Informational Issue: School Finance Funding Case Studies

The school finance formula directs the distribution of total program funding to Colorado school districts based on factors designed to recognize the characteristics of each school district, such as the local cost of living, the district’s enrollment, and the number of at-risk students. However, the combination of the negative factor, variations in local property wealth and resulting local revenues, and local mill levy overrides can result in funding levels that may or may not closely resemble the funding anticipated in the school finance formula. Such variations raise points to consider in discussions of the adequacy and equity of education funding in Colorado.

SUMMARY:

- The school finance formula begins with a statewide base per pupil funding amount and then adjusts the base using several factors to recognize the characteristics of each school district. The formula yields a per pupil funding amount for each school district, which is then multiplied by the school district’s funded pupil count to produce the district’s “total program funding.” The negative factor then reduces total program funding to reach the level of state funding available for school finance.

- As shown by a review of illustrative school districts from FY 2014-15, the combination of the negative factor, variations in local property wealth (and resulting local school finance revenues), and the availability of mill levy override moneys can produce some surprising funding amounts for each district that do not closely resemble the funding anticipated in the school finance formula.

DISCUSSION:

Background – The School Finance Formula

The school finance formula, established in the School Finance Act of 1994, directs the distribution of total program funding to Colorado school districts using factors designed to recognize the individual characteristics of each school district. Specifically, the formula considers district size (enrollment), the local cost of living, and the number and percentage of pupils considered by the School Finance Act to be at risk of failing or dropping out of school. The formula includes four major components: (1) preliminary per pupil funding (addressing district size, cost of living, and personnel costs); (2) at-risk funding; (3) online/ASCENT funding which provides a flat per pupil amount for students attending multi-district online schools and for students participating in the ASCENT program; and (4) the negative factor, first implemented in FY 2010-11.

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11 This issue paper and the companion appendix draw from two separate documents: (1) the April 2015 Legislative Council Staff publication “School Finance in Colorado” available at: https://www.colorado.gov/pacific/cga-legislativencouncil/school-finance and (2) the July 2015 Department of Education publication “Understanding School Finance and Categorical Funding” available at: https://www.cde.state.co.us/cdefinance/fy2015-16brochure
Preliminary Per Pupil Funding

Statewide base per pupil funding is the starting point for the school finance formula. The General Assembly specifies statewide base per pupil funding in law each year. Article IX of Section 17 of the Colorado Constitution (Amendment 23) requires the General Assembly to increase statewide base per pupil funding by at least the rate of inflation each year. For example, for FY 2015-16, the General Assembly was required to increase the statewide base per-pupil funding amount by at least $171 (from $6,121 to $6,292, or 2.8 percent), based on the actual 2.8 percent increase in the Denver-Boulder consumer price index in calendar year 2014. Given an estimated funded-pupil count of more than 855,000, the General Assembly was thus required to provide a minimum of $5.4 billion in state and local funds for base per pupil funding in FY 2015-16, equal to 86.3 percent of the $6.2 billion in total program funding.

The formula then adjusts the statewide base per pupil amount to calculate a preliminary per pupil funding amount for each district based on the individual district’s characteristics. Specifically, the preliminary per pupil funding amount accounts for: (1) district enrollment (size) to account for school districts’ lack of economies of scale; and (2) the cost of living in a school district based on the need to recruit, hire, and retain qualified personnel.

- **Enrollment:** Districts’ pupil counts are based on the annual October 1 count date. Because the October 1 count date is three months into the state fiscal year and the final count information is not available to the Department and the General Assembly until December, the initial school finance appropriation for each year is based on forecast pupil count information and then modified at mid-year through the supplemental process to reflect actual pupil counts. For FY 2014-15 the statewide funded pupil count was 844,528 funded pupils. That year, school districts’ actual pupil counts ranged from 11.5 in Agate to 84,044 in Denver. Please note that while multiple school districts had actual pupil counts below 50.0 student in FY 2014-15, current law (section 22-54-103 (7) (e) (VI), C.R.S. as enacted in S.B. 13-260 (School Finance)) funds any district with less than 50.0 student FTE as though it has 50.0 FTE. As a result, Agate and the other districts with fewer than 50.0 pupils have 50.0 funded pupils. And finally, for school districts that have declining enrollment, the funded pupil count is the greater of the current enrollment or enrollment averaged over a period of up to five years.

