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### 8.1 Appendix Introduction \& Analysis

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# 8.1 Appendix Introduction \& Analysis 

A.

## Data Analysis

Assignment Stability

## 8.1

## Appendix A1:Table of BoundaryChanges, 1984 to Present <br> Appendix A2: Example Boundary Change

A.

## Appendix A1: Boundary Changes, 1984 to Present

| School Year of BOE Action | Scope: Cluster(s) Involved | School Level(s) | Schools Opened or Reopened (opening date) |
| :---: | :---: | :---: | :---: |
| 1984-85 | Gaithersburg | Elementary | Flower Hill ES (Sept. 1985) |
|  | Seneca Valley | Elementary | Lake Seneca ES (Sept. 1985) |
| 1985-86 | Seneca Valley | Elementary | Clopper Mill ES (Sept. 1986) |
|  | Seneca Valley | Elementary | Jones Lane ES (Sept. 1987) |
|  |  |  | McAuliffe ES (Sept. 1987) |
|  | Gaithersburg, Richard Montgomery, Seneca Valley, Wootton | High | Quince Orchard HS (Sept. 1988) |
|  |  |  | Watkins Mill HS (Sept. 1989) |
| 1987-88 | Damascus | Elementary | Clearspring ES (Sept. 1988) |
|  | Gaithersburg | Elementary | Goshen ES (Sept. 1988) |
|  |  |  | Strawberry Knoll ES (Sept. 1988) |
|  | Paint Branch | Elementary | Greencastle ES (Sept. 1988) |
|  |  |  | Cloverly ES (Sept. 1989) |
|  | Seneca Valley | Elementary | Waters Landing ES (Sept. 1988) |
|  | Wootton | Elementary | Stone Mill ES (Sept. 1988) |
| 1988-89 | Kennedy, Magruder, Rockville, Sherwood, \& Springbrook | Elementary, Middle, High | no schools opened |
|  | Rockville, Sherwood | Middle and High | no schools opened |
|  | Watkins Mill | Elementary | Daly ES (Sept. 1989) |
|  | Churchill | Elementary and Middle | Cabin John MS (Sept. 1989) |
|  | Damascus, Poolesville | Elementary, Middle, High | no schools opened |
|  | Kennedy | Elementary | no schools opened |
|  | Springbrook |  | Key MS (Sept. 1990) |
|  |  | Elementary and Middle | Burnt Mills ES (Sept. 1990) |
|  |  |  | Drew ES (Sept. 1991) |


| School Year of BOE Action | Scope: Cluster(s) Involved | School Level(s) | Schools Opened or Reopened (opening date) |
| :---: | :---: | :---: | :---: |
| 1989-90 | Paint Branch | Elementary, Middle | Briggs Chaney MS (Sept. 1990) |
|  | Gaithersburg, Magruder | Elementary, Middle, High | no schools opened |
|  | Gaithersburg, Wootton | Elementary, Middle, High | no schools opened |
|  | Magruder | Elementary | Sequoyah ES (Sept. 1990) |
|  | Seneca Valley | Elementary | McNair ES (Sept. 1990) |
|  | Quince Orchard | Elementary | Carson ES (Sept. 1990) |
|  | Sherwood | Elementary | Brooke Grove ES (Sept. 1990) |
|  | Wheaton | Elementary | no schools opened |
| 1990-91 | Gaithersburg | Elementary | Resnik ES (Sept. 1991) |
|  | Richard Montgomery | Elementary | no schools opened |
|  | Churchill, Wootton | Elementary, Middle, High | no schools opened |
|  | Springbrook | Elementary | no schools opened |
| 1991-92 | Watkins Mill | Elementary | no schools opened |
|  | Seneca Valley | Elementary and Middle | Ride ES (Sept. 1992) |
|  |  |  | Clemente MS (Sept. 1994) |
|  | Damascus, Gaithersburg, Magruder | Elementary, Middle, High | no schools opened |
|  | Seneca Valley |  |  |
|  | Damascus | Elementary | Rockwell ES (Sept. 1992) |
|  | Magruder, Sherwood | Middle | Rosa Parks MS (Sept. 1992) |
| 1992-93 | Churchill, Wootton | Middle | no schools opened |
|  | Kennedy | Middle | Argyle MS (Sept. 1993) |
|  | Quince Orchard | Elementary | Marshall ES (Sept. 1993) |
| 1993-94 | Kennedy, Wheaton | Middle, High | no schools opened |
| 1994-95 | Damascus | Middle | Rocky Hill MS (Sept. 1995) |
|  | Gaithersburg | Middle | Forest Oak MS (Sept. 1995 and |
|  |  |  | relocated in Sept. 1999) |
|  | Paint Branch | Elementary and Middle | no schools opened |
|  | Sherwood | Elementary and Middle | no schools opened |


| School Year of BOE Action | Scope: Cluster(s) Involved | School Level(s) | Schools Opened or Reopened (opening date) |
| :---: | :---: | :---: | :---: |
| 1995-96 | Watkins Mill | Middle | Neelsville MS (Sept. 1996) |
|  | Whitman | Elementary | no schools opened |
|  | Blair, Takoma Park Unification Area | Elementary, Middle, High | no schools opened |
|  | Damascus | Elementary | no schools opened |
| 1996-97 | Sherwood | Elementary, Middle, High | no schools opened |
|  | Paint Branch, Sherwood, Springbrook | High—base areas | Blake HS (Sept. 1998) and |
|  |  |  | Northeast Consortium |
|  | Quince Orchard, Seneca Valley | Middle and High | Northwest HS (Sept. 1998) |
|  |  |  | Kingsview MS (Sept. 1997) |
|  | Walter Johnson | Middle | North Bethesda MS (Sept. 1999) |
|  | Watkins Mill | Elementary | no schools opened |
| 1997-98 | Churhill, Wootton | Elementary, Middle, High | no schools opened |
|  | Springbrook | Elementary | no schools opened |
|  | Blair | Elementary and Middle | Silver Spring International MS (Sept. 1999) |
|  |  |  | Sligo Creek ES (Sept. 1999) |
| 1998-99 | Northeast Consortium, Sherwood | Middle | no schools opened |
|  | Magruder | Middle | Shady Grove MS (former Forest Oak MS |
|  |  |  | reassigned to Magruder cluster, Sept. 1999) |
| 1999-00 | Richard Montgomery, Wootton | Elementary, Middle, High | no schools opened |
|  | Einstein, Walter Johnson | Elementary, Middle, High | no schools opened |
| 2000-01 | Seneca Valley | Elementary | no schools opened |
|  | Northwest | Elementary | $\begin{aligned} & \text { Matsunaga ES (Sept. } \\ & \text { 2001) } \end{aligned}$ |
| 2001-02 | Einstein | Middle | Newport Mill MS (Sept. 2002) |
|  | Quince Orchard | Elementary | no schools opened |
| 2002-03 | Gaithersburg | Elementary | no schools opened |


| School Year of BOE Action | Scope: Cluster(s) Involved | School Level(s) | Schools Opened or Reopened (opening date) |
| :---: | :---: | :---: | :---: |
|  | Blair, Einstein, Kennedy, Wheaton | High—base areas | Northwood HS (Sept. 2004) and |
|  |  |  | Downcounty Consortium |
| 2003-04 | Banneker MS \& Briggs Chaney MS | Middle | no schools opened |
| 2004-05 | Viers Mill, Weller Road, Wheaton Woods | Elementary | $\begin{aligned} & \text { Sargent Shriver ES (Aug. } \\ & \text { 2006) } \end{aligned}$ |
|  | Kingsview MS \& Ridgeview MS | Middle | Lakelands Park MS (Aug. 2005) |
|  | Argyle MS, Belt MS, and Parkland MS | Middle | Middle School Magnet Consortium; single choice area and temporary boundaries for Belt MS in 2005-06 (Grades 7-8) |
|  | Clarksburg ES \& Cedar Grove ES | Elementary | Little Bennett ES (Aug. 2006 ) |
| 2005-06 | Burnt Mills ES \& Cresthaven ES | Elementary | Roscoe R. Nix ES (Aug. 2006) |
|  | Clopper Mill ES, Germantown ES, \& Matsunaga ES | Elementary | Great Seneca Creek ES (Aug. 2006) |
|  | Damascus, Seneca Valley, and Watkins Mill | High and Middle | $\begin{aligned} & \text { Clarksburg HS (Aug. } \\ & \text { 2006) } \end{aligned}$ |
| 2006-07 | Glen Haven, Highland, Kemp Mill ESs | Elementary | Arcola ES (Aug. 2007) |
|  | Briggs Chaney MS, Farquhar MS, Key MS, \& White Oak MS (Hampshire Greens) | Middle | no schools opened |
| 2007-08 | None | None | no schools opened |
| 2008-09 | Bells Mill, Potomac, Seven Locks | Elementary \& Middle | no schools opened |
|  | Cabin John, Hoover |  |  |
|  | Cedar Grove, Clarksburg, Little Bennett | Elementary | William B. Gibbs ES (Aug. 2009) |
| 2009-10 | East Silver Spring ES, Takoma Park <br> ES, Piney Branch <br> ES, Sligo Creek <br> ES, Takoma Park <br> MS \& Silver Spring International MS | Elementary \& Middle | no schools opened |


| School <br> Year of BOE Action | Scope: Cluster(s) Involved | School Level(s) | Schools Opened or Reopened (opening date) |
| :---: | :---: | :---: | :---: |
|  | Baker MS and Rocky Hill MS | Middle | no schools opened |
|  | reassignment of Rockwell ES |  |  |
|  | Bethesda ES \& Bradley Hill ES | Elementary | no schools opened |
|  | Oakland Terrace K @ Sligo MS | Elementary | no schools opened |
|  | 2010-11 and 2011-12 years |  |  |
| 2010-11 | None | None | no schools opened |
| 2011-12 | Oakland Terrace ES | Elementary/ Middle | Flora M. Singer ES (Aug 2012) |
|  | Bethesda ES, Chevy Chase ES, N orth Chevy Chase ES, \& Rosemary Hills ES | Elementary | no schools opened |
|  | Maryvale ES/ Carl Sandburg LC Roundtable Study | Collocation study | Implement collocation at Maryvale ES (Sept. 2020) |
| 2012-13 | None | None | no schools opened |
| 2013-14 | Clarksburg Cluster | Elementary | Wilson Wims ES (Aug. 2014) |
|  | Bethesda-Chevy Chase Cluster | Elementary | no schools opened |
|  | (Naval Support Activity Bethesda) |  |  |
| 2014-15 | None | None | no schools opened |
| 2015-16 | Clarksburg, Damascus | Middle | Hallie Wells MS (Aug 2016) |
| 2016-17 | Bethesda-Chevy Chase | Middle | Silver Creek MS (Sept. 2017) |
|  | Gaithersburg \& Sherwood | Elementary, Middle, \& High | Reassign Unity Area from Gaithersburg Cluster to Sherwood Cluster |
|  | Highland ES, Newport MS \& Sligo MS | Middle | Reassign portion of Highland ES from Sligo MS to Newport Mill MS |
| 2017-18 | Beall ES, College Gardens ES, \& Ritchie Park ES | Elementary | Bayard Rustin ES (Sept. 2018) |
| 2018-19 | Clarksburg | Elementary | Snowden Farm ES (Sept. 2019) |


| School Year of BOE Action | Scope: Cluster(s) Involved | School Level(s) | Schools Opened or Reopened (opening date) |
| :---: | :---: | :---: | :---: |
| 2019-20* | Forest Knolls ES, <br> Montgomery Knolls <br> ES, \& Pine Crest ES | Elementary | no schools opened (capacity added at Montgomery Knolls ES and Pine Crest ES) Sept. 2020 |
|  | Clarksburg, <br> Northwest, \& Seneca Valley | Middle \& High | no schools opened (capacity added at Seneca Valley HS) Sept. 2020 |
| *Board action on November 26, 2019 |  |  |  |
|  |  |  |  |

Data source: MCPS Office of Shared Accountability

## Appendix A2:

## An Example Boundary Change

Finally, we examine an example boundary change to better understand the local effects of boundary changes. The figure below indicates the change in students by grade level at Little Bennett ES, Wilson Wims ES, and Cedar Grove ES as a result of the opening of Snowden Farm ES for the 2019-20 school year.
Most students relocated to Snowden Farm ES previously had Cedar Grove ES as their base school. We notice this shift when comparing the number of students in grades K-4 at Cedar Grove ES in school year 2019-20, the year Snowden Farm was

opened, compared to in school year 2018-19. In addition, students at Wilson Wims ES (which itself opened since 2010) were reassigned to Snowden Farm ES. We see a drop in enrollment at Wilson Wims between school years 2018-19 and 2019-20. At both Wilson Wims ES and Cedar Grove ES, we notice the effect of grandfathering policies: both schools have large 5th grade classes in comparison to grades K-4.

### 8.1 Appendix Introduction \& Analysis

## B. <br> Data Analysis Utilization

These analyses of utilization reveal several initial insights about the current conditions of school boundaries and facilities in MCPS, which have been highlighted over the course of the chapter.

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Appendix B1:
Geographic Zones


Map of zones


Zone 1


Zone 2


Zone 3


Zone 4

## Appendix B2:

Utilization Rate for all Schools, 2019-2020

| Cluster | School | School Type | Enrollment (2019-2020) | Capacity <br> (2019-2020) | Utilization Rate (2019-2020) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase | Bethesda | ES | 666 | 560 | 118.93\% |
| Bethesda-Chevy Chase | Chevy Chase | ES | 466 | 473 | 98.52\% |
| Bethesda-Chevy Chase | Somerset | ES | 582 | 515 | 113.01\% |
| Bethesda-Chevy Chase | Westbrook | ES | 341 | 547 | 62.34\% |
| Bethesda-Chevy Chase | North Chevy Chase | ES | 259 | 358 | 72.35\% |
| Bethesda-Chevy Chase | Rock Creek Forest | ES | 760 | 667 | 113.94\% |
| Bethesda-Chevy Chase | Rosemary Hills | ES | 570 | 628 | 90.76\% |
| Bethesda-Chevy Chase | Westland | MS | 808 | 1,105 | 73.12\% |
| Bethesda-Chevy Chase | Silver Creek | MS | 887 | 935 | 94.87\% |
| Bethesda-Chevy Chase | Bethesda-Chevy Chase | HS | 2,259 | 2,457 | 91.94\% |
| Clarksburg | Clarksburg | ES | 624 | 311 | 200.64\% |
| Clarksburg | Fox Chapel | ES | 613 | 683 | 89.75\% |
| Clarksburg | Daly | ES | 618 | 523 | 118.16\% |
| Clarksburg | Little Bennett | ES | 637 | 624 | 102.08\% |
| Clarksburg | William B. Gibbs Jr. | ES | 621 | 719 | 86.37\% |
| Clarksburg | Wilson Wims | ES | 768 | 739 | 103.92\% |
| Clarksburg | Snowden Farm | ES | 644 | 774 | 83.20\% |
| Clarksburg | Neelsville | MS | 945 | 956 | 98.85\% |
| Clarksburg | Rocky Hill | MS | 883 | 1,020 | 86.57\% |
| Clarksburg | Clarksburg | HS | 2,472 | 2,034 | 121.53\% |
| Col. Zadok Magruder | Candlewood | ES | 387 | 515 | 75.15\% |
| Col. Zadok Magruder | Cashell | ES | 343 | 339 | 101.18\% |
| Col. Zadok Magruder | Resnik | ES | 602 | 493 | 122.11\% |
| Col. Zadok Magruder | Flower Hill | ES | 458 | 493 | 92.90\% |
| Col. Zadok Magruder | Mill Creek Towne | ES | 507 | 336 | 150.89\% |
| Col. Zadok Magruder | Sequoyah | ES | 376 | 508 | 74.02\% |
| Col. Zadok Magruder | Shady Grove | MS | 575 | 854 | 67.33\% |
| Col. Zadok Magruder | Redland | MS | 635 | 765 | 83.01\% |
| Col. Zadok Magruder | Magruder | HS | 1,700 | 1,941 | 87.58\% |
| Damascus | Rockwell | ES | 454 | 530 | 85.66\% |
| Damascus | Damascus | ES | 362 | 355 | 101.97\% |
| Damascus | Cedar Grove | ES | 418 | 402 | 103.98\% |
| Damascus | Woodfield | ES | 355 | 381 | 93.18\% |
| Damascus | Clearspring | ES | 589 | 642 | 91.74\% |
| Damascus | Hallie Wells | MS | 873 | 982 | 88.90\% |
| Damascus | Baker | MS | 830 | 741 | 112.01\% |


| Cluster | School | School Type | Enrollment (2019-2020) | $\begin{array}{\|l} \text { Capacity } \\ (2019-2020) \end{array}$ | Utilization Rate (2019-2020) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Damascus | Damascus | HS | 1,354 | 1,543 | 87.75\% |
| Downcounty Consortium | Sligo Creek | ES | 680 | 664 | 102.41\% |
| Downcounty Consortium | Piney Branch | ES | 650 | 611 | 106.38\% |
| Downcounty Consortium | Takoma Park | ES | 613 | 629 | 97.46\% |
| Downcounty Consortium | East Silver Spring | ES | 498 | 577 | 86.31\% |
| Downcounty Consortium | Pine Crest | ES | 413 | 404 | 102.23\% |
| Downcounty Consortium | Woodlin | ES | 554 | 489 | 113.29\% |
| Downcounty Consortium | Oak View | ES | 423 | 335 | 126.27\% |
| Downcounty Consortium | Glen Haven | ES | 510 | 556 | 91.73\% |
| Downcounty Consortium | Oakland Terrace | ES | 531 | 487 | 109.03\% |
| Downcounty Consortium | Singer | ES | 683 | 680 | 100.44\% |
| Downcounty Consortium | Rolling Terrace | ES | 775 | 729 | 106.31\% |
| Downcounty Consortium | Viers Mill | ES | 582 | 743 | 78.33\% |
| Downcounty Consortium | Highland | ES | 555 | 540 | 102.78\% |
| Downcounty Consortium | Montgomery Knolls | ES | 470 | 537 | 87.52\% |
| Downcounty Consortium | Weller Road | ES | 747 | 772 | 96.76\% |
| Downcounty Consortium | Sargent Shriver | ES | 744 | 660 | 112.73\% |
| Downcounty Consortium | Bel Pre | ES | 613 | 640 | 95.78\% |
| Downcounty Consortium | Highland View | ES | 434 | 288 | 150.69\% |
| Downcounty Consortium | Georgian Forest | ES | 626 | 670 | 93.43\% |
| Downcounty Consortium | Wheaton Woods | ES | 504 | 766 | 65.80\% |
| Downcounty Consortium | Arcola | ES | 749 | 651 | 115.05\% |
| Downcounty Consortium | New Hampshire Estates | ES | 482 | 493 | 97.77\% |
| Downcounty Consortium | Rock View | ES | 655 | 636 | 102.99\% |
| Downcounty Consortium | Harmony Hills | ES | 745 | 709 | 105.08\% |
| Downcounty Consortium | Forest Knolls | ES | 755 | 529 | 142.72\% |
| Downcounty Consortium | Kemp Mill | ES | 486 | 458 | 106.11\% |
| Downcounty Consortium | Brookhaven | ES | 467 | 470 | 99.36\% |
| Downcounty Consortium | Glenallan | ES | 747 | 747 | 100.00\% |
| Downcounty Consortium | Strathmore | ES | 483 | 439 | 110.02\% |
| Downcounty Consortium | Silver Spring International | MS | 1,153 | 1,107 | 104.16\% |
| Downcounty Consortium | Takoma Park | MS | 1,162 | 939 | 123.75\% |
| Downcounty Consortium | Eastern | MS | 1,010 | 1,012 | 99.80\% |
| Downcounty Consortium | Sligo | MS | 722 | 941 | 76.73\% |
| Downcounty Consortium | Loiederman | MS | 999 | 871 | 114.70\% |
| Downcounty Consortium | Newport Mill | MS | 702 | 850 | 82.59\% |
| Downcounty Consortium | Parkland | MS | 1,142 | 948 | 120.46\% |
| Downcounty Consortium | Lee | MS | 771 | 727 | 106.05\% |
| Downcounty Consortium | Argyle | MS | 1,024 | 897 | 114.16\% |
| Downcounty Consortium | Blair | HS | 3,227 | 2,889 | 111.70\% |


| Cluster | School | School Type | $\begin{aligned} & \text { Enrollment } \\ & \text { (2019-2020) } \end{aligned}$ | $\begin{aligned} & \text { Capacity } \\ & \text { (2019-2020) } \end{aligned}$ | Utilization Rate (2019-2020) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Downcounty Consortium | Wheaton | HS | 2,193 | 2,234 | 98.16\% |
| Downcounty Consortium | Einstein | HS | 1,820 | 1,629 | 111.72\% |
| Downcounty Consortium | Northwood | HS | 1,808 | 1,508 | 119.89\% |
| Downcounty Consortium | Kennedy | HS | 1,830 | 1,794 | 102.01\% |
| Gaithersburg | Laytonsville | ES | 392 | 447 | 87.70\% |
| Gaithersburg | Goshen | ES | 571 | 594 | 96.13\% |
| Gaithersburg | Washington Grove | ES | 462 | 613 | 75.37\% |
| Gaithersburg | Gaithersburg | ES | 866 | 737 | 117.50\% |
| Gaithersburg | Rosemont | ES | 647 | 568 | 113.91\% |
| Gaithersburg | Summit Hall | ES | 702 | 457 | 153.61\% |
| Gaithersburg | Strawberry Knoll | ES | 651 | 459 | 141.83\% |
| Gaithersburg | Forest Oak | MS | 950 | 955 | 99.48\% |
| Gaithersburg | Gaithersburg | MS | 877 | 1,009 | 86.92\% |
| Gaithersburg | Gaithersburg | HS | 2,412 | 2,443 | 98.73\% |
| Northeast Consortium | Burtonsville | ES | 605 | 493 | 122.72\% |
| Northeast Consortium | Fairland | ES | 596 | 648 | 91.98\% |
| Northeast Consortium | JoAnn Leleck | ES | 874 | 715 | 122.24\% |
| Northeast Consortium | Jackson Road | ES | 732 | 699 | 104.72\% |
| Northeast Consortium | Roscoe Nix | ES | 483 | 503 | 96.02\% |
| Northeast Consortium | Cloverly | ES | 511 | 461 | 110.85\% |
| Northeast Consortium | Burnt Mills | ES | 579 | 392 | 147.70\% |
| Northeast Consortium | Cannon Road | ES | 412 | 518 | 79.54\% |
| Northeast Consortium | Page | ES | 615 | 392 | 156.89\% |
| Northeast Consortium | Galway | ES | 763 | 744 | 102.55\% |
| Northeast Consortium | Stonegate | ES | 501 | 385 | 130.13\% |
| Northeast Consortium | Greencastle | ES | 721 | 591 | 122.00\% |
| Northeast Consortium | Westover | ES | 316 | 266 | 118.80\% |
| Northeast Consortium | Drew | ES | 498 | 496 | 100.40\% |
| Northeast Consortium | Cresthaven | ES | 505 | 454 | 111.23\% |
| Northeast Consortium | Key | MS | 1,004 | 960 | 104.58\% |
| Northeast Consortium | Banneker | MS | 905 | 824 | 109.83\% |
| Northeast Consortium | Briggs Chaney | MS | 937 | 926 | 101.19\% |
| Northeast Consortium | Farquhar | MS | 694 | 784 | 88.52\% |
| Northeast Consortium | White Oak | MS | 845 | 992 | 85.18\% |
| Northeast Consortium | Paint Branch | HS | 1,997 | 2,020 | 98.86\% |
| Northeast Consortium | Blake | HS | 1,795 | 1,743 | 102.98\% |
| Northeast Consortium | Springbrook | HS | 1,748 | 2,135 | 81.87\% |
| Northwest | Clopper Mill | ES | 539 | 496 | 108.67\% |
| Northwest | Germantown | ES | 325 | 304 | 106.91\% |
| Northwest | McNair | ES | 828 | 626 | 132.27\% |
| Northwest | Great Seneca Creek | ES | 594 | 556 | 106.83\% |


| Cluster | School | School Type | Enrollment (2019-2020) | Capacity (2019-2020) | Utilization Rate (2019-2020) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Northwest | Darnestown | ES | 323 | 432 | 74.77\% |
| Northwest | Matsunaga | ES | 710 | 584 | 121.58\% |
| Northwest | Diamond | ES | 792 | 679 | 116.64\% |
| Northwest | Kingsview | MS | 983 | 1,041 | 94.43\% |
| Northwest | Northwest | HS | 2,624 | 2,286 | 114.79\% |
| Poolesville | Poolesville | ES | 489 | 539 | 90.72\% |
| Poolesville | Monocacy | ES | 151 | 219 | 68.95\% |
| Poolesville | Poole | MS | 390 | 468 | 83.33\% |
| Poolesville | Poolesville | HS | 1,207 | 1,170 | 103.16\% |
| Quince Orchard | Carson | ES | 893 | 692 | 129.05\% |
| Quince Orchard | Marshall | ES | 622 | 552 | 112.68\% |
| Quince Orchard | Jones Lane | ES | 442 | 516 | 85.66\% |
| Quince Orchard | Brown Station | ES | 637 | 761 | 83.71\% |
| Quince Orchard | Fields Road | ES | 487 | 435 | 111.95\% |
| Quince Orchard | Ridgeview | MS | 784 | 955 | 82.09\% |
| Quince Orchard | Lakelands Park | MS | 1,200 | 1,130 | 106.19\% |
| Quince Orchard | Quince Orchard | HS | 2,160 | 1,791 | 120.60\% |
| Richard Montgomery | Twinbrook | ES | 558 | 548 | 101.82\% |
| Richard Montgomery | Beall | ES | 531 | 639 | 83.10\% |
| Richard Montgomery | Ritchie Park | ES | 401 | 388 | 103.35\% |
| Richard Montgomery | College Gardens | ES | 634 | 678 | 93.51\% |
| Richard Montgomery | Bayard Rustin | ES | 719 | 744 | 96.64\% |
| Richard Montgomery | West | MS | 1,382 | 1,432 | 96.51\% |
| Richard Montgomery | Montgomery | HS | 2,507 | 2,241 | 111.87\% |
| Rockville | Maryvale | ES | 625 | 626 | 99.84\% |
| Rockville | Meadow Hall | ES | 409 | 375 | 109.07\% |
| Rockville | Barnsley | ES | 737 | 652 | 113.04\% |
| Rockville | Flower Valley | ES | 499 | 416 | 119.95\% |
| Rockville | Rock Creek Valley | ES | 436 | 460 | 94.78\% |
| Rockville | Wood | MS | 994 | 944 | 105.30\% |
| Rockville | Rockville | HS | 1,442 | 1,535 | 93.94\% |
| Seneca Valley | Lake Seneca | ES | 514 | 425 | 120.94\% |
| Seneca Valley | Waters Landing | ES | 659 | 776 | 84.92\% |
| Seneca Valley | McAuliffe | ES | 554 | 771 | 71.85\% |
| Seneca Valley | Ride | ES | 502 | 467 | 107.49\% |
| Seneca Valley | King | MS | 764 | 914 | 83.59\% |
| Seneca Valley | Clemente | MS | 1,289 | 1,231 | 104.71\% |
| Seneca Valley | Seneca Valley | HS | 1,232 | 1,330 | 92.63\% |
| Sherwood | Sherwood | ES | 524 | 529 | 99.05\% |
| Sherwood | Olney | ES | 683 | 606 | 112.71\% |
| Sherwood | Greenwood | ES | 521 | 584 | 89.21\% |
| Sherwood | Belmont | ES | 348 | 425 | 81.88\% |


| Cluster | School | School Type | Enrollment (2019-2020) | Capacity (2019-2020) | Utilization Rate (2019-2020) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sherwood | Brooke Grove | ES | 464 | 518 | 89.58\% |
| Sherwood | Parks | MS | 868 | 961 | 90.32\% |
| Sherwood | Sherwood | HS | 1,965 | 2,171 | 90.51\% |
| Thomas S. Wootton | Lakewood | ES | 461 | 556 | 82.91\% |
| Thomas S. Wootton | Travilah | ES | 341 | 526 | 64.83\% |
| Thomas S. Wootton | Fallsmead | ES | 565 | 551 | 102.54\% |
| Thomas S. Wootton | Cold Spring | ES | 332 | 458 | 72.49\% |
| Thomas S. Wootton | DuFief | ES | 316 | 427 | 74.00\% |
| Thomas S. Wootton | Stone Mill | ES | 588 | 694 | 84.73\% |
| Thomas S. Wootton | Frost | MS | 1,029 | 1,084 | 94.93\% |
| Thomas S. Wootton | Wootton | HS | 2,116 | 2,142 | 98.79\% |
| Walt Whitman | Bradley Hills | ES | 566 | 663 | 85.37\% |
| Walt Whitman | Wood Acres | ES | 649 | 725 | 89.52\% |
| Walt Whitman | Burning Tree | ES | 470 | 378 | 124.34\% |
| Walt Whitman | Bannockburn | ES | 461 | 364 | 126.65\% |
| Walt Whitman | Carderock Springs | ES | 366 | 406 | 90.15\% |
| Walt Whitman | Pyle | MS | 1,534 | 1,285 | 119.38\% |
| Walt Whitman | Whitman | HS | 2,040 | 1,857 | 109.85\% |
| Walter Johnson | Garrett Park | ES | 802 | 776 | 103.35\% |
| Walter Johnson | Farmland | ES | 856 | 714 | 119.89\% |
| Walter Johnson | Luxmanor | ES | 678 | 409 | 165.77\% |
| Walter Johnson | Wyngate | ES | 742 | 776 | 95.62\% |
| Walter Johnson | Ashburton | ES | 923 | 789 | 116.98\% |
| Walter Johnson | Kensington-Parkwood | ES | 643 | 757 | 84.94\% |
| Walter Johnson | Tilden | MS | 990 | 1,001 | 98.90\% |
| Walter Johnson | North Bethesda | MS | 1,233 | 1,233 | 100.00\% |
| Walter Johnson | Johnson | HS | 2,748 | 2,321 | 118.40\% |
| Watkins Mill | Whetstone | ES | 742 | 750 | 98.93\% |
| Watkins Mill | Watkins Mill | ES | 731 | 641 | 114.04\% |
| Watkins Mill | South Lake | ES | 897 | 694 | 129.25\% |
| Watkins Mill | Stedwick | ES | 538 | 688 | 78.20\% |
| Watkins Mill | Montgomery Village | MS | 791 | 865 | 91.45\% |
| Watkins Mill | Watkins Mill | HS | 1,597 | 1,947 | 82.02\% |
| Winston Churchill | Beverly Farms | ES | 585 | 689 | 84.91\% |
| Winston Churchill | Wayside | ES | 500 | 648 | 77.16\% |
| Winston Churchill | Potomac | ES | 376 | 425 | 88.47\% |
| Winston Churchill | Seven Locks | ES | 425 | 424 | 100.24\% |
| Winston Churchill | Bells Mill | ES | 642 | 626 | 102.56\% |
| Winston Churchill | Hoover | MS | 1,045 | 1,139 | 91.75\% |
| Winston Churchill | Cabin John | MS | 1,040 | 1,057 | 98.39\% |
| Winston Churchill | Churchill | HS | 2,275 | 1,986 | 114.55\% |

