## Cultural and Linguistic Diversity of MCPS Students and Staff

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Executive Summary of Office of Legislative Oversight Report Number 2015-1 September 30, 2014
Students of color and English language learners comprise two-thirds of Montgomery County Public Schools' enrollment while White educators account for roughly three-fourths of all school-based professionals. The County Council tasked the Office of Legislative Oversight to undertake this project to consider how the demographic alignment between MCPS students and educators and use of language assistance services varied across the school system. Four findings emerged from the information reviewed for this project.

- The demographic mismatch between MCPS students and school professionals mirrored state and national trends. The alignment between the language proficiencies of school-based staff and the linguistic diversity of ESOL-eligible students within MCPS however remains unknown.
- Student subgroups tended to be concentrated in schools with other members of their subgroup.
- Schools with high concentrations of student subgroups tend to have more professionals from that subgroup. However, the demographic mismatch between students and staff as reflected by student to staff ratios was often widest among schools with the highest enrollment of Black and Latino students.
- Schools' demand for central office language assistance services (interpreter and language line services) generally aligned with their ESOL-eligible and Latino student enrollment.


## Student and Staff Demographics by Race and Ethnicity

Finding \#1: Whites are over-represented among school professionals relative to student enrollment but the linguistic alignment between school staff and students remains unknown.

As noted in Table 1, Whites accounted for 76\% of all MCPS school-based professionals in 2012-13 compared to $33 \%$ of student enrollment. Thus, Whites were over-represented among MCPS school professionals relative to school enrollment. By contrast, Asians, Blacks, and Latinos were underrepresented as staff members compared to their enrollment. The linguistic alignment between MCPS staff and the languages spoken by ESOL-eligible students and parents remains unknown because MCPS does not collect data on school staff language skills.

Table 1: MCPS School-Based Professional Staff and Student Distribution Data, 2012-13

| Subgroups | Staff Share of <br> Population | Student Share of <br> Population | Demographic Gap* <br> $(0.0 \%=$ Parity $)$ | Parity Index** <br> $(100 \%$ = Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Asians | $5.0 \%$ | $14.3 \%$ | $-9.3 \%$ | $35.0 \%$ |
| Blacks | $12.5 \%$ | $21.3 \%$ | $-8.8 \%$ | $58.7 \%$ |
| Latinos | $5.3 \%$ | $26.6 \%$ | $-21.3 \%$ | $19.9 \%$ |
| Whites | $75.7 \%$ | $33.0 \%$ | $+42.7 \%$ | $229.4 \%$ |
| ESOL | $\mathrm{n} / \mathrm{a}$ | $15.4 \%$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |

* Demographic Gap equals Staff minus Student Share
** Parity Index equals Staff Share/Student Share


## Distribution of Students by School Level and Demographic Concentration

Finding \#2: Student subgroups tend to be concentrated in schools with other members of their subgroup rather than evenly dispersed throughout the school system.

Few MCPS schools reflect the racial and ethnic diversity of the school system as a whole noted in Table 1. Instead, students by subgroups are often concentrated in schools with other subgroup peers, especially White and Asian students. For example, as noted on Table 2 on the next page:

- Asians accounted for $14-15 \%$ of elementary and middle school enrollment in 2013, but 42-46\% of all Asian students were concentrated among the fifth of schools whose Asian enrollment exceeded $20 \%$.
- Whites accounted for $31-35 \%$ of school enrollment in 2013, but $57-59 \%$ of all White elementary and middle school students and $64 \%$ of all White high school students were enrolled among the third of schools whose White enrollment exceeded $45 \%$.

Black and Latino students were also concentrated among schools with medium to high concentrations of their subgroup peers, but at lower levels than Whites and Asians. At the elementary level, however, Latinos appear to be more concentrated in schools with other Latino peers. For example, $42 \%$ of Latino elementary students were concentrated among the fifth of elementary schools whose Latino enrollment exceeded $45 \%$.

Table 2: Distribution of Students by Subgroup and School Level, 2012-13

| Shares of School Enrollment | Asian Students |  | Black Students |  | Latino Students |  | White Students |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share | Schools | Share | Schools | Share | Schools | Share | Schools |
| Elementary Schools (130) |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Low Concentration } \\ & (0-19 \%) \end{aligned}$ | 54.4\% | 105 | 34.2\% | 78 | 19.3\% | 60 | 11.1\% | 48 |
| $\begin{aligned} & \text { Medium Concentration } \\ & (20-44 \%) \\ & \hline \end{aligned}$ | 45.6\% | 25 | 45.1\% | 43 | 47.1\% | 46 | 32.4\% | 39 |
| High Concentration $(45 \%+)$ | -- | -- | 20.7\% | 9 | 41.9\% | 24 | 56.5\% | 43 |
| Middle Schools (38) |  |  |  |  |  |  |  |  |
| Low Concentration <br> $(0-19 \%)$ | 57.6\% | 31 | 25.7\% | 16 | 25.8\% | 17 | 12.9\% | 12 |
| $\begin{array}{\|l\|} \hline \text { Medium Concentration } \\ (20-44 \%) \end{array}$ | 42.4\% | 7 | 54.9\% | 19 | 65.1\% | 19 | 27.7\% | 14 |
| High Concentration $(45 \%+)$ | -- | -- | 19.4\% | 3 | 9.1\% | 2 | 59.4\% | 12 |
| High Schools (25) |  |  |  |  |  |  |  |  |
| Low Concentration (0-19\%) | 68.2\% | 21 | 25.1\% | 12 | 18.4\% | 9 | 6.9\% | 6 |
| $\begin{aligned} & \text { Medium Concentration } \\ & (20-44 \%) \end{aligned}$ | 31.8\% | 4 | 64.8\% | 12 | 62.5\% | 13 | 31.7\% | 3 |
| High Concentration ( $45 \%$ +) | -- | -- | 10.2\% | 1 | 19.2\% | 3 | 61.4\% | 9 |

## Distribution of Staff by School Level and Demographic Concentration

Finding \#3: Although schools enrolling the highest shares of subgroups are staffed by more professionals from that subgroup, the demographic mismatch between staff and students is often greatest among schools with the largest minority populations.

OLO found that schools with a higher concentration of students in a specific subgroup generally had a higher percentage of school professionals from that subgroup. For example, Latinos accounted for 5\% of school professionals and $29 \%$ of enrollment among elementary schools, but accounted for $12 \%$ of professional staff among the elementary schools where Latinos enrollment was $45 \%$ or more.

With the exception of Asians, this pattern of schools with higher subgroup enrollment having a higher proportion of school professionals from that subgroup holds true. However, the demographic mismatch between students and school professionals is often highest among schools with the highest concentrations of students of color. Table 3 on the next page shows that student-to-staff ratios by subgroup are often highest among the schools with the highest concentrations of Black and Latino students. For example, comparing:

- Black students to Black staff, there were 22 students per staff among the high schools with the lowest concentrations of Black students v. 41 students per staff among the highest concentration high schools.
- Latino students to Latino staff, there were 42 students per staff among the high schools with the lowest concentrations of Latino students v. 84 students per staff among the highest concentration high schools.

Table 3: Student-to-Staff Ratios by Subgroup and School Type, 2012-13

| Schools by Subgroup Enrollment | AsiansStudents per Staff | BlacksStudents per Staff | LatinosStudents per Staff | WhitesStudents per Staff |
| :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 33.5 | 26.0 | 71.3 | 5.0 |
| - Low Concentration (0\%-19\%) | 24.0 | 23.4 | 60.2 | 1.3 |
| - Medium Low (20\%-29\%) | 57.3 | 28.4 | 69.4 | 3.9 |
| - Medium High (30\% - 44\%) | 73.2 | 25.2 | 69.6 | 6.2 |
| - High Concentration ( $45 \%+$ ) | -- | 30.3 | 80.1 | 9.6 |
| Middle Schools | 37.4 | 16.5 | 56.8 | 6.1 |
| - Low Concentration (0\%-19\%) | 27.6 | 13.5 | 87.3 | 2.6 |
| - Medium Low (20\% - 29\%) | 67.9 | 16.7 | 18.3 | 4.2 |
| - Medium High (30\% - 44\%) | 104.5 | 18.1 | 80.7 | 5.8 |
| - High Concentration ( $45 \%+$ ) | -- | 20.5 | 50.6 | 9.8 |
| High Schools | 43.3 | 21.8 | 62.1 | 6.6 |
| - Low Concentration (0\%-19\%) | 38.9 | 21.5 | 41.8 | 2.4 |
| - Medium Low (20\%-29\%) | 56.0 | 18.3 | 60.3 | 4.7 |
| - Medium High ( $30 \%$ - 44\%) | 60.1 | 23.3 | 74.9 | 6.1 |
| - High Concentration ( $45 \%+$ ) | --- | 40.6 | 83.8 | 10.2 |

## Schools' Use of Central Office Language Assistance Services

## Finding \#4: A review of MCPS' language assistance data suggests that school demand for central office language services generally aligns with schools' ESOL eligible enrollment and Latino enrollments.

OLO examined MCPS' language services data to discern if the demand for these central-office services aligned with school's shares of ESOL eligible and Latino students. OLO's review of this data found that the demand for language line and interpreter services overall and among Spanish language requests generally aligned with the demographics of schools across six geographic areas. The exception to this trend was the higher demand for central office language services among Downcounty Consortium schools. OLO also found that the demand for language services as compared to ESOL eligible enrollment and Latino enrollment tended to be higher among MCPS' secondary schools with the highest concentrations of ESOL eligible and Latino students and lower among schools with low concentrations of ESOL eligible and Latino students.

For a complete copy of OLO-Report 2015-1, go to:
http://www.montgomerycountymd.gov/olo/reports/2008.html

# Office of Legislative Oversight Report 2015-1 

Cultural and Linguistic Diversity of Montgomery County Public School Students and Staff

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## Chapter I: Authority, Scope, and Organization

## A. Authority

Council Resolution 17-830, Fiscal Year 2014 Work Program of the Office of Legislative Oversight, adopted July 30, 2013. ${ }^{1}$

## B. Scope and Background of Report

Federal data shows that there is a demographic mismatch between public school students and teachers. Nationally, persons of color (e.g. Asian, Black, and Latino students) account for half of all students, but less than 20 percent of all teachers. According to the Center for American Progress, this "large demographic mismatch" matters because "students of color need teachers who not only set rigorous standards for them but teachers who also can provide models of professional success."2

This Office of Legislative Oversight (OLO) report was prepared at the request of the County Council to examine the alignment of demographics between the school system's student body and its credentialed workforce and how schools communicate with the families of English language learners.

Culturally and linguistically diverse students, inclusive of English language learners, account for two-thirds of the Montgomery County Public Schools’ (MCPS) student enrollment. Yet, mirroring both national and state trends, White teachers and certificated staff within MCPS accounted for nearly three-quarters of its school-based professional workforce in 2012-13. Understanding the demographic alignment between MCPS students and staff, and the strategies that MCPS undertakes to effectively communicate with diverse families are central concerns of the County Council.

This report is one of eight OLO FY14 projects that consider cultural competency within its project scope. ${ }^{3}$ Together, this body of projects is intended to enhance the County Council's awareness of cultural competency issues in the County, defined as the capacity of institutions and service providers to understand and value the communities of the clients they serve.

This report addresses the following set of research questions:

1. How do the demographics of MCPS students compare to the demographics of MCPS schoolbased professionals (e.g. teachers, counselors, and administrators)?
2. How do the demographics of MCPS schools compare to the demographics of school-based professionals?
3. Are subgroups of students and staff evenly distributed across the school system or concentrated among a subset of schools?
4. Do school requests for language services vary depending on the demographics of schools?
${ }^{1}$ http://www6.montgomerycountymd.gov/content/council/pdf/res/2013/20130730_17-830.pdf
2 Ahmad, F and Boser, U., "America's Leaky Pipeline for Teachers of Color," Center for American Progress, May 2014, page 2 http://www.americanprogress.org/wp-content/uploads/2014/05/TeachersOfColor-report.pdf
${ }^{3}$ The other projects are: (a) Procurement and Small, Minority, Female, Disabled and Locally Owned Businesses; (b) Juvenile Justice; (c) Developmental Education; (d) Performance of MCPS' High Schools; (e) Similarities and Differences between English and Spanish Calls to 311; (f) Workforce Development Services; and (g) After School Programs. http://www.montgomerycountymd.gov/OLO/Resources/Files/fy2014oloworkprogram.pdf.

Of note, this report does not describe or review MCPS' recruitment or staff development practices aimed at enhancing the diversity or cultural competency of its credentialed staff. This report also does not compare the linguistic diversity of MCPS credentialed staff to students because data describing this is not available.

OLO staffers Carl Scruggs (Research Associate) and Elaine Bonner-Tompkins (Senior Legislative Analyst) prepared this report with assistance from Sue Richards (Senior Legislative Analyst) and Kelli Robinson (Administrative Specialist). OLO generated information through reviews of documents and data records provided by MCPS and through interviews with key MCPS staff. OLO also collaborated with MCPS' Offices of the Chief Operating Officer and Shared Accountability to identify and collect relevant data. A complete list of sources for data is included in the Appendix.

## C. Organization of Report

Chapter II, Teacher and Student Diversity and Cultural Competency, describes national trends in teacher and student diversity and best practices for enhancing cultural competency.

Chapter III, MCPS Student and Staff Demographics, examines and compares demographic data for MCPS students and school-based professional staff for the 2012-13 school year.

Chapter VI, MCPS Language Assistance Services, compares data on school requests for language line and interpreter services from 2010 to 2013 to schools' ESOL or Latino student enrollment for the 2012-13 school year.

Chapter V, Summary of Findings, presents OLO's key project findings.
Chapter VI, Agency Comments, presents MCPS Superintendent Joshua Starr's comments on the final draft of this report.

## D. Acknowledgements

OLO received a generous degree of cooperation from the parties involved in this project. Specifically, OLO would like to thank:

- Karen Woodson, Director of MCPS’ Division of ESOL/Bilingual Programs
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- Kimberly Statham, Deputy Superintendent of School Support and Improvement
- Krishnanda Tallur, Director of MCPS’ Office of Technology, Reporting \& Systems Support
- Ingrid Corratgé, Secretary to the Director of the Division of ESOL/Bilingual Programs


## E. Data, Key Terms, and Definitions

OLO relied on data included in MCPS' Schools at a Glance and other reports to describe student and staff subgroups by school in this report. As such, the following terminology is used in this report:

- Asian refers to students and staff identified as Asian or Asian American by MCPS.
- Black refers to students and staff identified as Black/Non-Hispanic or African American by MCPS.
- Latino refers to students and staff identified as either Latino or Hispanic by MCPS. Latino students can be of any race (e.g., White, Black, or Asian).
- White refers to students and staff identified as White/Non-Hispanic or Caucasian by MCPS.
- ESOL refers to students with limited English proficiency currently enrolled in English for Speakers of Other Languages (ESOL) courses in MCPS. The terms ESOL students and English language learners are used interchangeably within this report.
- ESOL eligibility refers to MCPS students with limited English proficiency that are currently or were previously eligible for enrollment in ESOL courses.
- Credentialed Staff refers to teachers, administrators, and other certificated/professional staff within MCPS schools.


## Chapter II: Teacher and Student Diversity and Cultural Competency

This chapter is presented in two parts to offer background information for this report's examination of MCPS student, staff, and language assistance services data in the next two chapters.
A. Background on Teacher and Student Diversity describes national trends in teacher and student diversity and the demographic gap between teachers and students; and
B. The Value of Cultural Competency describes what is meant by the term cultural competency and best practices for advancing cultural competency in schools.

OLO's review of the information referenced in this chapter demonstrates that MCPS is not alone in its demographic mismatch between students and school professionals. Federal and state data show that the demographic gap between school teachers and students is pervasive. A recent report by the Center for American Progress suggests that this challenge will persist until the "leaky pipeline for teachers of color" is addressed. ${ }^{4}$ The sources reviewed for this chapter also suggest that approaches to enhancing the cultural competency of schools to bridge the cultural gap between teachers and students should vary based on local needs.

## A. Background on Teacher and Student Diversity

Federal and state data demonstrate an increasing gap in the demographics of school teachers and their students. As a recent Center for American Progress (CAP) report states: ${ }^{5}$
"(O)ver the past 50 years, teaching has become a predominantly white profession. Eightytwo percent of public school teachers are white. ${ }^{6}$ At the same time, however, the nation's students have become increasingly diverse, and within three decades - as early as 2043 people of color will make up more than half of the American population. The transition to a K-12 system that is majority students of color will come even sooner: Today, students of color make up nearly half of the nation's public school population. ${ }^{7}$ In 2011, 52 percent of the 50 million students enrolled in public elementary and secondary schools were white."

This CAP report further notes that most states have a large gap in the diversity of their teacher corps and student enrollment. Nationally, persons of color - Black, Latino, Asian, Pacific Islander, Native American, and Multi-racial persons - account for $48 \%$ of all students compared to $18 \%$ of all teachers. This generates a national teacher student-diversity gap of 30 points.

On a state-by-state basis, this gap, described as the "teacher diversity index" by CAP ranges from a low of 4-8 points for the states of Vermont, Maine, West Virginia and New Hampshire, to a high of 37-44 points for the states of Arizona, Maryland, Nevada, and California. Thus, the State of Maryland ranks high on this marker of demographic misalignment between teachers and students.

[^0]Similarly, Montgomery County Public Schools would rank high on the CAP diversity gap measure when comparing the demographics of school-based professionals including teachers to students. As noted in the next chapter, students of color account for two-thirds of MCPS' enrollment, but professionals of color account for less than a quarter of credentialed school staff. As such, the diversity gap or teacher diversity index for MCPS would be 43 points.

To provide context for why the gap in teacher and student diversity matters, the Center for American Progress cites a number of research findings on why teacher diversity is beneficial to students.

- Teacher diversity can help narrow the achievement gap since "studies have shown that diversity reinforces teacher effectiveness and it is not simply an add-on." ${ }^{8}$
- High-achieving teachers of color can benefit students with similar cultural backgrounds "because such teachers provide real-life models of career success and academic engagement." ${ }^{9}$
- Teachers of color have also "demonstrated success in increasing the test scores of students with backgrounds similar to theirs." ${ }^{10}$
- Teachers of color often engage in practices that improve outcomes for students of color, including having high expectations, providing culturally relevant teaching, developing trusting relationships, confronting issues of racism through teaching, and serving as advocates and cultural brokers. ${ }^{11}$

Researchers Villegas, Strom, and Lucas also note that while important progress has been made toward increasing the overall number and proportion of teachers of color in public schools, "those gains have been eclipsed by the rapid growth of the minority student population.. ${ }^{12}$ They also note that proponents of teacher diversity policies, citing the widening of the demographic gap between teachers and students between the 1970's and 1980's, argued that without "considerable intervention, the widening cultural gap separating students and teachers would only grow in the years ahead." ${ }^{13}$

## B. The Value of Cultural Competency

This report comparing the cultural and linguistic diversity of students to staff employed by MCPS is one of eight OLO FY14 projects that considered cultural competency within its project scope. This body of projects is intended to enhance the County Council's awareness of cultural competency issues in the County. The increasing cultural diversity of MCPS' student enrollment compared to the relative homogeneity of the teaching workforce makes this topic especially relevant for Montgomery County and the County Council.

