

MUNICIPAL REPORT: PENNSYLVANIA PUBLIC SCHOOLS

August 12, 2020

COVID-19 Magnifies a Different Type of Cyber Risk for PA Public Schools

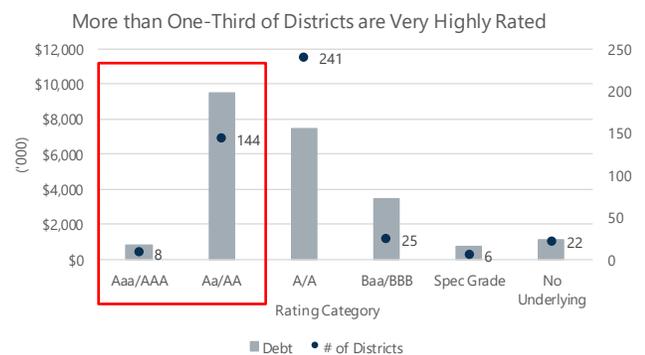
Public K-12 school districts across the country are announcing their back-to-school plans. An increasing number of the country’s largest public schools will not open with in-person instruction, including some of the largest school districts nationwide from California to Florida. Other districts are pushing back start dates, offering blended learning or some type of hybrid based on student preference. Any can reverse course and all are susceptible to statewide public health orders. With many different stakeholders and numerous considerations, the decision to return to the classroom is far from easy.

This report will focus on the potential for increased funding risks to Pennsylvania public school districts from cyber-charter schools. Pennsylvania is unique because it has a developed public cyber-charter option. While traditional public school remains the preferred choice, educating 89% of students in 2020, cyber-charters could take away some market share (and revenue) from districts or brick and mortar charters. This could occur should parents perceive an expertise in the cyber schools or are disappointed with their school’s cyber programming. Uncertainty about the safety of classroom learning in the absence of a vaccine or cure may also increase interest in distance learning longer term, for some families.

The report will also provide an overview of Pennsylvania school districts given the relatively large amount of debt outstanding in the state, totaling nearly \$23 billion across 466 districts. Many school districts are highly rated, as seen in the exhibit, or in a sound position to manage the financial risks stemming from the virus. Unlike higher education or K-12 private schools, revenues for public school districts are not tuition driven nor are seen as competitive enterprises. From a municipal bond perspective, school districts are generally a lower risk sector because revenues are relatively predictable given a high reliance on property taxes as opposed to more economically sensitive sources. However, there are nuances and exceptions to this, and while bondholders benefit from the Commonwealth’s intercept program, understanding the underlying credit quality remains important to evaluating the true risk of a bond.

2019-20 School Year Public School Enrollment		
Type	#	# of students
Public School Districts	499	1,566,855
Vocational-Technical Schools	70	48,904
Brick & Mortar Charter Schools	165	108,290
Virtual/Cyber Charter Schools	14	38,266
Total	748	1,762,315

Source: Selected enrollment by Janney; PA Dept. of Education 2019-20 Public School Enrollment Report (Oct. 1, 2019 reporting period)

