PUBLIC EDUCATION FACILITIES MASTER PLAN

Appendices B - I

for the

DISTRICT *of* COLUMBIA

Ayers Saint Gross Architects + Planners | Fieldng Nair International

TABLE OF CONTENTS

APPENDIX A:
School Listing (See Master Plan)

APPENDIX B:
DCPS and Charter Schools Listing By Neighborhood Cluster 1

APPENDIX C:
Complete Enrollment, Capacity and Utilization Study 7

APPENDIX D:
Complete Population and Enrollment Forecast Study 29

APPENDIX E:
Demographic Analysis 51

APPENDIX F:
Cluster Demographic Summary..... 63

APPENDIX G:
Complete Facility Condition, Quality and Efficacy Study 157

APPENDIX H:
DCPS Educational Facilities Effectiveness Instrument (EFEI) 195

APPENDIX I:
Neighborhood Attendance Participation..... 311

Cover Photograph: Capital City Public Charter School by Drew Angerer

APPENDIX B:

DCPS AND CHARTER SCHOOLS LISTING BY NEIGHBORHOOD CLUSTER

Cluster Number	Cluster Name	DCPS Schools	PCS Schools
1	Kalorama Heights, Adams Morgan, Lanier Heights	• Oyster-Adams Bilingual School (Adams) (Lower) • H.D. Cooke Elementary School • Marie Reed Elementary School	• Education Strengthens Families (Esf) PCS
2	Columbia Heights, Mt. Pleasant, Pleasant Plains, Park View	• Bancroft Elementary School • Benjamin Banneker Senior High School • Bruce-Monroe Elementary School at Park View • Cardozo Senior High School • Columbia Heights Education Campus • Meyer Elementary School • Tubman Elementary School	• AppleTree Early Learning PCS - Columbia Heights • Carlos Rosario International PCS • Cesar Chavez PCS: Bruce Prep Campus • Creative Minds PCS • DC Bilingual PCS - Columbia • DC Bilingual PCS - 14th Street • E.L. Haynes PCS - Georgia Avenue • LAYC Career Academy PCS • Shining Stars Montessori Academy PCS • The Next Step - El Proximo Paso PCS • YouthBuild LAYC PCS
3	Howard University, Le Droit Park, Cardozo/Shaw	• Cleveland Elementary School • Shaw Middle School at Garnet-Patterson	• Booker T. Washington PCS for the Technical Arts • Howard University Middle School PCS • Meridian PCS
4	Georgetown, Burleith/Hillandale	• Hyde-Addison Elementary School • Duke Ellington School of the Arts • Hardy Middle School	
5	West End, Foggy Bottom, GWU	• Francis-Stevens Education Campus • School Without Walls Senior High School,	
6	Dupont Circle, Connecticut Avenue/K Street	• Ross Elementary School	• Mundo Verde PCS
7	Shaw, Logan Circle	• Garrison Elementary School • Seaton Elementary School • Shaw Junior High School	• Center City PCS: Shaw Campus • Community Academy PCS - Butler Bilingual • KIPP DC: Grow, Lead, WILL
8	Downtown, Chinatown, Penn Quarters, Mount Vernon Square, North Capitol Street	• Walker Jones Education Campus • Thomson Elementary School	• BASIS DC PCS
9	Southwest Employment Area, Southwest/Waterfront, Fort McNair, Buzzard Point	• Amidon-Bowen Elementary School • Jefferson Middle School	• AppleTree Early Learning PCS - Amidon • AppleTree Early Learning PCS - Riverside
10	Hawthorne, Barnaby Woods, Chevy Chase	• Lafayette Elementary School	
11	Friendship Heights, American University Park, Tenleytown	• Deal Middle School • H.D. Woodrow Wilson Senior High School • Janney Elementary School	
12	North Cleveland Park, Forest Hills, Van Ness	• Murch Elementary School	
13	Spring Valley, Palisades, Wesley Heights, Foxhall Crescent, Foxhall Village, Georgetown Reservoir	• Key Elementary School • Mann Elementary School	

Cluster Number	Cluster Name	DCPS Schools	PCS Schools
14	Cathedral Heights, McLean Gardens, Glover Park	• Stoddert Elementary School	
15	Cleveland Park, Woodley Park, Massachusetts Avenue Heights, Woodland-Normanstone Terrace	• Eaton Elementary School • Hearst Elementary School • Oyster-Adams Bilingual School (Oyster) (Upper	
16	Colonial Village, Shepherd Park, North Portal Estates	• Shepherd Elementary School	
17	Takoma, Brightwood, Manor Park	• Coolidge Senior High School • Takoma Education Campus • Whittier Education Campus	• Capital City PCS • Center City PCS: Brightwood Campus • Latin American Montessori Bilingual PCS (LAMB) - Missouri Ave • Paul PCS • Roots PCS
18	Brightwood Park, Crestwood, Petworth	• Barnard Elementary School • Brightwood Education Campus • MacFarland Middle School • Powell Elementary School • Raymond Education Campus • Roosevelt Senior High School • Sharpe Health School • Truesdell Education Campus • West Education Campus	• Bridges PCS • Center City PCS: Petworth Campus • Community Academy PCS - Amos I • Community Academy PCS - Amos II • Community Academy PCS - Online • E.L. Haynes PCS - Kansas Avenue • Hospitality Senior High PCS • Washington Latin PCS: Middle School Campus (Decatur) • Washington Latin PCS: Upper School Campus (Upshur)
19	Lamont Riggs, Queens Chapel, Fort Totten, Pleasant Hill	• LaSalle-Backus Education Campus • Mamie D. Lee School	• Hope Community PCS: Lamond Campus • Ideal Academy PCS
20	North Michigan Park, Michigan Park, University Heights	• Brookland Education Campus at Bunker Hill • Brookland	• Elsie Whitlow Stokes Community Freedom PCS • Inspired Teaching Demonstration PCS • Potomac Lighthouse PCS • Washington Yu Ying PCS
21	Edgewood, Bloomingdale, Truxton Circle, Eckington	• Dunbar Senior High School • Emery Elementary School • Langley Educational Campus • McKinley Technology Senior High School • Shaed Education Campus	• Community Academy PCS - Amos III • DC Prep: Edgewood Elementary Campus • DC Prep: Edgewood Middle Campus • Hope Community PCS: Tolson Campus • William E. Doar Junior PCS: NE Campus
22	Brookland, Brentwood, Langdon	• Burroughs Education Campus • Langdon Education Campus • Luke C. Moore Academy Senior High School • Noyes Education Campus	• Mary McLeod Bethune Day Academy PCS • Perry St. Prep PCS (Upper and Lower) • Tree of Life Community PCS
23	Ivy City, Arboretum, Trinidad, Carver Langston	• Browne Education Campus • Hamilton (Youth Services Center) • Phelps Architecture, Construction, and Engineering Senior High School • Spingarn Senior High School • Wheatley Education Campus	• Center City PCS: Trinidad Campus • Washington Math, Science & Technology PCS (WMST)

Cluster Number	Cluster Name	DCPS Schools	PCS Schools
24	Woodridge, Fort Lincoln, Gateway	• Marshall Elementary School	• Friendship PCS - Woodridge Elementary & Middle
25	Union Station, Stanton Park, Kingman Park	• Capitol Hill Montessori at Logan • Eliot-Hine Middle School • J.O. Wilson Elementary School • Ludlow-Taylor Elementary School • Miner Elementary School • Peabody Elementary School (Capitol Hill Cluster) • Prospect Learning Center • School-Within-A-School at Logan • Stuart-Hobson Middle School (Capitol Hill Cluster) • Washington Metropolitan High School	• AppleTree Early Learning PCS - Oklahoma Ave. • Friendship PCS - Blow-Pierce Elementary & Middle • Options PCS - Middle and High School • Two Rivers PCS - Upper and Lower
26	Capitol Hill, Lincoln Park	• Brent Elementary School • Eastern Senior High School • Payne Elementary School, Tyler Elementary School • Watkins Elementary School (Capitol Hill Cluster)	• AppleTree Early Learning PCS - Lincoln Park • Center City PCS: Capitol Hill Campus • Cesar Chavez PCS: Capitol Hill Campus • Friendship PCS - Chamberlain Elementary & Middle • St. Coletta Special Education PCS
27	Near Southeast, Navy Yard	• Van Ness Elementary School	• Eagle Academy PCS- New Jersey Avenue
28	Historic Anacostia	• Ketcham Elementary School • Wilkinson Elementary School	
29	Eastland Gardens, Kenilworth	• Kenilworth Elementary School	• Early Childhood Academy PCS - Johenning Campus
30	Mayfair, Hillbrook, Mahaning Heights	• Smothers Elementary School • Thomas Elementary School	• Cesar Chavez PCS: Parkside Campus • DC Scholars • Friendship PCS - Collegiate Academy • Latin American Montessori Bilingual PCS (LAMB) - Michigan Park Campus
31	Deanwood, Burrville, Grant Park, Lincoln Heights, Fairmont Heights	• Aiton Elementary School • Burrville Elementary School • Drew Elementary School • Houston Elementary School • Kelly Miller Middle School • Ronald H. Brown Middle School • Woodson Senior High School,	• Arts & Technology Academy PCS • IDEA- Integrated Design and Electronic Academy PCS
32	River Terrace, Benning, Greenway, Dupont Park	• Kimball Elementary School • River Terrace Elementary School • Sousa Middle School	• DC Prep: Benning Campus • Richard Wright PCS • School for Educational Evolution and Development (SEED) PCS
33	Capitol View, Marshall Heights, Benning Heights	• C.W. Harris Elementary School • Davis Elementary School • Fletcher-Johnson Education Campus • Nalle Elementary School • Plummer Elementary School	• KIPP DC: KEY, LEAP, Promise • Maya Angelou PCS: Evans High School • Maya Angelou PCS - Evans Middle • Maya Angelou PCS-Young Adult Learning Center
34	Twining, Fairlawn, Randle Highlands, Penn Branch, Fort Davis Park, Fort Dupont	• Anacostia Senior High School • Beers Elementary School • Kramer Middle School • Orr Elementary School • Randle Highlands Elementary School	• Howard Road Academy PCS - Penn Ave
35	Fairfax Village, Naylor Gardens, Hillcrest, Summit Park	• Winston Education Campus	

