# Connecticut School Finance Project

# FAQS: SCHOOL DISTRICT CONSOLIDATION

## **Issue Summary**

Connecticut's student population has declined nearly seven percent in the past 10 years, and the rate of this decline is faster than initially projected.<sup>1,2</sup> Currently, Connecticut has a relatively large number of school districts for its geographic size and student population, including 84 local and regional school districts serving fewer than 2,000 students.<sup>3</sup> Research indicates very small schools and districts may not be able to provide comprehensive educational programs to students, including extracurricular activities and Advanced Placement courses. In addition, research also suggests that economic efficiency is expected when small school districts consolidate, and in peer states the optimal school district size for these efficiencies is approximately 1,500-3,000 students.

# Q: What is district consolidation?

A: District consolidation is the combination of two or more previously independent school districts into one new and larger school district, resulting in a single district oversight board and administration. This is different from school consolidation, which is the merging of two or more schools, resulting in the closure of at least one school.

# Q: What is the fiscal impact of school district consolidation?

**A:** Academic research on the fiscal impacts of school district consolidations shows economies of scale are likely to occur when smaller districts combine to form a single, larger school district.<sup>4</sup> Although there is a lack of agreement in academia on the methodologies for determining the most efficient school district size, there is substantial evidence — across research methodologies — that cost efficiency is expected to increase when smaller school districts consolidate.

# **Examples from Connecticut and Comparison States**

#### <u>Connecticut</u><sup>5</sup>

- Controlling for District Reference Groups (DRGs), an analysis published in 2010 found the ideal district size for output efficiency in Connecticut was 2,789 students and the ideal district size for input efficiency was 2,782.
- Outputs were defined as differences in performance, relative to average performance, in SAT and Connecticut Mastery Test scores, and district size.
- Inputs were defined as teachers, administrators, and computers per 100 students.

#### Massachusetts6

- Analysis of efficiency of Massachusetts' school districts indicates the optimal school district size for cost efficiency in Massachusetts is somewhere near 3,000 students.
- Results of analysis showed "almost all of the school districts in Massachusetts would be able to save if they merged with one or more of their neighboring school districts."

Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs2017/2017019.pdf. <sup>3</sup> Connecticut State Department of Education. (n.d.). EdSight: Public School Enrollment. Available from http://edsight.ct.gov/SASPortal/main.do.

<sup>&</sup>lt;sup>1</sup> Connecticut State Department of Education. (n.d.). EdSight: Public School Enrollment. Available from http://edsight.ct.gov/SASPortal/main.do. <sup>2</sup> Hussar, W.J., & Bailey, T.M. (2017). Projections of Education Statistics to 2025, Forty-fifth Edition (NCES 2017-019). Washington, DC: U.S. Department of Education, U.S. Department of Education, DC: U.S. Department of Education, DC: U.S. Department of Education, U.S. Department, U.S. D

<sup>4</sup> The optimal school district size for cost-efficiency, as modeled in economic research, is heavily dependent on geography, and ranges from approximately 1,900 students in Indiana to approximately 47,000 students in Texas.

Zimmer, T., DeBoer, L., & Hirth, M. (2009). Examining Economies of Scale in School Consolidation: Assessment of Indiana School Districts. Journal of Education Finance, 35(2), 103-107. Retrieved from

 $https://www.researchgate.net/profile/Tim_Zimmer/publication/236747805\_Examining\_Economies\_of\_Scale\_in\_School\_Consolidation\_Assessment\_of\_Indiana\_School\_Districts/links/558d579908ae6071ec3abaf2.pdf.$ 

Gronberg, T.J., Jansen, D.W., Karakaplan, M.U., & Taylos, L.L. (2015). School District Consolidation: Market Concentration and the Scale-Efficiency Tradeoff. Southern Economic Journal, 82(2), 580-597.

<sup>&</sup>lt;sup>5</sup> Heffley, D., & Bekaroglu, C. (2010). Getting More From Less: Measuring Efficiency in Connecticut High School Districts. The Connecticut Economy. Available from https://www.academia.edu/15280776/Getting\_More\_From\_Less?ends\_sutd\_reg\_path=true.

