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RESEARCH REPORT

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Are South Jersey school districts prepared for the next recession?

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Executive Summary

This study examines the current financial condition of the largest school districts in South Jersey and also identifies those school districts that are most financially vulnerable to a potential economic downturn. The study offers three main findings:

First, 17 of the 25 largest school districts in South Jersey are at risk of financial troubles if the economic downturn results in a sizeable reduction in school aid. To sustain current revenue levels, these 17 "more at risk" school districts would need to raise local property taxes by at least 5% if there was a 10% reduction in school aid.

Second, at least eight of the "more at risk" school districts face significant obstacles in raising local property taxes in response to a reduction in school aid because the residents in these school districts already face higher than average local tax burdens and higher than average levels of economic distress. It could be argued that all NJ school districts will face at least some set of obstacles in raising local property taxes, especially since NJ has the highest per capita property taxes in the country.

Lastly, at least ten of the "more at risk" school districts do not have adequate levels of short-term financial resources (e.g., cash and cash equivalents) to cover their short-term financial obligations (e.g., accounts payable). A sizeable reduction in state aid may cause greater liquidity troubles for these school districts. For example, if a school district has valuable property assets but does not have cash on hand, a delay or shortage of cash influx from the state could make it impossible for this school district to pay its bill.

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Introduction

Beginning in March 2020, state governments across the country implemented restrictions on many forms of economic activity in order to prevent the spread of the COVID-19 disease. These necessary decisions for public health have caused declines in the economy, reductions in state revenues, and state budgetary shortfalls. State governments often reduce school aid when balancing their budgets during economic recessions. For example, during the Great Recession, New Jersey reduced state aid to school districts by more than 10% between the 2008-09 and 2009-10 school years in order to balance the state budget. This is illustrated in Figure 1 below.

Figure 1. Percent change in state aid for fiscal years 2004-2011
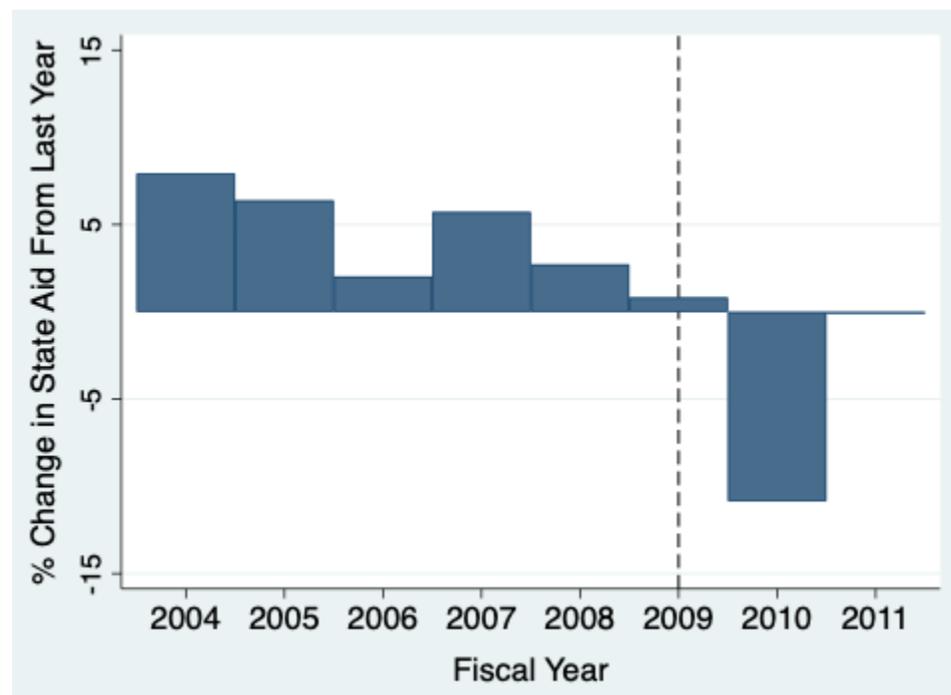
Notes: Fiscal Year 2009 is the 2008-09 school year and the first full year of the recession.

A significant reduction in state aid is problematic for New Jersey school districts because many of them depend on federal and state revenues to help fund schools. For example, the average NJ school district receives more than 40% of their revenues from state sources and approximately 5% of their revenues from federal sources. The reliance on school aid is even greater for school districts located in the most economically distressed areas.

Recessions are likely to result in state aid cuts. To help the state distribute cuts fairly, and to help school districts plan for the future, it is vital that state and local policymakers in South Jersey are aware of the most financially vulnerable school districts in the region. The current study provides this information by examining the current financial status of the largest school districts in South Jersey and also identifies those school districts that are most financially vulnerable to a potential economic downturn.

Specifically, this study addresses the following three research questions:

1. Which school districts are most financially vulnerable if there is a cut in school aid?
2. Which school districts have a greater ability to raise own-source revenues?
3. How prepared are school districts to fund their short-term financial obligations?

The remainder of this report is organized into three sections. Section 2 describes the data and methodology used to address the three research questions stated above. Section 3 presents the main results. Lastly, the concluding section of this report provides a summary of the main findings, limitations, and policy implications.

Data and Methodology

This report uses financial and socioeconomic data from the publicly available financial statements of the 25 largest school districts in South Jersey.[1] Specifically, I collected the Fiscal Year 2019 Comprehensive Annual Financial Report (CAFR) for each school district in the sample.[2]

I use six tables from the CAFR:

1. The Government-Wide Statement of Net Position
2. The Government-Wide Statement of Activities
3. The Assessed Value and Actual Value of Taxable Property
4. The District and Overlapping Property Tax Rates
5. Property Tax Levies and Collections
6. Demographic and Economic Statistics

to calculate financial and socio-economic indicators for all school districts in the sample. These tables allow me to calculate and report the risk exposure factor, local tax burden, % of property taxes collected, local unemployment rate, number of days of cash on hand, and the current ratio. The risk exposure factor is a common way to measure how dependent a school district is on school aid to maintain current spending.