[^1]Cultural competency refers to the capacity of institutions and service providers to understand and value the communities of the clients they serve. In education, the National Education Association argues that there is an increasing need for cultural competency in schools to address the "cultural gap in many of the nation's schools as a growing number of educators struggle to better serve students from cultures other than their own in response to the dramatic demographic changes."14

This section describes in detail what is meant by the term cultural competency in education, but does not describe or review MCPS' efforts to enhance cultural competency. The best practices described in this section are based on a synthesis of the following four resources:

- A Practical Guide to Accelerating Student Achievement Across Cultures: Strategies for Administrators, Teachers, Students and Parents - prepared by the Maryland State Department of Education, 2008. ${ }^{15}$
- The Significance of Cultural Competence and Culturally Responsive Practices in Education - prepared by Virginia Department of Education, 2009. ${ }^{16}$
- Promoting Educators' Cultural Competence to Better Serve Culturally Diverse Students, National Education Association Policy Brief, 2009. ${ }^{17}$
- Eliminating the Gaps - Cultural Competence, Washington (State) Office of the Superintendent of Public Instruction. ${ }^{18}$

This section's review suggests that institutional approaches to enhancing cultural competency should vary based on local needs. Best practices toward this end can include creating environments that are attractive to culturally and linguistically diverse students and hiring culturally and linguistically diverse staff. Efforts to enhance cultural competency, however, should reflect and value four characteristics of cultural competency: diversity, self-awareness, the dynamics of cultural interactions, and the acquisition and application of cultural knowledge.

What is Cultural Competency? Understanding the role of culture is essential to understanding what cultural competency means. The concept of cultural competence recognizes that culture: (1) is the lens through which we view the world, and (2) can be a powerful but often invisible factor that influences students' learning.

In public schools, cultural competency strives to build on the cultures and languages that students bring to school to enable them to meet high expectations for performance. Cultural competence seeks to harness the role that culture plays in education to enable schools to use diversity as an asset in the learning process rather than seeking to ignore or demean the value of diversity.

[^2]Generally, cultural competency refers to the ability to work effectively across culture in a way that acknowledges and respects the culture of the person or the organization being served. ${ }^{19}$ For educators, it is their ability to teach students who come from cultures other than their own. For institutions, the definition of cultural competency is broader and refers to the role of institutions in addressing cultural gaps between systems and clients. For example, the Virginia Department of Education defines cultural competency as "the integration and transformation of knowledge about individuals and groups of people about specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services, thereby producing better outcomes."20

Characteristics of Cultural Competency. Cultural competence offers a set of skills aimed at improving schools' practices to serve all students and communicate effectively with their families. ${ }^{21}$ The NEA, MSDE, and Virginia Department of Education describe the basic components of culturally competent individuals and institutions as follows:

- Value diversity - accepting and respecting different cultural backgrounds and customs, different ways of communicating, and different traditions and values,
- Culturally self-aware - understanding that educators' own cultures (i.e. all of their experiences, background, knowledge, skills, beliefs, values, and interests) shape their sense of who they are, where they fit into their family, school, community, and society, and how they interact with students,
- Understand the dynamics of cultural interactions - knowing that there are many factors that can affect interactions across cultures, including historical cultural experiences and relationships between cultures in a local community; and
- Acquire cultural knowledge and skills and develop adaptations - designing educational services based on an understanding of students' cultures and institutionalizing that knowledge so that educators, and the learning environments they work in, can adapt to and better serve diverse populations.

Cultural Competency Best Practices. While the specific approaches individuals and schools should undertake to become more culturally competent should vary based on the demographic composition of a school and its staff, there are a number of best practices, cited as the "Cultural Competence Checklist for Success," recommended in the Virginia guide: ${ }^{22}$

- Make the setting and environment more welcoming and attractive to culturally and linguistically diverse (CLD) families,
- Avoid stereotyping and misapplication of scientific knowledge,
- Include community input at the planning and development stages of a project,
- Use educational approaches and materials that will capture the attention of CLD students,
- Find ways to partner with the community,
- Understand that there is no recipe,
- Hire staff that reflect the CLD population,

[^3]- Understand cultural competency is continually evolving; and
- Be creative in finding ways to communicate with population groups that have limited English-speaking proficiency.

As noted above, this "checklist" includes hiring staff that reflect the cultural and linguistic diversity of students served. At the policymaking level, the Virginia guide also recommends the active recruitment of multi-ethnic and multi-racial staff; and at the administrative level, mandatory participation of all staff in regular, in-service cultural competency training.

## Chapter III: MCPS Student and Staff Demographics

At MCPS, a predominantly White professional staff teaches a racially heterogeneous student body. Of the approximately 150,000 students enrolled in MCPS, $14 \%$ are Asian, $21 \%$ are Black, $27 \%$ are Latino, and $33 \%$ are White. However, among the 11,000 teachers and other school-based professional staff, $76 \%$ are White, $13 \%$ are Black, and 5\% each are Latino or Asian.

The Council asked OLO to examine racial/ethnic data for MCPS staff and students, report on the composition of each, and present any significant findings related to diversity in MCPS. This chapter uses two metrics to characterize the alignment of MCPS' workforce and its student body.

- The Student to Staff Demographic Gap ${ }^{23}$ describes the magnitude of the demographic gap in schools between students and staff by subtracting the student subgroup population share (or percentage) from the staff subgroup population share (or percentage) for each race and ethnicity subgroup. A positive number indicates that the subgroup's staff population is overrepresented compared to its student population. A negative number indicates that the subgroup's staff population is under-represented relative to its student population.
- The Student to Staff Parity Index ${ }^{24}$ describes the degree of "match" between student and staff demographics among schools by dividing the staff population share (or percentage) by the student population share (or percentage) for each subgroup. Here, a number of less than $100 \%$ indicates that the subgroup's staff population is under-represented compared to its student population while a number exceeding $100 \%$ indicates that the subgroup's staff population is over-represented relative to their student population.

OLO relied on 2012-13 enrollment data from MCPS' Schools at a Glance reports for its analysis. In this chapter, OLO examines variations in student and staff diversity in four sections:
A. Districtwide Data aggregates available data for 195 MCPS schools that represent $95 \%$ of the MCPS student body and $98 \%$ of the MCPS school-based professional staff to describe the demographic gap and parity index for the school system as a whole.
B. School Level Data aggregates MCPS data for all schools by elementary, middle, and high school levels to describe demographic gap and parity index measures by school level.
C. Geographic Area Data aggregates available MCPS data into six geographic regions to describe the demographic gap and parity index by geography within the County. ${ }^{25}$
D. Concentrated Enrollment Data examines MCPS student and staffing data for the entire school system to consider whether subgroup enrollment and staffing patterns vary with the racial and ethnic composition of schools by school level.

[^4]Four key findings emerge from OLO's data review:

- Mirroring national and state trends, White school-based professionals are over-represented in MCPS relative to White student enrollment. Latino teachers and other school-based professionals are the most under-represented staff subgroup relative to enrollment, particularly at the elementary level. Asians and Blacks are also under-represented among school staff given their enrollment.
- Depending on the school level, there are 5 to 7 White students for every White staff member compared to 17 to 26 Black students for every Black staff member, 34 to 43 Asian students for every Asian staff member, and 57 to 71 Latino students for every Latino staff member.
- A majority of MCPS subgroups attend schools where their subgroup accounts for $20 \%$ or more of enrollment. This especially holds true for White students who are disproportionately enrolled among a subset of MCPS schools with the highest concentrations of White students.
- Schools with the highest shares of subgroup enrollment are staffed by more teachers from those subgroups. However, the difference or demographic mismatch between staff and students by subgroup is often greatest among schools with the largest minority populations.


## A. Districtwide Data

To describe the demographics of certificated school personnel and MCPS students, OLO compiled demographic data from MCPS' 2012-13 Schools at a Glance report. OLO's database aggregates available data for 195 MCPS schools with complete data on both the racial and ethnic composition of their school-based staff and student body. Together, these schools with complete data represent $95 \%$ of the MCPS student body and $98 \%$ of the MCPS school-based professional staff (certificated staff).

Table 3-1 describes districtwide data on the racial and ethnic composition of MCPS' student body and workforce of school-based professional (i.e. credentialed) staff. Table 3-1 also describes demographic gap and parity index measures for the school system as a whole for 2012-13.

Table 3-1: MCPS Staff and Student Distribution Data, 2012-13

| Race/Ethnicity <br> Subgroups | Staff Share of <br> Population | Student Share <br> of Population | Student to Staff <br> Demographic Gap* <br> $(0.0 \%=$ Parity) | Student to Staff <br> Parity Index* <br> (100\% = Parity) |
| :--- | ---: | ---: | ---: | ---: |
| Asians | $5.0 \%$ | $14.3 \%$ | $-9.3 \%$ | $35.0 \%$ |
| Blacks | $12.5 \%$ | $21.3 \%$ | $-8.8 \%$ | $58.7 \%$ |
| Latinos | $5.3 \%$ | $26.6 \%$ | $-21.3 \%$ | $19.9 \%$ |
| Whites | $75.7 \%$ | $33.0 \%$ | $+42.7 \%$ | $229.4 \%$ |
| * Student to Staff Demographic Gap equals Staff minus Student Share <br> **Student to Staff Parity Index equals Staff Share/Student Share |  |  |  |  |

Overall, the data show that within MCPS:

- Asians accounted for $5 \%$ of school-based professional staff, but $14 \%$ of students;
- Blacks accounted for $13 \%$ of school-based professional staff, but $21 \%$ of students;
- Latinos accounted for $5 \%$ of school-based professional staff, but $27 \%$ of students; and
- Whites accounted for $76 \%$ of school-based professional staff, but $33 \%$ of students.

These findings for MCPS align with national and state level data described in Chapter II showing a demographic gap between students of color and teachers of color. More specifically, MCPS student and staff data show that Whites were over-represented among school-based professional staff relative to their enrollment in 2012-13 while Asians, Blacks, and Latinos were under-represented among school-based professional staff compared to their shares of student enrollment.

The demographic gap and parity index measures in Table 3-1 further show that the differences in staff and student composition by race and ethnicity were widest for Latinos, followed by Asians, and then Blacks. Thus, Latinos were the most under-represented subgroup among MCPS school-based professionals compared to their share of student enrollment, followed by Asians and Blacks.

## B. School Level Data

Table 3-2 describes race and ethnicity data by school level for school-based professionals (i.e. MCEA and certificated staff) and the student body for all MCPS schools for 2012-13.

Table 3-2: MCPS Staff and Student Distribution Data by School Level, 2012-13

| Race/Ethnicity Subgroups | Staff Share of Population | Student Share of Population | Student to Staff Demographic Gap* ( $0.0 \%=$ Parity ) | Student to Staff Parity Index** ( $100 \%$ = Parity) |
| :---: | :---: | :---: | :---: | :---: |
| Elementary Schools |  |  |  |  |
| Asians | 5.2\% | 14.1\% | - 8.9\% | 36.9\% |
| Blacks | 9.8\% | 20.6\% | -10.8\% | 47.6\% |
| Latinos | 5.0\% | 28.8\% | - 23.8\% | 17.4\% |
| Whites | 78.5\% | 31.4\% | + 47.1\% | 250.0\% |
| Middle Schools |  |  |  |  |
| Asians | 5.0\% | 14.6\% | - 9.6\% | 34.2\% |
| Blacks | 16.7\% | 21.6\% | -4.9\% | 77.3\% |
| Latinos | 5.6\% | 24.9\% | -19.3\% | 22.5\% |
| Whites | 71.1\% | 34.0\% | + $37.1 \%$ | 209.1\% |
| High Schools |  |  |  |  |
| Asians | 4.7\% | 14.5\% | - 9.8\% | 32.4\% |
| Blacks | 14.3\% | 22.2\% | - 7.9\% | 64.4\% |
| Latinos | 5.5\% | 24.4\% | - 18.9\% | 22.5\% |
| Whites | 74.0\% | 34.7\% | + $39.3 \%$ | 213.3\% |
| * Student to Staff Demographic Gap equals Staff minus the Student Share <br> ** Student to Staff Parity Index equals Staff Share/Student Share |  |  |  |  |

Overall, an analysis of the data shows the following:

- The Asian share of MCPS' professional school-based workforce and student population does not vary much by school level. Thus, the student to staff demographic gap among Asians is fairly constant by school level ( -9 to -10 percentage points) as is the parity index ( $32-37 \%$ ).
- The Latino share of MCPS' student population is highest at the elementary level but the Latino share of MCPS' school-based staff does not vary much by school level. Thus, the Latino student to staff demographic gap is highest at the elementary level ( $-24 \%$ percentage points) compared to the middle and high school levels ( $-19 \%$ percentage points). The Latino parity index is lowest for elementary schools ( $17 \%$ ) vs. middle and high schools ( $23 \%$ ).
- The Black share of the school-based workforce is highest in middle and high schools ( $17 \%$ and $14 \%$ ) compared to elementary schools ( $10 \%$ ). Since the Black share of MCPS' student population does not vary by school level, the student to staff demographic gap is smallest at the secondary school levels ( -5 and -8 percentage points) compared to elementary schools ( -11 percentage points). The parity index is lowest at the elementary level ( $48 \%$ ) compared to the secondary schools (64-77\%).
- The White share of MCPS' student enrollment is lowest at the elementary level while the White share of school-based staff is highest at the elementary level. Thus, the White studentstaff demographic gap is highest for elementary schools (47 percentage points) compared to the secondary schools ( 37 to 39 percentage points); the parity index is highest for elementary schools ( $250 \%$ ) compared to secondary schools (209-213\%).


## C. Geographic Area Data

As shown in Table 3-3 below, OLO developed six County sub-areas to consider if the alignment between staff and student demographics varied by geographic areas within the County.

Table 3-3: County Sub-Areas Developed by OLO for Geographic Analysis

| Geographic <br> Areas | MCPS Clusters | \# of High <br> Schools | \# of Middle <br> Schools | \# of Elem. <br> Schools | Total <br> Schools |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Western <br> Area | Bethesda/Chevy-Chase, Walter <br> Johnson, Winston Churchill, <br> Walt Whitman, and Thomas S. <br> Wootton. | 5 | 9 | 32 | 46 |
| Up-County | Clarksburg, Damascus, <br> Northwest, and Poolesville. | 4 | 6 | 24 | 34 |
| Mid-County | Rockville, Richard <br> Montgomery, Col. Zadok <br> Magruder, and Sherwood. | 4 | 5 | 19 | 28 |
| Gaithersburg <br> Area | Gaithersburg, Quince Orchard, <br> Seneca Valley, and Watkins <br> Mill. | 4 | 6 | 15 | 25 |
| Northeast <br> Consortium | James Hubert Blake, Paint <br> Branch, and Springbrook. | 3 | 5 | 16 | 24 |
| Downcounty <br> Consortium | Montgomery Blair, Albert <br> Einstein, John F. Kennedy, <br> Northwood, and Wheaton. | 5 | 7 | 26 | 38 |

Of note, the clusters grouped in each geographic area are contiguous and share similarities in the demographics of their enrolled students. Yet, the size and enrollment of each geographic area is not proportional. For example, the Western Area includes 46 schools within its boundary and accounts for just under $26 \%$ of all MCPS students. ${ }^{26}$

Table 3-4 on the following page describes 2012-13 data by geographical area on the race and ethnicity of MCPS' school-based professional staff to students among schools with available data. An analysis of this data by race and ethnicity subgroup follows.

Asian Staff and Students: Among the 180 of 195 MCPS schools whose Asian student enrollment exceeded five percent of overall enrollment, an analysis of the data shows that:

- Asians' share of MCPS' student population varies by geographic area from a high of $19 \%$ among Up-County schools to a low of $10 \%$ among Downcounty Consortium schools. With five of 38 Downcounty Consortium schools excluded from OLO's analysis due to low Asian enrollment ( $<5 \%$ ), Asians likely count for an even lower share of Downcounty enrollment.
- Asians' share of school-based professionals varies less from a high of $6 \%$ among Western and MidCounty area schools to a low of $4 \%$ among Gaithersburg area schools.
- The Asian demographic gap is lowest among the Downcounty and Northeast Consortium schools ( -6 to -8 percentage points) and highest among the Western and Up-County areas ( -13 to -14 percentage points). The parity index is highest for Downcounty Consortium schools ( $47 \%$ ) and lowest for the Up-County schools (25\%).
- Across each geographic area, Asian professionals are under-represented relative to Asian student enrollment.

Black Staff and Students: Among the 178 of 195 MCPS schools whose Black student enrollment exceeded five percent of overall enrollment, an analysis of the data shows that:

- Blacks' share of MCPS' student population varies by geographic area from a high of $45 \%$ among Northeast Consortium schools to a low of $11 \%$ among Western area schools. With 15 of 46 Western area schools excluded from OLO's analysis due to low Black enrollment ( $<5 \%$ ), Blacks likely count for an even smaller share of Western area enrollment.
- Blacks' share of school-based professionals varies from a low of $6 \%$ among Western area and Mid-County schools to a high of 20-21\% among Downcounty and Northeast Consortium schools.
- The Black demographic gap is lowest among the Western area and Downcounty Consortium schools ( -4 to -5 percentage points) and highest for the Northeast Consortium ( -25 percentage points). The parity index is also highest for Downcounty Consortium schools ( $81 \%$ ) and lowest for Up-County (38\%).
- Generally, Black professionals are under-represented relative to Black student enrollment across each geographic area, but to a lesser extent in the Downcounty Consortium.

[^5]Table 3-4: MCPS Staff and Student Distribution Data by Geographic Area, 2012-13

| Race/Ethnicity Subgroups | Staff Share of Population | Student Share of Population | Student to Staff Demographic Gap* ( $0.0 \%=$ Parity) | Student to Staff <br> Parity Index** <br> ( $100 \%$ = Parity) |
| :---: | :---: | :---: | :---: | :---: |
| Western Area Schools |  |  |  |  |
| Asians | 5.8\% | 19.0\% | - 13.2\% | 30.5\% |
| Blacks | 6.2\% | 10.6\% | - $4.4 \%$ | 58.5\% |
| Latinos | 4.3\% | 13.9\% | - 9.6\% | 30.9\% |
| Whites | 82.6\% | 52.6\% | + $30.0 \%$ | 157.0\% |
| Up-County Schools |  |  |  |  |
| Asians | 4.7\% | 18.8\% | -14.1\% | 25.0\% |
| Blacks | 7.0\% | 18.3\% | -11.3\% | 38.3\% |
| Latinos | 4.8\% | 19.5\% | - 14.7\% | 24.6\% |
| Whites | 82.7\% | 41.0\% | + 41.7\% | 201.7\% |
| Mid-County Schools |  |  |  |  |
| Asians | 5.8\% | 15.0\% | - 9.2\% | 38.7\% |
| Blacks | 10.6\% | 16.0\% | - 5.4\% | 66.3\% |
| Latinos | 4.7\% | 25.8\% | -21.1\% | 18.2\% |
| Whites | 78.2\% | 38.0\% | + 40.2\% | 205.8\% |
| Gaithersburg Area Schools |  |  |  |  |
| Asians | 4.0\% | 11.1\% | -7.1\% | 36.0\% |
| Blacks | 13.4\% | 28.7\% | - 15.3\% | 46.7\% |
| Latinos | 5.8\% | 37.7\% | - $31.9 \%$ | 15.4\% |
| Whites | 74.9\% | 18.7\% | + 56.2\% | 400.5\% |
| Northeast Consortium Schools |  |  |  |  |
| Asians | 4.9\% | 12.4\% | -7.5\% | 39.5\% |
| Blacks | 20.6\% | 45.1\% | -24.5\% | 45.7\% |
| Latinos | 4.6\% | 25.0\% | - 20.4\% | 18.4\% |
| Whites | 67.5\% | 16.2\% | + 51.3\% | 416.7\% |
| Downcounty Consortium Schools |  |  |  |  |
| Asians | 4.8\% | 10.3\% | -5.5\% | 46.6\% |
| Blacks | 20.3\% | 25.1\% | -4.8\% | 80.9\% |
| Latinos | 7.3\% | 43.0\% | -35.7\% | 17.0\% |
| Whites | 65.3\% | 21.9\% | + 43.4\% | 298.2\% |
| * Student to Staff Demographic Gap equals Staff Share minus the Student Share <br> ** Student to Staff Parity Index equals Staff Share/Student Share |  |  |  |  |

Latino Staff and Students: Among the 192 of 195 MCPS schools whose Latino student enrollment exceeded five percent of overall enrollment, an analysis of the data shows that:

- Latinos' share of MCPS' student population varies by geographic area from a high of $43 \%$ among Downcounty schools to a low of $14 \%$ among Western area schools. With three of 46 Western area schools excluded from OLO's analysis due to low Latino enrollment ( $<5 \%$ ), Latinos likely count for a slightly smaller share of Western area enrollment.
- Latinos' share of school-based professionals varies less from a high of 7\% among Downcounty Consortium schools to a low of $4 \%$ among Western area schools.
- The Latino demographic gap is lowest among the Western area schools ( -10 percentage points) and highest among the Gaithersburg Area and Downcounty schools (-32 to -36 percentage points). The parity index measure is also highest for Western area ( $31 \%$ ) and lowest for the Gaithersburg Area and Downcounty schools ( $15 \%$ to $17 \%$ ).
- Across each geographic area, Latino professional staffs are highly under-represented relative to Latino student enrollment.