## Appendix B3:

Detailed Maps of Utilization (Elementary Schools)


Zone 1: Elementary school utilization rates


Zone 2: Elementary school utilization rates


Zone 3: Elementary school utilization rates


Zone 4: Elementary school utilization rates

## Appendix B4: <br> Detailed Maps of Utilization (Middle Schools)



Zone 1: Middle school utilization rates


Zone 2: Middle school utilization rates


Zone 3: Middle school utilization rates


Zone 4: Middle school utilization rates

## Appendix B5:

Detailed Maps of Utilization (High Schools)


Zone 1: High school utilization rates


Zone 2: High school utilization rates


Zone 3: High school utilization rates


Zone 4: High school utilization rates

## Appendix B6:

Table: Over and Under the Minimum Threshold, by School

The minimum threshold at the elementary level is 92 . The following schools have a deficit of greater than 92 seats and are sorted by cluster.

| Cluster | School | Enrollment (2019-2020) | Capacity (2019-2020) | Difference between capacity and enrollment | Utilization Rate (2019-2020) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase | Bethesda | 666 | 560 | -106 | 118.93\% |
| Bethesda-Chevy Chase | Rock Creek Forest | 760 | 667 | -93 | 113.94\% |
| Clarksburg | Clarksburg | 624 | 311 | -313 | 200.64\% |
| Clarksburg | Daly | 618 | 523 | -95 | 118.16\% |
| Col. Zadok Magruder | Mill Creek Towne | 507 | 336 | -171 | 150.89\% |
| Col. Zadok Magruder | Resnik | 602 | 493 | -109 | 122.11\% |
| Downcounty Consortium | Forest Knolls | 755 | 529 | -226 | 142.72\% |
| Downcounty Consortium | Highland View | 434 | 288 | -146 | 150.69\% |
| Downcounty Consortium | Arcola | 749 | 651 | -98 | 115.05\% |
| Gaithersburg | Summit Hall | 702 | 457 | -245 | 153.61\% |
| Gaithersburg | Strawberry Knoll | 651 | 459 | -192 | 141.83\% |
| Gaithersburg | Gaithersburg | 866 | 737 | -129 | 117.50\% |
| Northeast Consortium | Page | 615 | 392 | -223 | 156.89\% |
| Northeast Consortium | Burnt Mills | 579 | 392 | -187 | 147.70\% |
| Northeast Consortium | JoAnn Leleck | 874 | 715 | -159 | 122.24\% |
| Northeast Consortium | Greencastle | 721 | 591 | -130 | 122.00\% |
| Northeast Consortium | Stonegate | 501 | 385 | -116 | 130.13\% |
| Northeast Consortium | Burtonsville | 605 | 493 | -112 | 122.72\% |
| Northwest | McNair | 828 | 626 | -202 | 132.27\% |
| Northwest | Matsunaga | 710 | 584 | -126 | 121.58\% |
| Northwest | Diamond | 792 | 679 | -113 | 116.64\% |
| Quince Orchard | Carson | 893 | 692 | -201 | 129.05\% |
| Walt Whitman | Bannockburn | 461 | 364 | -97 | 126.65\% |
| Walter Johnson | Luxmanor | 678 | 409 | -269 | 165.77\% |
| Walter Johnson | Farmland | 856 | 714 | -142 | 119.89\% |
| Walter Johnson | Ashburton | 923 | 789 | -134 | 116.98\% |
| Watkins Mill | South Lake | 897 | 694 | -203 | 129.25\% |
|  |  |  |  |  |  |

The minimum threshold at the middle school level is 150 . The following schools have a deficit of greater than 150 seats and are sorted by cluster.

| Cluster | School | Enrollment <br> $\mathbf{( 2 0 1 9 - 2 0 2 0 )}$ | Capacity <br> $\mathbf{( 2 0 1 9 - 2 0 2 0 )}$ | Difference <br> between <br> capacity and <br> enrollment | Utilization <br> Rate <br> (2019-2020) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Downcounty Consortium | Takoma Park | 1,162 | 939 | -223 | $123.75 \%$ |
| Downcounty Consortium | Parkland | 1,142 | 948 | -194 | $120.46 \%$ |
| Walt Whitman | Pyle | 1,534 | 1,285 | -249 | $119.38 \%$ |

The minimum threshold at the high school level is 200. The following schools have a deficit of greater than 200 seats and are sorted by cluster.

| Cluster | School | Enrollment <br> $(\mathbf{2 0 1 9 - 2 0 2 0 )}$ | Capacity <br> $(\mathbf{2 0 1 9 - 2 0 2 0 )}$ | Difference be- <br> tween capacity <br> and enrollment | Utilization <br> Rate <br> (2019-2020) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Clarksburg | Clarksburg | 2,472 | 2,034 | -438 | $121.53 \%$ |
| Downcounty Consortium | Blair | 3,227 | 2,889 | -338 | $111.70 \%$ |
| Downcounty Consortium | Northwood | 1,808 | 1,508 | -300 | $119.89 \%$ |
| Northwest | Northwest | 2,624 | 2,286 | -338 | $114.79 \%$ |
| Quince Orchard | Quince Orchard | 2,160 | 1,791 | -369 | $120.60 \%$ |
| Richard Montgomery | Montgomery | 2,507 | 2,241 | -266 | $111.87 \%$ |
| Walter Johnson | Johnson | 2,748 | 2,321 | -427 | $118.40 \%$ |
| Winston Churchill | Churchill | 2,275 | 1,986 | -289 | $114.55 \%$ |
|  |  |  |  |  |  |

## Appendix B7:

## Table: Schools, Utilization Rates, and Roadway Distances to Nearest School

## Elementary Schools

| Cluster | School | Utilization Rate | Distance to current school (miles) | Distance to closest School (miles) |
| :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase | Bethesda Elementary | 118.93\% | 0.68 | 0.68 |
| Bethesda-Chevy Chase | Chevy Chase Elementary | 98.52\% | 1.52 | 0.80 |
| Bethesda-Chevy Chase | Somerset Elementary | 113.01\% | 0.82 | 0.74 |
| Bethesda-Chevy Chase | Westbrook Elementary | 62.34\% | 0.68 | 0.68 |
| Bethesda-Chevy Chase | North Chevy Chase Elementary | 72.35\% | 1.32 | 0.79 |
| Bethesda-Chevy Chase | Rock Creek Forest Elementary | 113.94\% | 0.53 | 0.52 |
| Bethesda-Chevy Chase | Rosemary Hills Elementary | 90.76\% | 1.87 | 1.11 |
| Clarksburg | Little Bennett Elementary | 102.08\% | 0.95 | 0.88 |
| Clarksburg | Snowden Farm Elementary | 83.20\% | 0.50 | 0.50 |
| Clarksburg | Wilson Wims Elementary | 103.92\% | 0.70 | 0.61 |
| Clarksburg | William B. Gibbs Jr. Elementary | 86.37\% | 1.07 | 0.87 |
| Clarksburg | Captain James E. Daly Elementary | 118.16\% | 0.93 | 0.70 |
| Clarksburg | Fox Chapel Elementary | 89.75\% | 0.71 | 0.62 |
| Clarksburg | Clarksburg Elementary | 200.64\% | 2.01 | 1.76 |
| Col. Zadok Magruder | Cashell Elementary | 101.18\% | 0.65 | 0.65 |
| Col. Zadok Magruder | Candlewood Elementary | 75.15\% | 1.32 | 1.18 |
| Col. Zadok Magruder | Sequoyah Elementary | 74.02\% | 2.99 | 1.40 |
| Col. Zadok Magruder | Mill Creek Towne Elementary | 150.89\% | 0.96 | 0.80 |
| Col. Zadok Magruder | Flower Hill Elementary | 92.90\% | 0.74 | 0.73 |
| Col. Zadok Magruder | Judith A. Resnik Elementary | 122.11\% | 1.78 | 0.95 |
| Damascus | Clearspring Elementary | 91.74\% | 1.46 | 1.18 |
| Damascus | Woodfield Elementary | 93.18\% | 1.04 | 1.02 |
| Damascus | Cedar Grove Elementary | 103.98\% | 1.61 | 0.77 |


| Cluster | School | Utilization Rate | Distance to current school (miles) | Distance to closest School (miles) |
| :---: | :---: | :---: | :---: | :---: |
| Damascus | Damascus Elementary | 101.97\% | 1.92 | 1.91 |
| Damascus | Lois P. Rockwell Elementary | 85.66\% | 1.35 | 0.98 |
| Downcounty Consortium | Piney Branch Elementary | 106.38\% | 0.94 | 0.81 |
| Downcounty Consortium | Flora M. Singer Elementary | 100.44\% | 0.86 | 0.77 |
| Downcounty Consortium | Oakland Terrace Elementary | 109.03\% | 0.64 | 0.57 |
| Downcounty Consortium | Glen Haven Elementary | 91.73\% | 0.56 | 0.56 |
| Downcounty Consortium | Oak View Elementary | 126.27\% | 1.04 | 0.67 |
| Downcounty Consortium | Woodlin Elementary | 113.29\% | 0.94 | 0.84 |
| Downcounty Consortium | Pine Crest Elementary | 102.23\% | 1.35 | 0.78 |
| Downcounty Consortium | East Silver Spring Elementary | 86.31\% | 0.50 | 0.50 |
| Downcounty Consortium | Sligo Creek Elementary | 102.41\% | 0.87 | 0.75 |
| Downcounty Consortium | Takoma Park Elementary | 97.46\% | 1.05 | 0.88 |
| Downcounty Consortium | Rolling Terrace Elementary | 106.31\% | 0.39 | 0.39 |
| Downcounty Consortium | Montgomery Knolls Elementary | 87.52\% | 1.02 | 0.73 |
| Downcounty Consortium | Highland Elementary | 102.78\% | 0.57 | 0.57 |
| Downcounty Consortium | Strathmore Elementary | 110.02\% | 1.61 | 1.46 |
| Downcounty Consortium | Glenallan Elementary | 100.00\% | 0.90 | 0.88 |
| Downcounty Consortium | Brookhaven Elementary | 99.36\% | 1.28 | 1.08 |
| Downcounty Consortium | Kemp Mill Elementary | 106.11\% | 2.41 | 0.95 |
| Downcounty Consortium | Forest Knolls Elementary | 142.72\% | 0.91 | 0.84 |
| Downcounty Consortium | Harmony Hills Elementary | 105.08\% | 0.89 | 0.70 |
| Downcounty Consortium | Viers Mill Elementary | 78.33\% | 0.70 | 0.69 |
| Downcounty Consortium | Rock View Elementary | 102.99\% | 0.89 | 0.71 |
| Downcounty Consortium | Arcola Elementary | 115.05\% | 1.08 | 0.67 |
| Downcounty Consortium | Wheaton Woods Elementary | 65.80\% | 0.50 | 0.50 |
| Downcounty Consortium | Georgian Forest Elementary | 93.43\% | 1.84 | 1.22 |
| Downcounty Consortium | Highland View Elementary | 150.69\% | 0.56 | 0.54 |
| Downcounty Consortium | Sargent Shriver Elementary | 112.73\% | 0.61 | 0.56 |


| Cluster | School | Utilization Rate | Distance to current school (miles) | Distance to closest School (miles) |
| :---: | :---: | :---: | :---: | :---: |
| Downcounty Consortium | Weller Road Elementary | 96.76\% | 0.53 | 0.50 |
| Downcounty Consortium | New Hampshire Estates Elementary | 97.77\% | 0.61 | 0.43 |
| Downcounty Consortium | Bel Pre Elementary | 95.78\% | 1.73 | 1.54 |
| Gaithersburg | Laytonsville Elementary | 87.70\% | 2.30 | 1.96 |
| Gaithersburg | Strawberry Knoll Elementary | 141.83\% | 0.70 | 0.59 |
| Gaithersburg | Summit Hall Elementary | 153.61\% | 0.84 | 0.82 |
| Gaithersburg | Rosemont Elementary | 113.91\% | 1.68 | 1.01 |
| Gaithersburg | Gaithersburg Elementary | 117.50\% | 0.66 | 0.65 |
| Gaithersburg | Washington Grove Elementary | 75.37\% | 1.34 | 1.04 |
| Gaithersburg | Goshen Elementary | 96.13\% | 1.20 | 1.01 |
| Northeast Consortium | Cresthaven Elementary | 111.23\% | 1.47 | 1.03 |
| Northeast Consortium | Dr. Charles R. Drew Elementary | 100.40\% | 1.19 | 0.91 |
| Northeast Consortium | Westover Elementary | 118.80\% | 1.24 | 0.97 |
| Northeast Consortium | Greencastle Elementary | 122.00\% | 0.92 | 0.90 |
| Northeast Consortium | Stonegate Elementary | 130.13\% | 1.83 | 1.54 |
| Northeast Consortium | Galway Elementary | 102.55\% | 1.24 | 1.12 |
| Northeast Consortium | William Tyler Page Elementary | 156.89\% | 1.13 | 1.08 |
| Northeast Consortium | Cannon Road Elementary | 79.54\% | 1.37 | 0.84 |
| Northeast Consortium | Burnt Mills Elementary | 147.70\% | 1.13 | 1.00 |
| Northeast Consortium | Jackson Road Elementary | 104.72\% | 1.33 | 1.25 |
| Northeast Consortium | Roscoe R. Nix Elementary | 96.02\% | 1.76 | 1.10 |
| Northeast Consortium | Burtonsville Elementary | 122.72\% | 1.65 | 1.57 |
| Northeast Consortium | Fairland Elementary | 91.98\% | 1.99 | 1.33 |
| Northeast Consortium | Cloverly Elementary | 110.85\% | 2.08 | 1.93 |
| Northeast Consortium | JoAnn Leleck Elementary at Broad Acres | 122.24\% | 1.09 | 0.48 |
| Northwest | Clopper Mill Elementary | 108.67\% | 0.88 | 0.61 |
| Northwest | Germantown Elementary | 106.91\% | 0.67 | 0.62 |


| Cluster | School | Utilization Rate | Distance to current school (miles) | Distance to closest School (miles) |
| :---: | :---: | :---: | :---: | :---: |
| Northwest | Ronald McNair Elementary | 132.27\% | 0.82 | 0.72 |
| Northwest | Great Seneca Creek Elementary | 106.83\% | 0.83 | 0.72 |
| Northwest | Darnestown Elementary | 74.77\% | 1.71 | 1.56 |
| Northwest | Spark M. Matsunaga Elementary | 121.58\% | 1.55 | 0.92 |
| Northwest | Diamond Elementary | 116.64\% | 1.73 | 1.18 |
| Poolesville | Poolesville Elementary | 90.72\% | 1.13 | 1.12 |
| Poolesville | Monocacy Elementary | 68.95\% | 3.49 | 3.02 |
| Quince Orchard | Thurgood Marshall Elementary | 112.68\% | 2.00 | 0.90 |
| Quince Orchard | Jones Lane Elementary | 85.66\% | 2.28 | 1.01 |
| Quince Orchard | Brown Station Elementary | 83.71\% | 0.69 | 0.68 |
| Quince Orchard | Fields Road Elementary | 111.95\% | 0.63 | 0.63 |
| Quince Orchard | Rachel Carson Elementary | 129.05\% | 1.01 | 0.79 |
| Richard Montgomery | College Gardens Elementary | 93.51\% | 0.84 | 0.81 |
| Richard Montgomery | Twinbrook Elementary | 101.82\% | 0.82 | 0.76 |
| Richard Montgomery | Beall Elementary | 83.10\% | 0.79 | 0.69 |
| Richard Montgomery | Ritchie Park Elementary | 103.35\% | 1.87 | 0.90 |
| Richard Montgomery | Bayard Rustin Elementary | 96.64\% | 0.89 | 0.76 |
| Rockville | Meadow Hall Elementary | 109.07\% | 0.70 | 0.61 |
| Rockville | Lucy V. Barnsley Elementary | 113.04\% | 1.01 | 0.90 |
| Rockville | Flower Valley Elementary | 119.95\% | 1.39 | 1.11 |
| Rockville | Rock Creek Valley Elementary | 94.78\% | 0.86 | 0.62 |
| Rockville | Maryvale Elementary | 99.84\% | 0.51 | 0.51 |
| Seneca Valley | Dr. Sally K. Ride Elementary | 107.49\% | 2.04 | 0.90 |
| Seneca Valley | S. Christa McAuliffe Elementary | 71.85\% | 0.87 | 0.87 |
| Seneca Valley | Waters Landing Elementary | 84.92\% | 0.75 | 0.73 |
| Seneca Valley | Lake Seneca Elementary | 120.94\% | 1.10 | 0.84 |


| Cluster | School | Utilization Rate | Distance to current school (miles) | Distance to closest School (miles) |
| :---: | :---: | :---: | :---: | :---: |
| Sherwood | Brooke Grove Elementary | 89.58\% | 0.63 | 0.60 |
| Sherwood | Sherwood Elementary | 99.05\% | 2.23 | 1.88 |
| Sherwood | Greenwood Elementary | 89.21\% | 1.28 | 1.13 |
| Sherwood | Olney Elementary | 112.71\% | 1.42 | 1.27 |
| Sherwood | Belmont Elementary | 81.88\% | 1.64 | 1.19 |
| Thomas S. Wootton | Lakewood Elementary | 82.91\% | 1.46 | 1.01 |
| Thomas S. Wootton | Travilah Elementary | 64.83\% | 1.16 | 1.16 |
| Thomas S. Wootton | Fallsmead Elementary | 102.54\% | 2.06 | 1.12 |
| Thomas S. Wootton | Cold Spring Elementary | 72.49\% | 0.56 | 0.50 |
| Thomas S. Wootton | Dufief Elementary | 74.00\% | 0.70 | 0.70 |
| Thomas S. Wootton | Stone Mill Elementary | 84.73\% | 0.89 | 0.87 |
| Walt Whitman | Wood Acres Elementary | 89.52\% | 0.81 | 0.79 |
| Walt Whitman | Burning Tree Elementary | 124.34\% | 1.13 | 0.95 |
| Walt Whitman | Bannockburn Elementary | 126.65\% | 1.32 | 1.00 |
| Walt Whitman | Carderock Springs Elementary | 90.15\% | 2.06 | 1.89 |
| Walt Whitman | Bradley Hills Elementary | 85.37\% | 0.88 | 0.71 |
| Walter Johnson | Garrett Park Elementary | 103.35\% | 1.69 | 1.15 |
| Walter Johnson | Farmland Elementary | 119.89\% | 1.35 | 1.22 |
| Walter Johnson | Luxmanor Elementary | 165.77\% | 1.33 | 1.18 |
| Walter Johnson | Wyngate Elementary | 95.62\% | 0.94 | 0.79 |
| Walter Johnson | Ashburton Elementary | 116.98\% | 1.24 | 1.09 |
| Walter Johnson | Kensington Parkwood Elementary | 84.94\% | 1.29 | 0.88 |
| Watkins Mill | Watkins Mill Elementary | 114.04\% | 0.87 | 0.80 |
| Watkins Mill | Whetstone Elementary | 98.93\% | 1.03 | 0.88 |
| Watkins Mill | South Lake Elementary | 129.25\% | 1.13 | 0.68 |
| Watkins Mill | Stedwick Elementary | 78.20\% | 1.19 | 1.03 |
| Winston Churchill | Seven Locks Elementary | 100.24\% | 1.64 | 1.30 |
| Winston Churchill | Potomac Elementary | 88.47\% | 2.30 | 1.88 |
| Winston Churchill | Wayside Elementary | 77.16\% | 1.62 | 1.05 |
| Winston Churchill | Bells Mill Elementary | 102.56\% | 0.83 | 0.83 |
| Winston Churchill | Beverly Farms Elementary | 84.91\% | 0.99 | 0.86 |

## Middle Schools

| Cluster | School | Utilization Rate | Distance to current school (miles) | Distance to closest School (miles) |
| :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase | Westland Middle | 73.12\% | 2.15 | 1.79 |
| Bethesda-Chevy Chase | Silver Creek Middle | 94.87\% | 2.58 | 2.21 |
| Clarksburg | Rocky Hill Middle | 86.57\% | 2.46 | 2.19 |
| Clarksburg | Neelsville Middle | 98.85\% | 2.73 | 1.61 |
| Col. Zadok Magruder | Redland Middle | 83.01\% | 3.29 | 2.30 |
| Col. Zadok Magruder | Shady Grove Middle | 67.33\% | 1.75 | 1.66 |
| Damascus | John T. Baker Middle | 112.01\% | 2.40 | 2.36 |
| Damascus | Hallie Wells Middle | 88.90\% | 1.18 | 1.13 |
| Downcounty Consortium | Newport Mill Middle | 82.59\% | 1.19 | 1.01 |
| Downcounty Consortium | A. Mario Loiederman Middle | 114.70\% | 1.00 | 0.98 |
| Downcounty Consortium | Sligo Middle | 76.73\% | 1.34 | 1.11 |
| Downcounty Consortium | Eastern Middle | 99.80\% | 1.30 | 1.22 |
| Downcounty Consortium | Takoma Park Middle | 123.75\% | 1.11 | 1.08 |
| Downcounty Consortium | Silver Spring International Middle | 104.16\% | 1.43 | 1.02 |
| Downcounty Consortium | Col. E. Brooke Lee Middle | 106.05\% | 2.06 | 1.53 |
| Downcounty Consortium | Argyle Middle | 114.16\% | 1.40 | 1.19 |
| Downcounty Consortium | Parkland Middle | 120.46\% | 1.41 | 1.31 |
| Gaithersburg | Gaithersburg Middle | 86.92\% | 2.23 | 1.82 |
| Gaithersburg | Forest Oak Middle | 99.48\% | 3.43 | 1.92 |
| Northeast Consortium | Briggs Chaney Middle | 101.19\% | 4.18 | 2.34 |
| Northeast Consortium | White Oak Middle | 85.18\% | 3.02 | 2.08 |
| Northeast Consortium | Francis Scott Key Middle | 104.58\% | 2.50 | 1.67 |
| Northeast Consortium | Benjamin Banneker Middle | 109.83\% | 1.99 | 1.96 |
| Northeast Consortium | William H. Farquhar Middle | 88.52\% | 3.14 | 2.43 |
| Northwest | Kingsview Middle | 94.43\% | 1.26 | 1.23 |
| Poolesville | John Poole Middle | 83.33\% | 2.88 | 2.68 |
| Quince Orchard | Ridgeview Middle | 82.09\% | 2.33 | 2.02 |
| Quince Orchard | Lakelands Park Middle | 106.19\% | 2.28 | 1.73 |
| Richard Montgomery | Julius West Middle | 96.51\% | 2.19 | 2.01 |
| Rockville | Earle B. Wood Middle | 105.30\% | 1.72 | 1.38 |
| Seneca Valley | Roberto W Clemente Middle | 104.71\% | 1.74 | 1.23 |
| Seneca Valley | Dr. Martin Luther King Jr. Middle | 83.59\% | 1.65 | 1.24 |
| Sherwood | Rosa Parks Middle | 90.32\% | 1.90 | 1.86 |
| Thomas S. Wootton | Robert Frost Middle | 94.93\% | 3.09 | 2.40 |
| Walt Whitman | Thomas W. Pyle Middle | 119.38\% | 2.17 | 1.67 |
| Walter Johnson | North Bethesda Middle | 100.00\% | 2.04 | 1.28 |
| Walter Johnson | Tilden Middle | 98.90\% | 1.61 | 1.61 |
| Watkins Mill | Montgomery Village Middle | 91.45\% | 1.04 | 1.04 |
| Winston Churchill | Cabin John Middle | 98.39\% | 3.52 | 1.98 |
| Winston Churchill | Herbert Hoover Middle | 91.75\% | 2.64 | 2.33 |

High Schools

| Cluster | School | Utilization <br> Rate | Distance to <br> current school <br> (miles) | Distance to <br> closest School <br> (miles) |
| :--- | :--- | :--- | :--- | :--- |
| Bethesda-Chevy Chase | Bethesda-Chevy Chase <br> High | $91.94 \%$ | 1.94 | 1.86 |
| Clarksburg | Clarksburg High | $121.53 \%$ | 2.52 | 1.99 |
| Col. Zadok Magruder | Col. Zadok Magruder High | $87.58 \%$ | 3.45 | 2.93 |
| Damascus | Damascus High | $87.75 \%$ | 2.83 | 2.49 |
| Downcounty Consortium | John F. Kennedy High | $102.01 \%$ | 2.67 | 2.14 |
| Downcounty Consortium | Montgomery Blair High | $111.70 \%$ | 2.41 | 2.41 |
| Downcounty Consortium | Wheaton High | $98.16 \%$ | 1.56 | 1.51 |
| Downcounty Consortium | Northwood High | $119.89 \%$ | 1.76 | 1.19 |
| Downcounty Consortium | Albert Einstein High | $111.72 \%$ | 2.01 | 1.54 |
| Gaithersburg | Gaithersburg High | $98.73 \%$ | 2.53 | 2.07 |
| Northeast Consortium | Springbrook High | $81.87 \%$ | 3.27 | 2.47 |
| Northeast Consortium | James Hubert Blake High | $102.98 \%$ | 4.86 | 2.29 |
| Northeast Consortium | Paint Branch High | $98.86 \%$ | 2.26 | 2.22 |
| Northwest | Northwest High | $114.79 \%$ | 2.25 | 1.72 |
| Poolesville | Poolesville High | $103.16 \%$ | 2.01 | 1.88 |
| Quince Orchard | Quince Orchard High | $120.60 \%$ | 2.20 | 1.94 |
| Richard Montgomery | Richard Montgomery High | $111.87 \%$ | 1.97 | 1.66 |
| Rockville | $93.94 \%$ | 1.84 | 1.69 |  |
| Seneca Valley | Rockville High | $92.63 \%$ | 1.51 | 1.46 |
| Sherwood | Seneca Valley High | $90.51 \%$ | 3.65 | 3.40 |
| Thomas S. Wootton | Sherwood High | Thomas S. Wootton High | $98.79 \%$ | 3.20 |
| Walt Whitman | Walt Whitman High | $109.85 \%$ | 2.11 | 2.52 |
| Walter Johnson | Walter Johnson High | $118.40 \%$ | 2.24 | 2.09 |
| Watkins Mill | Watkins Mill High | $82.02 \%$ | 1.94 | 1.92 |
| Winston Churchill | Winston Churchill High | $114.55 \%$ | 2.83 | 1.80 |
|  |  |  | 2.53 |  |