36	Woodland/Fort Stanton, Garfield Heights, Knox Hill	• Garfield Elementary School • Stanton Elementary School	
Cluster Number	Cluster Name	DCPS Schools	PCS Schools
37	Sheridan, Barry Farm, Buena Vista	• Moten Elementary School • Savoy Elementary School	• Excel Academy PCS • KIPP DC: AIM, College Prep, Discover, Heights • Howard Road Academy PCS - Howard Road • Howard Road Academy Middle PCS - MLK Ave • Septima Clark PCS • Thurgood Marshall Academy PCS
38	Douglas, Shipley Terrace	• Green Elementary School • John Hayden Johnson Middle School • Malcolm X Elementary School • Turner Elementary School	• AppleTree Early Learning PCS - Douglas Knoll • AppleTree Early Learning PCS -Parkland
39	Congress Heights, Bellevue, Washington Highlands	• Ballou Senior High School • Ferebee-Hope Elementary School • Hart Middle School • Hendley Elementary School • King Elementary School • M.C. Terrell/McGogney Elementary School • Patterson Elementary School • Simon Elementary School	• Achievement Preparatory Academy PCS • Center City PCS: Congress Heights Campus • Eagle Academy PCS - The Eagle Center at McGoney • Early Childhood Academy PCS - Walter Washington Campus • Friendship PCS - Southeast Elementary Academy • Friendship PCS- Technology Preparatory Academy • Imagine Southeast PCS • National Collegiate Preparatory PCS
40	Walter Reed		
41	Rock Creek Park		
42	Observatory Circle		
43	Saint Elizabeths		
44	Joint Base Anacostia-Bolling	• Leckie Elementary School	
45	National Mall, Potomac River		
46	National Arboretum, Anacostia River		

APPENDIX C:

Complete Enrollment, Capacity and Utilization Study

ADEQUATE SPACE TO SUPPORT QUALITY EDUCATION PROGRAMS

PREMISE

The Master Facilities Plan is meant to guide strategic facilities improvements so the District can provide families with a choice of high quality schools close to their homes. Currently, District families have many school choices outside of their neighborhoods, including charter schools and a variety of DC Public Schools (DCPS). This aim of the Master Facilities Plan is aligned with many existing District policies, including the following:

- The Mayor's initiative of "One City, One Future," ensuring every child in every neighborhood has access to high quality facilities.
- The policy of high quality school facilities contributing to the quality of the neighborhood.
- The concept of high quality school facilities, both DCPS and charter schools, supporting high quality education programs and offering parents more choices regardless of their income or access to transportation.

PURPOSE

This chapter on Capacity and Utilization concentrates on how much space is available, how many students are in the public education system and how much space is utilized by students. Specifically, the Capacity and Utilization chapter answers the following questions:

- Where and how many students attend DCPS and charter schools?
- What is the current capacity of charter and DCPS school facilities?
- Is there alignment between facility capacity and student enrollment?
- How much space is being utilized to support current enrollment?
- How many students could be served in the current space?
- Is space located appropriately to meet current demand?

DEFINING CAPACITY AND UTILIZATION

In order to utilize public resources most efficiently and effectively, it is critical that the Master Facilities Plan consider the capacity, or the amount of space available citywide, in each neighborhood and each school to serve the educational needs of the District's students.

Capacity is measured by the number of students that a facility can serve based on a school's program, the amount of space available, and classroom standards. "Utilization" means the degree to which the enrollment is either below capacity or greater than capacity.

Although this analysis examines capacity and utilization for both DCPS and charter schools, it is important to note differences in the mandates and operation of DCPS and charters that affect capacity and utilization, and make direct comparisons quite complex. DCPS is a neighborhood-based school system that is mandated to provide a seat for every child in his or her respective neighborhood. Public charter schools are structured to serve as many students as they are able or as they choose to serve from all over the District. In addition, DCPS schools have tended to provide a wide range of co-curricular and extra- curricular facilities, such as athletic and assembly spaces, while charter schools are much more varied in the amount space dedicated to co-curricular and extra-curricular programs. The capacity of each charter school is affected by many issues outside of facility capacity, including staffing, educational programming and funding. For DCPS, the size and location of its facility inventory is affected by many buildings designed from 50 to 100 years ago for a different size of school population, a different geographic pattern of enrollment and different methods of teaching and learning. The alignment of facility to school population is made even more complex by the DCPS open enrollment policy of allowing students to attend schools of choice outside of their neighborhoods.

The size and location of charter schools' facility inventory is impacted by the facilities available either through the request for offers (RFO) process or through lease or purchase. Therefore, charter schools are also challenged to locate and size schools according to demand, as they may not have access to facilities in areas of high demand or the facilities available may be too large or small for the student population they intend to serve.

CAPACITY

The analysis of the space available per student (square foot or SF/student) can indicate the efficiency of the buildings and the extent to which buildings are overcrowded or under-enrolled. An understanding of capacity is critical to developing a plan that allocates space fairly and effectively, and makes the most of existing assets.

DCPS capacity is derived from 2003 and 2012 program capacity analyses commissioned by DCPS. The 2012 capacity is used wherever possible and final capacity data was confirmed by DCPS for all schools to reflect current programming. Program capacity is the number of students that the school building can serve given its current educational programming. Whereas design capacity simply counts the number of seats available per classroom in the building, program capacity counts the number of seats according to the way each space is used. For example, if a classroom originally designed for 20 is used as special education space for 8, the capacity is counted as 8.

Charter capacity is derived using self-reported capacity numbers from the Public Charter School Board (PCSB).

When not available, a proxy for charter capacity numbers was created by combining the charter enrollment numbers plus the additional open seats available for each school (as reported by each individual charter school). Given the wide range of facility types and programs among charter schools, this data is the most reliable of the available information to indicate the number of students each charter could support. However, self-reported capacity for each charter is influenced by a range of factors beyond facility, including staffing, funding and educational programs. Therefore, charter capacity should be considered for the purposes of this study as an indicator of how many students that the school as an institution could support, and not necessarily how many students that the current facilities could or should support.

To provide a common metric for understanding available space, an analysis consisting of two metrics was undertaken for both charters and DCPS. The first metric is the measurement of the square feet available per student based on the designed facility capacity. The second consists of the measurement of square feet per student enrollment.

UTILIZATION

This analysis determines the degree to which a facility is enrolled, either under or above capacity. Utilization, as defined for this analysis, is the enrollment of the school divided by the capacity of a facility expressed as a percentage. For example, many DCPS facilities are 50 to 75 percent utilized, indicating that the enrollment is below the number of students the facility could potentially serve.

An understanding of utilization is critical to ensuring that there is a critical mass of students to support high quality programming and an appropriate range of elective course offerings. It is also important to ensuring there are not so many students that specialized spaces must be used as classrooms, thereby reducing course offerings and programming.

FACTS AND BENCHMARKING

FACILITY INVENTORY

DC Public Schools

As of October 2012, DCPS has 13.8 million gross square feet (GSF) of space in 119 active school buildings, with a program capacity of approximately 60,020 students. In addition, the system has 1.2 million GSF in 10 vacant buildings, with capacity for an additional 5,900 students. The schools targeted in the 2012 DCPS closures and consolidation are not included in this vacant category.

Compared to the 2011 audited DCPS student enrollment data, there is an excess of 23,500 seats in the existing DCPS facility inventory. This number includes the space available in currently vacant buildings. The number of excess seats in the active inventory accounts for 17,600 excess seats.

Public Charter Schools

As of October 2012, charter schools utilize 4.2 million GSF of space in 95 facilities, with a total self-reported capacity of approximately 40,000 students.

DCPS and Charter Schools Combined and Compared

Within the District's total public education facility inventory, which combines DCPS and charter school facilities, there are 18 million GSF in 223 schools serving 77,500 students.

Very clear differences between DCPS and charter schools' school size and building size are evident within the inventory. For example, the average size of a DCPS elementary school facility is 71,800 square feet with capacity for about 400 students, whereas the average size of a charter elementary school facility is 28,000 square feet and serves 330 students. Since DCPS is required to provide a seat for every child in the city and charter school size is determined by many factors beyond facility, each system has to utilize space differently and strategically. DCPS must maintain enough inventory to support a fluid and dynamic enrollment. On the other hand, the finances of each charter school limit the amount of space each can afford to operate, thereby setting capacity.

SPACE PER STUDENT

To understand the fit between student enrollment and the space available in facilities, the gross square feet per student based on current enrollment and capacity was analyzed (Figure C.1). Gross square feet (GSF) was used as opposed to net square feet (NSF) or assignable square feet (ASF) so that a comparison could be made between the total space available in facilities, regardless of the efficiency of design or use of space.