The risk exposure factor (REF) is used to address the first research question and it is calculated by the following equation:

$$(1) \quad REF = \frac{(Federal\ Aid + State\ Aid +\ Miscellaneous\ Income)}{Local\ Property\ Taxes}$$

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[1] I use data on school district's enrollment in 2019-20 to identify the largest 25 school districts.

[2] I use the 2018 CAFR for Camden City because it is the school district's most recently available CAFR. The CAFR reports are publicly available on the New Jersey Department of Education website.

As implied by this equation, a higher reliance on local property taxes to fund school expenditures puts a school district at a lower financial risk to reductions in school aid, holding all other factors constant. Those school districts with a higher proportion of revenues coming from federal and state sources are relatively more financial vulnerable to school aid reductions and would likely need to substantially increase local property tax revenues if faced with a school aid cut. The rule of thumb is to have a REF below 0.5. I calculate the REF for all 25 school districts in the sample and label those school districts with a REF above 0.5 as "more at risk" school districts. All other school districts will be labelled as "less at risk" school districts.

There are at least two main advantages of using REFs to identify "more at risk" school districts compared to non-financial measures of economic distress. First, common measures of economic distress, like unemployment rates, are not always strongly correlated with REF scores. In other words, there are particular school districts in the sample that have similarly higher than average unemployment rates, but drastically different REF scores. For example, as shown in [Figure 2](#), the prediction line fits the data points (i.e., school districts in the sample) very well for school districts with unemployment rates below 6%.

However, for school districts with higher than average unemployment rates, the prediction line would severely overestimate some school districts' REF scores (i.e., Atlantic City and Egg Harbor Township), while it would severely underestimate other school districts' REF scores (i.e., Pemberton Township and Millville). Second, the REF is a more preferred indicator than common non-financial measures of economic distress because it provides a very useful and clear interpretation for users. It is difficult to use the unemployment rate to tell a policymaker exactly how financially vulnerable a school district can be from a potential reduction in school aid. In contrast, the REF tells the policymaker exactly how much local own-source revenues would need to increase at any given percentage point reduction in school aid. For these two reasons, I use the REF score to identify the "more at risk" and also "less at risk" school districts in the sample.

Figure 2. Relationship between risk exposure factors and local unemployment rates
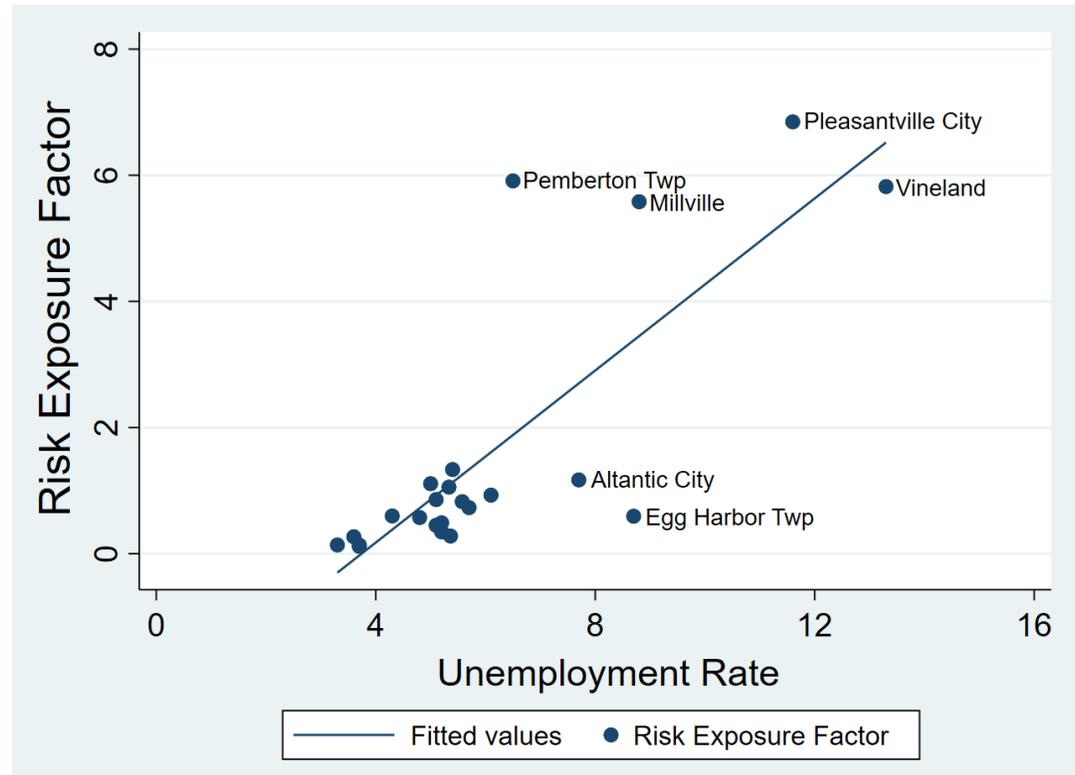
Many of the financial and socioeconomic indicators used in this report are fairly straightforward. For example, the local employment rate is the percentage of residents in the labor force that are looking for employment. However, the local tax burden, the days of cash on hand, and the current ratio need additional explanation. The local tax burden is used to address the second research question and is calculated by the following equation:

$$(2) \quad Local\ Tax\ Burden = \frac{Local\ Property\ Tax\ Levy}{Total\ Peronal\ Income} \times 100$$

which requires data on the combined local property tax levy for all local government services and also the total personal income of the residents in the school district. The combined local property tax levy is calculated by multiplying the combined local property tax rate by the net assessed property value. All of this data is reported in the school districts' CAFR.

