Commission on Local Government

Estimate of Local Fiscal Impact

2019 General Assembly Session

In accordance with the provisions of §30-19.03 of the Code of Virginia, the staff of the Commission on Local Government offers the following analysis of the above-referenced legislation:

Bill Summary:

Modernization of public school buildings and facilities. Establishes standards for the design, construction, maintenance, and operation of public school buildings and facilities and allows for a local school division to enter into a lease agreement with a private entity to meet such standards. The bill would allow for net energy metering in public school buildings and facilities. The bill would also authorize the Virginia Resources Authority to provide partial funding for school modernization projects, effective January 1, 2020.

Executive Summary:

Localities have evaluated a negative fiscal impact ranging from \$0.00 - \$156,545,939.00. While this amount appears significant, the specific locality used a methodology based on an existing net zero school in Northern Virginia, and applied those costs and methodology to the eight schools that were constructed in 2017-2018. Consequently, this is not representative of that local school division's specific projected costs. Additionally, it does not factor the amount of costs that could be offset by partial funding from the VA Resources Authority. On the other hand, localities noted that the bill would create additional costs to public school building and facilities, and the costs would be related to upgrading HVAC, roofing, and the replacement of school buildings. Localities also noted that in some circumstances, the bill could also provide a savings to the localities, but this aspect is likely variable and may not reduce overall costs significantly. Other localities noted that the fiscal impact of the bill is indeterminate, but likely significant.

Local Analysis:

Locality: City of Danville Estimated Fiscal Impact: \$0.00

Per Danville Public Schools: Not sure of a quantifiable cost to this. However, it would actually make money available for needed modernization which would be beneficial.

Locality: City of Newport News Estimated Fiscal Impact: \$61,000,000.00

Based on FY 2019 adopted Capital Improvements Plan, and current School Division request, \$11 million would be for four basic HVAC, roof projects (in FY 2020) and \$50 million for a middle school replacement. The City would bond the debt and pay debt service on the amount for an annual debt service estimate of approximately \$4 million.

Locality: City of Norfolk Estimated Fiscal Impact: \$0.00

The impact of this bill will create additional costs to the public school buildings and facilities. School buildings and facilities are an expensive undertaking and it is unknown the exact fiscal impact although it is expected to be significant. The partial funding aspect is variable and not expected to reduce the overall costs significantly.

Locality: Rappahannock County

Estimated Fiscal Impact: \$156,545,939.00

The opportunity to use competitive negotiation may save localities local expenditures in some cases and the legislation's use of the word "may" in 2.2-4303 is appropriate and renders this change moot from an impact that causes additional local expense and may, in some circumstances, provide a savings.

Developments in the area of zero net energy schools has come a very long way, but there is no guarantee that such a school would offer the lowest life cycle cost. The compulsory nature of 22.1-141.1 with the use of the word "shall" including zero-energy design is problematic as there ma be higher life cycle costs. Prescriptive design concepts are best left to localities and their design professionals. In today's time, net zero school structures cannot be guaranteed to offer the lowest long term cost to operate and the capital cost needed to accomplish this will exceed the potential offsetting savings over the life of the energy consumption assets. If net zero construction was economically viable, a mandate would not be required. As written it is impossible to project the fiscal impact, but it could be significant. Changing the language to be suggestive rather than compulsory, by using the word "may" rather than "shall" would eliminate the fiscal impact. The example school in the ASHRAE document "Discovery" has a total cost of \$448/sf ... compared with data available from the VDOE showing an average of \$254/sf for 2017-2018 for elementary schools. There is NO way those other schools will use \$194/sf of energy over the life of the critical mechanical and electrical equipment that was used to make Discovery net zero (PV panels, HVAC, Lighting, etc will have to be replaced in 10-15 years!). Similarly for the building only, Discovery cost \$343/sf compared with the average listed by VDOE of \$201/sf. Assuming a 50,000 square foot school, the total project additional cost based on the referenced numbers could be \$9,700,000 that would have to be saved in energy which MAY cost the typical \$50,000 sf school \$1.50/sf/yr (\$75,000) \$9,700,000/\$75,000 = 129 year break even period! Considered alternatively, to fully recoup the \$9,700,000 over a 15 year period life of mechanical equipment the energy use of the typical/average school built at \$254/sf would have to cost \$12.93/sf/yr ... an absurd amount. In 2017-18 eight schools were built in VA at a total cost of \$204,962,209 ... at the Discovery unit rate the cost would have been \$156,545,939 more.