The significance of GSF/student is both programmatic and financial. If there is not enough GSF per student, facilities may not have the space to support education programming, particularly specialties like art, music, science and athletics. If there is too much GSF per student, the District of Columbia is paying to maintain

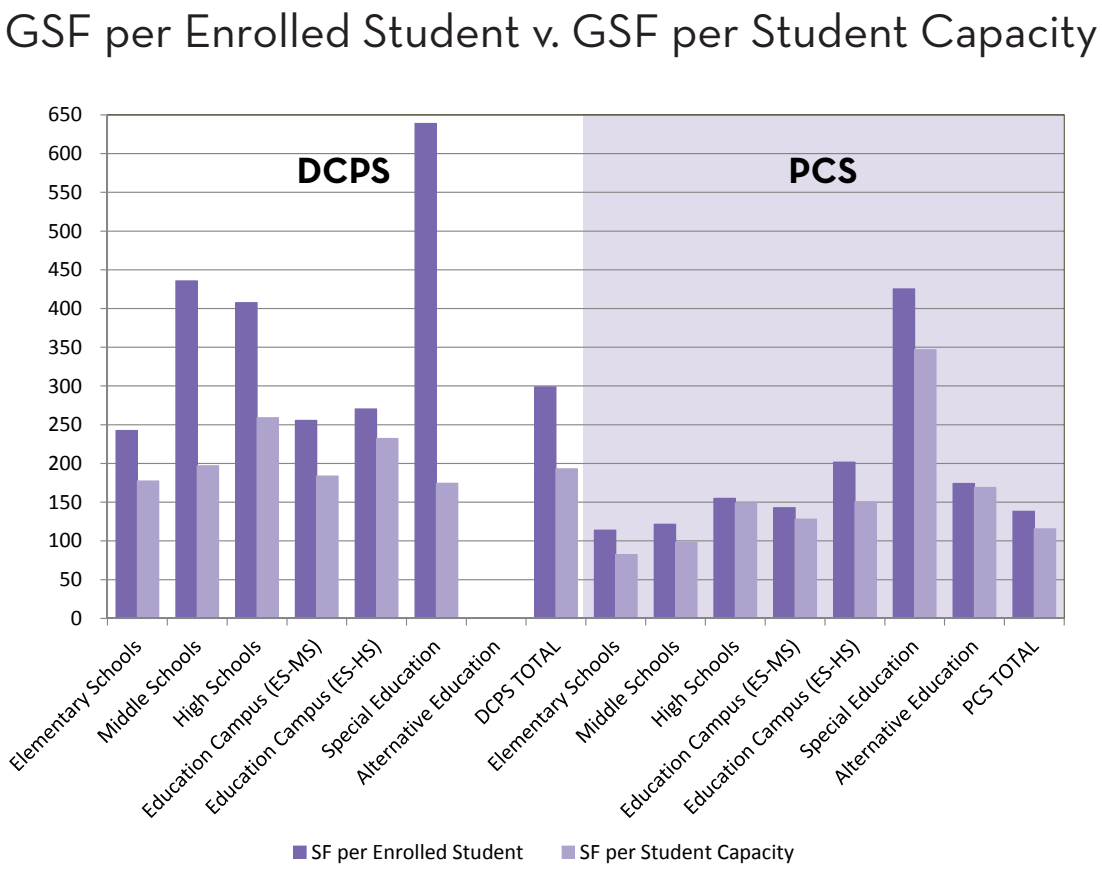

Figure C.1

and operate more building area than is needed.

Given the specialized space needs of DCPS special education and adult education facilities, this analysis focuses on DCPS elementary schools, middle schools, high schools and the few education campuses. For charter schools, the analysis focuses on elementary schools, middle schools, high schools, PK/K-8 education campuses and PK/K-12 education campuses, and excludes special education and adult education facilities given their specialized space needs.

When looking at GSF per student, it is important to note that the GSF per student tends to increase for middle school and high schools, as spaces like large gymnasiums and associated support spaces become more prevalent. Gymnasiums require more GSF although they do not tend to increase a school's capacity because of their occasional use. Charter schools typically do not have access to such large spaces, so the GSF per student tends to be based on more efficient spaces like classrooms.

Additionally, given the wide range of education programming in the District in both DCPS and charter schools, there is not a single GSF per student that is ideal or appropriate for every school. However, GSF per student puts all schools on equal footing regardless of academic program, how they were designed or are being used currently. Furthermore, benchmark data is available for GSF per student from the DCPS Design Guidelines and other school districts, allowing for comparisons.

DCPS

The average GSF per enrolled student breaks down by school type as follows (Figure C.2):

- Elementary School: 243 SF/student:
  - DCPS Standard for New Construction and Modernization[1] 150 SF/ student
  - National Average[2]: 77-147 SF/ student
- Middle School: 436 SF / student:
  - DCPS Standard for New Construction and Modernization : 170 SF/ student
  - National Average 114-212 SF/ student
  - ES-MS Education Campus: 256 SF/student
  - ES-HS Education Campus: 270 SF/ student
- High School: 408 SF / student
  - DCPS Standard for New Construction and Modernization : 192 SF/ student
  - National Average 123-211 SF/ student

[1]Design Guidelines | District of Columbia Public Schools, 2009, pg 2000-1

[2]Wohlers, Art. "Gross Square Feet per Student", Council of Education Facilities Planners, Issuetrak, November 2005.

DCPS Analysis

All school types on average are well above the GSF per student identified in DCPS design guidelines. This finding suggests that either the inventory is unaligned with current enrollment or there are significant issues with the efficiency of building designs. This issue is particularly acute for middle schools. Although DCPS has only 13 middle schools and only 4,759 DCPS students enrolled in these middle schools, it dedicates 1.8 million GSF to middle school education. There is more space per student in middle schools than any other type of school.

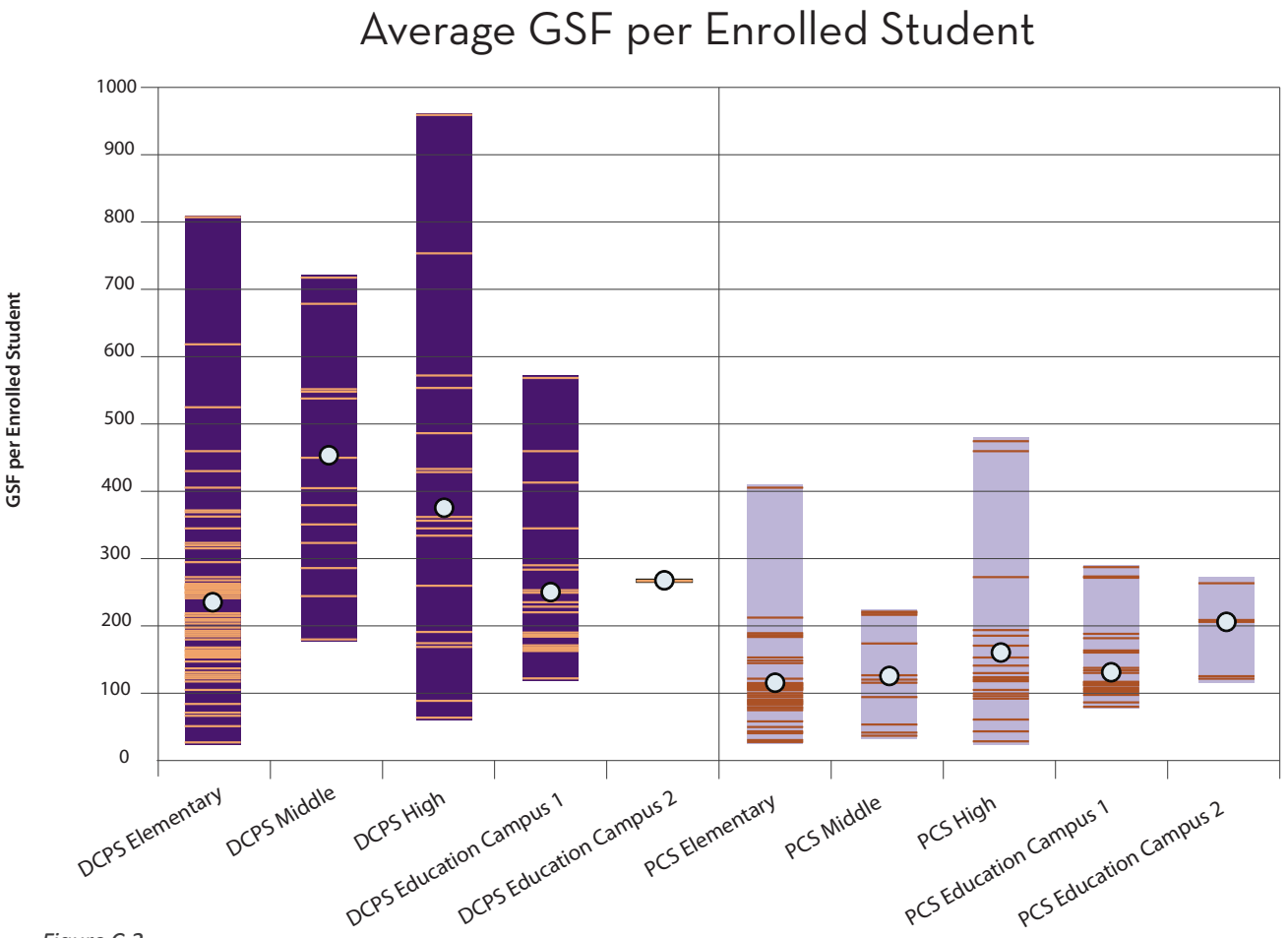

Figure C.2

CHARTER SCHOOLS

Given the range of space needed to support the wide variety of charter education programs, it is difficult to develop a meaningful average GSF per student nationally. However, it is useful to examine the amount of space available per student for reference. The statistical average (mean) SF per enrolled student by grade configuration is as follows (Figure C.2):

- Elementary School: 114 SF/student
- Middle School: 121 SF / student
- ES-MS Education Campus: 143 SF/student
- ES-HS Education Campus: 202 SF/ student
- High School 155 SF / student

DCPS AND CHARTER SCHOOLS COMBINED AND COMPARED

Charter facilities range from purpose-built new schools to leased commercial space and former DCPS schools to meet a wide range of educational programming with differential spatial needs. However, charter schools on a GSF per student basis are operating between 25 percent to 50 percent less space per student than is the case with DCPS schools.

