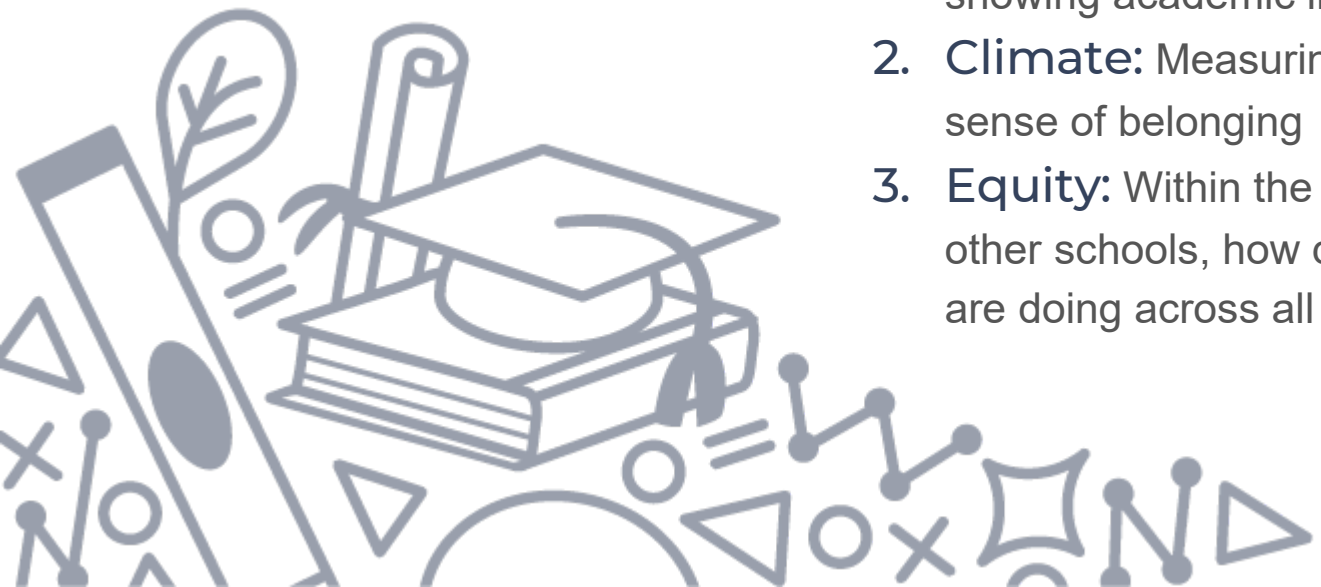
Minneapolis School Finder Rating Technical Guide

Winter 2025

Rating components & measures

The MSF School Performance Rating is comprised of 3 components: academics, climate & equity

These roll up into a single school rating. Each component is calculated from different measures that indicate a school's quality in that area. Traditional high schools, alternative high schools, & K-8's feature different academic & equity measures.*



1. **Academics:** Number of students on grade level, on track for college preparedness, &/or showing academic improvement
2. **Climate:** Measuring students' and staff's sense of belonging
3. **Equity:** Within the school & compared to other schools, how different student groups are doing across all the metrics above

Rating components & measures

Component	K8 Measures	HS Measures	Alternative HS Measures
Academic 60%	• MCA Math & Reading proficiency • MCA Math & Reading progress	• ACT Composite Score • 4-yr graduation rate • College continuation	• 7-year graduation rate • % in College or Working Full Time • Credit Accumulation
Climate 20%	• Teacher retention • Consistent attendance • Student Retention		N/A
Equity 20%	• Intra-school gaps on MCA proficiency, MCA progress, and consistent attendance • Inter-school gaps on MCA proficiency, MCA progress, and consistent attendance • % of teachers of color relative to students of color	• Intra-school gaps on graduation rate and consistent attendance • Inter-school gaps on graduation rate and consistent attendance • % of teachers of color relative to students of color	N/A