## Appendix B8:

Table: Schools and Dissimilarity from Nearest Five Schools

## Elementary Schools

| School | Utilization Rate | Dissimilarity between school and nearest five neighboring schools |
| :---: | :---: | :---: |
| Arcola | 115.05\% | 0.12 |
| Ashburton | 116.98\% | 0.02 |
| Bannockburn | 126.65\% | 0.27 |
| Barnsley | 113.04\% | 0.11 |
| Bayard Rustin | 96.64\% | 0.05 |
| Beall | 83.10\% | 0.11 |
| Bel Pre | 95.78\% | 0.01 |
| Bells Mill | 102.56\% | 0.06 |
| Belmont | 81.88\% | 0.13 |
| Bethesda | 118.93\% | 0.27 |
| Beverly Farms | 84.91\% | 0.11 |
| Bradley Hills | 85.37\% | 0.17 |
| Brooke Grove | 89.58\% | 0.21 |
| Brookhaven | 99.36\% | 0.09 |
| Brown Station | 83.71\% | 0.27 |
| Burning Tree | 124.34\% | 0.23 |
| Burnt Mills | 147.70\% | 0.44 |
| Burtonsville | 122.72\% | 0.12 |
| Candlewood | 75.15\% | 0.17 |
| Cannon Road | 79.54\% | 0.39 |
| Carderock Springs | 90.15\% | 0.12 |
| Carson | 129.05\% | 0.39 |
| Cashell | 101.18\% | 0.02 |
| Cedar Grove | 103.98\% | 0.13 |
| Chevy Chase | 98.52\% | 0.07 |
| Clarksburg | 200.64\% | 0.84 |
| Clearspring | 91.74\% | 0.24 |
| Clopper Mill | 108.67\% | 0.11 |
| Cloverly | 110.85\% | 0.00 |
| Cold Spring | 72.49\% | 0.19 |
| College Gardens | 93.51\% | 0.00 |
| Cresthaven | 111.23\% | 0.06 |
| Daly | 118.16\% | 0.21 |
| Damascus | 101.97\% | 0.15 |
| Darnestown | 74.77\% | 0.19 |


| School | Utilization Rate | Dissimilarity between school and nearest five neighboring schools |
| :---: | :---: | :---: |
| Diamond | 116.64\% | 0.14 |
| Drew | 100.40\% | 0.07 |
| DuFief | 74.00\% | 0.16 |
| East Silver Spring | 86.31\% | 0.18 |
| Fairland | 91.98\% | 0.19 |
| Fallsmead | 102.54\% | 0.10 |
| Farmland | 119.89\% | 0.12 |
| Fields Road | 111.95\% | 0.08 |
| Flower Hill | 92.90\% | 0.17 |
| Flower Valley | 119.95\% | 0.18 |
| Forest Knolls | 142.72\% | 0.28 |
| Fox Chapel | 89.75\% | 0.07 |
| Gaithersburg | 117.50\% | 0.09 |
| Galway | 102.55\% | 0.06 |
| Garrett Park | 103.35\% | 0.08 |
| Georgian Forest | 93.43\% | 0.01 |
| Germantown | 106.91\% | 0.10 |
| Glen Haven | 91.73\% | 0.17 |
| Glenallan | 100.00\% | 0.04 |
| Goshen | 96.13\% | 0.07 |
| Great Seneca Creek | 106.83\% | 0.06 |
| Greencastle | 122.00\% | 0.17 |
| Greenwood | 89.21\% | 0.11 |
| Harmony Hills | 105.08\% | 0.04 |
| Highland | 102.78\% | 0.04 |
| Highland View | 150.69\% | 0.41 |
| Jackson Road | 104.72\% | 0.14 |
| JoAnn Leleck ES at Broad Acres | 122.24\% | 0.13 |
| Jones Lane | 85.66\% | 0.05 |
| Kemp Mill | 106.11\% | 0.01 |
| KensingtonÃ $\tilde{A}^{-}{ }^{\prime} \hat{A}^{1} 1 / 2$ Parkwood | 84.94\% | 0.08 |
| Lake Seneca | 120.94\% | 0.24 |
| Lakewood | 82.91\% | 0.09 |
| Laytonsville | 87.70\% | 0.18 |
| Little Bennett | 102.08\% | 0.09 |
| Luxmanor | 165.77\% | 0.52 |
| Marshall | 112.68\% | 0.12 |
| Maryvale | 99.84\% | 0.02 |
| Matsunaga | 121.58\% | 0.19 |


| School | Utilization Rate | Dissimilarity between school and nearest five neighboring schools |
| :---: | :---: | :---: |
| McAuliffe | 71.85\% | 0.25 |
| McNair | 132.27\% | 0.25 |
| Meadow Hall | 109.07\% | 0.02 |
| Mill Creek Towne | 150.89\% | 0.45 |
| Monocacy | 68.95\% | 0.43 |
| Montgomery Knolls | 87.52\% | 0.12 |
| New Hampshire Estates | 97.77\% | 0.04 |
| North Chevy Chase | 72.35\% | 0.32 |
| Oak View | 126.27\% | 0.20 |
| Oakland Terrace | 109.03\% | 0.10 |
| Olney | 112.71\% | 0.07 |
| Page | 156.89\% | 0.49 |
| Pine Crest | 102.23\% | 0.14 |
| Piney Branch | 106.38\% | 0.00 |
| Poolesville | 90.72\% | 0.21 |
| Potomac | 88.47\% | 0.03 |
| Resnik | 122.11\% | 0.14 |
| Ride | 107.49\% | 0.06 |
| Ritchie Park | 103.35\% | 0.07 |
| Rock Creek Forest | 113.94\% | 0.19 |
| Rock Creek Valley | 94.78\% | 0.12 |
| Rock View | 102.99\% | 0.04 |
| Rockwell | 85.66\% | 0.28 |
| Rolling Terrace | 106.31\% | 0.03 |
| Roscoe Nix | 96.02\% | 0.21 |
| Rosemary Hills | 90.76\% | 0.03 |
| Rosemont | 113.91\% | 0.19 |
| Sargent Shriver | 112.73\% | 0.21 |
| Sequoyah | 74.02\% | 0.25 |
| Seven Locks | 100.24\% | 0.01 |
| Sherwood | 99.05\% | 0.13 |
| Singer | 100.44\% | 0.00 |
| Sligo Creek | 102.41\% | 0.01 |
| Snowden Farm | 83.20\% | 0.30 |
| Somerset | 113.01\% | 0.21 |
| South Lake | 129.25\% | 0.30 |
| Stedwick | 78.20\% | 0.21 |
| Stone Mill | 84.73\% | 0.05 |
| Stonegate | 130.13\% | 0.14 |


| School | Utilization Rate | Dissimilarity between <br> school and nearest <br> five neighboring <br> schools |
| :--- | :--- | :--- |
| Strathmore | $110.02 \%$ | 0.05 |
| Strawberry Knoll | $141.83 \%$ | 0.22 |
| Summit Hall | $153.61 \%$ | 0.46 |
| Takoma Park | $97.46 \%$ | 0.07 |
| Travilah | $64.83 \%$ | 0.25 |
| Twinbrook | $101.82 \%$ | 0.14 |
| Viers Mill | $78.33 \%$ | 0.22 |
| Washington Grove | $75.37 \%$ | 0.19 |
| Waters Landing | $84.92 \%$ | 0.12 |
| Watkins Mill | $114.04 \%$ | 0.09 |
| Wayside | $77.16 \%$ | 0.18 |
| Weller Road | $96.76 \%$ | 0.00 |
| Westbrook | $62.34 \%$ | 0.29 |
| Westover | $118.80 \%$ | 0.04 |
| Wheaton Woods | $65.80 \%$ | 0.26 |
| Whetstone | $98.93 \%$ | 0.03 |
| William B. Gibbs Jr. | $86.37 \%$ | 0.29 |
| Wilson Wims | $103.92 \%$ | 0.10 |
| Wood Acres | $89.52 \%$ | 0.05 |
| Woodfield | $93.18 \%$ | 0.03 |
| Woodlin | $113.29 \%$ | 0.17 |
| Wyngate | $95.62 \%$ | 0.20 |

## Middle Schools

| School | Utilization Rate | Dissimilarity between school and nearest five neighboring schools |
| :---: | :---: | :---: |
| Argyle | 114.16\% | 0.18 |
| Baker | 112.01\% | 0.14 |
| Banneker | 109.83\% | 0.13 |
| Briggs Chaney | 101.19\% | 0.02 |
| Cabin John | 98.39\% | 0.02 |
| Clemente | 104.71\% | 0.09 |
| Eastern | 99.80\% | 0.04 |
| Farquhar | 88.52\% | 0.09 |
| Forest Oak | 99.48\% | 0.08 |
| Frost | 94.93\% | 0.06 |
| Gaithersburg | 86.92\% | 0.08 |
| Hallie Wells | 88.90\% | 0.05 |
| Hoover | 91.75\% | 0.08 |
| Key | 104.58\% | 0.01 |
| King | 83.59\% | 0.09 |
| Kingsview | 94.43\% | 0.01 |
| Lakelands Park | 106.19\% | 0.09 |
| Lee | 106.05\% | 0.05 |
| Loiederman | 114.70\% | 0.18 |
| Montgomery Village | 91.45\% | 0.02 |
| Neelsville | 98.85\% | 0.06 |
| Newport Mill | 82.59\% | 0.14 |
| North Bethesda | 100.00\% | 0.03 |
| Parkland | 120.46\% | 0.20 |
| Parks | 90.32\% | 0.03 |
| Poole | 83.33\% | 0.07 |
| Pyle | 119.38\% | 0.22 |
| Redland | 83.01\% | 0.05 |
| Ridgeview | 82.09\% | 0.07 |
| Rocky Hill | 86.57\% | 0.06 |
| Shady Grove | 67.33\% | 0.23 |
| Silver Creek | 94.87\% | 0.12 |
| Silver Spring International | 104.16\% | 0.00 |
| Sligo | 76.73\% | 0.27 |
| Takoma Park | 123.75\% | 0.27 |
| Tilden | 98.90\% | 0.02 |
| West | 96.51\% | 0.04 |
| Westland | 73.12\% | 0.26 |
| White Oak | 85.18\% | 0.16 |
| Wood | 105.30\% | 0.11 |

High Schools

| School | Utilization Rate | Dissimilarity between <br> school and nearest <br> five neighboring <br> schools |
| :--- | :--- | :--- |
| Bethesda-Chevy Chase | $91.94 \%$ | 0.15 |
| Blair | $111.70 \%$ | 0.08 |
| Blake | $102.98 \%$ | 0.08 |
| Churchill | $114.55 \%$ | 0.10 |
| Clarksburg | $121.53 \%$ | 0.13 |
| Damascus | $87.75 \%$ | 0.18 |
| Einstein | $111.72 \%$ | 0.05 |
| Gaithersburg | $98.73 \%$ | 0.04 |
| Johnson | $118.40 \%$ | 0.14 |
| Kennedy | $102.01 \%$ | 0.03 |
| Magruder | $87.58 \%$ | 0.10 |
| Montgomery | $111.87 \%$ | 0.10 |
| Northwest | $114.79 \%$ | 0.08 |
| Northwood | $119.89 \%$ | 0.13 |
| Paint Branch | $98.86 \%$ | 0.00 |
| Poolesville | $103.16 \%$ | 0.05 |
| Quince Orchard | $120.60 \%$ | 0.15 |
| Rockville | $93.94 \%$ | 0.08 |
| Seneca Valley | $92.63 \%$ | 0.16 |
| Sherwood | $90.51 \%$ | 0.05 |
| Springbrook | $81.87 \%$ | 0.15 |
| Watkins Mill | $109.85 \%$ | 0.21 |
| Wheaton | $98.79 \%$ | 0.08 |
| Whitman | 0.02 |  |
| Wootton | 0.06 |  |

Appendix B9:
Utilization Rates Over Time (2010, 2015, 2020)

| Cluster | school | $\underset{\lambda}{\text { ® }}$ |  |  |  |  | $\begin{aligned} & \text { n } \\ & \text { 릉 } \\ & \text { N } \\ & \frac{0}{N} \\ & \text { U心 N } \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bethesda - Chevy Chase | Bethesda | ES | 467 | 384 | 122\% | 517 | 384 | 135\% | 666 | 560 | 119\% |
| Bethesda - Chevy Chase | Chevy Chase | ES | 439 | 429 | 102\% | 541 | 473 | 114\% | 466 | 473 | 99\% |
| Bethesda - Chevy Chase | Somerset | ES | 388 | 457 | 85\% | 567 | 515 | 110\% | 582 | 515 | 113\% |
| Bethesda - Chevy Chase | Westbrook | ES | 363 | 293 | 124\% | 452 | 554 | 82\% | 341 | 547 | 62\% |
| Bethesda - Chevy Chase | North Chevy Chase | ES | 349 | 276 | 126\% | 355 | 266 | 133\% | 259 | 358 | 72\% |
| Bethesda - Chevy Chase | Rock Creek Forest | ES | 511 | 404 | 126\% | 628 | 770 | 82\% | 760 | 667 | 114\% |
| Bethesda - Chevy Chase | Rosemary Hills | ES | 598 | 494 | 121\% | 633 | 478 | 132\% | 570 | 628 | 91\% |
| Bethesda - Chevy Chase | Bethesda-Chevy Chase | HS | 1,744 | 1,656 | 105\% | 1,992 | 1,683 | 118\% | 2,259 | 2,457 | 92\% |
| Bethesda - Chevy Chase | Westland | MS | 930 | 1,037 | 90\% | 1,254 | 1,097 | 114\% | 808 | 1,105 | 73\% |
| Bethesda - Chevy Chase | Silver Creek | MS | -- | -- | -- | -- | -- | -- | 887 | 935 | 95\% |
| Clarksburg | Clarksburg | ES | 428 | 335 | 128\% | 305 | 312 | 98\% | 624 | 311 | 201\% |
| Clarksburg | Fox Chapel | ES | 600 | 386 | 155\% | 601 | 683 | 88\% | 613 | 683 | 90\% |
| Clarksburg | Captain James Daly | ES | 565 | 508 | 111\% | 593 | 518 | 114\% | 618 | 523 | 118\% |
| Clarksburg | Little Bennett | ES | 999 | 684 | 146\% | 691 | 676 | 102\% | 637 | 624 | 102\% |
| Clarksburg | William B. Gibbs Jr. | ES | -- | -- | -- | 778 | 740 | 105\% | 621 | 719 | 86\% |
| Clarksburg | Wilson Wims | ES | -- | -- | -- | 660 | 759 | 87\% | 768 | 739 | 104\% |
| Clarksburg | Snowden Farm | ES | -- | -- | -- | -- | -- | -- | 644 | 774 | 83\% |
| Clarksburg | Clarksburg | HS | 1,735 | 1,593 | 109\% | 1,974 | 1,638 | 121\% | 2,472 | 2,034 | 122\% |
| Clarksburg | Neelsville | MS | 793 | 850 | 93\% | 914 | 922 | 99\% | 945 | 956 | 99\% |
| Clarksburg | Rocky Hill | MS | 1,211 | 956 | 127\% | 1,133 | 995 | 114\% | 883 | 1,020 | 87\% |
| Damascus | Lois P. Rockwell | ES | 389 | 534 | 73\% | 456 | 523 | 87\% | 454 | 530 | 86\% |
| Damascus | Damascus | ES | 275 | 338 | 81\% | 297 | 328 | 91\% | 362 | 355 | 102\% |
| Damascus | Cedar Grove | ES | 659 | 479 | 138\% | 641 | 405 | 158\% | 418 | 402 | 104\% |
| Damascus | Woodfield | ES | 395 | 457 | 86\% | 302 | 471 | 64\% | 355 | 381 | 93\% |
| Damascus | Clearspring | ES | 639 | 631 | 101 \% | 624 | 642 | 97\% | 589 | 642 | 92\% |
| Damascus | Damascus | HS | 1,412 | 1,589 | 89\% | 1,246 | 1,551 | 80\% | 1,354 | 1,543 | 88\% |
| Damascus | Hallie Wells | MS | -- | -- | -- | -- | -- | -- | 873 | 982 | 89\% |
| Damascus | John T Baker | MS | 576 | 702 | 82\% | 772 | 741 | 104\% | 830 | 741 | 112\% |
| Downcounty Consortium | Sligo Creek | ES | 616 | 526 | 117\% | 639 | 664 | 96\% | 680 | 664 | 102\% |
| Downcounty Consortium | Piney Branch | ES | 519 | 565 | 92\% | 527 | 611 | 86\% | 650 | 611 | 106\% |
| Downcounty Consortium | Takoma Park | ES | 399 | 290 | 138\% | 654 | 636 | 103\% | 613 | 629 | 97\% |
| Downcounty Consortium | East Silver Spring | ES | 231 | 354 | 65\% | 525 | 582 | 90\% | 498 | 577 | 86\% |
| Downcounty Consortium | Pine Crest | ES | 348 | 358 | 97\% | 473 | 381 | 124\% | 413 | 404 | 102\% |
| Downcounty Consortium | Woodlin | ES | 420 | 393 | 107\% | 623 | 462 | 135\% | 554 | 489 | 113\% |
| Downcounty Consortium | Oak View | ES | 303 | 358 | 85\% | 379 | 358 | 106\% | 423 | 335 | 126\% |
| Downcounty Consortium | Glen Haven | ES | 587 | 505 | 116\% | 547 | 576 | 95\% | 510 | 556 | 92\% |
| Downcounty Consortium | Oakland Terrace | ES | 731 | 469 | 156\% | 491 | 513 | 96\% | 531 | 487 | 109\% |
| Downcounty Consortium | Flora M. Singer | ES | -- | -- | -- | 677 | 680 | 100\% | 683 | 680 | 100\% |
| Downcounty Consortium | Rolling Terrace | ES | 637 | 639 | 100\% | 905 | 724 | 125\% | 775 | 729 | 106\% |
| Downcounty Consortium | Viers Mill | ES | 549 | 383 | 143\% | 714 | 760 | 94\% | 582 | 743 | 78\% |


| Cluster | school | $\stackrel{0}{2}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Downcounty Consortium | Highland | ES | 469 | 570 | 82\% | 541 | 522 | 104\% | 555 | 540 | 103\% |
| Downcounty Consortium | Montgomery Knolls | ES | 410 | 273 | 150\% | 510 | 540 | 94\% | 470 | 537 | 88\% |
| Downcounty Consortium | Weller Road | ES | 450 | 570 | 79\% | 652 | 752 | 87\% | 747 | 772 | 97\% |
| Downcounty Consortium | Sargent Shriver | ES | 587 | 587 | 100\% | 756 | 673 | 112\% | 744 | 660 | 113\% |
| Downcounty Consortium | Bel Pre | ES | 516 | 383 | 135\% | 541 | 638 | 85\% | 613 | 640 | 96\% |
| Downcounty Consortium | Highland View | ES | 368 | 278 | 132\% | 426 | 298 | 143\% | 434 | 288 | 151\% |
| Downcounty Consortium | Georgian Forest | ES | 460 | 309 | 149\% | 571 | 649 | 88\% | 626 | 670 | 93\% |
| Downcounty Consortium | Wheaton Woods | ES | 415 | 348 | 119\% | 537 | 358 | 150\% | 504 | 766 | 66\% |
| Downcounty Consortium | Arcola | ES | 430 | 513 | 84\% | 719 | 496 | 145\% | 749 | 651 | 115\% |
| Downcounty Consortium | New Hampshire Estates | ES | 383 | 483 | 79\% | 516 | 480 | 108\% | 482 | 493 | 98\% |
| Downcounty Consortium | Rock View | ES | 521 | 335 | 156\% | 657 | 687 | 96\% | 655 | 636 | 103\% |
| Downcounty Consortium | Harmony Hills | ES | 498 | 328 | 152\% | 736 | 709 | 104\% | 745 | 709 | 105\% |
| Downcounty Consortium | Forest Knolls | ES | 531 | 590 | 90\% | 737 | 560 | 132\% | 755 | 529 | 143\% |
| Downcounty Consortium | Kemp Mill | ES | 406 | 466 | 87\% | 531 | 453 | 117\% | 486 | 458 | 106\% |
| Downcounty Consortium | Brookhaven | ES | 406 | 278 | 146\% | 458 | 486 | 94\% | 467 | 470 | 99\% |
| Downcounty Consortium | Glenallan | ES | 378 | 294 | 129\% | 650 | 762 | 85\% | 747 | 747 | 100\% |
| Downcounty Consortium | Strathmore | ES | 383 | 473 | 81\% | 455 | 439 | 104\% | 483 | 439 | 110\% |
| Downcounty Consortium | Wheaton | HS | 1,270 | 1,389 | 91\% | 1,467 | 1,356 | 108\% | 2,193 | 2,234 | 98\% |
| Downcounty Consortium | Albert Einstein | HS | 1,606 | 1,615 | 99\% | 1,699 | 1,621 | 105\% | 1,820 | 1,629 | 112\% |
| Downcounty Consortium | John F. Kennedy | HS | 1,548 | 1,748 | 89\% | 1,570 | 1,847 | 85\% | 1,830 | 1,794 | 102\% |
| Downcounty Consortium | Montgomery Blair | HS | 2,614 | 2,885 | 91\% | 2,900 | 2,920 | 99\% | 3,227 | 2,889 | 112\% |
| Downcounty Consortium | Northwood | HS | 1,301 | 1,526 | 85\% | 1,586 | 1,519 | 104\% | 1,808 | 1,508 | 120\% |
| Downcounty Consortium | Silver Spring International | MS | 632 | 1,029 | 61\% | 979 | 1,118 | 88\% | 1,153 | 1,107 | 104\% |
| Downcounty Consortium | Eastern | MS | 729 | 978 | 75\% | 868 | 1,024 | 85\% | 1,010 | 1,012 | 100\% |
| Downcounty Consortium | Sligo | MS | 583 | 988 | 59\% | 523 | 915 | 57\% | 722 | 941 | 77\% |
| Downcounty Consortium | A. Mario Loiederman | MS | 926 | 944 | 98\% | 909 | 897 | 101\% | 999 | 871 | 115\% |
| Downcounty Consortium | Newport Mill | MS | 621 | 769 | 81\% | 599 | 825 | 73\% | 702 | 850 | 83\% |
| Downcounty Consortium | Col. E. Brooke Lee | MS | 461 | 762 | 60\% | 719 | 743 | 97\% | 771 | 727 | 106\% |
| Downcounty Consortium | Argyle | MS | 734 | 888 | 83\% | 920 | 897 | 103\% | 1,024 | 897 | 114\% |
| Downcounty Consortium | Takoma Park | MS | 768 | 863 | 89\% | 996 | 939 | 106\% | 1,162 | 939 | 124\% |
| Downcounty Consortium | Parkland | MS | 797 | 881 | 90\% | 941 | 948 | 99\% | 1,142 | 948 | 120\% |
| Gaithersburg | Laytonsville | ES | 442 | 488 | 91\% | 428 | 448 | 96\% | 392 | 447 | 88\% |
| Gaithersburg | Goshen | ES | 590 | 655 | 90\% | 577 | 533 | 108\% | 571 | 594 | 96\% |
| Gaithersburg | Washington Grove | ES | 376 | 537 | 70\% | 414 | 603 | 69\% | 462 | 613 | 75\% |
| Gaithersburg | Gaithersburg | ES | 517 | 729 | 71\% | 795 | 771 | 103\% | 866 | 737 | 118\% |
| Gaithersburg | Rosemont | ES | 489 | 607 | 81\% | 569 | 590 | 96\% | 647 | 568 | 114\% |
| Gaithersburg | Summit Hall | ES | 458 | 443 | 103\% | 634 | 443 | 143\% | 702 | 457 | 154\% |
| Gaithersburg | Strawberry Knoll | ES | 531 | 498 | 107\% | 599 | 453 | 132\% | 651 | 459 | 142\% |
| Gaithersburg | Gaithersburg | HS | 1,961 | 2,067 | 95\% | 2,245 | 2,407 | 93\% | 2,412 | 2,443 | 99\% |
| Gaithersburg | Forest Oak | MS | 768 | 890 | 86\% | 834 | 949 | 88\% | 950 | 955 | 99\% |
| Gaithersburg | Gaithersburg | MS | 651 | 910 | 72\% | 749 | 933 | 80\% | 877 | 1,009 | 87\% |
| Magruder | Candlewood | ES | 344 | 411 | 84\% | 329 | 550 | 60\% | 387 | 515 | 75\% |


| Cluster | school | $\stackrel{\text { ® }}{2}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Magruder | Cashell | ES | 286 | 403 | 71\% | 337 | 341 | 99\% | 343 | 339 | 101\% |
| Magruder | Judith A. Resnik | ES | 532 | 481 | 111\% | 615 | 493 | 125\% | 602 | 493 | 122\% |
| Magruder | Flower Hill | ES | 454 | 403 | 113\% | 505 | 483 | 105\% | 458 | 493 | 93\% |
| Magruder | Mill Creek Towne | ES | 442 | 393 | 112\% | 412 | 326 | 126\% | 507 | 336 | 151\% |
| Magruder | Sequoyah | ES | 409 | 451 | 91\% | 433 | 470 | 92\% | 376 | 508 | 74\% |
| Magruder | Col. Zadok Magruder | HS | 1,859 | 1,958 | 95\% | 1,520 | 1,995 | 76\% | 1,700 | 1,941 | 88\% |
| Magruder | Shady Grove | MS | 579 | 854 | 68\% | 592 | 867 | 68\% | 575 | 854 | 67\% |
| Magruder | Redland | MS | 630 | 740 | 85\% | 540 | 757 | 71\% | 635 | 765 | 83\% |
| Northeast Consortium | Burtonsville | ES | 598 | 594 | 101\% | 660 | 485 | 136\% | 605 | 493 | 123\% |
| Northeast Consortium | Fairland | ES | 521 | 354 | 147\% | 623 | 648 | 96\% | 596 | 648 | 92\% |
| Northeast Consortium | JoAnn Leleck | ES | 475 | 677 | 70\% | 756 | 672 | 113\% | 874 | 715 | 122\% |
| Northeast Consortium | Jackson Road | ES | 548 | 380 | 144\% | 727 | 709 | 103\% | 732 | 699 | 105\% |
| Northeast Consortium | Roscoe R. Nix | ES | 436 | 486 | 90\% | 756 | 672 | 113\% | 483 | 503 | 96\% |
| Northeast Consortium | Cloverly | ES | 500 | 460 | 109\% | 462 | 454 | 102\% | 511 | 461 | 111\% |
| Northeast Consortium | Burnt Mills | ES | 361 | 386 | 94\% | 538 | 402 | 134\% | 579 | 392 | 148\% |
| Northeast Consortium | Cannon Road | ES | 385 | 283 | 136\% | 432 | 521 | 83\% | 412 | 518 | 80\% |
| Northeast Consortium | William T. Page | ES | 344 | 351 | 98\% | 410 | 379 | 108\% | 615 | 392 | 157\% |
| Northeast Consortium | Galway | ES | 726 | 754 | 96\% | 808 | 790 | 102\% | 763 | 744 | 103\% |
| Northeast Consortium | Stonegate | ES | 460 | 431 | 107\% | 492 | 395 | 125\% | 501 | 385 | 130\% |
| Northeast Consortium | Greencastle | ES | 569 | 576 | 99\% | 817 | 582 | 140\% | 721 | 591 | 122\% |
| Northeast Consortium | Westover | ES | 283 | 298 | 95\% | 304 | 293 | 104\% | 316 | 266 | 119\% |
| Northeast Consortium | Dr. Charles R. Drew | ES | 387 | 465 | 83\% | 444 | 456 | 97\% | 498 | 496 | 100\% |
| Northeast Consortium | Cresthaven | ES | 387 | 465 | 83\% | 503 | 467 | 108\% | 505 | 454 | 111\% |
| Northeast Consortium | Paint Branch | HS | 1,816 | 1,584 | 115\% | 1,996 | 2,034 | 98\% | 1,997 | 2,020 | 99\% |
| Northeast Consortium | James Blake | HS | 1,709 | 1,715 | 100\% | 1,607 | 1,743 | 92\% | 1,795 | 1,743 | 103\% |
| Northeast Consortium | Springbrook | HS | 1,852 | 2,086 | 89\% | 1,750 | 2,145 | 82\% | 1,748 | 2,135 | 82\% |
| Northeast Consortium | Francis Scott Key | MS | 727 | 878 | 83\% | 942 | 961 | 98\% | 1,004 | 960 | 105\% |
| Northeast Consortium | Benjamin Banneker | MS | 715 | 876 | 82\% | 884 | 803 | 110\% | 905 | 824 | 110\% |
| Northeast Consortium | Briggs Chaney | MS | 878 | 927 | 95\% | 891 | 969 | 92\% | 937 | 926 | 101\% |
| Northeast Consortium | William H. Farquhar | MS | 620 | 838 | 74\% | 586 | 906 | 65\% | 694 | 784 | 89\% |
| Northeast Consortium | White Oak | MS | 663 | 924 | 72\% | 750 | 962 | 78\% | 845 | 992 | 85\% |
| Northwest | Clopper Mill | ES | 466 | 429 | 109\% | 457 | 417 | 110\% | 539 | 496 | 109\% |
| Northwest | Germantown | ES | 281 | 361 | 78\% | 316 | 333 | 95\% | 325 | 304 | 107\% |
| Northwest | Ronald McNair | ES | 701 | 611 | 115\% | 851 | 623 | 137\% | 828 | 626 | 132\% |
| Northwest | Great Seneca Creek | ES | 708 | 659 | 107\% | 732 | 566 | 129\% | 594 | 556 | 107\% |
| Northwest | Darnestown | ES | 388 | 273 | 142\% | 310 | 471 | 66\% | 323 | 432 | 75\% |
| Northwest | Spark M. Matsunaga | ES | 940 | 660 | 142\% | 926 | 652 | 142\% | 710 | 584 | 122\% |
| Northwest | Diamond | ES | 470 | 528 | 89\% | 648 | 463 | 140\% | 792 | 679 | 117\% |
| Northwest | Northwest | HS | 2,076 | 2,151 | 97\% | 2,116 | 2,241 | 94\% | 2,624 | 2,286 | 115\% |
| Northwest | Kingsview | MS | 879 | 956 | 92\% | 1,002 | 1,041 | 96\% | 983 | 1,041 | 94\% |
| Poolesville | Poolesville | ES | 364 | 549 | 66\% | 441 | 539 | 82\% | 489 | 539 | 91\% |
| Poolesville | Monocacy | ES | 205 | 205 | 100\% | 161 | 219 | 74\% | 151 | 219 | 69\% |
| Poolesville | Poolesville | HS | 1,114 | 1,107 | 101\% | 1,222 | 1,170 | 104\% | 1,207 | 1,170 | 103\% |