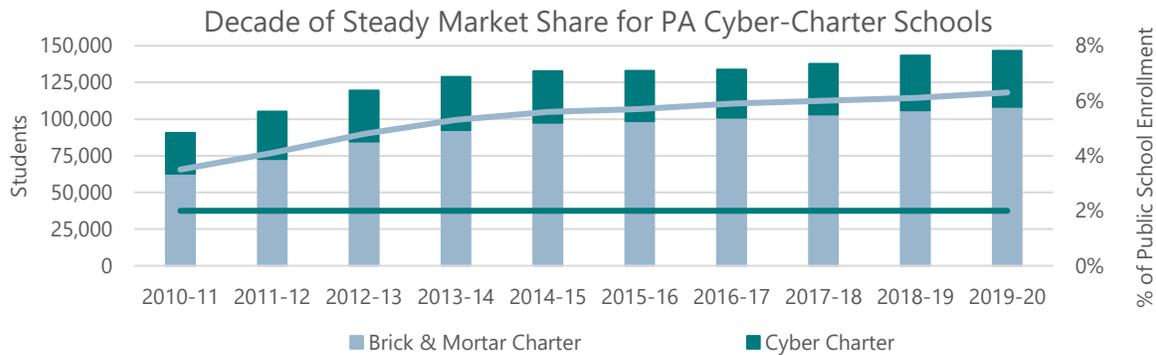


Source: Janney; Bloomberg debt and ratings as of 8-10-2020

Coronavirus Alters Educational Delivery Modes

The COVID-19 pandemic has shifted all education delivery methods in ways unlikely foreseen before this year. While most people would agree that in-person instruction is the ideal learning method for most students, an increasing number of school districts and families are showing a preference for virtual learning. Pennsylvania’s two largest school districts, the School District of Philadelphia and Pittsburgh Public Schools will begin the school year offering online learning for at least a portion of the year. Most districts that are providing just the virtual option do not have the resources (financial, space, logistical, resident/community support, etc.) to also offer in-person instruction while abiding by state guidelines for socially distancing students.

Pennsylvania is among states nationwide as having a sizeable charter school option. Charter schools, privately managed public schools, provide an education alternative at no additional monetary cost to the student. Supporters promote the importance of school choice while opponents say it siphons funding away from traditional public schools. Most states have charter school laws. According to the Education Commission’s January 2020 review, Montana, Nebraska, the Dakotas, and Vermont are the only ones that do not.

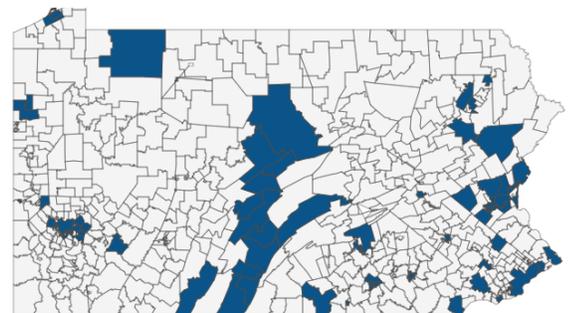


Source: Janney; PA Dept. of Education Enrollment reports for referenced school year as of October 1

While most states have public charter schools, few have public cyber-charter schools. Pennsylvania’s first public cyber-charter began operating in 2003. During the 2019-20 school year, Pennsylvania charters enrolled 146,556 students, of which 26% were students at cyber-charters. As seen in the exhibit, market share for cyber-charters has consistently been 2% of total public school enrollment since 2010. Enrollment at both brick and mortar and cyber-charter schools have increased annually compared to traditional public schools. Traditional public school enrollment is down 7% since 2010, attributable to a shrinking school-age population and students turning to other options, such as charters or private schools.

Brick and mortar charter schools are geographically concentrated in the state, with the majority of charter schools serving the greater Philadelphia and Pittsburgh areas. As seen in the map, just 26 counties have brick and mortar charter schools (shaded in blue), so most public school districts do not have physical charter schools accessible to their students. There are 87 charters in Philadelphia County, enrolling 62% of all brick and mortar charter students. Allegheny County has 22 schools, accounting for 13%. As cyber schools are not limited to geography or physical space, they have the ability to enroll students from every county. In fact, all but one district paid tuition to cyber charter schools in FY 2019. At least historically, lack of demand for a 100% virtual option seems to be the greatest factor limiting cyber school enrollment.

Brick & Mortar Charters Not an Option for Many

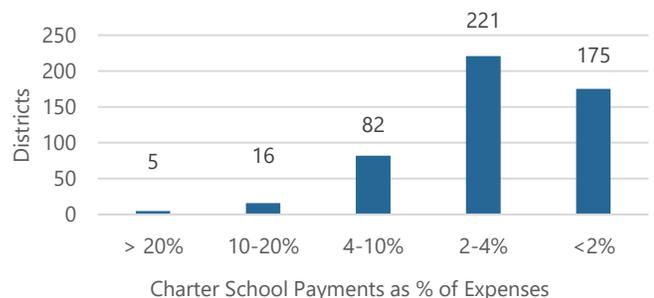


Source: Graphic from Commonwealth Foundation

Shifting Risk: COVID-19 as a Game Changer

Charter schools insert an element of competition to traditional public education, but that competition tends to be manageable for most districts because of either limited availability of physical schools or minimal demand. While the cost to attend charters is “free” to students, the public school districts pay tuition to the public charter school when students opt to enroll there instead of the district. This is true for both brick and mortar charters and cyber-charters. For FY 2019, tuition payments to charter schools totaled over \$2 billion, or 7%, of total expenditures across all districts. Nearly 80% of districts have less than 4% of expenses allocated toward charter schools.