See Appendix B for measure definitions

Ratings Calculations – Curving Data

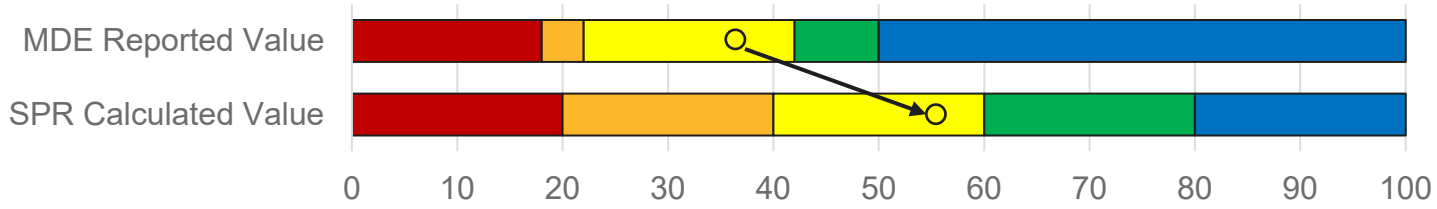
Each measure is divided into 5 color-coded categories, split by 4 cut points. Those cut points are curved to fit an even distribution on a 0 to 100 scale. This allows for comparison across measures.

Example: Reading Proficiency	Red	Orange	Yellow	Green	Blue
Actual Value	≤18%	≤22% to >18%	≤42% to >22%	≤42% to >50%	>50%
Adjusted Value	≤20%	≤20% to 40>%	≤40% to >60%	≤60% to >80%	>80%

Example:

Reading Proficiency is split into 5 categories. It is then curved to fit a 20/40/60/80 distribution using the formula $y = 0.006882x^3 - 0.731027x^2 + 25.954613\,x - 250.46875$, where x is the MDE Reported value and y is the SPR Calculated (curved) value.

A school with a Reading Proficiency rate of 37% would be given a curved value of 58%, awarding them a Yellow rating.



Each measure has a unique curve based on its designated cut points. See Appendix E for all equations.

Ratings Calculations – Weighting

To arrive on component ratings, a weighted average of the measures within the component is calculated.

Example:

Sunnyside Elementary has calculated the following measures in the Academic component.

	Weight	Actual Value	Adjusted Value	Color
Math Proficiency	13%	46%	82%	Blue
Reading Proficiency	13%	37%	58%	Yellow
Math Progress	37%	66%	71%	Green
Reading Progress	37%	36%	29%	Orange
Academic Rating (Weighted Avg)	-	-	55%	Yellow

This same technique is used to award an Overall Rating. That is, the three components contribute to a weighted average, the result of which is the Overall Rating.

Appendix A

Measure cut points & weighting

Academic component cut points & weighting K-8 School (60%)

Measure & Weight	Blue	Green	Yellow	Orange	Red
MCA Math Proficiency (37%)	>45%	≤45% to >33%	≤33% to >17%	≤17% to >9%	≤9%
MCA Reading Proficiency (37%)	>50%	≤50% to >42%	≤42% to >22%	≤22% to >18%	≤18%
MCAS Math Progress (13%)	>60%	≤60% to >47%	≤47% to >40%	≤40% to 20>%	≤20%
MCA Reading Progress (13%)	>67%	≤67% to >50%	≤50% to >40%	≤40% to >33%	≤33%

Academic component cut points & weighting High School (60%)

Measure & points	Blue	Green	Yellow	Orange	Red
ACT (25%)	>21	≤21 to >18	≤18 to >15	≤15 to >14	≤14
4-yr grad rate (33%)	>90%	≤90% to >80%	≤80% to >70%	≤70% to >50%	≤50%
College continuation (42%)	>84%	≤84% to >75%	≤75% to >65%	≤65% to >52%	≤52%

Academic component cut points & weighting Alternative High School

Measure & points	Blue	Green	Yellow	Orange	Red
College or Working Full Time (40%)	>56%	≤56% to >42%	≤42% to >30%	≤30% to >15%	≤15%
7-yr grad rate (40%)	>84%	≤84% to >67%	≤67% to >47%	≤47% to >34%	≤34%
Credit Accumulation (20%)	>75%	≤75% to >60%	≤60% to >42%	≤42% to >25%	≤25%

Climate component cut points & weighting
K-8 School (20%)

Measure & weight	Blue	Green	Yellow	Orange	Red
Teacher retention (30%)	>80%	≤80% to >75%	≤75% to >65%	≤65% to >50%	≤50%
Consistent attendance (40%)	>90%	≤90% to >80%	≤80% to >66%	≤66% to >45%	≤45%
Student retention (30%)	>89%	≤89% to >75%	≤75% to >66%	≤66% to >52%	≤52%

