

A Closer Look at Tennessee's 2018 Priority Schools

A Research Brief on Driving Improvement in Low-Performing Schools

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Introduction

The 2018 Priority Schools List released last fall by the Tennessee Department of Education (TDOE) designates the state's bottom five percent of schools as measured by student academic performance. It is the third such list for Tennessee, following similar lists in 2012 and 2014 under the state's Race to the Top grant, and those lists served as the basis for the formation of the statewide Achievement School District (ASD) and local innovation zones (iZones) for Priority Schools.

Given this history, Tennessee has more opportunity to put the composition and characteristics of its lowest-performing schools in historical perspective than do the many states who have recently identified low-performing schools for the first time in order to comply with the newly-enacted Every Student Succeeds Act (ESSA). Tennessee has a similarly unique opportunity to examine the performance trajectories of schools on previous Priority Lists to anticipate the range of likely outcomes for the schools comprising the current list and to identify lessons regarding where and how turnaround efforts might be most successful.

This brief examines four key findings:

- 1** *2018 Priority schools are distinctly different from typical schools in Tennessee in terms of more than just academic performance. Most notably, these schools serve far higher proportions of economically disadvantaged students and students of color.*
- 2** *Despite changeover in which specific schools comprise the latest list, 2018 Priority Schools look much like the schools on the 2012 and 2014 Priority Lists in terms of student and staff characteristics.*
- 3** *Almost half of all schools from the 2012 Priority List have improved rapidly relative to rest of the state over the past six years, while only a small handful of 2012 Priority Schools have fallen further behind.*
- 4** *The fastest-improving schools from the 2012 Priority List come exclusively from among elementary and middle schools (no high schools) and exclusively from within Shelby County.*

This brief considers 2018 Priority Schools in both comparative and historical context by:

- **Showing how schools on Tennessee's 2018 Priority Schools List compare to other schools in the state** in terms of composition and performance. Comparing characteristics of 2018 Priority Schools to state averages gives us insight into how student demographics, staff characteristics, or geography may present unique contexts for improvement efforts.
- **Comparing the 2018 Priority Schools to the schools making up the Priority Lists released in 2012 and 2014.** Lessons learned from previous reforms may only apply to the extent that schools on the 2018 list look similar to the schools that made up the previous lists.
- **Examining variation in performance trajectories of schools on the 2012 Priority List.** Within this variation, we hope to identify lessons regarding where and how turnaround efforts might be most successful.
- **Identifying a handful of schools from the 2012 Priority List as rapidly-improving priority schools** for further research and deeper analysis into promising practices for driving improvement in low-performing schools. By understanding more about these schools and what may account for their success, leaders from other schools, districts, or state systems can design more effective turnaround interventions going forward.

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COMPARATIVE CONTEXT

2018 Priority Schools vs. the Rest of the State

2018 Priority schools are distinctly different from typical schools in Tennessee in terms of more than just academic performance. Most notably, these schools serve far higher proportions of economically disadvantaged students and students of color.

This section of the brief offers context for the 2018 Priority List by comparing the schools on the list to all other schools in the state. This comparison allows us to consider the ways in which the challenges and settings of these schools may be unique among Tennessee schools and might require unique strategies and approaches.

Table 1 compares 2018 Priority School enrollment to the demographics of other Tennessee schools, revealing a number of important contrasts. **Most notably, Priority Schools are significantly higher-poverty and serve higher proportions of students of color than typical Tennessee schools.** At 82%, the proportion of black students in Priority Schools is almost four times greater than the state average. **Priority Schools also have almost double the proportion of economically disadvantaged students** – 74% in Priority Schools compared to a 37% state average.

Measures of academic performance are lower for Priority Schools by design, as the Priority designation is intended for the state’s lowest-performing schools. **However, the disparity between performance in Priority and non-Priority schools demonstrates the degree of inequality across Tennessee schools.** The difference in proficiency rates between Priority Schools (8%) and the rest of the state (37%) suggests that the students who enroll in non-Priority schools are roughly five times as likely to be academically proficient as the students who enroll in Priority Schools.¹

Given these demographic and academic compositions, school and district leaders must explicitly consider whether the expertise and evidence to support their improvement plans comes from schools with similar student populations, understanding that otherwise it remains an open question whether that expertise and evidence will generalize to the contexts of Priority Schools.