| Cluster | school | 을 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poolesville | John Poole | MS | 350 | 472 | 74\% | 327 | 468 | 70\% | 390 | 468 | 83\% |
| Quince Orchard | Rachel Carson | ES | 854 | 639 | 134\% | 1,013 | 667 | 152\% | 893 | 692 | 129\% |
| Quince Orchard | Thurgood Marshall | ES | 525 | 529 | 99\% | 624 | 534 | 117\% | 622 | 552 | 113\% |
| Quince Orchard | Jones Lane | ES | 508 | 495 | 103\% | 470 | 441 | 107\% | 442 | 516 | 86\% |
| Quince Orchard | Brown Station | ES | 419 | 394 | 106\% | 513 | 436 | 118\% | 637 | 761 | 84\% |
| Quince Orchard | Fields Road | ES | 420 | 580 | 72\% | 484 | 419 | 116\% | 487 | 435 | 112\% |
| Quince Orchard | Quince Orchard | HS | 1,736 | 1,791 | 97\% | 1,899 | 1,857 | 102\% | 2,160 | 1,791 | 121\% |
| Quince Orchard | Ridgeview | MS | 702 | 1,007 | 70\% | 702 | 995 | 71\% | 784 | 955 | 82\% |
| Quince Orchard | Lakelands Park | MS | 822 | 1,052 | 78\% | 1,011 | 1,122 | 90\% | 1,200 | 1,130 | 106\% |
| Richard Montgomery | Twinbrook | ES | 521 | 511 | 102\% | 531 | 563 | 94\% | 558 | 548 | 102\% |
| Richard Montgomery | Beall | ES | 576 | 540 | 107\% | 801 | 638 | 126\% | 531 | 639 | 83\% |
| Richard Montgomery | Ritchie Park | ES | 480 | 410 | 117\% | 551 | 387 | 142\% | 401 | 388 | 103\% |
| Richard Montgomery | College Gardens | ES | 647 | 694 | 93\% | 873 | 694 | 126\% | 634 | 678 | 94\% |
| Richard Montgomery | Bayard Rustin | ES | -- | -- | - | -- | -- | -- | 719 | 744 | 97\% |
| Richard Montgomery | Richard Montgomery | HS | 1,967 | 1,887 | 104\% | 2,199 | 2,236 | 98\% | 2,507 | 2,241 | 112\% |
| Richard Montgomery | Julius West | MS | 926 | 973 | 95\% | 1,201 | 1,054 | 114\% | 1,382 | 1,432 | 97\% |
| Rockville | Maryvale | ES | 609 | 579 | 105\% | 613 | 626 | 98\% | 625 | 626 | 100\% |
| Rockville | Meadow | ES | 344 | 345 | 100\% | 428 | 370 | 116\% | 409 | 375 | 109\% |
| Rockville | Lucy V. Barnsley | ES | 596 | 513 | 116\% | 691 | 404 | 171\% | 737 | 652 | 113\% |
| Rockville | Flower Valley | ES | 444 | 429 | 103\% | 480 | 429 | 112\% | 499 | 416 | 120\% |
| Rockville | Rock Creek Valley | ES | 397 | 363 | 109\% | 437 | 393 | 111\% | 436 | 460 | 95\% |
| Rockville | Rockville | HS | 1,177 | 1,602 | 73\% | 1,339 | 1,570 | 85\% | 1,442 | 1,535 | 94\% |
| Rockville | Earle B. Wood | MS | 829 | 972 | 85\% | 927 | 961 | 96\% | 994 | 944 | 105\% |
| Seneca Valley | Lake Seneca | ES | 350 | 460 | 76\% | 536 | 410 | 131\% | 514 | 425 | 121\% |
| Seneca Valley | Waters Landing | ES | 647 | 651 | 99\% | 691 | 776 | 89\% | 659 | 776 | 85\% |
| Seneca Valley | S. Christa McAuliffe | ES | 550 | 630 | 87\% | 629 | 526 | 120\% | 554 | 771 | 72\% |
| Seneca Valley | Dr. Sally K. Ride | ES | 506 | 479 | 106\% | 527 | 523 | 101\% | 502 | 467 | 107\% |
| Seneca Valley | Seneca Valley | HS | 1,364 | 1,452 | 94\% | 1,284 | 1,374 | 93\% | 1,232 | 1,330 | 93\% |
| Seneca Valley | Martin Luther King, Jr. | MS | 609 | 880 | 69\% | 612 | 905 | 68\% | 764 | 914 | 84\% |
| Seneca Valley | Roberto Clemente | MS | 1,096 | 1,175 | 93\% | 1,208 | 1,231 | 98\% | 1,289 | 1,231 | 105\% |
| Sherwood | Sherwood | ES | 468 | 377 | 124\% | 499 | 569 | 88\% | 524 | 529 | 99\% |
| Sherwood | Olney | ES | 555 | 584 | 95\% | 629 | 585 | 108\% | 683 | 606 | 113\% |
| Sherwood | Greenwood | ES | 547 | 572 | 96\% | 505 | 585 | 86\% | 521 | 584 | 89\% |
| Sherwood | Belmont | ES | 386 | 414 | 93\% | 310 | 424 | 73\% | 348 | 425 | 82\% |
| Sherwood | Brooke Grove | ES | 410 | 530 | 77\% | 398 | 531 | 75\% | 464 | 518 | 90\% |
| Sherwood | Sherwood | HS | 2,124 | 2,022 | 105\% | 1,891 | 2,166 | 87\% | 1,965 | 2,171 | 91\% |
| Sherwood | Rosa Parks | MS | 846 | 888 | 95\% | 904 | 978 | 92\% | 868 | 961 | 90\% |
| Walt Whitman | Bradley Hills | ES | 454 | 341 | 133\% | 632 | 663 | 95\% | 566 | 663 | 85\% |
| Walt Whitman | Wood Acres | ES | 630 | 551 | 114\% | 718 | 527 | 136\% | 649 | 725 | 90\% |
| Walt Whitman | Burning Tree | ES | 463 | 428 | 108\% | 492 | 379 | 130\% | 470 | 378 | 124\% |
| Walt Whitman | Bannockburn | ES | 367 | 365 | 101\% | 407 | 365 | 112\% | 461 | 364 | 127\% |
| Walt Whitman | Carderock Springs | ES | 299 | 251 | 119\% | 418 | 407 | 103\% | 366 | 406 | 90\% |
| Walt Whitman | Walt Whitman | HS | 1,881 | 1,891 | 99\% | 1,912 | 1,891 | 101\% | 2,040 | 1,857 | 110\% |


| Cluster | school | $\underset{7}{2}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Walt Whitman | Thomas W. Pyle | MS | 1,248 | 1,267 | 99\% | 1,483 | 1,289 | 115\% | 1,534 | 1,285 | 119\% |
| Walter Johnson | Garrett Park | ES | 460 | 456 | 101\% | 749 | 753 | 99\% | 802 | 776 | 103\% |
| Walter Johnson | Farmland | ES | 579 | 617 | 94\% | 655 | 728 | 90\% | 856 | 714 | 120\% |
| Walter Johnson | Wyngate | ES | 606 | 412 | 147\% | 770 | 777 | 99\% | 742 | 776 | 96\% |
| Walter Johnson | Ashburton | ES | 615 | 660 | 93\% | 892 | 629 | 142\% | 923 | 789 | 117\% |
| Walter Johnson | Kensington-Parkwood | ES | 509 | 518 | 98\% | 654 | 472 | 139\% | 643 | 757 | 85\% |
| Walter Johnson | Luxmanor | ES | 353 | 429 | 82\% | 466 | 428 | 109\% | 678 | 409 | 166\% |
| Walter Johnson | Walter Johnson | HS | 2,047 | 2,199 | 93\% | 2,264 | 2,335 | 97\% | 2,748 | 2,321 | 118\% |
| Walter Johnson | Tilden | MS | 687 | 996 | 69\% | 798 | 972 | 82\% | 990 | 1,001 | 99\% |
| Walter Johnson | North Bethesda | MS | 763 | 850 | 90\% | 951 | 874 | 109\% | 1,233 | 1,233 | 100\% |
| Watkins Mill | Whetstone | ES | 611 | 495 | 123\% | 758 | 783 | 97\% | 742 | 750 | 99\% |
| Watkins Mill | Watkins Mill | ES | 556 | 695 | 80\% | 635 | 746 | 85\% | 731 | 641 | 114\% |
| Watkins Mill | South Lake | ES | 553 | 729 | 76\% | 862 | 716 | 120\% | 897 | 694 | 129\% |
| Watkins Mill | Stedwick | ES | 590 | 658 | 90\% | 573 | 639 | 90\% | 538 | 688 | 78\% |
| Watkins Mill | Watkins Mill | HS | 1,699 | 1,832 | 93\% | 1,499 | 1,906 | 79\% | 1,597 | 1,947 | 82\% |
| Watkins Mill | Montgomery Village | MS | 594 | 826 | 72\% | 658 | 894 | 74\% | 791 | 865 | 91\% |
| Winston Churchill | Beverly Farms | ES | 596 | 541 | 110\% | 621 | 690 | 90\% | 585 | 689 | 85\% |
| Winston Churchill | Wayside | ES | 599 | 657 | 91\% | 533 | 671 | 79\% | 500 | 648 | 77\% |
| Winston Churchill | Potomac | ES | 547 | 411 | 133\% | 474 | 424 | 112\% | 376 | 425 | 88\% |
| Winston Churchill | Seven Locks | ES | 262 | 251 | 104\% | 398 | 425 | 94\% | 425 | 424 | 100\% |
| Winston Churchill | Bells Mill | ES | 428 | 609 | 70\% | 611 | 626 | 98\% | 642 | 626 | 103\% |
| Winston Churchill | Winston Churchill | HS | 2,041 | 1,972 | 103\% | 1,996 | 2,013 | 99\% | 2,275 | 1,986 | 115\% |
| Winston Churchill | Herbert Hoover | MS | 955 | 927 | 103\% | 1,058 | 1,139 | 93\% | 1,045 | 1,139 | 92\% |
| Winston Churchill | Cabin John | MS | 890 | 844 | 105\% | 943 | 1,129 | 84\% | 1,040 | 1,057 | 98\% |
| Wootton | Lakewood | ES | 604 | 568 | 106\% | 549 | 569 | 96\% | 461 | 556 | 83\% |
| Wootton | Travilah | ES | 417 | 524 | 80\% | 413 | 517 | 80\% | 341 | 526 | 65\% |
| Wootton | Fallsmead | ES | 442 | 519 | 85\% | 566 | 598 | 95\% | 565 | 551 | 103\% |
| Wootton | Cold Spring | ES | 364 | 412 | 88\% | 335 | 458 | 73\% | 332 | 458 | 72\% |
| Wootton | DuFief | ES | 397 | 394 | 101\% | 328 | 428 | 77\% | 316 | 427 | 74\% |
| Wootton | Stone Mill | ES | 622 | 666 | 93\% | 619 | 654 | 95\% | 588 | 694 | 85\% |
| Wootton | Thomas S. Wootton | HS | 2,437 | 2,059 | 118\% | 2,195 | 2,184 | 101 \% | 2,116 | 2,142 | 99\% |
| Wootton | Robert Frost | MS | 1,045 | 1,071 | 98\% | 1,139 | 1,075 | 106\% | 1,029 | 1,084 | 95\% |
|  |  |  |  |  |  |  |  |  |  |  |  |

## Appendix B10:

Table: Island Assignment Schools, Utilization Rates, and Number of Non-Contiguous Areas

## Elementary Schools

| School | Utilization Rate | Number of Non-Contiguous Areas |
| :---: | :---: | :---: |
| Arcola ES | 115.05\% | 2 |
| Bannockburn ES | 126.65\% | 2 |
| Belmont ES | 81.88\% | 2 |
| Brookhaven ES | 99.36\% | 3 |
| Burnt Mills ES | 147.70\% | 2 |
| Cannon Road ES | 79.54\% | 3 |
| Clopper Mill ES | 108.67\% | 2 |
| Diamond ES | 116.64\% | 2 |
| Drew ES | 100.40\% | 2 |
| Fairland ES | 91.98\% | 3 |
| Fallsmead ES | 102.54\% | 2 |
| Flower Hill ES | 92.90\% | 3 |
| Galway ES | 102.55\% | 3 |
| Garrett Park ES | 103.35\% | 3 |
| Georgian Forest ES | 93.43\% | 2 |
| Harmony Hills ES | 105.08\% | 2 |
| Jones Lane ES | 85.66\% | 2 |
| Kensington-Parkwood ES | 84.94\% | 2 |
| Lakewood ES | 82.91\% | 2 |
| Marshall ES | 112.68\% | 3 |
| New Hampshire Estates ES | 97.77\% | 2 |
| Olney ES | 112.71\% | 2 |
| Resnik ES | 122.11\% | 2 |
| Ritchie Park ES | 103.35\% | 2 |
| Rosemary Hills ES | 90.76\% | 4 |
| Rosemary Hills ES | 90.76\% | 4 |
| Rosemont ES | 113.91\% | 3 |
| Sequoyah ES | 74.02\% | 2 |
| Seven Locks ES | 100.24\% | 2 |
| Sligo Creek ES | 102.41\% | 2 |
| South Lake ES | 129.25\% | 3 |
| Spark M. Matsunaga ES | 121.58\% | 2 |
| Stone Mill ES | 84.73\% | 2 |
| Westbrook ES | 62.34\% | 2 |

Middle Schools

| School | Utilization <br> Rate | Number of Non-Con- <br> tiguous Areas |
| :--- | :--- | :--- |
| Ridgeview MS | $82.09 \%$ | 3 |
| Neelsville MS | $98.85 \%$ | 2 |
| Frost MS | $94.93 \%$ | 3 |
| Forest Oak MS | $99.48 \%$ | 3 |
| Key MS | $104.58 \%$ | 3 |
| Briggs Chaney MS | $101.19 \%$ | 5 |
| Westland MS | $73.12 \%$ | 2 |
| Shady Grove MS | $67.33 \%$ | 4 |
| Lakelands Park MS | $106.19 \%$ | 2 |
| Gaithersburg MS | $86.92 \%$ | 2 |
| Redland MS | $83.01 \%$ | 2 |
| Cabin John MS | $98.39 \%$ | 5 |
| Kingsview MS | $94.43 \%$ | 2 |
| White Oak MS | $85.18 \%$ | 2 |
| Parkland MS | $120.46 \%$ | 4 |

## High Schools

| School | Utilization Rate | Number of <br> Non-Contiguous <br> Areas |
| :--- | :--- | :--- |
| Wootton HS | $98.79 \%$ | 2 |
| Northwest HS | $114.79 \%$ | 2 |
| Blake HS | $102.98 \%$ | 4 |
| Bethesda-Chevy Chase HS | $91.94 \%$ | 2 |
| Gaithersburg HS | $98.73 \%$ | 2 |
| Wheaton HS | $98.16 \%$ | 4 |
| Springbrook HS | $81.87 \%$ | 3 |

## Appendix B11:

Table: Special Program Schools

## Regional Special Programs at elementary schools

| School Name | \% Students not <br> living in atten- <br> dance area | Utilization Rate | Special Program |
| :--- | :--- | :--- | :--- |
| Page | $25.13 \%$ | $156.89 \%$ | SIR |
| Mill Creek Towne | $26.20 \%$ | $150.89 \%$ | CESR |
| Burnt Mills | $19.59 \%$ | $147.70 \%$ | SIR |
| Oak View | $21.88 \%$ | $126.27 \%$ | CESR |
| Rock Creek Forest | $45.68 \%$ | $113.94 \%$ | SIR |
| Barnsley | $26.54 \%$ | $113.04 \%$ | CESR |
| Sligo Creek | $38.80 \%$ | $102.41 \%$ | FIR |
| Pine Crest | $23.42 \%$ | $102.23 \%$ | CESR |
| Drew | $29.78 \%$ | $100.40 \%$ | CESR |
| Maryvale | $54.37 \%$ | $99.84 \%$ | FIR |
| Chevy Chase | $29.72 \%$ | $98.52 \%$ | CESR |
| Takoma Park | $5.61 \%$ | $97.46 \%$ | Magnet |
| Bayard Rustin | $22.47 \%$ | $96.64 \%$ | CIR |
| Clearspring | $20.32 \%$ | $91.74 \%$ | CESR |
| Fox Chapel | $18.15 \%$ | $89.75 \%$ | CESR |
| Potomac | $6.43 \%$ | $88.47 \%$ | CIP |
| Cold Spring | $35.45 \%$ | $72.49 \%$ | CESR |

## Regional Special Programs at middle schools

| School | \% Students not living <br> in attendance area | Utilization Rate | Special Program |
| :--- | :--- | :--- | :--- |
| Takoma Park | $19.01 \%$ | $123.75 \%$ | MSMSCSP |
| Parkland | $14.35 \%$ | $120.46 \%$ | MSMC |
| Loiederman | $11.55 \%$ | $114.70 \%$ | MSMC |
| Argyle | $12.77 \%$ | $114.16 \%$ | MSMC |
| Clemente | $20.86 \%$ | $104.71 \%$ | MSHCP,MSMSCSP,MYP |
| Silver Spring International | $6.44 \%$ | $104.16 \%$ | FIP, SIP, MYP |
| Eastern | $16.14 \%$ | $99.80 \%$ | MSHCP |
| Hoover | $6.56 \%$ | $91.75 \%$ | CIP |
| Gaithersburg | $12.08 \%$ | $86.92 \%$ | FIP |
| King | $15.61 \%$ | $83.59 \%$ | MSHCP, MYP |
| Westland | $9.74 \%$ | $73.12 \%$ | SIP, MYP |

## Regional Special Programs at high schools

| School Name | \% Students not living in <br> attendance area | Utilization Rate | Special Program |
| :--- | :--- | :--- | :--- |
| Montgomery | $20.60 \%$ | $111.87 \%$ | APC, IBDP |
| Einstein | $2.67 \%$ | $111.72 \%$ | APC, IBDP |
| Blair | $13.93 \%$ | $111.70 \%$ | SMCSMR, APCS |
| Poolesville | $51.74 \%$ | $103.16 \%$ | APC, SMCSMR, HHR |
| Kennedy | $3.05 \%$ | $102.01 \%$ | SMCSMR, APCS, IBDP |
| Watkins Mill | $4.43 \%$ | $82.02 \%$ | SMCSMR, IBDP |
| Springbrook | $1.75 \%$ | $81.87 \%$ | SMCSMR, LSSP, IBDP |

## Appendix B12:

Map: Paired Schools


Map of paired schools and their combined utilization rate (total enrollment divided by total capacity).

# 8.1 Appendix Introduction \& Analysis 

C.

## Data Analysis

Diversity

## 8.1

## Appendix C1: FARMS and Ever- 479 FARMS as Measures of Socioeconomic Hardship in Montgomery County <br> Appendix C2: Additional Maps 478

## Appendix C1: <br> FARMS and Ever-FARMS as Measures of Socioeconomic Hardship in Montgomery County

## Correlation of FARMS and Ever-FARMS

FARMS and Ever-FARMS have come under scrutiny as measures of socioeconomic hardship faced by students. How accurate are these measures? The graphs below compare the FARMS and Ever-FARMS rates in MCPS's 200 general education schools to the area median household income and per capita income of their attendance area.

## School Catchment Area Median Household Income



School Least Squares Polynomial Fit (2 deg.) -
Figure 1 School FARMS Rate and Median Household Income

School Catchment Area Median Household Income


Figure 2 School Ever-FARMS Rate and Median Household Income
Figures in this section show a strong downward correlation between area median household income and FARMS / Ever-FARMS rates. The correlation is marginally higher for Ever-FARMS than for FARMS.

Schools where area median household income is between $\$ 250,000$ per year and $\$ 150,000$ per year have an average Ever-FARMS rate of $13 \%$, compared to a rate of $69 \%$ for schools where the median household income is less than $\$ 100,000$ per year.

Comparing FARMS and Ever-FARMS to per capita income in school catchment zones, we again find a strong downward correlation. The correlation is marginally higher for Ever-FARMS than for FARMS.

The coefficients of correlation are the same to two decimal places when comparing FARMS to median household income and per capita income (0.76), and Ever-FARMS to median household income and per capita income (0.8).


Figure 3 School FARMS Rate and Per Capita Income
Nevertheless, we find less variation when comparing school FARMS and EverFARMS rates to per capita income, rather than median household income. You can see this by comparing the range of values along the vertical aspects in Figures $X X-X X$ at different points.

This suggests FARMS and Ever-FARMS track with per capita income more closely than median household income. As such, FARMS and Ever-FARMS capture student socio-economic hardship better when ignoring household size, suggesting the measures function well across MCPS.

## School Catchment Area Per Capita Income



Figure 4 School Ever-FARMS Rate and Per Capita Income

## Critiques of FARMS

Though the charts above suggest FARMS and Ever-FARMS are reasonable measures of socio-economic hardship at this point in time, researchers rightly scrutinize the accuracy and importance of the measures. Brookings cites ${ }^{1}$ changing eligibility requirements as one major reason the measure may perform poorly across time:

Actual poverty measures fall and rise with the state of the economy, but FRL ${ }^{2}$ participation has increased almost every year for more than 30 years. This is particularly noticeable in recent years, when the poverty-based measure fell

[^0]but FRL participation continued to rise as the 2010 changes were implemented. The most recent data indicate that there are substantially more kids eligible for a program limited to 185 percent of the poverty line than there are kids who live in families below 200 percent of the poverty threshold-a difference that likely results in large part from the program's community eligibility provisions. These data make clear that FRL is not a reliable way to track the socio-economic makeup of the U.S. student population over time. When the national FRL rate crossed the 50 percent mark for the first time in 2012-13, it generated misleading headlines such as "Majority of U.S. public school students are in poverty." [Data] clearly show that the share of children living in families below 50 percent, 100 percent, or 200 percent of the federal poverty threshold is similar to what it was in the early 1990s.

The changing eligibility requirements of FARMS and recent disconnect between national measures of poverty and FARMS suggests that measures relying on longitudinal FARMS data, such as Ever-FARMS, should be used with caution. As such, the average Ever-FARMS student in elementary school may have a slightly different socio-economic background than the average Ever-FARMS student in high school if that student was only FARMS eligible many years ago. Despite this, FARMS rates nationally have increased steadily in the last thirty years, suggesting that students eligible for FARMS many years ago gained that status by a more stringent test of socio-economic disadvantage.

## Appendix C2:

## Additional Maps and Tables



Figure 2.3.1 Ever-FARMS Rate by Elementary School Attendance Area


- $-20 \%$ - $20 \%$ - $40-60 \%$ - -80 - $100 \%$

Figure 2.3.1 FARMS Rate by Middle School Attendance Area


Figure 2.3.1 Ever-FARMS Rate by Middle School Attendance Area


Figure 2.3.1 FARMS Rate by High School Attendance Area


Figure 2.3.1 Ever-FARMS Rate by High School Attendance Area


0-20\%

- 20-40\%

40-60\%
60-80\%
80-100\%
Figure 2.3.1 ESOL Rate by Elementary School Attendance Area


Figure 2.3.1 Ever-ESOL Rate by Elementary School Attendance Area


- 0 -20\%
- 20 - 40\%

40-60\%
-60-80\%
$80-100 \%$
Figure 2.3.1 ESOL Rate by Middle School Attendance Area


Figure 2.3.1 Ever-ESOL Rate by Middle School Attendance Area


Figure 2.3.1 ESOL Rate by High School Attendance Area


Figure 2.3.1 Ever-ESOL Rate by High School Attendance Area

| Cluster | School | Grades <br> Served | Racial <br> Dissimilarity <br> to 3 Nearest | Socio-Economic <br> Dissimilarity to <br> 3 Nearest |
| :--- | :--- | :--- | :--- | :--- |
| Bethesda-Checy Chase <br> Cluster | Chevy Chase | $3-5$ | $8.5 \%$ | $7.5 \%$ |
|  | North Chevy Chase | $3-5$ | $12.3 \%$ | $5.8 \%$ |
|  | Westland | $6-8$ | $6.4 \%$ |  |


| Cluster | School | Grades Served | Racial Dissimilarity to 3 Nearest | Socio-Economic Dissimilarity to 3 Nearest |
| :---: | :---: | :---: | :---: | :---: |
| Downcounty Consortium | Piney Branch | 3-5 | 22.2\% | 20.7\% |
|  | Pine Crest | 3-5 | 5.9\% | 6.6\% |
|  | Oak View | 3-5 | 25.3\% | 27.5\% |
|  | Strathmore | 3-5 | 29.7\% | 15.4\% |
|  | Silver Spring International | 6-8 | 8.7\% | 1.6\% |
|  | Takoma Park | 6-8 | 28.3\% | 18.6\% |
|  | Eastern | 6-8 | 18.1\% | 18.3\% |
|  | Sligo | 6-8 | 11.7\% | 12.5\% |
|  | Loiederman | 6-8 | 13.9\% | 4.7\% |
|  | Newport Mill | 6-8 | 11.2\% | 6.0\% |
|  | Parkland | 6-8 | 11.4\% | 5.1\% |
|  | Lee | 6-8 | 18.2\% | 18.3\% |
|  | Argyle | 6-8 | 11.0\% | 8.1\% |
|  | Blair | 9-12 | 23.2\% | 22.2\% |
|  | Wheaton | 9-12 | 7.3\% | 3.9\% |
|  | Einstein | 9-12 | 15.4\% | 12.9\% |
|  | Northwood | 9-12 | 11.0\% | 9.5\% |
|  | Kennedy | 9-12 | 13.5\% | 11.6\% |
|  | Montgomery Knolls | HS-2 | 14.6\% | 11.5\% |
|  | New Hampshire Estates | HS-2 | 22.7\% | 22.2\% |
|  | East Silver Spring | HS-5 | 29.9\% | 31.5\% |
|  | Glen Haven | HS-5 | 7.8\% | 11.4\% |
|  | Rolling Terrace | HS-5 | 12.4\% | 6.5\% |
|  | Viers Mill | HS-5 | 2.1\% | 3.7\% |
|  | Highland | HS-5 | 6.7\% | 8.3\% |
|  | Weller Road | HS-5 | 10.9\% | 3.6\% |
|  | Highland View | HS-5 | 21.2\% | 9.1\% |
|  | Georgian Forest | HS-5 | 11.0\% | 4.8\% |
|  | Wheaton Woods | HS-5 | 11.0\% | 13.9\% |
|  | Rock View | HS-5 | 4.5\% | 7.3\% |
|  | Harmony Hills | HS-5 | 17.1\% | 9.1\% |
|  | Kemp Mill | HS-5 | 28.3\% | 35.3\% |
|  | Brookhaven | HS-5 | 21.5\% | 27.1\% |
|  | Glenallan | HS-5 | 23.5\% | 12.5\% |
|  | Takoma Park | K-2 | 23.5\% | 18.5\% |
|  | Bel Pre | K-2 | 22.4\% | 17.9\% |
|  | Sligo Creek | K-5 | 34.2\% | 48.2\% |


| Cluster | School | Grades Served | Racial Dissimilarity to 3 Nearest | Socio-Economic Dissimilarity to 3 Nearest |
| :---: | :---: | :---: | :---: | :---: |
|  | Woodlin | K-5 | 11.8\% | 8.1\% |
|  | Oakland Terrace | K-5 | 12.6\% | 17.6\% |
|  | Singer | K-5 | 7.9\% | 4.5\% |
|  | Sargent Shriver | K-5 | 6.5\% | 8.4\% |
|  | Arcola | K-5 | 7.9\% | 5.8\% |
|  | Forest Knolls | K-5 | 24.4\% | 35.5\% |
| Gaithersburg Cluster | Forest Oak | 6-8 | 7.5\% | 4.8\% |
|  | Gaithersburg | 6-8 | 5.3\% | 8.9\% |
|  | Gaithersburg | 9-12 | 25.9\% | 24.0\% |
|  | Washington Grove | HS-5 | 6.0\% | 10.2\% |
|  | Gaithersburg | HS-5 | 14.6\% | 9.9\% |
|  | Rosemont | HS-5 | 27.8\% | 22.5\% |
|  | Summit Hall | HS-5 | 8.8\% | 8.3\% |
|  | Strawberry Knoll | HS-5 | 17.6\% | 32.7\% |
|  | Laytonsville | K-5 | 35.3\% | 42.1\% |
|  | Goshen | K-5 | 9.8\% | 12.3\% |
| Northeast Consortium | Cresthaven | 3-5 | 3.5\% | 6.8\% |
|  | Key | 6-8 | 22.0\% | 14.7\% |
|  | Banneker | 6-8 | 22.2\% | 6.7\% |
|  | Briggs Chaney | 6-8 | 18.1\% | 8.3\% |
|  | Farquhar | 6-8 | 24.0\% | 30.8\% |
|  | White Oak | 6-8 | 12.1\% | 12.6\% |
|  | Paint Branch | 9-12 | 28.6\% | 10.2\% |
|  | Blake | 9-12 | 6.7\% | 4.2\% |
|  | Springbrook | 9-12 | 15.9\% | 7.8\% |
|  | Roscoe Nix | HS-2 | 6.3\% | 8.4\% |
|  | Fairland | HS-5 | 7.1\% | 8.2\% |
|  | JoAnn Leleck ES at Broad Acres | HS-5 | 42.6\% | 22.1\% |
|  | Jackson Road | HS-5 | 8.0\% | 22.2\% |
|  | Burnt Mills | HS-5 | 19.4\% | 7.7\% |
|  | Page | HS-5 | 11.8\% | 21.6\% |
|  | Galway | HS-5 | 4.9\% | 7.1\% |
|  | Stonegate | HS-5 | 6.4\% | 11.9\% |
|  | Greencastle | HS-5 | 9.1\% | 14.3\% |
|  | Drew | HS-5 | 9.9\% | 10.1\% |
|  | Burtonsville | K-5 | 8.7\% | 20.0\% |
|  | Cloverly | K-5 | 23.2\% | 25.0\% |
|  | Cannon Road | K-5 | 20.3\% | 11.6\% |


