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# THE MICHIGAN CONTEXT AND PERFORMANCE REPORT CARD

— PUBLIC ELEMENTARY AND MIDDLE SCHOOLS, 2015 —

By Audrey Spalding and Ben DeGrow



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The Mackinac Center for Public Policy

# The Michigan Context and Performance Report Card: Public Elementary and Middle Schools, 2015

By Audrey Spalding and Ben DeGrow

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## **Introduction**

This is the Mackinac Center's fourth school report card and covers elementary and middle schools. A similar report card was published in 2013, and this edition includes two years' worth of new data. A unique characteristic of this report card is that takes into consideration the "context" of a school when assessing its performance. Specifically, it controls for differences in the socioeconomic status of students each school serves. Including this factor provides a more accurate assessment of a school's performance, since research has shown that student backgrounds can have a large impact on academic performance.<sup>1</sup> Report cards that do not consider these differences among schools can understate the performance of schools serving high-poverty students and overstate the performance of schools serving relatively affluent students.\*

This report card averages several years of student achievement data to create a "Context and Performance" score, or CAP Score. This helps ensure that a school's grade is not unduly influenced by a single year's performance. At least six subject test scores from at least two different years of testing were used to calculate a school's overall CAP Score.

Though the Michigan Department of Education publishes school rankings and assessment score cards, the state does not use student socioeconomic status as a way to compare schools enrolling similar student populations.<sup>2</sup> In response to previous CAP report cards, other organizations also have begun publishing school report cards that adjust scores based on student socioeconomic status.<sup>†</sup>

This 2015 elementary and middle school report card contains slight methodological changes compared to the 2013 one. Changes to Michigan's standardized student testing system mean that this will be the last elementary and middle school CAP report card to rate schools on the basis of scores from the Michigan Educational Assessment Program tests. Due to the state's phaseout of the MEAP (the last MEAP tests were administered during the 2013-14 school year), this report card can only rely on three years of test data to generate CAP Scores; past report cards have used four.

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\* For instance, the Pacific Research Institute reviewed Michigan school performance and found that in close to half of Michigan's more affluent schools, a majority of students fail to meet proficient (or better) level on at least one state assessment. Lance Izumi and Alicia Chang, "Not as Good as You Think: Why Middle-Class Parents in Michigan Should Be Concerned About Their Local Public Schools" (Pacific Research Institute, March 2015), <http://perma.cc/V64A-VVWA>.

† Bridge Magazine publishes an "Academic Champs" ranking that uses the methodology originally developed in Mackinac Center report cards. "Achievement Exceeding Predicted Proficiency: Methodology" (Public Sector Consultants, Inc., 2015), <http://perma.cc/62LV-87BJ>. However, the Mackinac Center's CAP report card uses a slightly different methodology that more accurately adjusts test scores based on students' socioeconomic status. Audrey Spalding, "The Michigan Context and Performance Report Card: Public Elementary and Middle Schools, 2013" (Mackinac Center for Public Policy, 2013), 36–37, <http://perma.cc/R2MR-ZXMZ>.

## Data and Methods

This report card's methodology is based on research first published by the University of Arkansas in 2006.<sup>3</sup> For each MEAP test (in a particular year, subject and grade), regression analysis is used to predict how a school will perform, given the socioeconomic status of the students tested. The school's actual performance is then compared to its expected performance based on these regressions.

The socioeconomic status of students in a school is measured by the percentage of students who qualify for a free lunch under the federal National School Lunch Program. During the 2013-14 school year, a student from a family of four was eligible for a free lunch if the family's annual income was \$30,615 or less.<sup>4</sup> Though researchers often use both the percentage of students eligible for a free lunch and the percentage eligible for a reduced-price lunch as a proxy for socioeconomic status, this report card uses only the free-lunch figure. Research for previous CAP report cards found that the percentage of students eligible for reduced-price lunches in Michigan is not correlated with academic performance.<sup>5</sup>

Since this report card uses grade-level student assessment data, a school's predicted performance for a particular test relies on grade-level student socioeconomic data. For example, eighth-grade MEAP mathematics scores were regressed against the percentage of eighth-grade students at each school who were eligible for a free lunch — not the overall percentage of students at the school who were eligible.

The CAP Score awarded to a school shows whether the school did better or worse than expected. A CAP Score of 100 means that a school did exactly as expected — this value was assigned to the average performance of schools given the socioeconomic status of their students. A score greater than 100 indicates better-than-expected performance, while a score of less than 100 indicates worse-than-expected performance. More details about these scores can be found in Appendix B: Regression Analysis.

### ***Test Scores Used***

The Michigan Educational Assessment Program tests were used for this report card. Up through the 2013-14 school year, the MEAP test was given to public school students in grades three through nine. For the 2014-15 school year, the state replaced the MEAP with the Michigan Student Test of Educational Progress, or M-STEP, a new standardized test that adheres to different standards and uses more open-ended questions.<sup>6</sup>

Though the CAP methodology would allow for the use of two different tests to calculate CAP Scores, this report card only includes MEAP results, to preserve continuity with previous years' results.\* While past CAP report cards have used four years of data to calculate school rankings, this report card only uses three years (2011-12, 2012-13 and 2013-14), due to the MEAP's discontinuation.

Students in grades three through eight took both the reading and mathematics MEAP test each year. Students in grades four through eight take one extra subject test (in writing, science or social studies),

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\* The M-STEP test scores could have been normalized to the same scale as the MEAP test scores used in the calculation of CAP Scores, with CAP Scores generated from these different assessments then averaged together to create a single score for a school.

depending on their grade level. Ninth-grade students take a social studies test as part of the MEAP. Graphic 1 shows the MEAP test schedule in detail.

**Graphic 1: Michigan Educational Assessment Program  
Test Subjects and Grades**

Grade	Tests Administered
3	Math, reading
4	Math, reading, writing
5	Math, reading, science
6	Math, reading, social studies
7	Math, reading, writing
8	Math, reading, science
9	Social studies

Source: "Michigan Statewide Assessment Selection Guidance" (Michigan Department of Education, 2011), <http://perma.cc/B5U7-Y6AR>.

Most ninth-grade social studies scores on the MEAP came from high schools. Since the goal of this report card is to compare performance among elementary and middle schools, ninth-grade social studies scores were not included in the calculation of CAP Scores. All other MEAP test scores were used.

Among the 2,246 schools that were ranked in this report card, 196 schools had 51 MEAP subject test scores used to generate their CAP Scores.\* The typical school's CAP Score was based on an average of 26 MEAP subject tests. As such, each school's overall CAP Score represents an average of many standardized assessments, thereby creating a more reliable portrait of overall school performance.

To generate a school's CAP Score, MEAP subject tests were first normalized by comparing the school's performance within that grade and that subject for a particular year to the performance of other schools with similar student populations. The various subject-level CAP Scores for a particular grade and year were averaged together to generate a year-specific grade-level CAP Score. From there, a school's grade-level CAP Scores were averaged together to generate a CAP Score for each of the three years examined. Each school's year-level CAP Scores were averaged together to create an overall CAP Score.†

If a school did not serve the same number of grades over this three-year period, some grade-level CAP Scores could be more heavily weighted than others. Consider a charter middle school that opened in the 2012-13 school year and enrolled just sixth-graders in its first year. The school's 2012-13 CAP Score would be based only on its sixth-graders' scores on three MEAP tests: math, reading and social studies. When the school added seventh grade in 2013-14, half of its 2013-14 CAP Score would be based on those three sixth-grade MEAP test scores and half would be based on seventh-graders' MEAP test scores in

\* Schools that served grades three through eight would have results from 17 subject tests each year. Schools that tested these grades in each of the three years used for this report card would have scores from 51 different tests over this period.

† As an example, consider a school that serves grades three, four and five. Its 2011-12 third-grade reading and math scores were averaged to create a 2011-12 third-grade CAP Score. The same procedure would be used for its fourth-grade reading, math and writing scores and fifth-grade reading, math and science scores. This would create a fourth-grade 2011-12 CAP Score and a fifth-grade 2011-12 CAP Score. All three of these 2011-12 CAP Scores were then averaged together to create the school's 2011-12 annual CAP Score. MEAP scores from the following two years — 2012-13 and 2013-14 — were treated the same way, so that the school had annual CAP Scores for 2011-12, 2012-13 and 2013-14. Finally, these three annual CAP Scores were averaged together to produce the overall CAP Score used in this report card.

math, reading and writing. To calculate the charter middle school’s overall CAP Score over this two-year period, the 2012-13 and 2013-14 CAP Scores would be averaged together — and 75 percent of the school’s CAP Score would wind up coming from sixth-grade MEAP scores.\*

To avoid ranking too many schools that have been closed or reorganized, this report card only ranks schools that reported MEAP test results for the 2012-13 and 2013-14 school years, and schools with at least six subject-level CAP Scores. The Center’s intent in publishing this report card is to provide useful information to parents, school leaders and policymakers. As such, ranking schools that are now closed would not be helpful. Further, schools that primarily serve students with special needs were excluded as well.

### **School Identification/Classification**

This report card considers three types of public elementary and middle schools: conventional schools, charter schools, and selective-admission schools. Conventional schools are operated by traditional public school districts, and, in some cases, are more than 100 years old.<sup>7</sup> Charter schools operate independently of school districts, are “chartered” by a public authorizer (typically a community college or university) and are often run by private management companies. They are also relatively new schools. Charter schools cannot limit enrollment on the basis of academic achievement.<sup>8</sup>

Selective schools are conventional public schools that require students to demonstrate a certain level of academic performance before being admitted. They were identified in the report card by checking school enrollment policies. For example, the Crestwood Accelerated Program, a school run by the Crestwood School District in Dearborn Heights, limits enrollment to students who scored at or above the 95th percentile in a subject test or 70th percentile overall on a standardized test.<sup>9</sup>

**Graphic 2: Types of Public Elementary and Middle Schools in Michigan, 2012-2014**

School Type	Number of Schools	Percentage of Schools
Conventional	1,999	89.0%
Charter	238	10.6%
Selective	9	0.4%
Total	2,246	100%

Source: Authors’ calculations based on analysis of MDE data.

To provide a better understanding of the environment in which they operate, schools were also categorized by geographic “locale codes.” These codes indicate whether a school is located in an urban, suburban, town or rural setting, as assigned by the federal National Center for Education Statistics.<sup>†</sup>

Schools are placed into one of four categories: City, suburb, town, rural. Within each of these four major categories, there are three subcategories that provide further information about the density or remoteness

\* In this case, 50 percent from the 2012-13 sixth-grade scores plus 25 percent from the 2013-14 sixth-grade scores.

† Just one school, Nah Tah Wahsh Public School Academy, was not paired with a locale code when matched with NCES data. Since the school is close to the Bark River-Harris school district, that district’s locale code (Rural: Remote) was assigned to Nah Tah Wahsh Public School Academy.



of the area in which the school operates. For specific descriptions of each of these locale categories, see “Appendix C: Locale Codes.”

More than 60 percent of Michigan schools are located in cities or suburban areas. Suburban schools make up the largest share of elementary and middle schools, accounting for close to 38 percent of all schools. Compared to the 2013 CAP report card, there are fewer schools located in cities and more schools located in suburban areas.

Close to 40 percent of elementary and middle schools are located in towns or in rural areas. Rural schools far outnumber schools in towns, however: There are 614 rural elementary and middle schools included in this report card, compared to just 260 schools in towns. Since the 2013 report card, the number of schools located in both areas has decreased.