TABLE 1: 2018 PRIORITY VS. 2018 NON-PRIORITY SCHOOLS

	PRIORITY	NON-PRIORITY
Schools and Enrollment		
Schools	82	1,605
K-8 Enrollment	404	512
High School Enrollment	532	898
Student Demographics		
White	7%	67%
Black	82%	22%
Hispanic/Other	11%	11%
Economically Disadvantaged (ED)	74%	37%
Performance		
Proficiency	8%	37%
School TVAAS	3.16	2.34
Teachers		
% of Teachers 4-5 on TVAAS	22%	45%
Teacher Turnover	34%	18%
Teacher Years of Experience	9.5	11.6
Teacher Effectiveness (TEAM)	3.4	4.2
Location		
Memphis	43	
Nashville	23	
Other	16	



2018 Priority Schools tend to be smaller than average Tennessee schools.

Schools on the 2018 Priority List are smaller than average Tennessee schools. The difference in enrollment is particularly large among high schools, with the average high school in Tennessee having 70% more students than the high schools on the 2018 Priority List. Although smaller enrollments mean that school-level supports will serve fewer students than if implemented in an average-sized school, it could also mean that the attention and resources for school improvement are more concentrated and can have a greater impact on each student and teacher served.

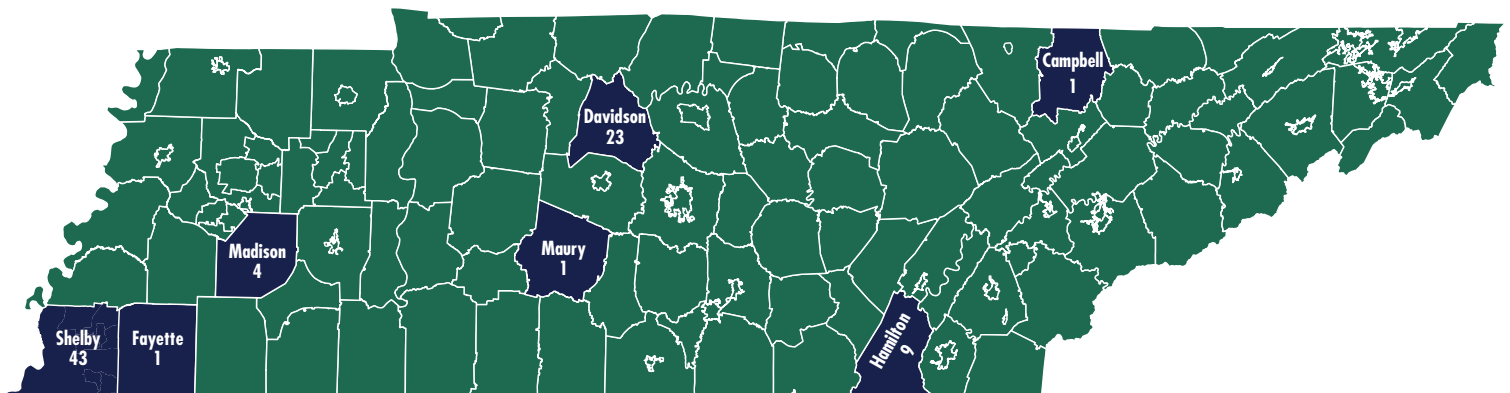
2018 Priority Schools tend to have higher teacher turnover and lower average teacher evaluation ratings than non-Priority Schools.

Differences in teacher characteristics between Priority and non-Priority schools demonstrate both the existence of staffing challenges in low-performing schools as well as the consequences of high staff turnover. **In 2018, Priority Schools' teacher turnover rates were 34%, roughly twice as high as the turnover rate of non-Priority Schools (18%).** This turnover creates instability in schools, making it difficult to establish the instructional routines necessary for sustained improvement. Stemming in part from this turnover, teachers in Priority Schools have less experience (9.5 years) than teachers in non-Priority Schools (11.6). One potential concern with less-experienced faculty is that early-career teachers tend to be less effective than their more experienced peers. Evidence from a comparison of teachers' evaluation scores (Level of Effectiveness) and value-added (TVAAS) supports this concern and suggests that students in Tennessee's lowest-performing schools are less likely to have access to the state's highest-performing teachers.

The majority of 2018 Priority Schools are in the state's urban centers.

More than half of the 2018 Priority List comes from Memphis (43), more than quarter from Nashville (23), and many of the rest between Chattanooga (9) and Jackson (4). **Together, more than 96% of all 2018 Priority Schools are in one of these four cities.**

