Memorandum

TO: Margie Vandeven, Commissioner
Missouri Department of Elementary and Secondary Education

FROM: Michael Casserly, Executive Director
Council of the Great City Schools

SUBJECT: Performance of the Kansas City (MO) Public Schools

DATE: December 17, 2020

The Council of the Great City Schools was asked by officials at the Missouri Department of Elementary and Secondary Education (DESE) about the performance and progress of the Kansas City (MO) Public Schools. Council staff briefed DESE officials on December 1, 2020, about the data that the Council collected on its member urban school systems, including the Kansas City school district. This memo summarizes the data that the Council has on the school system.

The Council collects, analyzes, and maintains the following academic data on its members and has done so for about seven years—

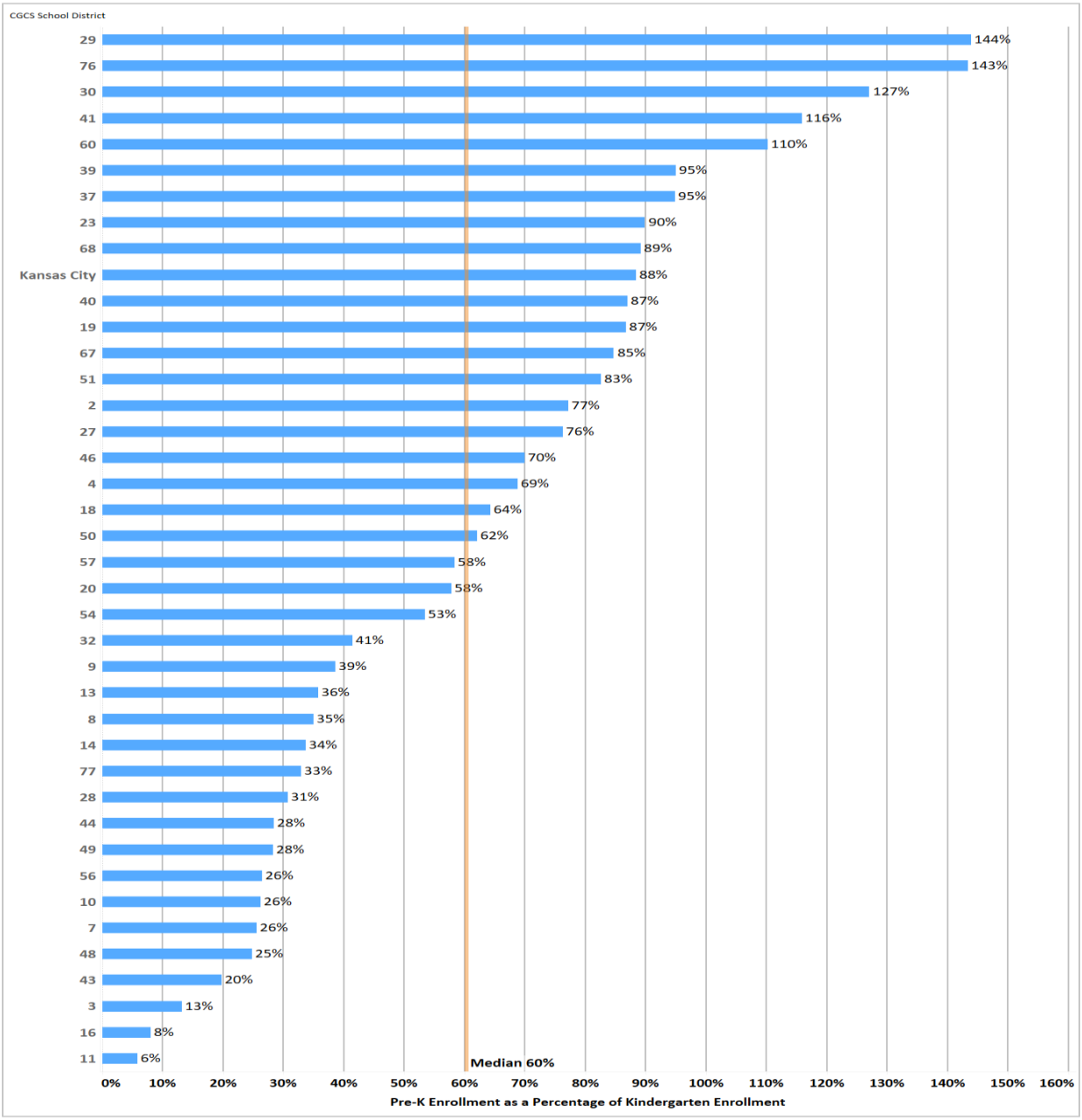
- Preschool enrollment as a percent of kindergarten enrollment
- Percent of 9th graders who failed one or more core courses
- Percent of 9th graders with B averages or better in all core courses
- Percent of students who successfully completed Algebra I or equivalent by the end of 9th grade
- Percent of secondary grade students who took one or more Advanced Placement (AP) courses
- Percent of all AP exam scores that were three or higher
- Attendance in grades 3, 6, 8, and 9
- Suspensions and instructional days lost to out-of-school suspensions
- Graduation rates.

Data on all variables are collected by race, gender, language status, disability status, and family income status. Reporting districts submit raw data and student counts, and the Council calculates all percentages, rates, and trends. Data are current through the 2018-19 school year and are collected in the same ways across all Council-member school systems to ensure the greatest degree of comparability across cities.

In addition to these data, the Council asked for raw data on Kansas City's last three years of i-Ready testing in reading and math since the state was unable to administer its summative tests at the end of the 2019-20 school year. And the Council compared Kansas City's state summative exam scores to St. Louis, which has already received state accreditation.

1) *Pre-K Enrollment as a Percent of Kindergarten Enrollment*. This measure provides a preliminary proxy measure of the size of a districts' pre-K program relative to its kindergarten enrollment. The current early childhood KPI divides the pre-K enrollment reported on the KPI data survey by the kindergarten enrollment. The indicator is important because it provides an initial look at the instructional background of students before they enter the formal school grading system. It is not a measure of performance per se, but it can help interpret changes in early grade student outcomes. Figure 1 below presents this data for 2018-19.