Days of cash on hand is one of the indicators used to address the third research question. The days of cash on hand is calculated by the following equation:

$$(3) \quad Days\ of\ Cash\ on\ Hand = \frac{(Cash + Investments)}{Operating\ expenses\ per\ day}$$

which requires financial data from the government-wide financial statements. In the Statement of Net Position, school districts report the amount of dollars that it has in cash and unrestricted investments. These two forms of short-term assets are highly liquid and allow school districts to pay their short-term bills faster than do relatively less liquid assets like accounts receivable and capital assets. Using the Statement of Activities, the operating expenses per day is calculated by dividing the total operating expenses for school district by 365 days.

The second indicator for addressing the third research question, the current ratio, is calculated by the following equation:

$$(4) \quad Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

which is the ratio between the dollar amount of current assets listed on the school districts' balance sheet and the school districts' current liabilities on the balance sheet. Using the Statement of Net Position, I identify all of the current assets on the school district's balance sheet including cash, cash equivalents, investments, inventory, and all other short-term assets. Likewise, I use the balance sheet to identify all of the current liabilities including payroll payables, accounts payable, and all other short-term liabilities.

Results

This section is divided into three subsections. The first subsection examines which school districts in the sample are most vulnerable to significant reductions in school aid. The second subsection addresses the second research question by determining which of the "more at risk" school districts have relatively more capacity to raise own-source revenues (e.g., property taxes) in the event of school aid cuts. The last subsection examines the third research question by exploring how much short-term financial cushion "more at risk" school districts have in their balance sheets to fund short-term liabilities (e.g., employee payrolls, accounts payable, etc.).

3.1. Which school districts are most financially vulnerable if there is a cut in school aid?

Table 1 reports risk exposure factors (REFs) for the largest school districts in South Jersey. As explained above in section two of this report, a higher REF score implies the school district is more vulnerable to reductions in school aid. The rule of thumb is to have a REF below 0.5.

There are three main takeaways from this table. First, Table 1 shows that 17 of the largest 25 school districts would need to increase local property taxes by at least 5% if school aid was reduced by 10%. For example, Pleasantville School District has a REF of 6.85, which implies that a 10% reduction in school aid would require the school district to increase local property taxes by 68.5% in order to maintain current expenditures. Second, there are significant disparities in REFs across the 25 school districts. For example, if school aid was reduced 10%, Camden City would have to increase local property taxes by 454.4%, while Mount Laurel Township would only need to increase local property taxes by 1.2%. Lastly, many of the financially vulnerable school districts are located in Atlantic, Camden, Cumberland, and Gloucester, whereas many of the school districts not financially vulnerable are located in Burlington County.

Overall, the results from Table 1 shows that the majority of the largest 25 school districts in South Jersey are potentially vulnerable to significant budgetary shortfalls if there was even a moderate reduction in school aid. One potential solution to a budgetary shortfall is to raise own-source revenues (e.g., property taxes). Unfortunately,

not all school districts have the same ability to do so. The next subsection explores this further.

Table 1. Risk Exposure Factor Rankings for South Jersey's Largest School Districts

Rank	School District	County Name	REF Score	A 10% reduction in school aid would require a property tax increase of …
1	Camden City	Camden	45.44	454.4%
2	Bridgeton City	Cumberland	24.46	244.6%
3	Pleasantville City	Atlantic	6.85	68.5%
4	Pemberton Twp	Burlington	5.91	59.1%
5	Vineland City	Cumberland	5.82	58.2%
6	Millville City	Cumberland	5.58	55.8%
7	Pennsauken Twp	Camden	1.33	13.3%
8	Atlantic City	Atlantic	1.17	11.7%
9	Gloucester Twp	Camden	1.11	11.1%
10	Black Horse Pike	Camden	1.06	10.6%
11	Winslow Twp	Camden	0.93	9.3%
12	Deptford Twp	Gloucester	0.86	8.6%
13	Toms River Reg.	Ocean	0.83	8.3%
14	Monroe Twp	Gloucester	0.73	7.3%
15	Washington Twp	Gloucester	0.60	6.0%
16	Egg Harbor Twp	Atlantic	0.60	6.0%
17	Jackson Twp	Ocean	0.57	5.7%
18	Burlington Twp	Burlington	0.49	4.9%
19	Lacey Twp	Ocean	0.45	4.5%
20	Brick Twp	Ocean	0.35	3.5%
21	Lenape Regional	Burlington	0.28	2.8%
22	Evesham Twp	Burlington	0.27	2.7%
23	Moorestown Twp	Burlington	0.14	1.4%
24	Cherry Hill Twp	Camden	0.14	1.4%
25	Mount Laurel Twp	Burlington	0.12	1.2%

3.2. Which school districts have a greater ability to increase their own-source revenue?

There is no perfect method to predict whether school districts will be able to raise own-source revenues in response to school aid reductions. Nonetheless, there are potential financial and socioeconomic indicators that can be used to identify school districts that are most financially constrained and less likely to be able to raise own-source revenues in the event of a reduction in school aid. These indicators include local tax burdens, percent of property taxes collected, and the local unemployment rate.

Table 2 reports the local tax burden for all 17 school districts in the sample that had a REF score above 0.5. These 17 school districts are considered the "more at risk". The local tax burden measures the ratio between local combined property tax revenues and total personal income. A higher tax burden suggest that a higher proportion of residents' incomes goes toward paying property taxes. The average local tax burden in the sample was 5.5, which suggests that total property taxes in the average school district accounts for 5.5% of total personal income.

As shown in Table 2, there are significant differences in local tax burdens across the "more at risk" school districts. For example, Atlantic City has the highest local tax burden among the "more at risk" school districts with the average resident paying 14.3% of their income towards property taxes. At the same time, Pemberton Township has one of the lowest local tax burden among the "more at risk" school districts with the average resident paying only 2.1% of their income towards property taxes. Holding all other factors constant, this suggests that a school district like Atlantic City would be relatively less able to substantially increase local property taxes compared to a school district like Pemberton. Other "more at risk" school districts with higher than average local tax burdens include Toms River Regional, Vineland City, Egg Harbor Township, Washington Township, Gloucester Township, Black Horse Pike Regional, and Deptford Township.