Climate component cut points & weighting High School (20%)

Measure & weight	Blue	Green	Yellow	Orange	Red
Teacher retention (30%)	>80%	≤80% to >75%	≤75% to >65%	≤65% to >50%	≤50%
Consistent attendance (40%)	>83%	≤83% to >60%	≤60% to >45%	≤45% to >30%	≤30%
Student retention (30%)	>90%	≤90% to >83%	≤83% to >76%	≤76% to >64%	≤64%

Equity component cut points & weighting K-8 School (20%)

Measure & weight	Blue	Green	Yellow	Orange	Red
Intra-School Equity Math Proficiency (5%)	<25%	≥25% to <45%	≥45% to <60%	≥60% to <80%	≥80%
Intra-School Equity Reading Proficiency (5%)	<25%	≥25% to <45%	≥45% to <60%	≥60% to <80%	≥80%
Intra-School Equity Math Progress (7.5%)	<10%	≥10% to <20%	≥20% to <30%	≥30% to <50%	≥50%
Intra-School Equity Reading Progress (7.5%)	<10%	≥10% to <20%	≥20% to <30%	≥30% to <50%	≥50%
Intra-School Equity Consistent Attendance (10%)	<2.5%	≥2.5% to <7%	≥7% to <14%	≥14% to <20%	≥20%
Teachers of color to students of color ratio (30%)	>1:2	≤1:2 to >1:4	≤1:4 to >1:6	≤1:6 to >1:9	≤1:9

Equity component cut points & weighting, cont.
K-8 School (20%)

Measure & weight	Blue	Green	Yellow	Orange	Red
Inter-School Equity Math Proficiency (5%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%
Inter-School Equity Reading Proficiency (5%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%
Inter-School Equity Math Progress (7.5%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%
Inter-School Equity Reading Progress (7.5%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%
Inter-School Equity Consistent Attendance (10%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%

Equity component cut points & weighting
High School (20%)

Measure & weight	Blue	Green	Yellow	Orange	Red
Intra-School Equity 4-year Grad (18%)	<2.5%	≥2.5% to <6%	≥6% to <15%	≥15% to <26%	≥26%
Intra-School Equity Consistent Attendance (17%)	<4%	≥4% to <9%	≥9% to <16%	≥16% to <24%	≥24%
Inter-School Equity 4-year Grad (18%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%
Inter-School Equity Consistent Attendance (17%)	>80%	≤80% to >60%	≤60% to >40%	≤40% to >20%	≤20%
Teachers of color to students of color ratio (30%)	>1:2	≤1:2 to >1:4	≤1:4 to >1:6	≤1:6 to >1:9	≤1:9

Appendix B

Data definitions

(Data from MDE, unless noted)

Academic component definitions K-8 Schools

Measure	Definition
MCA Proficiency	% of students proficient on the MCA (including MTAS)
MCA Progress	% of students making progress, as defined by MDE

Academic component definitions High Schools

Measure	Definition
ACT	Average ACT composite score
4-year graduation rate	The percent of students that graduated within the traditional 4-year timeframe. Thus, students that enter a school in 9th grade graduate in 4 years. Students that enter in 10th grade graduate in 3 years. Students that transfer to another school are removed from the cohort. Students that drop out are attributed to the school in which they spent the most time, unless they drop out within less than one academic year of entering a school.
College persistence	% of high school graduates enrolled or graduated into their 2nd academic year of college (SLEDS)

Academic component definitions Alternative High Schools

Measure	Definition
College or Working Full Time	The percent of graduates that are enrolled in college or working 35+ hours a week one year after graduating high school (SLEDS)
7-year graduation rate	The percent of students that graduated within a 7-year timeframe. Thus, students that enter a school in 9th grade graduate in 7 years. Students that enter in 10th grade graduate in 6 years. Students that transfer to another school are removed from the cohort. Students that drop out are attributed to the school in which they spent the most time, unless they drop out within less than one academic year of entering a school.
Credit Accumulation	Of those that are enrolled at least 95 days, the percent of students that accrue 5+ credits, or 1 academic year's equivalent