Figure 1. Pre-K Enrollment as a Percentage of Kindergarten Enrollment, 2018-19

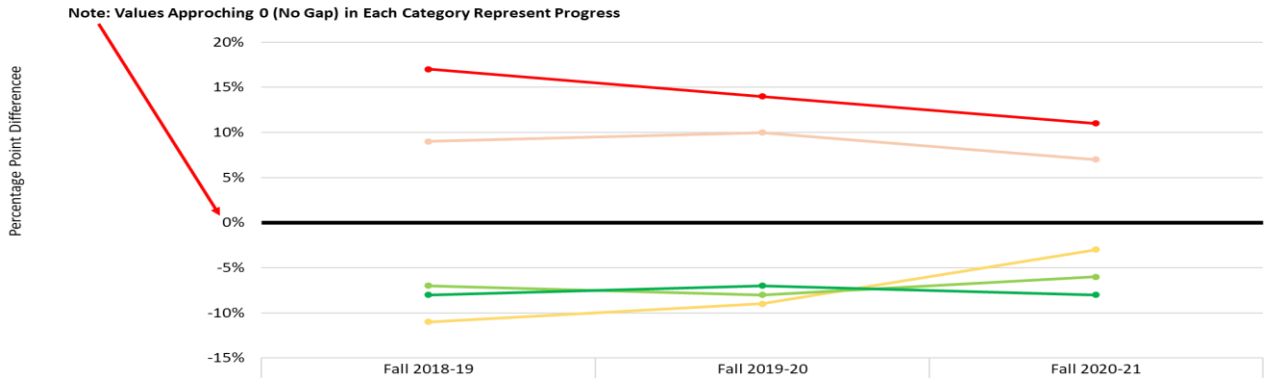


The data indicate that the pre-K enrollment in Kansas City (MO) was approximately 88 percent as large as its kindergarten enrollment. Nine city school systems had pre-K enrollments that were larger as a percent of the kindergarten enrollments, and 30 city school systems had pre-K enrollments that were smaller. This places Kansas City in the top tier of urban school systems on this variable, with participation rates comparable to those of Arlington (TX), Fort Worth, and Dayton (OH). The district's participation rate in 2014-15 was 53 percent.

2) *I-Ready Trends Compared to Urban School Students Nationally.* The Kansas City (MO) school district administers the i-Ready Computer Adaptive Assessment three times a year to students in grades K-8 to measure academic progress in reading and mathematics. The Council requested data from the school district and from Curriculum Associates, the publisher of i-Ready, to assess Kansas City's progress compared with the progress of other big city school systems nationally who administer the same test. The request yielded data for fall 2018-19, fall 2019-20, and fall 2020-21 on approximately 1.2 million students nationally each year. The Council was then able to measure the gap between Kansas City and other major urban school systems in the aggregate over time to see whether district progress was consistent with what we saw nationally, and whether Kansas City was closing the gap with other cities or widening that gap. Data were tracked on five variables: students who are three or more grade levels below expectations; students who are two grade levels below; students who are one grade level below; students who are on grade level; and students who are proficient or above.

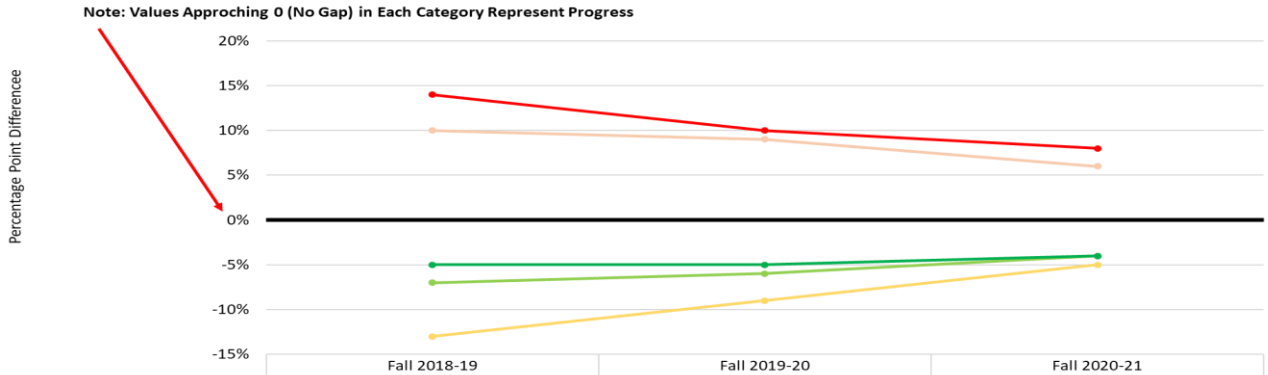
   The graphs below show trends in the gaps in reading and math between Kansas City and the nation's Great City School districts at each performance level. The data in reading show that Kansas City was able to reduce the gap with other large city school systems among students who were three or more grade levels behind from 2018-19, 2019-20, to 2020-21. In other words, Kansas City did a better job in reducing the numbers of its lowest-performing students in reading over this period than other big city school systems taking the same assessment. The same pattern existed among students who were two grade levels behind and one grade level behind. However, the gap between Kansas City and other big city school systems in students who were proficient remained largely the same over the period. Figures 2 and 3 on the next page show results in reading and math.