WHERE 2018 PRIORITY SCHOOLS ARE LOCATED



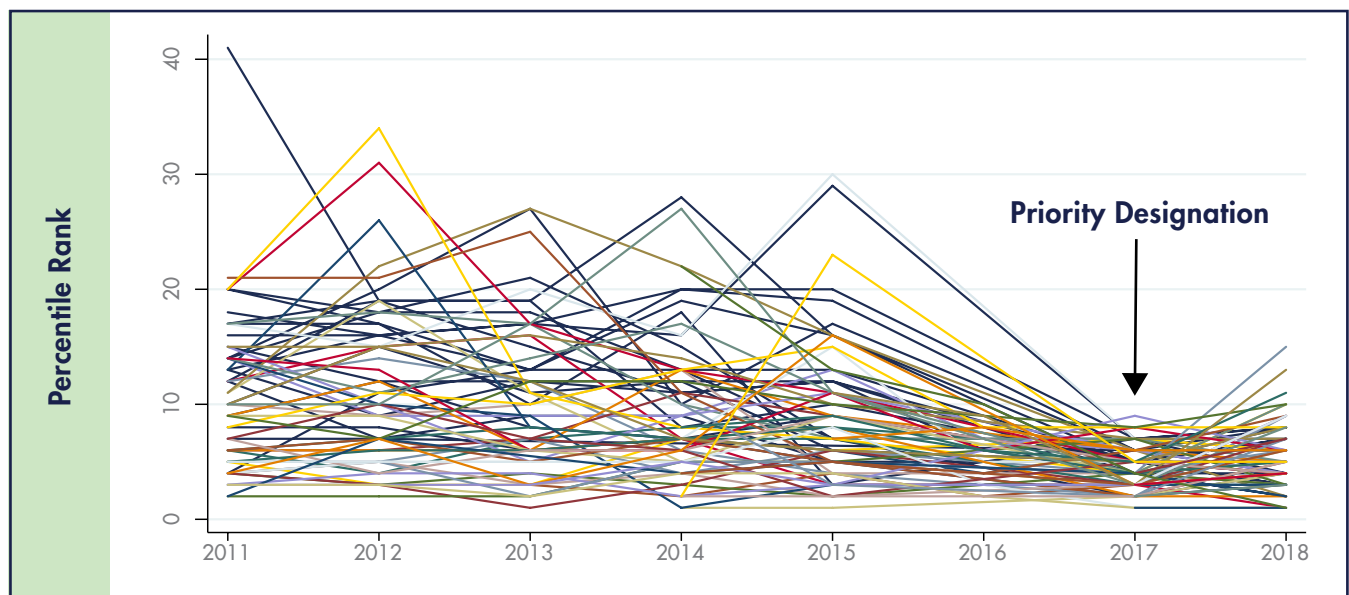


2018 Priority Schools have been chronically low-performing.

As a final comparison to state averages, we observe the percentile rank of 2018 Priority Schools in the years leading up to their Priority designation. This analysis can suggest whether Priority Schools tend to be chronically low-performing or, alternatively, suffered unexpected performance dips immediately before the Priority designation. **As demonstrated in Figure 1, the majority of 2018 Priority Schools have been beneath the 20th percentile of statewide performance for the past several years.**² These performance records point to the need for interventions designed to offer long-needed and sustained supports rather than quick fixes as though intended to return schools to prior success.

FIGURE 1: 2018 PRIORITY SCHOOLS WERE NOT PROFICIENT PRIOR TO DESIGNATION

The majority of 2018 Priority Schools have been beneath the 20th percentile of statewide performance since 2012.



2

HISTORICAL CONTEXT

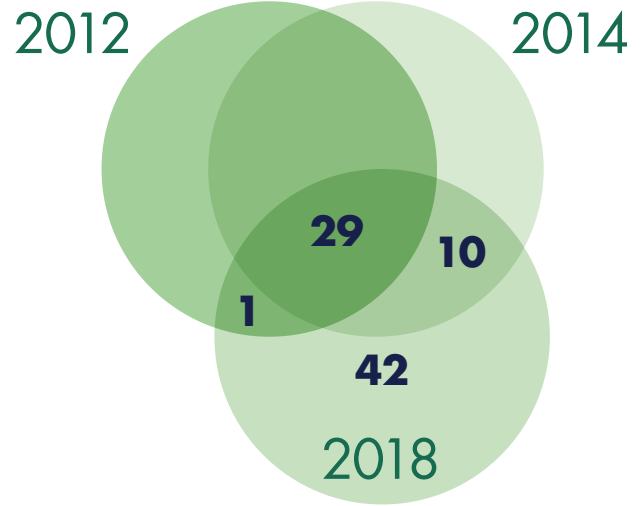
2018 Priority Schools vs. 2012 & 2014 Priority Schools

Despite changeover in which specific schools comprise the latest list, 2018 Priority Schools look much like the schools on the 2012 and 2014 Priority Lists in terms of student and staff characteristics.

Comparisons to previous Priority Lists can offer further context for schools on the 2018 list. Most importantly, these comparisons have the potential to reveal ways in which the state's progress in improving low-performing schools has changed the type of schools identified as Priority Schools or the extent to which lessons gleaned from work in previous cohorts of Priority Schools can inform upcoming efforts in schools on the 2018 list. Across all measures, we find that the same comparative differences observed between Priority and non-Priority Schools on the 2018 Priority List also existed on the 2012 and 2014 lists. **That is, schools from all three Priority Lists look much more like each other than they look like non-Priority Schools in Tennessee.**

First, we examine the overlap in schools that have appeared on multiple Priority Lists. For the 2018 list, more than half (42 out of 82) of the schools were new to Priority status, meaning they were not included on either the 2012 or 2014 lists. Of the schools that had been on previous lists, most (29 out of 40) have now appeared on the Priority List every year that the state has issued one. Two important takeaways from this analysis are that over a third of the 2018 Priority List is comprised of chronically low-performing schools that have been in (or around) the bottom five percent of Tennessee schools since at least 2012. Second, while the overlap across lists means that the following cohort comparisons do not compare entirely independent groups of schools, there is enough changeover on the lists that the relative

MANY 2018 PRIORITY SCHOOLS WERE ON PREVIOUS PRIORITY LISTS



consistency of key characteristics from one list to the next demonstrates that new Priority Schools look a lot like previous Priority Schools.