CAPACITY BY CLUSTER

COMBINED DCPS AND CHARTER SCHOOLS: ES ONLY

DCPS school capacity numbers were obtained from DCPS. Charter School capacity numbers were obtained from PCSB. When not available, a proxy for Charter School capacity numbers was created by combining the Charter School enrollment numbers plus the additional open seats available for each school (as reported by each individual charter school).

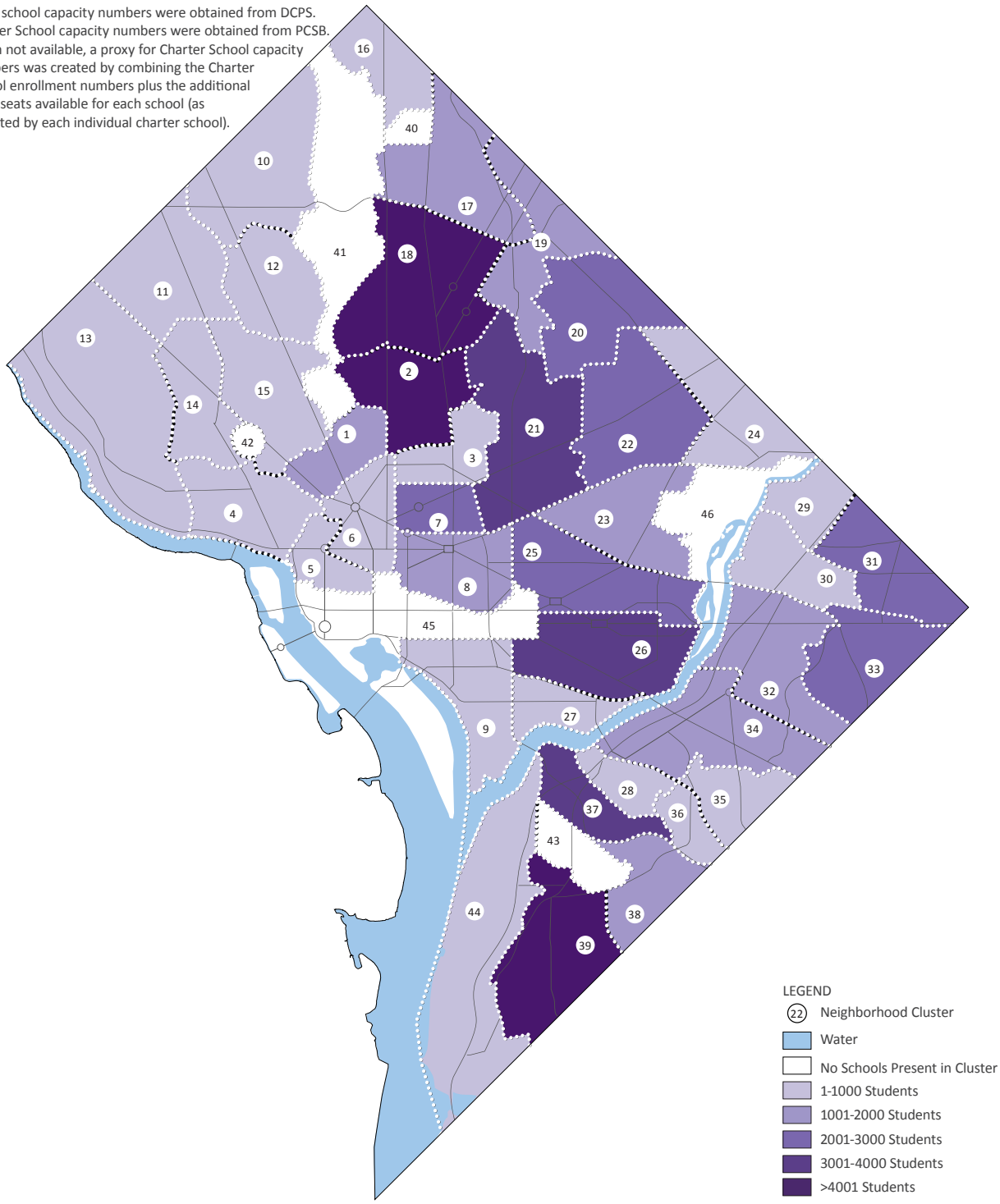

Figure C.3

14

CAPACITY BY CLUSTER

COMBINED DCPS AND CHARTER SCHOOLS: ES, MS AND HS

DCPS school capacity numbers were obtained from DCPS. Charter School capacity numbers were obtained from PCSB. When not available, a proxy for Charter School capacity numbers was created by combining the Charter School enrollment numbers plus the additional open seats available for each school (as reported by each individual charter school).