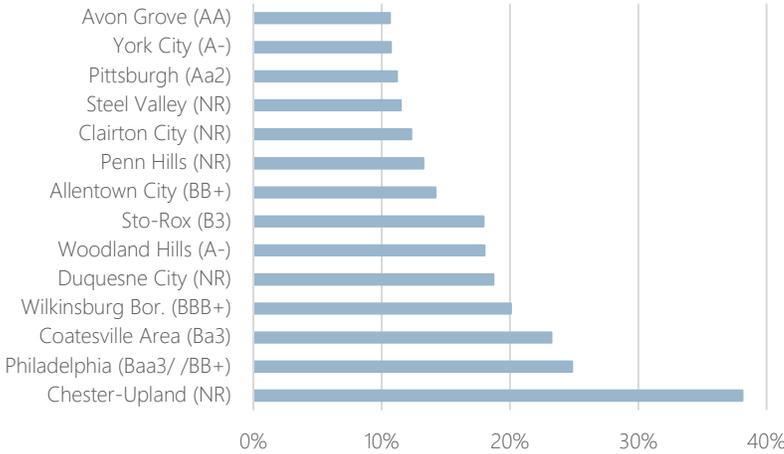
Charters Pose Modest Budget Risk to Most Districts



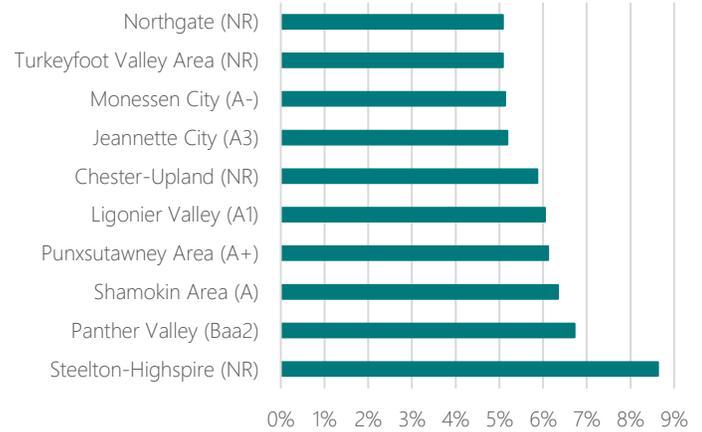
Source: Janney; PA Dept. of Education AFR Tuition Schedule, FY 2019

However, charters pose a material budget risk to some schools. The list of districts below have outsized exposure to charter schools as a percent of expenditures. Notably, 44% of Chester-Upland School District’s expenses were charter school payments (38% traditional brick and mortar and nearly 6% cyber).

Districts with >10% of Budget to Traditional Charters



Top 10 Districts with High Cyber Exposure



Source: Janney; PA Dept. of Education AFR Tuition Schedule, FY 2019; Bloomberg ratings as of 8/11/20
 *Ratings are the actual rating on the district and not an enhanced rating or an insured rating, NR is "not rated"

While Pennsylvania school districts offer online learning programs, enrollment has remained relatively small. Broadly, the addition of cyber-programs has not appeared to recapture students back to the resident district nor has necessarily prepared districts to scale up the program for districtwide distance learning. Developing online programming is an added expense in addition to any tuition paid to cyber-charters. The statewide school closures in Spring 2020 through the end of the school year required all schools to provide remote education, to varying degrees of satisfaction.

Each school district has an expense per pupil calculated from its average daily membership, which serves as the basis of a statutory funding formula for charter schools. The median expense per student for Pennsylvania districts is \$17,750 for FY 2019. The funding levels are adjusted to deduct certain expenses for transportation, facilities, debt service, special education, and other programs (listed in Section 1725-A(a)2) for the regular education rate. For special education students, those expenses are factored back in to determine the special education student rate. Interestingly, the rate a district pays per student is the same for a brick and mortar charter or cyber-charter. Over the years, the State’s governors and members of the legislature have introduced policy to amend the funding formulas for both types of charter schools. Many of the recommendations propose to reduce the per pupil cost a district pays, particularly for the cyber schools which are seen as having a lower cost structure. Charter schools receive very modest state funding - nearly all of the funding is from school districts.