**Graphic 3: Public Elementary and Middle Schools in Michigan by Locale, 2012-2014**

Locale	Number of schools	Percentage of Total
City: Large	134	5.97%
City: Midsize	128	5.70%
City: Small	262	11.67%
<b>City: Total</b>	<b>524</b>	<b>23.33%</b>
Suburb: Large	668	29.74%
Suburb: Midsize	96	4.27%
Suburb: Small	84	3.74%
<b>Suburb: Total</b>	<b>848</b>	<b>37.76%</b>
Town: Fringe	88	3.92%
Town: Distant	84	3.74%
Town: Remote	88	3.92%
<b>Town: Total</b>	<b>260</b>	<b>11.58%</b>
Rural: Fringe	242	10.77%
Rural: Distant	264	11.75%
Rural: Remote	108	4.81%
<b>Rural: Total</b>	<b>614</b>	<b>27.34%</b>

Source: Authors' calculations using NCES and MDE data.

## Selected Results

The following tables show selected results from this report card, including the top- and bottom-scoring 100 public elementary and middle schools. It is not feasible to list all 2,246 ranked schools in this publication; however, interested readers can find an online database of all schools at <http://www.mackinac.org/CAP2015>.

In the tables that follow, a school's name, rank, district or municipality, and geographic locale are displayed. For a more detailed understanding of each school's CAP Score, the number of MEAP subject tests used to calculate each school's CAP Score is listed (“# of Scores” column), as is the school's overall CAP Score and percentile rank. Finally, schools are awarded a letter grade of A, B, C, D or F.

The grading distribution of schools in this report card follows a standard bell curve pattern, with the top 10 percent of schools receiving an A, the next 20 percent receiving a B, the next 40 percent receiving a C,

the next 20 percent receiving a D, and the lowest 10 percent of schools receiving an F. The number of schools receiving each grade is displayed in the table below.

**Graphic 4: Grade Distribution of CAP Report Card**

Grade	Percentage of Schools	Number of Schools
A	10%	224
B	20%	450
C	40%	899
D	20%	450
F	10%	223

### ***The Top 100 Public Elementary and Middle Schools***

The highest-ranked school on this year's report card is Martin Luther King, Jr. Education Center Academy, a charter school in Detroit. The school received an overall CAP Score of 132.49 (a CAP Score of 100 is average or expected performance). Fifty-one different MEAP scores were used to calculate its CAP Score — meaning that every single subject test for grades three through eight was included in the school's score.

Fifteen of the top 100 elementary and middle schools were charter public schools, a somewhat higher number than would have been expected, given that charter schools make up less than 11 percent of all the schools in this report card. Three of the top 10 schools were also charter schools. As might be expected, given that selective schools limit student enrollment on the basis of academic performance, all nine of the identified selective schools scored in the top 100.

Many of this year's top 100 schools were on the top 100 list in 2013. Indeed, just 24 schools are new to the list in 2015.\* Among them, the Mt. Morris Consolidated Schools' Moore Elementary was one of the most improved. In the 2013 report card, the school earned a 106.06 CAP Score, ranking in the 85.7 percentile. On this report card, the school received a 112.17 CAP Score and ranked in the 96.6 percentile.† Its reading proficiency rates increased for all grades from 2009-10 to 2013-14. Math proficiency rates also increased for some grades tested.<sup>10</sup>

Some conventional school districts appeared several times in the top 100 list. Ann Arbor Public Schools, which had a total of 25 schools in this report card, saw nine of its elementary and middle schools place among the top 100. The Troy School District, which had 16 of its schools ranked in this report card, saw

\* These are: Three Oaks Public School Academy, Charles Wright School, Burr Elementary, International Academy of Flint, Traverse Heights Elementary School, West Michigan Academy of Environmental Science, Rankin Elementary School, Rose City School, Bridge Academy Elementary, Riverside Academy, Wattles Elementary, Dickinson East Elementary School, Grandville Central Elementary School, Arenac Eastern Middle/High School, Moore Elementary School, Cesar Chavez Middle School, Uriah H. Lawton School, Barnard Elementary School, Barrington Elementary School, Hill Elementary School, Forsythe Middle School, Northridge Academy, Leonard Elementary School, and Sylvester Elementary School.

† Audrey Spalding, "The Michigan Context and Performance Report Card: Public Elementary and Middle Schools, 2013" (Mackinac Center for Public Policy, 2013), <http://perma.cc/R2MR-ZXMZ>. While Northridge Academy moved from a ranking of 47.6 percent to a ranking of 95.8 percent, this movement is likely due to the school reporting a very large increase in the number of students eligible for free lunch in the 2013-14 school year. This may be a reporting error. See: "Student Count Trends: Northridge Academy" (Michigan Department of Education), <https://goo.gl/ozlvbi>.

six schools place. Detroit Public Schools, a much larger district with 67 schools ranked, had seven of its elementary and middle schools make the top 100.\*

A disproportionate number of the top 100 operate in cities. Half — 50 — were located in cities, 28 were located in suburbs, seven were located in towns, and 13 were located in rural areas.

Top 100 Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Martin Luther King, Jr. Education Center Academy	Charter	Detroit	City: Large	51	132.49	100.00%	A
2	Ross-Hill Academy-Elementary	Charter	Detroit	City: Large	39	130.56	99.96%	A
3	North Godwin Elementary School	Conventional	Godwin Heights	City: Small	15	130.48	99.91%	A
4	Crestwood Accelerated Program	Selective	Crestwood	Suburb: Large	15	130.17	99.87%	A
5	Iris Becker Elementary School	Conventional	Dearborn	City: Small	24	130.01	99.82%	A
6	Hamtramck Academy	Charter	Hamtramck	Suburb: Large	51	129.22	99.78%	A
7	Lowrey Middle School	Conventional	Dearborn	City: Small	27	128.74	99.73%	A
8	Saginaw Arts and Sciences Academy	Selective	Saginaw	City: Small	27	128.26	99.69%	A
9	Webster Elementary School	Conventional	Livonia	City: Small	33	127.51	99.64%	A
10	Davison Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	125.98	99.60%	A
11	Center for Economicology	Selective	Grand Rapids	City: Midsize	9	124.99	99.55%	A
12	Thirkell Elementary School	Conventional	Detroit Public Schools	City: Large	27	124.71	99.51%	A
13	Blandford Nature Center	Selective	Grand Rapids	Suburb: Large	9	123.98	99.47%	A
14	Glenwood Elementary	Conventional	Kentwood	Suburb: Large	24	123.76	99.42%	A
15	Lowrey Elementary School	Conventional	Dearborn	City: Small	24	122.63	99.38%	A
16	Handley School	Selective	Saginaw	City: Small	24	122.58	99.33%	A
17	Robbie Hall Parker School	Conventional	Clintondale	Suburb: Large	24	121.51	99.29%	A
18	City Middle/High School	Selective	Grand Rapids	City: Midsize	18	121.41	99.24%	A
19	Maples Elementary School	Conventional	Dearborn	City: Small	24	121.18	99.20%	A
20	Geer Park Elementary	Conventional	Dearborn	City: Small	24	119.43	99.15%	A
21	Angell School	Conventional	Ann Arbor	City: Midsize	24	119.18	99.11%	A
22	Woodworth Middle School	Conventional	Dearborn	City: Small	27	119.14	99.07%	A
23	Brown Elementary School	Conventional	Byron Center	Suburb: Large	15	118.92	99.02%	A
24	Martin Luther King Elem. School	Conventional	Ann Arbor	City: Midsize	24	117.89	98.98%	A
25	Bemis Elementary School	Conventional	Troy	City: Small	24	117.63	98.93%	A
26	Three Oaks Public School Academy*	Charter	Muskegon	City: Small	24	117.53	98.89%	A
27	John Ball Park Zoo School	Selective	Grand Rapids	City: Midsize	9	117.35	98.84%	A
28	Wright, Charles School*	Conventional	Detroit Public Schools	City: Large	15	117.14	98.80%	A
29	Sister Lakes Elementary School	Conventional	Dowagiac	Rural: Distant	24	116.89	98.75%	A
30	Clippert Academy	Selective	Detroit Public Schools	City: Large	36	116.72	98.71%	A
31	Hemmeter Elementary School	Selective	Saginaw Township	Suburb: Midsize	24	116.71	98.66%	A
32	Lakeshore Elementary School	Conventional	West Ottawa	Suburb: Small	24	116.29	98.62%	A
33	Clague Middle School	Conventional	Ann Arbor	City: Midsize	27	116.25	98.58%	A
34	Detroit Merit Charter Academy	Charter	Detroit	City: Large	51	116.09	98.53%	A
35	Jamestown Elementary School	Conventional	Hudsonville	Suburb: Large	24	115.74	98.49%	A
36	Kinloch Elementary School	Conventional	Crestwood	Suburb: Large	15	115.73	98.44%	A
37	Coit Arts Academy	Conventional	Grand Rapids	City: Midsize	24	115.73	98.40%	A
38	Riverside Academy - West Campus	Charter	Dearborn	City: Small	27	115.70	98.35%	A
39	Onaway Elementary School	Conventional	Onaway	Rural: Remote	24	115.15	98.31%	A
40	John Allen School	Conventional	Ann Arbor	City: Midsize	24	115.03	98.26%	A
41	Berrien Springs Middle School	Conventional	Berrien Springs	Town: Fringe	27	114.59	98.22%	A
42	Platte River Elementary School	Conventional	Benzie County Central	Rural: Remote	33	114.37	98.17%	A

\* In the 2013 report card, Detroit Public Schools' Thirkell Elementary was the top-ranked school in the state. In this year's report card, Thirkell is ranked 12th. Of the eight DPS schools that made the top 100 list in 2013, Ronald Brown Academy and Pasteur Elementary slipped below the top 100 schools, their rankings falling to 508 and 303, respectively.