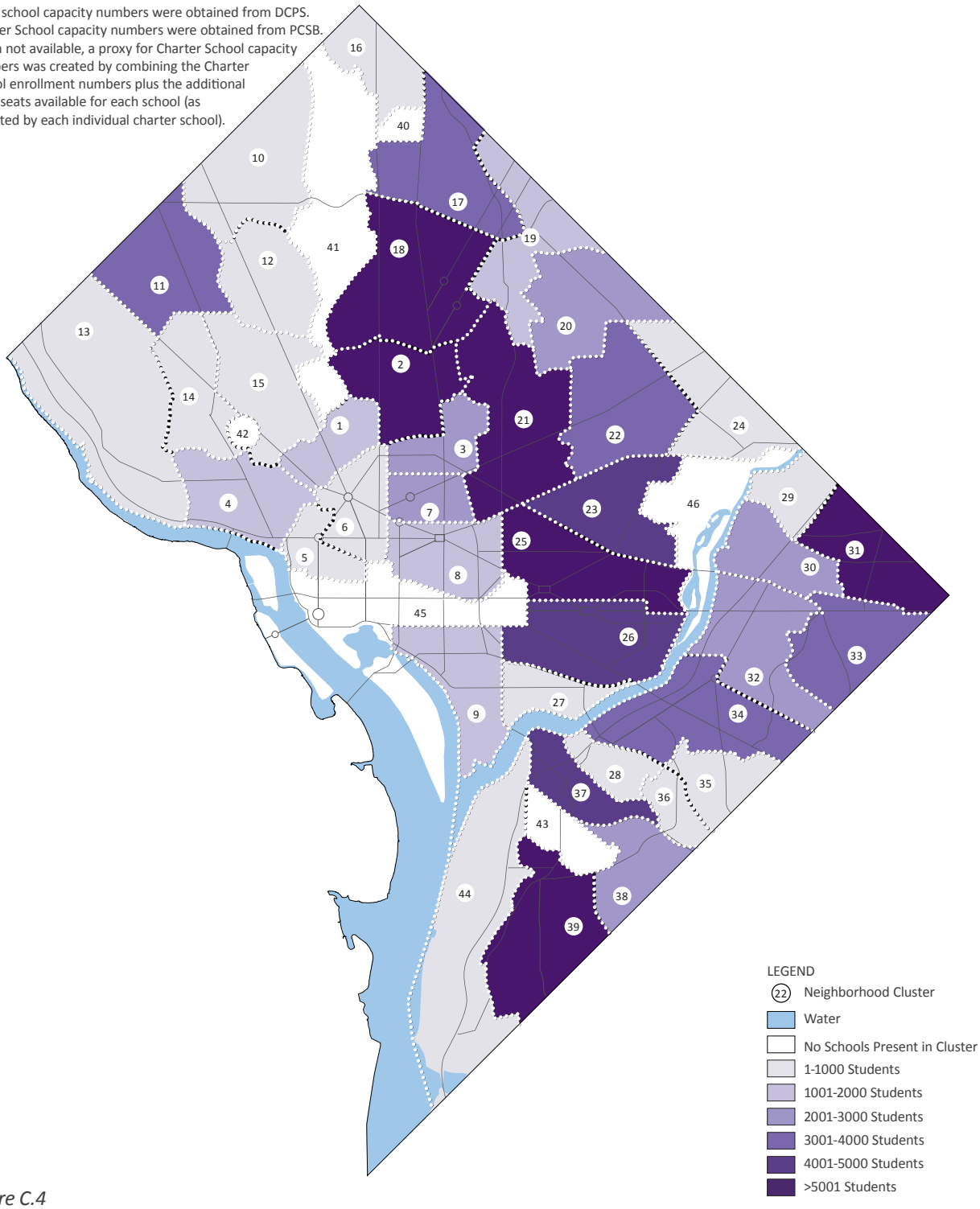

Figure C.4

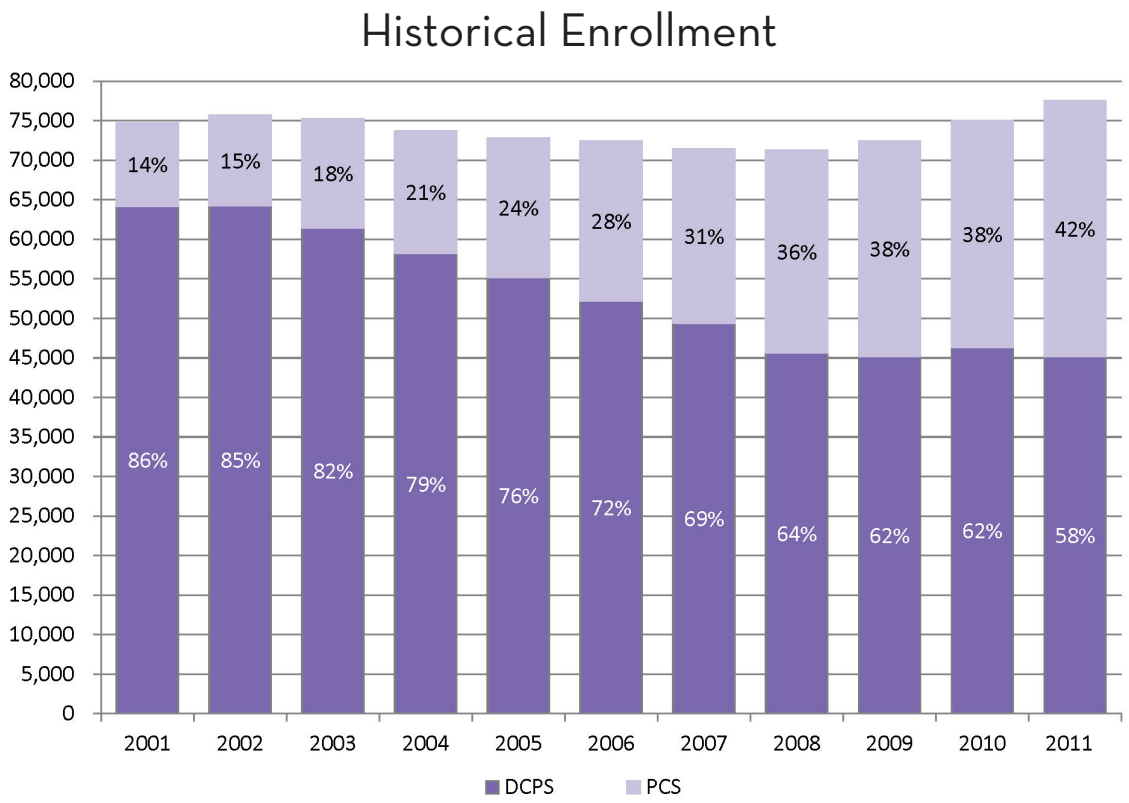

Figure C.5

ENROLLMENT

Between 2001 and 2008, total enrollment decreased by more than 2,000 students but increased by more than 5,000 students from 2009 to 2011. From 2001 to 2011, the charter schools' share of total enrollment has increased from 14 percent to more than 38 percent in 2011 (Figure C.5).

DCPS has the greatest share of elementary and high school students, while charter schools have the greatest share of ES-MS education campuses (Figure C.6).

From Grade 5 to Grade 6, DCPS enrollment significantly dips according to the October 2011 Enrollment Audit in contrast to an increase in charter school enrollment for the same grades (Figure C.7). There are 668 fewer students enrolled in DCPS Grade 6 than in Grade 5 and 469 more students enrolled in charters Grade 6 than in charters Grade 5.

This data suggests that there is noticeable shift from DCPS to charter schools at the transition from elementary to middle school. This shift may account for part of the under-utilization of DCPS middle school inventory and the over-utilization of charter schools' middle school inventory. Together, DCPS and charters lost nearly 200 students between Grades 5 and 6 in 2011.

Enrollment significantly jumps from Grade 8 to Grade 9 in both DCPS and charter schools. The increase is considerable in DCPS schools, where there were 1,349 more students in Grade 9 than in Grade 8. For charter schools, there are 146 more students in Grade 9 than in Grade 8.

Comparison of Enrollment between DCPS and Charter Schools

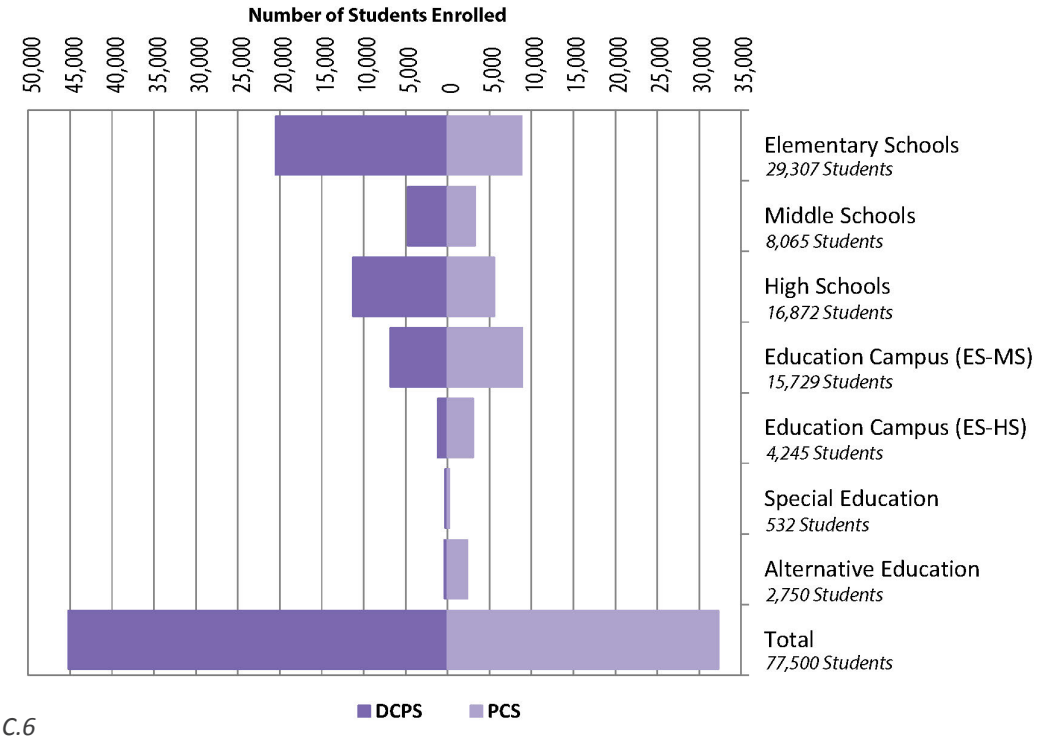

Figure C.6

Comparison of Enrollment by Grade between DCPS and Charter Schools

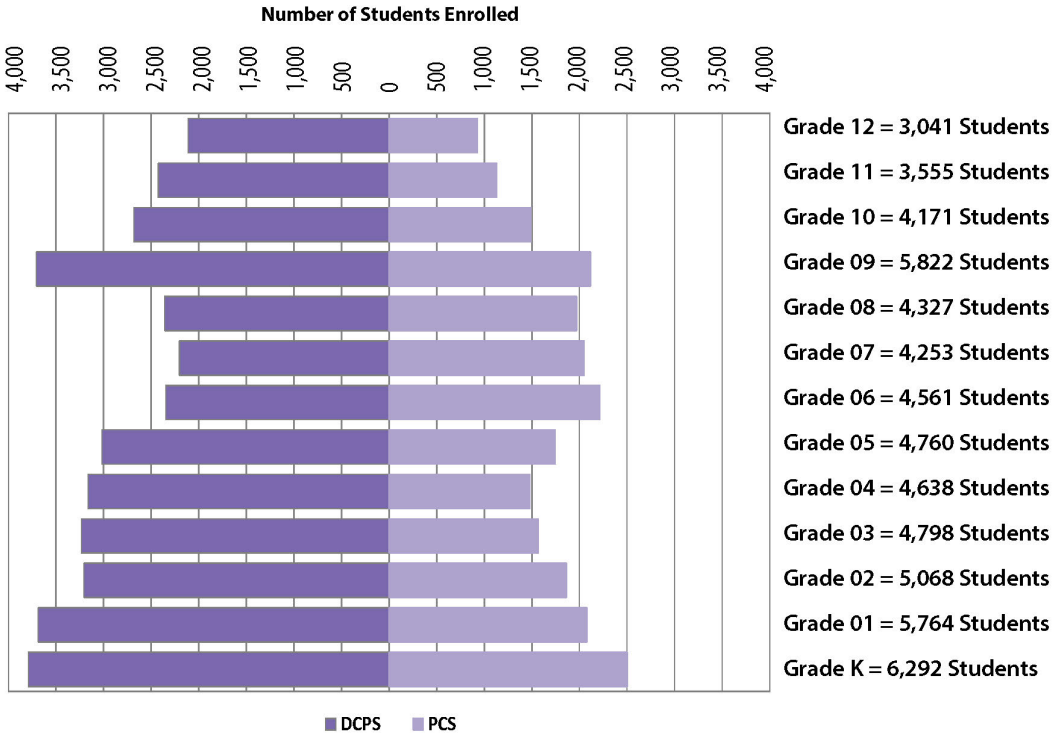

Figure C.7

ENROLLMENT BY CLUSTER

COMBINED DCPS AND CHARTER SCHOOLS: ES ONLY

Enrollment data for both DCPS and Charter Schools was gathered from the Office of the State Superintendant of Education (OSSE) October 2011 Audited Enrollment.

