## 2014-I5 Interscholastic High School Athletics Participation, Academic Performance, and Eligibility Requirements

## Key Findings

I. In total, $36 \%$ of MMSD high school students participated in interscholastic athletics, with participation rates varying by school, grade and demographic group.
2. Sixty-one percent of interscholastic high school student athletes were white.
3. Soccer, cross country, track, and football had the greatest number of participants across the district.
4. Overall, higher percentages of interscholastic high school student athletes received no Ds (71\%) or Fs (86\%) than non-participants (58\% and 66\%).
5. All four potential eligibility models explored result in significant disparities in interscholastic athletics eligibility across student groups.

During 2015, athletics has been a topic of interest for MMSD's Board of Education. Athletics participation ties directly into MMSD's Strategic Framework Goal \#2: Every student has access to a challenging and well-rounded education, which is measured in part by access and participation data for extra-curricular and co-curricular activities like athletics. In this report, we investigate the athletic participation, academic performance, and eligibility of student athletes during the 2014-15 school year through three research questions:
I. Who participated in interscholastic high school athletics in 2014-15?
2. What was the prevalence of Ds and course failures among MMSD high school students who participated in interscholastic athletics in 2014-15?
3. What percent of students from different demographic groups would have been eligible to participate in MMSD high school interscholastic athletics in 2014-I5 under various eligibility criteria?

A complementary report -The Effect of Interscholastic High School Athletics Participation on Student Outcomes for the Classes of 20I2-20I4 - is available at mmsd.org/research.

## Question I: Who participated in interscholastic high school athletics in 2014-15?

To answer this question, we looked at enrollment in MMSD-sponsored interscholastic sports. If a sport appears on a student's schedule (where MMSD athletic rosters are recorded) during 20I4-I5 without the designation that it was through Madison School \& Community Recreation (MSCR) we count them as a participant in that sport and as a participant in interscholastic athletics (e.g., "Boys Tennis - 9th Blue" counts but "Volleyball - MSCR" does not). This designation also does not include students who participated in other athletic activities outside of MMSD, nor does it reflect the intensity of participation (e.g. participated for one week or for the entire season), which is not recorded. Students who try out for a sport and are cut at the beginning of the season also do not appear, as the sport will never appear on their schedule, so interest in sports likely is higher than the figures reported here. Table I lists the demographics of the 2,813 high school students (36\%) who participated in interscholastic athletics during 2014-15.

Table I: 2014-15 Participation Rates by Demographic Group

| Grouping Category | Group | $\%$ of Students in Any Sport | \# of Student Athletes |
| :---: | :---: | :---: | :---: |
| Total | Grand Total | 36\% | 2813 |
| School | East | 31\% | 535 |
|  | La Follette | 37\% | 581 |
|  | Memorial | 41\% | 823 |
|  | West | 41\% | 861 |
|  | Shabazz | 5\% | 6 |
|  | Innovative \& Alt | 2\% | 6 |
| Race/Ethnicity | Asian | 30\% | 218 |
|  | African-American | 21\% | 351 |
|  | Hispanic | 25\% | 317 |
|  | Multiracial | 34\% | 219 |
|  | White | 47\% | 1700 |
| Gender | Female | 33\% | 1243 |
|  | Male | 38\% | 1570 |


| Grouping Category | Group | \% in Any Sport | \# of Student Athletes |
| :---: | :---: | :---: | :---: |
| Income | Not Free/Reduced | 48\% | 2109 |
|  | Free/Reduced | 20\% | 704 |
| Special Education Status | Not Special Ed. | 41\% | 2599 |
|  | Special Ed. | 14\% | 214 |
| ELL Status | Not ELL | 39\% | 2400 |
|  | ELL | 24\% | 413 |
| Grade | 9 | 45\% | 867 |
|  | 10 | 40\% | 761 |
|  | 11 | 30\% | 589 |
|  | 12 | 29\% | 596 |

Across MMSD, $36 \%$ of high school students participated in MMSD-sponsored interscholastic athletics during 2014-15. Of the four conventional high schools, West had the highest participation ( 861 students; $41 \%$ ) while East had the lowest ( 535 students; $31 \%$ ). Participation rates were highest among white students ( $47 \%$ ), male students ( $38 \%$ ), not low-income students ( $48 \%$ ), not special education students ( $41 \%$ ), and not ELL students ( $39 \%$ ). Athletics participation was lower in higher grades, dipping from $45 \%$ in grade 9 to $29 \%$ in grade I2. These rates reflect all high school students, although some are ineligible to participate for reasons such as age, residential ineligibility, or part-time or virtual enrollment.