| Cluster | School | Grades Served | Racial Dissimilarity to 3 Nearest | Socio-Economic Dissimilarity to 3 Nearest |
| :---: | :---: | :---: | :---: | :---: |
|  | Westover | K-5 | 20.0\% | 26.1\% |
| Northwest Cluster | Kingsview | 6-8 | 28.0\% | 31.2\% |
|  | Northwest | 9-12 | 18.8\% | 18.6\% |
|  | Clopper Mill | HS-5 | 19.8\% | 19.9\% |
|  | McNair | HS-5 | 4.0\% | 6.2\% |
|  | Germantown | K-5 | 7.4\% | 8.4\% |
|  | Great Seneca Creek | K-5 | 14.7\% | 3.5\% |
|  | Darnestown | K-5 | 28.7\% | 26.1\% |
|  | Matsunaga | K-5 | 18.8\% | 11.8\% |
|  | Diamond | K-5 | 36.2\% | 31.1\% |
| Poolesville Cluster | Poole | 6-8 | 44.2\% | 25.9\% |
|  | Poolesville | 9-12 | 37.6\% | 32.8\% |
|  | Poolesville | K-5 | 29.0\% | 6.1\% |
|  | Monocacy | K-5 | 41.1\% | 2.8\% |
| Quince Orchard Cluster | Ridgeview | 6-8 | 15.8\% | 9.5\% |
|  | Lakelands Park | 6-8 | 9.9\% | 5.0\% |
|  | Quince Orchard | 9-12 | 12.2\% | 2.1\% |
|  | Carson | HS-5 | 23.2\% | 2.3\% |
|  | Brown Station | HS-5 | 20.0\% | 25.4\% |
|  | Fields Road | HS-5 | 14.8\% | 3.6\% |
|  | Marshall | K-5 | 21.7\% | 23.2\% |
|  | Jones Lane | K-5 | 12.3\% | 7.6\% |
| Richard Montgomery Cluster | West | 6-8 | 14.3\% | 16.1\% |
|  | Montgomery | 9-12 | 15.5\% | 15.0\% |
|  | Twinbrook | HS-5 | 28.9\% | 30.8\% |
|  | Beall | HS-5 | 12.2\% | 3.5\% |
|  | College Gardens | HS-5 | 17.6\% | 25.9\% |
|  | Ritchie Park | K-5 | 19.8\% | 4.1\% |
|  | Bayard Rustin | K-5 | 17.9\% | 15.0\% |
| Rockville Cluster | Wood | 6-8 | 20.5\% | 20.5\% |
|  | Rockville | 9-12 | 12.7\% | 7.0\% |
|  | Maryvale | HS-5 | 14.4\% | 3.1\% |
|  | Rock Creek Valley | HS-5 | 20.7\% | 25.4\% |
|  | Meadow Hall | K-5 | 17.8\% | 15.6\% |
|  | Barnsley | K-5 | 7.1\% | 8.1\% |
|  | Flower Valley | K-5 | 19.8\% | 19.4\% |
| Seneca Valley Cluster | King | 6-8 | 7.8\% | 3.0\% |
|  | Clemente | 6-8 | 5.2\% | 7.6\% |


| Cluster | School | Grades Served | Racial Dissimilarity to 3 Nearest | Socio-Economic Dissimilarity to 3 Nearest |
| :---: | :---: | :---: | :---: | :---: |
|  | Seneca Valley | 9-12 | 13.6\% | 14.7\% |
|  | McAuliffe | HS-5 | 5.0\% | 7.9\% |
|  | Ride | HS-5 | 20.1\% | 18.6\% |
|  | Lake Seneca | K-5 | 11.1\% | 11.6\% |
|  | Waters Landing | K-5 | 7.2\% | 3.1\% |
| Sherwood Cluster | Parks | 6-8 | 30.8\% | 27.4\% |
|  | Sherwood | 9-12 | 37.0\% | 36.2\% |
|  | Brooke Grove | HS-5 | 14.6\% | 8.6\% |
|  | Sherwood | K-5 | 9.8\% | 2.0\% |
|  | Olney | K-5 | 3.6\% | 2.4\% |
|  | Greenwood | K-5 | 10.1\% | 9.8\% |
|  | Belmont | K-5 | 14.3\% | 10.0\% |
| Thomas S. Wootton Cluster | Frost | 6-8 | 9.9\% | 10.0\% |
|  | Wootton | 9-12 | 19.6\% | 15.3\% |
|  | Lakewood | K-5 | 16.9\% | 10.5\% |
|  | Travilah | K-5 | 16.1\% | 9.9\% |
|  | Fallsmead | K-5 | 9.9\% | 6.9\% |
|  | Cold Spring | K-5 | 10.2\% | 6.9\% |
|  | DuFief | K-5 | 7.3\% | 9.7\% |
|  | Stone Mill | K-5 | 17.4\% | 9.1\% |
| Walt Whitman Cluster | Pyle | 6-8 | 13.4\% | 13.1\% |
|  | Whitman | 9-12 | 26.5\% | 26.6\% |
|  | Bradley Hills | K-5 | 10.9\% | 5.6\% |
|  | Wood Acres | K-5 | 1.9\% | 2.8\% |
|  | Burning Tree | K-5 | 8.5\% | 0.9\% |
|  | Bannockburn | K-5 | 5.1\% | 0.4\% |
|  | Carderock Springs | K-5 | 6.6\% | 2.3\% |
| Walter Johnson Cluster | Tilden | 6-8 | 14.4\% | 14.6\% |
|  | North Bethesda | 6-8 | 4.3\% | 3.6\% |
|  | Johnson | 9-12 | 7.7\% | 7.3\% |
|  | Garrett Park | K-5 | 15.1\% | 18.1\% |
|  | Farmland | K-5 | 12.5\% | 6.3\% |
|  | Luxmanor | K-5 | 10.8\% | 8.8\% |
|  | Wyngate | K-5 | 10.0\% | 4.9\% |
|  | Ashburton | K-5 | 14.1\% | 5.7\% |
|  | Kensington-Parkwood | K-5 | 27.1\% | 22.8\% |
| Watkins Mill Cluster | Montgomery Village | 6-8 | 4.3\% | 9.3\% |
|  | Watkins Mill | 9-12 | 15.4\% | 19.7\% |
|  | Whetstone | HS-5 | 5.2\% | 13.2\% |


| Cluster | School | Grades <br> Served | Racial <br> Dissimilarity <br> to 3 Nearest | Socio-Economic <br> Dissimilarity to <br> 3 Nearest |
| :--- | :--- | :--- | :--- | :--- |
| Winston Churchill Cluster | Watkins Mill | HS-5 | $4.0 \%$ | $10.5 \%$ |
|  | South Lake | HS-5 | $7.8 \%$ | $16.6 \%$ |
|  | Stedwick | HS-5 | $7.8 \%$ | $12.2 \%$ |
|  | Hoover | $6-8$ | $13.2 \%$ | $15.5 \%$ |
|  | Cabin John | $6-8$ | $13.7 \%$ | $15.0 \%$ |
|  | Churchill | $9-12$ | $12.0 \%$ | $14.6 \%$ |
|  | Beverly Farms | K-5 | $4.8 \%$ | $0.8 \%$ |
|  | Wayside | K-5 | $18.0 \%$ | $2.4 \%$ |
|  | Potomac | K-5 | $3.5 \%$ | $1.5 \%$ |
|  | Seven Locks | K-5 | $8.5 \%$ | $0.9 \%$ |
|  | Bells Mill | K-5 | $6.2 \%$ | $1.5 \%$ |

# 8.1 Appendix Introduction \& Analysis 

# D. <br> Data Analysis Proximity 

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Schools

## Appendix D1: Average distance to school for island attendance areas



Elementary School


Middle Schools


High Schools

## Appendix D2: <br> Proximity for island attendance areas

## Elementary Schools

| School | Average distance to school | Difference in average distance between island assignment areas | Number of assignment area pieces |
| :---: | :---: | :---: | :---: |
| Westbrook | 0.68 | 0.00 | 2 |
| Stone Mill | 0.89 | 0.27 | 2 |
| South Lake | 1.13 | 3.47 | 3 |
| Sligo Creek | 0.87 | 0.54 | 2 |
| Seven Locks | 1.64 | 1.87 | 2 |
| Sequoyah | 2.99 | 1.90 | 2 |
| Rosemont | 1.68 | 1.48 | 3 |
| Rosemary Hills | 1.87 | 2.20 | 4 |
| Ritchie Park | 1.87 | 2.68 | 2 |
| Resnik | 1.78 | 2.13 | 2 |
| Olney | 1.42 | 1.27 | 2 |
| Oak View | 1.04 | 0.66 | 2 |
| North Chevy Chase | 1.32 | 1.18 | 2 |
| New Hampshire Estates | 0.61 | 0.71 | 2 |
| Matsunaga | 1.55 | 1.65 | 2 |
| Marshall | 2.00 | 2.28 | 3 |
| Lakewood | 1.46 | 1.88 | 2 |
| Kensington-Parkwood | 1.29 | 2.05 | 2 |
| Jones Lane | 2.28 | 4.35 | 2 |
| Harmony Hills | 0.89 | 0.47 | 2 |
| Georgian Forest | 1.84 | 1.10 | 2 |
| Garrett Park | 1.69 | 1.61 | 3 |
| Galway | 1.24 | 1.29 | 3 |
| Flower Hill | 0.74 | 1.00 | 3 |
| Fallsmead | 2.06 | 2.50 | 2 |
| Fairland | 1.99 | 1.61 | 3 |
| Drew | 1.19 | 3.11 | 2 |
| Diamond | 1.73 | 1.27 | 2 |
| Clopper Mill | 0.88 | 1.66 | 2 |
| Chevy Chase | 1.52 | 2.33 | 2 |
| Cannon Road | 1.37 | 2.20 | 3 |
| Burnt Mills | 1.13 | 0.71 | 2 |
| Brookhaven | 1.28 | 2.43 | 3 |
| Belmont | 1.64 | 1.28 | 2 |
| Bannockburn | 1.32 | 1.63 | 2 |
| Arcola | 1.08 | 0.76 | 2 |

## Middle Schools

| School | Average <br> distance to <br> school | Difference in average <br> distance between <br> island assignment <br> areas | Number of <br> assignment <br> area pieces |
| :--- | :--- | :--- | :--- |
| White Oak | 3.02 | 1.97 | 2 |
| Westland | 2.15 | 0.00 | 2 |
| Shady Grove | 1.75 | 1.03 | 4 |
| Ridgeview | 2.33 | 1.01 | 3 |
| Redland | 3.29 | 0.60 | 2 |
| Parkland | 1.41 | 1.40 | 4 |
| Neelsville | 2.73 | 2.63 | 2 |
| Lakelands Park | 2.28 | 2.86 | 2 |
| Kingsview | 1.26 | 0.76 | 2 |
| Key | 2.50 | 3.25 | 3 |
| Gaithersburg | 2.23 | 4.76 | 2 |
| Frost | 3.09 | 2.96 | 3 |
| Forest Oak | 3.43 | 2.32 | 5.33 |
| Cabin John | 3.52 | 3.56 | 5 |
| Briggs Chaney | 4.18 |  |  |

## High Schools

| School | Average <br> distance to <br> school | Difference in average <br> distance between <br> island assignment <br> areas | Number of <br> assignment <br> area pieces |
| :--- | :--- | :--- | :--- |
| Wootton | 3.20 | 0.46 | 2 |
| Wheaton | 1.56 | 2.42 | 4 |
| Springbrook | 3.27 | 3.99 | 3 |
| Northwest | 2.25 | 3.28 | 2 |
| Gaithersburg | 2.53 | 1.15 | 2 |
| Blake | 4.86 | 3.50 | 4 |
| Bethesda-Chevy Chase | 1.94 | 0.00 | 2 |

## Appendix D3: <br> Population density and average distance to school, MS and HS maps



MIddle School


High Schools

## Appendix D4:

## Population density and average distance to school

## Elementary Schools

$\left.\begin{array}{l|l|l|l|l}\hline \text { Cluster } & \text { School } & \begin{array}{l}\text { Distance to } \\ \text { current school }\end{array} & \begin{array}{l}\text { Distance } \\ \text { to nearest } \\ \text { school }\end{array} & \begin{array}{l}\text { Population } \\ \text { Density }\end{array} \\ \hline \text { Bethesda-Chevy Chase } & \text { Bethesda Elementary } & 0.68 & 0.68 & 6674 \\ \hline \text { Bethesda-Chevy Chase } & \text { Chevy Chase Elementary } \\ \text { Somerset Elementary }\end{array}\right) 0.52$ 0.82 $\quad 10884$

| Cluster | School | Distance to current school | Distance to nearest school | Population Density |
| :---: | :---: | :---: | :---: | :---: |
| Downcounty Consortium | Oakland Terrace Elementary | 0.64 | 0.57 | 6773 |
| Downcounty Consortium | Glen Haven Elementary | 0.56 | 0.56 | 8542 |
| Downcounty Consortium | Oak View Elementary | 1.04 | 0.67 | 11474 |
| Downcounty Consortium | Woodlin Elementary | 0.94 | 0.84 | 8315 |
| Downcounty Consortium | Pine Crest Elementary | 1.35 | 0.78 | 7461 |
| Downcounty Consortium | East Silver Spring Elementary | 0.50 | 0.50 | 11314 |
| Downcounty Consortium | Sligo Creek Elementary | 0.87 | 0.75 | 10467 |
| Downcounty Consortium | Takoma Park Elementary | 1.05 | 0.88 | 8168 |
| Downcounty Consortium | Rolling Terrace Elementary | 0.39 | 0.39 | 14474 |
| Downcounty Consortium | Montgomery Knolls Elementary | 1.02 | 0.73 | 7461 |
| Downcounty Consortium | Highland Elementary | 0.57 | 0.57 | 10488 |
| Downcounty Consortium | Strathmore Elementary | 1.61 | 1.46 | 7906 |
| Downcounty Consortium | Glenallan Elementary | 0.90 | 0.88 | 4041 |
| Downcounty Consortium | Brookhaven Elementary | 1.28 | 1.08 | 5816 |
| Downcounty Consortium | Kemp Mill Elementary | 2.41 | 0.95 | 3785 |
| Downcounty Consortium | Forest Knolls Elementary | 0.91 | 0.84 | 6076 |
| Downcounty Consortium | Harmony Hills Elementary | 0.89 | 0.70 | 7884 |
| Downcounty Consortium | Viers Mill Elementary | 0.70 | 0.69 | 6573 |
| Downcounty Consortium | Rock View Elementary | 0.89 | 0.71 | 6762 |
| Downcounty Consortium | Arcola Elementary | 1.08 | 0.67 | 9381 |
| Downcounty Consortium | Wheaton Woods Elementary | 0.50 | 0.50 | 8036 |
| Downcounty Consortium | Georgian Forest Elementary | 1.84 | 1.22 | 4401 |
| Downcounty Consortium | Highland View Elementary | 0.56 | 0.54 | 6965 |


| Cluster | School | Distance to current school | Distance to nearest school | Population Density |
| :---: | :---: | :---: | :---: | :---: |
| Downcounty Consortium | Sargent Shriver Elementary | 0.61 | 0.56 | 8541 |
| Downcounty Consortium | Weller Road Elementary | 0.53 | 0.50 | 7483 |
| Downcounty Consortium | New Hampshire Estates Elementary | 0.61 | 0.43 | 11474 |
| Downcounty Consortium | Bel Pre Elementary | 1.73 | 1.54 | 7906 |
| Gaithersburg | Laytonsville Elementary | 2.30 | 1.96 | 318 |
| Gaithersburg | Strawberry Knoll Elementary | 0.70 | 0.59 | 8559 |
| Gaithersburg | Summit Hall Elementary | 0.84 | 0.82 | 9084 |
| Gaithersburg | Rosemont Elementary | 1.68 | 1.01 | 5847 |
| Gaithersburg | Gaithersburg Elementary | 0.66 | 0.65 | 8950 |
| Gaithersburg | Washington Grove Elementary | 1.34 | 1.04 | 4029 |
| Gaithersburg | Goshen Elementary | 1.20 | 1.01 | 3341 |
| Northeast Consortium | Cresthaven Elementary | 1.47 | 1.03 | 5932 |
| Northeast Consortium | Dr. Charles R. Drew Elementary | 1.19 | 0.91 | 1917 |
| Northeast Consortium | Westover Elementary | 1.24 | 0.97 | 2384 |
| Northeast Consortium | Greencastle Elementary | 0.92 | 0.90 | 7412 |
| Northeast Consortium | Stonegate Elementary | 1.83 | 1.54 | 1785 |
| Northeast Consortium | Galway Elementary | 1.24 | 1.12 | 4174 |
| Northeast Consortium | William Tyler Page Elementary | 1.13 | 1.08 | 3179 |
| Northeast Consortium | Cannon Road Elementary | 1.37 | 0.84 | 3537 |
| Northeast Consortium | Burnt Mills Elementary | 1.13 | 1.00 | 2884 |
| Northeast Consortium | Jackson Road Elementary | 1.33 | 1.25 | 3528 |
| Northeast Consortium | Roscoe R. Nix Elementary | 1.76 | 1.10 | 5932 |
| Northeast Consortium | Burtonsville Elementary | 1.65 | 1.57 | 1764 |
| Northeast Consortium | Fairland Elementary | 1.99 | 1.33 | 2945 |
| Northeast Consortium | Cloverly Elementary | 2.08 | 1.93 | 777 |
| Northeast Consortium | JoAnn Leleck Elementary at Broad Acres | 1.09 | 0.48 | 11686 |
| Northwest | Clopper Mill Elementary | 0.88 | 0.61 | 7411 |
| Northwest | Germantown Elementary | 0.67 | 0.62 | 5850 |
| Northwest | Ronald McNair Elementary | 0.82 | 0.72 | 4303 |
| Northwest | Great Seneca Creek Elementary | 0.83 | 0.72 | 2583 |
| Northwest | Darnestown Elementary | 1.71 | 1.56 | 386 |


| Cluster | School | Distance to current school | Distance to nearest school | Population Density |
| :---: | :---: | :---: | :---: | :---: |
| Northwest | Spark M. Matsunaga Elementary | 1.55 | 0.92 | 1302 |
| Northwest | Diamond Elementary | 1.73 | 1.18 | 3122 |
| Poolesville | Poolesville Elementary | 1.13 | 1.12 | 96 |
| Poolesville | Monocacy Elementary | 3.49 | 3.02 | 144 |
| Quince Orchard | Thurgood Marshall Elementary | 2.00 | 0.90 | 2017 |
| Quince Orchard | Jones Lane Elementary | 2.28 | 1.01 | 2773 |
| Quince Orchard | Brown Station Elementary | 0.69 | 0.68 | 3642 |
| Quince Orchard | Fields Road Elementary | 0.63 | 0.63 | 5368 |
| Quince Orchard | Rachel Carson Elementary | 1.01 | 0.79 | 4964 |
| Richard Montgomery | College Gardens Elementary | 0.84 | 0.81 | 3432 |
| Richard Montgomery | Twinbrook Elementary | 0.82 | 0.76 | 7462 |
| Richard Montgomery | Beall Elementary | 0.79 | 0.69 | 5220 |
| Richard Montgomery | Ritchie Park Elementary | 1.87 | 0.90 | 3573 |
| Richard Montgomery | Bayard Rustin Elementary | 0.89 | 0.76 | 3854 |
| Rockville | Meadow Hall Elementary | 0.70 | 0.61 | 4720 |
| Rockville | Lucy V. Barnsley Elementary | 1.01 | 0.90 | 4581 |
| Rockville | Flower Valley Elementary | 1.39 | 1.11 | 3381 |
| Rockville | Rock Creek Valley Elementary | 0.86 | 0.62 | 5434 |
| Rockville | Maryvale Elementary | 0.51 | 0.51 | 2644 |
| Seneca Valley | Dr. Sally K. Ride Elementary | 2.04 | 0.90 | 4303 |
| Seneca Valley | S. Christa McAuliffe Elementary | 0.87 | 0.87 | 7997 |
| Seneca Valley | Waters Landing Elementary | 0.75 | 0.73 | 6225 |
| Seneca Valley | Lake Seneca Elementary | 1.10 | 0.84 | 6350 |
| Sherwood | Brooke Grove Elementary | 0.63 | 0.60 | 3503 |
| Sherwood | Sherwood Elementary | 2.23 | 1.88 | 630 |
| Sherwood | Greenwood Elementary | 1.28 | 1.13 | 463 |
| Sherwood | Olney Elementary | 1.42 | 1.27 | 2759 |
| Sherwood | Belmont Elementary | 1.64 | 1.19 | 1672 |
| Thomas S. Wootton | Lakewood Elementary | 1.46 | 1.01 | 3502 |
| Thomas S. Wootton | Travilah Elementary | 1.16 | 1.16 | 1164 |
| Thomas S. Wootton | Fallsmead Elementary | 2.06 | 1.12 | 2688 |
| Thomas S. Wootton | Cold Spring Elementary | 0.56 | 0.50 | 3802 |
| Thomas S. Wootton | Dufief Elementary | 0.70 | 0.70 | 2892 |
| Thomas S. Wootton | Stone Mill Elementary | 0.89 | 0.87 | 4827 |


| Cluster | School | Distance to current school | Distance to nearest school | Population Density |
| :---: | :---: | :---: | :---: | :---: |
| Walt Whitman | Wood Acres Elementary | 0.81 | 0.79 | 3501 |
| Walt Whitman | Burning Tree Elementary | 1.13 | 0.95 | 2715 |
| Walt Whitman | Bannockburn Elementary | 1.32 | 1.00 | 2083 |
| Walt Whitman | Carderock Springs Elementary | 2.06 | 1.89 | 851 |
| Walt Whitman | Bradley Hills Elementary | 0.88 | 0.71 | 4938 |
| Walter Johnson | Garrett Park Elementary | 1.69 | 1.15 | 6763 |
| Walter Johnson | Farmland Elementary | 1.35 | 1.22 | 5864 |
| Walter Johnson | Luxmanor Elementary | 1.33 | 1.18 | 5196 |
| Walter Johnson | Wyngate Elementary | 0.94 | 0.79 | 4884 |
| Walter Johnson | Ashburton Elementary | 1.24 | 1.09 | 4783 |
| Walter Johnson | Kensington Parkwood Elementary | 1.29 | 0.88 | 5622 |
| Watkins Mill | Watkins Mill Elementary | 0.87 | 0.80 | 6883 |
| Watkins Mill | Whetstone Elementary | 1.03 | 0.88 | 6590 |
| Watkins Mill | South Lake Elementary | 1.13 | 0.68 | 7552 |
| Watkins Mill | Stedwick Elementary | 1.19 | 1.03 | 4444 |
| Winston Churchill | Seven Locks Elementary | 1.64 | 1.30 | 1463 |
| Winston Churchill | Potomac Elementary | 2.30 | 1.88 | 718 |
| Winston Churchill | Wayside Elementary | 1.62 | 1.05 | 1532 |
| Winston Churchill | Bells Mill Elementary | 0.83 | 0.83 | 2981 |
| Winston Churchill | Beverly Farms Elementary | 0.99 | 0.86 | 3161 |


| Cluster | School | Distance to current school | Distance to nearest school | Population Density |
| :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase | Westland Middle | 2.15 | 1.79 | 7,057 |
| Bethesda-Chevy Chase | Silver Creek Middle | 2.58 | 2.21 | 4,721 |
| Clarksburg | Rocky Hill Middle | 2.46 | 2.19 | 685 |
| Clarksburg | Neelsville Middle | 2.73 | 1.61 | 5,184 |
| Col. Zadok Magruder | Redland Middle | 3.29 | 2.3 | 1,195 |
| Col. Zadok Magruder | Shady Grove Middle | 1.75 | 1.66 | 3,177 |
| Damascus | John T. Baker Middle | 2.4 | 2.36 | 547 |
| Damascus | Hallie Wells Middle | 1.18 | 1.13 | 1,530 |
| Downcounty Consortium | Newport Mill Middle | 1.19 | 1.01 | 7,440 |
| Downcounty Consortium | A. Mario Loiederman Middle | 1 | 0.98 | 7,446 |
| Downcounty Consortium | Sligo Middle | 1.34 | 1.11 | 7,800 |
| Downcounty Consortium | Eastern Middle | 1.3 | 1.22 | 8,702 |
| Downcounty Consortium | Takoma Park Middle | 1.11 | 1.08 | 9,097 |
| Downcounty Consortium | Silver Spring International Middle | 1.43 | 1.02 | 8,840 |
| Downcounty Consortium | Col. E. Brooke Lee Middle | 2.06 | 1.53 | 4,984 |
| Downcounty Consortium | Argyle Middle | 1.4 | 1.19 | 6,933 |
| Downcounty Consortium | Parkland Middle | 1.41 | 1.31 | 7,192 |
| Gaithersburg | Gaithersburg Middle | 2.23 | 1.82 | 1,280 |
| Gaithersburg | Forest Oak Middle | 3.43 | 1.92 | 4,825 |
| Northeast Consortium | Briggs Chaney Middle | 4.18 | 2.34 | 2,122 |
| Northeast Consortium | White Oak Middle | 3.02 | 2.08 | 2,666 |
| Northeast Consortium | Francis Scott Key Middle | 2.5 | 1.67 | 4,249 |
| Northeast Consortium | Benjamin Banneker Middle | 1.99 | 1.96 | 2,894 |
| Northeast Consortium | William H. Farquhar Middle | 3.14 | 2.43 | 947 |
| Northwest | Kingsview Middle | 1.26 | 1.23 | 1,944 |
| Poolesville | John Poole Middle | 2.88 | 2.68 | 116 |
| Quince Orchard | Ridgeview Middle | 2.33 | 2.02 | 3,067 |
| Quince Orchard | Lakelands Park Middle | 2.28 | 1.73 | 1,399 |
| Richard Montgomery | Julius West Middle | 2.19 | 2.01 | 4,309 |
| Rockville | Earle B. Wood Middle | 1.72 | 1.38 | 3,688 |
| Seneca Valley | Roberto W Clemente Middle | 1.74 | 1.23 | 6,937 |
| Seneca Valley | Dr. Martin Luther King Jr. Middle | 1.65 | 1.24 | 5,602 |
| Sherwood | Rosa Parks Middle | 1.9 | 1.86 | 1,068 |
| Thomas S. Wootton | Robert Frost Middle | 3.09 | 2.4 | 2,154 |
| Walt Whitman | Thomas W. Pyle Middle | 2.17 | 1.67 | 2,312 |
| Walter Johnson | North Bethesda Middle | 2.04 | 1.28 | 5,010 |
| Walter Johnson | Tilden Middle | 1.61 | 1.61 | 6,047 |
| Watkins Mill | Montgomery Village Middle | 1.04 | 1.04 | 6,451 |
| Winston Churchill | Cabin John Middle | 3.52 | 1.98 | 2,557 |
| Winston Churchill | Herbert Hoover Middle | 2.64 | 2.33 | 1,112 |

High Schools

| Cluster | School | Distance to current school | Distance to nearest school | Population Density |
| :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase | Bethesda-Chevy Chase High | 1.94 | 1.86 | 5,748 |
| Clarksburg | Clarksburg High | 2.52 | 1.99 | 1,045 |
| Col. Zadok Magruder | Col. Zadok Magruder High | 3.45 | 2.93 | 1,665 |
| Damascus | Damascus High | 2.83 | 2.49 | 635 |
| Downcounty Consortium | John F. Kennedy High | 2.67 | 2.14 | 5,984 |
| Downcounty Consortium | Montgomery Blair High | 2.41 | 2.41 | 9,927 |
| Downcounty Consortium | Wheaton High | 1.56 | 1.51 | 7,343 |
| Downcounty Consortium | Northwood High | 1.76 | 1.19 | 6,473 |
| Downcounty Consortium | Albert Einstein High | 2.01 | 1.54 | 7,536 |
| Gaithersburg | Gaithersburg High | 2.53 | 2.07 | 2,317 |
| Northeast Consortium | Springbrook High | 3.27 | 2.47 | 3,711 |
| Northeast Consortium | James Hubert Blake High | 4.86 | 2.29 | 2,103 |
| Northeast Consortium | Paint Branch High | 2.26 | 2.22 | 2,479 |
| Northwest | Northwest High | 2.25 | 1.72 | 1,471 |
| Poolesville | Poolesville High | 2.01 | 1.88 | 116 |
| Quince Orchard | Quince Orchard High | 2.20 | 1.94 | 3,670 |
| Richard Montgomery | Richard Montgomery High | 1.97 | 1.66 | 4,309 |
| Rockville | Rockville High | 1.84 | 1.69 | 3,688 |
| Seneca Valley | Seneca Valley High | 1.51 | 1.46 | 6,108 |
| Sherwood | Sherwood High | 3.65 | 3.40 | 917 |
| Thomas S. Wootton | Thomas S. Wootton High | 3.20 | 2.52 | 2,589 |
| Walt Whitman | Walt Whitman High | 2.11 | 2.09 | 2,312 |
| Walter Johnson | Walter Johnson High | 2.24 | 1.92 | 5,516 |
| Watkins Mill | Watkins Mill High | 1.94 | 1.80 | 6,061 |
| Winston Churchill | Winston Churchill High | 2.83 | 2.53 | 1,312 |

## Appendix D5:

Average distance to school, average distance to closest school, and difference in distance between schools

