Estimating the Cost of an Adequate Education in Minnesota

EXECUTIVE SUMMARY

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BACKGROUND

If Minnesota’s students are to meet state and federal performance requirements, districts will have to be supported with the adequate funding to do so. This report, prepared at the request of P.S. Minnesota, seeks to determine the cost of an adequate education as defined by federal and state performance expectations. It is expected that this data will be used to create a funding formula rationally linked to student performance.

In 2003, Minnesota Governor Tim Pawlenty created a 19-member task force and charged them with undertaking an education funding reform study. The task force enlisted the help of Management, Analysis and Planning, Inc. (MAP) and the study was completed in 2004. In 2005, the Association of Metropolitan School Districts (AMSD), the Minnesota Rural Education Association (MREA), and Schools for Equity in Education (SEE) contracted with national school finance expert John Myers of Augenblick, Palaich and Associates (APA) in a phase one report to examine the task force results. APA, using widely accepted methodologies, determined the resources necessary to ensure that each public school student is educated to meet the federal and state performance expectations. The results of that initial research effort are available under a separate cover.

The current study by APA, a phase two effort, seeks to accomplish several objectives. It further quantifies the “base” costs associated with meeting state and federal requirements as well as the adjustments needed for individual students who are at risk or have special needs. It examines district adjustments to recognize cost differentials that are largely beyond the control of a school district. Capital, food service, community services, adult education and transportation costs are not included in this analysis.

APA used two different methods to come up with a base cost which can be applied to all students. The first model APA used was the Professional Judgment (PJ) analysis undertaken by the Governor’s task force; in that approach, several panels of experienced educators specified the resources needed to meet Adequate Yearly Progress (AYP) standards. The PJ method seeks to project funding needed to meet 2013-14 AYP and calculates weights for students with special needs. APA used the PJ data from the MAP study to generate a per pupil cost as well as weights for special needs students. APA then compared the findings to data generated with an additional research tool--an evidence-based approach focusing on actual costs--to determine the plausibility of those findings. The resultant base cost was $5,938. This sum is represented in 2004-05 dollars using the Minneapolis-St. Paul CPI to adjust the original figure. Weights were determined at 1.0 for special education, 0.75 for at-risk students, and 0.90 for LEP.

The second method used was the Successful Schools approach in which APA looked at actual per pupil spending in districts currently meeting and on target to meet the 2008-09 Minnesota No Child Left Behind Adequate Yearly Progress standards in math and reading. In order to be identified for analysis, districts must also have met the 2004-05 reading and math AYP objectives for at least two of the six special needs populations identified (special education, at-risk pupils and English language learners). APA then eliminated any districts with incomplete financial data and used statistical filters to remove those with spending that varied more than one standard deviation above the mean in the areas of instruction and administration as well as
maintenance and operations. When inflated to the 2004-05 year, using the Minneapolis-St. Paul CPI, the base cost for SS was $5,359.

APA then sought to explore the additional costs that districts might incur as a result of differences in cost of living, remoteness, and district size in order to add weights to the formula where necessary. Three statistical analyses were used in this work. The first was the development of a Location Cost Metric (LCM) which recognizes cost differentials related to the cost of living as well as the cost of hiring and retaining personnel. The LCM index reflects both the county-level labor market and the larger labor market of the economic development region. In the metropolitan area, adjustments are also made by county based on housing costs and their share of a household budget.

The second statistical analysis looked at the impact of remoteness using both internal and external measures. The internal cost of remoteness is measured using the cost of transportation per student. The external cost of remoteness is the mileage to St. Paul or another large city where professional development opportunities are likely to be available. The analysis finds that the direct costs of remoteness are relatively small while indirect costs are more significant. The research finds that since the cost associated with remoteness is largely indirect, the other adjustments recommended throughout the report address the issue. However, this is only the case if the costs associated with transportation are adequately addressed for each district. As importantly, this assumption is dependent on the inclusion of a District Size Adjustment.

The District Size Adjustment is recommended to recognize economies of scale challenges and limited purchasing power of smaller districts. Because the MAP study had no PJ data to draw upon, APA examined the data from recently conducted adequacy studies from states similar to Minnesota. APA concluded that a three-state average was best supported by research. That statistical adjustment was used through the rest of the report.

**FINDINGS**

APA uses both the SS and PJ base costs, as well as the recommended individual student weights and district adjustments, to compare the cost of adequacy to actual 2004-05 spending. The analysis removes operating referendum revenue and charter school data to arrive at an analysis that is not skewed by either factor. The resultant findings represent a comparison based on funding provided by the state.

Costs excluded from all findings were capital, transportation, and food service. Examined costs included the 341 districts from which APA had full data. The districts were divided into five size categories for comparison. The base, special education, at-risk, and LEP costs were also broken down. An examination of all districts revealed that a small number of schools are spending more than the amount needed for adequacy and some are spending below the adequacy levels. The numbers reflect that those spending more would be held harmless with the state focusing on bringing districts below adequacy up to standard. Those few districts spending above adequacy fell into all size categories.
The following charts summarize costs as determined under both the Successful Schools and Professional Judgment models. These costs do not include charter schools or operating referendum dollars; they do include LCM adjustments.

<table>
<thead>
<tr>
<th>Successful Schools</th>
<th>Professional Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Charters and Referendum Spending, With LCM</td>
<td>Without Charters and Referendum Spending, With LCM</td>
</tr>
<tr>
<td>Aggregate Cost</td>
<td>Aggregate Cost</td>
</tr>
<tr>
<td>$8,619</td>
<td>$9,550</td>
</tr>
<tr>
<td>Total Spending</td>
<td>Total Spending</td>
</tr>
<tr>
<td>$6,905,465,229</td>
<td>$7,651,374,050</td>
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<tr>
<td>Difference</td>
<td>Difference</td>
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<tr>
<td>$1,041,548,300</td>
<td>$1,787,457,121</td>
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</table>

**NEXT STEPS**

This report provides research-based methods for Estimating the Cost of an Adequate Education in Minnesota. It offers a short-term cost analysis generated under the SS approach as well as a long-term projection developed through the PJ approach. The report provides important information to state policymakers as they work toward reforming Minnesota’s education funding system.

This report does not make specific recommendations as to the source of funding; the mix between state and local resources is a policy-level decision. It also does not address or recommend how the state might make a transition to a new funding system. Exactly how weights are applied for special needs students must still be addressed. Several other issues were beyond the scope of this report. Declining enrollment and the impact of student mobility on district costs are typically addressed in an adequate funding solution. Finally, to ensure full adequacy, there would have to be an analysis of real capital and transportation costs.

It is clear from this research that if Minnesota is to continue to progress toward ensuring that all students meet federal and state performance expectations, it must significantly increase its investment in education. As importantly, any resultant funding formula must be rationally linked to student needs. This research can provide a foundation for that formula.