High School Consortia

Overview

MCPS operates two high school consortia to provide educational options for students within broad geographic areas. Consortia programs were designed to support school choice with the goals of promoting diversity and providing unique academic programs that were not available across all MCPS high schools, as discussed in the historical overview section above. Maps of the regional consortia are presented in Appendix E.

The first, the **Northeast Consortium (NEC)**, was established in 1998 in response to increasing enrollment in the northeast area of the county and the need to open a new high school, James Hubert Blake HS. Among the goals for the consortium were to: feature innovative educational methods and practices that meet needs and interests of identified students; and to reduce isolation among racial and ethnic minority students in each of the three participating schools. Currently, the NEC comprises three schools that each offer a comprehensive high school academic program as well as unique signature programs for students with a special interest in the theme to advance their study through a series of elective courses or pathways.

- James Hubert Blake HS has a thematic focus on the fine arts and humanities and offers academy (smaller learning community) programs in Arts and Communications, Humanities and Public Services, Business and Consumer Services, and STEM (Science Technology, Engineering, and Math).
- Paint Branch HS offers two academy programs: the Academy of Science with elective pathways in medical careers, biotechnology, engineering, nutrition, and environmental sciences; and the Academy of Media, which offers courses in television and radio production, multimedia production, publications, and business and technical media.
- Springbrook HS offers two signature programs: Information Technology, including courses in computer science and programming, robotics, software applications, and video game development; and IB World, which includes the IB Middle Years and Diploma Programs. In addition, the school has a pathway program in Justice, Law and Society that offers courses in criminal justice, forensics, and law.

In the 2004–05 school year, MCPS opened the **Downcounty Consortium (DCC)** in response to increasing enrollment in the southeastern region of the county and the need to re-open Northwood HS which had been closed in the 1980s. The DCC functions similarly to the NEC, with the goal to increase racial and socioeconomic diversity across five schools and provide programs that meet the different interests and needs of students across the consortium. In each school, students have the opportunity to select an academy that focuses on career pathways in smaller learning communities within a larger comprehensive high school. Students who complete

an academic course pathway and a capstone (college level class, internship, or research project) receive special recognition upon graduation.

- Albert Einstein HS offers the International Baccalaureate Program Academy; the Finance, Business Management, and Marketing Academy; the Renaissance Academy; and the Academy of Visual and Performing Arts.
- John F. Kennedy HS offers the International Baccalaureate Program; the Media Communications Academy; Health Careers Academy; the Business Management Academy; and the Naval Junior Reserve Officer Training Corps program (NJROTC).
- Montgomery Blair HS offers the Academy of Entrepreneurship and Business Management; Human Service Professions Academy; the Academy of International Studies; Academy of Media, Music and the Arts; and the Academy of Science, Technology, Engineering and Math.
- Northwood HS offers the Academy of Technology, Environmental, and Systems Science; the Humanities, Arts, and Media Academy; the Musical Theater Academy; the Politics, Advocacy, and Law Academy; and the Montgomery College Middle College (MC²@N).
- Wheaton HS offers the Academy of Biosciences and Health Professions; the Academy of Engineering; the Academy of Information Technology; and the Institute for Global and Cultural Studies.

In addition to the academies, as discussed in more detail in the prior chapter, Montgomery Blair, Kennedy, and Wheaton HS offer application programs with selection criteria, open only to students who reside in the DCC or attended middle schools that feed into DCC high schools, and Montgomery Blair HS and Einstein HS operate magnets open to students outside of the DCC, as well. These magnet and application programs, as already noted, utilize separate admissions processes distinct from the consortium lottery described below.

For each consortium, students participate in a random selection lottery that incorporates consideration of the following factors: 1) student preference; 2) school capacity; and 3) demographic factors, including gender and socioeconomic status (based on student eligibility for FARMS at any point during the student's education in MCPS). Students can be guaranteed placement in their first choice school if they have a sibling who currently attends that school <u>or</u> if they live in that school's base area. Base areas are not attendance zones; rather, they are non-contiguous geographic areas near or around each school, established to allow students to choose to attend a school near their home while also promoting, at least when they were originally developed, racial integration.

Students who do not receive their first choice school during the lottery and new students can participate in a second round of the lottery. Students who do not receive their first choice in either of the two rounds of the lottery can appeal their assignment to DCCAPS. NEC and DCC students are provided transportation.

DCCAPS conducts a variety of outreach strategies to provide information to consortia families about the choice process and the programs offered at each school. To begin, all families of Grade 8 students in middle schools located within the NEC and DCC clusters are mailed information about evening informational meetings and the programs offered in each of the consortium schools. The evening informational meetings are held in the fall in English and Spanish for all families, and special meetings are offered for families of students in the special education program and for families of students who currently attend private school. In addition, each consortium school conducts an Open House in the fall to showcase the school's offerings and signature and/or academy programs. DCCAPS also works with Grade 8 counselors in middle schools to share information about the consortia and help students complete interest forms to identify areas of potential interest or aptitude. All Grade 8 students are given a Choice form and have approximately three to four weeks to complete and return the forms; follow-up is conducted with students who do not return the form. In 2013–14, 99.0% of students completed and returned the form. Students who do not make a selection are assigned to a school based on school capacity in the DCC and base area in the NEC.