Cyber-Charters Vary in Size

Cyber-Charter Name	Enrollment
Pennsylvania Cyber CS	9,856
Commonwealth Charter Academy CS	9,294
Agora Cyber CS	5,143
Reach Cyber CS	3,393
Pennsylvania Leadership Charter School	3,055
Pennsylvania Virtual CS	1,996
Insight PA Cyber CS	1,852
21st Century Cyber CS	1,270
Pennsylvania Distance Learning CS	811
Achievement House CS	588
Esperanza Cyber CS	445
ASPIRA Bilingual Cyber Charter School	345
Central PA Digital Learning Foundation CS	142
Susq-Cyber CS	76

Source: Janney; PA Dept. of Education 2019-20 Public School Enrollment Report (Oct. 1, 2019 reporting period)

Primer on Pennsylvania School Districts

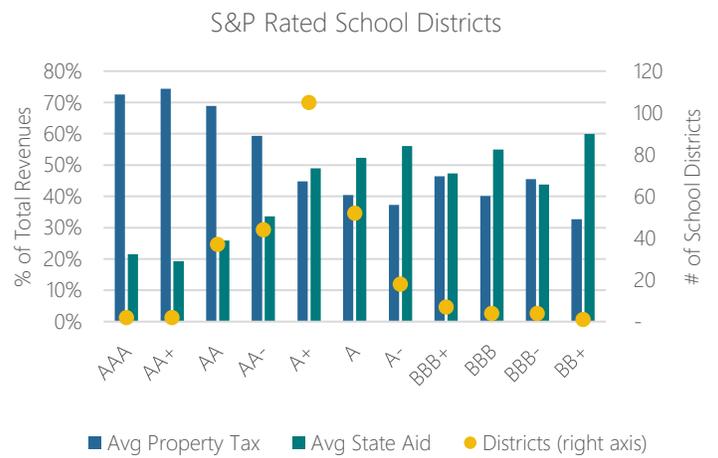
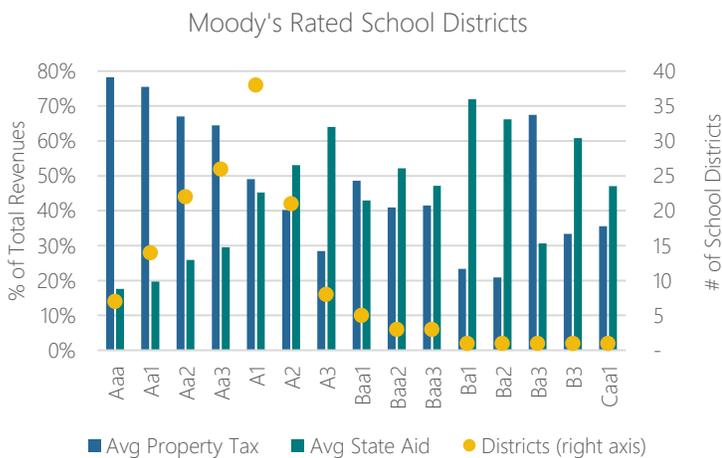
The public school districts in Pennsylvania mainly receive funding from local taxes and state aid, having a median reliance on these sources of 53% and 42%, respectively. Property taxes account for the largest portion of local funding at a median 40%, but districts also have the authority to levy a mix of local taxes defined in [Act 511](#), which include taxes on earned income, real estate

transfers, businesses, and others. The earned income tax generates the most revenue from Act 511 taxes, which all but 35 districts levy, for a median 5% of revenue.

Wealthier districts have less dependence on state funding, accounting for as low as 12% of total revenue as compared to a handful of districts which receive more than 75% of revenue from the state. There is less funding risk for schools that receive most of their revenue from local taxes, particularly property taxes, rather than the state. Investors can take some solace that even in difficult economic times public education remains among the top priorities for many states, but as a large expenditure for state budgets reductions to school districts is typical. Pennsylvania’s interim spending plan holds funding for education flat for the 2021 fiscal year, but given drops in revenue because of staggeringly high unemployment and reduced consumption, the likelihood of future reductions beyond 2021 is high.