Figure 2. Percentage Point Change in Reading Gaps Between Kansas City and CGCS Districts on i-Ready Assessments between Fall 2018-19 and Fall 2020-21



	Fall 2018-19	Fall 2019-20	Fall 2020-21
3+ Levels Below	17%	14%	11%
2 Level Below	9%	10%	7%
1 Level Below	-11%	-9%	-3%
Early On Level	-7%	-8%	-6%
Mid On Level or Above	-8%	-7%	-8%

Figure 3. Percentage Point Change in Mathematics Gaps Between Kansas City and CGCS Districts on i-Ready Assessments between Fall 2018-19 and Fall 2020-21



	Fall 2018-19	Fall 2019-20	Fall 2020-21
3+ Levels Below	14%	10%	8%
2 Level Below	10%	9%	6%
1 Level Below	-13%	-9%	-5%
Early On Level	-7%	-6%	-4%
Mid On Level or Above	-5%	-5%	-4%

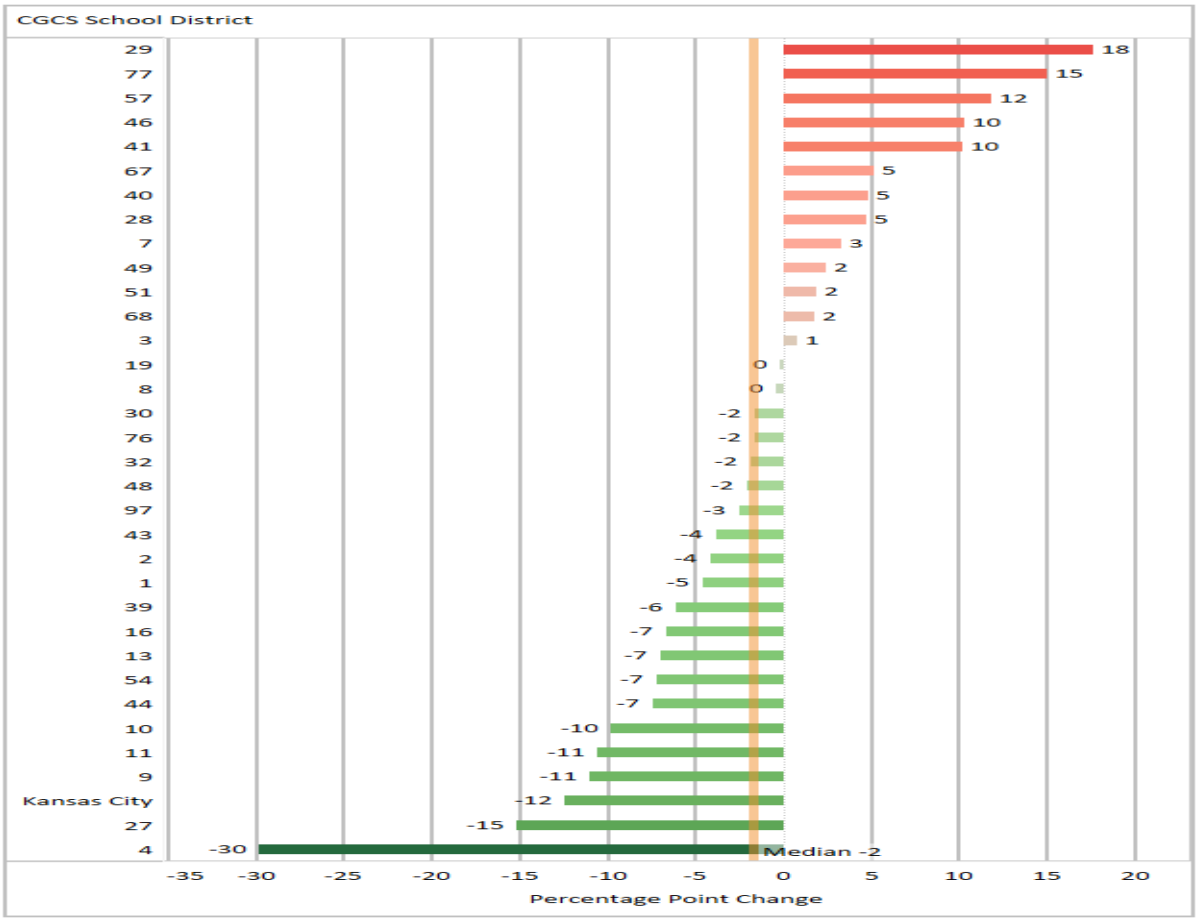
In general, the results in both reading and math suggest that Kansas City is improving the academic performance of its students—particularly its struggling students—faster than large city school systems nationally.

3) *Percentage of Ninth-Grade Students Who Failed One or More Core Courses.* This variable measures the percentage of ninth-grade students who have failed one or more core courses (mathematics, science, English language arts, or social studies) during the ninth-grade year. The indicator is based on research demonstrating the relationship between core course failures in the ninth grade and eventual high school graduation.

The data show that 37 percent of Kansas City (MO) ninth graders failed one or more courses in 2018-19. Some 13 city school systems nationally had higher rates and 25 had lower rates. Rates ranged from 55 percent to 12 percent—the median was 32 percent. The rate in Kansas City was most comparable to the rates in Arlington (TX), San Francisco, Los Angeles, and Cincinnati.

However, the rates in Kansas City have improved markedly over the past several years. In 2014, 51 percent of ninth graders failed one or more courses. Between 2015-16 and 2018-19, the percentage dropped from 49 percent to 37 percent—or 12 percentage points. This 12-percentage point decline in the number of ninth graders who failed one or more courses was the third largest improvement of all cities on which the Council had data (see Figure 4 below) and placed Kansas City in the top quartile of cities showing improvement on this variable. (The median improvement was two percentage points.) In addition, the improvements in Kansas City allowed the district to surpass Atlanta, St. Paul, Houston, Baltimore, Dallas, and Fort Worth in the overall city rankings on this variable. Finally, the ninth-grade course failure rate dropped by 15 percentage points among African American males and 15 percentage points among African American females, placing Kansas City in the top quartile of improving urban school districts across the nation.