Top 100 Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
43	Burr Elementary School	Conventional	Utica	Suburb: Large	33	114.35	98.13%	A
44	Charles C. McGlennen School	Conventional	Clintondale	Suburb: Large	24	114.12	98.09%	A
45	Godwin Heights Middle School	Conventional	Godwin Heights	City: Small	36	113.85	98.04%	A
46	Harrington Elementary School	Conventional	Albion	Town: Fringe	33	113.82	98.00%	A
47	International Academy of Flint*	Charter	Flint	City: Midsize	51	113.81	97.95%	A
48	Oakman Elementary School	Conventional	Dearborn	City: Small	24	113.79	97.91%	A
49	Madison Middle School	Conventional	Madison (Lenawee)	Town: Distant	27	113.79	97.86%	A
50	Reo School	Conventional	Lansing	City: Midsize	12	113.79	97.82%	A
51	Fairview High School	Conventional	Fairview	Rural: Remote	24	113.60	97.77%	A
52	Traverse Heights Elem. School*	Conventional	Traverse City	Town: Remote	24	113.59	97.73%	A
53	University Hills Elem. School	Conventional	Rochester	Suburb: Large	24	113.59	97.68%	A
54	West MI Academy of Environmental Science*	Charter	Grand Rapids	Suburb: Large	51	113.59	97.64%	A
55	Rankin Elementary School*	Conventional	Carman-Ainsworth	Rural: Fringe	24	113.51	97.60%	A
56	Rose City School*	Conventional	West Branch-Rose City	Rural: Remote	28	113.40	97.55%	A
57	Townline Elementary	Conventional	Kentwood	Suburb: Large	24	113.38	97.51%	A
58	Burns Park Elementary School	Conventional	Ann Arbor	City: Midsize	24	113.36	97.46%	A
59	Franklin Elementary School	Conventional	Cadillac	Town: Remote	15	113.34	97.42%	A
60	Leonard Elementary School	Conventional	Ovid-Elsie	Rural: Distant	6	113.32	97.37%	A
61	Chrysler Elementary School	Conventional	Detroit Public Schools	City: Large	24	113.28	97.33%	A
62	Star International Academy	Charter	Dearborn Heights	Suburb: Large	51	113.11	97.28%	A
63	Bridge Academy - Elementary*	Charter	Hamtramck	Suburb: Large	24	113.04	97.24%	A
64	Riverside Academy*	Charter	Dearborn	City: Small	24	112.96	97.20%	A
65	Pine Creek Elementary School	Conventional	West Ottawa	Suburb: Small	24	112.89	97.15%	A
66	Brookwood Elementary	Conventional	Kentwood	Suburb: Large	24	112.84	97.11%	A
67	Boulan Park Middle School	Conventional	Troy	City: Small	27	112.76	97.06%	A
68	Wattles Elementary School*	Conventional	Troy	City: Small	24	112.69	97.02%	A
69	Grayling Middle School	Conventional	Crawford AuSable	Town: Remote	27	112.63	96.97%	A
70	Covert Middle School	Conventional	Covert	Rural: Distant	27	112.60	96.93%	A
71	Harms Elementary School	Conventional	Detroit Public Schools	City: Large	24	112.58	96.88%	A
72	Dickinson East Elementary School*	Conventional	Hamtramck	Suburb: Large	33	112.55	96.84%	A
73	Grandville Central Elementary School*	Conventional	Grandville	Suburb: Large	33	112.40	96.79%	A
74	Arenac Eastern Middle/High School*	Conventional	Arenac Eastern	Rural: Remote	27	112.31	96.75%	A
75	Burton International School	Conventional	Detroit Public Schools	City: Large	51	112.23	96.71%	A
76	Slauson Middle School	Conventional	Ann Arbor	City: Midsize	27	112.22	96.66%	A
77	Moore Elementary School*	Conventional	Mt. Morris Consolidated	Suburb: Large	24	112.17	96.62%	A
78	Cesar Chavez Middle School*	Charter	Detroit	City: Large	27	112.13	96.57%	A
79	Uriah H. Lawton School*	Conventional	Ann Arbor	City: Midsize	24	112.06	96.53%	A
80	Chippewa Middle School	Conventional	Okemos	Suburb: Large	18	111.89	96.48%	A
81	Barnard Elementary School*	Conventional	Troy	City: Small	24	111.86	96.44%	A
82	Lucile S. Patton Elem. School	Conventional	Roseville	Suburb: Large	24	111.85	96.39%	A
83	Tappan Middle School	Conventional	Ann Arbor	City: Midsize	27	111.77	96.35%	A
84	Barryton Elementary School*	Conventional	Chippewa Hills	Rural: Remote	15	111.74	96.30%	A
85	Miller Elementary School	Conventional	Plymouth-Canton	Suburb: Large	24	111.69	96.26%	A
86	Weidman Elementary School	Conventional	Chippewa Hills	Rural: Distant	15	111.67	96.22%	A
87	Academy of Southfield	Charter	Southfield	City: Small	51	111.62	96.17%	A
88	Hill Elementary School*	Conventional	Davison	Suburb: Large	15	111.56	96.13%	A
89	Southwood Elementary	Conventional	Kentwood	Suburb: Large	24	111.54	96.08%	A
90	Collins Elementary School	Conventional	Houghton Lake	Town: Remote	6	111.53	96.04%	A
91	Forsythe Middle School*	Conventional	Ann Arbor	City: Midsize	27	111.52	95.99%	A
92	Crystal Lake Elementary School	Conventional	Benzie County Central	Rural: Remote	24	111.48	95.95%	A
93	Frostick School	Conventional	Croswell-Lexington	Rural: Distant	15	111.41	95.90%	A
94	Discovery Elementary	Conventional	Kentwood	Suburb: Large	24	111.40	95.86%	A
95	Northridge Academy*	Charter	Flint	City: Midsize	51	111.37	95.81%	A
96	El-Hajj Malik El-Shabazz Academy	Charter	Lansing	City: Midsize	33	111.35	95.77%	A

Top 100 Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
97	Leonard Elementary School*	Conventional	Troy	City: Small	24	111.34	95.73%	A
98	Hamilton Elementary School	Conventional	Troy	City: Small	24	111.29	95.68%	A
99	City School	Conventional	Grand Blanc	Suburb: Large	24	111.28	95.64%	A
100	Sylvester Elementary School*	Conventional	Berrien Springs	Town: Fringe	24	111.23	95.59%	A

\* denotes schools new to the Top 100 list since the 2013 edition.

### The Bottom 100 Public Elementary and Middle Schools

One thing immediately apparent when reviewing the list of Michigan's lowest-ranked elementary and middle schools is that of the first seven lowest-ranked schools, six were run by the Education Achievement Authority, the state's "school turnaround" district.<sup>11</sup> This low performance is due in part to the nature of a "reform district." The EAA was tasked with managing the worst-performing schools in Detroit Public Schools.<sup>12</sup> Further, since the EAA began running these schools in the 2012-13 school year, just two years of data were used to generate their CAP Scores. Yet, even considering this limited data, the nature of this report card's methodology means that the EAA schools are performing far below what would have been expected for schools serving a similar student population.

Among the bottom 100 elementary and middle schools, 25 were public charter schools and 75 were conventional schools. Among the 25 low-ranked charter schools, 12 did not have a CAP Score for the 2011-12 school year, suggesting that half of them are new. In fact, 13 other charter public schools ranked in this report card also did not have a CAP Score for 2011-12 — and none of these new schools scored above a C. Since new charter schools typically enroll a large portion of transfer students, their scores may be more reflective of the performance of the schools from which these students transferred, rather than of the schools they currently attend.\*

A disproportionate number of the lowest-ranked 100 schools are either run by Detroit Public Schools or are located in Detroit. In fact, the 15 lowest-performing schools in the state are all in Detroit. In addition to the six EAA schools, another 29 Detroit schools are in the bottom 100. Of these, 22 are run by Detroit Public Schools and seven are charter schools.

Bottom 100 Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Burns Elementary-Middle School	Conventional	EAA	City: Large	34	71.16	0.04%	F
2	EMAN Hamilton Academy	Charter	Detroit	City: Large	51	73.55	0.09%	F
3	Phoenix Elementary-Middle School	Conventional	EAA	City: Large	34	73.93	0.13%	F
4	Law Elementary School	Conventional	EAA	City: Large	34	74.69	0.18%	F
5	Mary McLeod Bethune Elementary-Middle School	Conventional	EAA	City: Large	34	75.18	0.22%	F
6	Nolan Elementary-Middle School	Conventional	EAA	City: Large	34	75.60	0.27%	F
7	Brenda Scott Academy for Theatre Arts	Conventional	EAA	City: Large	34	77.43	0.31%	F

\* A better method of evaluating the performance of schools with a large number of transfer students is to evaluate the average annual learning gains made by individual students. Stanford University's Center for Research on Educational Outcomes conducted such an analysis of charter schools in Michigan and found that students enrolled in charter schools gained an additional two months' worth of learning progress in both reading and math compared to their "virtual twins" in conventional public schools. "Charter School Performance in Michigan" (Center for Research on Educational Outcomes, Jan. 11, 2013), <http://perma.cc/SVE6-UY57>.

Bottom 100 Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
8	Stewart Elementary	Charter	Detroit	City: Large	34	78.43	0.36%	F
9	Mason Elementary School	Conventional	Detroit Public Schools	City: Large	42	80.07	0.40%	F
10	Marquette Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	80.80	0.45%	F
11	Henderson Academy	Conventional	Detroit Public Schools	City: Large	51	80.97	0.49%	F
12	Noble Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	81.09	0.53%	F
13	Trix Elementary	Charter	Detroit	City: Large	34	81.46	0.58%	F
14	Murphy Elementary	Charter	Detroit	City: Large	34	81.81	0.62%	F
15	Young, Coleman A. Elementary	Conventional	Detroit Public Schools	City: Large	24	82.41	0.67%	F
16	Muskegon Heights Middle School	Charter	Muskegon	Suburb: Midsize	18	82.82	0.71%	F
17	STEAM Academy at MLK	Conventional	Benton Harbor	City: Small	36	82.97	0.76%	F
18	Mackenzie Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	34	83.34	0.80%	F
19	Carstens Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	83.40	0.85%	F
20	Caniff Liberty Academy	Charter	Hamtramck	Suburb: Large	34	83.47	0.89%	F
21	J.W. Sexton High School	Conventional	Lansing	City: Midsize	12	83.69	0.93%	F
22	Kensington Woods High School	Charter	Lakeland	Suburb: Midsize	12	83.83	0.98%	F
23	Taylor International Academy	Charter	Southfield	City: Small	42	83.98	1.02%	F
24	Litchfield High School	Conventional	Litchfield	Rural: Distant	27	84.34	1.07%	F
25	International Preparatory Academy - MacDowell Camp	Charter	Detroit	City: Large	34	84.42	1.11%	F
26	Houghton Elementary School	Conventional	Saginaw	City: Small	24	84.70	1.16%	F
27	Douglass Academy for Young Men	Conventional	Detroit Public Schools	City: Large	12	84.77	1.20%	F
28	Hope Academy of West Michigan	Charter	Grand Rapids	City: Midsize	51	84.93	1.25%	F
29	Herrington School	Conventional	Pontiac	City: Small	33	85.03	1.29%	F
30	Sampson Academy	Conventional	Detroit Public Schools	City: Large	51	85.11	1.34%	F
31	Durfee Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	85.49	1.38%	F
32	Pontiac Middle School	Conventional	Pontiac	City: Small	18	85.80	1.42%	F
33	Fisher Magnet Upper Academy	Conventional	Detroit Public Schools	City: Large	36	85.97	1.47%	F
34	Carleton Elementary School	Conventional	Detroit Public Schools	City: Large	24	86.00	1.51%	F
35	Northwestern High School	Conventional	Flint	City: Midsize	12	86.10	1.56%	F
36	Grattan Academy - Middle/High School	Charter	Greenville	Rural: Fringe	21	86.13	1.60%	F
37	Pontiac Academy for Excellence - Middle School	Charter	Pontiac	City: Small	27	86.37	1.65%	F
38	Detroit Community Schools-Elementary	Charter	Detroit	City: Large	51	86.39	1.69%	F
39	Will Carleton Charter School Academy*	Charter	Hillsdale	Rural: Fringe	51	86.46	1.74%	F
40	Gardner Academy	Conventional	Lansing	City: Midsize	34	86.48	1.78%	F
41	Farmington 5-6 Campus	Conventional	Garden City	Suburb: Large	18	86.57	1.83%	F
42	Potterville Elementary School	Conventional	Potterville	Rural: Fringe	15	86.83	1.87%	F
43	Pulaski Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	86.98	1.91%	F
44	Beecher Middle School Academy	Conventional	Beecher	Suburb: Large	18	87.00	1.96%	F
45	Blackwell Institute	Conventional	Detroit Public Schools	City: Large	51	87.11	2.00%	F
46	Beech Elementary	Conventional	Redford	Suburb: Large	24	87.15	2.05%	F
47	Ann Visger K-5 Preparatory Academy	Conventional	River Rouge	Suburb: Large	24	87.20	2.09%	F
48	Faxon Language Immersion Academy	Charter	Farmington Hills	City: Small	7	87.38	2.14%	F
49	Lighthouse Academy	Charter	Grand Rapids	Suburb: Large	12	87.48	2.18%	F
50	Kelly Middle School	Conventional	East Detroit	Suburb: Large	24	87.55	2.23%	F
51	Mid Peninsula School	Conventional	Mid Peninsula	Rural: Distant	48	87.55	2.27%	F
52	Neinas Elementary School	Conventional	Detroit Public Schools	City: Large	24	87.57	2.32%	F
53	Morrice Area Elementary School	Conventional	Morrice	Rural: Fringe	33	87.70	2.36%	F
54	Dossin Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	87.70	2.40%	F
55	Vanderbilt Area School	Conventional	Vanderbilt	Rural: Distant	22	87.76	2.45%	F
56	Rutherford Winans Academy	Charter	Detroit	City: Large	16	87.79	2.49%	F

\* Will Carleton Charter School Academy reports that it does not participate in the National School Lunch Program and the number of students it reports to the state who are eligible for a free lunch based on their household income may not be an accurate depiction of the socioeconomic status of its student body. This would lower the school's CAP Score as a result.