Table 2. Local Tax Burden for the "More at Risk" School Districts in Fiscal Year 2016

Rank	School District	County Name	Tax Burden	Percentage of personal income that total property taxes account for...
1	**Atlantic City**	**Atlantic**	**14.3**	**14.3%**
2	**Toms River Regional**	**Ocean**	**7.5**	**7.5%**
3	**Vineland City**	**Cumberland**	**7.5**	**7.5%**
4	**Egg Harbor Twp**	**Atlantic**	**6.5**	**6.5%**
5	**Washington Twp**	**Gloucester**	**6.3**	**6.3%**
6	**Gloucester Twp**	**Camden**	**6.2**	**6.2%**
7	**Black Horse Pike**	**Camden**	**5.9**	**5.9%**
8	**Deptford Twp**	**Gloucester**	**5.7**	**5.7%**
Average School District in the Sample			*5.5*	*5.5%*
9	Jackson Twp	Ocean	5.4	5.4%
10	Monroe Twp	Gloucester	5.0	5.0%
11	Pennsauken Twp	Camden	4.9	4.9%
12	Millville City	Cumberland	4.9	4.9%
13	Pleasantville City	Atlantic	3.9	3.9%
14	Winslow Twp	Camden	3.4	3.4%
15	Bridgeton City	Cumberland	2.3	2.3%
16	Pemberton Twp	Burlington	2.1	2.1%
17	Camden City	Camden	1.3	1.3%

Notes: "More at Risk" school districts are those with a risk exposure factor above 0.5 as shown in Table 1. Tax burden is the ratio between combined local property tax revenues and total personal income.

Figure 3 plots the local tax burden and risk exposure factor for each school district in the "more at risk" category. Each data point represents one of the 17 "more at risk" school districts, and the dotted lines in the figure represent the average values for each variable (i.e., average REF score is 2.37 and the average local tax burden is 5.5). School districts in the bottom left are in the best position (all other things being equal) because they have the lowest tax burdens and are also the least vulnerable to cuts in state aid. In contrast, school districts in the top right are in the worst position, because they are most vulnerable to cuts and the least likely to be able to raise property taxes.

Figure 3. Local Tax Burdens and Risk Exposure Factors (All "More at Risk")
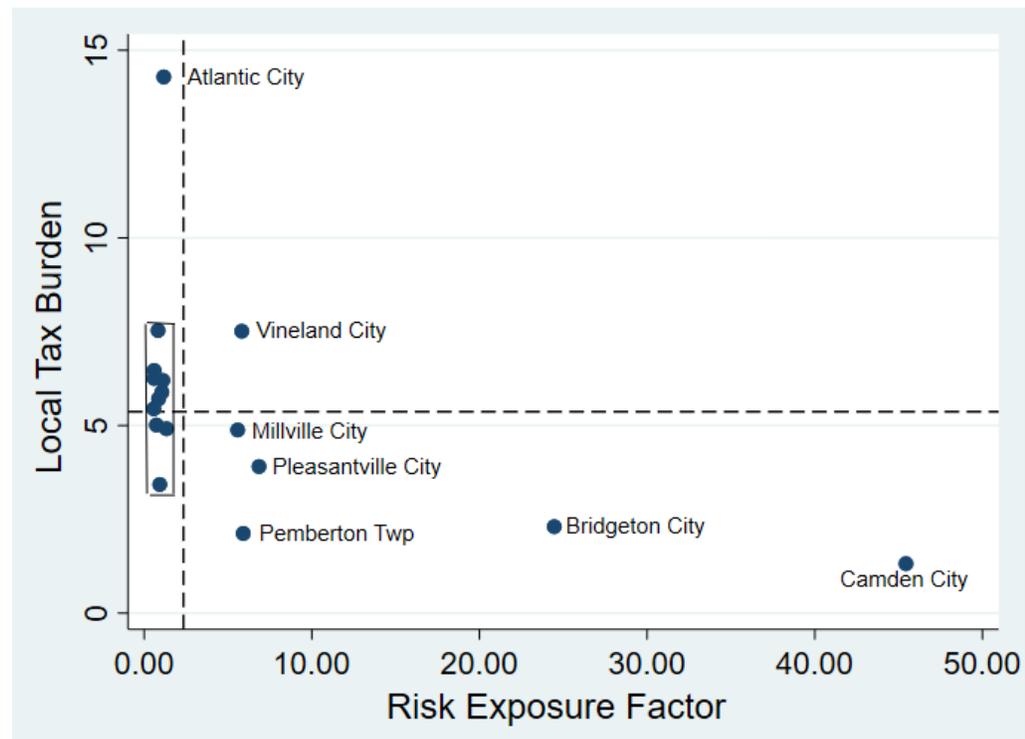
There are four main takeaways from Figure 3. First, there is a subset of school districts (i.e., Bridgeton City, Camden City, and Pemberton Township) that have higher than average REF scores, but lower than average local tax burdens. Holding all other things constant, these school districts have relatively more ability to raise own source revenues in response to a reduction in school aid compared to other school districts. While

Bridgeton City and Camden City have lower than average local tax burdens, they have enormously high poverty rates, which will likely prevent them from significantly increasing local property taxes. Second, Vineland City is in a precarious situation compared to all of the "more at risk" school districts because it is the only school district in the sample with both an above average REF score and an above average local tax burden. This suggests that Vineland is arguably the most vulnerable school district in the sample to a reduction in school aid. Third, there is a subset of school districts with similar REF scores (Vineland City, Millville City, Pleasantville City, and Pemberton Township), but significantly different local tax burdens. Holding all other factors constant, Pemberton Township is in a better position to raise own-source revenues to mitigate the effects of school aid reductions compared to Pleasantville City, Millville City, and Vineland City. Lastly, Atlantic City has a similar REF score compared to the other school districts with a below average REF score (shown in the rectangle box in Figure 3), but a substantially higher local tax burden compared to them. This implies that Atlantic City will have a more difficult time increasing local property taxes relative to other school districts with below average REF scores.