Table 2 lists participant totals and demographics for the 17 interscholastic high school sports MMSD offered in 2014-15.
Table 2: 2014-I5 Participant Totals by Sport and Demographic Group

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| Total | Grand Total | 2813 | 291 | 287 | 62 | 490 | 474 | 65 | 61 | 75 | 65 | 630 | 243 | 297 | 475 | 317 | 85 |
| School | East | 535 | 49 | 53 | 4 | 72 | 112 | 9 | 15 | 14 | 14 | 145 | 61 | 41 | 71 | 71 | 22 |
|  | La Follette | 581 | 85 | 84 | 35 | 46 | 139 | 12 | 5 | 11 | 20 | 120 | 35 | 54 | 92 | 75 | 30 |
|  | Memorial | 823 | 74 | 68 | 11 | 183 | 123 | 18 | 19 | 25 | 20 | 150 | 70 | 120 | 175 | 85 | 17 |
|  | West | 861 | 82 | 81 | 11 | 189 | 95 | 24 | 22 | 24 | 11 | 212 | 77 | 81 | 137 | 86 | 16 |
| Race/Ethnicity | Asian | 218 | 6 | 6 | 5 | 41 | 11 | 5 | 2 | I | 2 | 40 | 8 | 82 | 20 | 23 | 4 |
|  | African-American | 351 | 10 | 116 | 20 | 9 | 128 | 0 | 3 | 0 | 8 | 40 | I | 7 | 79 | 26 | 15 |
|  | Hispanic | 317 | 14 | 13 | 7 | 34 | 64 | I | 5 | 3 | 3 | 150 | 15 | 14 | 45 | 21 | 9 |
|  | Multiracial | 219 | 20 | 43 | 6 | 25 | 53 | 2 | 3 | 3 | 7 | 35 | 12 | 16 | 45 | 32 | 17 |
|  | White | 1700 | 241 | 108 | 24 | 381 | 215 | 57 | 48 | 68 | 45 | 364 | 205 | 177 | 285 | 214 | 40 |
| Gender | Female | 1243 | 113 | 99 | 61 | 236 | 24 | 18 | 61 | 10 | 63 | 272 | 128 | 137 | 202 | 196 | 9 |
|  | Male | 1570 | 178 | 188 | 1 | 254 | 450 | 47 | 0 | 65 | 2 | 358 | 115 | 160 | 273 | 121 | 76 |
| Income | Not Free/Reduced | 2109 | 253 | 153 | 29 | 465 | 269 | 63 | 53 | 71 | 51 | 460 | 231 | 255 | 366 | 244 | 56 |
|  | Free/Reduced | 704 | 38 | 134 | 33 | 25 | 205 | 2 | 8 | 4 | 14 | 170 | 12 | 42 | 109 | 73 | 29 |
| Special Education | Not Special Ed. | 2599 | 278 | 250 | 61 | 455 | 395 | 62 | 59 | 73 | 64 | 603 | 232 | 287 | 446 | 304 | 68 |
| Status | Special Ed. | 214 | 13 | 37 | 1 | 35 | 79 | 3 | 2 | 2 | 1 | 27 | 11 | 10 | 29 | 13 | 17 |
| ELL Status | Not ELL | 2400 | 277 | 270 | 52 | 455 | 419 | 60 | 56 | 73 | 63 | 444 | 228 | 244 | 417 | 282 | 69 |
|  | ELL | 413 | 14 | 17 | 10 | 35 | 55 | 5 | 5 | 2 | 2 | 186 | 15 | 53 | 58 | 35 | 16 |
| Grade | 9 | 867 | 92 | 121 | 8 | 142 | 140 | 18 | 20 | 17 | 9 | 246 | 50 | 79 | 139 | 136 | 25 |
|  | 10 | 761 | 87 | 85 | 24 | 133 | 138 | 16 | 17 | 22 | 7 | 156 | 73 | 92 | 145 | 89 | 19 |
|  | II | $589$ | 55 | 47 | 17 | $101$ | 93 | 18 | 14 | 15 | 24 | 110 | 69 | 61 | 101 | 52 | 13 |
|  | 12 | 596 | 57 | 34 | 13 | 114 | 103 | 13 | 10 | 21 | 25 | 118 | 51 | 65 | 90 | 40 | 28 |

Note: Shabazz High had six athletics participants and another five came from Innovative \& Alternative programs. We do not show these schools' data separately in the table above because of the small student counts, but these students are included in all demographic breakouts. Some students appear as participants in sports not typically played by that gender (e.g. 24 females in football), partially due to the presence of student managers in athletics participation records.