Bottom 100 Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
57	American International Academy	Charter	Westland	Suburb: Large	33	87.97	2.54%	F
58	King, John R. Academic and Performing Arts Academy	Conventional	Detroit Public Schools	City: Large	51	87.98	2.58%	F
59	Starr Detroit Academy	Charter	Harper Woods	Suburb: Large	19	88.00	2.63%	F
60	Henry Ford Academy	Charter	Highland Park	Suburb: Large	32	88.06	2.67%	F
61	George Long Elementary School	Conventional	Grass Lake	Rural: Fringe	24	88.15	2.72%	F
62	Barber Elementary School	Charter	Highland Park	Suburb: Large	34	88.28	2.76%	F
63	Dryden High School	Conventional	Dryden	Rural: Distant	18	88.35	2.80%	F
64	Perry East Elementary	Conventional	Perry	Town: Fringe	18	88.44	2.85%	F
65	Dudley School	Conventional	Battle Creek	City: Small	24	88.47	2.89%	F
66	David Hicks School	Conventional	Wayne-Westland	Suburb: Large	15	88.47	2.94%	F
67	Golightly Education Center	Conventional	Detroit Public Schools	City: Large	51	88.50	2.98%	F
68	Philip Latendresse School	Conventional	Baraga	Rural: Remote	30	88.50	3.03%	F
69	Oxford Virtual Academy	Conventional	Oxford	Suburb: Large	34	88.51	3.07%	F
70	Glenn W. Levey Middle School	Conventional	Southfield	City: Small	27	88.53	3.12%	F
71	Dickinson School	Conventional	Grand Rapids	City: Midsize	27	88.54	3.16%	F
72	Grattan Academy - Elementary	Charter	Belding	Rural: Distant	27	88.73	3.21%	F
73	Owen Elementary School	Conventional	Pontiac	City: Small	33	88.74	3.25%	F
74	Erie Elementary School	Conventional	Chippewa Valley	Suburb: Large	24	88.84	3.29%	F
75	Grand Rapids Ellington Academy of Arts & Technology	Charter	Grand Rapids	City: Midsize	26	88.89	3.34%	F
76	Carver Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	88.90	3.38%	F
77	Climax-Scotts Elementary School	Conventional	Climax-Scotts	Rural: Fringe	24	88.96	3.43%	F
78	Cromie Elementary School	Conventional	Warren Consolidated	City: Midsize	24	89.00	3.47%	F
79	Clark, J.E. Preparatory Academy	Conventional	Detroit Public Schools	City: Large	51	89.05	3.52%	F
80	Pittsford Area Elem. School	Conventional	Pittsford	Rural: Distant	33	89.06	3.56%	F
81	Palmer Park Preparatory Academy	Conventional	Detroit Public Schools	City: Large	51	89.08	3.61%	F
82	Alice M. Birney K-8 School	Conventional	Southfield	City: Small	51	89.09	3.65%	F
83	Gros Cap School	Conventional	Moran Township	Rural: Distant	11	89.19	3.70%	F
84	Bay City Academy-Madison Arts Campus	Charter	Bay City	City: Small	35	89.22	3.74%	F
85	Garden City Middle School	Conventional	Garden City	Suburb: Large	18	89.25	3.78%	F
86	Laingsburg Middle School	Conventional	Laingsburg	Rural: Distant	27	89.28	3.83%	F
87	Rogers City High School	Conventional	Rogers City	Town: Remote	27	89.28	3.87%	F
88	Wood Creek Elementary School	Conventional	Farmington	City: Small	15	89.28	3.92%	F
89	Thomas Jefferson Elem. School	Conventional	South Redford	Suburb: Large	24	89.32	3.96%	F
90	Summerfield Junior/Senior High School	Conventional	Summerfield	Rural: Distant	18	89.33	4.01%	F
91	Multicultural Academy	Charter	Ann Arbor	Suburb: Large	49	89.35	4.05%	F
92	Adams Elementary School	Conventional	Zeeland	Rural: Fringe	16	89.38	4.10%	F
93	Earhart Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	89.41	4.14%	F
94	International Academy at Hull	Conventional	Benton Harbor	Suburb: Small	36	89.42	4.19%	F
95	Oak Park Preparatory Academy	Conventional	Oak Park	Suburb: Large	18	89.42	4.23%	F
96	Patrick Henry Middle School	Conventional	Woodhaven-Brownstown	Suburb: Large	9	89.42	4.27%	F
97	Litchfield Elementary School	Conventional	Litchfield	Rural: Distant	24	89.47	4.32%	F
98	Lakeview Elementary School	Conventional	Lakeview (Montcalm)	Rural: Distant	6	89.51	4.36%	F
99	Will L. Lee School	Conventional	Richmond	Town: Fringe	15	89.56	4.41%	F
100	Jenison International Academy	Conventional	Jenison	Suburb: Large	18	89.59	4.45%	F

### ***Locale-Specific Scores***

The following table displays the average CAP Scores for elementary and middle schools by geographic locale. Most locale categories had an average CAP Score close to 100 — the expected value, since the average CAP Scores was set to 100. But there are a few exceptions. Schools in small cities had an average CAP Score of 102.01, meaning that these schools tended to post higher student test scores than expected, given the socioeconomic status of their student populations. Schools in remote rural areas also had a high average score — 102.48.

The lowest average overall CAP Score was seen in schools located in large cities. These 134 schools are all located in Detroit, since it is the only city in the state that meets the criteria of a “large city.” The average CAP Score of 96.73 is much lower than that of the next lowest-scoring geographic category, schools in rural fringe areas, which posted an average CAP Score of 99.52.

**Graphic 5: Schools and Average CAP Score by Locale**

Locale	Schools	Average CAP Score
City: Large	134	96.35
City: Midsize	128	101.64
City: Small	262	102.01
Suburb: Large	668	100.29
Suburb: Midsize	96	99.70
Suburb: Small	84	99.81
Town: Distant	84	100.11
Town: Fringe	88	100.28
Town: Remote	88	101.52
Rural: Distant	264	99.74
Rural: Fringe	242	99.52
Rural: Remote	108	102.48

### ***Top 5 Percent of City Schools***

Of these 27 schools, seven are located in Detroit, seven are located in midsize cities and 13 are in small cities. The majority of these schools (16) are conventional schools, five are charter schools, and six are selective schools.

Six of the 28 schools in Dearborn Public Schools ranked in the top 5 percent of city schools — far more than expected. Grand Rapids Public Schools had four of its elementary and middle schools make this list, though, since three of the four are selective, this is less surprising. Three of Ann Arbor Public Schools’ schools earned this distinction, a tally also above the expected distribution.

Of the 524 city schools ranked in this report card, close to 17 percent received an A. Since the design of this report card limits an A to just 10 percent of schools, city schools received more of their expected share of the top grade.



Top 5 Percent of Public Elementary and Middle Schools in Cities								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Martin Luther King, Jr. Education Center Academy	Charter	Detroit	City: Large	51	132.49	100.00%	A
2	Ross-Hill Academy-Elementary	Charter	Detroit	City: Large	39	130.56	99.96%	A
3	North Godwin Elementary School	Conventional	Godwin Heights	City: Small	15	130.48	99.91%	A
4	Iris Becker Elementary School	Conventional	Dearborn	City: Small	24	130.01	99.82%	A
5	Lowrey Middle School	Conventional	Dearborn	City: Small	27	128.74	99.73%	A
6	Saginaw Arts and Sciences Academy	Selective	Saginaw	City: Small	27	128.26	99.69%	A
7	Webster Elementary School	Conventional	Livonia	City: Small	33	127.51	99.64%	A
9	Davison Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	125.98	99.60%	A
9	Center for Economicology	Selective	Grand Rapids	City: Midsize	9	124.99	99.55%	A
10	Thirkell Elementary School	Conventional	Detroit Public Schools	City: Large	27	124.71	99.51%	A
11	Lowrey Elementary School	Conventional	Dearborn	City: Small	24	122.63	99.38%	A
12	Handley School	Selective	Saginaw	City: Small	24	122.58	99.33%	A
13	City Middle/High School	Selective	Grand Rapids	City: Midsize	18	121.41	99.24%	A
14	Maples Elementary School	Conventional	Dearborn	City: Small	24	121.18	99.20%	A
15	Geer Park Elementary	Conventional	Dearborn	City: Small	24	119.43	99.15%	A
16	Angell School	Conventional	Ann Arbor	City: Midsize	24	119.18	99.11%	A
17	Woodworth Middle School	Conventional	Dearborn	City: Small	27	119.14	99.07%	A
18	Martin Luther King Elem. School	Conventional	Ann Arbor	City: Midsize	24	117.89	98.98%	A
19	Bemis Elementary School	Conventional	Troy	City: Small	24	117.63	98.93%	A
20	Three Oaks Public School Academy	Charter	Muskegon	City: Small	24	117.53	98.89%	A
21	John Ball Park Zoo School	Selective	Grand Rapids	City: Midsize	9	117.35	98.84%	A
22	Charles Wright School	Conventional	Detroit Public Schools	City: Large	15	117.14	98.80%	A
23	Clippert Academy	Selective	Detroit Public Schools	City: Large	36	116.72	98.71%	A
24	Clague Middle School	Conventional	Ann Arbor	City: Midsize	27	116.25	98.58%	A
25	Detroit Merit Charter Academy	Charter	Detroit	City: Large	51	116.09	98.53%	A
26	Coit Arts Academy	Conventional	Grand Rapids	City: Midsize	24	115.73	98.40%	A
27	Riverside Academy - West Campus	Charter	Dearborn	City: Small	27	115.70	98.35%	A

### Bottom 5 Percent of City Schools

The graphic below shows the lowest-performing 5 percent of city schools. All but five of these 27 schools were located in Detroit. EAA schools posted some of the lowest CAP Scores, with all six EAA elementary and middle schools on this list. Six (or 22 percent) of the lowest-performing city schools are charter schools — a larger share than expected, given that only 11 percent of the schools ranked in this report card were charter schools. All of the schools in the bottom 5 percent had at least 12 separate MEAP test scores used in the calculation of their overall CAP Score. Among the schools listed below, an average of more than 30 MEAP tests were used to calculate each school's CAP Score.