The 2018 Priority List once again has schools with exceptionally high concentrations of students of color.

One of the most striking patterns across all three Priority Lists is the racial disparity of student demographics between Priority and non-Priority Schools. In a state where two out of three students are white, 19 of every 20 students served by Priority Schools are students of color.

FIGURE 2

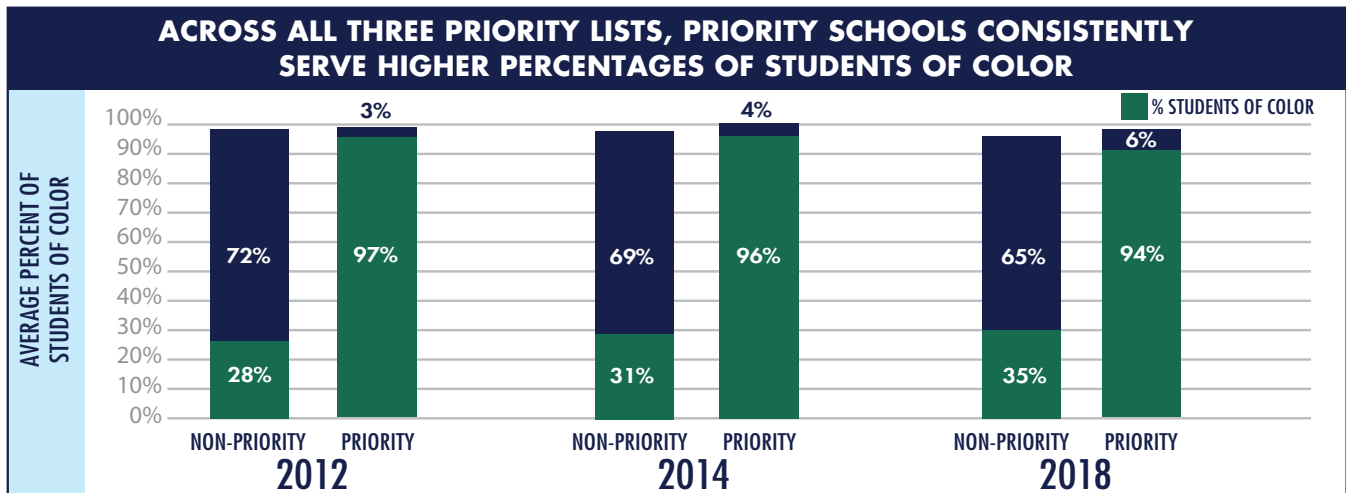
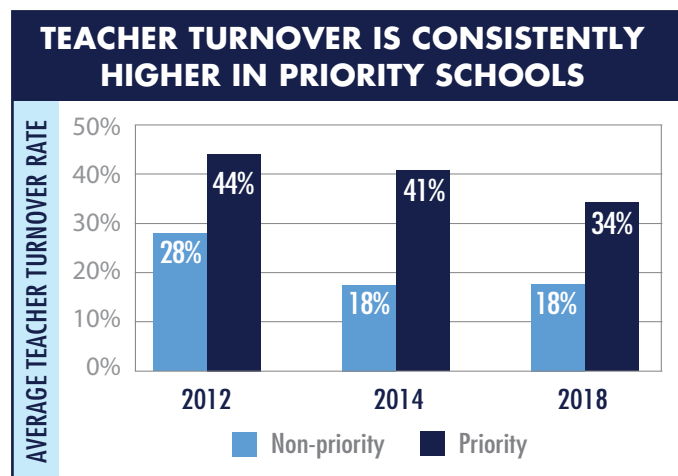




FIGURE 4



The 2018 Priority List once again has schools with smaller-than-average enrollments.

From the 2018 list, Priority Schools in the K–8 pool enrolled an average of 404 students, compared to 512 in non-Priority Schools. The difference in the high school pool is even greater, with just 532 students enrolled in the average Priority School compared to a statewide average of 898 in non-Priority high schools. This is consistent with observations from both the 2012 and 2014 lists, both in terms of Priority Schools having below-average enrollments, and this difference being especially large among high schools.

The 2018 Priority List once again has schools with higher teacher turnover and lower average teacher evaluation ratings than non-Priority Schools.