Figure 4 provides a closer look at the school districts in the rectangle box from Figure 3. Similar to the takeaways from Figure 3, Figure 4 shows significant differences in local tax burdens across school districts with similar REF scores. For example, as shown in Figure 4, Winslow Township, Deptford Township, and Toms River Regional all have very similar REF scores. However, Winslow Township has a local tax burden that is less than 4, whereas Toms River Regional has a local tax burden above 7. This suggests that Winslow Township has a potentially better chance to raise own-source revenues to mitigate the potential effects of a school aid reduction compared to Toms River Regional.

Figure 4. Local Tax Burdens and Risk Exposure Factors (Select Sample)
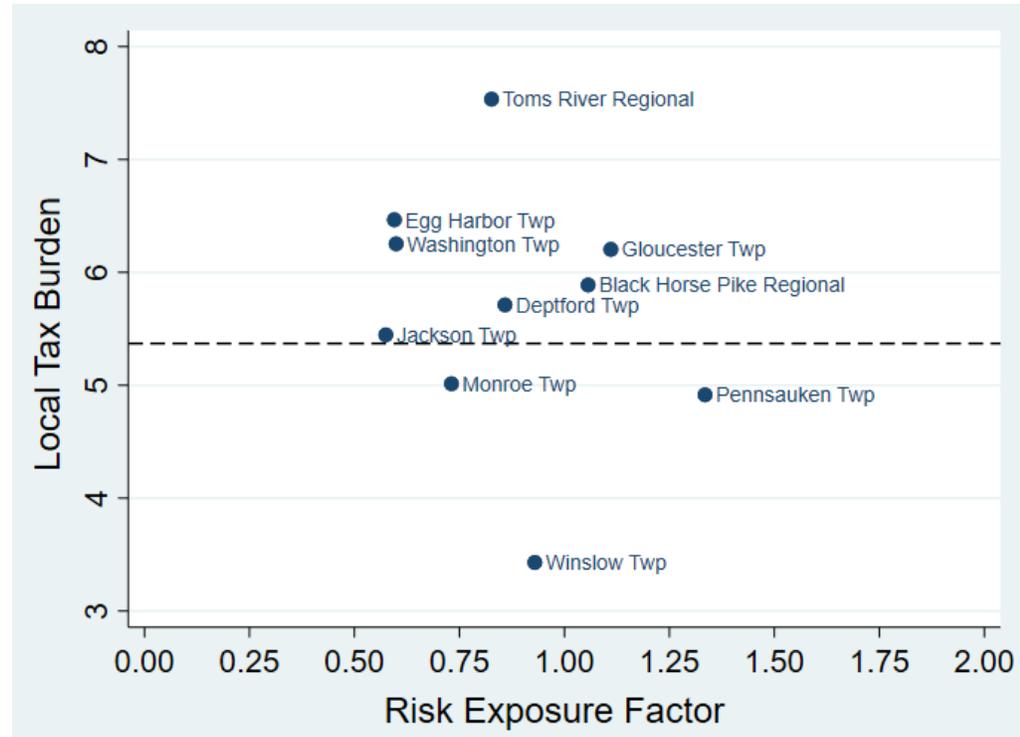
The inability to collect 100% of property tax bills is a potential sign of economic stress for residents of the school district. Table 3 reports the average percent of property taxes collected for all fiscal years between 2010 and 2016 by school district. Table 3 shows there are differences in how successful school districts are in collecting their property tax bills across the "more at risk" subsample. Also shown in Table 3, the majority of these school districts collected 100% of property tax bills during the time frame between 2010 and 2016[3]. Unfortunately, seven school districts among the "more at risk" did not fully collect all of their property tax bills during this time period. For example, on average, Winslow Township collected only 95% of property taxes during the typical fiscal year between 2010 and 2016.

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[3] All eight "less at risk" school districts in the sample also collected 100% of its property taxes.

Table 3. Average % of Taxes Collected between Fiscal Years 2010 and 2016

Rank	School District	County Name	% Collected	Percentage of property taxes collected by school districts
1	Camden City	Camden	100	100%
1	Bridgeton City	Cumberland	100	100%
1	Deptford Twp	Gloucester	100	100%
1	Egg Harbor Twp	Atlantic	100	100%
1	Jackson Twp	Ocean	100	100%
1	Millville City	Cumberland	100	100%
1	Monroe Twp	Gloucester	100	100%
1	Pemberton Twp	Burlington	100	100%
1	Pleasantville City	Atlantic	100	100%
1	Pennsauken Twp	Camden	100	100%
11	Gloucester Twp	Camden	99	99%
11	Atlantic City	Atlantic	99	99%
13	Washington Twp	Gloucester	98	98%
14	Vineland City	Cumberland	97	97%
15	Toms River Regional	Ocean	96	96%
15	Black Horse Pike	Camden	96	96%
17	Winslow Twp	Camden	95	95%

Notes: The sample only includes "More at Risk" school districts, which are those with a risk exposure factor above 0.5 as shown in Table 1.

The last indicator used to evaluate the "more at risk" school district' abilities to raise own-source property taxes is the local unemployment rate. Table 4 reports the local employment rate in 2016 for all of the "more at risk" school districts. While the average local unemployment rate in 2016 for the largest 25 school districts in South Jersey was 6.3%, the local employment rate for the "more at risk" group ranged from 4.3%

(Washington Township) to 13.3% (Vineland City). Pleasantville City, Camden City, Millville City, Bridgeton City, Egg Harbor Township, Atlantic City, and Pemberton all had above average unemployment rates. It is likely that these cities and townships will lack the economic capacity and political willingness to substantially raise own-source revenues.