- **Size Factor:** The size factor provides additional funding per pupil to smaller districts to account for a lack of enrollment-based economies of scale. Section 22-54-104 (5) (b) (1.5), C.R.S., directs the calculation of each district’s size factor. For FY 2014-15, size factors ranged from 1.0297 for school districts with 4,023 or more pupils to 2.3958 for the smallest districts (those funded based on the 50.0 pupil floor). The size factor is a major driver of per pupil funding for smaller districts. Because the most affected districts are small, however, the impact on overall total program funding is more limited (the size factor represented roughly 4.3 percent of total program funding in FY 2014-15, prior to the application of the negative factor).

- **Cost of Living:** The cost of living factors are not specified in statute but Section 22-54-104 (5) (c), C.R.S. specifies the method for calculating the factors. Every two years,
Legislative Council Staff contracts for a study that measures the cost of an identical set of items (such as housing, goods, services, and transportation) in each school district throughout the State. The 2013 study dictates the cost of living factors for FY 2014-15 and FY 2015-16. Legislative Council Staff has contracted for the 2015 study which will affect FY 2016-17 and FY 2017-18. For FY 2014-15 and FY 2015-16, the cost of living factor ranged from 1.011 (a 1.1 percent adjustment) to 1.650 (a 65.0 percent adjustment). The cost of living factor accounted for an estimated 14.6 percent of total program funding in FY 2014-15, prior to the application of the negative factor.

- **Personnel Costs Factor:** The formula recognizes that larger (enrollment) school districts generally spend a greater share of their budget on personnel while other fixed costs generally make up a greater share for smaller school districts. Because the cost of living factor is directly related to personnel, the formula only applies the cost of living factor to estimated personnel costs. Section 22-54-104 (5) (d), C.R.S., specifies the method for calculating the personnel costs factor for each district. For FY 2014-15 and FY 2015-16, personnel costs factors ranged from 79.92 percent to a maximum of 90.50 percent. Each district’s “non-personnel costs factor” (the share of base funding that is not modified by the cost of living factor) is the difference between 100.0 percent and the personnel costs factor and ranges from 9.50 percent to 20.08 percent in FY 2014-15 and FY 2015-16.

Using these factors, the formula calculates preliminary per pupil funding using the following formula:

\[
\text{Preliminary Per Pupil Funding} = \frac{\left(\text{Statewide Base} \times \text{Personnel Costs Factor} \times \text{Cost of Living Factor}\right) + \left(\text{Statewide Base} \times \text{Non-personnel Costs Factor}\right)}{\text{District Size Factor}}
\]

**At-Risk Funding**

The formula builds on the preliminary per pupil funding (calculated above) to add funding for school districts that serve students considered to be at risk of dropping out of school. The School Finance Act defines at-risk students to include two groups: (1) students eligible for free lunch based on family income (not necessarily those participating in the free lunch program); and (2) certain English language learners. An individual student may only be counted as at-risk once. As with the funded pupil count, the original appropriation is based on forecasts of the at-risk population in each school district, which is then “trued up” through the annual October 1 count.\(^{12}\)

School districts receive funding based on both the number of at-risk students in the district (the count) and the proportion of at-risk students in the district.

- **At-Risk Count (Base):** As a base, each school district receives at-risk funding equal to 12.0 percent of the preliminary per pupil funding calculated above for each at-risk student.

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\(^{12}\) The at-risk count for each district is the greater of either the actual at-risk count (based on free lunch eligibility) or the projected K-12 proportion of at-risk students based on the actual count of grades K-8 because free lunch eligibility data is less likely to be complete for high schools.
At-Risk Proportion (Concentration): School districts with a greater proportion of at-risk students than the state average (37.1 percent in FY 2014-15) receive a “premium” for each student above the statewide at-risk proportion. Specifically for each percentage point above the statewide average, the formula allocates an additional 0.3 percent of the preliminary per pupil funding amount for districts with less than 50,000 pupils and 0.36 percent for districts with enrollment greater than 50,000.

\[
\text{At-Risk Funding} = \text{At-Risk Pupils} \times 12.0\% \times \text{Preliminary Per Pupil Funding} + \text{At-Risk Premium}
\]

It is worth noting that because at-risk funding is based on the preliminary per pupil funding school districts with higher preliminary per pupil funding receive a larger amount per at-risk pupil.