Figure 4. Change in Percentage of Ninth Graders Failing One or More Courses between 2015-16 and 2018-19

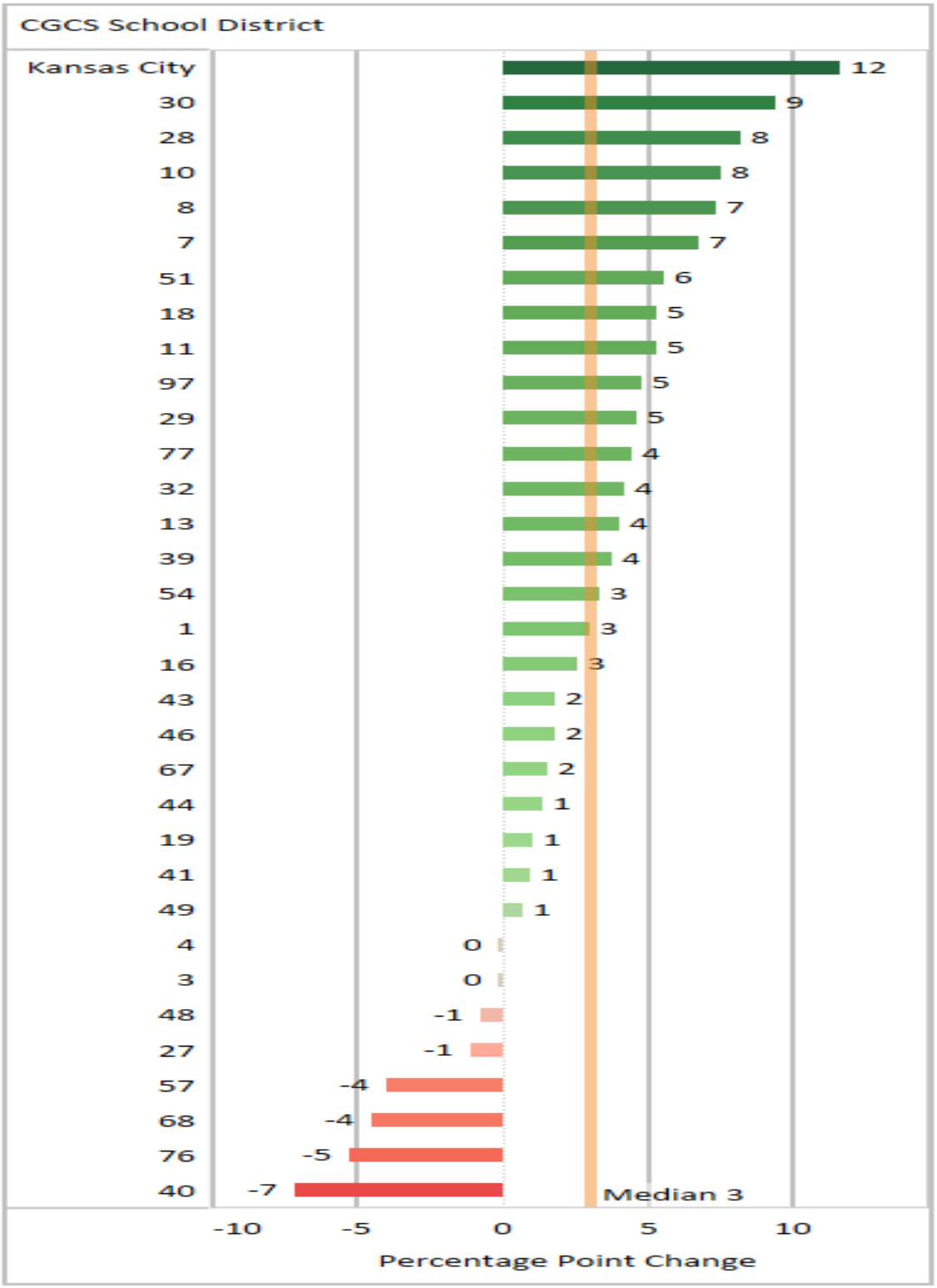


4) *Percentage of Ninth Grade Students with a B Average Grade Point Average (GPA) or Better in All Courses*. This variable tracks grades and trends in grades among ninth-grade students, which have been shown to be an accurate measure of overall performance. The Council did not collect data on this variable in 2014-15, but data on 2018-19 shows that 32 percent of ninth graders in Kansas City had a B average or better in all courses. The median across the Great City Schools was 43 percent, with nine urban school districts having lower rates and 29 having higher rates. Districts ranged from 65 percent to 11 percent. Kansas City's overall rate was most like those in the District of Columbia (one of the fastest improving urban school systems), New York City, and Fresno.

   Like the data on the numbers of ninth graders who had failed one or more courses, the Kansas City data on grade-point averages have improved markedly. Between 2015-16 and 2018-19, the percentage of ninth graders who had a B average or better improved from 20 percent to 32 percent—or 12 percentage points. This rate of gain was the largest of any urban school district in the country on which the Council has data. (See Figure 5 below.) This improvement allowed the district to surpass Norfolk, Detroit, Milwaukee, Cincinnati, and Cleveland on the overall rankings on this variable.