White Staff and Students: Among the 182 of 195 MCPS schools whose White student enrollment exceeded five percent of overall enrollment, an analysis of the data shows that:

- Whites' share of MCPS' student population varies by area from a high of $53 \%$ for Western Area schools to a low of $16 \%$ among Northeast Consortium schools. With eight of 38 Northeast Consortium schools excluded from OLO's analysis due to low White enrollment ( $<5 \%$ ), Whites likely count for a smaller share of Northeast Consortium enrollment.
- Whites' share of school-based professionals varies less from a high of $83 \%$ among Western area and Up-County schools to a low of $65 \%$ among Downcounty Consortium schools.
- The White demographic gap is lowest among Western area schools (30 percentage points) and highest among Gaithersburg area schools ( 56 percentage points). The parity index measure is also lowest for Western Area schools (157\%) and highest for Northeast Consortium schools (417\%).
- Across each geographic area, White professional staffs are highly over-represented relative to White student enrollment.


## D. Concentrated Enrollment Data

This section examines student and staffing data in two ways to consider whether subgroup enrollment and staffing patterns vary with the racial and ethnic composition of MCPS schools:

- Subsection 1 describes the distribution of student subgroups among schools with varying concentrations of subgroup enrollment; and
- Subsection 2 compares student and staff data to describe demographic gap and parity index measures by subgroup among schools with varying concentrations of subgroup enrollment.

Generally, the concentration levels used to describe subgroup enrollment patterns among schools in this section reflect the clustering of the school data observed by OLO. ${ }^{27}$

## 1. Distribution of Subgroups by School Concentration Levels

This subsection describes the distribution of student subgroups by school level according to the ethnic and racial composition of schools. Enrollment data for three student subgroups - Blacks, Latinos, and Whites - are described across four school types:

- Low Concentration Schools where a subgroup accounts for 0-19\% of enrollment,
- Medium Low Concentration Schools where a subgroup accounts for 20-29\% of enrollment,
- Medium High Concentration Schools where a subgroup accounts for $30-44 \%$ of enrollment, and
- High Concentration Schools where a subgroup accounts for $45 \%$ or more of enrollment.

For Asians, a narrower band of concentration levels are used to describe schools by concentration type because they represent a smaller share of student enrollment. ${ }^{28}$

Asian Enrollment by School Concentration. Table 3-5 on the next page describes how Asian students were distributed across MCPS by school level across four school types:

- Schools where Asians comprised $9 \%$ or less of enrollment,
- Schools where Asians comprised 10-19\% of enrollment,
- Schools where Asians comprised 20-29\% of enrollment, and
- Schools where Asians comprised $30 \%$ or more of enrollment.

An analysis of this data shows that most Asian students were enrolled in schools with low to medium low concentrations of Asian students at the elementary level ( $0-19 \%$ ), but were enrolled in secondary schools with medium low to medium high concentrations of Asian students (10-29\%). As noted in Table 3-2, Asians comprised 14-15\% of student enrollment in 2012-13.

Table 3-5 also shows that Asian enrollment was fairly diffused across MCPS schools with a majority of schools enrolling a majority of Asian students. More specifically:

- 75 of 130 ( $58 \%$ ) elementary schools enrolled $80 \%$ of all Asian elementary students,
- 26 of $38(68 \%)$ middle schools enrolled $86 \%$ of all Asian middle school students, and
- 18 of $25(72 \%)$ high schools enrolled $86 \%$ of all Asian high school students.

[^6]Table 3-5: Asian Student Enrollment by School Type, 2012-13

| Schools by Level and <br> Asian Enrollment | \# of <br> Schools | \# Asian <br> Students | Distribution <br> of Students |
| :--- | :---: | ---: | ---: |
| Elementary Schools | $\mathbf{1 3 0}$ | $\mathbf{1 0 , 0 9 4}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-9 \%)$ | 55 | 2,038 | $20.2 \%$ |
| - Medium Low $(10 \%-19 \%)$ | 50 | 3,516 | $34.8 \%$ |
| - Medium High (20\% - 29\%) | 12 | 1,832 | $18.2 \%$ |
| - High Concentration $(30 \%+)$ | 13 | 2,708 | $26.8 \%$ |
| Middle Schools | $\mathbf{3 8}$ | $\mathbf{4 , 5 5 9}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-9 \%)$ | 12 | 650 | $14.3 \%$ |
| - Medium Low (10\%-19\%) | 19 | 1,997 | $43.8 \%$ |
| - Medium High (20\% - 29\%) | 6 | 1,494 | $32.8 \%$ |
| - High Concentration $(30 \%+)$ | 1 | 418 | $9.2 \%$ |
| High Schools | $\mathbf{2 5}$ | $\mathbf{6 , 4 9 9}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-9 \%)$ | 7 | 910 | $14.0 \%$ |
| - Medium Low $(10 \%-19 \%)$ | 14 | 3,520 | $54.2 \%$ |
| - Medium High $(20 \%-29 \%)$ | 3 | 1,289 | $19.8 \%$ |
| - High Concentration $(30 \%+)$ | 1 | 781 | $12.0 \%$ |

Yet, it is also important to note that a fairly high share of Asian students was also enrolled in schools with high concentrations of Asian students. More specifically, a quarter of Asian students were enrolled in 15 schools ( 13 elementary, 1 middle, and 1 high) where their share of student enrollment at $30 \%$ or above was more than double than their share of MCPS enrollment overall.

Black Enrollment by School Concentration. Table 3-6 on the next page describes how Black students were distributed across MCPS by school level across four school types:

- Schools where Blacks comprised $19 \%$ or less of enrollment,
- Schools where Blacks comprised 20-29\% of enrollment,
- Schools where Blacks comprised 30-44\% of enrollment, and
- Schools where Blacks comprised $45 \%$ or more of enrollment.

An analysis of this data shows that most Black students were enrolled in elementary schools with low to medium low concentrations of Black students (0-29\%). As noted in Table 3-2, Black students comprised 21-22\% of student enrollment in 2012-13. However, the data in Table 3-6 also shows that Black enrollment was somewhat concentrated among a subset of MCPS schools with:

- 52 of $130(40 \%)$ elementary schools enrolling $66 \%$ of all Black elementary students,
- 22 of $38(58 \%)$ middle schools enrolling $74 \%$ of all Black middle school students, and
- 13 of 25 ( $52 \%$ ) high schools enrolling $75 \%$ of all Black high school students.

Table 3-6: Black Student Enrollment by School Type, 2012-13

| Schools by Level and <br> Black Enrollment | \# of <br> Schools | \# Black <br> Students | Distribution <br> of Students |
| :--- | :---: | ---: | ---: |
| Elementary Schools | $\mathbf{1 3 0}$ | $\mathbf{1 4 , 7 4 8}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 78 | 5,051 | $34.2 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 23 | 3,006 | $20.4 \%$ |
| - Medium High $(30 \%-44 \%)$ | 20 | 3,633 | $24.6 \%$ |
| - High Concentration $(45 \%+)$ | 9 | 3,059 | $20.7 \%$ |
| Middle Schools | $\mathbf{3 8}$ | $\mathbf{6 , 7 4 5}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 16 | 1,732 | $25.7 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 14 | 2,468 | $36.6 \%$ |
| - Medium High $(30 \%-44 \%)$ | 5 | 1,233 | $18.3 \%$ |
| - High Concentration $(45 \%+)$ | 3 | 1,311 | $19.4 \%$ |
| High Schools | $\mathbf{2 5}$ | $\mathbf{9 , 9 5 1}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 12 | 2,493 | $25.1 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 7 | 3,389 | $34.1 \%$ |
| - Medium High $(30 \%-44 \%)$ | 5 | 3,054 | $30.7 \%$ |
| - High Concentration $(45 \%+)$ | 1 | 1,015 | $10.2 \%$ |

Latino Enrollment by School Concentration. Table 3-7 on the next page describes how Latino students were distributed across MCPS by school level across four school types:

- Schools where Latinos comprised 19\% or less of enrollment,
- Schools where Latinos comprised 20-29\% of enrollment,
- Schools where Latinos comprised $30-44 \%$ of enrollment, and
- Schools where Latinos comprised $45 \%$ or more of enrollment.

An analysis of this data shows that most Latino students were enrolled in schools with medium high to high concentrations of Latino students ( $30 \%$ or more of enrollment). As noted in Table 3-2, Latinos comprised 24-29\% of student enrollment in 2012-13. The data in Table 3-7 also shows that Latino enrollment was concentrated among a subset of MCPS schools with:

- 52 of $130(40 \%)$ elementary schools enrolling $68 \%$ of all Latino elementary students,
- 19 of 38 ( $50 \%$ ) middle schools enrolling $74 \%$ of all Latino middle school students, and
- 16 of 25 (64\%) high schools enrolling $82 \%$ of all Latino high school students.

A data point that is particularly striking is that $42 \%$ of all Latino students in the elementary grades were enrolled in 24 elementary schools with concentrations of Latino students exceeding $45 \%$.

Table 3-7: Latino Student Enrollment by School Type, 2012-13

| Schools by Level and <br> Latino Enrollment | \# of <br> Schools | \# Latino <br> Students | Distribution <br> of Students |
| :--- | :---: | ---: | ---: |
| Elementary Schools | $\mathbf{1 3 0}$ | $\mathbf{2 0 , 6 1 8}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 60 | 3,975 | $19.3 \%$ |
| - Medium Low (20\%-29\%) | 18 | 2,567 | $12.4 \%$ |
| - Medium High (30\% - 44\%) | 28 | 5,429 | $26.3 \%$ |
| - High Concentration $(45 \%+)$ | 24 | 8,647 | $41.9 \%$ |
| Middle Schools | $\mathbf{3 8}$ | $\mathbf{7 , 7 7 6}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 17 | 2,009 | $25.8 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 4 | 862 | $11.1 \%$ |
| - Medium High $(30 \%-44 \%)$ | 15 | 4,197 | $54.0 \%$ |
| - High Concentration $(45 \%+)$ | 2 | 708 | $9.1 \%$ |
| High Schools | $\mathbf{2 5}$ | $\mathbf{1 0 , 9 3 7}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 9 | 2,007 | $18.4 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 7 | 3,315 | $30.3 \%$ |
| - Medium High $(30 \%-44 \%)$ | 6 | 3,518 | $32.2 \%$ |
| - High Concentration $(45 \%+)$ | 3 | 2,096 | $19.2 \%$ |

White Enrollment by School Concentration. Table 3-8 on the next page describes how White students were distributed across MCPS by school level across four school types:

- Schools where White students comprised $19 \%$ or less of enrollment,
- Schools where White students comprised 20-29\% of enrollment,
- Schools where White students comprised $30-44 \%$ of enrollment, and
- Schools where White students comprised $45 \%$ or more of enrollment.

An analysis of this data shows that a majority of White students ( $57 \%$ to $61 \%$ depending on school level) were enrolled on campuses with high concentrations of White students ( $45 \%+$ ). As noted in Table 3-2, White students comprised 31-35\% of student enrollment in 2012-13. Yet, a majority of White students were enrolled in a minority of MCPS schools. More specifically, the data in Table 3-7 shows that White enrollment was concentrated among a subset of MCPS schools with:

- 68 of 130 ( $52 \%$ ) elementary schools enrolling $82 \%$ of all White elementary students,
- 19 of 38 ( $50 \%$ ) middle schools enrolling $78 \%$ of all White middle school students, and
- 12 of $25(48 \%)$ high schools enrolling $72 \%$ of all White high school students.

Table 3-8: White Student Enrollment by School Type, 2012-13

| Schools by Level and <br> White Enrollment | \# of <br> Schools | \# White <br> Students | Distribution <br> of Students |
| :--- | :---: | ---: | ---: |
| Elementary Schools | $\mathbf{1 3 0}$ | $\mathbf{2 2 , 4 8 0}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 48 | 2,497 | $11.1 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 14 | 1,737 | $7.7 \%$ |
| - Medium High (30\% - 44\%) | 25 | 5,544 | $24.7 \%$ |
| - High Concentration $(45 \%+)$ | 43 | 12,702 | $56.5 \%$ |
| Middle Schools | $\mathbf{3 8}$ | $\mathbf{1 0 , 6 1 7}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 12 | 1,368 | $12.9 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 7 | 880 | $8.3 \%$ |
| - Medium High $(30 \%-44 \%)$ | 7 | 2,060 | $19.4 \%$ |
| - High Concentration $(45 \%+)$ | 12 | 6,309 | $59.4 \%$ |
| High Schools | $\mathbf{2 5}$ | $\mathbf{1 5 , 5 5 4}$ | $\mathbf{1 0 0 . 0 \%}$ |
| - Low Concentration $(0 \%-19 \%)$ | 6 | 1,067 | $6.9 \%$ |
| - Medium Low $(20 \%-29 \%)$ | 7 | 3,257 | $20.9 \%$ |
| - Medium High $(30 \%-44 \%)$ | 3 | 1,674 | $10.8 \%$ |
| - High Concentration $(45 \%+)$ | 9 | 9,556 | $61.4 \%$ |

## 2. Subgroup Staffing and Student Patterns by School Concentration Levels

In this subsection, OLO analyzed MCPS' student and staffing data to consider where staff/student match varies according to racial and ethnicity composition of school student bodies. Like the prior subsection, data is presented by school level across four school concentration types:

- Low Concentration Schools where a subgroup accounts for 0-19\% of enrollment,
- Medium Low Concentration Schools where a subgroup accounts for 20-29\% of enrollment,
- Medium High Concentration Schools where a subgroup accounts for $30-44 \%$ of enrollment, and
- High Concentration Schools where a subgroup accounts for $45 \%$ or more of enrollment.

Again, a narrower band of concentration levels are used to describe schools by Asian concentration type because they represent a smaller share of student enrollment.

Asian Students and Staffing. Table 3-9 on the next page describes school concentration, staffing, and student data for Asians by school level for 2012-13.

Table 3-9: Asian Staff and Students by School Level and Enrollment, 2012-13

| Schools by Level and Asian Enrollment | \# of Schools | \% Asian Staff | \% Asian <br> Students | Demographic Gap* <br> (0.0\% = Parity) | Parity Index** $(100 \%=$ Parity $)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 130 | 5.2\% | 14.1\% | - 8.9\% | 36.9\% |
| - Low Concentration ( $0 \%-9 \%$ ) | 55 | 4.6\% | 6.8\% | - $2.2 \%$ | 67.6\% |
| - Medium Low (10\%-19\%) | 50 | 5.2\% | 13.1\% | - $7.9 \%$ | 39.7\% |
| - Medium High (20\%-29\%) | 12 | 6.2\% | 24.8\% | - 18.6\% | 25.0\% |
| - High Concentration ( $30 \%+$ ) | 13 | 6.9\% | 34.7\% | - 27.8\% | 19.9\% |
| Middle Schools | 38 | 5.0\% | 14.6\% | -9.6\% | 34.2\% |
| - Low Concentration (0\%-9\%) | 12 | 4.5\% | 7.4\% | - $2.9 \%$ | 60.8\% |
| - Medium Low (10\%-19\%) | 19 | 5.3\% | 13.2\% | - $7.9 \%$ | 40.2\% |
| - Medium High (20\%-29\%) | 6 | 4.9\% | 24.3\% | - $19.4 \%$ | 20.2\% |
| - High Concentration (30\% +) | 1 | 5.3\% | 36.7\% | - $31.4 \%$ | 14.4\% |
| High Schools | 25 | 4.7\% | 14.5\% | - 32.4\% | 32.4\% |
| - Low Concentration ( $0 \%$ - 9\%) | 7 | 2.9\% | 8.0\% | - $36.3 \%$ | 36.3\% |
| - Medium Low (10\%-19\%) | 14 | 4.9\% | 13.7\% | - 8.8\% | 35.8\% |
| - Medium High (20\%-29\%) | 3 | 6.4\% | 23.6\% | - $17.2 \%$ | 27.1\% |
| - High Concentration ( $30 \%$ +) | 1 | 8.8\% | 34.0\% | - $25.2 \%$ | 25.9\% |
| * Demographic Gap equals \% Staff minus \% Student <br> ** Parity Index equals \% Staff /\% Student |  |  |  |  |  |

Three findings emerge from an analysis of the data in Table 3-9:

- Schools with greater percentages of Asian students generally have greater percentages of Asian staff. For example, in elementary schools where Asians comprised $30 \%$ or more of the student body, Asians comprised $7 \%$ of professional staff compared to comprising $5 \%$ of professional staff among schools where Asians accounted for 0 to $9 \%$ of all students.
- At the middle school level, Asians as a percentage of professional staff did not vary with Asian enrollment. Across all Asian enrollment concentration levels, the Asian share of the school-based professional staff population remained virtually unchanged at $5 \%$.
- The Asian demographic gap was highest (and the parity index was lowest) among schools with the highest concentrations of Asian students. Although Asian staff share tended to increase with Asian student share, these increases were not proportional. The level of Asian staff under-representation, as measured by the demographic gap and parity index, increases with Asian enrollment levels. In turn, the demographic gap was lowest (and the parity index was highest) among schools where Asians accounted for $9 \%$ or less of all students.

Table 3-10 on the next page describes the number of Asian professionals, students, and student-tostaff ratios for this subgroup by school level.

Table 3-10: Asian Student to Staff Ratios by School Level and Enrollment, 2012-13

| Schools by Level and <br> Asian Enrollment | \# of <br> Schools | \# Asian <br> Staff | \# Asian <br> Students | Students to <br> Staff Ratios |
| :--- | :---: | ---: | ---: | :---: |
| Elementary Schools | $\mathbf{1 3 0}$ | $\mathbf{3 0 1}$ | $\mathbf{1 0 , 0 9 4}$ | $\mathbf{3 3 . 5}$ |
| - Low Concentration $(0 \%-9 \%)$ | 55 | 119 | 2,038 | 17.1 |
| - Medium Low $(10 \%-19 \%)$ | 50 | 112 | 3,516 | 31.4 |
| - Medium High $(20 \%-29 \%)$ | 12 | 32 | 1,832 | 57.3 |
| - High Concentration $(30 \%+)$ | 13 | 37 | 2,708 | 73.2 |
| Middle Schools | $\mathbf{3 8}$ | $\mathbf{1 2 2}$ | $\mathbf{4 , 5 5 9}$ | $\mathbf{3 7 . 4}$ |
| - Low Concentration $(0 \%-9 \%)$ | 12 | 32 | 650 | 20.3 |
| - Medium Low $(10 \%-19 \%)$ | 19 | 64 | 1,997 | 31.2 |
| - Medium High $(20 \%-29 \%)$ | 6 | 22 | 1,494 | 67.9 |
| - High Concentration $(30 \%+)$ | 1 | 4 | 418 | 104.5 |
| High Schools | $\mathbf{2 5}$ | $\mathbf{1 5 0}$ | $\mathbf{6 , 4 9 9}$ | $\mathbf{4 3 . 3}$ |
| - Low Concentration $(0 \%-9 \%)$ | 7 | 25 | 910 | 36.4 |
| - Medium Low $(10 \%-19 \%)$ | 14 | 89 | 3,520 | 39.6 |
| - Medium High $(20 \%-29 \%)$ | 3 | 23 | 1,289 | 56.0 |
| - High Concentration $(30 \%+)$ | 1 | 13 | 781 | 60.1 |

Four findings emerge from an analysis of the data included in Table 3-10:

- Depending on the school level, there are 34 to 43 Asian students for every Asian schoolbased professional in MCPS.
- Asian student-to-staff ratios are lowest among low concentration elementary and middle schools where Asian enrollment is $9 \%$ or less of overall enrollment. Among these schools, on average there is one Asian professional per 17 to 20 Asian students.
- Asian student-to-staff ratios are highest among medium to high concentration schools at all levels where Asian enrollment is $20 \%$ or more of overall enrollment. Among these schools, on average there is one Asian professional per 56 to 105 Asian students.
- A slight majority of Asian professionals are assigned to elementary schools. Of the 573 Asian professionals in MCPS schools, 301 (53\%) work in elementary schools.