Online and ASCENT Funding
As discussed above, the School Finance Act funds multi-district online and ASCENT students at a flat rate per pupil each year. In FY 2014-15, the formula provided $7,381 per pupil for these groups prior to the application of the negative factor (which is discussed in greater detail below).

Total Program Funding – Before the Negative Factor
Preliminary per pupil funding, at-risk funding, and online/ASCENT funding provide the basis for each district’s total program funding prior to the application of the negative factor. Prior to the implementation of the negative factor in FY 2010-11, the following formula produced the end result of total program calculations under the school finance formula.

\[
\text{Total Program Funding} = (\text{Preliminary Per Pupil Funding} \times \text{Funded Pupil Count}) + (\text{At-Risk Funding}) + (\text{Online and ASCENT Funding})
\]

The Negative Factor
First implemented as the “state budget stabilization factor” in FY 2010-11 and later renamed the “negative factor,” the negative factor reduces each school district’s total program funding by a fixed percentage. In FY 2014-15 (the focus of this issue paper), the negative factor reduced each district’s total program funding by 13.0 percent (a total of $880.2 million statewide). However, as will be illustrated below, the negative factor can only reduce state funding. As a result, for school districts receiving less state funding, the reduction is limited to the state share.

FY 2014-15 School Finance Examples
While the Committee’s budget discussions necessarily focus on statewide total program funding as the largest single use of General Fund in the state budget, a focus on statewide funding can obscure variations in the funding available to individual school districts. The combination of the negative factor, variations in property wealth and the resulting availability of local revenues, and
the use of local mill levy overrides can create funding scenarios that may not align with expectations based on the school finance formula alone.

As an illustration, this issue paper focuses on school finance funding for five illustrative school districts from FY 2014-15, the most recent year for which all of the relevant data are available. While this issue paper discusses the districts’ characteristics and resulting funding levels, Appendix E walks through the actual school finance formula calculations for the case study districts. To illustrate the workings of the school finance formula and the related issue of local mill levy overrides, staff selected the following five districts: Clear Creek, Denver, Hinsdale, Mesa County Valley, and Weld-Pawnee.

- **Clear Creek** provides a relatively small mountain district with high enough assessed value to entirely fund total program solely with local revenues. Cost of living, and to a lesser extent the size factor, are drivers of the districts’ total program funding.

- **Denver** is the largest enrollment school district in the State and also has a relatively high proportion of at-risk students. Cost of living and at-risk funding are drivers of the districts’ budget.

- **Hinsdale** (Lake City area) is a small enrollment mountain district without sufficient local revenues to fund total program without a state share. Because of its small enrollment, the size factor is the major driver of total program funding.

- **Mesa County Valley**, on the Western Slope, is a minimum/floor funded district.

- **Weld-Pawnee**, in Weld County, is a small eastern plains district with relatively high but volatile local revenues that in some years can fund total program entirely with local revenues.

The following table summarizes the major (school finance related) characteristics of each example school district.

<table>
<thead>
<tr>
<th>FY 2014-15 School Finance Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School District</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Clear Creek</td>
</tr>
<tr>
<td>Denver</td>
</tr>
<tr>
<td>Hinsdale</td>
</tr>
<tr>
<td>Mesa County Valley</td>
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<tr>
<td>Weld-Pawnee</td>
</tr>
</tbody>
</table>

*For comparison purposes, 37.1 percent of pupils statewide were considered at-risk in FY 2014-15.

**Total Program Funding and the Negative Factor**

The school finance formula produces a per pupil funding amount for each district based on the various factors described above. Multiplying that per pupil amount by the funded pupil count generates each district’s total program funding. In general, the smallest districts (in terms of
enrollment) tend to receive the largest per pupil amounts as a result of the size factor. However, the enrollment of large districts results in higher total funding.

After calculating total program per pupil funding (and the resulting total program funding), the School Finance Act applies the negative factor as a percentage reduction to reach the available level of state funding. As discussed above, the negative factor can only reduce state funding. In FY 2014-15, the negative factor as appropriated was 13.0 percent. However, districts with less than 13.0 percent of funding coming from the state share did not experience the full reduction.