While teachers in Priority Schools have had a higher turnover rate than other teachers in the state across all three Priority cohorts, the difference has decreased over time, even as statewide turnover rates have fallen. In contrast, the gap in teacher experience between Priority and non-Priority Schools emerged after the initial list in 2012 and appears to be growing. This pattern would be consistent with the initial announcement of a school turnaround program leading to an immediate uptick in teachers leaving low-performing schools from which these schools have not yet bounced back. Finally, the Priority-non-Priority gap in teacher evaluation scores has remained stable across all three Priority cohorts.

FIGURE 3

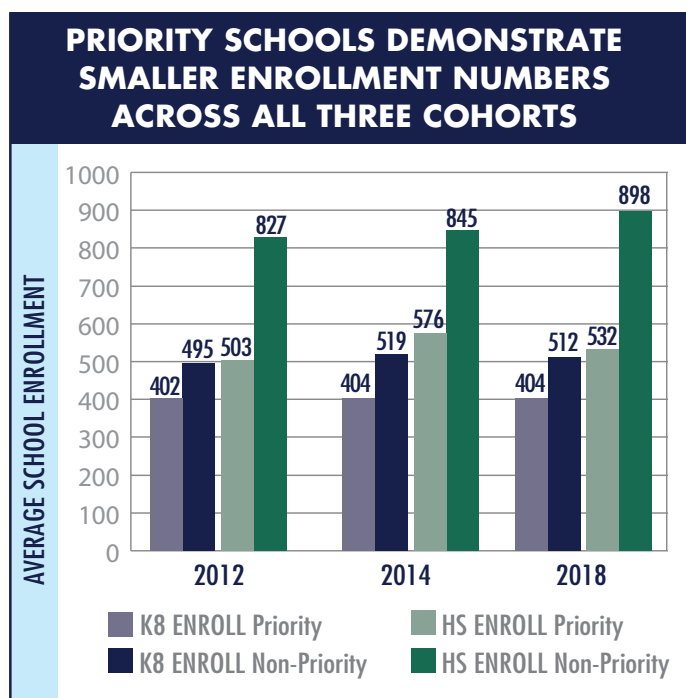
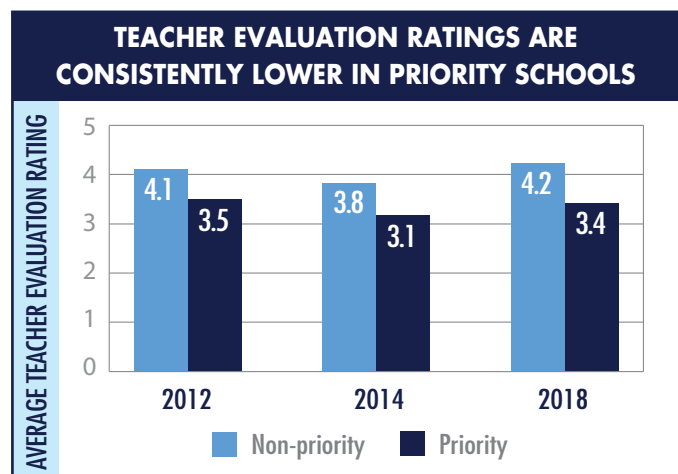


FIGURE 5

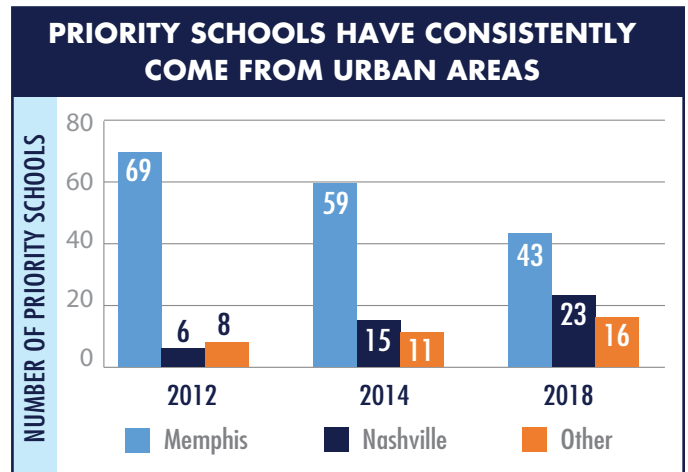




The 2018 Priority List once again primarily comprises schools from the state’s urban centers.

Though most Priority Schools continue to come from the state’s two largest cities (Memphis and Nashville), the distribution has shifted away from Memphis, from 83% of Priority Schools in 2012 to 52% of the Priority List in 2018. Given that each Priority List is bound to include roughly the same number of schools (five percent of the state), fewer schools coming from Memphis must mean more schools from other areas and districts. The Nashville area has seen an uptick of schools on the Priority Lists, from just six schools in 2012 to 23 schools on the 2018 list.

FIGURE 6



The 2018 Priority Schools List looks much like the 2012 and 2014 lists — they continue to serve greater concentrations of students of color, experience higher teacher teacher turnover rates, and have lower than average teacher evaluation ratings than non-Priority schools.