Black Students and Staffing. Table 3-11 on the next page describes school concentration, staffing, and enrollment data for Blacks by school level for 2012-13.

Table 3-11: Black Staff and Students by School Level and Enrollment, 2012-13

| Schools by Level and Black Enrollment | \# of Schools | \% Black Staff | \% Black <br> Students | Demographic Gap* <br> ( $0.0 \%=$ Parity) | Parity Index** $(100 \%=$ Parity $)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 130 | 9.8\% | 20.6\% | - 10.8\% | 47.6\% |
| - Low Concentration (0\%-19\%) | 78 | 6.3\% | 8.2\% | - $1.9 \%$ | 76.8\% |
| - Medium Low (20\%-29\%) | 23 | 10.5\% | 25.3\% | - $14.8 \%$ | 41.5\% |
| - Medium High (30\%-44\%) | 20 | 15.6\% | 34.8\% | - $19.2 \%$ | 44.8\% |
| - High Concentration (45\% +) | 9 | 22.5\% | 57.1\% | - $34.6 \%$ | 39.4\% |
| Middle Schools | 38 | 16.7\% | 21.6\% | -4.9\% | 77.3\% |
| - Low Concentration (0\%-19\%) | 16 | 11.4\% | 6.6\% | + 4.8\% | 172.7\% |
| - Medium Low (20\%-29\%) | 14 | 18.0\% | 24.1\% | -6.1\% | 74.7\% |
| - Medium High (30\%-44\%) | 5 | 23.1\% | 35.0\% | - $11.9 \%$ | 66.0\% |
| - High Concentration ( $45 \%$ +) | 3 | $32.0 \%$ | 52.2\% | - $20.2 \%$ | 61.3\% |
| High Schools | 25 | 14.3\% | 22.2\% | -7.9\% | 64.4\% |
| - Low Concentration (0\%-19\%) | 12 | 7.6\% | 11.3\% | -3.7\% | 67.3\% |
| - Medium Low (20\%-29\%) | 7 | 19.3\% | 25.9\% | -6.6\% | 74.5\% |
| - Medium High (30\%-44\%) | 5 | 22.2\% | 39.1\% | - $16.9 \%$ | 56.8\% |
| - High Concentration (45\% +) | 1 | 19.4\% | 52.8\% | - $33.4 \%$ | 36.7\% |
| * Demographic Gap equals \% Staff minus \% Student <br> ** Parity Index equals \% Staff /\% Student |  |  |  |  |  |

Three findings emerge from an analysis of the data in Table 3-11:

- Schools with greater shares of Black students generally have greater shares of Black staff. For example, in elementary schools where Black students comprised $45 \%$ or more of student enrollment, Black staff comprised $23 \%$ of teaching professionals, compared to $6 \%$ of staff among schools where Black students represented $9 \%$ or less of the student body.
- High schools with greater shares of Black students, however, did not have greater shares of Black staff. Across medium to high levels of Black enrollment concentrations (from 20\% to $45 \%$ or more), the Black share of professional school-based staff remained virtually unchanged, ranging from $19 \%$ to $22 \%$.
- The Black demographic gap was highest (and the parity index was lowest) among schools with the highest concentrations of Black students. Although Black staff share tended to increase with Black student share, these increases were not proportional. Thus, the level of Black staff under-representation, as measured by the demographic gap and parity index, increases with Black enrollment levels. In turn, the demographic gap was lowest (and the parity index was highest) among schools where Black students accounted for 5\% to $19 \%$ of all students.

Table 3-12 describes the number of Black professionals, students, and student-to-staff ratios for this subgroup by school level.

Table 3-12: Black Student to Staff Ratios by School Level and Enrollment, 2012-13

| Schools by Level and <br> Black Enrollment | \# of <br> Schools | \# Black <br> Staff | \# Black <br> Students | Students to <br> Staff Ratios |
| :--- | :---: | ---: | ---: | :---: |
| Elementary Schools | $\mathbf{1 3 0}$ | $\mathbf{5 6 7}$ | $\mathbf{1 4 , 7 4 8}$ | $\mathbf{2 6 . 0}$ |
| - Low Concentration $(0 \%-19 \%)$ | 78 | 216 | 5,051 | 23.4 |
| - Medium Low $(20 \%-29 \%)$ | 23 | 106 | 3,006 | 28.4 |
| - Medium High $(30 \%-44 \%)$ | 20 | 144 | 3,633 | 25.2 |
| - High Concentration $(45 \%+)$ | 9 | 101 | 3,059 | 30.3 |
| Middle Schools | $\mathbf{3 8}$ | $\mathbf{4 0 9}$ | $\mathbf{6 , 7 4 5}$ | $\mathbf{1 6 . 5}$ |
| - Low Concentration $(0 \%-19 \%)$ | 16 | 128 | 1,732 | 13.5 |
| - Medium Low $(20 \%-29 \%)$ | 14 | 148 | 2,468 | 16.7 |
| - Medium High $(30 \%-44 \%)$ | 5 | 68 | 1,233 | 18.1 |
| - High Concentration $(45 \%+)$ | 3 | 64 | 1,311 | 20.5 |
| High Schools | $\mathbf{2 5}$ | $\mathbf{4 5 7}$ | $\mathbf{9 , 9 5 1}$ | $\mathbf{2 1 . 8}$ |
| - Low Concentration $(0 \%-19 \%)$ | 12 | 116 | 2,493 | 21.5 |
| - Medium Low $(20 \%-29 \%)$ | 7 | 185 | 3,389 | 18.3 |
| - Medium High $(30 \%-44 \%)$ | 5 | 131 | 3,054 | 23.3 |
| - High Concentration $(45 \%+)$ | 1 | 25 | 1,015 | 40.6 |

Four findings emerge from an analysis of the data in Table 3-12:

- Depending on the school level, there are 17 to 26 Black students for every Black schoolbased professional employed by MCPS.
- Black student-to-staff ratios are lowest among middle schools and among high schools with medium low concentrations of Black enrollment. Among these schools, on average there is one Black professional per 14 to 21 Black students.
- Black student-to-staff ratios are highest among elementary schools and high schools with medium to highest concentration of Black students ( $30 \%$ or more). Among these schools, on average there is one Black professional per 23 to 41 Black students.
- Most Black professionals are assigned to secondary schools. Of the 1,433 Black professionals in MCPS schools, 409 (29\%) work in middle schools and another 457 (32\%) work in MCPS high schools.

Latino Students and Staffing. Table 3-13 on the next page describes school concentration, staffing, and enrollment data for Latinos by school level for 2012-13.

Table 3-13: Latino Staff and Students by School Level and Enrollment, 2012-13

| Schools by Level and Latino Enrollment | \# of Schools | \% Latino Staff | \% Latino Students | Demographic Gap* $(0.0 \%=\text { Parity })$ | Parity Index** $(100 \%=$ Parity $)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 130 | 5.0\% | $\mathbf{2 8 . 8 \%}$ | - $\mathbf{2 3 . 8 \%}$ | 17.4\% |
| - Low Concentration (0\%-19\%) | 60 | 2.8\% | 12.1\% | -9.3\% | 23.1\% |
| - Medium Low (20\%-29\%) | 18 | 4.2\% | 23.8\% | - $19.6 \%$ | 17.6\% |
| - Medium High (30\%-44\%) | 28 | 6.2\% | 38.6\% | - $32.4 \%$ | 16.1\% |
| - High Concentration ( $45 \%$ +) | 24 | 8.3\% | 61.8\% | - 53.5\% | 13.4\% |
| Middle Schools | 38 | 5.6\% | $\mathbf{2 4 . 9 \%}$ | - $\mathbf{1 9 . 3 \%}$ | 22.5\% |
| - Low Concentration (0\%-19\%) | 17 | 5.4\% | 13.1\% | - 7.7\% | 41.2\% |
| - Medium Low (20\%-29\%) | 4 | 4.8\% | 24.2\% | - 19.4\% | 19.8\% |
| - Medium High (30\%-44\%) | 15 | 5.7\% | 38.5\% | - $32.8 \%$ | 14.8\% |
| - High Concentration ( $45 \%$ +) | 2 | 12.3\% | 50.4\% | - $38.1 \%$ | 24.4\% |
| High Schools | 25 | 5.5\% | 24.4\% | -18.9\% | 22.5\% |
| - Low Concentration (0\%-19\%) | 9 | 4.2\% | 11.8\% | - $7.6 \%$ | 35.6\% |
| - Medium Low (20\%-29\%) | 7 | 5.8\% | 24.0\% | - $18.2 \%$ | 24.2\% |
| - Medium High (30\%-44\%) | 6 | 6.4\% | 36.2\% | - $29.8 \%$ | 17.7\% |
| - High Concentration (45\% +) | 3 | 7.4\% | 48.7\% | - $41.3 \%$ | 15.2\% |
| * Demographic Gap equals \% Staff minus \% Student <br> ** Parity Index equals \% Staff /\% Student |  |  |  |  |  |

Two findings emerge from an analysis of the data in Table 3-13:

- Across all levels, schools with greater shares of Latino students have greater shares of Latino staff. For example, in middle schools where Latino students comprised $45 \%$ or more of student enrollment, Latino staff comprised $12 \%$ of professional staff compared to $5 \%$ of staff among schools where Latino students represented $19 \%$ or less of enrollment.
- The Latino demographic gap was highest (and the parity index was lowest) among schools with the highest concentrations of Latino students. Although Latino staff share tended to increase with Latino student share, these increases were not proportional. Thus, the level of Latino staff under-representation, as measured by the demographic gap and parity index, increases with Latino enrollment. In turn, the demographic gap was lowest (and the parity index was highest) among schools where Latino students accounted for $0 \%$ to $19 \%$ of all students.

Table 3-14 on the next page describes the number of Latino professionals, students, and student-tostaff ratios for this subgroup by school level.

Table 3-14: Latino Student to Staff Ratios by School Level and Enrollment, 2012-13

| Schools by Level and Latino Enrollment | \# of Schools | \# Latino Staff | \# Latino Students | Students to Staff Ratios |
| :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 130 | 289 | 20,618 | 71.3 |
| - Low Concentration (0\%-19\%) | 60 | 66 | 3,975 | 60.2 |
| - Medium Low (20\%-29\%) | 18 | 37 | 2,567 | 69.4 |
| - Medium High (30\%-44\%) | 28 | 78 | 5,429 | 69.6 |
| - High Concentration ( $45 \%$ +) | 24 | 108 | 8,647 | 80.1 |
| Middle Schools | 38 | 137 | 7,776 | 56.8 |
| - Low Concentration (0\%-19\%) | 17 | 23 | 2,009 | 87.3 |
| - Medium Low (20\%-29\%) | 4 | 47 | 862 | 18.3 |
| - Medium High (30\%-44\%) | 15 | 52 | 4,197 | 80.7 |
| - High Concentration (45\% +) | 2 | 14 | 708 | 50.6 |
| High Schools | 25 | 176 | 10,937 | 62.1 |
| - Low Concentration (0\%-19\%) | 9 | 48 | 2,007 | 41.8 |
| - Medium Low (20\%-29\%) | 7 | 55 | 3,315 | 60.3 |
| - Medium High (30\%-44\%) | 6 | 47 | 3,518 | 74.9 |
| - High Concentration ( $45 \%$ +) | 3 | 25 | 2,096 | 83.8 |

Four findings emerge from an analysis of the data in Table 3-14:

- Depending on the school level, there are 57 to 71 Latino students for every Latino schoolbased professional employed by MCPS. This subgroup by far has the highest student-to-staff ratios within MCPS.
- Latino student-to-staff ratios are lowest among middle schools with Latino enrollment ranging from 20 to $29 \%$. Among these four middle schools, on average there is one Latino professional per 18 Latino students.
- For every other school type considered, Latino student-to-staff ratios range from one Latino professional per 40 Latino students enrolled in low concentration high schools to one Latino professional per $80+$ Latino students in high concentration elementary and high schools where Latino enrollment is $45 \%$ or more of overall enrollment, and among low and medium low concentration middle schools where Latinos comprise $19 \%$ or less of enrollment and between $30-44 \%$ of enrollment.
- A slight majority of Latino professionals are assigned to secondary schools. Of the 602 Latino professionals in MCPS schools, 137 (23\%) work in middle schools and 176 (29\%) work in high schools.

White Students and Staffing. Table 3-15 below describes school concentration, staffing, and enrollment data for White students by school level for 2012-13.

Table 3-15: White Staff and Students by School Level and Enrollment, 2012-13

| Schools by Level and White Enrollment | \# of Schools | \% White Staff | \% White <br> Students | Demographic Gap* ( $0.0 \%=$ Parity $)$ | $\begin{gathered} \text { Parity } \\ \text { Index** } \\ (100 \%=\text { Parity }) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 130 | 78.5\% | 31.4\% | + 47.1\% | $\mathbf{2 5 0 . 0 \%}$ |
| - Low Concentration (0\%-19\%) | 48 | 72.4\% | 8.7\% | + 63.7\% | 832.2\% |
| - Medium Low ( $20 \%-29 \%$ ) | 14 | 80.1\% | 25.7\% | + 54.4\% | 311.7\% |
| - Medium High ( $30 \%-44 \%$ ) | 25 | 79.9\% | 37.4\% | + 42.5\% | 213.6\% |
| - High Concentration ( $45 \%$ +) | 43 | 87.2\% | 59.4\% | + 27.8\% | 146.8\% |
| Middle Schools | 38 | 71.1\% | 34.0\% | + 37.1\% | 209.1\% |
| - Low Concentration ( $0 \%$ - 19\%) | 12 | 61.7\% | 13.0\% | + 48.7\% | 474.6\% |
| - Medium Low ( $20 \%$ - 29\%) | 7 | 63.5\% | 23.8\% | + 39.7\% | 266.8\% |
| - Medium High ( $30 \%-44 \%$ ) | 7 | 76.7\% | 33.6\% | + 43.1\% | 228.3\% |
| - High Concentration ( $45 \%$ +) | 12 | 81.0\% | 58.1\% | + 22.9\% | 139.4\% |
| High Schools | 25 | 74.0\% | 34.7\% | + 39.3\% | 213.3\% |
| - Low Concentration (0\%-19\%) | 6 | 61.1\% | 11.2\% | + 49.9\% | 545.5\% |
| - Medium Low ( $20 \%-29 \%$ ) | 7 | 72.1\% | 24.2\% | + 47.9\% | 297.9\% |
| - Medium High ( $30 \%$ - $44 \%$ ) | 3 | 76.5\% | 32.9\% | + 43.6\% | 232.5\% |
| - High Concentration ( $45 \%+$ ) | 9 | 83.2\% | 56.9\% | + 26.3\% | 146.2\% |
| * Demographic Gap equals \% Staff minus \% Student <br> ** Parity Index equals \% Staff / \% Student |  |  |  |  |  |

Two findings emerge from a review of the data in Table 3-15:

- Schools with greater shares of White students tend to have greater shares of White staff. For example, in high schools where White students comprise $45 \%$ or more of the student body, White staff accounts for $83 \%$ of professional staff compared to $61 \%$ of staff among schools where White students account for $19 \%$ or less of total enrollment.
- The White demographic gap and parity index were highest among schools with the lowest concentrations of White students. Although White staff share increases with White student enrollment, these increases are not proportional. White staff over-representation, as measured by the demographic gap and parity index, increases as White student enrollment decreases. Thus, both the White demographic gap and parity index were lowest for schools where White students accounted for $45 \%$ or more of the student body; both measures were highest among schools where White students accounted for $0-19 \%$ of the student body.

Table 3-16 on the next page describes the number of White professionals, students, and student-tostaff ratios for this subgroup.

Table 3-16: White Student to Staff Ratios by School Level and Enrollment, 2012-13

| Schools by Level and White Enrollment | \# of Schools | \# White Staff | \# White <br> Students | Students to Staff Ratio |
| :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 130 | 4,541 | 22,480 | 5.0 |
| - Low Concentration (0\%-19\%) | 48 | 1,880 | 2,497 | 1.3 |
| - Medium Low (20\%-99\%) | 14 | 447 | 1,737 | 3.9 |
| - Medium High (29\%-44\%) | 25 | 889 | 5,544 | 6.2 |
| - High Concentration ( $45 \%$ +) | 43 | 1,325 | 12,702 | 9.6 |
| Middle Schools | 38 | 1,740 | 10,617 | 6.1 |
| - Low Concentration (0\%-19\%) | 12 | 530 | 1,368 | 2.6 |
| - Medium Low (20\%-99\%) | 7 | 209 | 880 | 4.2 |
| - Medium High (29\%-44\%) | 7 | 355 | 2,060 | 5.8 |
| - High Concentration ( $45 \%$ +) | 12 | 646 | 6,309 | 9.8 |
| High Schools | 25 | 2,363 | 15,554 | 6.6 |
| - Low Concentration (0\%-19\%) | 6 | 449 | 1,067 | 2.4 |
| - Medium Low (20\%-99\%) | 7 | 700 | 3,257 | 4.7 |
| - Medium High (29\%-44\%) | 3 | 276 | 1,674 | 6.1 |
| - High Concentration ( $45 \%$ +) | 9 | 938 | 9,556 | 10.2 |

Four findings emerge from an analysis of the data in Table 3-16:

- Depending on the school level, there are 5 to 7 White students for every White school-based professional in MCPS. This compares to a ratio of 17 to 26 Black students for every Black staff member, a ratio of 34 to 43 Asian students for every Asian staff member, and a ratio of 57 to 71 Latino students for every Latino staff member.
- White student-to-staff ratios are lowest among low concentration schools at all levels where White enrollment is $19 \%$ or less of overall enrollment. Among these schools, on average there is one White professional per 1 to 3 White students.
- White student-to-staff ratios are highest among the high concentration schools at all levels where White enrollment is $45 \%$ or more of overall enrollment. Among these schools, on average there is one White professional per 10 Asian students.
- Most White professionals are assigned to elementary schools. Of the 8,644 White professionals in MCPS schools, 4,541 (53\%) work in elementary schools.


## Chapter IV: MCPS Language Assistance Services

OLO launched this report with the intent to compare the linguistic diversity of MCPS school-based professionals to schools' English for Speakers of Other Languages (ESOL) enrollment to discern whether the schools with the highest numbers of English language learners employed more bilingual staff than other schools. MCPS, however, does not collect data on the linguistic diversity of most of its school personnel. ${ }^{29}$ To offer some perspective on whether linguistic diversity services in MCPS match school need, this section compares schools' use of central office language assistance services to schools' ESOL eligibility and Latino student enrollment.