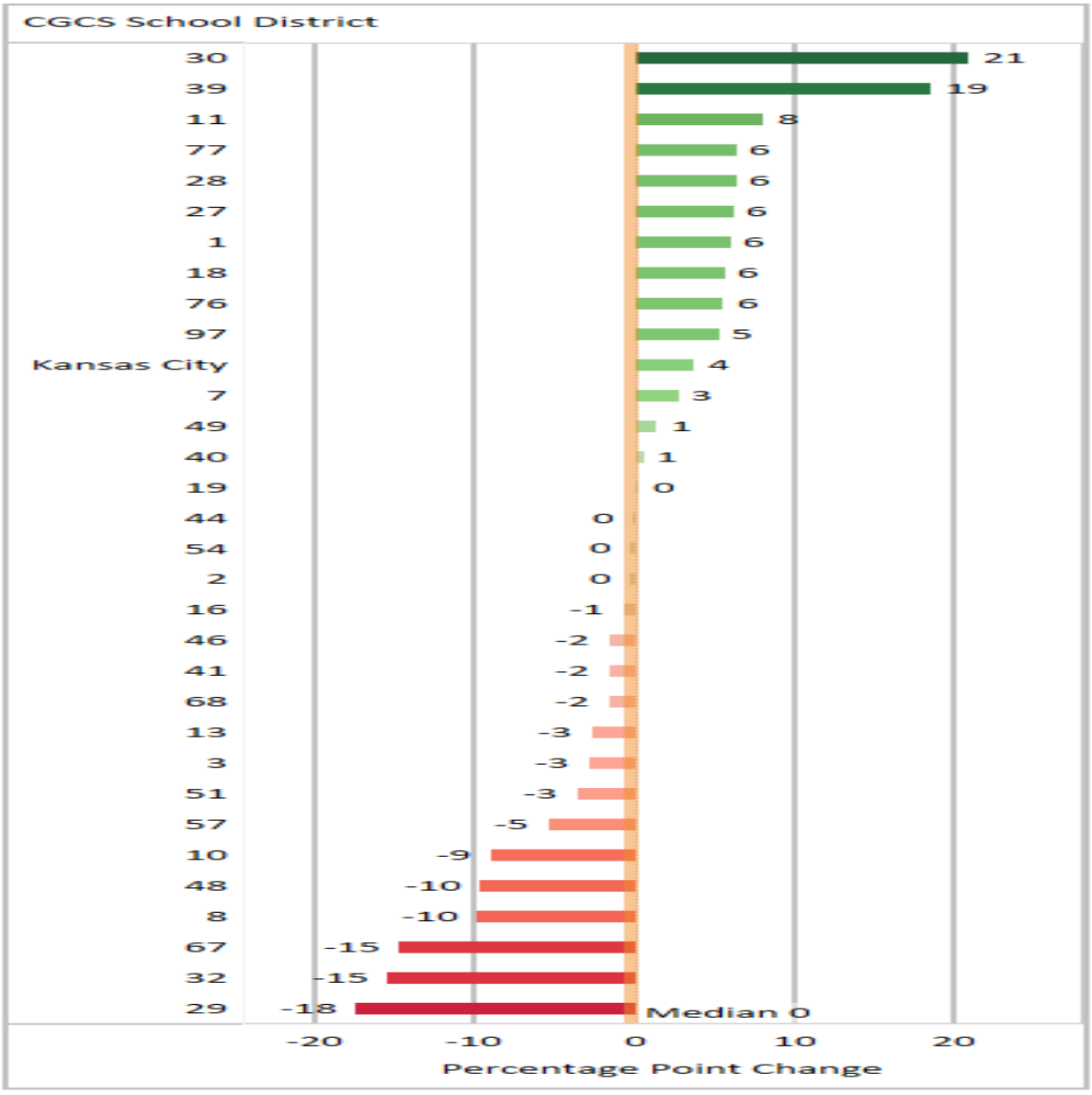
   Finally, the rates of improvement among African American males climbed by 5 percentage points between 2015-16 and 2018-19, while the rates among African American females jumped by 12 percentage points, Hispanic males by 6 percentage points, and Hispanic females by 12 percentage points. These gains place Kansas City in the top quartile of improvements in other urban school systems nationally on which the Council has data.

Figure 5. Change in Percentage of Ninth Graders with a B Average or Better between 2015-16 and 2018-19



5) *Percentage of Students Who Had Successfully Completed Algebra I or Equivalent by the End of 9th Grade.* This variable shows the percentage of first time ninth-grade students successfully completing Algebra I or equivalent by the end of grades seven, eight, or nine. The counts in each grade do not overlap or duplicate one another. Completion of this course has been shown to effectively predict graduation rates. In Kansas City (MO), the data show that some 63 percent of ninth graders in 2018-19 had successfully completed Algebra I or equivalent. Rates across the cities ranged from 88 percent to 30 percent. Kansas City had higher rates than 8 major city districts nationwide and lower rates than 30 large city school districts on which the Council has data. Kansas City's rate was most like rates in Wichita and New York City.

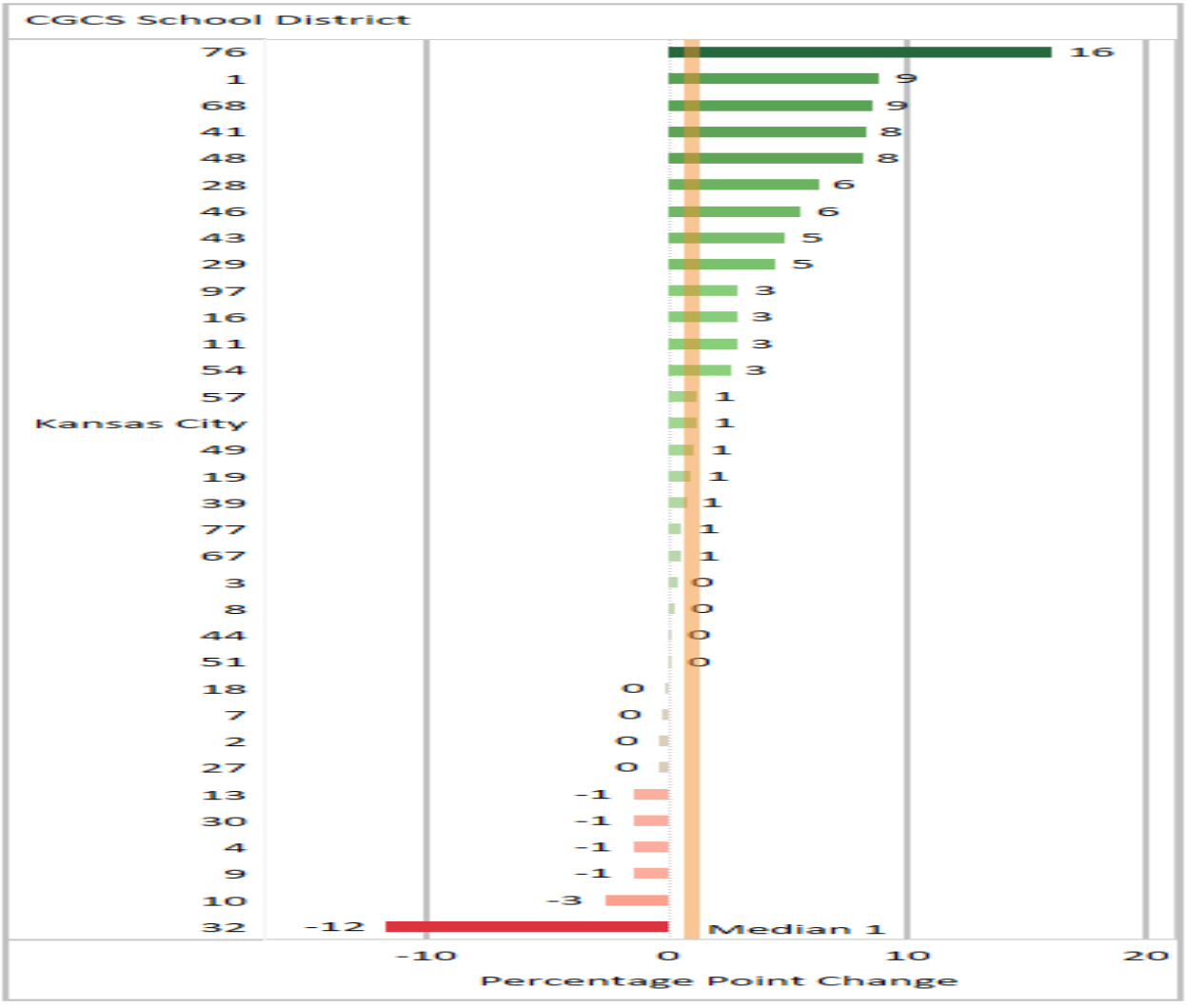
Figure 6. Change in Percent of Students Who Had Successfully Completed Algebra I by the End of Ninth Grade