As shown in the following table, Clear Creek (which was entirely locally funded under the formula) did not see any reduction, and Weld-Pawnee saw a minimal reduction in FY 2014-15. Conversely, the other three case study districts absorbed 13.0 percent reductions.

<table>
<thead>
<tr>
<th>School District</th>
<th>Funded Pupil Count (A)</th>
<th>Total Program Formula Per Pupil Funding (B)</th>
<th>Total Program Funding Before Negative Factor (C) = (A)* (B)</th>
<th>Negative Factor Reduction (D)</th>
<th>Final Total Program Funding (E) = (C)+(D)</th>
<th>Final Per Pupil Funding (F) = (E)/(A)</th>
<th>Negative Factor as Percentage of Total Program Funding (F) = (D)/(C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Creek</td>
<td>866.9</td>
<td>$8,541</td>
<td>$7,404,272</td>
<td>$0</td>
<td>$7,404,272</td>
<td>$8,541</td>
<td>0.0%</td>
</tr>
<tr>
<td>Denver</td>
<td>84,044.2</td>
<td>8,451</td>
<td>710,242,434</td>
<td>(92,097,835)</td>
<td>618,144,600</td>
<td>7,355</td>
<td>-13.0%</td>
</tr>
<tr>
<td>Hinsdale</td>
<td>87.9</td>
<td>16,609</td>
<td>1,459,911</td>
<td>(189,308)</td>
<td>1,270,603</td>
<td>14,455</td>
<td>-13.0%</td>
</tr>
<tr>
<td>Mesa County Valley</td>
<td>21,677.2</td>
<td>7,660</td>
<td>166,055,549</td>
<td>(21,532,586)</td>
<td>144,522,963</td>
<td>6,667</td>
<td>-13.0%</td>
</tr>
<tr>
<td>Weld-Pawnee</td>
<td>80.4</td>
<td>16,125</td>
<td>1,296,446</td>
<td>(179)</td>
<td>1,296,267</td>
<td>16,123</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

For the purposes of this discussion, it is worth noting that two similar districts in terms of enrollment, cost of living, and at-risk funding (Hinsdale and Weld-Pawnee) experienced quite different funding scenarios in FY 2014-15. Prior to the application of the negative factor, Hinsdale’s per pupil funding was $484 higher than Weld-Pawnee. However, after application of the negative factor, Hinsdale’s per pupil funding had dropped $1,668 below Weld-Pawnee.

**Mill Levy Overrides**

Current law (Sec. 22-54-108, C.R.S.) allows local school districts, with the approval of voters, to use mill levy overrides to provide additional funding for education, up to a maximum of $200,000 per year or 25.0 percent of district total program funding, whichever is greater. The school finance formula does not consider local mill levy overrides in any way. However, the mill levy overrides addressed here provide funding for the same basic purposes as total program funding and provide a significant amount of funding statewide (116 districts collected $826.5 million in FY 2014-15). As a result, while overrides are not part of the school finance formula, they do provide significant funding to many school districts and may be another useful factor to consider in an analysis of school district funding.

13 Pursuant to H.B. 15-1321 (Flexibility and Funding for Rural School Districts), “small rural” districts may collect up to 30.0 percent of total program funding, or $200,000, whichever is greater.
As shown in the following table four of the districts analyzed in this issue paper collected override revenues in FY 2014-15. Of the five example districts, Hinsdale was the only district that did not do so (a total of 62 out of 178 districts statewide did not collect override revenues that year).

