student Populations

Percentage of Low-Income Students			
	2005	2015	Change 2005–15
Berkshire County	27.3	34.0	6.7
State	27.7	26.3	-1.4



Selected Student Populations

Percentage of Students with Disabilities			
	2005	2015	Change 2005–15
Berkshire County	15.3	17.7	2.4
State	15.9	17.1	1.2



Selected Student Populations

Percentage of English Language Learners			
	2005	2015	Change 2005–15
Berkshire County	1.8	1.8	0.0
State	5.1	8.5	3.4



School Choice Enrollment

- Minimal change from 2005 to 2015 in some districts.
- In other districts, large absolute and percentage gains and losses.
- Example: Pittsfield had a net loss of 166 students in 2005 and 344 students in 2015.
- Example: Richmond had a net loss of 3% of its enrollment in 2005 and a net gain of 41% in 2015.
- Example: In 2015, school choice revenue as a percentage of total expenditures represented a 7% gain for Lenox and an 8% loss for Savoy.

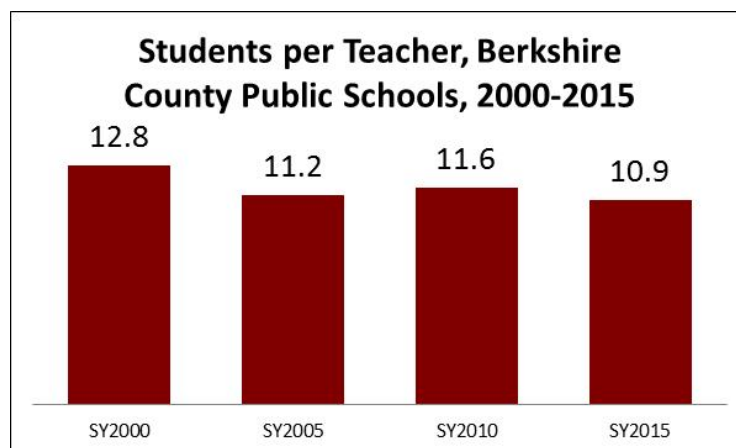


Building Capacity

- Many school buildings are filled below capacity, which increases fixed costs per student.
- Declining enrollment has exacerbated this problem and will continue to do so.
- Student enrollment as a percentage of building capacity:
 - In 2015, ranged from 31% to 103% (median = 77%)
 - In 2025, will range from 16% to 95% (median = 69%) based on enrollment projects and current district configurations



Students Per Teacher



Students Per Teacher

- Different from average class size, because includes both classroom and specialist teachers.
- The county average in 2015 was 10.9, but ranged from 4.7 to 13.0 students per teacher.
- Berkshire County has fewer students per teacher than the state: 15% fewer in 2005, 18% in 2010, and 21% in 2015.



Teacher Salaries

- The average teacher salary in Massachusetts was higher than in Berkshire County by 10% in 2005 and by 12% in 2015.
- The average teacher salary in Berkshire County in the 2014–15 school year was \$67K, but ranged from \$41K to \$94K.



Program Trends – Administrator Perspectives, 5-Year Time Frame

- Half of districts expressed moderate to serious concerns about program impacts due to declining enrollment and revenue shortfalls, particularly for the next five years.
- Adams-Cheshire – Particular urgency. Deep cuts already and more anticipated.
- Multiple districts nearing a “tipping point” where avoiding future program impacts will become difficult or impossible.
- Increased class sizes and reduced course offerings.
- Chapter 70, tax levies, school choice outflows, and special education costs.



Program Trends – 15-Year Time Frame, Educational Offerings

- Reporting of negative impacts was more consistent among this group and when looking over a 15-year time period.

Have Educational Offerings Been Reduced in the Past 15 Years?				
Yes	No			
4	1			
Minimal	Min/Mod	Moderate	Mod/Ext	Extensive
0	0	1	2	1



Program Trends – 15 Years, Fewer Section Offerings

Have Fewer Section Offerings Reduced Students' Ability to Take the Classes They Want Over the Past 15 Years?				
Yes	No			
4	1			
Minimal	Min/Mod	Moderate	Mod/Ext	Extensive
0	0	2	2	0



Program Trends – 15 Years, Level of Academic Support

Has the Level of Academic Support Declined in the Past 15 Years?				
Yes	No			
2	3			
Minimal	Min/Mod	Moderate	Mod/Ext	Extensive
0	0	1	1	0



Program Trends – 15 Years, Extracurricular Activities

Have Extracurricular and Co-curricular Programs and Services Been Reduced in the Past 15 Years?				
Yes	No			
5	0			
Minimal	Min/Mod	Moderate	Mod/Ext	Extensive
1	1	1	1	1



Program Trends – 15 Years, Student Support Services

Have Student Support Services Been Reduced in the Past 15 Years?				
Yes	No			
3	2			
Minimal	Min/Mod	Moderate	Mod/Ext	Extensive
2	0	1	0	0



Program Trends – 15 Years, Quality of Educational Opportunity

- Four of the five administrators believed that the quality of educational opportunity in Berkshire County had declined in the past 15 years.
- Negative impacts on:
 - Level of student engagement
 - Educational equity
 - College readiness
 - College admissions