Program-Level Findings

I. Choice lottery participants

Almost nine in 10 students in the NEC were assigned to their first choice school, and approximately half of all students selected their base area school as their first choice. In 2013–14, 1,315 students participated in the NEC lottery—among these students, 88.9% were assigned to their first choice school. The first choice match rates (meaning students who were assigned to their first choice) were high across all student subgroups, with slight differences. For example, 91.7% of Hispanic/Latino students, 88.5% of Black/African American students, 85.6% of White students, and 85.9% of Asian received their first choice. Furthermore, 91.4% of students who were currently eligible for FARMS and 86.2% of non-FARMS students were assigned to their first choice.

Differences in the first choice match rates may be attributed to the proportions of students who selected their base area school or were placed due to sibling link. Within the lottery process, half (50%) of students applying in the NEC choice process chose their base area school as their first choice, and thus received automatic placement in the school. An additional 6% of students were placed due to sibling link.

Three-quarters of students in the DCC received their first choice school; this rate is lower than in the NEC because of the large proportion of students who selected Montgomery Blair HS as their first choice. For the DCC lottery in 2013–14, 1,848 students participated and 74.7% were assigned to their first choice school. Just under half (42%) of students chose their base area school as their first choice and received automatic placement; an additional 8% was assigned due to sibling link. First choice match rates were lower in the DCC than NEC due to

capacity issues in the DCC schools as a result of increasing enrollments across the area and because of the over-selection of Montgomery Blair HS as a first choice in the lottery.

First choice rates in the DCC lottery varied by student subgroup. For example, 80.7% of Hispanic/Latino students received their first choice, while 72.1% of Black/African American, 73.9% of White, and 59.1% of Asian students did. Students who were currently eligible for FARMS were more likely than non-FARMS students to be assigned to their first choice school (79.3% to 66.9%).

Differences in the first choice match rates by student subgroup were also impacted by the high number of base area students who selected Montgomery Blair HS as their first choice school. In fact, because of the high number of base area students who selected Montgomery Blair HS as their first choice in 2013–14, only 5% of students (N=49) who did not reside within Montgomery Blair HS's base area or had sibling link were assigned to Montgomery Blair HS through the lottery. Additionally, 175 seats at Montgomery Blair HS are filled each year for the magnet and CAP programs which reduces the overall number of students selected for Montgomery Blair HS in the choice lottery. As a result, the first choice rates for students who chose Montgomery Blair HS were much lower, and impacted the rates across the DCC.

Consortia families are generally very satisfied with the choice process. Each year, MCPS administers a short survey for families participating in the choice process to measure their levels of satisfaction with the process and the amount of information they received. In 2013–14, high proportions of families expressed satisfaction with each of the consortium. In the NEC, 82% of families reported that they *had enough information to rank schools in order*, 76% indicated that *in general, we see benefits to the choice process*; and 73% reported that they *had enough information to rank schools in order*, 76% indicated that *in general, we see benefits to the choice process*; and 73% reported that they *had enough information to rank schools in order*, 76% indicated that *in general, we see benefits to the choice process*; and 73% reported that they *had enough information to rank schools in order*, 76% indicated that *in general, we see benefits to the choice process* and that *the program's offerings influenced our constrain of the rank schools in order*, 76% indicated that *in general, we see benefits to the choice process* and that *the program's offerings influenced our decision*.

2. Profile of students enrolled in each high school consortium

The efficacy of the consortia in achieving diversity goals has been affected by the changing demographics across the county and important historical decisions about which schools to include and the use of base areas. Since the consortia began operating—in 1998 for the NEC and 2004 for the DCC—the county and district have experienced major demographic shifts that have impacted the effects of the choice process on school diversity. As discussed in the context section of the report and presented in graphs in the Appendix, the geographic areas of both consortia currently include much higher proportions of Black/African American, Hispanic/Latino, and low-income students than they did 15 to 20 years ago. In some areas, the proportions of students in each of these subgroups have increased by 20 or more percentage points since the establishment of the consortia. Thus, across each consortium, the student

population is less diverse than when the consortium was created, which has limited the efficacy of the choice process in supporting diversity.