Bottom 5 Percent of Public Elementary and Middle Schools in Cities								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Burns Elementary-Middle School	Conventional	EAA	City: Large	34	71.16	0.04%	F
2	EMAN Hamilton Academy	Charter	Detroit	City: Large	51	73.55	0.09%	F
3	Phoenix Elementary-Middle School	Conventional	EAA	City: Large	34	73.93	0.13%	F
4	Law Elementary School	Conventional	EAA	City: Large	34	74.69	0.18%	F
5	Mary McLeod Bethune Elementary-Middle School	Conventional	EAA	City: Large	34	75.18	0.22%	F
6	Nolan Elementary-Middle School	Conventional	EAA	City: Large	34	75.60	0.27%	F
7	Brenda Scott Academy for Theatre Arts	Conventional	EAA	City: Large	34	77.43	0.31%	F

Bottom 5 Percent of Public Elementary and Middle Schools in Cities								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
8	Stewart Elementary	Charter	Detroit	City: Large	34	78.43	0.36%	F
9	Mason Elementary School	Conventional	Detroit Public Schools	City: Large	42	80.07	0.40%	F
10	Marquette Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	80.80	0.45%	F
11	Henderson Academy	Conventional	Detroit Public Schools	City: Large	51	80.97	0.49%	F
12	Noble Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	81.09	0.53%	F
13	Trix Elementary	Charter	Detroit	City: Large	34	81.46	0.58%	F
14	Murphy Elementary	Charter	Detroit	City: Large	34	81.81	0.62%	F
15	Young, Coleman A. Elementary	Conventional	Detroit Public Schools	City: Large	24	82.41	0.67%	F
16	STEAM Academy at MLK	Conventional	Benton Harbor	City: Small	36	82.97	0.76%	F
17	Mackenzie Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	34	83.34	0.80%	F
18	Carstens Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	83.40	0.85%	F
19	J.W. Sexton High School	Conventional	Lansing	City: Midsize	12	83.69	0.93%	F
20	Taylor International Academy	Charter	Southfield	City: Small	42	83.98	1.02%	F
21	International Preparatory Academy - MacDowell Camp	Charter	Detroit	City: Large	34	84.42	1.11%	F
22	Houghton Elementary School	Conventional	Saginaw	City: Small	24	84.70	1.16%	F
23	Douglass Academy for Young Men	Conventional	Detroit Public Schools	City: Large	12	84.77	1.20%	F
24	Hope Academy of West Michigan	Charter	Grand Rapids	City: Midsize	51	84.93	1.25%	F
25	Herrington School	Conventional	Pontiac	City: Small	33	85.03	1.29%	F
26	Sampson Academy	Conventional	Detroit Public Schools	City: Large	51	85.11	1.34%	F
27	Durfee Elementary-Middle School	Conventional	Detroit Public Schools	City: Large	51	85.49	1.38%	F

### Top 5 Percent of Suburban Schools

The graphic below displays the top 5 percent of schools in suburban areas. Of these 43 schools, 35 are conventional, five are charter schools and three are selective schools.

The selective Crestwood Accelerated Program is the top-ranked suburban school in the state in both this and the 2013 report card. Five of the 13 schools in Kentwood Public Schools were ranked among the top 5 percent of suburban schools. The Kentwood district posted significantly higher-than-expected grades, with six of its schools receiving A grades, six receiving Bs, and just one school receiving a C. All Kentwood schools included in this report card posted CAP Scores greater than 100, meaning student test scores were higher than expected in all its schools.

Though 848 suburban schools were included in this report card, just 68 suburban schools (8 percent) received an A, below the number expected, since 10 percent of schools overall assigned an A.

Top 5 Percent of Suburban Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Crestwood Accelerated Program	Selective	Crestwood	Suburb: Large	15	130.17	99.87%	A
2	Hamtramck Academy	Charter	Hamtramck	Suburb: Large	51	129.22	99.78%	A
3	Blandford Nature Center	Selective	Grand Rapids	Suburb: Large	9	123.98	99.47%	A
4	Glenwood Elementary	Conventional	Kentwood	Suburb: Large	24	123.76	99.42%	A
5	Robbie Hall Parker School	Conventional	Clintondale	Suburb: Large	24	121.51	99.29%	A
6	Brown Elementary School	Conventional	Byron Center	Suburb: Large	15	118.92	99.02%	A
7	Hemmeter Elementary School	Selective	Saginaw Township	Suburb: Midsize	24	116.71	98.66%	A
8	Lakeshore Elementary School	Conventional	West Ottawa	Suburb: Small	24	116.29	98.62%	A
9	Jamestown Elementary School	Conventional	Hudsonville	Suburb: Large	24	115.74	98.49%	A
10	Kinloch Elementary School	Conventional	Crestwood	Suburb: Large	15	115.73	98.44%	A

Top 5 Percent of Suburban Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
11	Burr Elementary School	Conventional	Utica	Suburb: Large	33	114.35	98.13%	A
12	Charles C. McGlennen School	Conventional	Clintondale	Suburb: Large	24	114.12	98.09%	A
13	University Hills Elem. School	Conventional	Rochester	Suburb: Large	24	113.59	97.68%	A
14	West MI Academy of Environmental Science	Charter	Grand Rapids	Suburb: Large	51	113.59	97.64%	A
15	Townline Elementary	Conventional	Kentwood	Suburb: Large	24	113.38	97.51%	A
16	Star International Academy	Charter	Dearborn Heights	Suburb: Large	51	113.11	97.28%	A
17	Bridge Academy - Elementary	Charter	Hamtramck	Suburb: Large	24	113.04	97.24%	A
18	Pine Creek Elementary School	Conventional	West Ottawa	Suburb: Small	24	112.89	97.15%	A
19	Brookwood Elementary	Conventional	Kentwood	Suburb: Large	24	112.84	97.11%	A
20	Dickinson East Elementary School	Conventional	Hamtramck	Suburb: Large	33	112.55	96.84%	A
21	Grandville Central Elementary School	Conventional	Grandville	Suburb: Large	33	112.40	96.79%	A
22	Moore Elementary School	Conventional	Mt. Morris Consolidated	Suburb: Large	24	112.17	96.62%	A
23	Chippewa Middle School	Conventional	Okemos	Suburb: Large	18	111.89	96.48%	A
24	Lucile S. Patton Elem. School	Conventional	Roseville	Suburb: Large	24	111.85	96.39%	A
25	Miller Elementary School	Conventional	Plymouth-Canton	Suburb: Large	24	111.69	96.26%	A
26	Hill Elementary School	Conventional	Davison	Suburb: Large	15	111.56	96.13%	A
27	Southwood Elementary	Conventional	Kentwood	Suburb: Large	24	111.54	96.08%	A
28	Discovery Elementary	Conventional	Kentwood	Suburb: Large	24	111.40	95.86%	A
29	City School	Conventional	Grand Blanc	Suburb: Large	24	111.28	95.64%	A
30	Great Lakes Elementary School	Conventional	West Ottawa	Suburb: Small	24	111.22	95.55%	A
31	Lewis Maire Elementary School	Conventional	Grosse Pointe	Suburb: Large	24	111.06	95.28%	A
32	Commerce Elementary School	Conventional	Walled Lake	Suburb: Large	24	111.02	95.24%	A
33	North Hill Elementary School	Conventional	Rochester	Suburb: Large	24	110.97	95.10%	A
34	Wealthy School	Conventional	East Grand Rapids	Suburb: Large	24	110.68	94.66%	A
35	Highview Elementary School	Conventional	Crestwood	Suburb: Large	15	110.57	94.57%	A
36	Chesterfield Elementary School	Conventional	L'Anse Creuse	Suburb: Large	24	110.51	94.43%	A
37	Gladys Dillon Elementary School	Conventional	Carman-Ainsworth	Suburb: Large	6	110.47	94.39%	A
38	Universal Learning Academy	Charter	Westland	Suburb: Large	48	110.42	94.35%	A
39	Roosevelt Elementary School	Conventional	West Bloomfield	Suburb: Large	24	110.39	94.30%	A
40	Van Hoosen Middle School	Conventional	Rochester	Suburb: Large	27	110.21	94.21%	A
41	Kinawa School	Conventional	Okemos	Suburb: Large	18	110.11	93.94%	A
42	Hart Middle School	Conventional	Rochester	Suburb: Large	27	110.09	93.77%	A
43	Millennium Middle School	Conventional	South Lyon	Suburb: Midsize	27	109.94	93.54%	A

### **Bottom 5 Percent of Suburban Schools**

Among the bottom 5 percent of suburban elementary and middle schools, 12 were charter schools and 31 were conventional schools. The prevalence of charter schools in this list (they comprise 28 percent) is somewhat surprising, since only 11 percent of schools in this report card are charter schools.

Several historically struggling schools are on this list, most notably those from two financially failed districts that converted their schools to charters: Muskegon Heights and Highland Park.<sup>13</sup> Muskegon Heights Middle School is the worst-ranked suburban school. Edgewood Elementary, the 27th-lowest ranked suburban school, is also part of the Muskegon Heights charter system. Highland Park's Henry Ford Academy and Barber Elementary are ranked 12th and 13th on this list, respectively.

There are 43 schools on this list, but another 33 suburban schools received Fs as well. As fewer than expected suburban schools received As, fewer than expected suburban schools also received Fs. More

received C grades than expected, suggesting that there could be less variation in school performance in suburban settings than in other geographic areas.

Bottom 5 Percent of Suburban Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Muskegon Heights Middle School	Charter	Muskegon	Suburb: Midsize	18	82.82	0.71%	F
2	Caniff Liberty Academy	Charter	Hamtramck	Suburb: Large	34	83.47	0.89%	F
3	Kensington Woods High School	Charter	Lakeland	Suburb: Midsize	12	83.83	0.98%	F
4	Farmington 5-6 Campus	Conventional	Garden City	Suburb: Large	18	86.57	1.83%	F
5	Beecher Middle School Academy	Conventional	Beecher	Suburb: Large	18	87.00	1.96%	F
6	Beech Elementary	Conventional	Redford	Suburb: Large	24	87.15	2.05%	F
7	Ann Visger K-5 Preparatory Academy	Conventional	River Rouge	Suburb: Large	24	87.20	2.09%	F
8	Lighthouse Academy	Charter	Grand Rapids	Suburb: Large	12	87.48	2.18%	F
9	Kelly Middle School	Conventional	East Detroit	Suburb: Large	24	87.55	2.23%	F
10	American International Academy	Charter	Westland	Suburb: Large	33	87.97	2.54%	F
11	Starr Detroit Academy	Charter	Harper Woods	Suburb: Large	19	88.00	2.63%	F
12	Henry Ford Academy	Charter	Highland Park	Suburb: Large	32	88.06	2.67%	F
13	Barber Elementary School	Charter	Highland Park	Suburb: Large	34	88.28	2.76%	F
14	David Hicks School	Conventional	Wayne-Westland	Suburb: Large	15	88.47	2.94%	F
15	Oxford Virtual Academy	Conventional	Oxford	Suburb: Large	34	88.51	3.07%	F
16	Erie Elementary School	Conventional	Chippewa Valley	Suburb: Large	24	88.84	3.29%	F
17	Garden City Middle School	Conventional	Garden City	Suburb: Large	18	89.25	3.78%	F
18	Thomas Jefferson Elem. School	Conventional	South Redford	Suburb: Large	24	89.32	3.96%	F
19	Multicultural Academy	Charter	Ann Arbor	Suburb: Large	49	89.35	4.05%	F
20	International Academy at Hull	Conventional	Benton Harbor	Suburb: Small	36	89.42	4.19%	F
21	Oak Park Preparatory Academy	Conventional	Oak Park	Suburb: Large	18	89.42	4.23%	F
22	Patrick Henry Middle School	Conventional	Woodhaven-Brownstown	Suburb: Large	9	89.42	4.27%	F
23	Jenison International Academy	Conventional	Jenison	Suburb: Large	18	89.59	4.45%	F
24	Owen Intermediate School	Conventional	Van Buren	Suburb: Large	21	89.84	4.63%	F
25	Lindemann Elementary School	Conventional	Allen Park	Suburb: Large	24	89.96	4.72%	F
26	Amanda Moore Elementary School	Conventional	Romeo	Suburb: Large	24	90.00	4.76%	F
27	Edgewood Elementary School	Charter	Muskegon	Suburb: Midsize	16	90.08	4.85%	F
28	Mohawk Elementary School	Conventional	Chippewa Valley	Suburb: Large	24	90.33	5.03%	F
29	Scott Elementary School	Conventional	DeWitt	Suburb: Large	15	90.40	5.08%	F
30	Douglas Elementary 3-4 Campus	Conventional	Garden City	Suburb: Large	15	90.45	5.16%	F
31	Eriksson Elementary School	Conventional	Plymouth-Canton	Suburb: Large	24	90.46	5.21%	F
32	McBride Middle School	Conventional	Van Buren	Suburb: Large	21	90.48	5.25%	F
33	Shumate Middle School	Conventional	Gibraltar	Suburb: Large	27	90.54	5.43%	F
34	Detroit West Preparatory Academy	Charter	Redford	Suburb: Large	36	90.58	5.48%	F
35	Pleasantview Elementary School	Conventional	East Detroit	Suburb: Large	27	90.68	5.52%	F
36	Daly School	Conventional	Westwood	Suburb: Large	27	90.81	5.61%	F
37	Adams STEM Academy	Conventional	Ypsilanti	Suburb: Large	33	90.93	5.74%	F
38	Albert Schweitzer Elementary School	Conventional	Wayne-Westland	Suburb: Large	15	90.95	5.79%	F
39	Shawnee Elementary School	Conventional	Chippewa Valley	Suburb: Large	24	91.04	5.88%	F
40	Gudith Elementary School	Conventional	Woodhaven-Brownstown	Suburb: Large	24	91.10	5.97%	F
41	Roosevelt Elementary School	Conventional	Port Huron	Suburb: Small	24	91.27	6.28%	F
42	Anchor Bay Middle School South	Conventional	Anchor Bay	Suburb: Large	27	91.29	6.37%	F
43	Global Heights Academy	Charter	Dearborn Heights	Suburb: Large	24	91.30	6.46%	F