Course Offerings

- Course enrollments were provided by 10 of 12 high schools
- Standardized across districts into a single spreadsheet
- Statistics offered for AP and Honors courses
 - Number of courses offered (AP 7–19, Honors 12 to 39)
 - Average class size (AP 5–16, Honors 10–20)
 - Courses taken per student (AP 0.16–0.78, Honors 0.75–2.88)
- Establishes a baseline for future comparisons on these course offerings and others
- ESE's Student Course Schedule might provide a more efficient resource for comparisons across districts and years



Cost-Saving Strategies

- Staffing and program cuts
- Increasing class sizes
- Renegotiating health care plans
- Special education
- Energy costs
- Closing schools
- Combining positions
- Purchase 14-passenger buses
- Seeking grants
- Updating technology



Cost-Saving Strategies: Shared Services

- Substantial evidence of cost savings and untapped savings
- Berkshire County districts already participating in many shared services efforts and want to continue and expand
 - Regional efforts – two groups are already meeting
 - Special education services
 - Health care services
 - Sharing superintendents and other personnel
 - Professional development
 - Athletics
- Future plans for shared services in many areas



Cost-Saving Strategies: Consolidation

- It's not just about cost savings; also educational quality.
- See the potential need, but no determined current efforts
- Adams-Cheshire reached out to Lanesborough in 2015
- Some districts are exploring it
- Possibly closing schools – Hancock, Clarksburg
- Possibly closing grades – Richmond



Estimating Fiscal Impacts of Change Strategies

- Some broad comments on methods used; much more details are provided in the studies.
- Method #1 – Franklin County Study (NESDEC)
 - Explore three reorganization models – a single county-wide district, three districts, or six districts (including one regional vocational technical district).
 - Specify the number of administrators per district and their salaries, and calculate cost savings compared to current level of administrators and salaries.
 - One model for BCETF's "Tier 3"



Estimating Fiscal Impacts of Change Strategies

- **Method #2 – Granville-Southwick-Tolland Study (PVPC)**
 - Estimate budgets under three scenarios
 1. No changes were made
 2. Granville joined Southwick-Tolland, but no changes were made in programming and structure
 3. Granville joined Southwick-Tolland, and additional savings and efficiencies were found (e.g., personnel, services, buildings).
 - Estimate each town's payments under each scenario
 - Corresponds more to BCETF's "Tier 2"



Estimating Fiscal Impacts of Change Strategies

- **Method #3 – Aquidneck Island Study (RIPEC)**
 - Explores regionalizing three districts (Middletown, Newport, and Portsmouth, Rhode Island) and consolidating some of their schools
 - Compares a combined Aquidneck Island district to four benchmarking communities in other states.
 - Estimates fiscal impacts of regionalization for different staffing levels, student/teacher ratios, and school closings.
 - Corresponds more to BCETF's "Tier 2"



Conclusions and Recommendations

- The quality of education in Berkshire County is clearly being threatened by enrollment and fiscal trends.
- Negative program impacts have already happened in many districts, and signs of negative program impacts in the future are apparent in most districts.



Shared Services – Conclusions

- More shared services are promising to pursue immediately, with a high likelihood of cost savings.
- Engaging in shared services would advance collaborative relationships among districts that might facilitate future regionalization.
- The literature suggests that the savings will be meaningful but not sufficient to resolve many districts' fiscal challenges.
- Getting this work underway will provide crucial information about what additional cost-saving measures districts will need to pursue.
- Changes to collective bargaining agreements may be needed.



Shared Services – Recommendations

- Share lessons learned from current shared services efforts.
- Assess which Berkshire County needs might be met by existing Massachusetts collaboratives.
- Investigate forming a new collaborative in Berkshire County.
- Estimate the cost savings of potential shared services efforts.
- Investigate issues with shared services and collective bargaining agreements.
- Identify and possibly advocate for state incentives for shared services initiatives.



Consolidation – Conclusions

- Appears to face greater challenges to implementation than shared services.
- Mixed evidence of cost savings and educational benefits.
- Estimating cost savings accurately is difficult.
- Some interest in exploring regionalization.
- Some reluctance to regionalize, due to concerns about local control, school closings, job losses, travel times, and academic opportunities.
- Literature cited offers many suggestions for assessing need and increasing chances of success when regionalizing.



Consolidation – Recommendations

- **Use Phase Two to assess potential educational benefits, cost savings, and feasibility of Tier 2 and Tier 3 consolidation options.**
- **Conduct discussions with stakeholders about Task Force concerns. Share implications of regionalization for local control, school closings, employment, and travel times. Clarify options, including some that do not require school closings.**
- **Consider promoting and providing support for a process that would help districts assess whether they may be strong candidates for regionalization.**



Consolidation – Recommendations

- **Consider establishing a process to identify a small number of district groupings that demonstrate strong motivation to participate fully in exploring regionalization.**
- **Analyze indicators that may suggest a greater likelihood of cost savings upon regionalization.**
- **Assess costs associated with both maintaining existing school buildings and closing some buildings.**
- **Identify and possibly advocate for state incentives for regionalization efforts, including transition support.**



UMass Donahue Institute
Applied Research and Program Evaluation
100 Venture Way, Suite 5

Hadley, MA 01035

(413) 587-2418

elevine@donahue.umassp.edu

www.donahue.umassp.edu



UMASS DONAHUE INSTITUTE

53