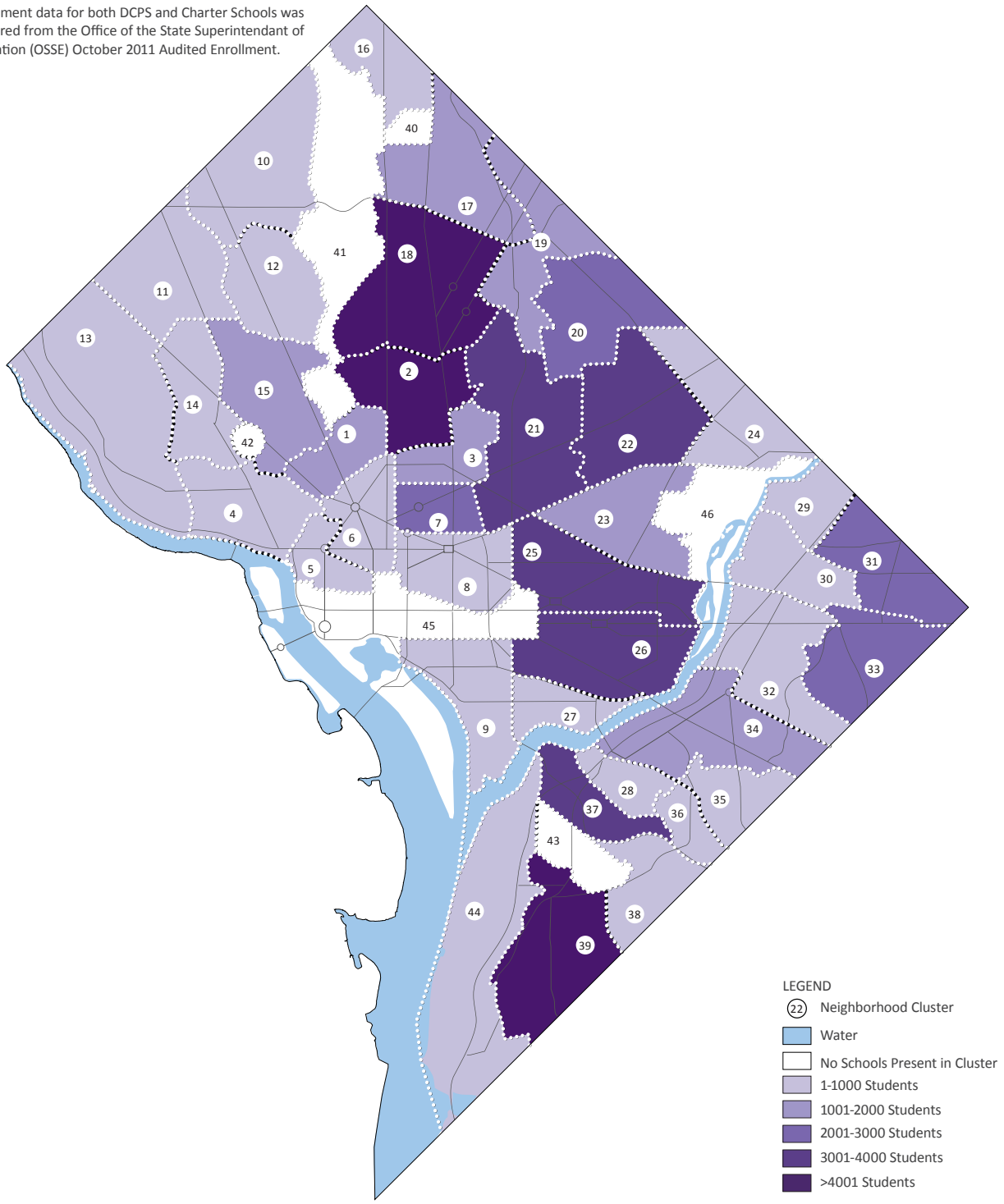

Figure C.8

18

ENROLLMENT BY CLUSTER

COMBINED DCPS AND CHARTER SCHOOLS: ES, MS AND HS

Enrollment data for both DCPS and Charter Schools was gathered from the Office of the State Superintendant of Education (OSSE) October 2011 Audited Enrollment.

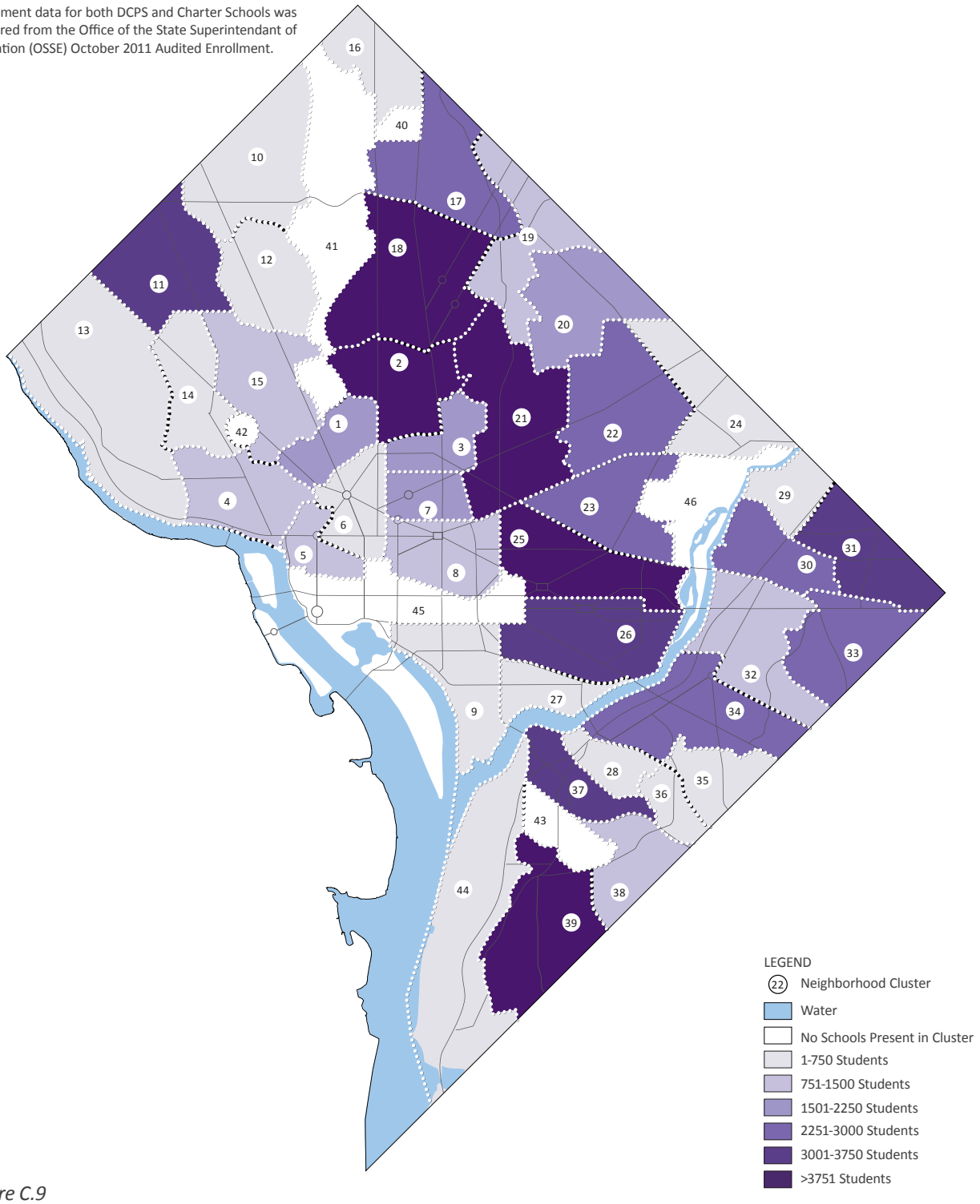

Figure C.9

UTILIZATION

Although average utilization for both DCPS and charters shows a reasonable match between capacity and enrollment District-wide, at 75 percent and 85 percent respectively, there is wide variation among school types and neighborhood clusters. Figure C.10 demonstrates the wide variation in utilization between neighborhood clusters in the District's schools to suggest there are enough seats in total, but the seats are not located in the right places to meet current demand.

Given the excess capacity in the DCPS middle school inventory, utilization drops dramatically in DCPS middle schools. Interestingly, DCPS utilization for middle schools drops to 53 percent and charter school utilization jumps to 82 percent. Correlating this misalignment between facility capacity at the middle school level and enrollment with a grade cohort analysis, the data suggests that there is a shift from DCPS to charters during the middle school years.

Elementary and middle schools are well utilized for both DCPS and charter schools, at 78 percent utilization and 91 percent utilization respectively. The combination of elementary and middle schools in (combined) ES-MS campuses is also more efficient on SF/student basis.