## Elementary Schools

| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bethesda Elementary | 0.68 | 0.68 | 4 | 0.01 | 96.04\% | -0.72 |
| Chevy Chase Elementary | 1.52 | 0.80 | 4 | 0.71 | 62.96\% | -0.15 |
| Somerset Elementary | 0.82 | 0.74 | 5 | 0.08 | 71.16\% | -0.40 |
| Westbrook Elementary | 0.68 | 0.68 | 2 | 0.00 | 99.69\% | -0.95 |
| North Chevy Chase Elementary | 1.32 | 0.79 | 6 | 0.53 | 46.44\% | -0.83 |
| Rock Creek Forest Elementary | 0.53 | 0.52 | 2 | 0.02 | 92.45\% | -1.85 |
| Rosemary Hills Elementary | 1.87 | 1.11 | 4 | 0.75 | 36.60\% | -0.21 |
| Clarksburg Elementary | 2.01 | 1.76 | 5 | 0.25 | 79.21\% | -1.72 |
| Fox Chapel Elementary | 0.71 | 0.62 | 2 | 0.10 | 84.13\% | -1.57 |
| Captain James E. Daly Elementary | 0.93 | 0.70 | 2 | 0.23 | 69.13\% | -1.28 |
| Little Bennett Elementary | 0.95 | 0.88 | 5 | 0.07 | 67.29\% | -2.23 |
| William B. Gibbs Jr. Elementary | 1.07 | 0.87 | 4 | 0.19 | 72.96\% | -1.77 |
| Wilson Wims Elementary | 0.70 | 0.61 | 4 | 0.09 | 60.26\% | -2.10 |
| Snowden Farm Elementary | 0.50 | 0.50 | 1 | 0.00 | 100.00\% | -2.62 |
| Beverly Farms Elementary | 0.99 | 0.86 | 4 | 0.12 | 71.93\% | -1.04 |
| Wayside Elementary | 1.62 | 1.05 | 3 | 0.58 | 69.65\% | -1.40 |
| Potomac Elementary | 2.30 | 1.88 | 4 | 0.42 | 65.90\% | -2.24 |
| Seven Locks Elementary | 1.64 | 1.30 | 6 | 0.34 | 53.48\% | -1.98 |
| Bells Mill Elementary | 0.83 | 0.83 | 4 | 0.00 | 97.28\% | -2.01 |
| Lois P. Rockwell Elementary | 1.35 | 0.98 | 5 | 0.37 | 26.93\% | -2.13 |
| Damascus Elementary | 1.92 | 1.91 | 3 | 0.01 | 97.81\% | -3.74 |
| Cedar Grove Elementary | 1.61 | 0.77 | 3 | 0.84 | 11.73\% | -1.07 |
| Woodfield Elementary | 1.04 | 1.02 | 2 | 0.02 | 90.31\% | -3.07 |
| Clearspring Elementary | 1.46 | 1.18 | 3 | 0.28 | 59.90\% | -3.35 |
| Sligo Creek Elementary | 0.87 | 0.75 | 5 | 0.12 | 52.81\% | -0.42 |
| Piney Branch Elementary | 0.94 | 0.81 | 3 | 0.13 | 69.58\% | -0.24 |
| Takoma Park Elementary | 1.05 | 0.88 | 4 | 0.17 | 71.88\% | -1.11 |
| East Silver Spring Elementary | 0.50 | 0.50 | 2 | 0.00 | 99.75\% | -0.54 |
| Pine Crest Elementary | 1.35 | 0.78 | 2 | 0.56 | 48.36\% | -0.03 |
| Woodlin Elementary | 0.94 | 0.84 | 6 | 0.10 | 69.31\% | -0.58 |
| Oak View Elementary | 1.04 | 0.67 | 5 | 0.37 | 22.78\% | -0.99 |


| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Glen Haven Elementary | 0.56 | 0.56 | 4 | 0.01 | 93.45\% | -0.67 |
| Oakland Terrace Elementary | 0.64 | 0.57 | 3 | 0.07 | 72.26\% | -0.59 |
| Flora M. Singer Elementary | 0.86 | 0.77 | 3 | 0.10 | 75.13\% | -0.62 |
| Rolling Terrace Elementary | 0.39 | 0.39 | 3 | 0.00 | 96.19\% | -1.46 |
| Viers Mill Elementary | 0.70 | 0.69 | 2 | 0.01 | 96.07\% | -0.88 |
| Highland Elementary | 0.57 | 0.57 | 3 | 0.00 | 96.62\% | -0.66 |
| Montgomery Knolls Elementary | 1.02 | 0.73 | 4 | 0.29 | 54.12\% | -1.79 |
| Weller Road Elementary | 0.53 | 0.50 | 5 | 0.03 | 78.41 \% | -0.41 |
| Sargent Shriver Elementary | 0.61 | 0.56 | 5 | 0.04 | 78.91\% | -0.49 |
| Bel Pre Elementary | 1.73 | 1.54 | 4 | 0.19 | 61.84\% | -1.03 |
| Highland View Elementary | 0.56 | 0.54 | 4 | 0.02 | 79.74\% | -1.12 |
| Georgian Forest Elementary | 1.84 | 1.22 | 6 | 0.62 | 9.14\% | -0.43 |
| Wheaton Woods Elementary | 0.50 | 0.50 | 1 | 0.00 | 100.00\% | -1.40 |
| Arcola Elementary | 1.08 | 0.67 | 6 | 0.41 | 46.66\% | -0.20 |
| New Hampshire Estates Elementary | 0.61 | 0.43 | 5 | 0.18 | 57.69\% | -2.02 |
| Rock View Elementary | 0.89 | 0.71 | 4 | 0.18 | 55.91 \% | -0.79 |
| Harmony Hills Elementary | 0.89 | 0.70 | 7 | 0.19 | 51.01\% | -0.89 |
| Forest Knolls Elementary | 0.91 | 0.84 | 5 | 0.07 | 80.73\% | -1.20 |
| Kemp Mill Elementary | 2.41 | 0.95 | 5 | 1.46 | 14.54\% | 0.47 |
| Brookhaven Elementary | 1.28 | 1.08 | 7 | 0.20 | 41.75\% | -0.84 |
| Glenallan Elementary | 0.90 | 0.88 | 4 | 0.03 | 95.76\% | -1.20 |
| Strathmore Elementary | 1.61 | 1.46 | 4 | 0.15 | 63.68\% | -0.93 |
| Laytonsville Elementary | 2.30 | 1.96 | 4 | 0.34 | 43.96\% | -0.82 |
| Goshen Elementary | 1.20 | 1.01 | 3 | 0.19 | 72.91 \% | -1.07 |
| Washington Grove Elementary | 1.34 | 1.04 | 7 | 0.30 | 15.44\% | -0.26 |
| Gaithersburg Elementary | 0.66 | 0.65 | 2 | 0.02 | 95.71\% | -0.80 |
| Rosemont Elementary | 1.68 | 1.01 | 7 | 0.67 | 22.74\% | -0.13 |
| Summit Hall Elementary | 0.84 | 0.82 | 2 | 0.02 | 92.41\% | -0.98 |
| Strawberry Knoll Elementary | 0.70 | 0.59 | 5 | 0.11 | 71.76\% | -1.18 |
| Garrett Park Elementary | 1.69 | 1.15 | 4 | 0.54 | 45.28\% | -0.17 |
| Farmland Elementary | 1.35 | 1.22 | 2 | 0.13 | 61.30\% | -0.57 |
| Luxmanor Elementary | 1.33 | 1.18 | 4 | 0.15 | 69.76\% | -0.54 |
| Wyngate Elementary | 0.94 | 0.79 | 4 | 0.15 | 56.37\% | -1.26 |
| Ashburton Elementary | 1.24 | 1.09 | 5 | 0.15 | 69.33\% | -1.31 |
| Kensington Parkwood Elementary | 1.29 | 0.88 | 6 | 0.41 | 51.86\% | -0.73 |
| Candlewood Elementary | 1.32 | 1.18 | 3 | 0.14 | 69.32\% | -0.99 |
| Cashell Elementary | 0.65 | 0.65 | 1 | 0.00 | 100.00\% | -2.30 |
| Judith A. Resnik Elementary | 1.78 | 0.95 | 5 | 0.83 | 53.62\% | -0.03 |


| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Flower Hill Elementary | 0.74 | 0.73 | 2 | 0.01 | 91.75\% | -1.03 |
| Mill Creek Towne Elementary | 0.96 | 0.80 | 2 | 0.15 | 84.26\% | -1.28 |
| Sequoyah Elementary | 2.99 | 1.40 | 7 | 1.59 | 31.14\% | 0.22 |
| Twinbrook Elementary | 0.82 | 0.76 | 4 | 0.06 | 82.56\% | -0.58 |
| Beall Elementary | 0.79 | 0.69 | 3 | 0.10 | 79.36\% | -0.87 |
| Ritchie Park Elementary | 1.87 | 0.90 | 5 | 0.97 | 51.66\% | -0.25 |
| College Gardens Elementary | 0.84 | 0.81 | 2 | 0.03 | 97.48\% | -1.13 |
| Bayard Rustin Elementary | 0.89 | 0.76 | 2 | 0.12 | 80.00\% | -0.85 |
| Burtonsville Elementary | 1.65 | 1.57 | 2 | 0.08 | 79.19\% | -1.90 |
| Fairland Elementary | 1.99 | 1.33 | 5 | 0.66 | 14.37\% | -0.63 |
| JoAnn Leleck Elementary at Broad Acres | 1.09 | 0.48 | 4 | 0.60 | 82.88\% | -1.38 |
| Jackson Road Elementary | 1.33 | 1.25 | 4 | 0.08 | 73.38\% | -0.50 |
| Roscoe R. Nix Elementary | 1.76 | 1.10 | 3 | 0.66 | 52.74\% | 0.00 |
| Cloverly Elementary | 2.08 | 1.93 | 5 | 0.15 | 64.43\% | -0.97 |
| Burnt Mills Elementary | 1.13 | 1.00 | 2 | 0.14 | 63.51\% | -0.71 |
| Cannon Road Elementary | 1.37 | 0.84 | 4 | 0.53 | 55.31\% | -0.50 |
| William Tyler Page Elementary | 1.13 | 1.08 | 3 | 0.04 | 76.67\% | -1.43 |
| Galway Elementary | 1.24 | 1.12 | 4 | 0.11 | 91.62\% | -1.87 |
| Stonegate Elementary | 1.83 | 1.54 | 5 | 0.29 | 64.83\% | -1.21 |
| Greencastle Elementary | 0.92 | 0.90 | 4 | 0.02 | 92.93\% | -2.04 |
| Westover Elementary | 1.24 | 0.97 | 3 | 0.27 | 60.42\% | -1.16 |
| Dr. Charles R. Drew Elementary | 1.19 | 0.91 | 5 | 0.28 | 70.21\% | -1.60 |
| Cresthaven Elementary | 1.47 | 1.03 | 3 | 0.44 | 21.38\% | -0.87 |
| Clopper Mill Elementary | 0.88 | 0.61 | 4 | 0.27 | 68.37\% | -0.53 |
| Germantown Elementary | 0.67 | 0.62 | 3 | 0.05 | 80.60\% | -0.89 |
| Ronald McNair Elementary | 0.82 | 0.72 | 3 | 0.10 | 65.07\% | -1.15 |
| Great Seneca Creek Elementary | 0.83 | 0.72 | 2 | 0.11 | 74.25\% | -1.17 |
| Darnestown Elementary | 1.71 | 1.56 | 5 | 0.14 | 79.36\% | -1.99 |
| Spark M. Matsunaga Elementary | 1.55 | 0.92 | 3 | 0.64 | 48.33\% | -0.97 |
| Diamond Elementary | 1.73 | 1.18 | 4 | 0.55 | 36.60\% | -0.64 |
| Poolesville Elementary | 1.13 | 1.12 | 2 | 0.01 | 99.38\% | -8.03 |
| Monocacy Elementary | 3.49 | 3.02 | 5 | 0.47 | 73.20\% | -5.36 |
| Rachel Carson Elementary | 1.01 | 0.79 | 3 | 0.23 | 84.10\% | -0.49 |
| Thurgood Marshall Elementary | 2.00 | 0.90 | 5 | 1.11 | 31.79\% | 0.21 |
| Jones Lane Elementary | 2.28 | 1.01 | 3 | 1.27 | 55.32\% | -0.05 |
| Brown Station Elementary | 0.69 | 0.68 | 2 | 0.01 | 94.58\% | -2.05 |
| Fields Road Elementary | 0.63 | 0.63 | 2 | 0.00 | 98.80\% | -1.92 |
| Maryvale Elementary | 0.51 | 0.51 | 1 | 0.00 | 100.00\% | -0.81 |


| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meadow Hall Elementary | 0.70 | 0.61 | 2 | 0.09 | 75.63\% | -0.49 |
| Lucy V. Barnsley Elementary | 1.01 | 0.90 | 4 | 0.11 | 50.91\% | -0.74 |
| Flower Valley Elementary | 1.39 | 1.11 | 4 | 0.27 | 61.48\% | -0.64 |
| Rock Creek Valley Elementary | 0.86 | 0.62 | 4 | 0.24 | 47.09\% | -1.10 |
| Lake Seneca Elementary | 1.10 | 0.84 | 3 | 0.27 | 63.27\% | -0.71 |
| Waters Landing Elementary | 0.75 | 0.73 | 2 | 0.02 | 91.26\% | -1.27 |
| S. Christa McAuliffe Elementary | 0.87 | 0.87 | 1 | 0.00 | 100.00\% | -1.15 |
| Dr. Sally K. Ride Elementary | 2.04 | 0.90 | 4 | 1.14 | 43.62\% | -0.23 |
| Sherwood Elementary | 2.23 | 1.88 | 6 | 0.35 | 54.50\% | -1.14 |
| Olney Elementary | 1.42 | 1.27 | 4 | 0.15 | 56.46\% | -1.40 |
| Greenwood Elementary | 1.28 | 1.13 | 5 | 0.15 | 55.29\% | -2.29 |
| Belmont Elementary | 1.64 | 1.19 | 4 | 0.45 | 35.95\% | -1.37 |
| Brooke Grove Elementary | 0.63 | 0.60 | 4 | 0.03 | 79.60\% | -2.16 |
| Whetstone Elementary | 1.03 | 0.88 | 4 | 0.15 | 67.92\% | -1.57 |
| Watkins Mill Elementary | 0.87 | 0.80 | 3 | 0.08 | 75.21\% | -1.65 |
| South Lake Elementary | 1.13 | 0.68 | 3 | 0.44 | 79.57\% | -0.89 |
| Stedwick Elementary | 1.19 | 1.03 | 4 | 0.16 | 84.99\% | -1.51 |
| Bradley Hills Elementary | 0.88 | 0.71 | 4 | 0.16 | 67.39\% | -0.76 |
| Wood Acres Elementary | 0.81 | 0.79 | 3 | 0.02 | 89.27\% | -1.28 |
| Burning Tree Elementary | 1.13 | 0.95 | 6 | 0.18 | 67.18\% | -0.98 |
| Bannockburn Elementary | 1.32 | 1.00 | 4 | 0.32 | 51.43\% | -1.72 |
| Carderock Springs Elementary | 2.06 | 1.89 | 2 | 0.17 | 72.62\% | -2.60 |
| Lakewood Elementary | 1.46 | 1.01 | 3 | 0.45 | 41.83\% | -0.90 |
| Travilah Elementary | 1.16 | 1.16 | 3 | 0.00 | 97.56\% | -1.70 |
| Fallsmead Elementary | 2.06 | 1.12 | 6 | 0.93 | 40.49\% | -0.46 |
| Cold Spring Elementary | 0.56 | 0.50 | 3 | 0.05 | 74.65\% | -1.86 |
| Dufief Elementary | 0.70 | 0.70 | 3 | 0.00 | 96.46\% | -0.92 |
| Stone Mill Elementary | 0.89 | 0.87 | 3 | 0.02 | 93.32\% | -1.37 |


| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Westland Middle | 2.15 | 1.79 | 4 | 0.37 | 61.95\% | -0.56 |
| Silver Creek Middle | 2.58 | 2.21 | 4 | 0.37 | 50.75\% | -0.17 |
| Neelsville Middle | 2.73 | 1.61 | 3 | 1.12 | 54.69\% | 0.33 |
| Rocky Hill Middle | 2.46 | 2.19 | 5 | 0.27 | 65.03\% | -0.60 |
| Herbert Hoover Middle | 2.64 | 2.33 | 4 | 0.31 | 63.59\% | -0.47 |
| Cabin John Middle | 3.52 | 1.98 | 6 | 1.54 | 50.27\% | 0.82 |
| Hallie Wells Middle | 1.18 | 1.13 | 3 | 0.06 | 68.65\% | -0.94 |
| John T. Baker Middle | 2.40 | 2.36 | 2 | 0.04 | 95.52\% | -1.89 |
| Silver Spring International Middle | 1.43 | 1.02 | 4 | 0.41 | 58.00\% | -0.40 |
| Takoma Park Middle | 1.11 | 1.08 | 3 | 0.04 | 89.82\% | -0.74 |
| Eastern Middle | 1.30 | 1.22 | 2 | 0.08 | 85.38\% | -0.40 |
| Sligo Middle | 1.34 | 1.11 | 3 | 0.23 | 74.77\% | -1.70 |
| A. Mario Loiederman Middle | 1.00 | 0.98 | 3 | 0.02 | 93.55\% | -1.46 |
| Newport Mill Middle | 1.19 | 1.01 | 4 | 0.18 | 70.63\% | -1.70 |
| Parkland Middle | 1.41 | 1.31 | 3 | 0.11 | 61.92\% | -0.30 |
| Col. E. Brooke Lee Middle | 2.06 | 1.53 | 5 | 0.53 | 24.35\% | 0.18 |
| Argyle Middle | 1.40 | 1.19 | 3 | 0.21 | 72.41\% | -0.74 |
| Forest Oak Middle | 3.43 | 1.92 | 6 | 1.51 | 3.96\% | 0.73 |
| Gaithersburg Middle | 2.23 | 1.82 | 7 | 0.41 | 56.68\% | -0.30 |
| Tilden Middle | 1.61 | 1.61 | 3 | 0.00 | 98.44\% | -1.05 |
| North Bethesda Middle | 2.04 | 1.28 | 5 | 0.77 | 43.88\% | -1.06 |
| Shady Grove Middle | 1.75 | 1.66 | 3 | 0.09 | 44.05\% | -3.24 |
| Redland Middle | 3.29 | 2.30 | 7 | 0.99 | 14.72\% | 0.52 |
| Julius West Middle | 2.19 | 2.01 | 7 | 0.18 | 67.27\% | -0.54 |
| Francis Scott Key Middle | 2.50 | 1.67 | 4 | 0.83 | 66.84\% | -0.08 |
| Benjamin Banneker Middle | 1.99 | 1.96 | 2 | 0.03 | 95.66\% | -1.95 |
| Briggs Chaney Middle | 4.18 | 2.34 | 5 | 1.84 | 18.36\% | 0.74 |
| William H. Farquhar Middle | 3.14 | 2.43 | 4 | 0.70 | 46.98\% | -0.68 |
| White Oak Middle | 3.02 | 2.08 | 7 | 0.94 | 41.71\% | 0.05 |
| Kingsview Middle | 1.26 | 1.23 | 3 | 0.03 | 92.13\% | -1.12 |
| John Poole Middle | 2.88 | 2.68 | 3 | 0.20 | 93.40\% | -5.13 |
| Ridgeview Middle | 2.33 | 2.02 | 3 | 0.30 | 51.00\% | -0.57 |
| Lakelands Park Middle | 2.28 | 1.73 | 6 | 0.55 | 30.66\% | -1.62 |
| Earle B. Wood Middle | 1.72 | 1.38 | 5 | 0.33 | 46.82\% | -0.39 |
| Dr. Martin Luther King Jr. Middle | 1.65 | 1.24 | 3 | 0.41 | 81.92\% | -0.33 |
| Roberto W Clemente Middle | 1.74 | 1.23 | 3 | 0.51 | 38.20\% | -0.24 |


| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rosa Parks Middle | 1.90 | 1.86 | 2 | 0.04 | 88.32\% | -2.36 |
| Montgomery Village Middle | 1.04 | 1.04 | 1 | 0.00 | 100.00\% | -1.39 |
| Thomas W. Pyle Middle | 2.17 | 1.67 | 4 | 0.50 | 55.06\% | -0.44 |
| Robert Frost Middle | 3.09 | 2.40 | 4 | 0.69 | 46.45\% | -0.14 |

High Schools

| School |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bethesda-Chevy Chase High | 1.94 | 1.86 | 4 | 0.07 | 81.78\% | -1.55 |
| Clarksburg High | 2.52 | 1.99 | 5 | 0.53 | 66.88\% | -5.75 |
| Winston Churchill High | 2.83 | 2.53 | 5 | 0.30 | 75.17\% | -2.50 |
| Damascus High | 2.83 | 2.49 | 3 | 0.35 | 85.89\% | -8.40 |
| Montgomery Blair High | 2.41 | 2.41 | 1 | 0.00 | 100.00\% | -4.44 |
| Wheaton High | 1.56 | 1.51 | 4 | 0.04 | 89.02\% | -2.60 |
| Albert Einstein High | 2.01 | 1.54 | 5 | 0.47 | 50.36\% | -2.65 |
| Northwood High | 1.76 | 1.19 | 5 | 0.56 | 44.61\% | -3.15 |
| John F. Kennedy High | 2.67 | 2.14 | 3 | 0.54 | 41.08\% | -2.21 |
| Gaithersburg High | 2.53 | 2.07 | 6 | 0.46 | 68.49\% | -3.79 |
| Walter Johnson High | 2.24 | 1.92 | 7 | 0.32 | 60.12\% | -1.70 |
| Col. Zadok Magruder High | 3.45 | 2.93 | 3 | 0.51 | 49.37\% | -3.23 |
| Richard Montgomery High | 1.97 | 1.66 | 5 | 0.31 | 58.00\% | -0.66 |
| Paint Branch High | 2.26 | 2.22 | 4 | 0.04 | 94.83\% | -2.79 |
| James Hubert Blake High | 4.86 | 2.29 | 7 | 2.57 | 23.05\% | -0.17 |
| Springbrook High | 3.27 | 2.47 | 6 | 0.79 | 29.43\% | -2.76 |
| Northwest High | 2.25 | 1.72 | 4 | 0.53 | 50.04\% | -3.25 |
| Poolesville High | 2.01 | 1.88 | 4 | 0.14 | 95.41\% | -6.08 |
| Quince Orchard High | 2.20 | 1.94 | 3 | 0.26 | 61.56\% | -2.59 |
| Rockville High | 1.84 | 1.69 | 5 | 0.15 | 72.28\% | -1.35 |
| Seneca Valley High | 1.51 | 1.46 | 3 | 0.05 | 88.45\% | -4.49 |
| Sherwood High | 3.65 | 3.40 | 3 | 0.25 | 73.98\% | -2.84 |
| Watkins Mill High | 1.94 | 1.80 | 2 | 0.15 | 77.88\% | -4.35 |
| Walt Whitman High | 2.11 | 2.09 | 4 | 0.03 | 93.83\% | -3.00 |
| Thomas S. Wootton High | 3.20 | 2.52 | 4 | 0.68 | 52.99\% | -1.38 |

## Appendix D6:

Difference in distance for ES and HS


Elementary Schools


High Schools

## Appendix D7:

## Percentage of students in walk zone vs. walkshed

## Elementary Schools

| School | \% in walk zone | $\%$ in walkshed | \% difference for all schools all levels |
| :---: | :---: | :---: | :---: |
| Bethesda ES | 7.56\% | 85.98\% | 78.43\% |
| Rock Creek Forest ES | 30.73\% | 100.00\% | 69.27\% |
| Bells Mill ES | 23.44\% | 75.72\% | 52.28\% |
| Fields Road ES | 34.03\% | 84.62\% | 50.58\% |
| Germantown ES | 36.19\% | 85.07\% | 48.88\% |
| Woodlin ES | 10.75\% | 55.98\% | 45.23\% |
| Montgomery Knolls ES | 20.98\% | 62.67\% | 41.69\% |
| Somerset ES | 36.38\% | 77.61\% | 41.23\% |
| Sargent Shriver ES | 52.73\% | 92.36\% | 39.63\% |
| Burnt Mills ES | 20.92\% | 60.23\% | 39.31\% |
| Wood Acres ES | 32.51\% | 71.62\% | 39.11\% |
| Waters Landing ES | 36.79\% | 73.24\% | 36.45\% |
| East Silver Spring ES | 53.13\% | 88.47\% | 35.34\% |
| Twinbrook ES | 46.43\% | 81.09\% | 34.66\% |
| Arcola ES | 16.29\% | 48.42\% | 32.13\% |
| Harmony Hills ES | 18.20\% | 49.61\% | 31.42\% |
| Beall ES | 41.06\% | 72.25\% | 31.19\% |
| Mill Creek Towne ES | 35.50\% | 66.45\% | 30.94\% |
| Westbrook ES | 59.50\% | 89.41\% | 29.91\% |
| Little Bennett ES | 42.65\% | 72.23\% | 29.58\% |
| Maryvale ES | 69.79\% | 99.15\% | 29.36\% |
| Forest Knolls ES | 42.19\% | 68.89\% | 26.71\% |
| Wheaton Woods ES | 73.67\% | 99.76\% | 26.09\% |
| Fallsmead ES | 20.00\% | 45.87\% | 25.87\% |
| Highland View ES | 72.15\% | 97.47\% | 25.32\% |
| Bayard Rustin ES | 43.57\% | 68.52\% | 24.95\% |
| Jones Lane ES | 19.91\% | 44.44\% | 24.54\% |
| DuFief ES | 50.88\% | 74.78\% | 23.89\% |
| Strawberry Knoll ES | 63.45\% | 87.06\% | 23.61\% |
| Fox Chapel ES | 47.83\% | 70.87\% | 23.04\% |
| College Gardens ES | 35.66\% | 58.60\% | 22.94\% |
| New Hampshire Estates ES | 54.55\% | 77.27\% | 22.73\% |
| Wayside ES | 23.14\% | 45.85\% | 22.71\% |
| Brookhaven ES | 27.83\% | 50.43\% | 22.61\% |
| Ashburton ES | 18.68\% | 40.60\% | 21.92\% |
| Ritchie Park ES | 28.39\% | 49.36\% | 20.97\% |


| School | \% in walk zone | \% in walkshed | \% difference for all schools all levels |
| :---: | :---: | :---: | :---: |
| Bradley Hills ES | 44.50\% | 65.05\% | 20.54\% |
| North Chevy Chase ES | 16.73\% | 37.05\% | 20.32\% |
| Spark M. Matsunaga ES | 11.80\% | 31.47\% | 19.67\% |
| Cannon Road ES | 32.38\% | 51.96\% | 19.58\% |
| Olney ES | 21.77\% | 40.84\% | 19.07\% |
| Whetstone ES | 39.25\% | 58.31\% | 19.06\% |
| Wilson Wims ES | 63.44\% | 81.64\% | 18.20\% |
| Burning Tree ES | 27.18\% | 44.62\% | 17.44\% |
| Rolling Terrace ES | 82.55\% | 99.54\% | 17.00\% |
| Viers Mill ES | 63.13\% | 79.72\% | 16.59\% |
| Bannockburn ES | 20.79\% | 37.20\% | 16.41\% |
| Watkins Mill ES | 55.87\% | 72.23\% | 16.36\% |
| Roscoe R. Nix ES | 22.19\% | 38.27\% | 16.07\% |
| Kensington-Parkwood ES | 30.00\% | 45.81\% | 15.81\% |
| S. Christa McAuliffe ES | 36.31\% | 51.65\% | 15.34\% |
| Cashell ES | 75.36\% | 90.36\% | 15.00\% |
| Rachel Carson ES | 42.42\% | 57.33\% | 14.91\% |
| Oakland Terrace ES | 73.48\% | 88.08\% | 14.60\% |
| Flora M. Singer ES | 53.50\% | 68.01\% | 14.51\% |
| Greencastle ES | 46.47\% | 60.92\% | 14.45\% |
| Lois P. Rockwell ES | 8.49\% | 22.28\% | 13.79\% |
| Woodfield ES | 45.35\% | 58.53\% | 13.18\% |
| Poolesville ES | 42.50\% | 55.63\% | 13.13\% |
| Sligo Creek ES | 49.37\% | 61.90\% | 12.53\% |
| Piney Branch ES | 38.13\% | 50.43\% | 12.31\% |
| Flower Hill ES | 63.66\% | 75.77\% | 12.11\% |
| Glenallan ES | 54.50\% | 66.37\% | 11.86\% |
| Galway ES | 31.47\% | 42.66\% | 11.20\% |
| Greenwood ES | 39.14\% | 49.51\% | 10.37\% |
| Wyngate ES | 50.07\% | 60.34\% | 10.27\% |
| Stone Mill ES | 48.49\% | 58.75\% | 10.26\% |
| South Lake ES | 69.77\% | 79.46\% | 9.69\% |
| Chevy Chase ES | 38.27\% | 47.84\% | 9.57\% |
| Oak View ES | 32.41\% | 41.67\% | 9.26\% |
| Takoma Park ES | 41.68\% | 50.44\% | 8.76\% |
| Fairland ES | 4.51\% | 12.70\% | 8.20\% |
| Clearspring ES | 24.26\% | 32.18\% | 7.92\% |
| Luxmanor ES | 13.55\% | 21.44\% | 7.89\% |
| Laytonsville ES | 2.20\% | 9.34\% | 7.14\% |
| Flower Valley ES | 21.95\% | 28.96\% | 7.01\% |
| Rock Creek Valley ES | 49.31\% | 56.23\% | 6.93\% |
| Strathmore ES | 6.67\% | 13.57\% | 6.90\% |


| School | \% in walk zone | \% in walkshed | \% difference for all schools all levels |
| :---: | :---: | :---: | :---: |
| JoAnn Leleck ES at Broad Acres | 78.95\% | 85.63\% | 6.69\% |
| Westover ES | 28.75\% | 35.42\% | 6.67\% |
| Washington Grove ES | 14.19\% | 20.79\% | 6.60\% |
| Beverly Farms ES | 44.56\% | 50.88\% | 6.32\% |
| Clopper Mill ES | 66.89\% | 73.06\% | 6.16\% |
| Weller Road ES | 88.57\% | 94.62\% | 6.05\% |
| Candlewood ES | 15.07\% | 20.27\% | 5.21\% |
| Stonegate ES | 42.07\% | 47.13\% | 5.06\% |
| Meadow Hall ES | 70.08\% | 74.79\% | 4.71\% |
| Captain James Daly ES | 62.66\% | 67.28\% | 4.62\% |
| Thurgood Marshall ES | 26.49\% | 31.09\% | 4.61\% |
| Farmland ES | 27.86\% | 32.34\% | 4.48\% |
| Bel Pre ES | 6.31\% | 10.39\% | 4.07\% |
| Garrett Park ES | 19.35\% | 23.38\% | 4.03\% |
| Diamond ES | 13.06\% | 17.01\% | 3.95\% |
| Summit Hall ES | 51.79\% | 55.38\% | 3.59\% |
| Kemp Mill ES | 15.05\% | 17.86\% | 2.81\% |
| Great Seneca Creek ES | 65.79\% | 68.41\% | 2.62\% |
| Cedar Grove ES | 0.86\% | 3.44\% | 2.58\% |
| Brown Station ES | 76.72\% | 79.21\% | 2.49\% |
| Pine Crest ES | 24.03\% | 26.52\% | 2.49\% |
| Goshen ES | 12.42\% | 14.66\% | 2.24\% |
| Cresthaven ES | 12.83\% | 15.04\% | 2.21\% |
| Rosemary Hills ES | 29.76\% | 31.95\% | 2.19\% |
| Rock View ES | 56.71\% | 58.72\% | 2.00\% |
| Dr. Sally K. Ride ES | 40.57\% | 42.29\% | 1.71\% |
| William T. Page ES | 47.28\% | 48.94\% | 1.65\% |
| Lakewood ES | 22.79\% | 24.26\% | 1.47\% |
| Judith A. Resnik ES | 46.25\% | 47.29\% | 1.04\% |
| Ronald McNair ES | 64.04\% | 65.07\% | 1.03\% |
| Highland ES | 100.00\% | 100.00\% | 0.00\% |
| Glen Haven ES | 100.00\% | 100.00\% | 0.00\% |
| William B. Gibbs Jr. ES | 65.41\% | 65.41\% | 0.00\% |
| Cold Spring ES | 100.00\% | 100.00\% | 0.00\% |
| Belmont ES | 27.71\% | 27.71\% | 0.00\% |
| Snowden Farm ES | 100.00\% | 100.00\% | 0.00\% |
| Stedwick ES | 49.67\% | 47.46\% | -2.21\% |
| Lucy V. Barnsley ES | 38.32\% | 34.53\% | -3.79\% |
| Georgian Forest ES | 14.53\% | 10.61\% | -3.91\% |
| Rosemont ES | 4.37\% | 0.00\% | -4.37\% |
| Jackson Road ES | 28.98\% | 24.41\% | -4.58\% |


| School | \% in walk zone | \% in walk- <br> shed | \% difference for all <br> schools all levels |
| :--- | :--- | :--- | :--- |
| Brooke Grove ES | $98.85 \%$ | $93.68 \%$ | $-5.17 \%$ |
| Dr. Charles R. Drew ES | $65.37 \%$ | $59.72 \%$ | $-5.65 \%$ |
| Gaithersburg ES | $84.42 \%$ | $76.62 \%$ | $-7.79 \%$ |
| Lake Seneca ES | $61.33 \%$ | $48.27 \%$ | $-13.07 \%$ |