However, like the other variables discussed so far, Kansas City has shown improvement. The percentage of students who had successfully completed Algebra I or equivalent improved from 50 percent in 2014-15 to 59 percent in 2015-16 to 63 percent in 2018-19. This 4-percentage point rate of gain (see Figure 6 on previous page) allowed the district to surpass Cincinnati, Dayton, Atlanta, Cleveland, and New York City on this variable between 2015-16 and 2018-19. Finally, the percentage of African American males who successfully completed Algebra I or equivalent between 2015-16 and 2018-19 grew by 6 percentage points and African American females increased by 8 percentage points—placing Kansas City in the top quartile of all cities in terms of improvement among African American students.

6) *Percentage Point Change in Secondary Students Who Took One or More AP Courses*. This variable compares district performance on advanced placement (AP) indicators, including the percent of secondary school students who took one or more AP courses and the percent of all AP exam scores by district that were three or higher, meaning that they qualified for college credit.

Figure 7. Percentage Point Change in Secondary Students Who Took One or More AP Courses between 2015-16 and 2018-19



The data on which the Council has data indicate that only 7 percent of the district's secondary-grade students had taken one or more AP courses in 2018-19, compared to 25 percent of secondary students in urban school districts across the country on which the Council had data. Kansas City's rates were like those in Richmond (VA), Memphis, Cleveland, Detroit, and Dayton. Data collected by the Council suggests that the percentage of Kansas City secondary students taking AP did increase by 1 percentage point between 2015-16 and 2018-19, which was the median improvement among all Great City School districts (see Figure 7). Hispanic males, however, improved by 2 percentage points over the period, and Hispanic females improved by 4 percentage points.

More recent data from the district indicates that the number of students taking AP, International Baccalaureate, or Dual Credit courses increased from 558 in 2017-18 to 680 in 2018-19, to 753 in 2019-20.

7) *Percent of All AP Examination Scores that Were 3 or Higher*. Data from the Council on this variable show that only 2 percent of AP tests taken in Kansas City in 2018-19 were passed with a score of 3 or higher, i.e., high enough to qualify for college credit. This was the lowest percent of all the major city school districts on which the Council has data. More recent data from Kansas City indicates that the number of AP exams passed with a score of 3 or higher improved from 9 tests (or 3.3 percent) in 2018-19 to 51 tests (or 23.6 percent) in 2019-20. If this trend holds up and all other city scores remain constant, then this improvement would rate as the second highest increase in the percentage of AP test scores that were three or higher and would allow Kansas City to surpass Milwaukee, Richmond (VA), San Antonio, and Cleveland in the percent of tests with scores of 3 or higher.

   This substantial gain in AP test scores in 2019-20 is plausible because of the major improvements in ninth-grade performance data over the last several years. Those students are now moving into more advanced coursework and helping to improve the district's overall graduation rate, which we will see next.

8) Four-Year Cohort Graduation Rates. Kansas City (MO) reported a four-year graduation rate of 71 percent in 2018-19, compared to the big-city school median of 83 percent. In general, the graduation rates in big city school districts in 2018-19 ranged from 92 percent to 65 percent. The 71 percent graduation rate in Kansas City in 2018-19 was comparable to those in Richmond (VA) and Baltimore.

   Kansas City's graduate rate has improved substantially over the last several years, however. In 2014-15, the district's graduation rate was 65 percent, one of the lowest of all Great City School districts. In 2015-16, the graduation rate rose to 68 percent and in 2018-19 to 71 percent. That rate of gain moved Kansas City past the District of Columbia, Oklahoma City, Milwaukee, and Baltimore. More recent estimates from the district indicate that the official graduation rate for 2020 may have improved again to 74.8 percent. This would move the district one notch up the rankings among all cities, and it would make the district one of the top ten big city districts with the largest gains in graduation rates (among those districts on which the Council has data).

9) *Comparisons of State Summative Test Results with St. Louis*. Finally, the Council examined results of the Missouri Assessment Program (MAP) by grade in both Kansas City and St. Louis between 2016 and 2019. (There was no state testing in the spring of 2020.) We compared reading and math trends in both cities with state results over the same period, although the test changed between 2017 and 2018. Results for grade 3 are shown in Figures 8 and 9 below and in all grades tested in Table 1 on the next page. In the two most recent years tested (i.e., 2018 and 2019), Kansas City improved faster in reading than either St. Louis or the state average. In addition, Kansas City showed a scale score that was 10.9 points higher than St. Louis, and it narrowed the gap with the state from 34.9 scale score points in 2018 to 28.2 points in 2019.

