



Middle School Admissions Decision Detail for Applicant Families

February 20, 2024

Background

This document describes Ingenuity's selection process and provides examples of how the process worked for a few representative applicants for 2024-25. Ingenuity's citywide admissions process seeks to ensure equity and access to our rigorous and effective STEM curriculum for the brightest young people from all communities across Baltimore City.

The Ingenuity Admissions Score: The Ingenuity Admission Score calculated by Ingenuity is different from the Composite Score calculated by City Schools, though both calculations use the same raw data. A complete mathematical description can be found at the end of this document. The Ingenuity Admission Score describes how well an applicant scored on required testing and how good their grades were *compared to all the other applicants in a given admissions year.*

- In other words, an applicant with the highest scores on every assessment and the best report card average among all applicants would receive a score of 100.
- Conversely, an applicant with the lowest scores on each of the assessments and the lowest report card average among all applicants would receive a score of 0.
- For 2024-25 MS applicants, actual scores ranged from 7.1 to 99.4, with a median score of 34.1.

Ensuring Geographic and Economic Diversity: every applicant is assigned to a ZIP code quartile, based on the median household income of the ZIP code in which they live. For more detail you can view a [chart showing which Baltimore City ZIP codes are in each quartile](#), or review the supporting [2020 US Census data](#). This method essentially splits our applicant pool into four economic groups. Applicants are then ranked by admission score *within their ZIP quartile group* to determine their ZIP quartile rank. An applicant's ZIP quartile rank and the school preferences they choose are what directly determines placement offers.

Minimum Math Proficiency: Additionally, to ensure only students with a demonstrated ability to be successful in our program were selected to receive offers, a minimum scaled score of 735 (74th percentile) on the MCAP Math assessment was required to receive any placement offer or be added to the waitlist.

Distribution of Offers: Although ZIP quartiles matter a lot in our model, it is important to note that admission scores determine ZIP quartile ranks, and high scores go a long way. For example, among 2024-25 applicants, the 45 applicants with the highest Ingenuity Admission Scores all received placement offers to their first-choice schools, regardless of their ZIP quartiles. Additionally, among applicants who listed at least two schools as choices, the 80 applicants with highest Ingenuity Admission



Scores received offers to their 1st or 2nd choice schools. In total, 224 initial offers were made for a maximum of 214 placements to a pool of 941 applicants. Most of the offers made (59%) were offers to applicants' first-choice schools.

Offers by Applicant Choice Preference, 2024-25

	1st Choice	2nd Choice	3rd Choice	4th Choice
Number Receiving	132 (59%)	36 (16%)	25 (11%)	31 (14%)

Maximum Ingenuity Placements Available at Each Ingenuity Middle School, 2024-25


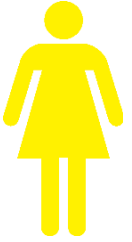




Ingenuity Middle School	Hamilton	James McHenry	Mount Royal	Roland Park
Maximum Number of 6th Grade Placements	30	60	60	64

(See table on next page)



Application Outcome Examples from 2024-25

The illustration below demonstrates how this process played out for six actual applicants to Ingenuity’s 6th grade cohort for school year 2024-25. Their identities have been changed, but the data is from actual applicants.

						
	Clarabelle	Daisy	Minnie	Mickey	Donald	Goofy
Ingenuity Admission Score	71.6	56.0	60.0	60.9	53.3	36.7
ZIP Quartile	2	1	3	4	3	2
ZIP Quartile Rank	1	6	15	29	39	68
1 st Choice School	Hamilton	Roland Park	Roland Park	Roland Park	Mount Royal	James McHenry
2 nd Choice School	Roland Park	Mount Royal	Hamilton	-	Hamilton	-
3 rd Choice School	Mount Royal	Hamilton	Mount Royal	-	Roland Park	-
4 th Choice School	James McHenry	James McHenry	James McHenry	-	James McHenry	-
Initial Placement Offer	HAMILTON	ROLAND PARK	ROLAND PARK	WAITLIST	HAMILTON	NONE



The descriptions below explain why each applicant received the initial offer they did. They are listed in the order in which they were assigned placement offers.

Clarabelle: Clarabelle has the highest admission score and the highest ZIP quartile rank among the examples shown, and easily earned an offer to their first choice school, Hamilton. They were one of the top 45 applicants for 2024-25 that would have received placement offers to their first-choice schools no matter what ZIP quartile they were from or which school was their first choice. This group of high-flying students is approximately the top 5% of all applicants (who receive about 20% of initial offers) for middle school.

Daisy: At first glance, you might think Mickey is more highly ranked than the other students besides Clarabelle, but that's not quite right. Although Mickey has the highest Ingenuity Admission Score among the remaining 5 examples, it is Daisy who is ranked highest *within her ZIP code quartile*. All of our applicants who score highest among their ZIP quartile peers receive offers to their first-choice schools, so Daisy got an offer to Mount Royal.