Table 4. Local Unemployment Rates in 2016 for the "More at Risk"

Rank	School District	County Name	Rate	Interpretation
1	**Vineland City**	**Cumberland**	**13.3**	**13.3% of workers not employed**
2	**Pleasantville City**	**Atlantic**	**11.6**	**11.6% of workers not employed**
3	**Camden City**	**Camden**	**10.1**	**10.1% of workers not employed**
4	**Millville City**	**Cumberland**	**8.8**	**8.8% of workers not employed**
5	**Bridgeton City**	**Cumberland**	**8.8**	**8.8% of workers not employed**
6	**Egg Harbor Twp**	**Atlantic**	**8.7**	**8.7% of workers not employed**
7	**Atlantic City**	**Atlantic**	**7.7**	**7.7% of workers not employed**
8	**Pemberton Twp**	**Burlington**	**6.5**	**6.5% of workers not employed**
Average South New Jersey County			6.3	6.3% of workers not employed
9	Winslow Twp	Camden	6.1	6.1% of workers not employed
10	Monroe Twp	Gloucester	5.7	5.7% of workers not employed
11	Toms River Regional	Ocean	5.6	5.6% of workers not employed
12	Pennsauken Twp	Camden	5.4	5.4% of workers not employed
13	Black Horse Pike	Camden	5.3	5.3% of workers not employed
14	Deptford Twp	Gloucester	5.1	5.1% of workers not employed
15	Gloucester Twp	Camden	5.0	5.0% of workers not employed
16	Jackson Twp	Ocean	4.8	4.8% of workers not employed
17	Washington Twp	Gloucester	4.3	4.3% of workers not employed

Notes: "More at Risk" school districts are those with a risk exposure factor above 0.5 as shown in Table 1.

3.3. How prepared are school districts to fund their short-term financial obligations?

So far, the analysis suggests many school districts are at-risk of significant budgetary shortfalls if there is even a moderate reduction in school aid. One way to alleviate these budgetary shortfalls is to use short-term, financial capital (e.g., cash and cash equivalents) to pay for short-term obligations like employee payrolls and supplies. The current study measures the short-term liquidity of school districts in the sample by calculating the number of days of cash on hand and also the current ratio, as explained in Section 2.

Not surprisingly, there is significant differences in the number of days of cash on hand across the "more at risk" school districts, as shown in Table 5. While Atlantic City could operate 76 days without any additional cash inflow, Toms River Regional could only operate 4 days before it needed an inflow of cash. There is no obvious rule of thumb, but a reasonable goal would be to have enough cash on hand to operate for a month. Only five of the "more at risk" school districts have enough cash on hand to operate for a month without additional cash flow (Atlantic City, Pennsauken Township, Monroe Township, Gloucester Township, and Washington Township). The remaining 12 "more at risk" school districts have less than 23 days of cash on hand, and six of these school districts have less than 10 days of cash on hand (Winslow Township, Vineland City, Black Horse Pike Regional, Pemberton Township, Deptford Township, and Toms River Regional).

The number of days of cash on hand indicator for short-term liquidity only provides a partial picture of how prepared a public organization is to fund its short-term financial obligations. For example, it is possible that a school district has a higher than average amount of cash on hand, but this might be because it has a higher than average amount of short-term financial obligations. Therefore, we need to account for both their short-term assets (e.g. cash) and their short-term liabilities (e.g. employee payrolls). The current ratio is a useful measure because it is the ratio between short-term assets and short-term liabilities.

Table 5. Days of Cash on Hand Ranking for the "More at Risk" School Districts

Rank	School District	County Name	Days	Days in operation without any cash inflow…
1	Atlantic City	Atlantic	76	76 days
2	Pennsauken Twp	Camden	67	67 days
3	Monroe Twp	Gloucester	43	43 days
4	Gloucester Twp	Camden	36	36 days
5	Washington Twp	Gloucester	34	34 days
6	Bridgeton City	Cumberland	23	23 days
7	Millville City	Cumberland	21	21 days
8	Egg Harbor Twp	Atlantic	20	20 days
9	Jackson Twp	Ocean	19	19 days
10	Pleasantville City	Atlantic	13	13 days
11	Camden City	Camden	11	11 days
12	**Winslow Twp**	**Camden**	**8**	**8 days**
13	**Vineland City**	**Cumberland**	**7**	**7 days**
14	**Black Horse Pike**	**Camden**	**6**	**6 days**
15	**Pemberton Twp**	**Burlington**	**6**	**6 days**
16	**Deptford Twp**	**Gloucester**	**5**	**5 days**
17	**Toms River Regional**	**Ocean**	**4**	**4 days**

Notes: "Cash on hand" includes the monetary value of the cash and investments on a school district's balance. This amount is then divided by the 365 days.

Table 6 reports the current ratio for all "more at risk" school districts in the sample. The rule of thumb is to have a current ratio above 2, which implies that the school district has $2 in short-term assets for every $1 in short-term liabilities. In other words, the ideal school district should have $2 of cash on hand for every $1 of upcoming expenses. As shown in Table 6, a majority of the "more at risk" school districts have an insufficient level of liquidity to pay for short-term obligations because they have a current ratio below 2. Worse yet, five of the "more at risk" school districts have a current ratio below 1 (Camden City, Deptford Township, Pleasantville City, Jackson Township, and Toms River Regional), which means they have more short-term liabilities than short-term

assets. For example, Toms River Regional has only $0.26 of short-term assets for every one dollar of short-term liabilities. In other words, without additional cash inflow, Tom Rivers Regional's current levels of cash and cash equivalents are not high enough to cover all of their short-term bills. An economic recession that results in school aid reductions will likely make matters worse for these school districts.