### Top 5 Percent of Town Schools

Among the 260 town schools included in this report card, 17 received an A — lower than the 26 schools expected, since 10 percent of all schools were awarded an A. The top 5 percent of town schools listed in the graphic below are all conventional schools.

Lincoln School, a conventional school in the South Haven school district, saw a dramatic increase in its overall CAP Score in this report card (ranked at 92.9 percent) compared to its 2013 performance (ranked at 73.2 percent). In recent years, the school saw its MEAP math scores increase, which likely contributed to the jump in the school's CAP score.\*

Top 5 Percent of Public Elementary and Middle Schools in Towns								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Berrien Springs Middle School	Conventional	Berrien Springs	Town: Fringe	27	114.59	98.22%	A
2	Harrington Elementary School	Conventional	Albion	Town: Fringe	33	113.82	98.00%	A
3	Madison Middle School	Conventional	Madison (Lenawee)	Town: Distant	27	113.79	97.86%	A
4	Traverse Heights Elem. School	Conventional	Traverse City	Town: Remote	24	113.59	97.73%	A
5	Franklin Elementary School	Conventional	Cadillac	Town: Remote	15	113.34	97.42%	A
6	Grayling Middle School	Conventional	Crawford AuSable	Town: Remote	27	112.63	96.97%	A
7	Collins Elementary School	Conventional	Houghton Lake	Town: Remote	6	111.53	96.04%	A
8	Sylvester Elementary School	Conventional	Berrien Springs	Town: Fringe	24	111.23	95.59%	A
9	North Ohio Elementary School	Conventional	Gaylord	Town: Remote	6	111.13	95.37%	A
10	Madison Elementary School	Conventional	Madison (Lenawee)	Town: Distant	24	110.10	93.90%	A
11	Riverview Elementary School	Conventional	Big Rapids	Town: Remote	15	110.07	93.72%	A
12	Justus Gage Elementary School	Conventional	Dowagiac	Town: Fringe	24	109.57	92.97%	A
13	Lincoln School	Conventional	South Haven	Town: Distant	6	109.57	92.92%	A

### Bottom 5 Percent of Town Schools

Both of the Richmond Community School District schools included in this report card earned Fs and were ranked among the bottom 5 percent of town schools. Creative Technologies Academy, ranked as the 6th-lowest-scoring town school on the 2013 report card, improved its statewide ranking from 5.3 percent to 11.5 percent. This improvement appears to solely be the result of overall increased student assessment scores, as its count of students eligible for a free lunch remained about the same. †

\* See: "MEAP: Lincoln School" (Michigan Department of Education, 2016), <https://goo.gl/ZJ2Rd0>. During the three years included in this report card, the percentage of students (all third-graders) at Lincoln scoring proficient or better on the MEAP mathematics test increased from 24 percent to 53.7 percent.

† For instance, 11.5 percent of Creative Technologies eighth-graders scored proficient or better on the MEAP mathematics test in 2010-11. In the 2013-14 school year, 34.8 percent were proficient or better on the same test. Scores for other grades over this period followed similar trends. For more information, see "MEAP: Creative Technologies Academy" (Michigan Department of Education, 2016), <https://goo.gl/hDKrht>.

Bottom 5 Percent of Public Elementary and Middle Schools in Towns								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Perry East Elementary	Conventional	Perry Public Schools	Town: Fringe	18	88.44	2.85%	F
2	Rogers City High School	Conventional	Rogers City	Town: Remote	27	89.28	3.87%	F
3	Will L. Lee School	Conventional	Richmond	Town: Fringe	15	89.56	4.41%	F
4	Richmond Middle School	Conventional	Richmond	Town: Fringe	36	90.79	5.57%	F
5	Pansophia Academy	Charter	Coldwater	Town: Distant	51	90.96	5.83%	F
6	Mary McGuire School	Conventional	Mt. Pleasant	Town: Distant	27	91.24	6.14%	F
7	Jonesville Middle School	Conventional	Jonesville	Town: Distant	27	91.25	6.19%	F
8	Gladstone Area Middle School	Conventional	Gladstone	Town: Remote	27	92.34	8.10%	F
9	Rogers City Elementary School	Conventional	Rogers City	Town: Remote	24	92.37	8.15%	F
10	Superior Hills Elementary School	Conventional	Marquette	Town: Remote	12	92.57	8.55%	F
11	TCAPS Montessori School	Conventional	Traverse City	Town: Remote	33	92.64	8.77%	F
12	Jefferson Elementary School	Conventional	Coldwater	Town: Distant	6	92.84	9.75%	F
13	Dundee Elementary School	Conventional	Dundee	Town: Fringe	15	92.88	9.80%	F

### Top 5 Percent of Rural Schools

Every one of these 32 schools is a conventional school.\* Schools in the Chippewa Hills district continued to post high marks. In this year's report, card three of the five ranked schools from the Chippewa Hills district scored among the top 5 percent of rural schools — a repeat of the district's performance in 2013. In 2015, every Chippewa Hills school scored better than expected.

Both of the schools in the Covert school district received an A and placed among the top 5 percent of rural schools. Covert Elementary improved its statewide ranking to 93.6 percent in this year's report card, compared to 89.8 percent in 2013.

Top 5 Percent of Rural Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Sister Lakes Elementary School	Conventional	Dowagiac	Rural: Distant	24	116.89	98.75%	A
2	Onaway Elementary School	Conventional	Onaway	Rural: Remote	24	115.15	98.31%	A
3	Platte River Elementary School	Conventional	Benzie County Central	Rural: Remote	33	114.37	98.17%	A
4	Fairview High School	Conventional	Fairview	Rural: Remote	24	113.60	97.77%	A
5	Rankin Elementary School	Conventional	Carman-Ainsworth	Rural: Fringe	24	113.51	97.60%	A
6	Rose City School	Conventional	West Branch-Rose City	Rural: Remote	28	113.40	97.55%	A
7	Leonard Elementary School	Conventional	Ovid-Elsie	Rural: Distant	6	113.32	97.37%	A
8	Covert Middle School	Conventional	Covert	Rural: Distant	27	112.60	96.93%	A
9	Arenac Eastern Middle/High School	Conventional	Arenac Eastern	Rural: Remote	27	112.31	96.75%	A
10	Barryton Elementary School	Conventional	Chippewa Hills	Rural: Remote	15	111.74	96.30%	A
11	Weidman Elementary School	Conventional	Chippewa Hills	Rural: Distant	15	111.67	96.22%	A
12	Crystal Lake Elementary School	Conventional	Benzie County Central	Rural: Remote	24	111.48	95.95%	A
13	Frostick School	Conventional	Croswell-Lexington	Rural: Distant	15	111.41	95.90%	A
14	Houghton Lake Middle School	Conventional	Houghton Lake	Rural: Fringe	36	111.18	95.50%	A
15	K.I. Sawyer Elementary School	Conventional	Gwinn	Rural: Distant	27	111.15	95.46%	A
16	Gaylord Middle School	Conventional	Gaylord	Rural: Fringe	18	111.14	95.41%	A
17	Floyd M. Jewett Elem. School	Conventional	Mesick	Rural: Remote	33	111.01	95.19%	A
18	Roscommon Middle School	Conventional	Roscommon	Rural: Distant	30	110.78	94.88%	A
19	Lewiston Elementary School	Conventional	Johannesburg-Lewiston	Rural: Remote	30	110.78	94.84%	A
20	Bellaire Middle/High School	Conventional	Bellaire	Rural: Remote	27	110.73	94.79%	A

\* Less than 5 percent of rural schools are charter schools, and this report did not identify any selective rural schools.

Top 5 Percent of Rural Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
21	Arenac Eastern Elementary School	Conventional	Arenac Eastern	Rural: Remote	21	110.67	94.61%	A
22	Sheldon Woods Elementary School	Conventional	West Ottawa	Rural: Fringe	22	110.53	94.52%	A
23	Bennett Woods Elementary School	Conventional	Okemos	Rural: Fringe	15	110.52	94.48%	A
24	Kingsley Area Elementary School	Conventional	Kingsley Schools	Rural: Distant	15	110.16	94.17%	A
25	Goodwillie Environmental School	Conventional	Forest Hills	Rural: Fringe	18	110.14	94.12%	A
26	Kingsley Area Middle School	Conventional	Kingsley	Rural: Distant	36	110.11	93.99%	A
27	Frankfort Elementary School	Conventional	Frankfort-Elberta	Rural: Remote	33	110.09	93.86%	A
28	Winn Elementary School	Conventional	Shepherd	Rural: Distant	24	110.05	93.68%	A
29	Mecosta Elementary School	Conventional	Chippewa Hills	Rural: Distant	15	109.96	93.63%	A
30	Covert Elementary School	Conventional	Covert	Rural: Distant	24	109.95	93.59%	A
31	Lybrook Elementary School	Conventional	Eau Claire	Rural: Fringe	24	109.90	93.46%	A
32	Kingston High School	Conventional	Kingston	Rural: Remote	18	109.72	93.28%	A

### Bottom 5 Percent of Rural Schools

Of these 32 schools, four are charter schools and 28 are conventional schools. Six of the lowest-ranked rural schools have names that suggest they serve both middle school and high school students. Litchfield High School, for example, is the lowest-scoring rural school in Michigan. Though Litchfield High School enrolls high school students, its rank in this report card is only based on the test scores from students in the sixth, seventh and eighth grades. The same is true for other schools on this list that enroll high school students.