MCPS provides resources for linguistically diverse students and families through its Division of ESOL/Bilingual Programs. These resources include:

- Instructional Programs to provide support for English language learners in the classroom;
- Parent Outreach Services to provide support for parents of ESOL students;
- An ESOL Bilingual Advisory Committee to help facilitate "feedback, perspective and support" from parents and the community ${ }^{30}$; and
- Counseling Services to help ESOL students improve their academic efforts and adjust to their new school environments.

MCPS' ESOL resources also includes its Language Assistance Services Unit (LASU) that provides three types of services that enable MCPS staff to communicate with linguistically diverse students and their families: oral interpretation, telephone interpretation, and written translation services. These three language services and the total number of uses from roughly August 2010 to September 2013 are described in Table 4-1.

Table 4-1: MCPS Language Assistance Services and Total Uses, 2010-2013

| Language Services | Description of Service | Total Uses* |
| :--- | :--- | :---: |
| Telephone Interpretation <br> (Language Line Calls) <br> - June 2010 - June 2013 | Telephone-based assistance, available to any <br> MCPS staff member who requires assistance with <br> face-to-face communication. | 39,322 |
| Oral Interpretation <br> (Face-to-Face Interpreters) <br> - August 2010 - September 2013 | Face-to-face communication with MCPS students, <br> their families, or other groups of individuals. | 32,170 |
| Written Translation <br> - August 2010 - September 2013 | Translation of MCPS documents and publications <br> into Spanish, French, Amharic, Chinese, <br> Vietnamese, or Korean. | 3,049 |
| * For telephone interpretation, services refer to number of usages; for oral interpretation, services refer to <br> number of requests; and for written translation, services refer to number of projects. |  |  |

[^7]Telephone interpretation (i.e. language line) is the most utilized LASU service followed by oral interpretation (face to face interpreter) and written translation services. This chapter examines data on the two most utilized LASU language services - language line and interpreter services - to consider two sets of questions about language assistance use:

- Does a school's use of language line and/or interpreters services vary according to its enrollment of ESOL eligible students?
- Does a school's use of Spanish language line services and/or interpreters, which accounts for the vast majority of both service requests, vary according to its Latino student enrollment?

To address these questions, OLO compared school-based location data on:

- 33,058 language line uses from June 2010 to June 2013 and 23,829 interpretation uses from August 2010 to September 2013 with schools' ESOL eligible enrollment in 2012-13; and
- 19,564 Spanish language line uses from June 2010 to June 2013 and 19,702 Spanish interpretation uses from August 2010 to September 2013 with schools' Latino enrollment in 2012-13.

OLO acknowledges that factors other than schools' ESOL eligible enrollment or Latino enrollment may impact its requests for language services. For example, the availability of bilingual staff in schools and the English proficiency of families with children receiving ESOL services may mitigate the need for schools to request language line or interpreter services from MCPS' central offices. If OLO had MCPS data describing the linguistic diversity of MCPS staff in schools, the relationship between student demographics, staff linguistic diversity, and requests for central-office language services among schools in MCPS could have been examined.

This chapter is presented in three parts:
A. Schools by Geographic Area compares schools' shares of language line and interpreter requests to their ESOL eligible enrollment and schools' shares of Spanish language line and interpreter requests to their Latino enrollment across six geographic areas.
B. Schools by ESOL Concentration compares schools' shares of language line and interpreter requests to their ESOL eligible enrollment among the 20 elementary, 10 middle, and 5 high schools with either the highest or lowest concentrations of ESOL students.
C. Schools by Latino Concentration compares schools' shares of Spanish language line and interpreter requests to their Latino enrollment among the 20 elementary, 10 middle, and 5 high schools with either the highest or lowest concentrations of Latino students.

Like Chapter III, this chapter also uses two metrics to describe the alignment between schools' requests for language services and their ESOL eligible enrollment and Latino student enrollment:

- The Demographic Gap subtracts the share or percentage of language service requests from the share or percentage of ESOL eligible/Latino student enrollment. Positive numbers indicate that schools are requesting a greater share of language services than their share of the ESOL/Latino student population. Negative numbers indicates that schools are requesting a lower share of language services than their share of the ESOL/Latino student population.
- The Parity Index divides the share or percentage of language services requests by the share or percentage of ESOL-eligible or Latino students. The result describes the degree of "match" between language requests and student enrollment. A number of less than 100\% indicates that schools have a lower likelihood of language requests than their share of ESOL eligibile or Latino enrollment, while a number exceeding $100 \%$ indicates that the school has a higher likelihood of requesting language services.

Overall, this chapter's analysis finds that the demand for language services generally aligns with schools' ESOL eligible and Latino enrollment. Yet, there are a few exceptions. Given their shares of ESOL eligible and Latino enrollment, school requests for language services are generally:

- Higher among Downcounty Consortium schools.
- Higher among middle and high schools with high concentrations of ESOL eligible and Latino students.
- Lower among elementary schools with high concentrations of ESOL eligible and Latino students.
- Lower among most schools with low concentrations of ESOL eligible and Latino students.

These findings suggest that Downcounty Consortium schools and secondary schools with high concentrations of ESOL eligible and Latino students may have a greater need for language services than their shares of enrollment and that elementary schools at both ends of the ESOL/Latino student concentration spectrum, and schools with low concentrations of ESOL eligible and Latino students may under-utilize central office language services or rely on non-central office services when language services are needed (e.g. bilingual staff).

## A. Schools by Geographic Area

This section compares 2012-13 demographic data on students to 2010-13 requests for language services across six geographic areas. This data is presented in four parts to separately compare language requests to schools' ESOL eligible enrollment and Latino student enrollment.

## 1. Language Line Requests and ESOL Eligible Students

Table 4-2 on the next page compares language line data to ESOL eligible enrollment by geographic area. An analysis of the data shows that:

- Mid-County and Northeastern Consortium schools made requests for language line services that were commensurate with their shares of ESOL eligible students. The "match" between ESOL eligible enrollment and language line requests as reflected by the parity index ranged from 95-106\%.
- Up-County, Western Area, and Gaithersburg Area schools made fewer requests for language line services than their shares of ESOL eligible enrollment. The "match" between shares of language line requests and ESOL eligible enrollment as reflected by the parity index varied between $68 \%$ and $84 \%$ among these geographic areas. Thus, given their shares of ESOL eligible students, these schools were about $16 \%$ to $32 \%$ less likely to request language line services.
- Downcounty Consortium schools made more requests for language line services than their shares of ESOL eligible enrollment. The parity index was $136 \%$. These schools were $36 \%$ more likely to request language line services given their share of ESOL eligible students.

Table 4-2: Language Line Calls and ESOL Students by Geographic Area

| Geographic Area | Share of <br> Language <br> Line Calls | Share of ESOL <br> Eligible <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity $)$ | Parity Index** <br> $(100 \%=$ Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | $13.8 \%$ | $16.6 \%$ | $-2.8 \%$ | $83.1 \%$ |
| Up-County | $8.5 \%$ | $12.6 \%$ | $-4.1 \%$ | $67.5 \%$ |
| Mid-County | $12.0 \%$ | $12.6 \%$ | $-0.6 \%$ | $95.2 \%$ |
| Gaithersburg Area | $14.1 \%$ | $16.7 \%$ | $-2.6 \%$ | $84.4 \%$ |
| Northeast Consortium | $13.7 \%$ | $12.9 \%$ | $+0.8 \%$ | $106.2 \%$ |
| Downcounty Consortium | $37.9 \%$ | $27.8 \%$ | $+10.1 \%$ | $136.3 \%$ |

* Demographic Gap equals Share of Language Line Calls minus the Share of ESOL Students
* Parity Index equals Language Line Share/ESOL Student Share


## 2. Interpreter Requests and ESOL Students

Table 4-3 on the next page compares interpreter data to ESOL eligible enrollment by geographic area and shows that:

- Up-County, Mid-County, and Gaithersburg Area schools made requests for interpreter services that were commensurate with their shares of total ESOL enrollment. The "match" between shares of interpreter requests and ESOL-eligible students as reflected by the services to student parity index varied between $92 \%$ and $112 \%$ among these geographic areas.
- Western Area and Northeastern Consortium schools made fewer requests for interpreters than their share of ESOL eligible students. Their "matches" between requests and ESOL eligibility as reflected by the parity index ranged from $78-79 \%$. Given their shares of ESOL eligible students, these schools were about $20 \%$ less likely than others to request interpreters.
- Downcounty Consortium schools made more requests for interpreter services than their shares of ESOL eligible students. The match between requests and ESOL eligible students as reflected by the parity index was $123 \%$. Thus, these schools were $23 \%$ more likely to request interpreter services given their share of ESOL eligible students.

Demand for Language Services by Geographic Area: Taken together, the data in Tables 4-2 and 4-3 suggest that Downcounty Consortium schools were more likely to request language line and interpreter services than anticipated by their share of ESOL eligible students.

Table 4-3: Interpreter Requests and ESOL Students by Geographic Area

| Geographic Area | Share of <br> Interpreter <br> Requests | Share of ESOL <br> Eligible <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity) | Parity Index** <br> $(100 \%=$ Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | $13.1 \%$ | $16.6 \%$ | $-3.7 \%$ | $78.0 \%$ |
| Up-County | $13.0 \%$ | $12.6 \%$ | $+0.4 \%$ | $103.2 \%$ |
| Mid-County | $14.1 \%$ | $12.6 \%$ | $+1.5 \%$ | $111.9 \%$ |
| Gaithersburg Area | $15.4 \%$ | $16.7 \%$ | $-1.3 \%$ | $92.2 \%$ |
| Northeast Consortium | $10.2 \%$ | $12.9 \%$ | $-2.7 \%$ | $79.1 \%$ |
| Downcounty <br> Consortium | $34.2 \%$ | $27.8 \%$ | $+6.4 \%$ | $123.0 \%$ |
| *Demographic Gap equals Share of Interpreter Requests minus the Share of ESOL Students <br> ** Parity Index equals Interpreter Share/ESOL Student Share |  |  |  |  |

## 3. Spanish Language Line Requests and Latino Students

Table 4-4 compares data on the share of school requests for Spanish language line services to the share of Latino enrollment by geographic area. An analysis of the data shows that:

- Western Area and Northeastern Consortium made requests for Spanish language line services that were commensurate with their shares of total Latino enrollment. The "match" between requests and enrollment as reflected by the parity index ranged from 104-113\%.
- Up-County, Gaithersburg Area, and Mid-County schools made fewer requests for Spanish language line services than their share of Latino enrollment. The parity index ranged from $69-81 \%$. Thus, given their share of Latino enrollment, these schools were $19-31 \%$ less likely than other schools to request Spanish language line services.
- Downcounty Consortium schools made more requests for Spanish language line services than their share of Latino enrollment. The parity index was $128 \%$. Thus, given their share of Latino enrollment, Downcounty Consortium schools were $28 \%$ more likely than other schools to request Spanish language line services.

Table 4-4: Spanish Language Line Calls Made and Latino Students by Geographic Area

| Geographic Area | Share of <br> Spanish <br> Calls | Share of <br> Latino <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity $)$ | Parity <br> Index** <br> $(100 \%=$ Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | $13.7 \%$ | $13.2 \%$ | $+0.5 \%$ | $103.8 \%$ |
| Up-County | $8.5 \%$ | $12.3 \%$ | $-3.8 \%$ | $69.1 \%$ |
| Mid-County | $12.0 \%$ | $14.8 \%$ | $-2.8 \%$ | $81.1 \%$ |
| Gaithersburg Area | $14.3 \%$ | $19.0 \%$ | $-4.7 \%$ | $75.3 \%$ |
| Northeast Consortium | $13.5 \%$ | $12.0 \%$ | $+1.5 \%$ | $112.5 \%$ |
| Downcounty Consortium |  |  |  |  |

## 4. Spanish Interpreter Requests and Latino Students

Table 4-5 on the next page compares data on the share of school requests for Spanish interpreter services to the share of Latino enrollment by geographic area. Overall, an analysis of the data yields the following findings:

- Schools in four of six geographic areas (Western, Up-County, Mid-County, and Gaithersburg) made requests for Spanish interpreter services that were commensurate with their shares of total Latino enrollment. The "match" as reflected by the student to services parity index ranged from 85-106\%.
- Northeastern Consortium schools made fewer requests for Spanish interpreter services than their share of Latino enrollment. The parity index was $77 \%$. Thus, given their share of Latino enrollment, Northeast Consortium schools were $23 \%$ less likely than other schools to request Spanish interpreter services.
- Downcounty Consortium schools made more requests for Spanish interpreter services than their share of Latino enrollment. The parity index was $119 \%$. Thus, given their share of Latino enrollment, Downcounty Consortium schools were $19 \%$ more likely than other schools to request Spanish interpreters.

Table 4-5: Spanish Interpreter Requests and Latino Students by Geographic Area

| Geographic Area | Share of <br> Spanish <br> Requests | Share of <br> Latino <br> Students | Demographic <br> Gap* <br> (0.0\% = Parity) | Parity <br> Index** <br> (100\% = Parity) <br> Western Area <br> Up-County <br> Mid-County <br> Gaithersburg Area <br> Northeast Consortium $13.2 \%$ |
| :--- | ---: | ---: | ---: | ---: |

* Demographic Gap equals Share of Spanish Interpreter Requests minus the Latino Student Share
** Parity Index equals Spanish Share of Interpreter Requests/Latino Student Share
Demand for Spanish Language Services by Geographic Area: The data in Tables 4-4 and 4-5 suggest that Downcounty Consortium schools were more likely to request Spanish language line services than anticipated by their share of ESOL enrollment.


## B. Schools by ESOL Concentration

This section compares 2012-13 demographic data on students to 2010-13 requests for language services across schools with varying concentrations of ESOL eligible students. This data is presented in four parts to separately compare language line and interpreter requests among schools with either high or low concentration of ESOL eligible students where:

- High concentration schools refer to the 20 elementary, 10 middle, and five high schools with the highest concentrations or percentages of ESOL eligible students; and
- Low concentration schools refer to the 20 elementary, 10 middle, and five high schools with the lowest concentrations or percentages of ESOL eligible students.


## 1. Language Line Requests among High ESOL Concentration Schools

Table 4-6 compares data describing language line requests among the 20 elementary, 10 middle, and five high schools with the highest percentages of ESOL eligible students.

An analysis of the data shows that high ESOL concentration elementary schools made a commensurate request for language line services given their share of ESOL eligible students while high concentration secondary schools made more requests. More specifically:

- The parity index for high ESOL concentration elementary schools was $107 \%$. Given their ESOL eligible enrollment, these schools were 7\% more likely to request language line services.
- The parity index was $147 \%$ for high ESOL concentration high schools. Given their ESOL eligible enrollment, these schools were $47 \%$ more likely to request language line services.
- The parity index was $52 \%$ for high ESOL concentration middle schools. Given their ESOL eligible enrollment, these schools were $52 \%$ more likely to request language line services.

Table 4-6: Language Line Calls and ESOL Students among High Concentration Schools

| Schools by Level | Share of <br> Language <br> Line Calls | Share of <br> ESOL Eligible <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity) | Parity <br> Index** <br> $(100 \%=$ Parity) |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | $35.0 \%$ | $32.6 \%$ | $2.4 \%$ | $107.2 \%$ |
| Middle Schools (10) | $56.4 \%$ | $38.5 \%$ | $17.9 \%$ | $146.6 \%$ |
| High Schools (5) | $46.6 \%$ | $30.7 \%$ | $15.9 \%$ | $151.8 \%$ |

* Demographic Gap equals Share of Language Line Calls minus the Share of ESOL Students
** Parity Index equals Share of Language Line Calls/Share of ESOL Students


## 2. Interpreter Requests among High ESOL Concentration Schools

Table 4-7 on the next page compares data describing percentages of ESOL eligible enrollment with interpreter requests among the 20 elementary, 10 middle, and five high schools with the highest percentages of ESOL eligible students.

An analysis of the data shows that high ESOL concentration elementary schools made fewer requests for interpreters than their share of ESOL eligible students while high concentration secondary schools made more requests, particularly among high schools. More specifically:

- The parity index was $84 \%$ for high ESOL concentration elementary schools. Given their ESOL eligible enrollment, these schools were $16 \%$ less likely to request interpreters.
- The parity index was $119 \%$ for high ESOL concentration middle schools. Given their ESOL eligible enrollment, these schools were $19 \%$ more likely to request interpreters.
- The parity index was $171 \%$ for high ESOL concentration high schools. Given their ESOL eligible enrollment, these schools were $71 \%$ more likely to request interpreters.

Table 4-7: Interpreter Requests and ESOL Students among High Concentration Schools

| Schools by Level | Share of <br> Interpreter <br> Requests | Share of <br> ESOL Eligible <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity $)$ | Parity Index** <br> $(100 \%=$ Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | $27.3 \%$ | $32.6 \%$ | $-5.3 \%$ | $83.7 \%$ |
| Middle Schools (10) | $45.8 \%$ | $38.5 \%$ | $7.3 \%$ | $119.0 \%$ |
| High Schools (5) | $52.6 \%$ | $30.7 \%$ | $21.9 \%$ | $171.3 \%$ |

* Demographic Gap equals Share of Interpreter Requests minus the Share of ESOL Students
** Parity Index equals Share of Interpreter Requests/Share of ESOL Students
Demand for Language Services at High ESOL Concentration Schools: Taken together, the data in Tables 4-6 and 4-7 suggest that high concentration secondary schools were more likely to request both language line and interpreter services than anticipated by their shares of ESOL eligible enrollment.


## 3. Language Line Requests among Low ESOL Concentration Schools

Table 4-8 compares data on school requests for language line services to ESOL eligibility rates among the 20 elementary, 10 middle, and 5 high schools with the lowest percentages of ESOL eligible students. An analysis of the data shows that low ESOL concentration high schools made fewer requests for language line services than their share of ESOL eligible students. More specifically:

- The parity index was $77 \%$ for low ESOL concentration elementary schools. Given their ESOL eligible enrollment, these schools were $23 \%$ less likely to request language line services.
- The parity index was $103 \%$ for low ESOL concentration middle schools. Thus ESOL eligible enrollment and language line requests were commensurate for these schools.
- The parity index was $17 \%$ for low ESOL concentration high schools. Given their ESOL eligibility rates, these schools were $83 \%$ less likely to request language line services.

Table 4-8: Language Line Calls and ESOL Students among Low Concentration Schools

| Schools by Level | Share of <br> Language Line <br> Calls | Share of <br> ESOL Eligible <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity) | Parity <br> Index** <br> (100\% = Parity) |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | $2.7 \%$ | $3.5 \%$ | $-0.8 \%$ | $76.5 \%$ |
| Middle Schools (10) | $13.3 \%$ | $12.9 \%$ | $0.4 \%$ | $103.4 \%$ |
| High Schools (5) | $1.3 \%$ | $7.3 \%$ | $-6.0 \%$ | $17.3 \%$ |

* Demographic Gap equals Share of Language Line Calls minus the Share of ESOL Students
** Parity Index equals Share of Language Line Calls/Share of ESOL Students


## 4. Interpreter Requests among Low ESOL Concentration Schools

Table 4-9 compares data on school requests for interpreters to ESOL eligible enrollment among the 20 elementary, 10 middle, and 5 high schools with the lowest percentages of ESOL eligible students. An analysis of the data shows that low ESOL concentration schools made fewer requests for interpreters than their share of ESOL eligible students, particularly high schools. More specifically:

- The parity index was $86 \%$ for low ESOL concentration elementary schools. Given their ESOL eligibility shares, these schools were $14 \%$ less likely to request interpreters.
- The parity index was $81 \%$ for low ESOL concentration middle schools. Given their ESOL eligibility shares, these schools were $19 \%$ less likely to request interpreters.
- The parity index was $41 \%$ for low ESOL concentration high schools. Given their ESOL eligibility shares, these schools were $59 \%$ less likely to request interpreters.