Climate & Equity component definitions

Measure	Definition
Teacher retention	% of teachers employed from the previous year that are also employed in the current year (PESLB)
Consistent attendance	% of students attending school 90% of the days or more, defined by MDE
Student retention	% of students enrolled Oct 1 of current year that were also enrolled Oct 1 of previous year, excluding students currently in the schools' lowest grade

Measure	Definition
Teachers of color to students of color ratio	Ratio of the % of teachers of color to the % of students of color

Intra-school equity component definitions K-8 Schools

Measure	Definition
Intra-School Equity Proficiency	Calculation of average & range of proficiency % by student groups (student groups as defined by ESSA)*
Intra-School Equity Progress	Calculation of average & range of progress % by student groups (student groups as defined by ESSA)*
Intra-School Equity Consistent Attendance	Calculation of average & range of consistent attendance % by student groups (student groups as defined by ESSA)*
Teachers of color to students of color ratio	Ratio of the % of teachers of color to the % of students of color

*See Appendix C for more details

Inter-school equity component definitions K-8 Schools

Measure	Definition
Inter-School Equity Proficiency	The average percentile ranking for each qualified demographic group compared to that same group in Minneapolis for math/reading proficiency
Inter-School Equity Progress	The average percentile ranking for each qualified demographic group compared to that same group in Minneapolis for math/reading progress
Inter-School Equity Consistent Attendance	The average percentile ranking for each qualified demographic group compared to that same group in Minneapolis for consistent attendance

*See Appendix D for more details

Intra-school equity component definitions
High Schools

Measure	Definition
Intra-School Equity 4-year Graduation	Calculation of average & range of 4-year graduation % by student groups (student groups as defined by ESSA)*
Intra-School Equity College Continuation	Calculation of average & range of % of HS graduates starting college & persisting or graduating as of 2nd academic year
Intra-School Equity Consistent Attendance	Calculation of average & range of consistent attendance % by student groups (student groups as defined by ESSA)*

*See Appendix C for more details

Inter-school equity component definitions High Schools

Measure	Definition
Inter-School Equity 4-year Graduation	The average percentile ranking for each qualified demographic group compared to that same group in Minneapolis for 4 year graduation
Inter-School Equity College Continuation	The average percentile ranking for each qualified demographic group compared to that same group in Minneapolis for college continuation
Inter-School Equity Consistent Attendance	The average percentile ranking for each qualified demographic group compared to that same group in Minneapolis for consistent attendance

*See Appendix D for more details

Appendix C

Intra-school Equity Calculations

Intra-school equity calculations

- “Intra-school equity” refers to the measurement of equity between various student groups in a single school
- For “Calculation of average & range of [measure] % by student groups,” we apply the coefficient of variation, or ”CV.” The formula is a statistical measure of the relative range of data points in a data series around the mean (average). To learn more about the value of this calculation, please watch this video.
- CV provides a normed way to compare schools' data averages & ranges. The smaller the CV, the more similar the experiences of the students at the school. If the CV is larger, student experiences are more inconsistent.
- For each measure, GMS calculated the average & range of the student groups at their school. Student groups (with at least 10 students) are reported and provided by MDE. Groups are set based on the demographics categories captured in reporting; they include race, Free/Reduced Lunch Eligibility, Special Education status & English Language Learner status. For more information on the ESSA groups & calculations, go to MDE ESSA accountability.

Sample calculations

Student Group	School 1	School 2	School 3
All Students	56%	57%	39%
Black	49%	48%	35%
Hispanic	46%	49%	36%
White	63%	62%	42%
English Language Learner	46%	47%	33%
Not English Language Learner	58%	59%	42%
Eligible for Free/Reduced Lunch	49%	51%	32%
Not Eligible for Free/Reduced Lunch	63%	58%	41%
Special Education	50%	53%	37%
Not Special Education	65%	61%	42%
Mean	**54.5%**	**54.5%**	**37.9%**
Standard Deviation	**7.0%**	**5.3%**	**3.6%**
Coefficient of Variation	**12.8%**	**9.7%**	**9.5%**

Schools 1 & 2 have the same average proficiency but the range of scores are larger at school 1. This means there is greater inequity between the different groups of students.

In school 3, students are performing as equitably as in school 2; however, their average achievement is much lower.

