Anticipating the Consequences of School District Consolidation in Major Metropolitan Areas
A Simulation Based on Cost Function Analysis

Executive Summary

August 2014

Prepared for

The University of Texas at Dallas Education Research Center and
The Texas Education Agency

Prepared by

Lori L. Taylor\textsuperscript{a}, Timothy J. Gronberg\textsuperscript{b}, Dennis W. Jansen\textsuperscript{b} and Mustafa U. Karakaplan\textsuperscript{c}

\textsuperscript{a} Bush School of Government and Public Service, Texas A&M University
\textsuperscript{b} Department of Economics, Texas A&M University
\textsuperscript{c} Center for Persons with Disabilities, Utah State University
The authors thank the University of Texas at Dallas Education Research Center for research support on this project. All views expressed are those of the authors alone. The conclusions of this research do not necessarily reflect the opinion or official position of the Texas Education Agency or the State of Texas.

Copyright © Notice. The materials are copyrighted © and trademarked ™ as the property of the Texas Education Agency (TEA) and may not be reproduced without the express written permission of TEA, except under the following conditions: (1) Texas public school districts, charter schools, and Education Service Centers may reproduce and use copies of the Materials and Related Materials for the districts' and schools' educational use without obtaining permission from TEA; (2) residents of the state of Texas may reproduce and use copies of the Materials and Related Materials for individual personal use only without obtaining written permission of TEA; (3) any portion reproduced must be reproduced in its entirety and remain unedited, unaltered and unchanged in any way; and (4) no monetary charge can be made for the reproduced materials or any document containing them; however, a reasonable charge to cover only the cost of reproduction and distribution may be charged. Private entities or persons located in Texas that are not Texas public school districts, Texas Education Service Centers, or Texas charter schools or any entity, whether public or private, educational or non-educational, located outside the state of Texas MUST obtain written approval from TEA and will be required to enter into a license agreement that may involve the payment of a licensing fee or a royalty. For information contact: Copyrights Office, Texas Education Agency, 1701 N. Congress Ave., Austin, TX 78701-1494; phone 512-463-9041; email: copyrights@tea.state.tx.us.
Executive Summary

Senate Bill (SB) 2 (83rd Texas Legislature, Regular Session) added Section 12.1013 to the Texas Education Code (TEC). Among other provisions, this new section requires the Texas Education Agency (TEA) to provide “an analysis of whether the performance of matched traditional campuses would likely improve if there were consolidation of school districts within the county in which the campuses are located.” The new section further clarifies that the analysis requirement “applies only to a county that includes at least seven school districts and at least 10 open-enrollment charter schools.” This report represents the required analysis of the potential gains from school district consolidation in the five counties that match that description—Bexar, Dallas, Harris, Tarrant and Travis.

Consolidation of all of the school districts in each of these five counties would create new districts that are very large by Texas and national standards. With an enrollment of just over 803,000 students, the consolidated Harris County Independent School District (ISD) would be the second largest school district in the country (behind only New York City Schools). The consolidated Dallas County ISD (enrollment 437,642) would be the fourth largest school district in the country, ahead of the Chicago Public School system, but smaller than Los Angeles Unified School district (which would be the third largest district). The consolidated Tarrant County ISD (enrollment 341,855) and Bexar County ISD (enrollment 321,072) would be the nation’s seventh and eighth largest districts, respectively. Even the consolidated Travis County ISD (enrollment 145,846) would be among the 20 largest districts nationwide.

Texas has no historical experience with consolidation on such a grand scale. There have been only 20 school district consolidations in Texas since 1994–95. In all but two of the 20 cases (Wilmer-Hutchins ISD and North Forest ISD) the consolidation folded a single-campus district into another, larger district. None of the consolidations involved more than two districts.

Given the lack of historical precedents, anticipating the likely effects of consolidation requires a simulation based on a formal analysis of the relationship between school student achievement and school district size. The simulation presented here uses cost function analysis to answer two key questions:

1. To what extent do the mergers lower the expected per-pupil cost of education?
2. To what extent do the mergers lower the expected efficiency of the affected districts?

Consolidation is expected to reduce the cost of education because research has demonstrated that the per-pupil cost of operating a very small school district is much higher than the per-pupil cost of operating a larger district. Consolidation is expected to increase inefficiency because research has also demonstrated that school districts tend to be more efficient (in the sense that they are able to produce higher student performance from the same level of resources) when there is more choice, and consolidation clearly reduces school choice.
The analysis supports three key findings.

- Cost savings can be expected for consolidations involving small districts, but as the size of the consolidated district increases past 3,200 students, costs are expected to rise, not fall.
- Competitive pressure leads to greater school district efficiency in Texas, so any consolidation is expected to lead to a loss of school district efficiency.
- There are no expected cost savings from any of the targeted consolidations under analysis. Consolidation in the designated counties increases the predicted expenditure per pupil by 6.5% in Bexar County, 4.9% in Dallas County, 4.1% in Harris County, 6.1% in Tarrant County, and 2.8% in Travis County. Expenditures are also expected to rise in the rest of their metropolitan areas (due to the loss of competition in those education markets).

Importantly, this simulation has been constructed assuming that the consolidated, countywide school districts did not close any campuses in the wake of consolidation. That is a reasonable assumption given the political difficulties associated with closing a viable, neighborhood school, and the near impossibility of accurately predicting the nature of any school-level consolidations. After all, most of the districts in the potentially consolidating counties already have the option of campus consolidation, and have chosen not to use it. However, it is likely that at least some campuses in the new, countywide school districts will be eliminated, allowing the average campus size to grow. The cost function analysis indicates that there can be substantial cost savings from campus consolidation. (If nothing else changes, combining two 200-student campuses into one 400-student campus, for example, is expected to reduce operating costs by 14%, on average.) Therefore, the simulation likely overstates somewhat the increase in expenditures post consolidation for Bexar, Dallas, Harris, Tarrant and Travis counties.

Given the lack of cost savings under the simulation, it is highly unlikely that performance would improve if there were consolidation in the designated counties. While there are many counties in Texas where all of the districts are sufficiently small to gain from consolidation, the existing districts in the specific counties under analysis already enjoy substantial economies of scale and would lose important incentives to behave efficiently were they to be consolidated. There is no reason to believe that this proposal would lead to improvements in student performance, and good reason to believe student performance would fall. The bottom line is that bigger is not always better in Texas.