Minnie: Minnie and Mickey both want to go to Roland Park, but Minnie ranked higher *within her ZIP quartile*. She scored highly enough among her peers to earn one of the remaining placements at her first-choice school.

Mickey: Mickey didn't want to be considered for any schools other than his first choice, Roland Park. After placement offers were assigned to the top 26 ranked candidates in each ZIP quartile, however, Roland Park had already reached its limit for initial offers. Mickey was the 29th-highest scoring applicant from ZIP quartile 4. Therefore, Mickey was added to our waitlist. *Placement offers to waitlist applicants are given based on Ingenuity Admission Score alone (without consideration of ZIP quartile rank)*. Because Mickey has the highest admission score among applicants on the waitlist, if and when a placement becomes available at his chosen school because of the refusal or non-response to an initial offer, Mickey will be given the first chance to accept placement from the waitlist.

Donald: Donald didn't quite have an admission score high enough to earn himself an offer to his first-choice school. However, after his first-choice school was filled by higher-ranked candidates, he was considered for (and given a placement offer to) his second-choice school, Hamilton.

Goofy: Goofy's ZIP quartile rank of 68 is just high enough to receive one of the final initial offers to his first-choice school, James McHenry. However, Goofy's MCAP math scaled score of 734 is below the minimum required to qualify for an offer (or the waitlist). Therefore, Ingenuity declined to offer him a placement, and the initial offer he would have received went to the next highest applicant by ZIP quartile rank.



CALCULATION OF ADMISSION SCORE

1. **Components:** For applications to 2024-25, Ingenuity used three data points to calculate a middle school admission score for each applicant: MCAP math scaled score¹, MCAP reading scaled score, and a report card grade average. The report card grade average is a simple average of an applicant's 4th grade final grades and 5th grade 1st marking period grades in math, ELA, social studies, and science. In cases where only 6 or 7 of these 8 grades were available, an average of the grades available was used. Students without grade data for 3 or more of these classes were not considered for admission.
2. **Conversion to Percent of Range:** Each of the three components were converted into a percentage of the range of the distribution of scores in the applicant pool. These calculations used the upper bound (highest) and lower bound (lowest) score in the set of all applicants to determine the range of scores. Each applicant's score was then converted into a percentage of that range. The formula for this process was the same for all three components of the Ingenuity Admission Score. This conversion was applied to ensure that sets of score components with relatively larger standard deviations do not have an inappropriately larger effect on admission score as compared to those components with less variation.

Definitions:

$$S_{\%} = [(S - S_{LB}) / (S_{UB} - S_{LB})] * 100\%$$

S = applicant's score

S_% = score percent of range

S_{LB} = applicant pool lower bound

S_{UB} = applicant pool upper bound

3. **Component Weights:** Each of the three score component percent of ranges were then multiplied by a cofactor ("weight") to produce a weighted percent of range. For 2024-25, these cofactors were 60% for math assessment, 30% for reading assessment, and 10% for report card grade average.²
4. **Combined Formula:** To produce a combined formula, each of the three score component percent of ranges (math assessment, MA; reading assessment, RA; and report card average, RCA) were multiplied by its cofactor and then summed.

¹ For out of district students who applied, their iReady math percentile was converted to an MCAP math scaled score equivalent.


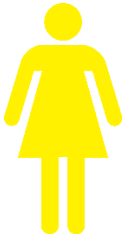




² For in-district students that did not have MCAP scores available, the iReady math percentile was converted to a MCAP math scaled score equivalent. For this small group (0.6% of applicants) without ELA scores, admission scores were weighted as 75% MCAP scaled score equivalent and 25% report card average.



MS Applicant Pool Data for 2024-25 Placement

Ingenuity Admission Score Component	Lower Bound (Lowest Score in Pool)	Upper Bound (Highest Score in Pool)	Average Score of Students who Received Initial Offers
Report Card Average	64.25	100	93.9
MCAP Math	701	846	764.5 (97 th %ile)
MCAP Reading	703	803	770.4 (95 th %ile)

Individual Data for Example MS Applicants to 2024-25

						
	Clarabelle	Daisy	Minnie	Mickey	Donald	Goofy
Ingenuity Admission Score	71.6	56.0	60.0	60.9	53.3	36.7
Report Card Average	99.25	94.13	91	98	98.25	92
MAP Math	783 (99 th %ile)	764 (96 th %ile)	759 (94 th %ile)	766 (97 th %ile)	751 (90 th %ile)	734 (72 nd %ile)
MAP Reading	796 (>99 th %ile)	775 (97 th %ile)	798 (>99 th %ile)	785 (99 th %ile)	780 (98 th %ile)	753 (82 nd %ile)

Ingenuity Admission Score Example Calculation

$$\begin{aligned}
 \text{Clarabelle} &= [0.6(783 - 701)/(846 - 701) + 0.3(796 - 703)/(803 - 703) + 0.1(99.25 - 64.25)/(100 - 64.25)] * 100 \\
 &= (0.339 + 0.279 + 0.098) * 100 \\
 &= 71.6
 \end{aligned}$$