Appendix D

Inter-School Equity Calculations

Inter-school equity calculations

- “Inter-school equity” refers to the measurement for each student group at a school compared to how that group is being served across Minneapolis
- For each demographic, we compare the performance of that demographic in a school against the performance of that same demographic in every other school in Minneapolis School Finder using a percentile
- For every demographic with 10+ students, a school’s inter-school equity rating is calculated by averaging those demographics’ percentiles

Sample calculations

	School 1		School 2	
Student Group	Proficiency	Percentile	Proficiency	Percentile
Black	20%	74%	8%	39%
Hispanic	22%	78%	11%	55%
White	56%	49%	45%	28%
English Language Learner	12%	73%	5%	50%
Not English Language Learner	49%	73%	20%	44%
Eligible for Free/Reduced Lunch	27%	75%	11%	41%
Not Eligible for Free/Reduced Lunch	59%	72%	32%	40%
Special Education	25%	77%	8%	31%
Not Special Education	50%	80%	15%	45%
Average	**36%**	**72%**	**33%**	**41%**

Appendix E

Curve Equations

Curve Equations – K8

Component	Measure	Equation
Academic	MCA Math Proficiency	$y = 0.00186\ x^3 – 0.16183\ x^2 + 5.734747x – 19.860491$
	MCA Reading Proficiency	$y = 0.006882\ x^3 – 0.731027\ x^2 + 25.954613x – 250.46875$
	MCA Math Progress	Where $x>40$: $y = -0.00336793x3 + 0.42915140x2 - 15.31888482x + 181.66056166$ Where $x<40$: $y = x$
	MCA Reading Progress	$y = -0.035712x^2 + 5.32435x – 116.5019$
Climate	Teacher Retention	$y = 0.003556x^3 – 0.648889x^2 + 40348889x – 826.6667$
	Student Retention	$y = 1.6468x – 66.5124$
	Consistent Attendance	$y = 0.000227\ x^3 – 0.029705\ x^2 + 2.129252x – 36.326531$
Equity	Intra-School Equity (MCA Math/Reading Proficiency)	Where $16 \leq x \leq 89$: $y = 0.000346x^3 - 0.054545x^2 + 1.510823x + 70.909091$ Where $x<16$: $y = -0.94117647x + 94.11764706$ Where $x>89$: $y = -1.5x + 150.5$
	Intra-School Equity (MCA Math/Reading Progress)	$Y = 116.420039e^{-0.03516214x}$
	Intra-School Equity (Consistent Attendance)	$y = –0.00998x^3 + 0.372565x^2 – 7.257737x + 95.971758$
	Inter-School Equity (Consistent Attendance, Math/Reading Proficiency, Math/Reading Growth)	$y = x$
	Teachers of color to students of color ratio	$y = 0.000205x^3 – 0.070407x^2 + 5.18215x – 28.75763$

Curve Equations (HS)

Component	Measure	Equation
Academic	4 Year Graduation Rate	$y = 3.459037 * e^{0.035162x}$
	College Continuation	$y = 0.001798x^3 – 0.34364x^2 + 23.21096x – 510.5526$
	ACT	$y = 0.47619\ x^3 – 25.714286\ x^2 +465.238095x – 2760$
Climate	Teacher Retention	$y = 0.003556x^3 – 0.648889x^2 +40348889x – 826.6667$
	Student Retention	$y = 0.00000075*x^{4.1114511}$
	Consistent Attendance	$y = 59.566734 * \ln(x) – 184.112826$
Equity	Intra-School Equity (4 Year Graduation)	$y = -0.011x^3 + 0.5385x^2 - 9.6604x + 100.96$
	Intra-School Equity (Consistent Attendance)	$y = -0.00357143x^3 + 0.19880952x^2 - 6.10952381x + 101.48571429$
	Inter-School Equity (4 Year Graduation, Consistent Attendance)	$y = x$
	Teachers of color to students of color ratio	$y = 0.000205x^3 – 0.070407x^2 + 5.18215x – 28.75763$

Curve Equations (Alt HS)

Component	Measure	Equation
Academic	7 Year Graduation Rate	$y = 0.000422\ x^3 - 0.078733\ x^2 + 5.822792x - 103.535211$
	College or Working Full Time	$y = 1.124373 * x^{1.059097}$
	Credit Accumulation	$y = 0.000172\ x^3 - 0.023715\ x^2 + 2.173771 - 22.210339$