School District Credit Quality

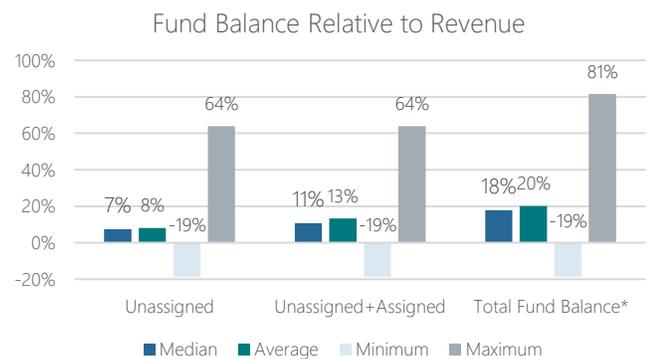
The charts below illustrate the correlation between revenue dependence and credit quality. The majority of Pennsylvania school districts have just one underlying rating on the credit quality of the district as opposed to a rating that represents an insurance provider or the State’s intercept program. Only five districts have two underlying ratings on their newest issued debt, including the School District of Philadelphia rated by Moody’s and Fitch. Twenty-two districts do not have underlying ratings, totaling \$1 billion of debt, but have insurance or intercept ratings. Moody’s and S&P are the primary rating agencies of school districts in Pennsylvania. Moody’s rates 152 districts with total debt of \$11.7 billion. S&P rates 276 districts with debt totaling \$10.7 billion.



Source: Janney; Bloomberg, FY2019 financials and ratings current as of 8-10-20

By number of issuers, the most common rating for Pennsylvania school districts is A1/A+, with debt of \$4.4 billion across 142 districts. Approximately, 95% of these issuers have bond insurance; most debt on districts rated A1/A+ and below have insurance, according to information collected from Bloomberg’s database.

Districts historically maintaining balanced budgets, having adequate reserves for budget variances or cash flow, and manageable debt burdens have less exposure to credit quality deterioration. Janney approaches credit analysis on an issuer-by-issuer basis, in that some strengths in some metrics may offset weaknesses in other metrics. The exhibit shows the various measures of fund balances relative to revenues, which helps assess an issuers’ ability to manage a thin or weak budget year. This data could serve as a reference point to compare a fund balance cushion of a particular school district in Pennsylvania to the median or average of all districts.



Source: Janney; PA Dept of Education Fund Balance report FY 2019

*Total Fund Balance: Committed, Assigned, and Unassigned Balances

State and district specific expense concerns of pension/other postemployment benefits, special education, mental health, and charter school competition, will persist with or without the pandemic. However, there could be increased budget stress from cyber-charters than previously. Cybersecurity risk, the more traditional cyber risk that comes to mind for municipal credit, will also be a focal point for districts and all municipal issuers to manage especially as austerity measures may include cuts to information technology budgets at the same time as coronavirus-induced work-from-home policies or virtual learning increase the use of technology. All districts are more than likely to face budget pressure given the magnitude of state budget stress, but in most cases have the ability to right size or access sufficient reserves after several years of a favorable state funding environment and economy.

Commonwealth's Enhancement Program Provides Additional "Insurance"

A favorable feature for Pennsylvania school district bondholders is the Pennsylvania School District Intercept Program. Pursuant to Section 633 of the Pennsylvania School Code of 1949, the State will withhold state aid due to the district and divert that aid to bondholders should a district fail to meet its debt service obligations, until the deficiency is cured. The School Code authorizes the state to intercept all forms of aid appropriated to the school district unable to meet its debt service during the current fiscal year. Only Moody's rates the program, which is currently A2. Based on Moody's methodology, the rating and outlook will move in tandem with changes to the State's rating, which is currently Aa3 stable.

The coronavirus pandemic has certainly introduced much uncertainty into credit for state and local governments, including school districts. In 2021 through 2023, Pennsylvania school districts have total principal payments around \$1.5 billion scheduled to mature annually in each of those years. Based on data collected from Bloomberg, of that total, districts rated in the Triple-B category and below or do not have a non-enhanced rating, the estimated principal scheduled to mature in 2021 is less than \$300 million. Total debt outstanding for this subset of school districts is around \$5.2 billion across 55 districts. However, even at the lower investment grade ratings or even the high speculative grade ratings, the anticipation is that these borrowers will be able to pay debt in full and on time. In the unlikely scenario where all of these districts would be unable to make debt service payments over the next three years, the level of state aid available should be sufficient for each of these districts.

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