Table 4-9: Interpreter Requests and ESOL Students among Low Concentration Schools

| Schools by Level | Share of <br> Interpreter <br> Requests | ESOL Eligible <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity $)$ | Parity Index** <br> $(100 \%=$ Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | $3.0 \%$ | $3.5 \%$ | $-0.5 \%$ | $85.7 \%$ |
| Middle Schools (10) | $10.4 \%$ | $12.9 \%$ | $-2.5 \%$ | $80.6 \%$ |
| High Schools (5) | $3.0 \%$ | $7.3 \%$ | $-4.3 \%$ | $41.1 \%$ |

* Demographic Gap equals Share of Interpreter Requests minus the Share of ESOL Students
** Parity Index equals Share of Interpreter Requests/Share of ESOL Students
Demand for Language Services at Low ESOL Concentration Schools: Taken together, the data in Tables 4-8 and 4-9 suggest that low concentration ESOL schools, and low concentration ESOL high schools in particular, tend to request fewer language line and interpreter services than anticipated by their shares of ESOL eligible enrollment.


## C. Schools by Latino Concentration

This section compares 2012-13 demographic data on students to 2010-13 requests for Spanish language services across schools with varying concentrations of Latino students. This data is presented in four parts to separately compare language line and interpreter requests among schools with either high or low concentration of Latino students where -

- High concentration schools refer to the 20 elementary, 10 middle, and five high schools with the highest concentrations or percentages of Latino students; and
- Low concentration schools refer to the 20 elementary, 10 middle, and five high schools with the lowest concentrations or percentages of Latino students.


## 1. Spanish Language Line Requests among High Latino Concentration Schools

Table 4-10 compares data on Spanish language line requests to enrollment among the 20 elementary, 10 middle, and five high schools with the highest percentages of Latino students. Overall, an analysis of the data shows that high Latino concentration secondary schools made more requests for Spanish language line calls than their share of Latino enrollment. More specifically:

- The parity index was $93 \%$ for high Latino concentration elementary schools suggesting that their requests for Spanish language line services was commensurate with their Latino student enrollment.
- The parity index was $152 \%$ for high Latino concentration middle schools. Given their Latino enrollment, these schools were $52 \%$ more likely to request Spanish language line services.
- The parity index was $135 \%$ for high Latino concentration high schools. Given their Latino enrollment, these schools were $35 \%$ more likely to request Spanish interpreters.

Table 4-10: Spanish Language Line Calls and Latino Students at High Concentration Schools

| Schools by Level | Share of <br> Spanish <br> Calls | Share of <br> Latino <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity) | Parity <br> Index** <br> $(100 \%=$ Parity) <br> Elementary Schools (20)$\quad 36.0 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Middle Schools (10) | $58.9 \%$ | $38.6 \%$ | $-2.6 \%$ | $93.3 \%$ |
| High Schools (5) | $48.2 \%$ | $35.8 \%$ | $20.1 \%$ | $151.8 \%$ |

* Demographic Gap equals Share of Spanish Calls minus the Share of Latino Students
** Parity Index equals Share of Spanish Calls/Share of Latino Students


## 2. Spanish Interpreter Requests among High Latino Concentration Schools

Table 4-11 on the next page compares data on Latino enrollment with Spanish interpreter requests among the 20 elementary, 10 middle, and five high schools with the highest percentages of Latino students. Overall, an analysis of the data shows that high Latino concentration elementary schools made fewer requests for Spanish interpreters than their share of Latino enrollment while high concentration secondary schools made more requests, particularly among high schools. More specifically:

- The parity index was $75 \%$ for high Latino concentration elementary schools. Given their Latino enrollment, these schools were $25 \%$ less likely to request Spanish interpreters.
- The parity index was $133 \%$ for high Latino concentration middle schools. Given their Latino enrollment, these schools were $33 \%$ more likely to request Spanish interpreters.
- The parity index was $153 \%$ for high Latino concentration high schools. Given their Latino enrollment, these schools were $53 \%$ more likely to request Spanish interpreters.

Table 4-11: Spanish Interpreter Requests and Latino Students at High Concentration Schools

| Schools by Level | Share of <br> Spanish <br> Requests | Share of <br> Latino <br> Students | Demographic <br> Gap* <br> (0.0\% = Parity) | Parity <br> Index** <br> (100\% = Parity) <br> Elementary Schools (20)$\quad 29.0 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Middle Schools (10) | $51.7 \%$ | $38.6 \%$ | $-9.6 \%$ | $75.1 \%$ |
| High Schools (5) | $54.8 \%$ | $38.8 \%$ | $12.9 \%$ | $133.2 \%$ |

* Demographic Gap equals Share of Spanish Requests minus the Share of Latino Students
** Parity Index equals Share of Spanish Requests/Share of Latino Students
Demand for Language Services at High Latino Concentration Schools: The data in Tables 4-10 and 4-11 suggest that secondary schools with the highest concentrations of Latino students request more Spanish language line and interpreter services than anticipated by their shares of ESOL enrollment.


## 3. Spanish Language Line Requests among Low Latino Concentration Schools

Table 4-12 compares data on Spanish language line requests to enrollment among the 20 elementary, 10 middle, and five high schools with the lowest percentages of Latino students. Overall, an analysis of the data shows that low Latino concentration schools tended to make fewer requests for Spanish language line calls than their share of Latino enrollment. More specifically:

- The parity index was $65 \%$ for low Latino concentration elementary schools. Given their Latino enrollment, these schools were 35\% less likely to request Spanish language line services.
- The parity index was $111 \%$ for low Latino concentration middle schools. Given their Latino enrollment, these schools were $11 \%$ more likely to request Spanish language line services.
- The parity index was $13 \%$ for low Latino concentration high schools. Given their Latino enrollment, these schools were $87 \%$ less likely to request Spanish language line services.

Table 4-12: Spanish Language Line Calls and Latino Students at Low Concentration Schools

| Schools by Level | Share of <br> Spanish <br> Calls | Share of <br> Latino <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity $)$ | Parity <br> Index** <br> $(100 \%=$ Parity) |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | $2.6 \%$ | $4.0 \%$ | $-1.4 \%$ | $65.0 \%$ |
| Middle Schools (10) | $13.0 \%$ | $11.7 \%$ | $1.3 \%$ | $111.1 \%$ |
| High Schools (5) | $1.1 \%$ | $8.4 \%$ | $-7.3 \%$ | $13.1 \%$ |

[^8]
## 4. Spanish Interpretation Requests among Low Latino Concentration Schools

Table 4-13 compares data on school requests for Spanish interpreter services to Latino enrollment among the 20 elementary, 10 middle, and 5 high schools with the lowest concentrations of Latino students. Overall, an analysis of the data shows that these low Latino concentration schools made fewer requests for Spanish interpreters given their Latino enrollment. More specifically:

- The parity index was $53 \%$ for low Latino concentration elementary schools. Given their Latino enrollment, these schools were $47 \%$ less likely to request Spanish interpreters.
- The parity index was $46 \%$ for low Latino concentration middle schools. Given their Latino enrollment, these schools were $54 \%$ less likely to request Spanish interpreters.
- The parity index was $31 \%$ for low Latino concentration high schools. Given their Latino enrollment, these schools were $69 \%$ less likely to request Spanish interpreters.

Demand for Language Services at Low Latino Concentration Schools: The data in Tables 4-12 and 4-13 suggest that low Latino concentration schools tend to request fewer Spanish language services than anticipated by their shares of Latino enrollment.

Table 4-13: Spanish Interpreter Requests and Latino Students at Low Concentration Schools

| Schools by Level | Share of <br> Spanish <br> Requests | Share of <br> Latino <br> Students | Demographic <br> Gap* <br> $(0.0 \%=$ Parity $)$ | Parity <br> Index** <br> $(100 \%=$ Parity $)$ |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | $2.1 \%$ | $4.0 \%$ | $-1.9 \%$ | $52.5 \%$ |
| Middle Schools (10) | $5.4 \%$ | $11.7 \%$ | $-6.3 \%$ | $46.2 \%$ |
| High Schools (5) | $2.6 \%$ | $8.4 \%$ | $-5.8 \%$ | $31.0 \%$ |

* Demographic Gap equals Share of Spanish Requests minus the Share of Latino Students
** Parity Index equals Share of Spanish Requests/Share of Latino Students


## Chapter V: Summary of Findings

This Office of Legislative Oversight (OLO) report was prepared at the request of the County Council to examine the alignment of demographics between Montgomery County Public Schools' student body and its teachers and the use of language assistance services among schools. This chapter describes the four major findings that emerged from OLO's review. They are that:

- Mirroring state and national trends, Whites are over-represented among MCPS school professionals relative to student enrollment. OLO however could not discern the linguistic alignment between school staffs and students because MCPS does not track school staffs' second language skills;
- Student subgroups tend to be concentrated in schools with other members of their subgroup rather than evenly dispersed throughout the school system, especially White students;
- Schools enrolling more students in specific subgroups are staffed by more professionals from that subgroup. Yet, the demographic gap between students and staff is highest among the most culturally diverse schools; and
- The data provided by MCPS does not enable OLO to compare the linguistic diversity of its school personnel to its student body. OLO's review of MCPS' language assistance data, however, suggests that the demand for interpreter services among schools generally aligns with their ESOL eligible and Latino student enrollments.

A detailed description of each of these specific findings follows.
Finding \#1: Whites are over-represented among school professionals in MCPS relative to student enrollment and student to staff ratios vary widely by subgroup. Yet, the linguistic alignment between school staff and ESOL students remains unknown.

As described in Table 5-1 below, White staff accounted for 76\% of school-based professionals employed by MCPS in 2013 while White students accounted for $33 \%$ of enrollment. Thus, Whites are over-represented among school professionals compared to enrollment. The over-representation of White professionals to students is especially high at the elementary level, where Whites accounted for $79 \%$ of school professionals compared to $31 \%$ of enrollment.

Table 5-1: MCPS Staff and Student Distribution Data, 2012-13

| Subgroups | Staff Share of <br> Population | Student Share of <br> Population | Demographic Gap* <br> $(0.0 \%=$ Parity) |
| :--- | ---: | ---: | ---: |
| Asians | $5.0 \%$ | $14.3 \%$ | $-9.3 \%$ |
| Blacks | $12.5 \%$ | $21.3 \%$ | $-8.8 \%$ |
| Latinos | $5.3 \%$ | $26.6 \%$ | $-21.3 \%$ |
| Whites | $75.7 \%$ | $33.0 \%$ | $+42.7 \%$ |
| ESOL | $\mathrm{n} / \mathrm{a}$ | $15.4 \%$ | $\mathrm{n} / \mathrm{a}$ |
| * Demographic gap equals Student Share minus the Staff Share |  |  |  |

Conversely, Latinos, Asians, and Blacks are under-represented as school professionals compared to their enrollment. The under-representation of Latinos among school professionals is especially high, as they accounted for 5\% of school professionals compared to $27 \%$ of student enrollment in 2013. The data also show that Asians accounted for $5 \%$ of school professionals, but $14 \%$ of students, and that Blacks accounted for $13 \%$ of school professionals compared to $21 \%$ of students.

The over-representation of White staff in MCPS schools and under-representation of staff from other subgroups leads to wide variation in MCPS student-to-staff ratios by subgroup as shown in Table 5-2, from a low of five White students per White professional among MCPS' elementary schools to a high of 62 Latino students per Latino professional among MCPS' high schools. Given the higher concentration of White professionals among MCPS' elementary schools, same subgroup student-to-staff ratios tend to be higher for Black and Latino students in these grades.

Table 5-2: Same Subgroup Student-to-Staff Ratios by School Type, 2012-13

| Schools by Subgroup Enrollment | Asian <br> Students <br> per Staff | Black <br> Students <br> per Staff | Latino <br> Students <br> per Staff | White <br> Students <br> per Staff |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools | 33.5 | 26.0 | 71.3 | 5.0 |
| Middle Schools | 37.4 | 16.5 | 56.8 | 6.1 |
| High Schools | 43.3 | 21.8 | 62.1 | 6.6 |

Of note, the demographic mismatch between school professionals and students in MCPS is emblematic of state and national trends. As noted by the Center for American Progress, at the national level people of color (i.e. Black, Latino, Asian, Pacific Islander, Native American, and Multi-racial persons) accounted for $18 \%$ of all teachers in 2012 but $48 \%$ of all students; in Maryland, people of color accounted for $17 \%$ of all teachers and $57 \%$ of all students. ${ }^{31}$

Finally, OLO could not compare the linguistic diversity of school-based professional staff to ESOL eligible students because MCPS does not track the second language skills of school personnel.
Therefore, the linguistic alignment between school staffs and MCPS' students remains unknown.
Finding \#2: Student subgroups tend to be concentrated in schools with other members of their subgroup rather than evenly dispersed throughout the school system, especially White students.

Depending on the school level (elementary, middle, and high school), Asian students make up 14$15 \%$ of enrollment, Black students comprise $21-22 \%$ of enrollment, Latino students constitute $24-$ $29 \%$ of enrollment, and White students make up 31-35\% of enrollment. Few MCPS schools, however, reflect the school system's racial and ethnic diversity at the individual campus level.

Instead, as shown in Table 5-3 on the next page, students by subgroup are often concentrated in schools with other subgroup peers, especially White and Asian students where:

[^9]- Asians accounted for $14 \%$ of elementary and $15 \%$ of middle school enrollment in 2013, but $42-46 \%$ of all Asian students were concentrated among the fifth of schools whose Asian enrollment exceeded 20\%.
- Whites accounted for $31-35 \%$ of school enrollment in 2013, but $57-59 \%$ of all White elementary and middle school students and $64 \%$ of all White high school students were enrolled among the third of schools whose White enrollment exceeded $45 \%$.

Black and Latino students were also concentrated among schools with medium to high concentrations of their subgroup peers, but at lower levels than Whites and Asians. More specifically, a majority of Black and Latino secondary students were enrolled in schools where their subgroups accounted for $20-44 \%$ of student enrollment. With Blacks accounting for $22 \%$ of secondary enrollment, and Latinos accounting for $24-25 \%$ of secondary enrollment, this finding suggests that Black and Latino secondary students are somewhat dispersed across secondary schools.

At the elementary level, however, Latinos appear to be more concentrated in schools with other Latino peers. For example, $42 \%$ of Latino students were concentrated among the 24 elementary schools whose Latino enrollment exceeded $45 \%$ compared to $21 \%$ of Black students enrolled in 7 MCPS elementary schools whose Black enrollment exceeded 45\%.

Table 5-3: Distribution of Students by Subgroup and School Level, 2012-13

| Shares of School Enrollment | Asian Students |  | Black Students |  | Latino Students |  | White Students |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share | Schools | Share | Schools | Share | Schools | Share | Schools |
| Elementary Schools (130) |  |  |  |  |  |  |  |  |
| Low Concentration (0-19\%) | 54.4\% | 105 | 34.2\% | 78 | 19.3\% | 60 | 11.1\% | 48 |
| Medium Concentration (20-44\%) | 45.6\% | 25 | 45.1\% | 43 | 47.1\% | 46 | 32.4\% | 39 |
| High Concentration (45\% +) | -- | -- | 20.7\% | 9 | 41.9\% | 24 | 56.5\% | 43 |
| Middle Schools (38) |  |  |  |  |  |  |  |  |
| Low Concentration (0-19\%) | 57.6\% | 31 | 25.7\% | 16 | 25.8\% | 17 | 12.9\% | 12 |
| Medium Concentration $(20-44 \%)$ | 42.4\% | 7 | 54.9\% | 19 | 65.1\% | 19 | 27.7\% | 14 |
| High Concentration ( $45 \%$ +) | -- | -- | 19.4\% | 3 | 9.1\% | 2 | 59.4\% | 12 |
| High Schools (25) |  |  |  |  |  |  |  |  |
| Low Concentration (0-19\%) | 68.2\% | 21 | 25.1\% | 12 | 18.4\% | 9 | 6.9\% | 6 |
| Medium Concentration (20-44\%) | 31.8\% | 4 | 64.8\% | 12 | 62.5\% | 13 | 31.7\% | 3 |
| High Concentration ( $45 \%$ +) | -- | -- | 10.2\% | 1 | 19.2\% | 3 | 61.4\% | 9 |

Finding \#3: Although schools enrolling the highest shares of subgroups are staffed by more professionals from that subgroup, the demographic mismatch between staff and students is often greatest among schools with the largest minority populations.

As described in Table 5-4, generally schools with a higher concentration of students in a specific subgroup had a higher percentage of school professionals from that subgroup. For example, Latinos accounted for five percent of school professionals and $29 \%$ of enrollment among MCPS elementary schools but accounted for $12 \%$ of professional staff among the elementary schools where Latinos accounted for $45 \%$ or more of enrollment.

Table 5-4: Staffing by Subgroup and School Type, 2012-13

| Schools by Subgroup Enrollment | \% Asian Staff | \% Black Staff | \% Latino Staff | $\begin{aligned} & \text { \%White } \\ & \text { Staff } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| All Elementary Schools | 5.3\% | 9.8\% | 5.0\% | 78.5\% |
| - Low Concentration (0\%-19\%) | 9.7\% | 6.3\% | 2.8\% | 72.4\% |
| - Medium Low ( $20 \%$ - 29\%) | 5.1\% | 10.5\% | 4.2\% | 80.1\% |
| - Medium High ( $30 \%-44 \%$ ) | 3.2\% | 15.6\% | 6.2\% | 79.9\% |
| - High Concentration ( $45 \%+$ ) | -- | 22.5\% | 8.3\% | 87.2\% |
| All Middle Schools | 5.1\% | 16.7\% | 5.6\% | 71.1\% |
| - Low Concentration (0\%-19\%) | 12.4\% | 11.4\% | 5.4\% | 61.7\% |
| - Medium Low ( $20 \%$ - 29\%) | 5.2\% | 18.0\% | 4.8\% | 63.5\% |
| - Medium High ( $30 \%-44 \%$ ) | 0.8\% | 23.1\% | 5.7\% | 76.7\% |
| - High Concentration ( $45 \%+$ ) | -- | 32.0\% | 12.3\% | 81.0\% |
| All High Schools | 4.8\% | 14.3\% | 5.5\% | 74.0\% |
| - Low Concentration (0\%-19\%) | 15.7\% | 7.6\% | 4.2\% | 61.1\% |
| - Medium Low (20\%-29\%) | 2.4\% | 19.3\% | 5.8\% | 72.1\% |
| - Medium High (30\% - 44\%) | 2.8\% | 22.2\% | 6.4\% | 76.5\% |
| - High Concentration ( $45 \%+$ ) | --- | 19.4\% | 7.4\% | 83.2\% |

With the exception of Asians, this pattern of schools with higher subgroup enrollment having a higher proportion of school professionals from that subgroup holds true. However, the demographic mismatch between students and school professionals is often highest among schools with the highest concentrations of students of color. Data on student-to-staff ratios across schools with varying concentrations of subgroup enrollment demonstrate this trend.

Table 5-5 on the next page also shows that student-to-staff ratios by subgroup are often highest among schools with the highest concentrations of Black and Latino students. For example:

- There were 22 Black students per Black professional among the high schools with the lowest concentrations of Black students compared to 41 Black students per Black professional among the high schools with the highest concentrations of Black students.
- There were 42 Latino students per Latino professional among the high schools with the lowest levels of Latino enrollment compared to 84 Latino students per Latino professional among the high schools with the highest concentrations of Latino students.