Furthermore, two key decisions in the development of consortia—the use of base areas and the selection of the schools to include—affected the impact of the consortia on diversity from the onset. The rationale for base areas was that students could attend schools near their home if they preferred. But the base areas are different from typical attendance zones because they are non-contiguous geographic areas and their original design was intended to promote diversity and ensure that, if all students chose their base area school, none of the schools in the consortium would be racially isolated. Over time, the populations in the base areas have shifted, however, and they have not been redrawn. Moreover, the use of base areas has limited the impact of the consortia because each year about half of students in the choice process chose to attend their base area school.

Another key decision made by Board at the time of the development of each consortium was to opt against including high schools with higher proportions of White students and students who were not eligible for FARMS—namely Sherwood HS in the NEC and Bethesda-Chevy Chase HS in the DCC. Without these schools, the student population across each consortium was not as diverse, in terms as race, ethnicity, or socioeconomics. These decisions, thus constrained the potential for the consortia to promote diversity; and the impact of the decisions has been magnified over time with shifts in enrollment and diversity across the consortia.

As a hypothetical exercise, the demographic composition of the NEC was calculated for the NEC in 2013–14, with the addition of Sherwood HS, and the results are quite different. Without Sherwood HS, the current enrollment across the NEC, as presented in Exhibits 34 and 35, includes 46.4% Black/African American students, 13.6% White students, 24.1% Hispanic/Latino students, and 12.3% Asian students, and 50.2% of students are eligible for FARMS. If Sherwood HS had been included in the NEC, the current enrollment across the NEC would comprise 38.6% Black/African American students, 24.4% White students, 21.2% Hispanic/Latino students, and 12.3% Asian students, and 42.1% of students would be eligible for FARMS.

Findings are similar for the DCC. In 2013–14, enrollment across the DCC comprised 27.8% Black/African American students, 15.4% White students, 43.1% Hispanic/Latino students, and 11.0% Asian students, and 41.1% of students were eligible for FARMS. These data are presented in Exhibits 36 and 37. If the enrollment data for the DCC were calculated including Bethesda-Chevy Chase HS, instead of Wheaton HS, the student population would include 25.5% Black/African American students, 24.6% White students, 36.5% Hispanic/Latino students, and 10.1% Asian students, and 48.9% of the students would be eligible for FARMS.

Even though the consortia were designed to increase racial, ethnic, and socioeconomic diversity across the schools, the current school enrollments are demographically very

similar to the schools' base areas. When established, the high school consortia were each designed to create greater racial, ethnic, and socioeconomic diversity across the participating schools. However, student enrollment across the consortia regions, as discussed in the context section of the report, has increased substantially in the past decades. In addition, the areas have experienced continued demographic change, with higher enrollment of Hispanic/Latino, LEP and low-income students across all consortia schools (see charts provided in MCPS Division of Long-Range Planning in Appendix). These enrollment shifts have impacted the efficacy of the consortia on increasing diversity. None of the NEC schools are racially or socioeconomically isolated, but enrollment data from 2013–14 show that the proportion of students in each racial and ethnic group and by socioeconomic status is almost identical to the proportions of these groups in each school's base area. As shown in Exhibit 34, in the NEC schools, the percentages of students in each racial and ethnic subgroup and who were eligible for FARMS each varied by less than 3.0 percentage points from percentage in the base areas (in other words, the school enrollment if all students attended their base school).

Data in Exhibit 34 also show that the racial and ethnic composition of each of the three schools varied slightly from that of the NEC as a whole. For example, the proportion of Black/African American students across the NEC was 46.4% which is slightly higher than the proportion of Black/African American students enrolled in Blake HS (42.7%) or in Springbrook HS (42%), but was lower than in Paint Branch HS (53.6%). Additionally, the proportion of Hispanic/Latino students across the NEC was 24.1%, which is slightly higher than at Blake HS (22%) or Paint Branch HS (16.5%) but lower than at Springbrook HS (34.6%). Also, the proportion of White students across the NEC (13.6%) is higher than at Paint Branch (10.7%) or Springbrook HS (9.0%) and lower than at Blake HS (21.0%). Data for FARMS, as shown in Exhibit 35, provide similar findings.



Exhibit 34: NEC-Actual Enrollment vs. Base Area Population, by Race/Ethnicity (2013-14)



Exhibit 35: NEC—Actual Enrollment vs. Base Area Population, by Eligibility for FARMS (2013–14)

Similar data are shown in Exhibit 36 for the DCC. As in the NEC, none of these schools are racially or socioeconomically isolated, but in four of the five DCC schools, the percentages of students in each racial and ethnic subgroup and who were eligible for FARMS each varied by less than 2.5 percentage points between actual enrollments and the base area populations. It should be noted that enrollment data include all students in the DCC schools, including students enrolled in magnet and application programs with selective admissions criteria that are located within DCC schools.