PERFORMANCE TRAJECTORIES

Almost half of all schools from the 2012 Priority List have improved rapidly relative to rest of the state over the past six years, while only a small handful of 2012 Priority Schools have fallen further behind.

In this section, we examine the range of growth outcomes across all schools from the 2012 Priority List. We track outcomes from the 2011-2012 school year (SY2012) through the 2016-2017 school year (SY2017). Within the variation across schools, we hope to answer questions regarding where and how turnaround efforts were most successful, such as what proportion of schools made gains on average? What proportion fell further behind? And how successful were the most successful schools?

Baseline Performance of the 2012 Priority Schools

Analyzing improvement begins with a review of where these schools stood academically when first identified on the 2012 Priority List.

	NUMBER OF SCHOOLS	PROFICIENCY RATE	ACHIEVEMENT PERCENTILE ³
2011-12 Tennessee	1,771	52%	50th
2011-12 Priority Schools	83	16%	17th
Elementary Schools	38	16%	15th
Middle Schools	27	14%	17th
High Schools	18	18%	19th
Shelby County	69	16%	16th
Metro Nashville	6	17%	23rd
Hamilton County	6	15%	16th
Other	2	18%	18th

While the statewide proficiency rate was 52% in 2011-12, just 16% of students in Priority Schools scored at or above proficiency. However, proficiency was not uniform across all Priority Schools. In nine of the 83 schools, proficiency rates were in single-digits. At the higher end, 17 schools from the Priority List had proficiency rates over 20%. The proficiency rate at one high school on the list, Hamilton High School, stood at 33% – closer to the overall state average than the average among other Priority Schools. Correspondingly, students’ achievement scores in the Priority Schools were, on average, at about the 17th percentile for the state.

2012 Priority Schools were most likely to close, and to move out of the bottom five percent of schools, if they were in Shelby County.

	COUNT	CLOSED ⁴	MOVED OFF BOTTOM 5% ⁵
All Schools	83	18	32 of 65
Elementary Schools	38	6	16 of 32
Middle Schools	27	7	10 of 20
High Schools	18	5	6 of 13
Shelby County	69	16	28 of 53
Metro Nashville	6	2	1 of 4
Hamilton County	6	0	1 of 6
Other	2	0	2 of 2

In the five years following the announcement of the original Priority List, 18 of the 83 schools named (or just over 20%) have closed. Closure was more common among schools serving upper grade levels, with over a quarter of middle and high schools from the Priority List closing, compared to just over 15% of Priority elementary schools. Though the vast majority of school closures occurred in Shelby County (88% of closures), this proportion is only slightly higher than the overall proportion of Priority Schools that were in Shelby County (83% of Priority Schools).

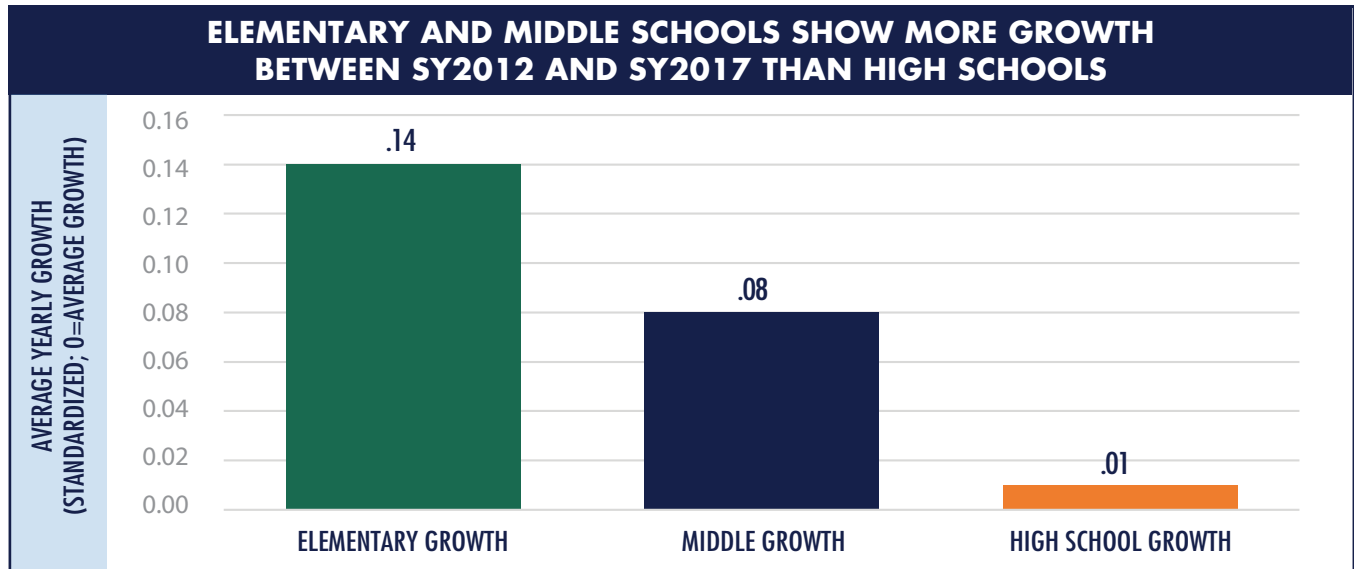
About half of the schools from the 2012 Priority List that did not close moved out of the bottom five percent of performance by 2016-17 (32 out of 65 still open). Digging deeper, we see that this proportion was roughly consistent across elementary schools (16 of 32), middle (10 of 20) and high schools (6 of 13). Priority Schools in Shelby County improved out of Priority status more frequently than Priority Schools in other locations, but this figure is somewhat bolstered by school closure. Though more than half (28 of 53) of Shelby County schools that remained open have moved out of the bottom five percent, that total represents just 43% of schools originally identified as low-performing when including those that closed. This is more similar to, but still higher than, the proportion moving out of bottom five percent status for other areas whether considering closure (33%) or not (29%).