Table 5-5: Student-to-Staff Ratios by Subgroup and School Type, 2012-13

| Schools by Subgroup Enrollment | Asian <br> Students <br> per Staff | Black <br> Students <br> per Staff | Latino <br> Students <br> per Staff | White <br> Students <br> per Staff |
| :--- | ---: | ---: | ---: | ---: |
| All Elementary Schools | $\mathbf{3 3 . 5}$ | $\mathbf{2 6 . 0}$ | $\mathbf{7 1 . 3}$ | $\mathbf{5 . 0}$ |
| - Low Concentration $(0 \%-19 \%)$ | 24.0 | 23.4 | 60.2 | 1.3 |
| - Medium Low $(20 \%-29 \%)$ | 57.3 | 28.4 | 69.4 | 3.9 |
| - Medium High $(30 \%-44 \%)$ | 73.2 | 25.2 | 69.6 | 6.2 |
| - High Concentration $(45 \%+)$ | -- | 30.3 | 80.1 | 9.6 |
| All Middle Schools | $\mathbf{3 7 . 4}$ | $\mathbf{1 6 . 5}$ | $\mathbf{5 6 . 8}$ | $\mathbf{6 . 1}$ |
| - Low Concentration $(0 \%-19 \%)$ | 27.6 | 13.5 | 87.3 | 2.6 |
| - Medium Low $(20 \%-29 \%)$ | 67.9 | 16.7 | 18.3 | 4.2 |
| - Medium High $(30 \%-44 \%)$ | 104.5 | 18.1 | 80.7 | 5.8 |
| - High Concentration $(45 \%+)$ | -- | 20.5 | 50.6 | 9.8 |
| All High Schools | $\mathbf{4 3 . 3}$ | $\mathbf{2 1 . 8}$ | $\mathbf{6 2 . 1}$ | $\mathbf{6 . 6}$ |
| - Low Concentration $(0 \%-19 \%)$ | 38.9 | 21.5 | 41.8 | 2.4 |
| - Medium Low $(20 \%-29 \%)$ | 56.0 | 18.3 | 60.3 | 4.7 |
| - Medium High $(30 \%-44 \%)$ | 60.1 | 23.3 | 74.9 | 6.1 |
| - High Concentration $(45 \%+)$ | --- | 40.6 | 83.8 | 10.2 |

Finding \#4: A review of MCPS' language assistance data suggests that school demand for language services generally aligns with schools' ESOL eligible and Latino student enrollments.

Since data regarding the linguistic diversity (second language skills) of school professionals in MCPS was not available, OLO examined MCPS data on language line and interpreter services by school to discern if the demand for these central-office services aligned with school's shares of ESOL eligible students and Latino students.

OLO's review of this data found that demand for central office language assistance services (language line and interpreter service) generally aligned with the demographics of schools across the MCPS' six geographic areas. The exception to this trend was the higher demand for language services among Downcounty Consortia schools. OLO also found that the demand for language services compared to ESOL eligible and/or Latino enrollment tended to be higher among MCPS' secondary schools with the highest concentrations of ESOL eligible and Latino students and lower among schools with low concentrations of these subgroups.

## Chapter VI: Agency Comments

The written comments received from the Superintendent of Montgomery County Public Schools on the final draft of this report are attached. This final OLO report also incorporates technical corrections and comments provided by MCPS staff. As always, OLO greatly appreciates the time taken by staff to review our draft report and provide feedback.


Elaine Bonner-Tompkins, Ph.D.
Senior Legislative Analyst
Montgomery County Council
Office of Legislative Oversight
100 Maryland Avenue
Rockville, Maryland 20850
Dear Dr. Bonner-Tompkins:
Thank you for the opportunity to respond to the Office of Legislative Oversight (OLO) Report, Cultural and Linguistic Diversity of MCPS Students and Staff. As you know, and as this report confirms, the student population in Montgomery County has grown dramatically more diverse since 2000. Staff demographics also have grown more diverse, but at a far slower rate, leading to what you describe as a Student to Staff Demographic Gap. This gap is not at all dissimilar to the gap in the ethnicity and race of teachers and school staff across the country when compared with the students they serve. Almost every state has a significant diversity gap. We are committed to creating a more diverse workforce that is representative of the populations we serve, and we are making progress toward that goal.

The report also attempts to analyze the linguistic diversity of the Montgomery County Public Schools (MCPS) population using data related to requests for language-related services and the number of students served in our English for Speakers of Other Languages (ESOL) program. This response will address both topics-staff diversity as well as language services.

## Methodology

While we appreciate the efforts of the OLO staff, we do have concerns about the methodology used in this report. The OLO created a "parity index" to describe the degree of the "match" between student and staff demographics among schools. Thus, parity is only reached if there is a 1-to-1 correlation between a student subgroup and a staff subgroup. For example, parity would be achieved if a school had 45 percent African American students and 45 percent African American teachers. This notion is worrisome, as we are concerned that it could be misinterpreted to imply that teachers of one race cannot adequately meet the instructional needs of students of another race. I am certain that is not your intent with this measure, and I hope that readers of this report will not draw this faulty conclusion. In creating a culturally proficient system, our goal is to have a diverse faculty and staff working effectively to meet the needs of our diverse student body in a truly integrated fashion. Our main focus is to ensure that we have a highly effective and talented teacher in front of every child, every day. We are working to accomplish this not only through hiring a more diverse workforce but also through building the capacity of existing employees with increased professional development focused on core value of equity. Our commitment to equity can also be seen in each of our professional growth systems.

Office of the Superintendent of Schools

## Research and Cultural Competency

The report states that research shows that teacher diversity can help narrow the achievement gap. Diversity alone will not meet this critically important goal. Rather, highly qualified, culturally sensitive teachers in conjunction with an environment of high standards and challenging curriculum is what leads to achievement gains (Haycock 2001). In "Answers in the Tool Box", (Adelman 1998) notes that the impact of a high school curriculum of high academic intensity and quality on degree completion is far more pronounced-and positively-for African American and Latino students than any other precollege indicator of academic resources. Therefore, our focus has to be on not only creating a more diverse workforce but a highly effective, culturally proficient one. What is our progress toward this goal?

We presented our work on creating a more culturally proficient staff to the Board of Education on September 9, 2014. The presentation and discussion with the Board can be seen on our website-www.montgomeryschoolsmd.org-by searching Equity Initiatives Unit (EIU). This unit, led by Mr. Troy Boddy, is implementing additional systemic and strategic practices this year to build the capacity of all staff to ensure the implementation of practices that demonstrate our commitment to equity and eliminate any institutional barriers to students' success. To facilitate this work, EIU is collaborating with other central services partners to design and implement professional learning opportunities that help us address the six goals for educational equity that are guiding our work in MCPS:

1. high academic achievement for every student;
2. equitable access and inclusion;
3. equitable treatment;
4. equitable opportunity to learn;
5. equitable resources; and
6. accountability for learning. (Scott, 2006 Intercultural Development Research Association South Central Collaborative for Equity)

## Hiring a More Diverse Workforce

Our Office of Human Resources and Development has been making a concerted effort over the last several years to increase the presence of underrepresented teaching staff through targeted recruitment strategies, direct outreach, and partnerships with local colleges and universities, and by critically reviewing and analyzing internal data to target process improvements. One of the most significant challenges is that the population of teachers coming out of education schools for years has been largely White and largely female. This is beginning to change as the percentage of African American and Latino students enrolled in college is increasing, and it is our hope that more will see the benefit of a career in teaching, therefore giving us a bigger recruitment pool.

Historically, our teaching force has come from the following colleges and universities: University of Maryland-College Park, Towson University, Johns Hopkins University, University of Delaware, Hood College, Loyola University, Mount Saint Mary's University, Pennsylvania State University, Salisbury University, and Bowie State University. To increase the pool of diverse candidates, we have expanded our recruitment efforts in recent years to local Historically Black Colleges and Universities (HBCUs), including Bowie State University, Coppin State University, and Howard University, as well as HBCUs outside of Maryland, such as Morehouse College, Spelman College, and Hampton University, to name a few. We will continue to intensify our efforts to hire more candidates of color as the percentage of White teachers hired this school year still remains about 70 percent.

We also are establishing partnerships with programs that will increase the pipeline of Latino and Asian teachers. Partnering with the Ana G. Mendez University System, MCPS has established a program for ESOL teachers. With strong partnerships with the Montgomery County Asian Educators Association and the Hispanic Educators Association, we have hired MCPS graduates who are awarded scholarships to study education and return to teach in MCPS.

In addition to recruiting externally, MCPS has the opportunity to cultivate best practices internally to promote from within. For example, encouraging our paraeducators and other support professionals to consider pursuing a degree in education could be a successful pipeline of diverse teachers. Some 500 employees have successfully moved from our support services positions into teaching and administrative ranks.

We have been quite successful in hiring administrators of color and creating a pool of future administrators through our well-respected leadership development program. The leadership of a school building sets the tone for the staff, so we know that to truly have a culturally proficient school, we must have administrators of all races and ethnicities who are committed to equity. The percentages of new principals and assistant principals hired this year who are African American were 54 and 44 percent, respectively. Newly hired administrators of Latino heritage only accounted for 4 percent, so this is an area that we will continue to focus on in our recruitment and development practices. Overall, about 36 percent of our principals are either African American or Latino, and 46 percent of our assistant principals are African American or Latino.

## MCPS Language Assistance Services

We know that the linguistic diversity of our students in families in Montgomery County is quite significant, with students coming from approximately 160 different countries speaking 130 languages. We do not know definitively, however, the linguistic diversity and capabilities of our staff, as this is not data that we capture. In the absence of this data, the OLO attempted to complete an analysis of how well we are serving our linguistically diverse families using some metrics and projections. It is not clear why OLO substituted a study of Language Line and interpreter usage in MCPS to compensate for the unavailability of data on the bilingual abilities of MCPS staff.

The OLO attempted to use the same demographic gap and parity index analysis it used in looking at staff and student demographics. The report compares schools' use of central office language assistance services to schools' ESOL and Latino student enrollment. This is a flawed comparison and thus cannot accurately yield the valid index comparisons that OLO attempts to make. ESOL student enrollment is not the only driver for Language Line and interpreter use in MCPS. It is quite possible that the parents or guardians of non-ESOL students may need interpreters to communicate with school staff, despite the student being proficient in English or having never been an ESOL student. In addition, Latino student enrollment is not the only driver for the use of Spanish Language Line and Spanish interpreters. Many Latinos are bilingual and/or proficient in English or do not speak Spanish, making an interpreter unnecessary. Finally, if a school does, in fact, have a number of staff members who are bilingual, it may not need to access central service language support to communicate with non-English-speaking families. Therefore, such schools where there are a significant number of multilingual staff might end up low on this OLO parity index.

The report goes into great detail to analyze "parity" of language service usage and ESOL/Latino enrollment by various areas of the county. The results are not surprising given what we all know about the demographics of the different areas of the county.

We believe that a more relevant analysis would be of the overall usage of our language assistance services. The trend across the county during the last five years is one of significant increases. Requests for written translations have increased from 791 in 2010 to more than 1150 midway through 2014. Requests for oral interpretation services have increased 80 percent since 2010 from approximately 6,400 to more than 11,600 so far this year. Our telephone language line services have seen a nearly 35 percent increase in utilization from about 11,200 to more than 15,000 during the same time period.

Certainly, our goal is to hire a workforce with more multilingual skills, and this is part of our overall hiring effort as outlined above. That said, in the absence of enough multilingual staff in all 202 schools to meet the various linguistic needs of our students and families, we will continue to provide robust support from central services. This is an area that will require more resources as we see increased demand.

In conclusion, this report is useful in helping spotlight issues related to the growing diversity of our community. This diversity provides a cultural richness in our county that makes Montgomery County such a wonderful place. What is clear is that to meet the needs of our students and to ensure that we continue to have a strong school system, we must work to increase the diversity and cultural proficiency of our workforce. Increasing the linguistic capabilities of our staff is an important goal as well. We look forward to further discussions around this topic and working together for the children of our community.

Sincerely,


Joshua P. Starr, Ed.D.
Superintendent of Schools
JPS:sln

## References:

Adelman, C. (1998). Answers in the Toolbox. Washington, DC. U.S. Department of Education. Haycock, Kati. (2001). Helping All Students Achieve. Educational Leadership. 58 (6), 6-11. IDRA - Six Goals of Education Equity. (n.d.). Retrieved September 24, 2014.

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## Data Sources

This appendix describes the data and data sources used in this report. Montgomery County Public Schools (MCPS) was the primary source of data for OLO's work, as shown in the chart below.

| Measures | Data Sources and Years |
| :--- | :--- |
| Student and Staff Race/Ethnicity | MCPS: Schools at a Glance, 2012-13 |
| Current Enrollment and <br> Eligibility for ESOL | MCPS Office of Shared Accountability |
| ESOL Language Line Usage | MCPS Office of ESOL/Bilingual Services |
| ESOL Interpreter Usage | MCPS Office of ESOL/Bilingual Services |

The data referenced in this appendix describe student and staff race/ethnicity across four subgroups: Asian, Black, Latino, and White.

## Appendix A

## MCPS Student Enrollment and Staffing Data

All data reported in Appendix A is based on OLO calculations of MCPS data from Schools at a Glance, 2012-13

Table A-1: MCPS Staff and Student Distribution Data, 2012-13

| Race/Ethnicity <br> Subgroups | Staff <br> Enrollment | Student <br> Enrollment | Share of Staff <br> Population | Share of Student <br> Population |
| :--- | ---: | ---: | ---: | ---: |
| Asians | 1,659 | 21,274 | $5.0 \%$ | $14.3 \%$ |
| Blacks | 2,471 | 31,688 | $12.5 \%$ | $21.3 \%$ |
| Latinos | 3,085 | 39,572 | $5.3 \%$ | $26.6 \%$ |
| Whites | 3,828 | 49,093 | $75.7 \%$ | $33.0 \%$ |

Table A-2: MCPS Staff and Student Distribution Data by School Level, 2012-13

| Race/Ethnicity Subgroups | Staff <br> Enrollment | Student Enrollment | Share of Staff Population | Share of Student Population |
| :---: | :---: | :---: | :---: | :---: |
| Elementary Schools |  |  |  |  |
| Asians | 301 | 10,094 | 5.2\% | 14.1\% |
| Blacks | 567 | 14,748 | 9.8\% | 20.6\% |
| Latinos | 289 | 20,618 | 5.0\% | 28.8\% |
| Whites | 4,451 | 22,480 | 78.5\% | 31.4\% |
| Middle Schools |  |  |  |  |
| Asians | 122 | 4,559 | 5.0\% | 14.6\% |
| Blacks | 409 | 6,745 | 16.7\% | 21.6\% |
| Latinos | 137 | 7,776 | 5.6\% | 24.9\% |
| Whites | 1,740 | 10,617 | 71.1\% | 34.0\% |
| High Schools |  |  |  |  |
| Asians | 150 | 6,499 | 4.7\% | 14.5\% |
| Blacks | 457 | 9,951 | 14.3\% | 22.2\% |
| Latinos | 176 | 10,937 | 5.5\% | 24.4\% |
| Whites | 2,363 | 15,554 | 74.0\% | 34.7\% |

Table A-3: MCPS Student Enrollment and Staff Levels by Sub-Area, 2012-13

| County Sub-Areas | Staff <br> Enrollment | Student <br> Enrollment | Share of Staff <br> Population | Share of Student <br> Population |
| :--- | ---: | ---: | ---: | ---: |
| Western Area Schools | 2,640 | 37,163 | $24.1 \%$ | $26.2 \%$ |
| Up-County Schools | 1,681 | 22,865 | $15.4 \%$ | $16.1 \%$ |
| Mid-County Schools | 1,590 | 20,819 | $14.5 \%$ | $14.7 \%$ |
| Gaithersburg Area <br> Schools | 1,539 | 18,266 | $14.1 \%$ | $12.9 \%$ |
| Northeast Consortium <br> Schools | 1,369 | 17,456 | $12.5 \%$ | $12.3 \%$ |
| Downcounty <br> Consortium Schools | 2,117 | 25,395 | $19.4 \%$ | $17.9 \%$ |

Table A-4: MCPS Staff and Student Distribution Data by Geographic Area, 2012-13

| Race/Ethnicity Subgroups | Staff <br> Enrollment | Student Enrollment | Share of Staff Population | Share of Student Population |
| :---: | :---: | :---: | :---: | :---: |
| Western Area Schools |  |  |  |  |
| Asians | 144 | 6,650 | 5.8\% | 19.0\% |
| Blacks | 118 | 2,796 | 6.2\% | 10.6\% |
| Latinos | 108 | 4,884 | 4.3\% | 13.9\% |
| Whites | 2,225 | 19,891 | 82.6\% | 52.6\% |
| Up-County Schools |  |  |  |  |
| Asians | 70 | 3,865 | 4.7\% | 18.8\% |
| Blacks | 108 | 3,824 | 7.0\% | 18.3\% |
| Latinos | 81 | 4,469 | 4.8\% | 19.5\% |
| Whites | 1,390 | 9,371 | 82.7\% | 41.0\% |
| Mid-County Schools |  |  |  |  |
| Asians | 92 | 3,118 | 5.8\% | 15.0\% |
| Blacks | 168 | 3,330 | 10.6\% | 16.0\% |
| Latinos | 75 | 5,375 | 4.7\% | 25.8\% |
| Whites | 1,243 | 7,912 | 78.2\% | 38.0\% |
| Gaithersburg Area Schools |  |  |  |  |
| Asians | 62 | 2,019 | 4.0\% | 11.1\% |
| Blacks | 206 | 5,243 | 13.4\% | 28.7\% |
| Latinos | 89 | 6,891 | 5.8\% | 37.7\% |
| Whites | 1,065 | 3,160 | 74.9\% | 18.7\% |
| Northeast Consortium Schools |  |  |  |  |
| Asians | 65 | 2,101 | 4.9\% | 12.4\% |
| Blacks | 281 | 7,870 | 20.6\% | 45.1\% |
| Latinos | 62 | 4,372 | 4.6\% | 25.0\% |
| Whites | 753 | 2,358 | 67.5\% | 16.2\% |
| Downcounty Consortium Schools |  |  |  |  |
| Asians | 87 | 2,281 | 4.8\% | 10.3\% |
| Blacks | 430 | 6,365 | 20.3\% | 25.1\% |
| Latinos | 154 | 10,928 | 7.3\% | 43.0\% |
| Whites | 1,093 | 4,505 | 65.3\% | 21.9\% |

## Appendix B

## MCPS Language Service Data

All data reported in Appendix B is based on OLO calculations of MCPS data from its Division of ESOL/Bilingual Programs

Table B-1: Language Service Data and School-Based Location Data Used for OLO's Analysis, 2010-2013

| Language Services | Total Uses* | Total Uses with <br> School Location Data | Share Utilized for <br> Data Analysis |
| :--- | :---: | :---: | :---: |
| Telephone Interpretation <br> (Language Line Calls) | 39,322 | 22,058 | $56.1 \%$ |
| Oral Interpretation <br> (Interpreters) | 32,170 | 23,829 | $74.1 \%$ |
| * For telephone interpretation, services refer to number of usages; for oral interpretation, services refer to <br> number of requests; and for written translation, services refer to number of projects. |  |  |  |

Table B-2: Language Line Calls and ESOL Students by Geographic Area

| Geographic Area | Total <br> Language <br> Line Calls | ESOL <br> Eligible <br> Student <br> Enrollment | Share of <br> Language <br> Line Calls | Share of <br> ESOL <br> Eligible <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | 3,047 | 6,466 | $13.8 \%$ | $16.6 \%$ |
| Up-County | 1,880 | 5,000 | $8.5 \%$ | $12.6 \%$ |
| Mid-County | 2,651 | 5,005 | $12.0 \%$ | $12.6 \%$ |
| Gaithersburg Area | 3,107 | 6,618 | $14.1 \%$ | $16.7 \%$ |
| Northeast Consortium | 3,011 | 5,058 | $13.7 \%$ | $12.9 \%$ |
| Downcounty Consortium | 8,362 | 10,851 | $37.9 \%$ | $27.8 \%$ |