Soccer (630), cross country (490), track (475) and football (474) have the greatest number of students participating across the district. The sports with the greatest participation at each high school include soccer at East (145), football at La Follette (I39), cross country at Memorial (183), and soccer at West (2I2). African-American students had the highest number of participants in football (I28) and basketball (II6), while white students had the highest number of participants in cross country (384) and soccer (364). Sports vary in their participation by grade; while some sports see higher number of participants from earlier grades (such as basketball, soccer, and volleyball), others remain relatively consistent or even see higher participation rates among students in grades II and I2 (such as golf, wrestling, and pom pon).

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The graph below shows the racial/ethnic identification of student-athletes overall and by sport.
Figure I: 2014-I5 Racial/Ethnic Identification of Student-Athletes


In total, $61 \%$ of student-athletes were white. Sports with the highest percentage of students of color were basketball ( $62 \%$ ), cheer ( $61 \%$ ), and football ( $54 \%$ ). Sports with the lowest percentage of students of color were hockey ( $9 \%$ ), golf (I2\%), and swimming \& diving (15\%).

## Question 2: What was the prevalence of Ds and course failures among MMSD high school students who participated in interscholastic athletics in 2014-15?

The Board has asked about the academic performance of interscholastic high school student athletes compared to nonathletes. To answer this question, we examined student transcripts from 2014-I5. Table 3 lists students receiving Ds and Fs by participation in interscholastic athletics and demographics in 2014-15.

Table 3: Students Receiving Ds and Fs by Athletics Participation and Demographics in 2014-I5

| Grouping Category |  |  | Students | Ds in 2014-15 |  |  | Fs in 2014-15 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Demographic Group | Athletics Participation |  | 0 | I | 2 or more | 0 | I | 2 or more |
| Total | All Students | Not in athletics In athletics | 5097 | 55\% | 14\% | 31\% | 60\% | II\% | 29\% |
|  |  |  | 2813 | 71\% | 11\% | 18\% | 86\% | 6\% | 8\% |
| Race/Ethnicity | Asian | Not in athletics In athletics | 499 | 63\% | 14\% | 23\% | 76\% | 9\% | 15\% |
|  |  |  | 218 | 87\% | 6\% | 7\% | 94\% | 4\% | 1\% |
|  | African-American | Not in athletics In athletics | 1287 | 47\% | 14\% | 39\% | 43\% | 11\% | 46\% |
|  |  |  | 351 | 32\% | 16\% | 52\% | 62\% | 12\% | 26\% |
|  | Hispanic | Not in athletics | 956 | 41\% | 16\% | 43\% | 50\% | 13\% | 37\% |
|  |  |  | 317 | 51\% | 15\% | 34\% | 73\% | 12\% | 15\% |
|  | Multiracial | Not in athletics | 416 | 49\% | 14\% | 37\% | 52\% | 11\% | 38\% |
|  |  | In athletics | 219 | 54\% | 16\% | 30\% | 73\% | 13\% | 14\% |
|  | White | Not in athletics In athletics | 1908 | 66\% | 14\% | 19\% | 75\% | 9\% | 16\% |
|  |  |  | 1700 | 82\% | 9\% | 8\% | 94\% | 3\% | 3\% |
| Gender | Female | Not in athletics | 2550 | 58\% | 15\% | 27\% | 63\% | 11\% | 26\% |
|  |  | In athletics | 1243 | 79\% | 9\% | 12\% | 90\% | 5\% | 5\% |
|  | Male | Not in athletics In athletics | 2547 | 52\% | 14\% | 34\% | 57\% | 11\% | 32\% |
|  |  |  | 1570 | 64\% | 12\% | 23\% | 83\% | 7\% | 10\% |
| Free/Reduced Lunch | Not FRL | Not in athletics | 2320 | 69\% | 13\% | 18\% | 76\% | 9\% | 14\% |
|  |  | In athletics | 2109 | 81\% | 9\% | 10\% | 94\% | 3\% | 3\% |
|  | FRL | Not in athletics In athletics | 2777 | 43\% | 15\% | 41\% | 47\% | 12\% | 42\% |
|  |  |  | 704 | 39\% | 17\% | 44\% | 63\% | 15\% | 22\% |
| Special Education | Not SPED | Not in athletics | 3733 | 56\% | 15\% | 30\% | 62\% | 10\% | 27\% |
|  |  | In athletics | 2599 | 73\% | 10\% | 16\% | 88\% | 5\% | 7\% |
|  | SPED | Not in athletics | 1364 | 52\% | 14\% | 34\% | 55\% | 11\% | 34\% |
|  |  | In athletics | 214 | 37\% | 20\% | 43\% | 64\% | 15\% | 21\% |
| ELL | Not ELL | Not in athletics | 3799 | 58\% | 14\% | 28\% | 61\% | 10\% | 29\% |
|  |  | In athletics | 2400 | 73\% | 10\% | 17\% | 87\% | 6\% | 7\% |
|  | ELL | Not in athletics In athletics | 1298 | 46\% | 16\% | 38\% | 58\% | 13\% | 29\% |
|  |  |  | 413 | 57\% | 16\% | 28\% | 79\% | 9\% | 12\% |
| School | East High | Not in athletics | 1189 | 49\% | 17\% | 35\% | 58\% | 12\% | 30\% |
|  |  | In athletics | 535 | 59\% | 13\% | 27\% | 77\% | 10\% | 13\% |
|  | La Follette High | Not in athletics | 977 | 47\% | 16\% | 37\% | 61\% | 10\% | 29\% |
|  |  | In athletics | 581 | 62\% | 13\% | 25\% | 82\% | 7\% | 10\% |
|  | Memorial High | Not in athletics | 1165 | 56\% | 16\% | 28\% | 60\% | 11\% | 29\% |
|  |  | In athletics | 823 | 77\% | 10\% | 14\% | 90\% | 4\% | 5\% |
|  | West High | Not in athletics | 1261 | 58\% | 11\% | 30\% | 69\% | 10\% | 21\% |
|  |  | In athletics | 861 | 78\% | 9\% | 13\% | 90\% | 4\% | 5\% |
| Grade | 9 | Not in athletics | 1046 | 48\% | 15\% | 38\% | 58\% | 11\% | 31\% |
|  |  | In athletics | 867 | 73\% | 9\% | 17\% | 87\% | 6\% | 7\% |
|  | 10 | Not in athletics | 1154 | 47\% | 14\% | 39\% | 57\% | 10\% | 33\% |
|  | 10 | In athletics | 761 | 69\% | 10\% | 21\% | 86\% | 5\% | 9\% |
|  | 11 | Not in athletics | 1402 | 54\% | 16\% | 30\% | 53\% | 11\% | 36\% |
|  |  | In athletics | 589 | 69\% | 12\% | 20\% | 84\% | 8\% | 8\% |
|  | 12 | Not in athletics | 1495 | 67\% | 13\% | 20\% | 71\% | 10\% | 19\% |
|  | 12 | In athletics | 596 | 70\% | 14\% | 16\% | 86\% | 6\% | 7\% |