More than half of Priority elementary and middle schools have improved rapidly, while very few schools have regressed.

Due to changes in Tennessee’s statewide assessment system, proficiency rates alone cannot track progress for the 2012 Priority Schools over time. Instead, for the purpose of this analysis, TERA standardized scores within each year and measure how schools’ performance relative to state average changes from year to year. For this analysis, we label any school in which students’ test scores gained 0.05 standard deviation units or more per year as “rapidly improving” and any school in which students fall behind the rest of the state by 0.05 standard deviation units annually as “falling behind.” This is roughly equivalent to students who start at the 20th percentile moving an average of two or three percentile points up (for rapidly improving) or down (for falling behind) the statewide distribution each year.

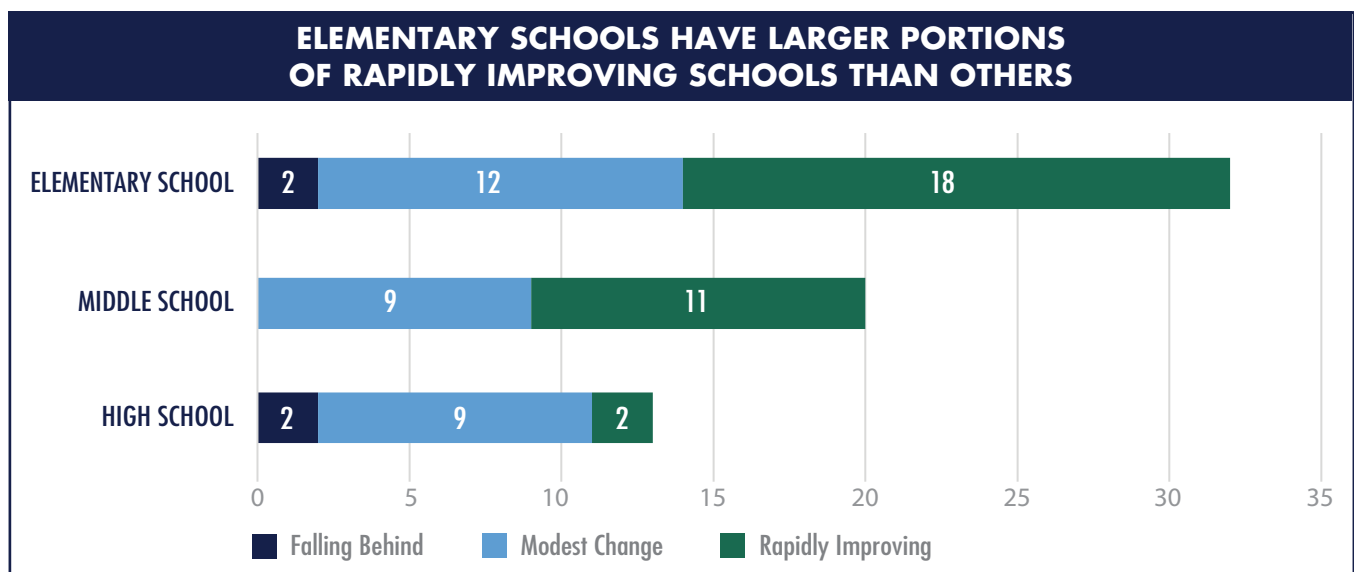
Beginning with all 66 Priority Schools that remained open through SY2017, we see an average improvement of 0.10 standard deviation units (SDU) per year relative to statewide performance. Average growth from the 2012 Priority Schools is greatest among the elementary schools at 0.14 SDU per year, followed by middle schools at 0.08. Students in the first cohort of Priority high schools improved 0.01 SDU per year, roughly keeping pace with state average.