At the fifth DCC school, Montgomery Blair HS, the actual enrollment and base area population were different. At Montgomery Blair HS, there was a higher proportion of Asian students and lower proportions of Black/African American, Hispanic/Latino, and low income students in the actual enrollment than in the base area population. It should be noted that Montgomery Blair HS houses two application programs—the science, math, computer science and CAP—which have high enrollments of White and Asian students. These students are included in the school enrollment data, and therefore, impact the racial, ethnic, and socioeconomic composition of the school in relation to the consortium. The impact of these programs on school demographics is discussed in the section on magnets and other application programs.

A comparison of each school's racial, ethnic, and socioeconomic composition in relation to the DCC as a whole provides similar findings to those for the DCC. None of the schools have a student population that precisely reflects the racial, ethnic, or socioeconomic composition of the DCC as a whole.



Exhibit 36: DCC-Actual Enrollment vs. Base Area Population, by Race/Ethnicity (2013-14)





3. Academic outcomes of students in each high school consortium

Over the past three years, the consortia have had limited success in increasing student outcomes and reducing achievement gaps. Across the NEC and the DCC, student achievement levels on MCPS high school milestones have remained flat over the past three years. Furthermore, on each of the high school milestones, achievement levels across the consortia lag compared to districtwide averages, which have also remained flat over the past three years. Data for all milestones are presented in the Appendix.

There were, however, several areas of improvement within the consortia in the area of academic performance. In the NEC, as shown in Exhibit 38, the proportion of Black/African American students who met the on-time graduation milestone increased in comparison with the proportion of White students who met the milestone; and the difference was statistically significant.¹⁷⁰

Exhibit 38: MCPS On-time Graduation Data—Percentage of Students Meeting the Milestone: Districtwide, NEC Total, and Subgroup



Within the DCC, student achievement overall on the Algebra 2 by Grade 11 milestone increased by 7 percentage points over the past three years (from 46% to 53%), and the difference was statistically significant (Exhibit 39). Districtwide, the proportion increased by only 2 percentage points. Furthermore, the proportion of Black/African American students who met the Algebra 2 milestone increased, and the increase was greater than for White students and statistically significant.¹⁷¹

¹⁷⁰ On-time graduation: NEC Black/African American students in 2012 to 2014 (p<=.009; Pearson Chi-Square=6.734).

¹⁷¹ Algebra 2: DCC in 2012 to 2014 (p<.05; Pearson Chi-Square=15.290); Algebra 2: Black/African American students in 2012 to 2014 (p=.006; Pearson Chi-Square =7.568).

Exhibit 39: MCPS Algebra 2 by Grade 11 Data—Percentage of Students Meeting the Milestone: Districtwide, DCC Total, and Subgroup



Indicator: Algebra 2

4. Perceptions of parents, students, and staff

Parents and students in both consortia generally agree that the choice process provides strong benefits for students who want to choose a school based on specific interests in the themes. During the focus groups, about half of the students reported that they chose their school because they had a specific interest in the theme or the programs that were offered. Responses from parents in focus groups about their children's choices were similar. Respondents who chose schools for a specific theme or program were generally very satisfied with the opportunity to select a school based on interests and passions. Furthermore, they noted that students who are in theme-based programs or academies are generally more interested and engaged in school and more serious about their studies. One student from Blake HS stated about his experience to take classes in an area of interest: "I feel like Blake has really helped me find my passion...you can really create your own schedule according to your own interests."

Students in focus groups also reported that the themebased electives and classes are more interesting and engaging because they tap into student aptitudes. For example, a student noted, "*IB challenges you to think creatively, more than just answering questions or sitting in class and taking notes. You are watching videos, relating it to your real life and making connections.*" These viewpoints highlight the benefits of choice, especially at the high school level, when many students are developing personal or intellectual passions. Courses that tap into those interests tend to be engaging for students and enable them to make real-world connections to their school work.

"For me personally, during my eighth grade year, I went to Takoma and my home school was [Montgomery] Blair. But I knew up to that point that I was interested in the biomedical sciences and it was brought to my attention that Wheaton has the only biomedical program in the DCC. So to me that was a straight attraction." – MCPS student

Families and staff in the DCC raised some concerns, however, that the consortia academies are not as well-developed as advertised during the open houses and in marketing materials.

Some of the parent focus group respondents, for example, reported that during the open houses, each school marketed the academies as smaller learning communities when they are actually a series of elective courses. They added that students who need to take core courses, specifically in Grades 9 and 10, do not have access to the academy elective because there is no room in their course schedule. They also expressed concerns that some students may not have access to special theme-based electives due to course scheduling conflicts. Furthermore, upper class students who do not have room in their schedules for electives, such as students who are overage and under-credited (oftentimes this group includes students who have emigrated from other countries), do not have the same access to the academies as other students. Focus group participants added that this point is not made clear through the marketing; therefore, students may not be fully informed about the opportunities that are available in the academies.