### FY 2014-15 Mill Levy Overrides

<table>
<thead>
<tr>
<th>School District</th>
<th>Total Program After Negative Factor (A)</th>
<th>FY 2014-15 Override Revenue (B)</th>
<th>Override Revenue as Percent of Total Program (C) = (B) / (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Creek</td>
<td>$7,404,272</td>
<td>$1,839,264</td>
<td>24.8%</td>
</tr>
<tr>
<td>Denver</td>
<td>618,144,600</td>
<td>131,109,742</td>
<td>21.2%</td>
</tr>
<tr>
<td>Hinsdale</td>
<td>1,270,603</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mesa County Valley</td>
<td>144,522,963</td>
<td>8,294,016</td>
<td>5.7%</td>
</tr>
<tr>
<td>Weld-Pawnee</td>
<td>1,296,267</td>
<td>129,879</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Staff notes that directly incorporating override revenues into the school finance formula (e.g., reducing the state share of funding to account for override revenues) would raise significant concerns, as the local voters approved the overrides specifically to supplement existing funding. However, for discussion purposes, including override moneys in the consideration of funding further complicates the impact of the negative factor. For example, as shown in the following table and chart, if override revenues are considered for discussion purposes as part of school finance funding, then three of the five example districts (Clear Creek, Denver, and Weld-Pawnee) were funded above the amount called for by the school finance formula prior to the negative factor, with Clear Creek 24.8 percent above the amount called for by the school finance formula. Including override revenues in the analysis reduces the negative factor from 13.0 percent to 8.0 percent in Mesa County Valley. With no override revenues available, Hinsdale remained at 13.0 percent below the school finance formula amount before the application of the negative factor.

### FY 2014-15 Per Pupil Funding with Override Revenues

<table>
<thead>
<tr>
<th>School District</th>
<th>Total Program Per Pupil Funding Before Negative Factor</th>
<th>Per Pupil Funding After Negative Factor</th>
<th>Override Revenue Per Pupil</th>
<th>Per Pupil Funding Including Override Revenue</th>
<th>Percent Change from Per Pupil Funding Before Negative Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Creek</td>
<td>$8,541</td>
<td>$8,541</td>
<td>$2,122</td>
<td>$10,663</td>
<td>24.8%</td>
</tr>
<tr>
<td>Denver</td>
<td>8,451</td>
<td>7,355</td>
<td>1,560</td>
<td>8,915</td>
<td>5.5%</td>
</tr>
<tr>
<td>Hinsdale</td>
<td>16,609</td>
<td>14,455</td>
<td>0</td>
<td>14,455</td>
<td>-13.0%</td>
</tr>
<tr>
<td>Mesa County Valley</td>
<td>7,660</td>
<td>6,667</td>
<td>383</td>
<td>7,050</td>
<td>-8.0%</td>
</tr>
<tr>
<td>Weld-Pawnee</td>
<td>16,125</td>
<td>16,123</td>
<td>1,615</td>
<td>17,738</td>
<td>10.0%</td>
</tr>
</tbody>
</table>
On a statewide basis, staff’s analysis indicates that including override revenues would have set 58 school districts at or above total program funding amounts before the application of the negative factor in FY 2014-15. The remaining 120 districts absorbed varying reductions as a result of the negative factor, even with 58 of the 120 collecting some override moneys in FY 2014-15.

Conclusion and Points to Consider
The confluence of the school finance formula, the negative factor, disparities in local property wealth and the ability to fund schools locally, and the varying availability of mill levy override revenues complicate any discussion of school finance funding, adequacy, and equity in Colorado. Staff offers three illustrative points for the Committee’s consideration:

- First, based solely on the availability of local revenues, otherwise similar school districts according to the factors considered in the school finance formula (e.g., Hinsdale and Weld-Pawnee) have experienced significantly different outcomes in terms of funding under the formula. Staff also notes that those two example districts have experienced different challenges, as Hinsdale has absorbed the entire negative factor each year while Weld-Pawnee (like similar districts with tax bases largely tied to oil and gas) has seen considerable fluctuations in funding from year to year based on oil and gas prices and development.

- Second, differences in the availability of override revenues further complicate discussions of the impact of the negative factor. With the inclusion of override revenues, 58 school districts (including three in the sample addressed in this issue paper)
were funded at or above pre-negative factor levels in FY 2014-15, some of which were well above that level. An additional 58 school districts offset at least a portion of the negative factor reduction with override revenues. Finally, 62 districts did not collect override moneys and absorbed the full 13.0 percent negative reduction in FY 2014-15.

- Finally, any discussion of override revenues is complicated by the varying reasons that districts may have for not collecting override revenues. In some school districts with relatively high assessed value, the district and/or the voters may simply not have the desire to collect (or provide) override revenues. In lower assessed value districts, however, collecting significant revenues may simply not be possible.