Middle Schools

| School | \% in walk zone | \% in walkshed | \% difference for all schools all levels |
| :---: | :---: | :---: | :---: |
| Silver Spring International MS | 23.24\% | 66.52\% | 43.28\% |
| Eastern MS | 49.08\% | 89.53\% | 40.45\% |
| Shady Grove MS | 12.64\% | 46.28\% | 33.64\% |
| Tilden MS | 9.67\% | 39.89\% | 30.22\% |
| A. Mario Loiederman MS | 54.07\% | 80.99\% | 26.91 \% |
| Martin Luther King, Jr MS | 30.09\% | 56.74\% | 26.65\% |
| Thomas W. Pyle MS | 18.13\% | 43.15\% | 25.02\% |
| Takoma Park MS | 55.19\% | 78.62\% | 23.43\% |
| Sligo MS | 46.25\% | 69.37\% | 23.12\% |
| Newport Mill MS | 59.13\% | 77.40\% | 18.27\% |
| White Oak MS | 10.06\% | 28.26\% | 18.19\% |
| Benjamin Banneker MS | 3.97\% | 21.14\% | 17.17\% |
| Francis Scott Key MS | 8.61\% | 25.23\% | 16.62\% |
| Julius West MS | 16.29\% | 31.68\% | 15.39\% |
| Kingsview MS | 53.29\% | 68.37\% | 15.07\% |
| Westland MS | 21.73\% | 35.54\% | 13.80\% |
| Argyle MS | 50.53\% | 62.96\% | 12.43\% |
| Rosa Parks MS | 26.96\% | 38.95\% | 12.00\% |
| Cabin John MS | 20.36\% | 31.69\% | 11.33\% |
| Earle B. Wood MS | 25.91 \% | 37.21\% | 11.31\% |
| Col. E. Brooke Lee MS | 14.25\% | 24.69\% | 10.45\% |
| Herbert Hoover MS | 27.36\% | 37.74\% | 10.38\% |
| North Bethesda MS | 21.93\% | 32.10\% | 10.17\% |
| Silver Creek MS | 5.99\% | 16.13\% | 10.14\% |
| Rocky Hill MS | 7.18\% | 17.15\% | 9.97\% |
| Parkland MS | 39.27\% | 48.17\% | 8.90\% |
| William H. Farquhar MS | 0.16\% | 9.03\% | 8.87\% |
| Montgomery Village MS | 76.44\% | 83.31\% | 6.87\% |
| John Poole MS | 21.11\% | 26.65\% | 5.54\% |
| Redland MS | 1.16\% | 6.47\% | 5.31\% |
| Ridgeview MS | 16.60\% | 20.98\% | 4.38\% |
| Briggs Chaney MS | 7.40\% | 10.99\% | 3.59\% |
| Forest Oak MS | 5.79\% | 9.35\% | 3.56\% |


| School | \% in walk zone | \% in walkshed | \% difference for all <br> schools all levels |
| :--- | :--- | :--- | :--- |
| Robert Frost MS | $20.78 \%$ | $21.97 \%$ | $1.19 \%$ |
| Lakelands Park MS | $34.82 \%$ | $35.69 \%$ | $0.87 \%$ |
| Roberto Clemente MS | $34.34 \%$ | $34.85 \%$ | $0.51 \%$ |
| Gaithersburg MS | $55.54 \%$ | $55.96 \%$ | $0.42 \%$ |
| Hallie Wells MS | $74.11 \%$ | $69.09 \%$ | $-5.01 \%$ |

High Schools

| School | \% in walk <br> zone | \% in walkshed | \% difference for all <br> schools all levels |
| :--- | :--- | :--- | :--- |
| Walt Whitman HS | $22.95 \%$ | $61.76 \%$ | $38.81 \%$ |
| Paint Branch HS | $3.05 \%$ | $35.86 \%$ | $32.81 \%$ |
| Damascus HS | $4.48 \%$ | $30.58 \%$ | $26.10 \%$ |
| Clarksburg HS | $21.44 \%$ | $46.65 \%$ | $25.20 \%$ |
| Montgomery Blair HS | $8.10 \%$ | $31.22 \%$ | $23.12 \%$ |
| Walter Johnson HS | $17.57 \%$ | $40.68 \%$ | $23.11 \%$ |
| Poolesville HS | $53.08 \%$ | $75.57 \%$ | $22.50 \%$ |
| Rockville HS | $40.83 \%$ | $61.61 \%$ | $20.77 \%$ |
| Bethesda-Chevy Chase HS | $30.40 \%$ | $48.56 \%$ | $18.16 \%$ |
| Winston Churchill HS | $34.05 \%$ | $45.84 \%$ | $11.78 \%$ |
| Sherwood HS | $2.49 \%$ | $10.69 \%$ | $8.20 \%$ |
| John F. Kennedy HS | $18.82 \%$ | $26.18 \%$ | $7.36 \%$ |
| Wheaton HS | $44.60 \%$ | $49.20 \%$ | $4.60 \%$ |
| Springbrook HS | $15.89 \%$ | $20.10 \%$ | $4.21 \%$ |
| Seneca Valley HS | $72.32 \%$ | $76.29 \%$ | $3.97 \%$ |
| Richard Montgomery HS | $48.57 \%$ | $51.89 \%$ | $3.32 \%$ |
| Gaithersburg HS | $51.70 \%$ | $54.26 \%$ | $2.57 \%$ |
| Albert Einstein HS | $44.43 \%$ | $45.15 \%$ | $0.71 \%$ |
| Quince Orchard HS | $43.64 \%$ | $43.73 \%$ | $0.10 \%$ |
| Northwood HS | $40.26 \%$ | $40.20 \%$ | $-0.06 \%$ |
| Watkins Mill HS | $55.05 \%$ | $53.89 \%$ | $-1.16 \%$ |
| Thomas S. Wootton HS | $27.74 \%$ | $25.54 \%$ | $-2.20 \%$ |
| Northwest HS | $47.00 \%$ | $44.62 \%$ | $-2.38 \%$ |

## Appendix D8:

Walk distance ranges for students with at least $\mathbf{5 0 \%}$ of students in walk zone


Middle Schools
The green schools are cases where more than $50 \%$ of students live within the walk zone but are on average more than half a mile away from school.


High Schools
The green schools are cases where more than $50 \%$ of students live within the walk zone but are on average more than half a mile away from school.

## Appendix D9:

## Choice and Magnet Programs

## Elementary Schools

| School | Distance from <br> choice to current <br> school (miles) | Percent of stu- <br> dents that are <br> choice students | Distance to <br> current school <br> (miles) | Difference in dis- <br> tance from choice <br> (miles) |
| :--- | :--- | :--- | :--- | :--- |
| Fox Chapel Elementary | 3.90 | $17.97 \%$ | 0.71 | 3.18 |
| Maryvale Elementary | 6.68 | $54.37 \%$ | 0.51 | 6.17 |
| Cold Spring Elementary | 4.50 | $35.15 \%$ | 0.56 | 3.94 |
| Burnt Mills Elementary | 4.45 | $19.59 \%$ | 1.13 | 3.31 |
| William Tyler Page Ele- <br> mentary | 6.90 | $24.78 \%$ | 1.13 | 5.77 |
| Bayard Rustin Elementary | 6.49 | $22.32 \%$ | 0.89 | 5.60 |
| Chevy Chase Elementary | 3.81 | $29.50 \%$ | 1.52 | 2.29 |
| Lucy V. Barnsley Elemen- <br> tary | 3.52 | $26.54 \%$ | 1.01 | 2.51 |
| Sligo Creek Elementary | 3.37 | $38.65 \%$ | 0.87 | 2.50 |
| Mill Creek Towne Elemen- <br> tary | 3.71 | $26.20 \%$ | 0.96 | 2.76 |
| Potomac Elementary | 8.98 | $6.43 \%$ | 2.30 | 6.68 |
| Clearspring Elementary | 4.83 | $20.32 \%$ | 1.46 | 3.37 |
| Dr. Charles R. Drew Ele- <br> mentary | 5.55 | $28.78 \%$ | 1.19 | 4.36 |
| Takoma Park Elementary | 4.02 | $5.28 \%$ | 1.05 | 2.96 |
| Pine Crest Elementary | 4.12 | $23.69 \%$ | 1.35 | 2.77 |
| Oak View Elementary | 2.30 | $5.12 \%$ | 1.04 | 1.26 |
| Rock Creek Forest Ele- <br> mentary | 5.55 | 0.53 | 5.02 |  |

Middle Schools

| School | Distance from <br> choice to current <br> school (miles) | Percent of stu- <br> dents that are <br> choice students | Distance to <br> current school <br> (miles) | Difference in dis- <br> tance from choice <br> (miles) |
| :--- | :--- | :--- | :--- | :--- |
| Dr. Martin Luther King <br> Jr. Middle | 5.51 | $15.61 \%$ | 1.65 | 3.86 |
| Roberto W Clemente <br> Middle | 5.19 | $20.86 \%$ | 1.74 | 3.45 |
| Herbert Hoover Middle | 7.73 | $6.56 \%$ | 2.64 | 5.09 |
| Westland Middle | 9.44 | $9.74 \%$ | 2.15 | 7.28 |
| Gaithersburg Middle | 5.03 | $12.08 \%$ | 2.23 | 2.80 |
| Silver Spring Internation- <br> al Middle | 3.84 | $17.60 \%$ | 1.43 | 2.41 |
| Takoma Park Middle | 8.67 | $27.81 \%$ | 1.11 | 7.56 |
| Eastern Middle | 6.38 | $27.68 \%$ | 1.30 | 5.08 |
| A. Mario Loiederman | 3.91 | $67.10 \%$ | 1.41 | 2.90 |
| Middle* | 4.07 | $60.75 \%$ | 1.40 | 2.66 |
| Parkland Middle* |  |  | 2.73 |  |
| Argyle Middle* | 4.13 |  |  |  |

* includes students from within the Middle School Magnet Consortium


## 8.2 <br> > Appendix Community Engagement <br> <br> Appendix <br> <br> Appendix Community Community Engagement

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- Comments and Questions from Virtual Meeting


## Appendix 1A:

 Regional Community Meeting Summary Reports
## Regional Community Meeting 1: Gaithersburg High School

| Date: | December 4, 2019 |
| :--- | :--- |
| Location: | Gaithersburg High School, 101 Education Blvd, Gaithersburg, MD 20877 |
| Attendance: | Approximately 300 community members <br> Twenty-five volunteer, experienced table facilitators |
| Format: | Focused, concise presentations <br> Abbreviated and targeted small group discussions to deepen the conversation <br> Ideas captured on worksheets by table facilitators for input to future stages of <br> the process <br> Polling to gather participant feedback |

## Themes from Participant Feedback:

a. Lens \#1-School Utilization

What do participants see? What do they think might be causing over- and underutilization?

- Disparities in usage appear to be based on geography
- People move to areas where schools are better, and that leads to overcrowding
- Elementary schools have the biggest overcrowding challenges
- Enrollment projections are consistently off, underestimated
- Challenges in utilization are tied to ongoing development in the county; also see it tied to "poor planning"
- Population growth is occurring, especially in areas of the county where development is more intensive
- In particular, seeing fast growth in the Hispanic population
- Building of new schools doesn't seem to be occurring fast enough in response to the growth; too limited
- Consider how to increase academic quality across the schools
- Concerned or unsure that boundary changes will really impact academic quality and performance positively and solve the disparities that currently exist


## b. Lens \#2 - Student Body Diversity

## What do participants see? What stands out in the presentation/data?

- Certain parts of the county have greater concentrations of diversity than others
- Please clarify the difference between Board indicating they will weigh diversity more heavily in their recent decision, but that this analysis will treat it equally to utilization and capacity
- MCPS needs to factor in far more than FARMS data regarding diversity
- See too much emphasis on FARMS
- Concern that MCPS is using too narrow a definition for diversity
- Recommend that other diversity factors could include - race, gender, language, ethnicity, religion, etc.
- See dimensions like cultural diversity as more important than socioeconomic diversity
- Wonder whether there is a correlation between FARMS and school performance
- Concern about whether the data actually proves that moving kids from low to high performing schools improves grades; and vice versa
- See a need to provide more resources for schools with higher percentages of everFARMS students; provide resources more equitably
- Not clear how moving FARMS students further away helps them
- Have concerns about busing, especially increased distances for busing
- Needs to factor in the impact that boundary changes would have on communities and families in this process
c. Lens \#3-Proximity to Schools


## What do participants see? What might explain differences in proximity?

- Proximity is very important, as is prioritizing community schools
- Busing time matters, and perhaps matters as much if not more than walk sheds
- Concern that county is considering forced busing
- Major concerns around potential of increased travel time
- Concerns about the secondary impact that increased travel time has on commutes, time for family, after-school activities, etc.
- Students thrive where they feel safe and comfortable
d. Intersection of Three Lenses

How are these three lenses interconnected?

- Concern whether all 3 lenses treated equally
- Need to do better planning around schools and school construction
- Concern about transparency regarding the data being used; want to see the data, not just the analysis of the data
- Continued concerns about future busing
- Re-emphasized the desire to preserve neighborhood schools
- Re-emphasized the concern that boundary changes will have a negative impact on kids and families
- Want to see "common sense" solutions
e. Input about MCPS Critical Events, History; Final Questions \& Concerns

Input

- See significant growth in enrollment in MCPS in recent decades
- See significant growth in diversity of MCPS students of color (Black, Hispanic, Asian) and a decline in the percentage of white students

What Else?

- Concerned about
- Future busing
- The Board's lack of transparency in general and in particular around boundary studies and this analysis
- The recent Clarksburg/Seneca Valley decision
- Unclear about
- The difference between boundary change versus bus-in/bus-out
- Why the Board is doing this analysis, i.e., about what problem it is trying to solve
- Didn't like the polling question re: \# of boundary changes from past 25 years; felt manipulated


# Regional Community Meeting 2: Julius West Middle School 

| Date: | December 7, 2019 |
| :--- | :--- |
| Location: | Julius West Middle School, 10651 Great Falls Rd, Rockville, MD 20850 |
| Attendance: | Approximately 400 community members <br>  <br> Twenty-five volunteer, experienced table facilitators |
| Format: | Focused, concise presentations |
|  | Abbreviated and targeted small group discussions to deepen the conversation <br> Ideas captured on worksheets by table facilitators for input to future stages of <br> the process <br> Polling to gather participant feedback |

## Themes from Participant Feedback:

a. Lens \#1-School Utilization

What is your perspective on utilization? Are there other ways we should analyze this issue?

- Concerned with the lack of transparency in this process
- Skeptical about the Board of Education in this process
- Don't want redistricting in the county; parents chose homes by where the schools were located - don't want that to change
- Concerned about possibility of forced busing in the future
b. Lens \#2 - Student Body Diversity

What is your perspective on student diversity? What are central challenges? What else should we analyze for this issue?

- Need to expand how "diversity" will be analyzed in this process
- Ever FARMS does not define diversity
- MCPS needs to factor in far more than FARMS data regarding diversity
- Too much emphasis on FARMS
- MCPS is using too narrow a definition for diversity
- Other diversity factors might include - race, gender, language, ethnicity, religion, etc.
- Concerned about what happens to a student's performance when they move from a high performing school to a low performing one.
- Need to clarify difference between the Board weighing diversity more heavily (based on recent decision), but that in this analysis diversity is treated equally with the other lenses
- Concerns about busing, increased use of busing, and busing for longer distances
- Don't believe evidence that increased diversity is a positive for school performance
c. Lens \#3 - Proximity to Schools


## What is your perspective on proximity to schools? What are central challenges? What else should we analyze for this issue?

- Proximity is the most important issue. It impacts:
- Quality of life
- Commutes
- Participation in after school activities
- Proximity is very important, as is prioritizing community schools
- Proximity must include time to travel to school
- Proximity also helps with parent engagement
- Very concerned about the potential of increased travel time; major concerns about busing long distances
- Concerned about travel time and the secondary impact that has on commutes, time for family, after-school activities, etc.
- Busing time matters, and perhaps matters as much if not more than walk sheds
- Buses are a problem - they run late; not enough drivers; breakdown; call pollution


## d. Intersection of Three Lenses

## How are these three lenses interconnected?

- Strong interest in seeing proximity prioritized
- Strong interest as well in ensuring that all variables are weighed equally
- Concerned about the negative impact boundary changes will have on kids
e. Input about MCPS Critical Events, History; Final Questions \& Concerns

Input

- See significant growth in enrollment in MCPS in recent decades
- See significant growth in diversity of MCPS students of color (Black, Hispanic, Asian) and a decline in the percentage of white students


## What Else?

- Concerned about:
- How data is collected
- The WXY contract \& scope; why is what is shared tonight different from what's online? Creates more distrust; Need to see revised RFP and scope
- Whether options and recommendations will be provided on boundaries; this is what the scope on the website says
- Having to send kids to schools that are not near their neighborhoods; people chose houses/neighborhoods largely because of the schools their kids would go to
- What the ultimate goal of this analysis is

MCPS not being focused on quality of education in this process
This process is moving too fast; finishing by June is too soon

- Lack of clarity about what process will be to actually make boundary changes
- People don't trust the Board
- Mistrust about the data; want to see the raw data; want to know how the data will be analyzed
- Upset about the decisions re: Clarksburg/Seneca Valley boundary study; and how those decisions were made; this increased distrust
- Need an online forum for this analysis too
- Need more transparency in this process; need to put all information online; make the whole analysis transparent
- Need more student voices in this process
- Conduct a survey to get additional feedback
- Loudest people in the room took over in disrespectful way; it was rude and obnoxious


## Responses to Polling Questions

There was no polling at this meeting

## Regional Community Meeting 3: White Oak Middle School

| Date: | December 14, 2019 |
| :--- | :--- |
| Location: | White Oak Middle School, 12201 New Hampshire Ave, Silver Spring, MD 20904 | Attendance: | Approximately 225 community members |
| :--- |
|  |
| Twenty-three volunteer, experienced table facilitators |

## Themes from Participant Feedback:

a. Lens \#1-School Utilization

## What feedback do you have on utilization? What else should we be factoring in?

- Concerned with overcrowding in some elementary (and other) schools
- Concerned about use of portables throughout the system, even in "under-utilized" schools
- Need to understand the relationship between over-/under-utilization and the deployment of teachers ( \& staff) across the school system
- Believe that there have been flawed predictions historically with MCPS enrollment projections
- Need to build more schools; need better planning around this
- Need to be aware that programs drive enrollment (quality, \#, type, etc.), which needs to be factored in
- Families purchase houses based on the location of schools and that reality should be considered in this analysis
- This analysis takes place in a much larger county context that includes county housing policy, transportation (roads) policy, where development occurs - and will occur in the future. MCPS must be ready to figure out what happens when more growth occurs in areas that are already overcrowded


## b. Lens \#2 - Student Body Diversity

What feedback do you have on student body diversity? What else should we be factoring in?

- Clarify difference between the Board weighing diversity more heavily (per recent decision), yet for this analysis it is treated equally
- Certain parts of the county have greater concentrations of diversity than others
- Diversity needs to be defined more broadly than ever FARMS
- Need also to look at racial and cultural diversity, and ESL and special needs populations
- Need a common understanding of what is meant by diversity in this analysis
- Schools with higher Ever-FARMS populations need more resources
- Need to factor in a better level of support for immigrant/ESOL populations
- Need to improve education/academic programs in all schools rather than trying to do it through boundary changes
- Concerned with trying to solve socioeconomic disparities through boundary changes
- Concerned about the validity of the data that proves moving kids from low to high performing schools improves grades; and vice versa
c. Lens \#3 - Proximity to Schools


## What do participants see? What might explain differences in proximity?

- Want to ensure that magnet and specialty programs (and consortia) fit into this analysis
- Need to not just look at distance but time factors too
- Concerned about longer commutes for children
- Must consider traffic patterns into this part of the analysis
- Consortia are important in the school system, but wonder how they might affect the analysis of boundaries in this project
- Need to emphasize the safety of children in decisions being made
- Safety not just on buses but also on walking/walkability
- Need to look at where housing growth/new developments will occur in the county
d. Intersection of Three Lenses

How are these three lenses interconnected?

- Need to equalize resources so all students have same opportunity to a great education
- All lenses should be of equal weight (even though BoE says diversity is top one)
e. Input about MCPS Critical Events, History; Final Questions \& Concerns

Input

- See significant growth in enrollment in MCPS in recent decades
- See significant growth in diversity of MCPS students of color (Black, Hispanic, Asian) and a decline in the percentage of white students


## What Else?

- Would like WXY to provide recommendations for boundary changes
- Need more transparency re: the whole process and the data; data needs to be public
- Unclear why the Board is doing this analysis, i.e., what problem it is trying to solve
- If you do conduct part of this analysis online, make sure data isn't skewed by highly organized groups during that part of the process


# Regional Community Meeting 4: Montgomery Blair High School 

| Date: | January 11, 2020 |
| :--- | :--- |
| Location: | Montgomery Blair High School, 51 University Blvd E, Silver Spring, MD 20901 |
| Attendance: | Approximately 400 community members <br> Thirty-five volunteer, experienced table facilitators |
| Format: | Focused, concise presentations |
|  | Abbreviated and targeted small group discussions to deepen the conversation <br> Ideas captured on worksheets by table facilitators for input to future stages of <br> the process <br> Polling to gather participant feedback |

## Themes from Participant Feedback:

a. Lens \#1-School Utilization

What feedback do you have on utilization? What else should we be factoring in?

- Not clear how utilization intersects or is affected by MCPS choice, magnet and other specialized programs; wonder whether some of these programs should be moved to under-utilized schools
- MCPS needs to build more schools; and be clear about how and when that happens; and/or MCPS needs to fix and grow the size of existing schools
- Not clear why the islands have occurred in the first place and why MCPS still has them
- Not clear how underutilization nor overutilization occur - need to understand better the history of decisions that led to this
- MCPS needs to do a better job at accurately projecting or predicting future population growth and enrollment growth
- A number of clusters look like they have been gerrymandered
- Utilization is impacted by new developments, the density of housing in certain places in the county, and lack of affordable housing; as a result, in many places development doesn't align well with utilization
- Concern with extensive and long-term use of portables at numerous schools; also very unclear where and how portables are factored into this analysis
- Overcrowding in schools appears to be more prevalent in down county
- Unclear about how utilization and:
- Access to resources intersect
- Performance intersect
- Ever FARMs intersect
- Need to know whether there is a correlation between overcrowding/overutilization and student success
- MCPS needs to allocate resources for schools more effectively
- Need to understand better how student-teacher ratios and class size intersect with utilization in both over and underutilized schools
b. Lens \#2 - Student Body Diversity

What feedback do you have on student body diversity? What else should we be factoring in?

- It appears that there are higher Ever FARMs rates at the elementary school level
- Need to analyze other aspects of diversity including:

| $\circ$ | Ethnicity | $\circ$ |
| :--- | :--- | :--- |
| $\circ$ | Race | $\circ$ |
| $\circ$ | Cultural |  |
| $\circ$ | Children with disabilities and |  |
|  | $\circ$ | Family education background |
|  |  |  |
|  |  |  |

- Numerous participants question whether Ever FARMs is the right variable to use for diversity
- MCPS needs to provide more resources at schools who serve high percentages of Ever FARMs students (and for schools that are underperforming)
- Believe that there is low participation in specialized programs by racial, ethnic, and low SES students
- There has been a big growth in immigrant communities in recent years
- Concern that an increase in Ever FARMs students in schools could cause students/families to move or go to school elsewhere (e.g., private schools)
- Need a clearer definition from MCPS for diversity as it relates to this analysis
- Need to understand the history of boundary decisions and how it relates to the varying Ever FARMs rates across schools
- Need to engage the Latino community in greater numbers in this process
- Need to engage students in greater numbers in this process
- Need to understand how new home construction impacts diversity in MCPS schools
- Would like to see the interrelationship between school location and property values
- Need to understand how over- and under-utilization intersects with the lack of diversity in schools where that is the case
- The County (and MCPS) needs to balance new housing development with the need for more or expanded schools
- Need to expand choice and magnet programs, in particular, to be more inclusive of the school population
- Believe that there is a stigma associated with FARMs
- Need to understand how diversity intersects with student performance
- Need to understand how diversity intersects with proximity
c. Lens \#3-Proximity to Schools

What feedback do you have on proximity to schools? What else should we be factoring in?

- Need to understand the impact of development and population growth on proximity to schools
- Would like to know what the percentage of students is who do not attend the school closest to them at each level
- The maps show clusters that look like the boundaries have been gerrymandered
- Would like to see the historical data on proximity to schools
- The analysis needs to include mileage, travel time, and travel patterns
- Need to factor in bike routes, walk routes, use of public transportation, availability of safe paths
- Proximity is important, especially at the elementary school level
- Unclear what the relationship is between proximity to schools and a family's willingness to travel (e.g., specialized programs)
- Unclear about the relationship regarding proximity to school with regard to choice and specialized programs
- Need to look at the relationship between proximity and housing patterns (both current and planned)
- Need to be clearer on how it is determined where to build new schools
- Proximity to schools and the amount of travel time required to get to schools can have a big impact on family and student well-being
- Travel distance to schools often has the biggest impact on those families/students with the fewest resources
- Some viewed proximity as highly important; others viewed it as of low importance


## d. Intersection of Three Lenses

## How are these three lenses interconnected?

- Need to understand the differences for how the three lenses intersect by school, cluster, and different levels of school (i.e., elementary, middle, high)
- Need to understand the impact of 3 lenses together and the resources required
- While conducting this analysis, need to keep in mind the importance of providing high quality education for all students
- Need to understand more clearly how consortia will be factored in across the lenses
- Need to know what metrics will be used for diversity and proximity (as has already been done for utilization)
e. Input about What Needs to Get Clarified and any Additional Issues or Concerns


## Clarifications

- We want to see recommendations on boundaries, especially after investing so much money into the analysis
- It is not clear at all when decisions will be made as a result of this analysis. Nor is it clear how those decisions will be made, or what happens next, after the report is submitted
- We believe travel time should be included in this analysis as a part of proximity
- Make sure you engage with underrepresented groups/populations and target harder-toreach communities, especially Latinos
- A wide range of comments about diversity, race, socio-economics, and Ever FARMS and how those each get factored into a boundary analysis What Else?
- Need to directly involve hard-to-reach groups, especially populations for whom English is a second language
- Need to reach out to the Latino community to engage in this process
- Need to reach out to a wide range of students to provide input into this process
- Would like to know how boundary analysis intersects with school and student performance
- Need to understand how choice and magnet programs are factored in
- MCPS needs to look at how resources are distributed across schools
- Need to understand more clearly what the impact of future population growth will be on MCPS and boundaries
- Would like WXY to provide recommendations for boundary changes


## Regional Community Meeting 5: Northwestern High School

Date: January 14, 2020

Location: Northwestern High School, 13501 Richter Farm Rd, Germantown, MD 20874

Attendance: Approximately 375 community members
Thirty-five volunteer, experienced table facilitators

Format: Focused, concise presentations
Abbreviated and targeted small group discussions to deepen the conversation Ideas captured on worksheets by table facilitators for input to future stages of the process

Polling to gather participant feedback

## Themes from Participant Feedback:

a. Lens \#1-School Utilization

What feedback do you have on utilization? What else should we be factoring in?

- MCPS needs to build more schools
- Concerned about how enrollment projections impact utilization; need for better community planning; projections need to be tied to future development and future population growth in the county
- Need to include traffic and travel time and make it a priority
- Need to continuously plan for expansion of the school system - specifically expansion of existing schools
- Need to analyze boundaries more regularly so that not dealing with the problem of over- and under-utilization
- Need to include student-teacher ratios in schools
b. Lens \#2 - Student Body Diversity

What feedback do you have on student body diversity? What else should we be factoring in?