Parents and community members provided mixed feedback about whether MCPS should continue to offer high school consortia. On one hand, in focus groups, some parents within each high school consortium indicated a preference for rigorous, neighborhood high schools over the consortia and suggested that resources used for the consortia be re-allocated to strengthen academics across all of the high schools. Furthermore, some parents in focus groups indicated that they support neighborhood schools because these schools promote a stronger sense of community and connections between families and the schools than do consortia schools.

As one parent stated, "A flaw of the consortia model is that there is no continuity of student experience. Students are not able to go from elementary to middle to high school with their peers." They also reported that parent engagement is lower in consortia schools because many parents do not live near the school and cannot attend school meetings and functions.





Conversely, close to half (46.1%) of the respondents to the community surveys indicated that they think MCPS currently offers *too few* high school consortia, and only 10.8% said that MCPS offers *too many* high school consortia. When the data were disaggregated by respondent

race/ethnicity, Black/African American respondents were most likely to say there are *too few* high school consortia (57.8%), while responses were similar for all other subgroups (42.4% to 48.5%).

5. Staffing and transportation costs for the high school consortia

According to data provided by MCPS, the additional incremental costs for staffing and transportation associated with both the NEC and DCC high school consortia for the current school year (2015–16) total approximately \$2,672,030.

For the NEC, the total additional incremental costs were approximately \$1,045,964. This total includes \$167,277 at the district-level to conduct the lottery and support membership dues and fees for signature programs at the three schools. Two schools received additional incremental staffing to support their signature programs: 0.4 FTE in staffing for Paint Branch HS and 1.4 FTE in staffing for Springbrook HS, which equaled about \$188,687 in total school-based staffing allocations. It should be noted that costs to support signature programs are not unique to the NEC schools, as a number of other high schools throughout the district operate such programs, although for local students only. In addition, about \$690,000 is used for the additional incremental transportation costs for 14 bus routes to transport students throughout the NEC, including budgets for staff, fuel, equipment, and repairs.¹⁷²

For the DCC, the total additional incremental costs were approximately \$1,626,066 (not including the countywide or regional magnets or application programs located at DCC schools, which are discussed in the previous section). This total includes \$181,081 at the district-level to conduct the lottery and support membership dues and fees for the academy programs at the five schools. In addition, the DCC schools received a total of \$607,985 in additional incremental school-based staffing to support their academies, including 0.8 FTE for Northwood HS, 0.8 FTE for Wheaton HS, 1.0 FTE for Blair HS, 1.6 FTE for Einstein HS, and 1.6 FTE for Kennedy HS. In addition, about \$837,000 is used for additional incremental transportation costs for 17 bus routes to transport students throughout the DCC, including staff, fuel, equipment, and repairs.

6. Benchmarking and research

Other districts provide students with choice among schools on a regional or district-wide basis, and several have utilized "controlled choice" models that have been successful at promoting diversity. Controlled choice is a process that provides families a choice of schools

¹⁷² It should be noted that the number of bus routes is higher than reported in a 2008 by the Office for Legislative Oversight which may indicate bus transportation has increased as the consortium has become more established and more families are choosing schools other than their home schools.

beyond an attendance zone, but maintains the goal of promoting racial, ethnic, and socioeconomic integration.¹⁷³ MCPS's high school consortia were developed through a comprehensive analysis of controlled choice models that consider student diversity as part of the student selection lottery, although the DEC and NEC do not utilize all aspects of the controlled choice model.

Controlled choice was first implemented in Cambridge, Massachusetts in 1981 as a voluntary method of school integration through the elimination of neighborhood schools. As originally designed, the Cambridge plan aimed "*to provide students with the opportunity to excel academically and to grow and accept others as their peers in an integrated and balanced learning environment.*"¹⁷⁴ In 2001, the assignment process was revised in light of evolving legal precedents to emphasize socioeconomic status, as measured by eligibility for FARMS, rather than race/ethnicity in its formula to promote school integration. The process was revised to maintain proportions of FARMS eligible students in each school that are reflective of the districtwide average. The process first matched school assignments with families' first choice; however, it used factors such as socioeconomic balance, gender balance, school capacity and student enrollments, and the language requirements of dual immersion schools.¹⁷⁵ Using this plan, the district has maintained diversity in schools while granting most families their first choice.¹⁷⁶

Cambridge's model has led to implementation of similar controlled choice plans that weigh socioeconomic diversity in various school districts across the county, ranging from Montclair Public Schools in New Jersey, to Champaign Unit 4 Schools in Illinois, and Berkeley Unified School District in California.¹⁷⁷ Lee County Public Schools in Florida, for example, developed a controlled choice plan in the context of a court-ordered desegregation plan and to avoid redrawing school boundaries in response to growth and shifting demographics. The original plan, developed in 1997, was designed to foster school improvement and provide diverse enrollments. Since its initial implementation, the plan has been revised to provide increased opportunities for families to enroll their children in school close to their home and reduce bus ride times. Additionally, the plan promotes student achievement and educational equity by

¹⁷³ Alves, Michael J., & Charles V. Willie (1990). Choice, Decentralization, and Desegregation: The Boston "Controlled Choice Plan". In William Clune and John White (Ed). *In Choice and Control in American Education, Vol. 2*. New York: The Falmer Press.