Figure 8. Results for the Missouri Assessment Program Reading Performance for Grade Three Between 2015-16 and 2018-19

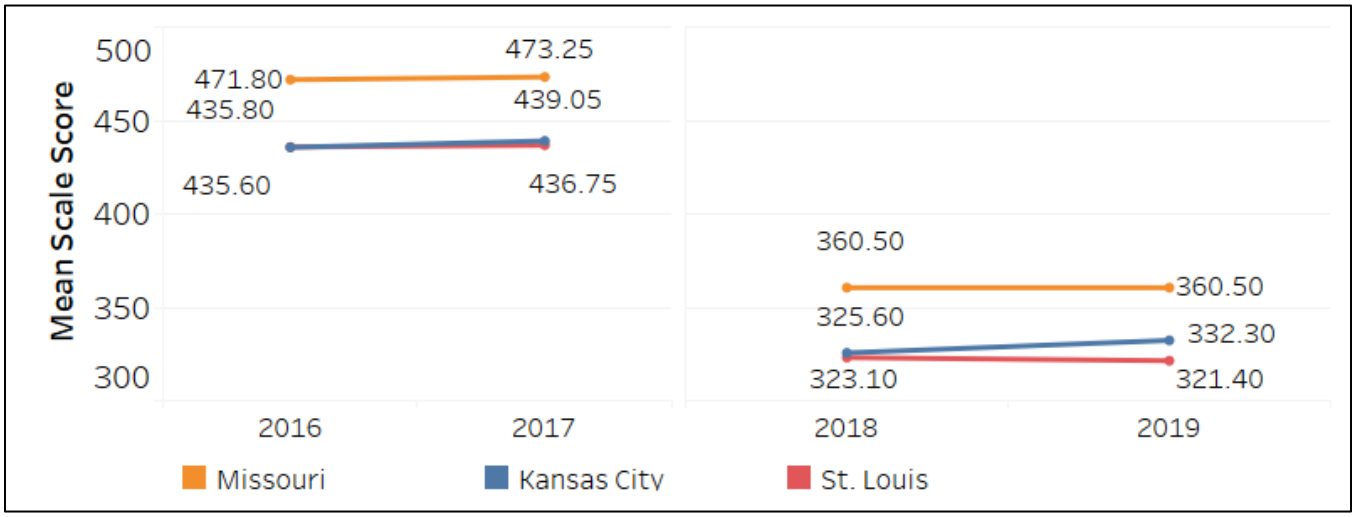
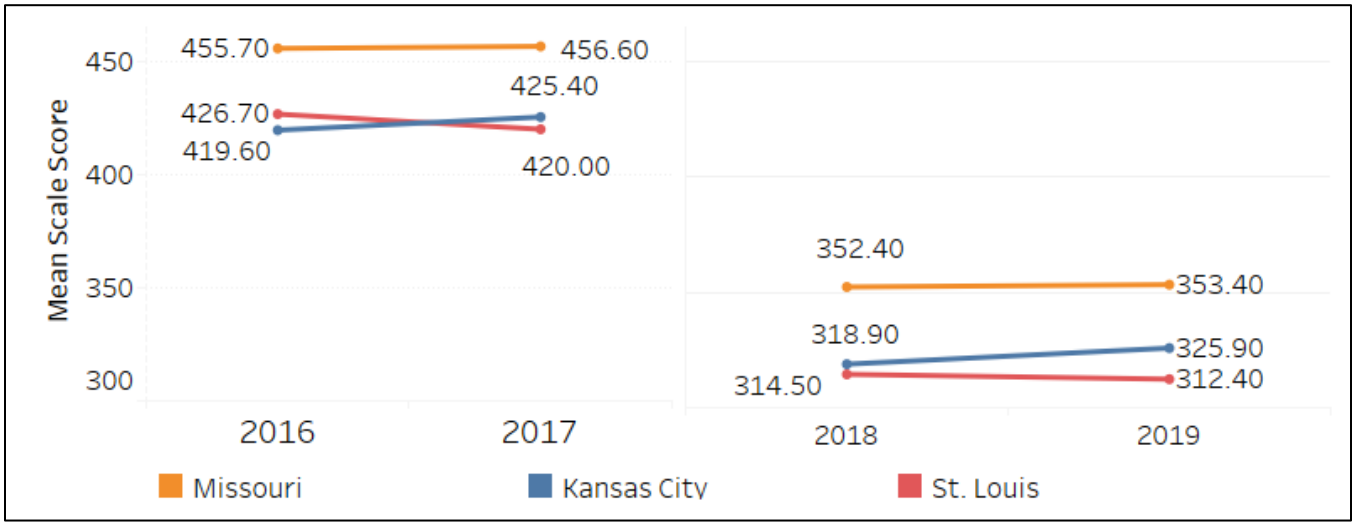


Figure 9. Results for the Missouri Assessment Program Mathematics Performance for Grade Three Between 2015-16 and 2018-19



Results were similar in math: Kansas City improved faster than either St. Louis or the state average. In addition, Kansas City showed a scale score that was 13.5 points higher than St. Louis, and it narrowed the gap with the state from 33.5 scale score points in 2018 to 27.5 points in 2019. The same general patterns also are seen between 2017 and 2018. Results for grades three through eight are shown in Table 1 below.