Table 6. Current Ratio Ranking for the "More at Risk" School Districts

Rank	School District	County Name	Current ratio	For every $1 in short-term liabilities…
1	Pennsauken Twp	Camden	4.75	it has $4.75 in short-term assets
2	Atlantic City	Atlantic	4.27	it has $4.27 in short-term assets
3	Gloucester Twp	Camden	2.95	it has $2.95 in short-term assets
4	Egg Harbor Twp	Atlantic	2.78	it has $2.78 in short-term assets
5	Black Horse Pike	Camden	2.29	it has $2.29 in short-term assets
6	Monroe Twp	Gloucester	2.04	it has $2.04 in short-term assets
7	Washington Twp	Gloucester	2.01	it has $2.04 in short-term assets
8	**Millville City**	**Cumberland**	**1.44**	**it has $1.44 in short-term assets**
9	**Winslow Twp**	**Camden**	**1.3**	**it has $1.30 in short-term assets**
10	**Pemberton Twp**	**Burlington**	**1.28**	**it has $1.28 in short-term assets**
11	**Bridgeton City**	**Cumberland**	**1.24**	**it has $1.24 in short-term assets**
12	**Vineland City**	**Cumberland**	**1.2**	**it has $1.20 in short-term assets**
13	**Camden City**	**Camden**	**0.95**	**it has $0.95 in short-term assets**
14	**Deptford Twp**	**Gloucester**	**0.88**	**it has $0.88 in short-term assets**
15	**Pleasantville City**	**Atlantic**	**0.85**	**it has $0.85 in short-term assets**
16	**Jackson Twp**	**Ocean**	**0.7**	**it has $0.70 in short-term assets**
17	**Toms River Regional**	**Ocean**	**0.26**	**it has $0.26 in short-term assets**

Notes: The current ratio is the ratio between short-term assets (e.g. cash and investments) and short-term liabilities (e.g. employee payroll).

Figure 5 plots the days of cash on hand and the current ratio for each of the "more at risk" school districts. As expected, this figure shows that school districts with more days of cash on hand tend to have a higher level for their current ratio. Interestingly, there are a few cases (e.g., Black Horse Pike Regional) where the school district has a lower than average amount of days of cash on hand but has a solid current ratio. This is why it is important to examine both indicators to fully understand the liquidity of a school district.

Figure 5. Days of Cash on Hand and Current Ratio (All "More at Risk")
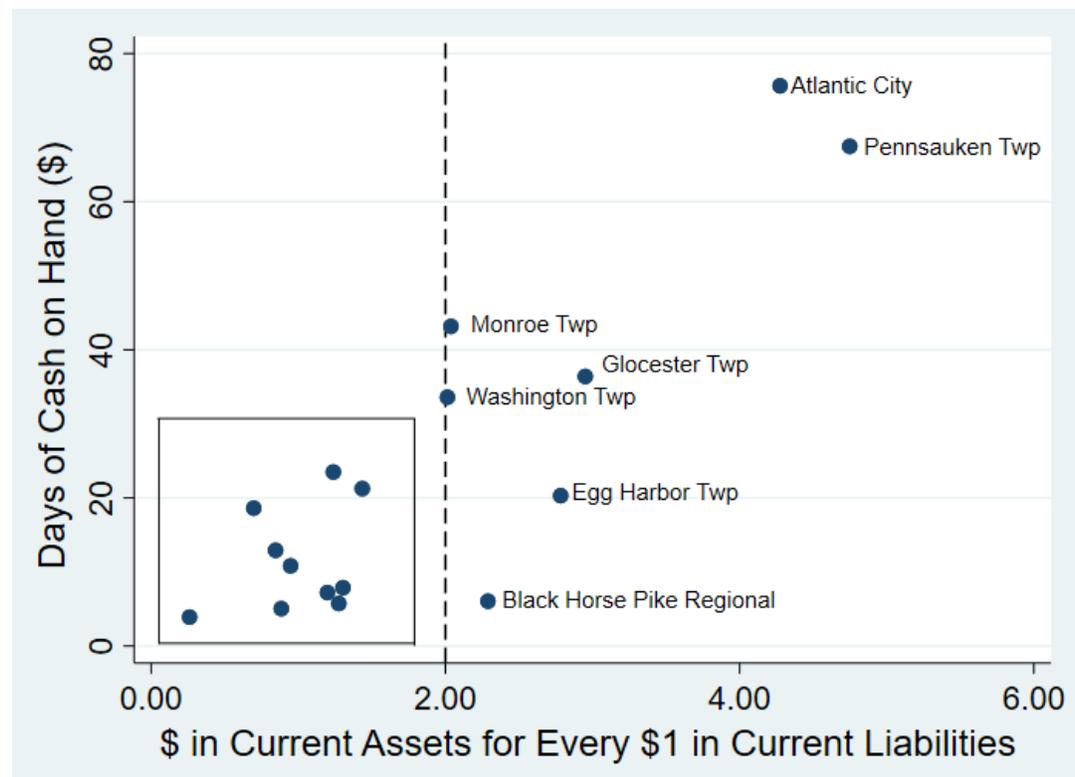
Figure 6 plots the days of cash on hand for the school districts that are contained in the square box in Figure 5. These are the 10 school districts that had a current ratio below 2, which implies that they are relatively more vulnerable to not meeting their short-term obligations compared to school districts with a current ratio above 2.

As shown in Figure 6, Toms River Regional has the smallest values for both of these liquidity indicators. Another important takeaway from Figure 6 is that there are substantial differences in the number of days of cash on hand for the 5 school districts with a current ratio below 1. For example, Pleasantville City and Deptford Township have almost identical current ratios, but Pleasantville City has more than double the amount of days of cash on hand than Deptford Township. This further motivates the need to examine both a school district's days of cash on hand and its current ratio when evaluating its ability to meet its short-term obligations. If we only looked at Pleasantville City's number of days of cash on hand, we would had overestimated their ability to cover their short-term liabilities. At the same time, for a set of school districts (Winslow Township, Vineland City, and Pemberton Township), we would underestimate their abilities to cover their short-term liabilities if we only looked at their number of days of cash on hand.