¹⁷⁴ http://www.cpsd.us/UserFiles/Servers/Server_3042785/File/Migration/SC_Presentation.pdf?rev=0.

¹⁷⁵ http://www.cpsd.us/departments/frc/making_your_choices/about_controlled_choice.

¹⁷⁶ Shircliffe, Barbara & Morley, Barbara. (2013). Valuing Diversity and Hoping for the Best. In Gary Orfield and Erica Frankenberg (Ed). *Educational Delusions? Why Choice Can Deepen Inequality and How to Make Schools Fair*. Berkeley: University of California Press.

¹⁷⁷ Potter, Halley, et al. (2016). A New Wave of School Integration: Districts and Charters Pursuing Socioeconomic Diversity, Century Foundation. 14.

"standardizing a rigorous curriculum and replicating successful programs in each zone."¹⁷⁸ Success of the plan in promoting diversity relies on annual review of the plan assignments and the ability for the district to reassign schools to zones based on shifting demographics of the district.¹⁷⁹ Jefferson County Public Schools (JCPS) also implements a controlled choice process at the elementary school level. The district's more than 80 elementary schools are divided into 13 clusters. Students are assigned to a cluster based on home address. Within the geographic clusters, students are assigned to schools based on a choice process that considers the following factors: parental preferences, school capacity, and socioeconomic status.¹⁸⁰

The District of Columbia is one of the more recent school districts to consider a controlled choice system in order to maintain diversity in schools to counteract the growing school segregation that is aligned with housing segregation.¹⁸¹ Controlled choice has its challenges, however. Plans can be confusing for parents and may have to establish preferences for geographic proximity, which may reduce ride times for students but limit the impact of the plan on promoting diversity. Furthermore, research suggests that choice models that do not outline diversity or socioeconomic goals may lead to greater stratification than models that have goals.¹⁸² In order for the plan to work effectively, all schools must provide high-quality programs that are desirable for parents. If parents perceive schools to vary in quality, the process will produce inequitable demand and may decrease enrollment in lower-performing schools.

In contrast to these "controlled choice" options, New York City implements an open choice enrollment for all high school students. The process utilizes a complex algorithm to match students with high schools based on student preference, school capacity, and school rankings and priorities. The process includes selective and non-selective schools; students are able to rank up to 12 high schools. It provides opportunities for all students to choose a high school based on area of interest, preferred geographic location, or other factors. Recent studies, however, question the equity of the plan, citing data that low-performing students are disadvantaged by the process by being more often assigned to low-performing high schools. Through the process,

¹⁷⁸ http://www.leeschools.net/_cache/files/8f9bf18c-4def-4225-bb3b-

e799444ab3a8/2409F41080EBBBA514F814C025F0CE75.2015-16-plan-for-student-assignment.pdf.

¹⁷⁹ Ibid.

¹⁸⁰ http://www.jefferson.kyschools.us/Pubs/ChoicesElem.pdf.

¹⁸¹ Chaltain, Sam, Kahlenberg, Richard, & Petrilli, Michael (2014, January 24). How D.C. Schools Can Ward Off the "Big Flip." *The Washington Post.*

¹⁸² Wells, Amy Stuart, & Roda, Allison (2009). White Parents, Diversity and School Choice Policies: Where Good Intentions, Anxiety, and Privilege Collide. Accessed at

http://www.vanderbilt.edu/schoolchoice/conference/papers/Wells-Roda_COMPLETE.pdf

which is designed to improve educational options, some of the neediest students may be stuck in the least desirable schools.¹⁸³

The DCC and NEC have relied on the effectiveness of smaller learning communities in attracting students to schools. However, in recent years, many school districts have experienced challenges with implementing this model. Restructuring large high schools into smaller learning communities has been a strategy implemented in high school reform for more than two decades. In the late 1990s, the development of small, personalized learning communities was one of four key objectives in the Breaking Ranks Model for improving outcomes in low-performing high schools, along with ensuring that all students have access to rigorous, standards-based, real-world experiences; developing staff capacity to systematically use data for purposes of equity, accountability, and instructional improvement; and implementing collaborative leadership strategies that engage staff, students, parents, and the broader community in supporting school and student success.¹⁸⁴

Smaller learning communities were validated as an important high school reform strategy around 2000 with the creation of the U.S. Department of Education Smaller Learning Communities (SLC) grant, designed to enable school districts to develop or expand smaller schools (or learning communities) within large comprehensive high schools to help improve student engagement, achievement, and behavior outcomes. MCPS received a federal SLC in 2004 to develop academy programs in each of the five DCC schools and again in 2010 to support programs in the NEC. The small schools movement has been a popular tool for high school reform across the country, including major initiatives in New York and Chicago, among other districts. Furthermore, the Bill and Melinda Gates Foundation provided extensive funding across the country to support the model.