Note: data for Native American, Pacific Islander, Innovative \& Alternative High, and Shabazz High students does not appear in the table above because the low number of athletics
participants from these groups makes it impossible to present these data breakouts without compromising student privacy.
Overall, approximately $71 \%$ of athletics participants received no Ds and $86 \%$ received no Fs during the 2014-15 school year. These rates are substantially better than those of non-participants, which are $55 \%$ and $60 \%$. The trend of higher
academic performance for student athletes does not always hold across student groups in terms of Ds received, but continues to be evident for Fs. For example, African-American student athletes and those receiving free or reduced lunch do not exhibit lower rates of Ds than their non-athlete peers, but they do exhibit lower rates of course failures.

The data for $9^{\text {th }}$ grade students in athletics is particularly notable, given that the percent of ${ }^{\text {th }}$ grade students receiving two or more course failures is a milestone metric within MMSD's Strategic Framework, research-proven to be predictive of on-time high school completion. Overall, MMSD stands at $20 \%$ on this metric, but student-athlete performance is vastly better at $7 \%$.

While Table 3 clearly shows differences in course grades between athletes and non-athletes, this does not imply that athletics caused these differences. It is possible that students who choose to participate in athletics are predisposed to do better in academics due to a variety of factors (e.g., previous performance, internal motivation). Investigating whether athletics participation causes students to not earn Ds and Fs would require a more rigorous research design.

## Question 3: What percent of students from different demographic groups would have been eligible to participate in MMSD high school interscholastic athletics in 2014-15 under various eligibility criteria?