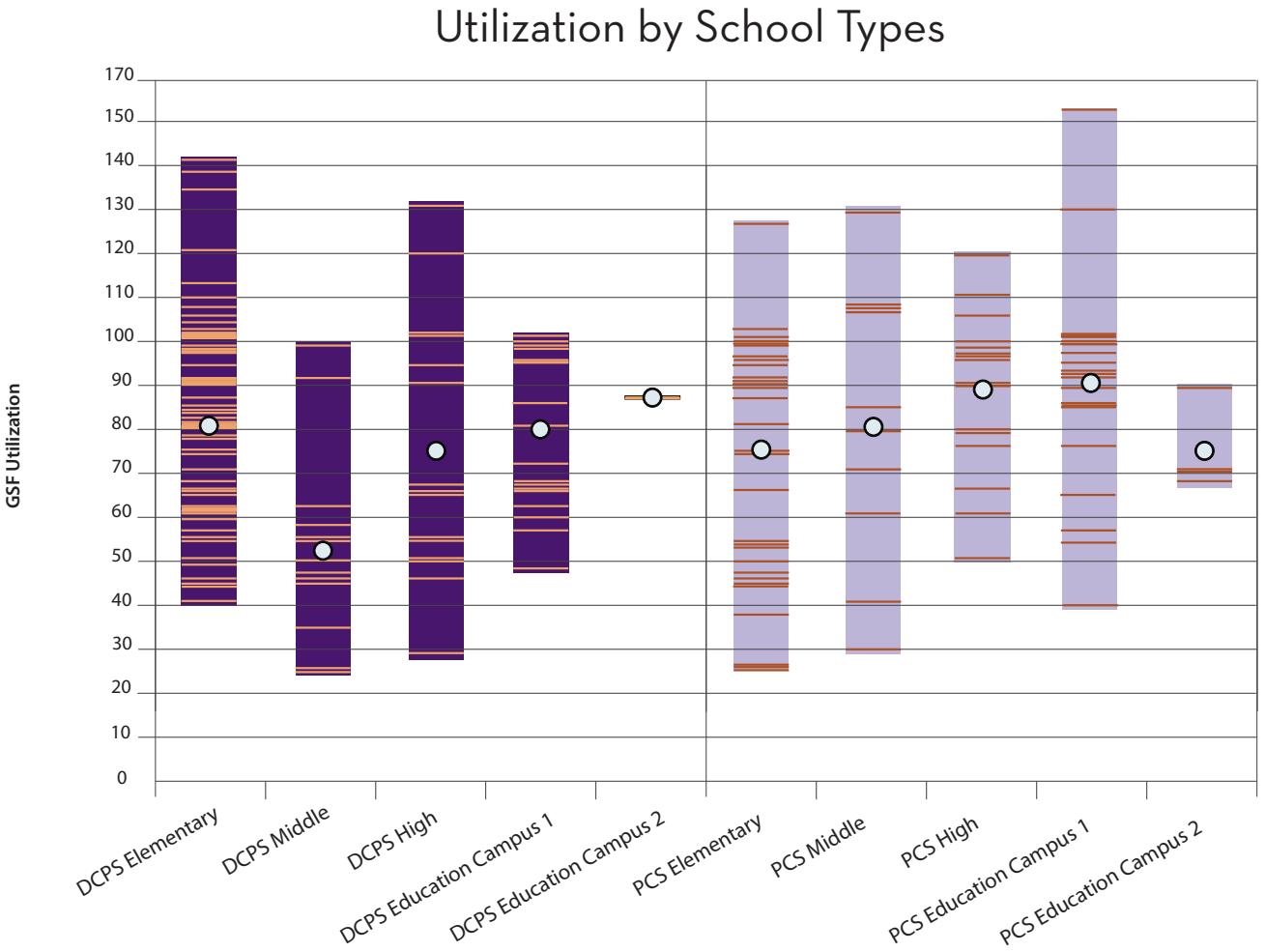

Figure C.10

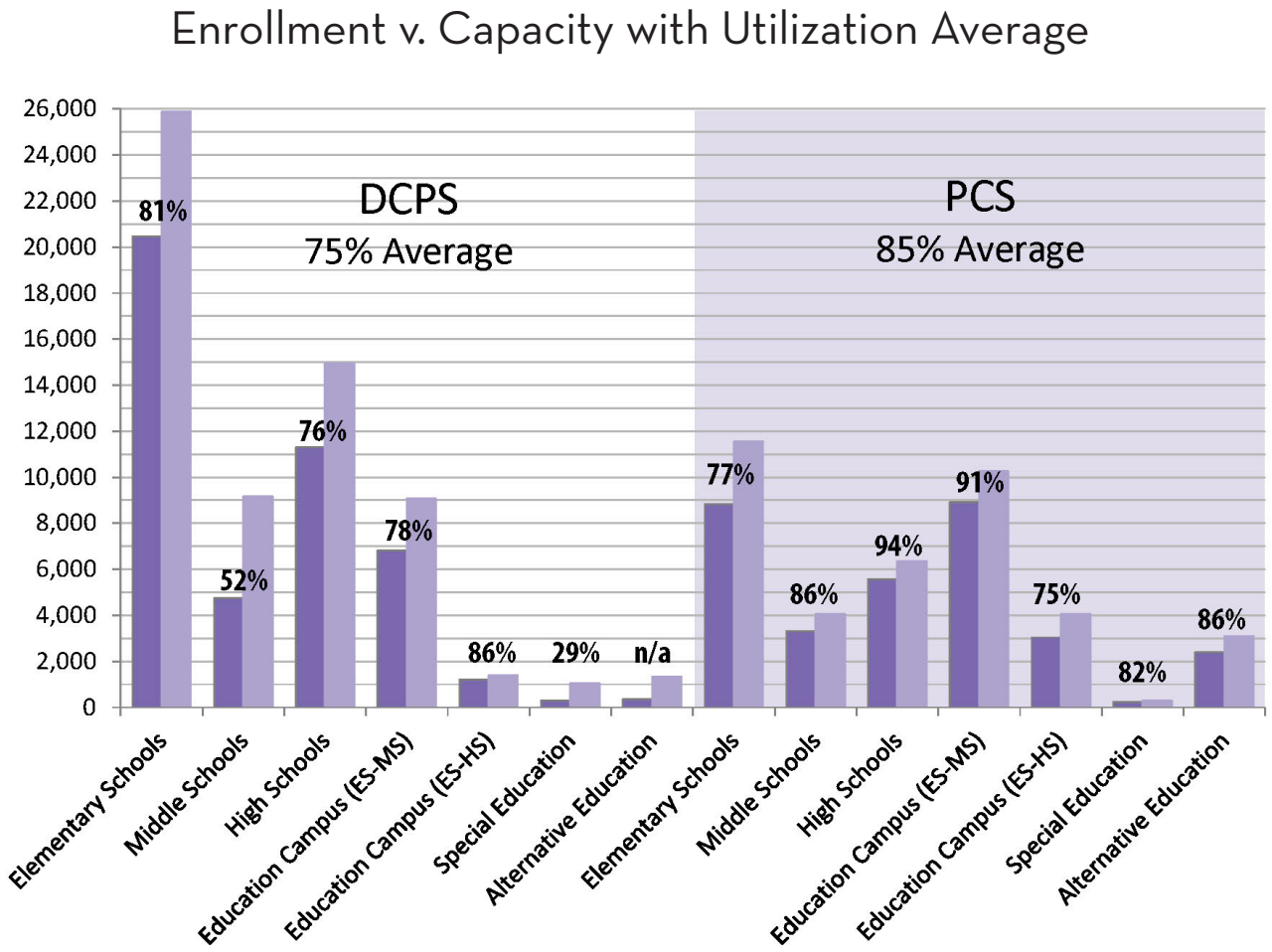
Enrollment v. Capacity with Utilization Average
26,000
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
DCPS
75% Average
PCS
85% Average
81%
52%
76%
78%
86%
29%
n/a
77%
86%
94%
91%
75%
82%
86%
Elementary Schools
Middle Schools
High Schools
Education Campus (ES-MS)
Education Campus (ES-HS)
Special Education
Alternative Education
Elementary Schools
Middle Schools
High Schools
Education Campus (ES-MS)
Education Campus (ES-HS)
Special Education
Alternative Education

Figure C.11

UTILIZATION BY CLUSTER

COMBINED DCPS AND CHARTER SCHOOLS: ES ONLY

Cluster utilization was determined by taking each school's enrollment and dividing by the facility's capacity.

DCPS enrollment numbers are from the Office of the State Superintendant of Education (OSSE) and Charter School Enrollment numbers obtained from Public Charter School Board (PCSB).

DCPS school capacity numbers obtained from DCPS. Charter School capacity numbers obtained from PCSB. When not available, a proxy for Charter School capacity numbers was created by combining the Charter School enrollment numbers plus the additional open seats available for each school (as reported by each individual charter school).

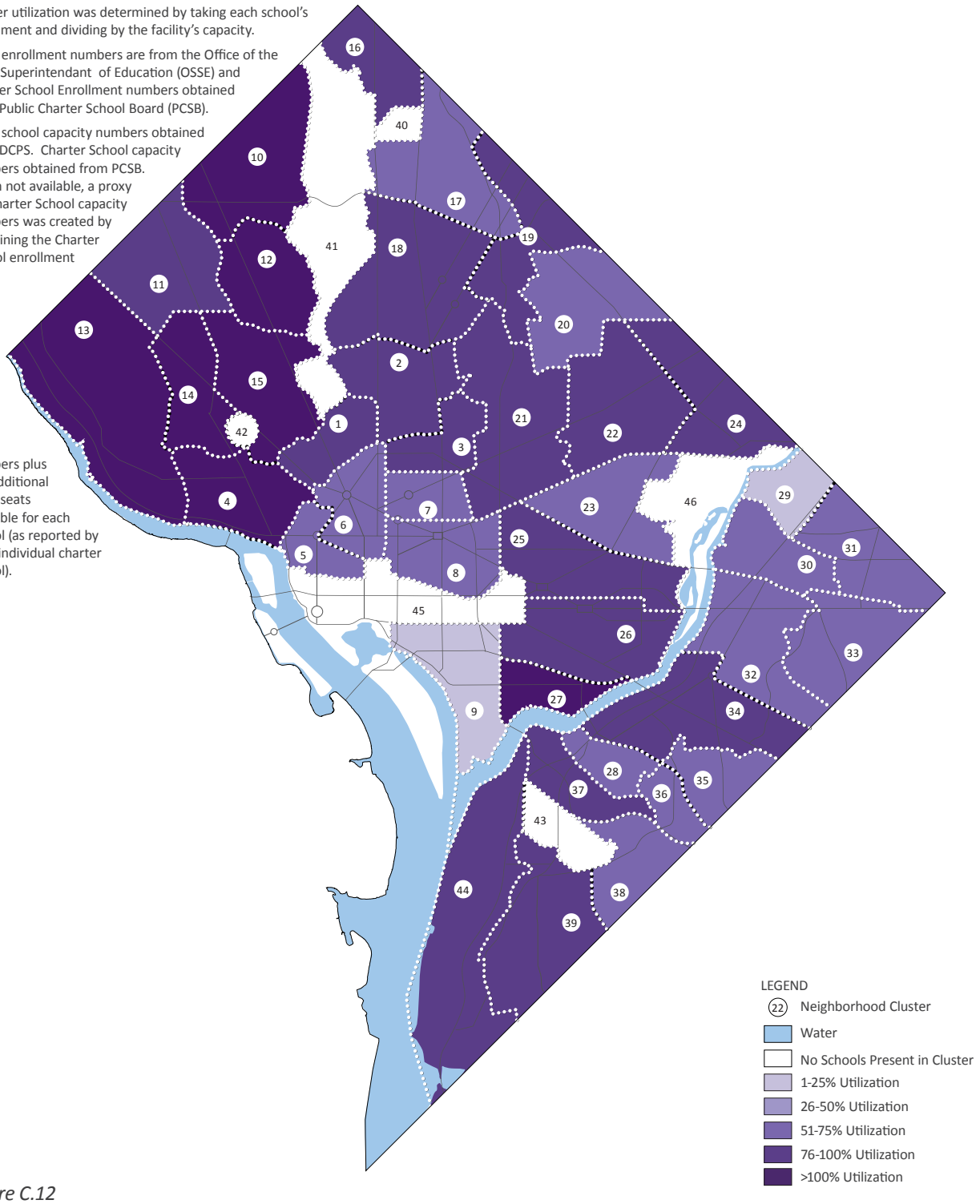

Figure C.12

22

UTILIZATION BY CLUSTER

COMBINED DCPS AND CHARTER SCHOOLS: ES, MS AND HS

Cluster utilization was determined by taking each school's enrollment and dividing by the facility's capacity.