Both of the Litchfield schools in this report card received an F and were ranked among the lowest-scoring 5 percent of rural schools. Both of the district's schools also received an F in 2013. Similarly, both of the Summerfield school district's schools received an F, were ranked among the bottom 5 percent of rural schools and received Fs in 2013.

Bottom 5 Percent of Rural Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
1	Litchfield High School	Conventional	Litchfield	Rural: Distant	27	84.34	1.07%	F
2	Grattan Academy - Middle/High School	Charter	Greenville	Rural: Fringe	21	86.13	1.60%	F
3	Will Carleton Charter School Academy*	Charter	Hillsdale	Rural: Fringe	51	86.46	1.74%	F
4	Potterville Elementary School	Conventional	Potterville	Rural: Fringe	15	86.83	1.87%	F
5	Mid Peninsula School	Conventional	Mid Peninsula	Rural: Distant	48	87.55	2.27%	F
6	Morrice Area Elementary School	Conventional	Morrice	Rural: Fringe	33	87.70	2.36%	F
7	Vanderbilt Area School	Conventional	Vanderbilt	Rural: Distant	22	87.76	2.45%	F
8	George Long Elementary School	Conventional	Grass Lake	Rural: Fringe	24	88.15	2.72%	F
9	Dryden High School	Conventional	Dryden	Rural: Distant	18	88.35	2.80%	F
10	Philip Latendresse School	Conventional	Baraga	Rural: Remote	30	88.50	3.03%	F
11	Grattan Academy - Elementary	Charter	Belding	Rural: Distant	27	88.73	3.21%	F
12	Climax-Scotts Elementary School	Conventional	Climax-Scotts	Rural: Fringe	24	88.96	3.43%	F
13	Pittsford Area Elem. School	Conventional	Pittsford	Rural: Distant	33	89.06	3.56%	F
14	Gros Cap School	Conventional	Moran Township	Rural: Distant	11	89.19	3.70%	F
15	Laingsburg Middle School	Conventional	Laingsburg	Rural: Distant	27	89.28	3.83%	F

\* Will Carleton Charter School Academy reports that it does not participate in the National School Lunch Program and the number of students it reports to the state who are eligible for a free lunch based on their household income may not be an accurate depiction of the socioeconomic status of its student body. This would lower the school's CAP Score as a result.

Bottom 5 Percent of Rural Public Elementary and Middle Schools								
Table Rank	School Name	School Type	District or Municipality	Locale	# of Scores	Overall CAP Values		
						Score	Percent Rank	Grade
16	Summerfield Junior/Senior High School	Conventional	Summerfield	Rural: Distant	18	89.33	4.01%	F
17	Adams Elementary School	Conventional	Zeeland	Rural: Fringe	16	89.38	4.10%	F
18	Litchfield Elementary School	Conventional	Litchfield	Rural: Distant	24	89.47	4.32%	F
19	Lakeview Elementary School	Conventional	Lakeview (Montcalm)	Rural: Distant	6	89.51	4.36%	F
20	Pottersville Middle School	Conventional	Pottersville	Rural: Fringe	36	90.06	4.81%	F
21	Summerfield Elementary School	Conventional	Summerfield	Rural: Distant	33	90.50	5.34%	F
22	Laingsburg Elementary School	Conventional	Laingsburg	Rural: Distant	24	90.50	5.39%	F
23	Hanover-Horton Middle School	Conventional	Hanover-Horton	Rural: Distant	27	91.15	6.01%	F
24	Armada Middle School	Conventional	Armada	Rural: Distant	27	91.16	6.06%	F
25	Pittsford Area High School	Conventional	Pittsford	Rural: Distant	18	91.20	6.10%	F
26	Climax-Scotts High School	Conventional	Climax-Scotts	Rural: Fringe	27	91.30	6.41%	F
27	North Dickinson School	Conventional	North Dickinson	Rural: Remote	51	91.58	6.72%	F
28	Long Lake Elementary School	Conventional	Traverse City	Rural: Fringe	24	91.64	6.77%	F
29	Tekonsha Elementary School	Conventional	Tekonsha	Rural: Distant	27	91.67	6.95%	F
30	Hamilton Parsons Elem. School	Conventional	Romeo	Rural: Fringe	24	91.70	7.03%	F
31	Concord Academy:Boyne	Charter	Boyne City	Rural: Fringe	46	91.94	7.30%	F
32	North Adams-Jerome Elem. School	Conventional	North Adams-Jerome	Rural: Distant	24	92.15	7.57%	F



## **About the Authors**

**Audrey Spalding** is an education policy fellow at the Mackinac Center for Public Policy. She started at the Center in 2012 as an education policy analyst.

Before joining the Mackinac Center, Spalding worked as a policy analyst at the St. Louis-based Show-Me Institute, where she provided analytical research and legislative testimony on tax credits, land banks and education. Her public policy op-eds have been published in a variety of newspapers, including The Detroit News, the Detroit Free Press, the Battle Creek Enquirer, the St. Louis Post-Dispatch, the St. Louis Business Journal and The Kansas City Star.

Before she joined the Show-Me Institute, Spalding was an education reporter for the Columbia Missourian, where she was a co-recipient of the 2008 Missouri Press Association's Community Service Award for her efforts to highlight school district expenditures. Spalding received her bachelor's degree from the University of Missouri, having majored in both journalism and economics.

**Ben DeGrow** is the Mackinac Center's education policy director. DeGrow joined the Center in 2015 after a long stint at Colorado's Independence Institute, where he provided expert analysis on school choice, school finance, collective bargaining and education employment policies. He authored numerous policy reports and op-eds for various newspapers and other publications, and regularly appeared on radio and television and before legislative committees.

DeGrow graduated summa cum laude with a bachelor's degree in history from Hillsdale College, and went on to receive a master's degree in history from the Pennsylvania State University. Ben's experiences in the classroom include service as a university graduate assistant and as a substitute teacher in Michigan public schools. He also spent nearly a year on the editorial staff of the Hillsdale Daily News.

## Appendix A: Data Acquisition and Organization\*

Two sources of data were used in the creation of this CAP report card: the Michigan Department of Education's "Fall 2013 MEAP Four Year Public Proficiency Detail with Chart" data file and the building-level free and reduced-price lunch count data sets posted on the state's "MI School Data" website.<sup>14</sup> For each school, student test scores for a particular grade and school year were matched with the percentage of students eligible for a free lunch in that same grade and year.

MEAP subject tests were administered to ninth-graders; however, all ninth-grade test scores were removed from this report card's data set to exclude schools that only enroll students in grades nine through twelve.

The MEAP scores and free lunch counts were then paired with data from the National Center for Education's Elementary/Secondary Information System. NCES posts school classification information, including whether a school exclusively serves students with special needs or is an alternative school. NCES school classification data for the 2013-14 school year were added to the data set. Schools classified as special needs or alternative schools were flagged, but only removed if the school name supported this label, or if the authors were able to substantiate the school's status using a different information source.<sup>†</sup> This culling of the data set led to 249 schools being removed.

The phaseout of the MEAP means that the student academic test scores used in this report card are more dated than those used in previous report cards. As such, we eliminated schools from the data set that did not have test scores for the two most recent years (2012-13 and 2013-14), as well as schools that had fewer than six total test scores used in the generation of their overall CAP Score. This helped assure that nearly all of the schools in this report card are open and active.

After this process of filtering out special and closed schools, the raw CAP data set contained 23,064 records. Each unique record within the CAP data set is a specific school's student performance on a particular test for a particular grade. Since the MEAP test was administered to students in grades three through nine and in the subjects of math, reading, writing, science and social studies, there can be several records for each school. For example, Royal Oak's Addams Elementary had eight records: (1) third-grade mathematics, (2) third-grade reading, (3) fourth-grade mathematics, (4) fourth-grade reading, (5) fourth-grade writing, (6) fifth-grade mathematics, (7) fifth-grade reading and (8) fifth-grade science.

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\* Some of the language in this section is copied verbatim from text previously published by the Mackinac Center.

† Schools with "alternative" or "special education" in their names were removed, as were strict-discipline academies. Schools that did not have a typical name were investigated through their district's website to determine whether the school served only special-needs students, or students who had previously dropped out or had behavioral issues. Virtual schools, though often catering to students seeking an alternative education model, were retained if they were not explicitly restricted to students with special needs.

## Appendix B: Regression Analysis\*

### Data Normalization

Average school test scores from the different subjects, grades and years needed to be normalized in order to generate an overall ranking for all schools, because MEAP scores are not directly comparable. For example, the average 2013-2014 statewide MEAP math score for sixth-graders was 626.4, but the same score for fourth-graders was 819.6.<sup>15</sup> To include both sixth- and eighth-grade results in a school's overall score, these two values needed to be normalized, so that an average-level school's sixth grade score is the same as an average-level school's eighth grade score. To achieve this, the distribution of each exam for each year and for each grade was adjusted so that the distribution had a standard deviation of 15 and the average score — defined as the “adjusted performance” score — was equal to 100. This score can then be compared among schools across grades, subjects and years.

The equation below shows this in detail:

$$\text{Adjusted Performance} = 100 + 15 * \left( \frac{\text{School Avg.} - \text{State Avg.}}{\text{Std. Dev. of State Avg.}} \right)$$

### Regression Model

After each subset of the data set was normalized, ordinary least squares regressions were used to control for students' socioeconomic backgrounds, with schools' test scores as the dependent variable and the proportion of students eligible for free lunch as the independent variable. This is described in the equation below:

$$\text{Adjusted Performance}_{s,t,m,g} = \beta_0 + \beta_1 * \text{Free Lunch Eligible}_{s,t,m,g} + \mu_{s,t,m,g}$$

where  $\text{Adjusted Performance}_{s,t,m,g}$  is the normalized average test score at a school  $s$  in year  $t$  on subject  $m$  in grade  $g$ ,

$\beta_0$  is a constant,

$\beta_1$  is a coefficient representing the estimated impact of the proportion of students eligible for free lunch on a school's average score,

$\text{Free Lunch Eligible}_{s,t,m,g}$  is the proportion of students eligible for free lunch at school  $s$  in year  $t$  on subject  $m$  in grade  $g$ , and

$\mu_{s,t,m,g}$  is the error term.

The regression controls for the impact that having a larger share of students eligible for a free lunch has on school test scores. For example, if the coefficient  $\beta_1$  is -0.5, the adjusted score on a given MEAP test for a school with 100 percent of students eligible for free lunch is, on average, 50 points lower than for a school where no students are eligible for free lunch.

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We used the adjusted performance scores created for each school's set of subject exams for each year to create "Context and Performance" scores. CAP Scores are simply the comparison of a school's actual performance to its predicted performance. Mathematically, this is accomplished by dividing a school's actual performance by its predicted performance and then multiplying by 100 to reduce the number of places after the decimal point:

$$CAP\ Score = 100 * \frac{Actual\ Performance}{Predicted\ Performance}$$

For a given school in a given year, the CAP Score for a particular grade was calculated by determining the average of the subject CAP Scores in that grade, with all subjects weighted equally. To then calculate the CAP Score for a particular year, the grade-level CAP Scores were averaged, with the CAP Scores for each grade weighted equally. A school's overall CAP Score was then determined by averaging the CAP Scores for each available year, with all years weighted equally.