<sup>&</sup>lt;sup>6</sup> Nguyen-Hoang, P., & Yinger, J. (2014). Education Finance Reform, Local Behavior, and Student Performance in Massachusetts. Journal of Education Finance, 39(4), 297-322.

• Analysis showed the highest rate of cost savings (24.8 percent) occurring for districts with enrollments between 100 and 3,000 students, and a sharp decrease in the rate of savings occurring for districts with enrollments between 3,000 and 5,000 students.

## New York<sup>7</sup>

- Analysis published in 2007 found that, in New York, consolidating districts from 300 students to 600 students would yield cost savings of 56.04 percent; from 900 students to 1,800 students would yield cost savings of 48.6 percent; and from 1,500 students to 3,000 students would yield savings of 45.07 percent.
- Analysis also revealed that consolidation leads to increased capital spending, which can lead to some mitigation of cost savings.

# Q: What is the impact of school district consolidation on student outcomes?

**A:** There is no conclusive evidence that school district consolidation positively or negatively impacts students' academic performance. However, arguments can be made that access to educational opportunities such as Advance Placement courses, elective courses, and athletics is improved by consolidating very small school districts. In studies where student performance was shown to be negatively correlated with school district size, other variables, such as student income and student-teacher ratios, have much stronger effects on student achievement than the size of school districts.

# **Examples from Connecticut and Comparison States**

Connecticut<sup>8</sup>

• An analysis published in 2010 comparing, within DRGs, academic performance in regional high schools to community high schools in Connecticut, found students in regional high schools outperformed their community high school counterparts within the same DRG in 15 of 16 pairs, using SAT I outcomes as the performance metric.

#### Vermont<sup>9</sup>

• A 2015 report focused on the State of Vermont's public schools found there is a positive correlation between school size and the number of Advanced Placement classes offered, and argued educational program breadth and depth may be compromised in Vermont's very small high schools, as "data appear similar for athletics opportunities."

#### Maine<sup>10</sup>

- A qualitative study released in 2013 on the impacts of Maine's school district consolidation, which occurred after statewide legislation passed in 2007, focused on the equity of educational opportunities in 24 newly-formed regional school districts.
- Of the districts surveyed, 22 reported changes to some aspect of the delivery or content of their
  programs of education, which included "expanded technology; increased gifted and talented
  programs; expanded prekindergarten or kindergarten programming; alignment of special
  education services; perceived improvements in education programming in certain subject
  areas; and improved professional development for teachers."
- However, these expanded services did not occur with uniformity, and "about a third of the districts... described only modest changes."
- In terms of equity, as defined by a redistribution of resources among partnering districts, two thirds of responding districts noted "improved or increased equity of educational opportunity in some aspect of their programming," although these changes also varied in breadth and scope.

<sup>&</sup>lt;sup>7</sup> Duncombe, W., & Yinger, J. (2007). Does District Consolidation Cut Costs? Education Finance and Policy, 2(4), 341-375. Retrieved from http://www.jstor.org/stable/pdf/educfinapoli.2.4.341.pdf?refreqid=excelsior%3A5bfe5dbc1ebb850941835136efb06d6f.

<sup>©</sup> Cullen, J.P. (2010). A Comparison of the Academic Performance of College Bound High School Students in Regional vs. Community High Schools in Connecticut. Current Issues in Education, 13(2). Retrieved from https://cie.asu.edu/ojs/index.php/cieatasu/article/view/399/116.

<sup>&</sup>lt;sup>9</sup> Baker, B.D., & Geller, W.I. (2015). When is Small Too Small? Efficiency, Equity and the Organization of Vermont Public Schools. New Brunswick, NJ: Rutgers University, Department of Educational Theory, Policy & Administration. Retrieved from http://education.vermont.gov/sites/aoe/files/documents/edu-bbaker-vt-consolidation-march2-20152.pdf.

<sup>&</sup>lt;sup>10</sup> Donis-Keller, C., O'Hara-Miklavic, B., & Fairman, J.C. (2013). Improving Educational Opportunity and Equity through School District Consolidation in Maine. *Maine Policy Review*, 22(2). Retrieved from https://digitalcommons.library.umaine.edu/cgi/viewcontent.cgi?article=1609&context=mpr.