The Board has asked MMSD leadership to explore increasing the eligibility criteria for interscholastic athletics participation. To identify potential options, RPEO looked at the 2014-15 eligibility policy. Currently, MMSD has eligibility guidelines for student athletes that are dependent upon their grades received during a particular school year and/or term. In 2014-I5, all students were eligible to participate in MMSD-sponsored interscholastic athletics, regardless of academic performance. However, a student could incur contest suspension(s) by failing a certain number of courses during an academic term or year or for unexcused absences. Athletics suspensions also include school day lengths, such as "ineligible for not less than 10 school days," but for simplicity, we present them in terms of athletics contests. The possible suspensions are listed below:

- One course failure - one contest suspension
- More than one course failure during a single term - two contest suspension
- More than two course failures during a single term - suspension from next season

With these policies in mind, we created four hypothetical models for eligibility:

- Model I: No course failures during the academic year (one or more failures = ineligibility)
- Model 2: One course failure maximum during a single term (two or more failures = ineligibility)
- Model 3: Two course failures maximum during a single term (three or more failures = ineligibility)
- Model 4: Cumulative GPA of 2.0 or above (per Board member request)

We then used 2014-15 transcripts to determine which students would and would not be eligible under each model.
We are aware that none of these models are an exact reflection of current MMSD eligibility practices, which are very difficult to reconstruct retroactively because of the use of progress grades in-season, which are not stored permanently, and the seasonal components to eligibility. Instead, these models are designed as hypothetical and illustrative of varying approaches that could be used.

Table 4 shows the percent of students who would have been eligible for athletics participation in 2014-15 under four hypothetical eligibility models:

Table 4: Students Eligible for Interscholastic Athletics Participation in 2014-15 by Eligibility Model and Demographics


Unsurprisingly, Model 3: Two course failures maximum during a single term would lead to the highest eligibility rates across student groups, while Model I: No course failures during an academic term would lead to the lowest rates.

The key finding from Table 4 is that regardless of the eligibility model used, there are significant disparities in athletics eligibility across student groups. For example, under Model 4: Cumulative GPA of 2.0 or above, $92 \%$ of white students would have been eligible to participate, while only $55 \%$ of African-American students would have been eligible.

In addition, we chose to examine eligibility under each model with a focus on actual 2014-15 interscholastic athletics participants. In other words, we explored how these hypothetical models would have affected the eligibility of students who chose to participate in interscholastic athletics, rather than all students - athletes and not. Table 5 shows the results.

Table 5: Students Eligible for Interscholastic Athletics Participation by Eligibility Model and Demographics, 2014-15 Interscholastic Athletics Participants

|  |  |  | Percent Eligible Under Eligibility Models |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Demographic Group | Number of Students | Model I | Model 2 | Model 3 | Model 4 |
| Total | All Competitive Athletes | 2813 | 86\% | 94\% | 97\% | 93\% |
| Race/Ethnicity | Asian | 218 | 94\% | 99\% | 99\% | 98\% |
|  | African-American | 351 | 62\% | 79\% | 89\% | 73\% |
|  | Hispanic | 317 | 73\% | 89\% | 94\% | 85\% |
|  | Multiracial | 219 | 73\% | 90\% | 95\% | 88\% |
|  | White | 1700 | 94\% | 98\% | 99\% | 98\% |
| Gender | Female | 1243 | 90\% | 97\% | 99\% | 96\% |
|  | Male | 1570 | 83\% | 92\% | 96\% | 90\% |
| Free/Reduced Lunch | Not Free/Reduced | 2109 | 94\% | 98\% | 99\% | 98\% |
|  | Free/Reduced | 704 | 63\% | 83\% | 91\% | 77\% |
| Special Education | Not Special Education | 2599 | 88\% | 95\% | 98\% | 94\% |
|  | Special Education | 214 | 64\% | 84\% | 90\% | 73\% |
| ELL | Not ELL | 2400 | 87\% | 95\% | 97\% | 93\% |
|  | ELL | 413 | 79\% | 92\% | 96\% | 89\% |
| School | East High | 535 | 77\% | 90\% | 95\% | 90\% |
|  | La Follette High | 581 | 82\% | 94\% | 98\% | 91\% |
|  | Memorial High | 823 | 90\% | 96\% | 98\% | 94\% |
|  | West High | 861 | 90\% | 95\% | 97\% | 94\% |
| Grade | 9 | 867 | 87\% | 95\% | 97\% | 91\% |
|  | 10 | 761 | 86\% | 93\% | 97\% | 93\% |
|  | 11 | 589 | 84\% | 94\% | 96\% | 93\% |
|  | 12 | 596 | 86\% | 94\% | 97\% | 94\% |
|  | Not in Athletics | 5097 | 60\% | 75\% | 83\% | 70\% |

Overall, each model would have reduced the percentage of athletes eligible to participate, ranging from $97 \%$ of 2014-15 athletes eligible under Model 3: Two course failures maximum during a single term to $86 \%$ eligible under Model I: No course failures during the academic year. Under each potential model, it is clear that there would be a disproportionate impact on certain student groups, including African-American students and students receiving free/reduced lunch. For example, under Model 4: Cumulative GPA of 2.0 or above, 27\% of current African-American athletes would be ineligible relative to $2 \%$ of current white athletes.