However, two decades later, research is highlighting some important challenges that districts and schools have encountered with implementation of this model, and in particular with converting existing, large schools into SLCs. For example, a five-year national evaluation of the Bill and Melinda Gates Foundation's National High Schools Initiative revealed that conversion of large high schools to SLCs is often hindered by the need to focus on structural changes required for implementing SLCs and by challenges associated with assigning staff and students to SLCs in an equitable manner. Furthermore, the conversion to SLCs is often challenged when key stakeholders are unable to agree upon or establish a clear vision for the learning environment, and when stakeholders are resistant to changes in instructional methods and strategies that are

¹⁸³ Nathanson, Lori, Corcoran, Sean, & Baker-Smith, Christine (2013). *High School Choice in New York City: A Report of the School Choices and Placement of Low Achieving Students.* New York: Research Alliance for New York City Schools, New York University Steinhart School of Culture, Education, and Human Development.

¹⁸⁴ Lachat, Mary Ann (2001). Data-Driven High School Reform: The Breaking Ranks Model. Providence: Brown University.

encouraged in order to make the conversion to SLCs effective. As a result, many large high schools have converted to SLCs, but still function as comprehensive high schools with staff who teach across SLCs and students who are assigned to SLCs but do not identify as a member of an SLC. Furthermore, the model has produced mixed results in terms of improved student outcomes. For example, data show that some SLCs produce positive results in terms of student attendance, engagement, and achievement gains in the first few years of the model, but many schools have not been able to sustain the outcomes or impact over time.¹⁸⁵

An effective model of high school choice with growing popularity across the country is the development of career pathways to provide choice using rigorous college and career-focused programs. Programs that include a combination of career and technical education (CTE), rigorous academic coursework, and opportunities to engage in the workforce—while creating clear pathways through high school, college, and beyond—are gaining momentum nationally; and district staff reported that they are working on bolstering such pathway programs in MCPS.

Career pathway approaches range in scope from discrete, school-based models, such as career academies within schools or whole school CTE programs, to systemic approaches designed to achieve broad and sustainable reforms in how students prepare for college and career. Research has highlighted the positive impact that these programs are having on student outcomes. For example, Linked Learning is a large-scale initiative in California designed to engage students in education by integrating rigorous academics with career-based learning and real-world workplace experiences through career-oriented pathways. Data show that the initiative has produced an impact on graduation level, credit accumulation, and program persistence and that students entering the program with low achievement scores demonstrate greater academic success than similar students enrolled in traditional high schools.¹⁸⁶ Additionally, a rigorous evaluation of Programs of Study, a career pathway model promoted by the U.S. Department of Education Office of Vocational and Adult Education, showed that "by the end of tenth grade, students' test scores, grade point averages, and progress to graduation tended to be better for the students in Programs of Study than for control/comparison students."¹⁸⁷

A recent study on career pathways conducted by MDRC attributes the growing popularity of career pathway models to the underlying principles and practices common to most programs, including: offering pathways that keep students' options open; allowing students to select their

186 SRI International (2015). Taking Stock in the California Linked Learning District Initiative: Six-Year Evaluation Report.

¹⁸⁵ Shear, L., Means, B., Mitchell, K., House, A., Gorges, T., Joshi, A., Smerdon, B., & Shkolnik, J. (2008). Contrasting Paths to Small-School Reform: Results of a 5-year Evaluation of the Bill & Melinda Gates Foundation's National High Schools Initiative. *Teachers College Record*, 110(9), 1986-2039.

¹⁸⁷ Visher, M. & Stern, D. (2015). New Pathways to Careers and College: Examples, Evidence, and Prospects. New York: MDRC.

pathway; using an integrated curriculum that includes real-world applications; providing personalized academic and social supports; integrating workforce exposure through employer partnerships and work-based learning; partnering and collaborating with postsecondary institutions and strong intermediary organizations; and setting high standards, establishing accountability systems, and engaging in data-driven decision-making.¹⁸⁸

A benchmark district that is implementing career pathways using a consortium model is Jefferson County Public Schools, which recently established a partnership with Ford Next Generation Learning to enhance and improve the high school programs and district choice model. In 2008, JCPS organized 16 area high schools into three clusters, and it developed five career themes which are each offered in one high school in each cluster to provide access for all students to JCPS's career themes. Students within each cluster can choose to attend any of the schools in the cluster. The programs were designed to prepare students for college and careers and promote collaboration and business partnerships around a career theme.¹⁸⁹