FIGURE 7



In terms of the number of “rapidly improving” and “falling behind” schools, just over half of both elementary and middle schools are rapidly improving relative to the state, while the number of schools falling behind was relatively small. Among high schools, however, just two out of 13 schools improved rapidly relative to the rest of the state, with an equal number falling behind at an equal rate. **To summarize, growth in Priority Schools appears to have been greatest in elementary and middle schools from SY2012 through SY2017, with less promising results among high schools.**

FIGURE 8





FINDING RAPIDLY-IMPROVING PRIORITY SCHOOLS

Rapidly-improving schools from the 2012 Priority List come exclusively from among elementary and middle schools (no high schools) and from within Shelby County.

These growth analyses can also lead to the identification of schools for potential future case studies that could delve into the structures, processes, and norms of the schools that have demonstrated the most rapid improvement. By understanding more about these schools and what may account for their success, leaders from other schools, districts, or state systems may be able to design more effective turnaround interventions going forward and apply these interventions to current and future Priority Lists.

To identify the most rapidly-improving schools, we look at the rankings of schools on multiple progress measures, including student achievement and proficiency. We identify schools appearing near the top of the list on multiple progress measures for potential further study:

TABLE 4: Schools ranked among most rapidly-improving.

SCHOOL NAME	LEVEL	DISTRICT
Cherokee Elementary	Elementary	Shelby County
Chickasaw Middle	Middle	Shelby County
Douglass Elementary	Elementary	Shelby County
Ford Road Elementary	Elementary	Shelby County
Georgian Hills Middle	Middle	Shelby County
Lucie E. Campbell Elementary	Elementary	Shelby County
Magnolia Elementary	Elementary	Shelby County
Shannon Elementary / KIPP Memphis Academy	Elementary	Achievement Schools
Sherwood Middle	Middle	Shelby County
Treadwell Elementary	Elementary	Shelby County
Treadwell Middle	Middle	Shelby County
Whitehaven Elementary	Elementary	Shelby County

Schools listed appeared among the top 20 of 2012 Priority Schools on rankings of annual gains in both proficiency rate and achievement levels, both with and without controls for enrollment demographics.

There are some notable trends across the rapidly-improving schools. All 12 schools are located in Shelby County. Eleven are still members of Shelby County Schools, while the Achievement School District began to phase-in control of Shannon Elementary in the 2013-14 school year as KIPP Memphis Academy Elementary. However, KIPP had not phased in any tested grades until the 2016-17 school year, meaning the majority of these gains were achieved by students and teachers in Shannon Elementary. In addition to the geographic consistency, all 12 schools are either elementary (nine schools) or middle (three schools), with no high schools ranking among the fastest-improving schools from the 2012 Priority List.

CONCLUSION



Comparisons of the 2018 cohort of Priority Schools to both statewide averages for non-Priority schools as well as to previous cohorts of Priority Schools offer insights relevant to the state's strategy in improving the performance of its lowest-performing schools. **Most notably, 2018 Priority Schools serve exceedingly disproportionate concentrations of traditional disadvantaged students.** The similarity in composition and characteristics of the 2018 list to that of schools in the prior two cohorts means that lessons learned from the past several years of reform efforts will likely generalize to the latest group of Priority Schools.

The performance trajectories of Tennessee's first cohort of Priority Schools can help set expectations for the new cohort named earlier this school year. Not only does Tennessee have one of the longest track records of state-

led school improvement efforts, rigorous evaluations by the Tennessee Education Research Alliance suggest Tennessee has also overseen one of the country's most successful turnaround initiatives over that time. That success has seen almost half the schools from the original Priority List move out of the state's bottom five percent of student performance and an equal proportion boost student performance by 0.05 standard deviations of student achievement per year. The level and frequency of improvement can serve as benchmarks for assessing Tennessee's efforts to drive improvement in low-performing schools over the years ahead.

In looking for rapidly-improving schools from previous cohorts to serve as models for future reforms, we found that the top-performing Priority Schools over the past five years are all elementary and middle schools. This warrants further investigation into the implementation of turnaround reforms in order to understand why the approaches taken in Tennessee seem to have been most effective for the youngest students.

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ENDNOTES

- 1 The difference in proficiency rates does not appear to reflect weaker performance by educators in Priority Schools, however, as school TVAAS scores and found that Priority schools score 3.17 compared to 2.34 in non-Priority schools.
- 2 The bunching of percentile ranks in 2017 is the result of selection criteria; all 2018 Priority Schools were in the bottom five percent between 2016 and 2017.
- 3 TCAP and EOC scores standardized by test, reported as percentile rank.
- 4 For multiple schools consolidated into a single school, none of the original schools counts as a closure.
- 5 Bottom five percent defined as the fifth percentile or below among all schools at the same level (K-8, high schools) in terms of student proficiency rate in 2016-17. Some schools may have been in the bottom five percent and not been named to the 2018 Priority List due to TVAAS safe-harbor provisions or failure to meet test count minimums. We do not make these exceptions, so for our purposes we do not consider these schools as having exited the bottom five percent.