Figure 6. Days of Cash on Hand and Current Ratio (Select Sample from Fig. 5)
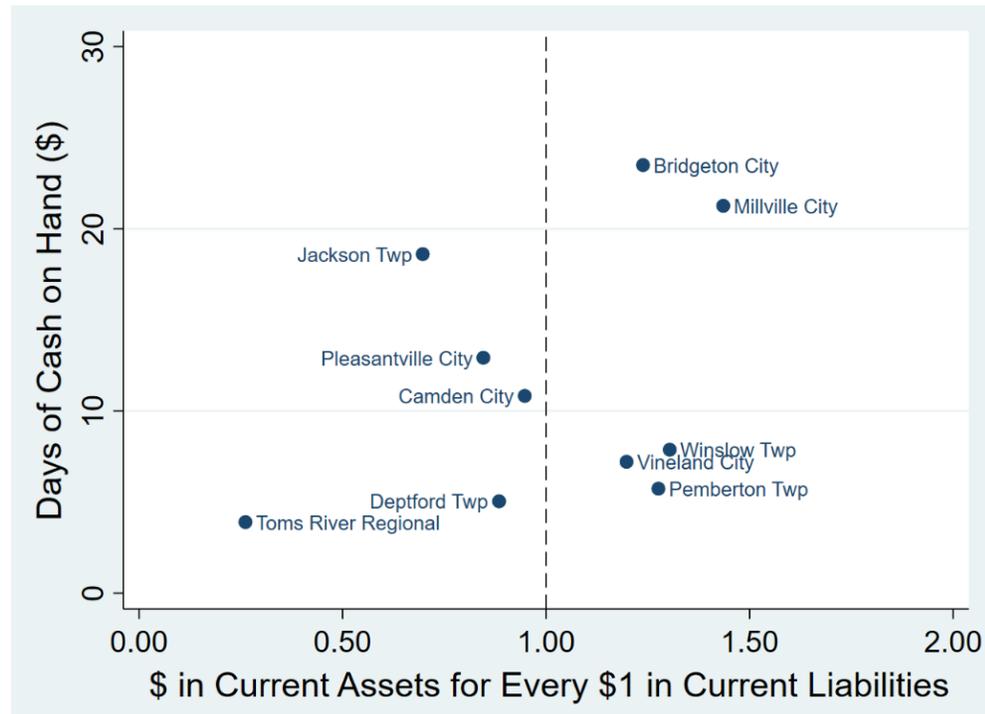
Conclusion

The study examines the financial condition of the 25 largest school districts in South Jersey. Specifically, this study sought to answer whether the largest South Jersey school districts are prepared for the next economic recession and also identified those school districts "more at risk" for budgetary shortfalls due to potential reductions in school aid. Overall, this report offers three main findings. First, 17 of the 25 largest school districts in South Jersey are at risk of financial troubles if the next economic recession results in a sizeable reduction in school aid. These 17 school districts would need to raise local property taxes by at least 5% if there was a 10% reduction in school aid. In the case of Camden City, the school district would have to raise local property taxes by more 454% to maintain current spending levels if there was a 10% reduction in school aid. Second, at least eight of the "more at risk" school districts face significant obstacles in their abilities to raise local property taxes because the residents in these school districts already face higher than average local tax burdens and levels of economic distress. The last main finding is that at least ten of the "more at risk" school districts do not have adequate levels of short-term financial resources (e.g., cash and cash equivalents) to cover their short-term financial obligations (e.g., accounts payable). A sizeable reduction in state aid may cause greater liquidity troubles for the 10 "more at risk" school districts with a current ratio below 2.

The current study's findings have policy implications for NJ policymakers. First, state policymakers should consider relaxing the local property levy limit for vulnerable school districts, especially if school aid cuts require them to raise property tax rates. Second, local school policymakers should start funding a rainy-day fund (i.e., unreserved fund balances), especially school district that are highly dependent on state aid. The state government should incentivize school districts in forming rainy-day funds via matching grants. Third, if a recession requires state aid reductions, state policymakers should consider targeting state aid reductions based on school districts' risk exposure factors to buffer the most vulnerable school districts. This is especially important because these school districts tend to have the most "at-risk" students. Lastly, and most importantly, the federal government should consider providing emergency economic stimulus funding to state governments to help them avoid making drastic reductions in state aid to local governments. During the Great Recession, the federal government did this through the American Recovery and Reinvestment Act of 2009 (ARRA). If the federal government's goal is to avoid a large increase in the national unemployment rate, there

is no more direct way to meet this goal than providing emergency funds to state governments to avoid layoffs and severe spending cuts.

There are at least two limitations of the current study. First, the current study uses data from school districts' comprehensive annual financial reports (CAFRs), which only includes financial information at one-time period. A school district publishes its CAFR after the end of a fiscal year. The financial information that is used in the CAFR is based on its financial accounts on June 30th, which is the last day of the fiscal year. Therefore, it is possible that information on certain assets and liabilities in the Fiscal Year 2019 CAFR could be different than the amounts in their financial accounts today. Further, the financial indicators reported in this study could provide different results if this is the case. Unfortunately, it is impossible to know for sure because financial data is only publicly available through the CAFRs. Second, the local tax burden and unemployment rate data come from 2016 because this is the most recent year that there is data on unemployment rates in the CAFRs for all school districts in the sample.

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About Us

Senator Walter Rand Institute for Public Affairs (WRI) is an applied research and public service center at Rutgers University-Camden working to address issues impacting residents and communities in southern New Jersey. With two decades of experience in evaluation, public policy, and organizational development, WRI has helped organizations in the public, private, and nonprofit sectors develop partnerships and achieve optimal effectiveness. WRI aims to contribute knowledge for sound policy and practice in South Jersey through research, community engagement, and coalition building.

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