In 2012, JCPS found that only about a third of students were enrolling in career pathways offered in the cluster high schools, and the programs were not accomplishing the goals to increase career and college readiness. In response, JCPS forged a partnership with the Ford Fund to develop and implement the three-year Ford Next Generation Learning (NGL) Master Plan and to become one of 17 school districts to join the Ford Motor Company's NGL Community. The Master Plan is being implemented from 2013–2016 to: 1) transform teaching and learning through teacher externships with industry and community partners and ongoing professional development to support effective implementation of project-based learning across schools; 2) redesign high schools by implementing high quality professional career themes in which all students will participate, implementing individual learning plans for all students, and using data to evaluate programs; and 3) sustain change through business and civic leadership which will include industry councils for each career program, a CEO Advisory Board of local civic and business leaders to advise and advocate for the programs, and parent and family engagement. With the Master Plan, JCPS is working to increase participation in career themes to 100% of students, increase the percentage of students who graduate college and career ready, and increase the graduation rate and decrease the dropout rate across the district.¹⁹⁰

Conclusion and Program-Level Recommendations

Overall, the choice process for MCPS's high school consortia produces high levels of satisfaction among families and students, places a large majority of students in their first choice

¹⁸⁸ Ibid.

¹⁸⁹ http://www.jefferson.kyschools.us/Pubs/ChoicesMSHS.pdf.

¹⁹⁰ http://www.jefferson.kyschools.us/Projects/Ford/Ford.pdf.

school, and provides access to an array of themed programs that it may not be feasible to offer in all home schools. Within the NEC, 76% of families reported that they see benefits in the choice process, and almost 90% of students received their first choice process. In the DCC, also 76% of families reported seeing benefits in the process, and 75% of students were placed in their first choice school.

While the consortia lottery process has avoided concentrating students of a particular socioeconomic status in any of the schools, shifts in demographics and limitations in the design of the process impede its efficacy in promoting racial, ethnic, and socioeconomic diversity, an original goal for each consortium. Enrollment data show that in both consortia, the proportions of students in each racial, ethnic, and socioeconomic group in each school are almost identical to the proportions in the base areas, in other words what enrollments would be if all students were assigned to their base school. This finding should be considered within the context of several key factors, including the shifting demographics within Montgomery County over the past 20 years, which has decreased the demographic diversity across the schools in each consortium, as well as the political decisions at the outset to use base areas and exclude other possible schools that were originally considered, such as Sherwood HS and Bethesda-Chevy Chase HS.

Despite this finding, many consortium families and students place a high value on choice. They report that students are more engaged in their education and school when they can choose courses and pathways of study aligned with their individual interests and passions. Across the NEC, students reported high satisfaction with the signature themes and were pleased to have a choice of schools. In the DCC, students and families were satisfied with the choices, and more than half of students chose a non-base area school as their first choice. Yet, concerns were raised during student and parent focus groups that the consortia academies were not as well-developed as advertised during open houses and in marketing materials. As a result, some students and parents who participated in the focus groups expressed disappointment that the academies functioned primarily as a series of electives rather than wall-to-wall academies. Parent focus group participants also felt that high schools with geographic attendance zones help build a sense of community which is missing in consortia schools.

The additional incremental costs for staffing and transportation associated with both the NEC and DCC high school consortia for the 2015–16 school year total approximately \$2,672,030. This includes approximately \$1,045,964 for the NEC and \$1,626,066 for the DCC. The costs include resources to conduct the lottery and support membership dues and fees for signature programs and academy themes; incremental staffing to support the programs; and additional incremental transportation costs for bus routes.

The high school consortia in MCPS were designed based on comprehensive analyses of different choice models, including the controlled choice model, which provides students with a choice of schools beyond an attendance zone but maintains the goal of promoting racial, ethnic, and socioeconomic integration. A number of districts across the country, including for example,

Cambridge Public Schools (MA), Montclair Public Schools (NJ), Lee County Public Schools (FL), and Jefferson County Public Schools among others, have effectively used controlled choice models to promote diversity. MCPS's consortia, however, do not follow all aspects of the controlled choice model, but do consider socioeconomic status in the choice lottery. In addition, both consortia have relied on the effectiveness of smaller learning communities in attracting students to schools. Academic research has shown that school districts across the country have experienced challenges with implementing the SLC model. In its place, some districts, including for example Jefferson County Public Schools, are moving toward career pathways as a more effective model of high school choice that provides options of students using rigorous college and career-focused pathways.

In light of these findings, MCPS should consider the following recommendations for the high school consortia:

- Conduct a comprehensive review of the academies and other theme-based programs in each DCC and NEC school to ensure they provide rigorous instructional options that are consistent with the district's SPF and provide access to programs that would not otherwise be available in home schools, such as career education pathways.
- Consider adopting practices that have been successful in the MSMC for promoting racial, ethnic, and socioeconomic diversity, as discussed in the next section, namely elimination of base areas and the admission of out-of-consortium students who are interested in the thematic programs in consortia schools.