Table 1. Results for the Missouri Assessment Program Reading and Math Performance for Grades Three through Eight Between 2015-16 and 2018-19

Grade/Subject	Subject	District	2016	2017	2018	2019
Third Grade	ELA	Missouri	458.1	459.8	360.5	360.5
		Kansas City	421.0	426.9	325.6	332.3
		St. Louis	422.7	422.0	323.1	321.4
	Math	Missouri	455.7	456.6	352.4	353.4
		Kansas City	419.6	425.4	318.9	325.9
		St. Louis	426.7	420.0	314.5	312.4
Fourth Grade	ELA	Missouri	485.5	486.7	384.8	385.2
		Kansas City	450.2	451.2	353.1	357.1
		St. Louis	448.9	451.5	348.1	350.0
	Math	Missouri	481.9	483.0	376.7	378.5
		Kansas City	440.1	438.0	343.9	347.3
		St. Louis	444.1	436.4	338.7	337.3
Fifth Grade	ELA	Missouri	499.2	500.5	399.7	398.8
		Kansas City	463.2	466.3	373.8	373.1
		St. Louis	464.7	470.4	370.5	366.6
	Math	Missouri	499.9	501.1	399.7	398.6
		Kansas City	469.5	470.4	376.5	375.8
		St. Louis	472.9	476.8	376.8	370.5
Sixth Grade	ELA	Missouri	506.7	507.6	409.9	408.2
		Kansas City	479.1	482.8	390.4	389.7
		St. Louis	472.4	473.9	380.9	380.3
	Math	Missouri	507.1	507.1	405.7	407.6
		Kansas City	477.6	479.4	386.3	390.9
		St. Louis	475.5	468.5	375.7	377.6
Seventh Grade	ELA	Missouri	514.8	516.8	425.9	425.8
		Kansas City	472.5	480.7	395.6	397.3
		St. Louis	471.7	475.2	394.1	396.1
	Math	Missouri	514.6	516.2	418.8	417.3
		Kansas City	478.0	480.0	381.5	381.8
		St. Louis	475.3	474.0	380.6	376.2
Eighth Grade	ELA	Missouri	527.6	528.7	439.6	438.2
		Kansas City	477.8	491.7	410.1	408.2
		St. Louis	485.5	484.8	401.8	407.5
	Math	Missouri	515.0	516.9	440.6	439.9
		Kansas City	466.6	468.9	389.3	394.9
		St. Louis	480.9	478.6	401.9	406.6

Note: The MAP assessment changed between 2017 and 2018. While these scores are not directly comparable, trends prior to and after the change indicate relative changes in Kansas City's performance over time. Blue represents the old assessment and Green reporsents the new assessment.

In general, results on the state test in Kansas City and St. Louis are comparable—with a slight advantage to Kansas City. The point, however, is not that one district is doing better than another; the point is that Kansas City is not asking for special treatment from the state on the issue of accreditation. They are asking for the same consideration from the state afforded St. Louis for similar or better performance.

Discussion

In the experience of the Council of the Great City Schools, trends like those described in this memo do not happen by accident. They are the result of deliberate action. In this case, it appears that Kansas City (MO) pursued a number of strategies to produce the gains it is seeing so far. First, when the superintendent arrived, he pursued a thorough audit of the school district's instructional program, financial operations, human resource operations, transportation systems, and food service operations. The audit, conducted by the Council of the Great City Schools, yielded 126 detailed recommendations based on research on how some urban school systems improve faster than others—64 of them in the area of instructional improvement.

The instructional proposals included steps the district could take in the areas of organizational structure, staffing, accountability, instructional programming and practice, curriculum and materials, English language arts, mathematics, school improvement planning, early childhood programming, gifted and talented education, professional development and capacity building, technology, English learner education, special education, discipline, and data and assessments. With these recommendations and the strong backing of the school board, the superintendent developed a strategic plan for the district and an overarching vision and theory of action for improvement, and aggressively pursued many of the proposals that the audit laid out.

A central part of this work involved strengthening the curriculum and boosting its overall efficacy, quality, and alignment with state standards. In addition, the district stepped up the quality of its professional development, strengthened instructional content and foundational skills in the early grades, increased the number of reading and math coaches, adopted a universal screener to identify needed interventions, created instructional walk-through and monitoring procedures, consolidated accountability documents to provide clearer expectations, improved academic department coordination, reoriented the work of principal supervisors around instruction, and increased the numbers of advanced placement courses and certified teachers.

Second, the district has aggressively partnered with the local business community, foundations, and community organizations to rebuild trust and coordination. These partnerships, in turn, allowed the school system to create its middle-college program and to fund programs like AVID and other efforts that helped strengthen the district's academic offerings. At the same time, district leadership went about the process of strengthening various family supports and communications.

Finally, the superintendent agreed at the outset of his tenure to be evaluated annually on a series of metrics that tracked district progress on the goals that it had set under the strategic plan. In the Council's experience, this seemingly simple step is critical to a district's focus on the attainment of its goals, especially its academic goals. In a recent set of case studies conducted by the Council on urban school

districts that had made significant gains in student outcomes, the organization found that such accountability and a school board's willingness to monitor progress on those outcomes were critical components in their improvement. Moreover, Kansas City went about the process of visiting and learning from other big city school systems that have made progress over the years.

To be sure, the Kansas City (MO) school district, its leadership, and staff have considerable work yet to do. Its indicators of performance are moving in the right direction, but like all school systems there are further improvements it can and should make.

The State of Missouri carefully monitors through its accreditation system multiple measures of school district performance. The purpose of this memo by the Council of the Great City Schools is to put Kansas City (MO) in a broader national context by comparing the school district not only to others in Missouri but to other urban school systems across the country with similar challenges and demographics. The results indicate that the school system has made substantial progress when compared to other major urban school systems across the country. This progress can be seen not only on indicators developed by the state, but it has made significant headway on a number of important metrics when compared to other major urban school systems across the country.

In the judgment of the Council, the Kansas City (MO) school system has earned full state accreditation. It appears that the district meets critical state criteria when measured over three years. And the improvements seen by the school system over the last several years stack up favorably with other big city school systems across the nation. In fact, the district is improving at a rate that is surpassing the performance of other big city school systems. In addition, the district has demonstrated stability in its direction and leadership that bodes well for its continued progress well into the future. Finally, state approval of district accreditation would provide an added incentive for the school district and the community to continue moving forward on behalf of Kansas City's schoolchildren.