Table B-3: Interpreter Requests and ESOL Students by Geographic Area

| Geographic Area | Total <br> Interpreter <br> Requests | ESOL <br> Eligible <br> Student <br> Enrollment | Share of <br> Interpreter <br> Requests | Share of <br> ESOL <br> Eligible <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | 3,113 | 6,466 | $13.1 \%$ | $16.6 \%$ |
| Up-County | 3,090 | 5,000 | $13.0 \%$ | $12.6 \%$ |
| Mid-County | 3,367 | 5,005 | $14.1 \%$ | $12.6 \%$ |
| Gaithersburg Area | 3,678 | 6,618 | $15.4 \%$ | $16.7 \%$ |
| Northeast Consortium | 2,424 | 5,058 | $10.2 \%$ | $12.9 \%$ |
| Downcounty Consortium | 8,157 | 10,851 | $34.2 \%$ | $27.8 \%$ |

Table B-4: Spanish Language Line Calls Made and Latino Students by Geographic Area

| Geographic Area | Total <br> Language <br> Line Calls | Latino <br> Student <br> Enrollment | Share of <br> Spanish Calls | Share of <br> Latino <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | 2,686 | 4,884 | $13.7 \%$ | $13.2 \%$ |
| Up-County | 1,672 | 4,469 | $8.5 \%$ | $12.3 \%$ |
| Mid-County | 2,365 | 5,376 | $12.0 \%$ | $14.8 \%$ |
| Gaithersburg Area | 2,807 | 6,891 | $14.3 \%$ | $19.0 \%$ |
| Northeast Consortium | 2,651 | 4,372 | $13.5 \%$ | $12.0 \%$ |
| Downcounty Consortium | 7,473 | 10,928 | $38.0 \%$ | $29.6 \%$ |

Table B-5: Spanish Interpreter Requests and Latino Students by Geographic Area

| Geographic Area | Total <br> Interpreter <br> Requests | Latino <br> Student <br> Enrollment | Share of <br> Spanish <br> Requests | Share of <br> Latino <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Western Area | 2,198 | 4,884 | $11.2 \%$ | $13.2 \%$ |
| Up-County | 2,564 | 4,469 | $13.0 \%$ | $12.3 \%$ |
| Mid-County | 2,875 | 5,376 | $14.6 \%$ | $14.8 \%$ |
| Gaithersburg Area | 3,335 | 6,891 | $17.0 \%$ | $19.0 \%$ |
| Northeast Consortium | 1816 | 4,372 | $9.2 \%$ | $12.0 \%$ |
| Downcounty Consortium | 6,914 | 10,928 | $35.1 \%$ | $29.6 \%$ |

Table B-6: Language Line Calls and ESOL Students among High Concentration Schools

| Schools by Level | Total <br> Language <br> Line Calls | ESOL <br> Eligible <br> Student <br> Enrollment | Share of <br> Language <br> Line Calls | Share of <br> ESOL <br> ELigible <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 4,034 | 7,810 | $35.0 \%$ | $32.6 \%$ |
| Middle Schools (10) | 3,614 | 3,113 | $56.4 \%$ | $38.5 \%$ |
| High Schools (5) | 1,916 | 2,134 | $46.6 \%$ | $30.7 \%$ |

Table B-7: Interpreter Requests and ESOL Students among High Concentration Schools

| Schools by Level | Total <br> Interpreter <br> Requests | ESOL <br> Eligible <br> Student <br> Enrollment | Share of <br> Interpreter <br> Requests | Share of <br> ESOL <br> Eligible <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 4,309 | 7,810 | $27.3 \%$ | $32.6 \%$ |
| Middle Schools (10) | 1,966 | 3,113 | $45.8 \%$ | $38.5 \%$ |
| High Schools (5) | 2,122 | 2,135 | $52.6 \%$ | $30.7 \%$ |

Table B-8: Language Line Calls and ESOL Students among Low Concentration Schools

| Schools by Level | Total <br> Language <br> Line Calls | ESOL <br> Eligible <br> Student <br> Enrollment | Share of <br> Language <br> Line Calls | Share of <br> ESOL <br> Eligible <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 309 | 839 | $2.7 \%$ | $3.5 \%$ |
| Middle Schools (10) | 854 | 1,043 | $13.3 \%$ | $12.9 \%$ |
| High Schools (5) | 52 | 508 | $1.3 \%$ | $7.3 \%$ |

Table B-9: Interpreter Requests and ESOL Students among Low Concentration Schools

| Schools by Level | Total <br> Interpreter <br> Requests | ESOL <br> Eligible <br> Student <br> Enrollment | Share of <br> Interpreter <br> Requests | Share of <br> ESOL <br> Eligible <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 571 | 839 | $3.0 \%$ | $3.5 \%$ |
| Middle Schools (10) | 331 | 1,043 | $10.4 \%$ | $12.9 \%$ |
| High Schools (5) | 170 | 508 | $3.0 \%$ | $7.3 \%$ |

Table B-10: Spanish Language Line Calls and Latino Students at High Concentration Schools

| Schools by Level | Total <br> Language <br> Line Calls | Latino <br> Student <br> Enrollment | Share of <br> Spanish Calls | Share of <br> Latino <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 3,735 | 7,959 | $36.0 \%$ | $38.6 \%$ |
| Middle Schools (10) | 3,305 | 3,017 | $58.9 \%$ | $38.8 \%$ |
| High Schools (5) | 1,764 | 3,915 | $48.2 \%$ | $35.8 \%$ |

Table B-11: Spanish Interpreter Requests and Latino Students at High Concentration Schools

| Schools by Level | Total <br> Interpreter <br> Requests | Latino <br> Student <br> Enrollment | Share of <br> Spanish <br> Requests | Share of <br> Latino <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 3,717 | 7,959 | $29.0 \%$ | $38.6 \%$ |
| Middle Schools (10) | 1,778 | 3,017 | $51.7 \%$ | $38.8 \%$ |
| High Schools (5) | 1,885 | 3,915 | $54.8 \%$ | $35.8 \%$ |

Table B-12: Spanish Language Line Calls and Latino Students at Low Concentration Schools

| Schools by Level | Total <br> Language <br> Line Calls | Latino <br> Student <br> Enrollment | Share of <br> Spanish Calls | Share of <br> Latino <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 270 | 825 | $2.6 \%$ | $4.0 \%$ |
| Middle Schools (10) | 728 | 910 | $13.0 \%$ | $11.7 \%$ |
| High Schools (5) | 39 | 919 | $1.1 \%$ | $8.4 \%$ |

Table B-13: Spanish Interpreter Requests and Latino Students at Low Concentration Schools

| Schools by Level | Total <br> Interpreter <br> Requests | Latino <br> Student <br> Enrollment | Share of <br> Spanish <br> Requests | Share of <br> Latino <br> Students |
| :--- | ---: | ---: | ---: | ---: |
| Elementary Schools (20) | 267 | 825 | $2.1 \%$ | $4.0 \%$ |
| Middle Schools (10) | 187 | 910 | $5.4 \%$ | $11.7 \%$ |
| High Schools (5) | 91 | 919 | $2.6 \%$ | $8.4 \%$ |

## Appendix C

MCPS Schools Excluded from Geographic Area Data Analysis
Table C-1: Schools with Less Than 5\% of Students of Each Race/Ethnicity and Locations


## Appendix D

## Lists of MCPS Schools by Geographic Area

Table D-1: Schools Contained Within Western Area

| Western Area: Bethesda-Chevy Chase, Walter Johnson, Winston Churchill, Walt |  |  |
| :--- | :--- | :--- |
| Whitman, Thomas S. Wootton |  |  |
| Elementary Schools | Middle Schools | High Schools |
| Ashburton ES | Cabin John MS | Bethesda-Chevy Chase HS |
| Bannockburn ES | North Bethesda MS | Winston Churchill HS |
| Bells Mill ES | Robert Frost MS | Walter Johnson HS |
| Bethesda ES | Herbert Hoover MS | Walt Whitman HS |
| Beverly Farms ES | A. Mario Loiederman MS | Thomas S. Wootton HS |
| Bradley Hills ES | Parkland MS |  |
| Brookhaven ES | Thomas W. Pyle MS |  |
| Burning Tree ES | Tilden MS |  |
| Carderock Springs ES | Westland MS |  |
| Chevy Chase ES |  |  |
| Cold Spring ES |  |  |
| DuFief ES |  |  |
| Fallsmead ES |  |  |
| Farmland ES |  |  |
| Garrett Park ES |  |  |
| Kensington Parkwood ES |  |  |
| Lakewood ES |  |  |
| Luxmanor ES |  |  |
| North Chevy Chase ES |  |  |
| Potomac ES |  |  |
| Rock Creek Forest ES |  |  |
| Rosemary Hills ES |  |  |
| Seven Locks ES |  |  |
| Somerset ES |  |  |
| Stone Mill ES |  |  |
| Travilah ES |  |  |
| Viers Mill ES |  |  |
| Wayside ES |  |  |
| Westbrook ES |  |  |
| Wheaton Woods ES |  |  |
| Wood Acres ES |  |  |

Table D-2: Schools Contained Within Up-County Area

| Up-County Area: Clarksburg, Damascus, Northwest, Quince Orchard, Poolesville |  |  |
| :--- | :--- | :--- |
| Elementary Schools | Middle Schools | High Schools |
| Brown Station ES | John T. Baker MS | Clarksburg HS |
| Rachel Carson ES | Kingsview MS | Damascus HS |
| Cedar Grove ES | Lakelands Park MS | Northwest HS |
| Clarksburg ES | John Poole MS | Quince Orchard HS |
| Clearspring ES | Ridgeview MS | Poolesville HS |
| Clopper Mill ES | Rocky Hill MS |  |
| Capt. James E. Daly ES |  |  |
| Damascus ES |  |  |
| Darnestown ES |  |  |
| Diamond ES |  |  |
| Fields Road ES |  |  |
| Fox Chapel ES |  |  |
| Germantown ES |  |  |
| William B. Gibbs, Jr. ES |  |  |
| Great Seneca Creek ES |  |  |
| Jones Lane ES |  |  |
| Little Bennett ES |  |  |
| Thurgood Marshall ES |  |  |
| Spark M. Matsunaga ES |  |  |
| Ronald McNair ES |  |  |
| Monocacy ES |  |  |
| Poolesville ES |  |  |
| Lois P. Rockwell ES |  |  |
| Woodfield ES |  |  |

Table D-3: Schools Contained Within Mid-County Area

| Mid-County Area: Rockville, Richard Montgomery, Col. Zadok Magruder, Sherwood |  |  |
| :--- | :--- | :--- |
| Elementary Schools | Middle Schools | High Schools |
| Lucy V. Barnsley ES | Rosa M. Parks MS | Col. Zadok Magruder HS |
| Beall ES | Redland MS | Richard Montgomery HS |
| Belmont ES | Shady Grove MS | Rockville HS |
| Brooke Grove ES | Julius West MS | Sherwood HS |
| Candlewood ES | Earle B. Wood MS |  |
| Cashell ES |  |  |
| College Gardens ES |  |  |
| Flower Hill ES |  |  |
| Flower Valley ES |  |  |
| Greenwood ES |  |  |
| Maryvale ES |  |  |
| Meadow Hall ES |  |  |
| Mill Creek Towne ES |  |  |
| Olney ES |  |  |
| Judith A. Resnik ES |  |  |
| Ritchie Park ES |  |  |
| Rock Creek Valley ES |  |  |
| Sequoyah ES |  |  |
| Twinbrook ES |  |  |

Table D-4: Schools Contained Within Gaithersburg Area

| Gaithersburg Area: Seneca Valley, Gaithersburg, Watkins Mill |  |  |
| :--- | :--- | :--- |
| Elementary Schools | Middle Schools | High Schools |
| Gaithersburg ES | Roberto W. Clemente MS | Gaithersburg HS |
| Goshen ES | Forest Oak MS | Seneca Valley HS |
| Lake Seneca ES | Gaithersburg MS | Watkins Mill HS |
| Laytonsville ES | Martin Luther King, Jr. MS |  |
| S. Christa McAuliffe ES | Montgomery Village MS |  |
| Dr. Sally K. Ride ES | Neelsville MS |  |
| Rosemont ES |  |  |
| South Lake ES |  |  |
| Stedwick ES |  |  |
| Strawberry Knoll ES |  |  |
| Summit Hall ES |  |  |
| Washington Grove ES |  |  |
| Waters Landing ES |  |  |
| Watkins Mill ES |  |  |
| Whetstone ES |  |  |

Table D-5: Schools Contained Within Northeast Consortium

| Elementary Schools | Middle Schools | High Schools |
| :--- | :--- | :--- |
| Broad Acres ES | Benjamin Banneker MS | James Hubert Blake HS |
| Burnt Mills ES | Briggs Chaney MS | Paint Branch HS |
| Burtonsville ES | William H. Farquhar MS | Springbrook HS |
| Cannon Road ES | Francis Scott Key MS |  |
| Cloverly ES | White Oak MS |  |
| Cresthaven ES |  |  |
| Dr. Charles R. Drew ES |  |  |
| Fairland ES |  |  |
| Galway ES |  |  |
| Greencastle ES |  |  |
| Jackson Road ES |  |  |
| Roscoe R. Nix ES |  |  |
| William T. Page ES |  |  |
| Sherwood ES |  |  |
| Stonegate ES |  |  |
| Westover ES |  |  |

Table D-6: Schools Contained Within Downcounty Consortium

| Elementary Schools | Middle Schools | High Schools |
| :--- | :--- | :--- |
| Arcola ES | Argyle MS | Montgomery Blair HS |
| Bel Pre ES | Eastern MS | Albert Einstein HS |
| East Silver Spring ES | Col. E. Brooke Lee MS | John F. Kennedy HS |
| Forest Knolls ES | Newport Mill MS | Northwood HS |
|  | Silver Spring |  |
| Georgian Forest ES | International MS | Wheaton HS |
| Glen Haven ES | Sligo MS |  |
| Glenallan ES | Takoma Park MS |  |
| Harmony Hills ES |  |  |
| Highland ES |  |  |
| Highland View ES |  |  |
| Kemp Mill ES |  |  |
| Montgomery Knolls ES |  |  |
| New Hampshire Estates |  |  |
| ES |  |  |
| Oak View ES |  |  |
| Oakland Terrace ES |  |  |
| Pine Crest ES |  |  |
| Piney Branch ES |  |  |
| Rock View ES |  |  |
| Rolling Terrace ES |  |  |
| Flora M. Singer ES |  |  |
| Sargent Shriver ES |  |  |
| Sligo Creek ES |  |  |
| Strathmore ES |  |  |
| Takoma Park ES |  |  |
| Weller Road ES |  |  |
| Woodlin ES |  |  |


[^0]:    ${ }^{4}$ Ahmad, F. and Boser, U. , May 2014
    ${ }^{5}$ Ibid, page 4
    ${ }^{6}$ National Center for Education Statistics, Table 1, Total number of public school teachers and percentage distribution of school leaders by race/ethnicity and state: 2011-12, cited by Ahmad and Boser, May 2014
    ${ }^{7}$ Boser, U., "Teacher Diversity Matters: A State-by-State Analysis of Teachers of Color," Center for American Progress, 2014 http://www.americanprogress.org/wp-content/uploads/2014/05/TeacherDiversity.pdf

[^1]:    ${ }^{8}$ Dee, T., Teachers, "Race and Student Achievement in a Randomized Experiment," Working Paper 8432, National Bureau of Economic Research, 2001 cited by Ahmad and Boser, May 2014
    ${ }^{9}$ Ingersoll, R. and May, H., "The Minority Teacher Shortage: Fact or Fable?," Education Week, September 1, 2011 cited by Ahmad and Boser, May 2014
    ${ }^{10}$ Dee, T., "Teachers, Race and Student Achievement in a Randomized Experiment"
    ${ }^{11}$ Villegas, A, and Irvine, J., "Diversifying the Teaching Force: An Examination of Major Arguments," The Urban Review, 2010 cited by Ahmad and Boser, May 2014
    ${ }^{12}$ Villegas, A, Strom, K., and Lucas, T. , "Closing the Racial/Ethnic Gap Between Students of Color and Their Teachers: An Elusive Goal," 2012 Equity and Excellence in Education, 45 (2), page 283
    ${ }^{13}$ Ibid

[^2]:    ${ }^{14}$ NEA Policy Brief, page 1
    ${ }^{15}$ See http://www.marylandpublicschools.org/NR/rdonlyres/7B27D822-DC9B-49FC-AEC44CA57CFCB6DB/17652/Practical_Guide_Aug_08.pdf and http://www.marylandpublicschools.org/NR/rdonlyres/07B677C6-CE3B-4C3F-BEFFE43921D715AF/24312/Practical_Guide_2.ppt
    ${ }^{16}$ See
    http://www.doe.virginia.gov/special_ed/tech_asst_prof_dev/self_assessment/disproportionality/cultural_competency .ppt
    ${ }^{17}$ See http://www.nea.org/assets/docs/PB13_CulturalCompetence08.pdf
    ${ }^{18}$ See http://www.k12.wa.us/cisl/eliminatingthegaps/culturalcompetence/default.aspx

[^3]:    ${ }^{19}$ Jerome Hanley, Beyond the Tip of the Iceberg: Five Stages toward Cultural Competence cited in MSDE, A Practical Guide Presentation, slide 10
    ${ }^{20}$ Virginia Department of Education, slide 8
    ${ }^{21}$ Washington Office of the State Superintendent of Public Instruction
    ${ }^{22}$ Virginia Department of Education, slides 27 and 28

[^4]:    ${ }^{23}$ This measure is similar to the Diversity Index measures used by Ulrich Boser of the Center for American Progress. See http://www.americanprogress.org/wp-content/uploads/2014/05/TeacherDiversity.pdf
    ${ }^{24}$ This measure is analogous to the Teacher-Student Parity Index used by Ana Maria Villegas, Kathryn Strom, and Tamara Lucas in "Closing the Racial/Ethnic Gap between Students of Color and Their Teachers" in 2012.
    ${ }^{25}$ To comply with federal privacy guidelines, MCPS does not report data for subgroups comprising less than five percent of overall school or school level populations. As a result, demographic data from several schools are excluded from this section's analysis. 13 elementary schools and 2 middle schools are excluded for Asian students; 17 elementary schools, 1 middle school and 1 high school for Black students, 3 elementary schools for Latino students; and 13 elementary schools for White students. A complete list of these schools and their locations within the County Sub-Areas is included in the Appendix.

[^5]:    ${ }^{26}$ Complete lists of the schools included in all six sub-areas are included in the Appendix.

[^6]:    ${ }^{27}$ Summary tables for the 10 elementary schools, 10 middle schools, and 10 high schools with the highest concentrations of students from each racial/ethnic group and the individual percentages of students within each individual school are included in the Appendix.
    ${ }^{28}$ For Asians, low-concentration schools defined as Asians accounting for $0-9 \%$ of school enrollment, medium low concentration schools defined as $10-19 \%$ of enrollment, medium high concentration schools defined as $20-29 \%$ of enrollment, and high concentration schools defined as $30 \%$ or more of enrollment.

[^7]:    ${ }^{29}$ Since 2007, MCPS has kept records of certain SEIU-affiliated professional staff that have been deemed "proficient" in other languages. These employees are kept on file with MCPS and can be offered extra pay for providing language assistance separate from their normal duties, such as with translation. However, they must first pass language requirement tests administered by the school system before becoming eligible.
    ${ }^{30} \mathrm{http}: / / \mathrm{www}$. montgomeryschoolsmd.org/curriculum/esol/lasu.aspx

[^8]:    * Demographic Gap equals Share of Spanish Calls minus the Share of Latino Students
    ** Parity Index equals Share of Spanish Calls/Share of Latino Students

[^9]:    ${ }^{31}$ Boser, U., Teacher Diversity Matters: A State-by-State Analysis of Teachers of Color, Center for American Progress, 2014 http://www.americanprogress.org/wp-content/uploads/2014/05/TeacherDiversity.pdf