For example, recall that the only MEAP exams given to third-graders were in math and reading, while the MEAP exams given to fourth-graders were in math, reading and writing. Under the method employed in this report card, the math and reading CAP Scores each count for half of the third-grade CAP Score, while the math and reading CAP Scores each count for just one-third of the fourth-grade CAP Score (which includes the writing CAP Score as well).

### ***Regression Results***

As indicated above, CAP Scores were based on a linear regression of adjusted grade-level student academic performance on a particular MEAP subject test against the grade-level percentage of students eligible for free lunch. All regression results listed below indicate a negative relationship between adjusted student test scores and the percentage of students eligible for free lunch.

Test	Grade					
	3	4	5	6	7	8
<b>Math, 2012</b>						
Coefficient Estimate						
Constant	119.99 (0.57)	120.07 (0.59)	120.36 (0.64)	120.65 (0.91)	122.52 (0.85)	120.93 (0.92)
Pct Free	-41.79 (1.07)	-42.09 (1.07)	-43.08 (1.18)	-41.44 (1.56)	-46.14 (1.57)	-44.88 (1.75)
Additional Information						
N	1,544	1,536	1,433	937	827	812
Adjusted R-squared	0.54	0.54	0.55	0.48	0.57	0.53
<b>Math, 2013</b>						
Coefficient Estimate						
Constant	120.73 (0.55)	120.54 (0.54)	120.73 (0.60)	122.47 (0.82)	122.29 (0.85)	122.57 (0.79)
Pct Free	-42.59 (1.05)	-43.19 (1.03)	-43.12 (1.07)	-44.66 (1.43)	-45.05 (1.54)	-46.92 (1.53)
Additional Information						
N	1,569	1,545	1,433	965	851	843
Adjusted R-squared	0.57	0.59	0.55	0.57	0.56	0.59
<b>Math, 2014</b>						
Coefficient Estimate						
Constant	120.19 (0.51)	121.70 (0.46)	120.00 (0.58)	121.82 (0.78)	122.36 (0.77)	121.92 (0.75)
Pct Free	-40.98 (0.95)	-44.50 (0.90)	-41.28 (1.03)	-42.59 (1.34)	-44.87 (1.44)	-45.28 (1.45)
Additional Information						
N	1,608	1,574	1,472	986	878	871
Adjusted R-squared	0.55	0.64	0.56	0.55	0.59	0.58
<b>Reading, 2012</b>						
Coefficient Estimate						
Constant	121.93 (0.44)	122.49 (0.44)	122.70 (0.46)	124.90 (0.57)	123.85 (0.69)	121.52 (0.78)
Pct Free	-45.83 (0.92)	-47.16 (0.89)	-48.00 (0.97)	-49.98 (1.16)	-48.86 (1.37)	-46.14 (1.78)
Additional Information						
N	1,543	1,537	1,435	937	827	812
Adjusted R-squared	0.65	0.67	0.68	0.70	0.64	0.56

Reading, 2013	Grade					
	3	4	5	6	7	8
Coefficient Estimate						
Constant	122.77 (0.43)	122.16 (0.44)	122.82 (0.46)	124.02 (0.60)	125.26 (0.56)	122.17 (0.73)
Pct Free	-46.81 (0.89)	-46.60 (0.88)	-47.47 (0.91)	-47.72 (1.28)	-51.09 (1.16)	-46.13 (1.58)
Additional Information						
N	1,567	1,545	1,439	965	851	843
Adjusted R-squared	0.68	0.68	0.69	0.65	0.72	0.58

Reading, 2014	Grade					
	3	4	5	6	7	8
Coefficient Estimate						
Constant	121.90 (0.43)	122.37 (0.40)	122.17 (0.43)	124.09 (0.59)	124.34 (0.59)	123.59 (0.57)
Pct Free	-44.48 (0.85)	-45.84 (0.83)	-45.81 (0.86)	-47.00 (1.14)	-48.88 (1.20)	-48.75 (1.24)
Additional Information						
N	1,608	1,574	1,472	987	877	871
Adjusted R-squared	0.54	0.68	0.69	0.67	0.70	0.68

Writing, 2012	Grade	
	4	7
Coefficient Estimate		
Constant	119.59 (0.57)	121.41 (0.80)
Pct Free	-41.09 (1.10)	-43.87 (1.63)
Additional Information		
N	1,536	827
Adjusted R-squared	0.51	0.52

Writing, 2013	Grade	
	4	7
Coefficient Estimate		
Constant	119.89 (0.54)	121.16 (0.81)
Pct Free	-41.81 (1.04)	-42.77 (1.63)
Additional Information		
N	1,545	851
Adjusted R-squared	0.55	0.51

<b>Writing, 2014</b>	<b>Grade</b>	
	<b>4</b>	<b>7</b>
Coefficient Estimate		
Constant	119.41 (0.53)	120.81 (0.76)
Pct Free	-39.79 (1.04)	-41.74 (1.52)
Additional Information		
N	1,574	876
Adjusted R-squared	0.51	0.51

<b>Science, 2012</b>	<b>Grade</b>	
	<b>5</b>	<b>8</b>
Coefficient Estimate		
Constant	122.63 (0.45)	122.05 (0.68)
Pct Free	-47.88 (0.91)	-47.28 (1.56)
Additional Information		
N	1,433	812
Adjusted R-squared	0.68	0.58

<b>Science, 2013</b>	<b>Grade</b>	
	<b>5</b>	<b>8</b>
Coefficient Estimate		
Constant	122.41 (0.47)	122.61 (0.64)
Pct Free	-46.61 (0.99)	-47.02 (1.46)
Additional Information		
N	1,441	843
Adjusted R-squared	0.67	0.60

<b>Science, 2014</b>	<b>Grade</b>	
	<b>5</b>	<b>8</b>
Coefficient Estimate		
Constant	121.73 (0.44)	123.19 (0.57)
Pct Free	-44.86 (0.90)	-47.92 (1.25)
Additional Information		
N	1,475	871
Adjusted R-squared	0.66	0.65

	<b>Grade</b>
<b>Social Studies, 2012</b>	<b>6</b>
Coefficient Estimate	
Constant	123.92 (0.58)
Pct Free	-48.01 (1.23)
Additional Information	
N	937
Adjusted R-squared	0.65

	<b>Grade</b>
<b>Social Studies, 2013</b>	<b>6</b>
Coefficient Estimate	
Constant	124.80 (0.53)
Pct Free	-49.28 (1.08)
Additional Information	
N	965
Adjusted R-squared	0.69

	<b>Grade</b>
<b>Social Studies, 2014</b>	<b>6</b>
Coefficient Estimate	
Constant	124.22 (0.53)
Pct Free	-47.24 (1.06)
Additional Information	
N	988
Adjusted R-squared	0.67



## Appendix C: Locale Codes <sup>\*</sup>

The locale codes used in this paper come directly from the National Center for Education Statistics. Locale codes represent how far away a particular school is from an urbanized area, and are based on a school's physical street address.<sup>16</sup> According to the NCES, the geographic information used to create locale codes is updated for about one-third of communities every year.

Definitions of each locale code category are below, taken directly from the NCES:<sup>17</sup>

Locale Code	Definition
<b>City: Large</b>	Territory inside an urbanized area and inside a principal city with population of 250,000 or more.
<b>City: Midsize</b>	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000
<b>City: Small</b>	Territory inside an urbanized area and inside a principal city with population less than 100,000.
<b>Suburb: Large</b>	Territory outside a principal city and inside an urbanized area with population of 250,000 or more.
<b>Suburb: Midsize</b>	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
<b>Suburb: Small</b>	Territory outside a principal city and inside an urbanized area with population less than 100,000.
<b>Town: Fringe</b>	Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.
<b>Town: Distant</b>	Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.
<b>Town: Remote</b>	Territory inside an urban cluster that is more than 35 miles from an urbanized area.
<b>Rural: Fringe</b>	Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
<b>Rural: Distant</b>	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster
<b>Rural: Remote</b>	Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

<sup>\*</sup> Some of the language used in this section is verbatim to text in previously published Mackinac Center studies.

## Endnotes

- 1 Selcuk Sirin, “Socioeconomic Status and Academic Achievement” A Meta-Analytic Review of Research,” Review of Educational Research 75, no. 3 (Fall 2005): 417-453, <http://perma.cc/GA9X-QT3Y>.
- 2 “2014 At-a-Glance Overview: Michigan School Accountability Scorecards” (Michigan Department of Education, 2014), <http://perma.cc/GT6M-ECRW>; “Top-to-Bottom Ranking, Priority, Focus and Reward Schools Identification Business Rules” (Michigan Department of Education, 2014), <http://perma.cc/GMG9-U7Q9>.
- 3 Jay Greene et al., “The School Performance Index in Arkansas” (University of Arkansas, January 2006), <http://perma.cc/FB8C-E55G>.
- 4 “Child Nutrition Program: Income Eligibility Guidelines” (U.S. Department of Agriculture, March 13, 2013), <http://perma.cc/X2HJ-WF52>.
- 5 Audrey Spalding, “The Michigan Context and Performance Report Card: Public Elementary and Middle Schools, 2013” (Mackinac Center for Public Policy, 2013), 36–37, <http://perma.cc/R2MR-ZXMZ>.
- 6 “Michigan Unveils New Standardized Test to Replace MEAP,” The Detroit News, Nov. 14, 2014, <http://perma.cc/5PGL-AKY5>; Lori Higgins, “New State Exam Requires Deeper Skills,” Detroit Free Press, Dec. 2, 2014, <http://perma.cc/G79R-E3NM>; “2014-15 Michigan Statewide Assessments Transition: Spring 2015 Assessment Update” (Michigan Department of Education, 2015), <http://perma.cc/CYK2-96CF>.
- 7 For instance, Jeffers High School, part of the Adams Township School District, graduated its first class in 1910. “School History” (Adams Township School District, 2016), <http://perma.cc/AR3K-WEFX>.
- 8 Michigan did not allow the creation of charter public schools until 1994. “Michigan Charter Schools - Questions and Answers” (Michigan Department of Education, Jan. 2016), <http://perma.cc/B3TA-DDMA>.
- 9 “Crestwood Accelerated Program: FAQ” (Crestwood School District), <http://perma.cc/655E-RPGZ>.
- 10 “MEAP: Moore Elementary School” (Michigan Department of Education, 2013), <https://goo.gl/5zdCm2>.
- 11 “Education Achievement Authority” (State of Michigan, 2016), <http://perma.cc/KE3D-YPV7>.
- 12 Dustin Walsh, “Education Achievement Authority Picks First 15 Schools — All in Detroit — for Improvement,” Crain’s Detroit Business, March 13, 2012, <http://perma.cc/BQ22-K6NG>.
- 13 Lori Higgins, “Snyder Assigns New EMs in Highland Park, Muskegon Heights,” *Detroit Free Press*, April 14, 2015, <http://perma.cc/3GV5-FXGT>.
- 14 “Downloadable Data Files” (Michigan Department of Education, 2016), <http://perma.cc/AZ7W-DHGS>; “Free and Reduced Lunch Counts” (Michigan Department of Education, 2016), <http://perma.cc/HS8V-AQWC>.
- 15 “MEAP: Statewide (State) and Statewide (State): 2013-14/6th/Mathematics/All Students” (Michigan Department of Education, 2016), <https://goo.gl/wbqKH8>; “MEAP: Statewide (State) and Statewide (State): 2013-14/8th/Mathematics/All Students” (Michigan Department of Education, 2016), <https://goo.gl/KsTKx1>.
- 16 “Identification of Rural Locales” (U.S. Department of Education), <http://perma.cc/DS9B-6D98>.
- 17 Ibid.

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