DCPS enrollment numbers are from the Office of the State Superintendant of Education (OSSE) and Charter School Enrollment numbers obtained from Public Charter School Board (PCSB).

DCPS school capacity numbers obtained from DCPS. Charter School capacity numbers obtained from PCSB. When not available, a proxy for Charter School capacity numbers was created by combining the Charter School enrollment numbers plus the additional open seats available for each school (as reported by each individual charter school).

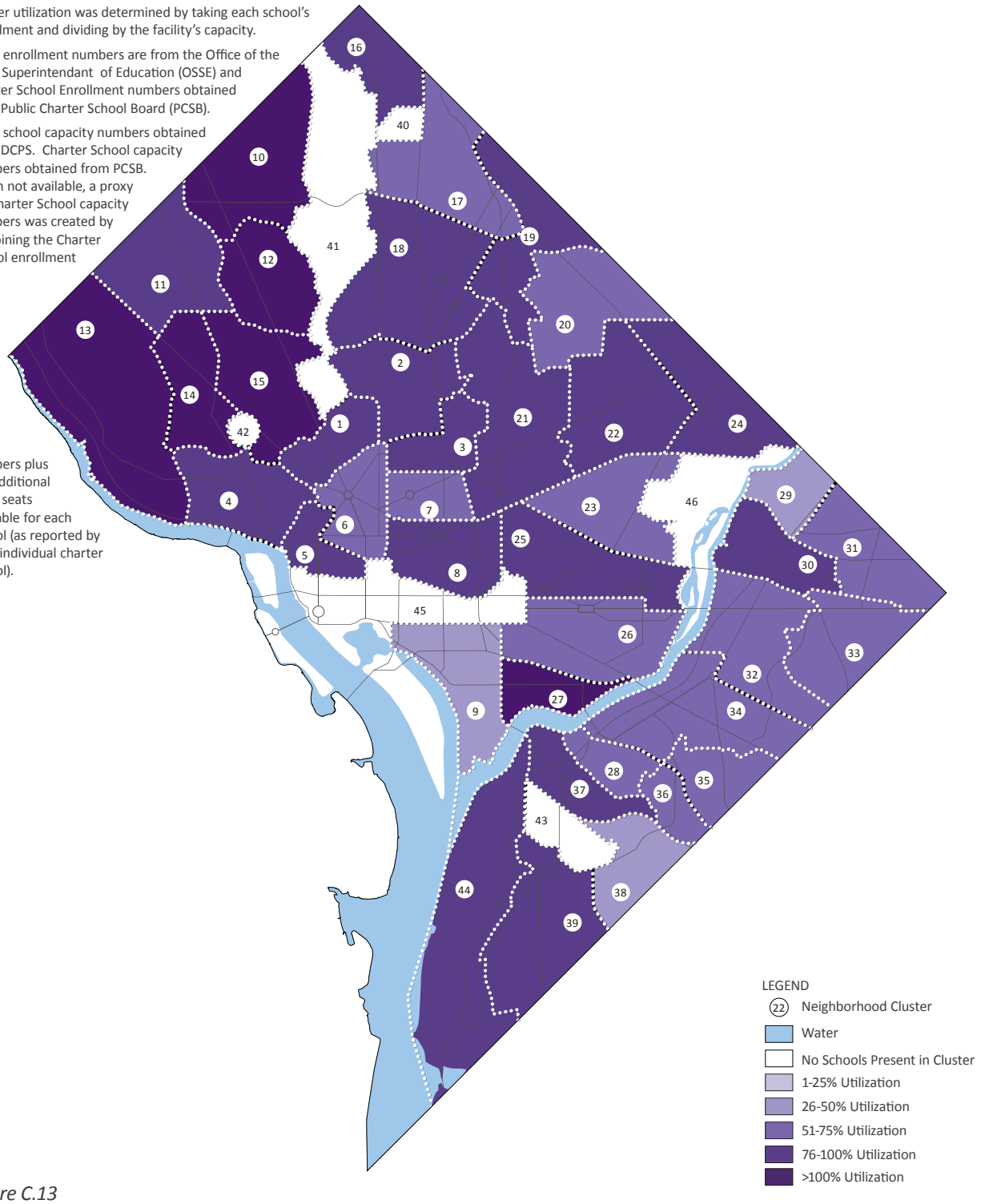

Figure C.13

FINDINGS

ENROLLMENT

Enrollment is fluid and dynamic. Although enrollment has decreased in recent years, enrollment trends projected for the next three to eight years may put new pressures on both DCPS and charter schools.

DCPS and charter enrollment dips considerably between Grades 5 and 6, suggesting that students and families are leaving the public education system at the middle school level.

Charter capacity and enrollment are condensed within the central and northern parts of the city (clusters 21, 18, 2, and east of the Anacostia River), even as school-aged population is expected to grow citywide.

CAPACITY

There is an excess of approximately 17,600 seats in the active DCPS inventory, not including vacant buildings. Adding the capacity from vacant buildings, there is a total of 23,500 seats in the total DCPS inventory (based on 2011 audited enrollment data).

There is capacity for approximately 7,300 students in charter schools (based on charter self-reported capacities and available slots).

A challenge is to find more strategic ways to distribute capacity geographically and between DCPS and charters so that capacity aligns with demand, while also preparing for future increases in enrollment.

UTILIZATION

Although average utilization for both DCPS and charters shows a reasonable match between capacity and enrollment District-wide, at 75 percent and 85 percent respectively, utilization on a school-by-school basis varies widely. This data suggests that there are more than enough seats in total, but they are not in the right places or do not align with current demand. For example, some neighborhood clusters are well over capacity – as much 137 percent utilized, while others are as low as 35 percent utilized.

Among the most common school types (elementary schools, middle schools, K-8 education campuses, and high schools), middle school utilization is the lowest at 52 percent for DCPS and 86 percent for charter schools.

The highest DCPS utilization among the most common school types is elementary schools at 81 percent and the highest charter school utilization is high schools at 94 percent.

OPPORTUNITIES

Meetings with the working group examined the possibility of a framework developed for the strategic matching of charter schools with available DCPS space around the city, where charter school education programming and grade configuration complement a DCPS need.

The group also discussed how a mixed-use strategy to facilities, taking advantage of community and education-related building uses outside of DCPS and charter schools, as a way to absorb excess building area through creative short-term leases. This approach to facilities could enrich DCPS or charter school programming, offset facility costs and help absorb excess capacity now, without relinquishing capacity permanently, so that capacity is available when enrollment increases.

Organizations that lease space could be required to consider internships and mentoring opportunities for public education students. These types of partnerships could create jobs and economic opportunity in local communities. When enrollment increases, the lease can be terminated and capacity recaptured.

Summary Table of Enrollment, Capacity and Utilization by School Type

Agency / School Type	No. of Schools	Total Gross Square Feet	Total Enrolled	Total Capacity	Average Gross Square Feet
DC Public Schools					
Elementary Schools	64	4,594,718	20,468	25,879	71,792
Middle Schools	13	1,763,497	4,759	9,157	135,654
High Schools	16	3,878,548	11,292	14,934	242,409
Education Campus (ES-MS)	19	1,683,173	6,819	9,071	88,588
Education Campus (ES-HS)	1	325,217	1,203	1,400	325,217
Special Education	3	185,500	298	1,050	61,833
Alternative Education	2	246,228	360	1,350	123,114
Vacant Campuses	10	1,158,600	0	5,858	115,860
DCPS Total/Average	**128**	**13,835,481**	**45,199**	**68,699**	**108,090**
Charter Schools					
Elementary Schools	36	956,047	8,839	11,553	28,119
Middle Schools	10	408,983	3,306	4,052	40,898
High Schools	15	857,719	5,580	6,352	57,181
Education Campus (ES-MS)	24	1,117,585	8,910	10,261	50,799
Education Campus (ES-HS)	4	582,300	3,042	4,057	145,575
Special Education	1	99,540	234	287	99,540
Alternative Education	4	125,513	2,390	3,087	41,838
PCS Total/Average	**95**	**4,159,687**	**32,301**	**39,649**	**46,219**
DC Public Education Facilities	**223**	**17,995,168**	**77,500**	**108,348**	**82,547**

Figure C.14

Average Enrolled	Average Capacity	Avg GSF per Enrolled Student	Minimum GSF per Enrolled Student	Maxmum GSF per Enrolled Student	Avg GSF per Student Capacity	Utilization (Enrollment/ Capacity)
320	411	243	68	811	177	81%
366	704	436	179	724	197	52%
706	933	408	68	953	259	76%
359	477	256	135	561	184	78%
1,203	1,400	270	270	270	232	86%
99	350	639	420	904	174	29%
180	n/a	1,460	n/a	n/a	n/a	n/a
n/a	586	n/a	n/a	n/a	203	n/a
383	**541**	**299**	**68**	**2,008**	**193**	**75%**
253	330	114	31	401	82	77%
331	405	121	35	224	98	86%
372	423	155	23	479	149	94%
371	428	143	74	287	128	91%
761	1,014	202	128	265	151	75%
234	287	425	425	425	347	82%
598	772	174	n/a	n/a	169	86%
347	**426**	**138**	**31**	**479**	**116**	**85%**
367	**492**	**230**	**31**	**2,008**	**161**	**79%**