- Skeptical about (and, in some cases, opposed to) the use of FARMsrelated/socioeconomic status data
- Need to use other diversity measures instead of or in addition to Ever FARMS; especially racial diversity ("race rather than poverty")
- Want to know if there is a link between Ever FARMs/socioeconomic data and overcrowded schools
- Want to see more resources for FARMs students/schools
- Schools are already perceived as diverse (racially)
- Develop a better and clearer definition for diversity
- Need to understand, better, the relationship between diversity and school/student performance
c. Lens \#3-Proximity to Schools

What feedback do you have on proximity to schools? What else should we be factoring in?

- Traffic is more indicative of proximity than distance; need to account for driving/travel/bus time
- Place a high value on community schools ("assign kids to closer schools")
- Proximity should be considered primary (although a few tables considered it secondary)
- Maximize walkers, put a cap on distance for busing
- Need to understand dhow magnet and specialized programs factor in to proximity
- Distrust the school system
- Measure the costs to the environment of busing
d. Intersection of Three Lenses

How are these three lenses interconnected?

- Balance all three factors but realize they may be difficult to weigh equally
- Concerned regarding the data and the model being transparent, accurate and valid
- Concerned about Ever FARMs as a measure
e. Input about What Needs to Get Clarified and any Additional Issues or Concerns


## Clarifications

- Concerned that the analysis is not looking at travel time or traffic
- Concerned about the data and the model - not complex enough, not clear about the data sources, nor how the data will be used
- Desire for this process and for MCPS to be more transparent with parents; don't currently trust the school system
- Concerned about what the end result will be of this analysis - "everybody knows something will happen"
- Questions regarding the analysis, the need for it, the need for a consultant, and the qualifications of the selected consultant


## What Else?

## Regional Community Meeting 6: Walter Johnson High School

Date: January 23, 2020

Location: Northwestern High School, 6400 Rock Spring Drive, Bethesda, MD 20814

Attendance: Approximately 600 community members
Forty volunteer, experienced table facilitators

Format: Focused, concise presentations
Abbreviated and targeted small group discussions to deepen the conversation Ideas captured on worksheets by table facilitators for input to future stages of the process

Polling to gather participant feedback
Q\&A - 30 minutes near the end of the meeting

## Themes from Participant Feedback:

## a. Lens \#1-School Utilization

## What feedback do you have on utilization? What else should we be factoring in?

- Concerns about the use of portables currently
- Concerns about poor planning of schools and utilization in the face of the county's population growth; need to project more accurately and further out into the future
- Need for strong coordination with County planning office to address population growth and housing growth and its impact on school utilization
- Lack of clarity about why there is underutilization in any schools
- Concern about what data is being used for the utilization analysis
- Questions about student-teacher ratios, class sizes, and their relationship to utilization
- If moving kids due to utilization needs, school system needs to ensure the minimal disruption for students impacted by that
- Wonder whether there is a relationship between under-utilization and the age of (older) facilities
- Wonder whether there is a relationship between lower performing schools and underutilized schools
- Wonder whether there is data about what happens to students when they move from higher performing to lower performing schools
- Clear that MCPS needs to build more schools
- Numerous overutilized elementary schools near underutilized elementary schools
- Need to dedicate more resources (teachers, programs, etc.) to underutilized schools
- Wonder how much longer older facilities will be able to be used as schools
- Wonder what the impact of choice and magnet schools and consortium schools is on utilization
b. Lens \#2-Student Body Diversity

What feedback do you have on student body diversity? What else should we be factoring in?

- Ever FARMs is not a good measure of student diversity; concerned that it is not a real indicator of socioeconomic status
- High FARMs/high poverty schools should receive additional resources/greater investments
- Not clear about what definition is being used for diversity. Needs to be broad and include factors like race, culture/ethnicity, ESOL, country of origin, religion, etc.
- If using socioeconomic data, use FARMs, not Ever FARMs
- Concerned about busing primarily to solve diversity issues in the county
- Recognize that the County is already very diverse and so is MCPS
- Concerned that magnet and specialty schools are not attracting diverse students
- Skeptical about diversity research; specifically, no research on FARMs/Ever FARMs diversity
c. Lens \#3-Proximity to Schools

What feedback do you have on proximity to schools? What else should we be factoring in?

- Concerned regarding the impact on issues like before care, after care, extracurricular programs, parental engagement, etc.
- MCPS needs to make a commitment to neighborhood schools
- Don't like the reality of split articulation in the school system
- Are against busing students further than already being bused
- Need to ensure MCPS focuses on travel time and traffic in this part of the analysis
- Unclear about where choice and specialty programs as well as consortia fit into this part of the analysis
- Concerned about the environmental impact of additional busing
- Unclear and concerned about so many kids not attending their closest schools currently
- Proximity lens is the most important
- Want to see that students are kept in the same cluster
- Need to factor in to this part of the analysis natural barriers, major roads, etc


## d. Intersection of Three Lenses

## How are these three lenses interconnected?

- Analysis is missing assignment stability; needs to be included
- Need to ensure MCPS studies impact of traffic
- Concerned about losing parental and community involvement if kids attend schools further away
- Align school construction with new development in the county; build more schools
- All three lenses are important but hard to determine how to align as they are likely to be in conflict or counteracting one another
- Proximity is most important
- Diversity doesn't belong as a lens
- Need to consider safety issues in this part of the analysis
- Need to invest more resources for schools that need them


## e. Input about What Needs to Get Clarified and any Additional Issues or Concerns

## Clarifications

- Not clear on the criteria for selecting the consultant
- Concerned about the amount of money invested in this analysis
- Concerned about what data is being used, where the data comes from, how old the data is, etc.
- Not clear where student performance and overall quality of education fit in to this analysis
- Not clear about what happens next, after analysis is completed


## What Else?

- Must include new housing and commercial development (i.e., future growth) into the analysis - when and where it will occur; also, the need for affordable housing in the county
- Unclear where student performance, quality of education, school performance fits in and concerned that metrics being used don't measure quality
- The 3 lenses should be treated equally
- Emphasize proximity and need for community schools
- Need to see metrics and thresholds for both diversity and proximity
- Concerned about what the impact of future boundary changes will be on home and property values
- Don't see anything about stability of assignments, but this lens is important


## Appendix 1B:

 Regional Communtiy Meeting Live Polling DataThis page includes a summary of polling data from each regional community meeting.

## Summary of all meetings

Q1. Select all of those that apply to you:


I am a Pre-K-12 student but not in MCPS
I am a Pre-K-12 student in MCPS
I don't have children but care about our county
I am a parent/guardian of children of Pre-K-12 age in private schools
I am a parent/guardian who used to have children in MCPS
I am a parent/guardian with kids who are not in MCPS

- I am a parent/guardian with kids currently in MCPS

Q3. I consider myself:


Q2. Which of these best describes where you live:


Southeast: in the vicinity of Colesville, Fairland + Burtonsville
South: In the vicinity of Sliver Spring, Takoma Park, Wheaton + White Oak

Southwest: In the vicinity of Bethesda, Chevy Chase + Potomac

East: In the vicinity of Colesville, Fairland +
BurtonsvilleCentral: In the vicinity of of Rockville + Derwood
North Central: In the vicinity of Gaithersburg + Montgomery Village
Northeast: In the vicinity of Damascus +
Clarksburg
Northwest: In the vicinity of Poolsville, Dickerson,
Boyds + Germantown
1 live outside Montgomery County, but connected
to the county in other ways

Q4. Which statement best describes your experience in terms of how much you learned:


Unsure / Skeptical

Q5. Which statement best summarizes your view of the MCPS boundary analysis:

## 31\%

This is an important effort that we need in order to look at ways to improve MCPS

## 21\%

This boundary analysis has pros and cons and \& we need to be careful moving forward

2\%
I am not sure what I think and want to continue to learn more
I am skeptical about this process and wonder whether

I am skeptical about this process and wonder whether it needs to be done at this time

## Summary of all meetings

Q6. Is it a good idea to review the school boundaries occasionally to make sure they are up to date with the growth of the district? (Scale of 1-10) (multiple choice)

| $32 \%$ | $6 \%$ | $10 \%$ | $10 \%$ | $41 \%$ |
| :--- | :---: | :---: | :---: | :---: | ---: |
|  |  |  |  |  |
| Fully Disagree | Disagree | Neutral | Agree | Fully Agree |
| $1-2$ | $3-4$ | $5-6$ | $7-8$ | $9-10$ |

This question was asked in Jan 11th, Jan14th and Jan 23rd.

Q7. I have felt heard today and have had a chance to express my views, hopes, and concerns. (Scale 1-10) (multiple choice)

| 42\% |  | 5\% | 14\% | 13\% | 26\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fully Disagree |  | Disagr | eutral | Agree | Fully Agree |
| 1-2 | 3-4 | 5-6 | 7-8 |  | 9-10 |

This question was asked in Jan 11th, Jan14th and Jan 23rd.

## Dec 4th Meeting (5 Questions asked)

Q1. Select all of those that apply to you:
I am a Pre-K-12 student but not in MCPS
I am a Pre-K-12 student in MCPSI don't have children but care about our county
I am a parent/guardian of children of Pre-K-12 age in private schoolsI am a parent/guardian who used to have children in MCPS I am a parent/guardian with kids who are not in MCPS

I am a parent/guardian with kids currently in MCPS

Q2. Which of these best describes where you live:


South: In the vicinity of Sliver Spring, Takoma Park, Wheaton + White Oak
Southwest: In the vicinity of Bethesda, Chevy Chase + Potomac

East: In the vicinity of Colesville, Fairland +
Burtonsville
Central: In the vicinity of of Rockville + Derwood
North Central: In the vicinity of Gaithersburg +
Montgomery Village
Northeast: In the vicinity of Damascus +
Clarksburg
Northwest: In the vicinity of Poolsville, Dickerson,
Boyds + Germantown
I live outside Montgomery County, but connected
to the county in other ways

Q3. I consider myself:


Q4. Which statement best describes your experience in terms of how much you learned:
$11 \%$
I learned a great deal but I did not know before about the history of MCPS and the current challenges it faces 23\%
learned a little that I did not know about MCPS and the issues that need to be discussed 21\%

I had trouble understanding a lot of the data and so it's hard to say how much I learned

## 46\%

1 am already pretty familiar with the issues discussed tonight and didn't really learn much that is new

Q5. Which statement best summarizes your view of the MCPS boundary analysis:

## 9\%

This is an important effort that we need in order to look at ways to improve MCPS

## 25\%

This boundary analysis has pros and cons and \& we need to be careful moving forward

## 1\%

I am not sure what I think and want to continue to learn more

## 65\%

I am skeptical about this process and wonder whether it needs to be done at this time

## Dec 14th Meeting (5 Questions Asked)

Q1. Select all of those that apply to you:
I am a Pre-K-12 student but not in MCPS
I am a Pre-K-12 student in MCPS
I don't have children but care about our county
I am a parent/guardian of children of Pre-K-12 age in private schools
I am a parent/guardian who used to have children in MCPS
I am a parent/guardian with kids who are not in MCPS
I am a parent/guardian with kids currently in MCPS

Q2. Which of these best describes where you live:


Southeast: in the vicinity of Colesville, Fairland + Burtonsville
South: In the vicinity of Sliver Spring, Takoma Park, Wheaton + White Oak
Southwest: In the vicinity of Bethesda, Chevy Chase + Potomac
East: In the vicinity of Colesville, Fairland + Burtonsville
Central: In the vicinity of of Rockville + Derwood
North Central: In the vicinity of Gaithersburg +
Montgomery Village
Northeast: In the vicinity of Damascus +
Clarksburg
Northwest: In the vicinity of Poolsville, Dickerson,
Boyds + Germantown
I live outside Montgomery County, but connected
to the county in other ways

Q3. I consider myself:


Q4. Which statement best describes your experience in terms of how much you learned:

## 24\%

I learned a great deal that I did not know before about the history of MCPS and the current challenges it faces

## 30\%

I learned a little that I did not know about MCPS and the issues that need to be discussed

## 9\%

I had trouble understanding a lot of the data and so it's hard to say how much I learned
20\%
I am already pretty familiar with the issues discussed tonight and didn't really learn much that is new

## 17\%

I am skeptical about this process and wonder whether it needs to be done at this time (not asked on Dec 4th)
Q5. Which statement best summarizes your view of the MCPS boundary analysis:

This is an important effort that we need in order to look at ways to improve MCPS

## 23\%

This boundary analysis has pros and cons and \& we need to be careful moving forward
3\%
I am not sure what I think and want to continue to learn more

I am skeptical about this process and wonder whether it needs to be done at this time

## Jan 11th Meeting

Q1. Select all of those that apply to you:


- I am a Pre-K-12 student but not in MCPSI am a Pre-K-12 student in MCPS
- I don't have children but care about our county
- I am a parent/guardian of children of Pre-K-12 age in private schools
- I am a parent/guardian who used to have children in MCPS
- I am a parent/guardian with kids who are not in MCPS
- I am a parent/guardian with kids currently in MCPS

Q2. Which of these best describes where you live:


Southeast: in the vicinity of Colesville, Fairland + Burtonsville
South: In the vicinity of Sliver Spring, Takoma
Park, Wheaton + White OakSouthwest: In the vicinity of Bethesda, Chevy Chase + Potomac
East: In the vicinity of Colesville, Fairland +
BurtonsvilleCentral: In the vicinity of of Rockville + DerwoodNorth Central: In the vicinity of Gaithersburg +
Montgomery Village
Northeast: In the vicinity of Damascus +
ClarksburgNorthwest: In the vicinity of Poolsville, Dickerson,
Boyds + GermantownI live outside Montgomery County, but connected
to the county in other ways

Q3. I consider myself:


Q4. Which statement best describes your experience in terms of how much you learned:

## 25\%

I learned a great deal that I did not know before about the history of MCPS and the current challenges it faces 39\%
I learned a little that I did not know about MCPS and the issues that need to be discussed

## 5\%

I had trouble understanding a lot of the data and so it's hard to say how much I learned

## 16\%

I am already pretty familiar with the issues discussed tonight and didn't really learn much that is new

## 15\%

I am skeptical about this process and wonder whether it needs to be done at this time (not asked on Dec 4th)
Q5. Which statement best summarizes your view of the MCPS boundary analysis:

This is an important effort that we need in order to look at ways to improve MCPS

## 17\%

This boundary analysis has pros and cons and \& we need to be careful moving forward
2\%
I am not sure what I think and want to continue to learn more

## 11\%

am skeptical about this process and wonder whether it needs to be done at this time


## Jan 14th Meeting

Q1. Select all of those that apply to you:


I am a Pre-K-12 student but not in MCPS1 am a Pre-K-12 student in MCPS
I don't have children but care about our county

- I am a parent/guardian of children of Pre-K-12 age in private schools

I am a parent/guardian who used to have children in MCPS
I am a parent/guardian with kids who are not in MCPS
I am a parent/guardian with kids currently in MCPS

Q3. I consider myself:



Q4. Which statement best describes your experience in terms of how much you learned:

I learned a great deal that I did not know before about the history of MCPS and the current challenges it faces 14\%
I learned a little that I did not know about MCPS and the issues that need to be discussed 8\%
I had trouble understanding a lot of the data and so it's hard to say how much I learned 15\%
am already pretty familiar with the issues discussed tonight and didn't really learn much that is new 58\%
I am skeptical about this process and wonder whether it needs to be done at this time (not asked on Dec 4th)

Q5. Which statement best summarizes your view of the MCPS boundary analysis:

## 18\%

This is an important effort that we need in order to look at ways to improve MCPS

## 14\%

This boundary analysis has pros and cons and \& we need to be careful moving forward

## 2\%

I am not sure what I think and want to continue to learn more

## 65\%

I am skeptical about this process and wonder whether it needs to be done at this time


## Jan 23rd Meeting (Combined)



Q6. Is it a good idea to review the school boundaries occasionally to make sure they are up to date with the growth of the district? (Scale of 1-10) (multiple choice)

$$
1 \text { = Fully Disagree }
$$ 10 = Fully Agree



Q7. I have felt heard today and have had a chance to express my views, hopes, and concerns. (Scale 1-10) (multiple choice)


## Appendix 1D. Sample Facilitator Worksheet

## FACILITATOR WORKSHEET

(use both sides)

Table Discussion: Table Intros

- Is there anything our table needs clarified about the boundary analysis process at this point?


## Table Discussion: UTILIZATION

- What feedback do you have for us about school utilization as part of this boundary analysis?
- What else should we include in this analysis?


## Table Discussion: DIVERSITY

- What feedback do you have for us about student diversity as part of this boundary analysis?
- What else should we include in this analysis?


## Table Discussion: PROXIMITY

- What feedback do you have for us about proximity to schools as part of this boundary analysis?
- What else should we include in this analysis?


## Table Discussion: Intersection of the 3 Topics (Utilization, Diversity and Proximity)

- What are the most important things to keep in mind about the way these three issues - school utilization, school body diversity, and proximity to schools - are interconnected?
- Is there anything else we may have missed that you think we should know?


## Appendix 1E. Sample Participant Worksheet

```
Marylandes Larpest School District
MONTGOMERY COUNTY PUBLIC SCHOOLS
Expanding Opportunity and Unleashing Potential
```

montgomeryschoolsmd.org/boundary-analysis/

## PARTICIPANT WORKSHEET

Table Discussion: Table Introductions

- Is there anything our table needs clarified about the boundary analysis process at this point?


## Table Discussion: UTILIZATION

- What feedback do you have for us about school utilization as part of this boundary analysis?
- What else should we include in this analysis?

Table Discussion: DIVERSITY

- What feedback do you have for us about student diversity as part of this boundary analysis?
- What else should we include in this analysis?


## Table Discussion: PROXIMITY

- What feedback do you have for us about proximity to schools as part of this boundary analysis?
- What else should we include in this analysis?


## Table Discussion: Intersection of the 3 Topics (Utilization, Diversity and Proximity)

- What are the most important things to keep in mind about the way these three issues - school utilization, school body diversity, and proximity to schools - are interconnected?
- Is there anything else we may have missed that you think we should know?


## Appendix 2A: Interviews - Format and Questions

Below is a detailed summary of interview format and questions asked.

## Part I

The interviews begin with a short explanation of the boundary analysis and the issues to be discussed. Interviewers explain what will--and will not--be in the report to the Board of Education. This includes a short explanation of the three focus areas:

1. facility utilization
2. student demographics and diversity
3. geography and access to schools

## Part II - Boundary Analysis Discussions

- What do you think are the most pressing challenges MCPS faces as it works to achieve effective utilization of facilities, student body diversity and convenient access to schools?
- Utilization: What do you think people need to know about facilities utilization and capacity in order to have an effective conversation about the issue?
- Diversity: Do you have any suggestions about what data on demographics and student body diversity people need to understand in order to have a good conversation on that topic?
- Access: What type of information do people need in order to understand the choices we face in access to schools and transportation?
- Public Meeting: What are the main things we need to do at the public meetings to make them effective and productive?
- Next Steps: Do you have any other comments or suggestions for us as we work with MCPS to get public input on the districtwide boundary analysis?


## Part III - Community Outreach

- Broad Representation: Which groups in Montgomery County are particularly important to have represented at the public meetings?
- Key Stakeholders: Are there specific organizations or key individuals you want us to invite to the public meetings? If so, do you have contact information for those groups and/or individuals?
- Hard to Reach Groups: Which segments of the Montgomery County population that ought to be involved in the boundary analysis discussion are least likely to attend? Do you have any suggestions of what to do or
who to contact in order to get those people involved?
- Next Steps: Do you have any other general suggestions or comments about how to get Montgomery County residents effectively involved in the boundary analysis process?


## Appendix 2B: Student Engagement - Comments and Questions from Virtual Meeting

The following is a list of comments and questions submitted virtually during the virtual student meeting, held February 20, 2020.

Link to virtual meeting: https://www.youtube.com/watch?v=YOtBaoGMpQc

- Would a change in consortia (DCC or NEC) be a possibility in school assignments?
- When will the final changes be posted? Will there be any programs or such to help new students?
- What is being done about the overcrowding at Blair?
- am not happy about the boundary analysis. Why will switching schools and making transportation harder for students benefit people overall?
- As a rising senior, if I were to switch schools, would I have to meet their graduation requirement, or would I be excused and follow my previous schools' requirements.
- If a person attending one school is currently in a program that's specifically offered at their original school, is moved to another school that doesn't have the required classes, will the student lose their ability to complete a program?
- My school is the result of some terrible districting. It is practically the definition of intra school segregation. The boundaries were totally drawn to promote the white population, two of the schools that feed into Gaithersburg are simply not within a reasonable distance. Most kids from Maryvale commute from Rockville and the kids from Laytonsville have insane bus rides from 30 minutes to an hour. How is this ok? Kids from Maryvale don't even get activity buses. Laytonsville Elementary has to have PTA meetings to convince parents to not COSA to baker or go private in fear of sending their children to Gaithersburg or "the gang school" How is this ok? The Maryvale kids are indirectly isolated within the school.
- What is the time frame for decisions to be made? And what is the goal year to implement changes?
- Is there a limit on how far a student can be relocated?
- Why use ever-FARMS as opposed to current FARMS?
- My school does not seem overcrowded currently, will there be more students coming to mine?
- Is there a chance that I could be bussed across boundary lines?


### 8.3 Appendix Summary Table

## Summary Table



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|  | ขЧ！ЧМ ${ }^{\text {²0 }}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \dot{\circ} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \underset{\sim}{\dot{J}} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ó } \\ & \text { oj } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{2}} \\ & \stackrel{y}{*} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{4} \\ & \underset{\sim}{\sim} \end{aligned}$ | $\begin{aligned} & \circ \\ & 0 \\ & \text { ò } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{2}} \\ & \stackrel{6}{\circ} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \circ \\ & \text { oे } \\ & \text { or } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{+}{2} \end{aligned}$ | $\begin{aligned} & \text { ô } \\ & \text { ò } \end{aligned}$ | $\begin{aligned} & \text { ఠे } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{ल} \\ & \stackrel{0}{\circ} \end{aligned}$ | $\stackrel{\stackrel{-}{\infty}}{\stackrel{0}{0}}$ | $\begin{aligned} & \text { oे } \\ & \text { oे } \\ & \text { ó } \end{aligned}$ | $\begin{aligned} & \circ \text { ò } \\ & \infty \\ & \infty \end{aligned}$ | $\stackrel{\stackrel{\circ}{\stackrel{\circ}{\gtrless}}}{\stackrel{1}{c}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { U }}{2} \end{aligned}$ | $\begin{aligned} & \text { oै } \\ & \text { © } \end{aligned}$ | $\begin{aligned} & \circ \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\dot{\gamma}} \\ & \stackrel{+}{\dot{\prime}} \end{aligned}$ | $\begin{aligned} & 9 \\ & + \\ & + \\ & + \\ & \vdots \\ & \hline \end{aligned}$ |  | $\stackrel{\circ}{\mathrm{y}} \stackrel{\stackrel{y}{c}}{\stackrel{\sim}{2}}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{0}{0} \\ & \stackrel{0}{6} \end{aligned}$ | $\stackrel{\circ}{\underset{\sim}{\infty}}$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{N}}}{\stackrel{1}{2}}$ | $\stackrel{\text { Nे }}{\stackrel{\circ}{2}}$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{M}}}{\stackrel{1}{2}}$ | $\frac{\circ}{\div}$ | $\begin{aligned} & \text { مٌ } \\ & \text { مٌ } \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{\rightharpoonup}{m} \end{aligned}$ |
|  | $1)^{170}{ }^{\circ} \mathrm{d}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\stackrel{\circ}{N}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{4} \end{aligned}$ | $\begin{aligned} & \circ \\ & \infty \\ & \text { ○ } \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{N}}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\stackrel{\stackrel{\circ}{\mathrm{N}}}{\stackrel{-}{+}}$ | $\stackrel{\circ}{-}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{0}{\circ} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { Ò } \end{aligned}$ | $\stackrel{\text { ® }}{\text { ¢ }}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{0} \\ & \text { è } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\infty}}$ | $\stackrel{\stackrel{\circ}{\infty}}{\substack{\infty}}$ |  |  |  |  | $\stackrel{\circ}{\circ} \stackrel{\circ}{\circ}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \\ & \hline \end{aligned}$ | $\stackrel{\circ}{\circ} \stackrel{\circ}{\stackrel{\circ}{N}}$ | $\begin{aligned} & \text { e } \\ & 4 \\ & \hline \end{aligned}$ | $\stackrel{\stackrel{y}{\mathrm{e}}}{\stackrel{\circ}{\mathrm{o}}} \stackrel{\mathrm{c}}{\mathrm{~N}}$ | $\begin{aligned} & \circ \\ & \text { ○. } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{N}}}$ | $\stackrel{\text { N® }}{\text { N- }}$ |  | ＋${ }^{\circ}$ |
|  | ग！ueds！t ${ }^{7} \mathrm{D}$ | $\begin{aligned} & \text { oे } \\ & \text { م̀ } \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \text { O} \\ & \end{aligned}$ | $\begin{gathered} \stackrel{\circ}{\underset{\sim}{N}} \end{gathered}$ | $\stackrel{\circ}{\stackrel{\circ}{\text { ले }}}$ | $\frac{\circ}{-}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{j}} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{\circ}{+} \end{aligned}$ | $\begin{aligned} & \text { oㅇ } \\ & \text { Ni } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ○ } \end{aligned}$ | $\begin{aligned} & \circ 0 \\ & \text { ○ } \\ & \infty \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { م̀ } \\ & \text { O} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{o}} \\ & \stackrel{j}{\mathrm{j}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { ®}}{ } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\underset{~}{~}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\sim}{N} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\infty} \\ & \stackrel{0}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{ }{\circ}} \\ & \stackrel{\circ}{2} \end{aligned}$ |  | $\begin{aligned} & \text { ô } \\ & \text { © } \\ & \hline 1 \end{aligned}$ | $$ |  |  | $\begin{aligned} & \circ \\ & \stackrel{\circ}{n} \\ & \stackrel{\rightharpoonup}{c} \\ & \underset{\sim}{2} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\dot{\sigma}} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{寸} \\ & \stackrel{y}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{1}{\infty} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \text { ó } \\ & \text { Jjo } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\begin{array}{lc} \circ & \stackrel{\circ}{\circ} \\ \dot{\circ} \\ \stackrel{\infty}{\infty} \\ \hline \end{array}$ |
|  |  | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \underset{F}{1} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{0}{\circ} \\ & \stackrel{9}{\circ} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\rightharpoonup}{\mathrm{j}}}$ |  | $\begin{aligned} & \text { O} \\ & \text { ํ } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{o}} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \text { ò } \\ & \stackrel{\circ}{\mathrm{N}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{1}{\circ} \\ & \dot{\sim} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{+}{\square} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\infty} \\ & \infty \\ & \infty \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \underset{~}{+} \end{aligned}$ |  | $\begin{aligned} & \circ \circ \\ & \text { ¢ } \\ & \underset{\sim}{4} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{\rightharpoonup}{\mathrm{~N}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \underset{\sim}{+} \end{aligned}$ | $\begin{aligned} & \text { ơ } \\ & \stackrel{\rightharpoonup}{\circ} \\ & \hline \end{aligned}$ | $\underset{\substack{\text { on }}}{\text { on }}$ | － |  | ¢ $\stackrel{\text { ¢ }}{ }$ $\stackrel{1}{2}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{j}}}$ |  | $\begin{aligned} & \text { oे } \\ & \text { O} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\sim}{\mathrm{m}} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \underset{\ddagger}{\circ} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \infty \end{aligned}$ | $\stackrel{\circ}{\text { ¢ }}$ |  | － | $\frac{\circ}{\circ}$ | $\begin{aligned} & \text { oㅇ } \\ & \text { 우 } \end{aligned}$ | $\stackrel{\text { ® }}{\substack{\text { ¢ } \\ \text {－}}}$ |
|  | ue！s＊${ }^{19} \mathbf{d}$ | $\begin{aligned} & \circ \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | $\stackrel{\circ}{\stackrel{-}{e}}$ | $\begin{aligned} & \circ \\ & \circ \\ & \infty \\ & \infty \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\circ}{i}} \\ & \stackrel{y}{c} \end{aligned}$ | $\begin{aligned} & \circ \\ & \text { ò } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \text { ó } \\ & \infty \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \infty \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \text { ô } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { O. } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{N}}}$ | $\frac{\circ}{\stackrel{\circ}{\top}}$ | $\begin{aligned} & \text { oे } \\ & \text { ò } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\stackrel{\text { ®® }}{\text { ¢ }}$ | － | $\stackrel{\text { ® }}{\text { N }}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{y}{\mathrm{~N}} \end{aligned}$ | $\stackrel{\text { ®® }}{\stackrel{\text { ® }}{+}}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{N}}}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{M}} \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{~}{~}} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{~}}$ | $\stackrel{\circ}{\stackrel{\circ}{~}}$ | －${ }_{\text {¢ }}$ |  | － | $\stackrel{\text { ¢ }}{\text { ¢ }}$ | ¢ | \％ |
|  | słuәpnis ןセł이 | ○ | $\stackrel{\infty}{\infty}$ | $\stackrel{\text { ® }}{\stackrel{\circ}{*}}$ | $\frac{M}{\tau}$ | $\stackrel{N}{7}$ | $\underset{\text { M }}{ }$ | ¢ | $\stackrel{\circ}{\mathrm{f}}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\infty}{\sim}$ | $\stackrel{\otimes}{\circ}$ | $\stackrel{\infty}{\triangleleft}$ | Bo | $\frac{\circ}{5}$ | กั |  | مٌمٌ | $\underset{\sim}{\text { No }}$ | $\frac{m}{6}$ | $\frac{m}{6}$ | $$ | $0$ | مٌ | مٌ | © | N | N | N | $\stackrel{\square}{\text { L }}$ | ＊ | H | \％ | 䢛 |
|  | рәллеs səpeגפ | ${ }_{0}^{\infty}$ | $\stackrel{\infty}{\circ}$ | $\underset{\omega}{\overleftarrow{\sigma}}$ | じ | L゙ |  |  | Ǹ N | Ǹ | लٌ |  |  | $\begin{aligned} & \text { COS } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & \text { LCO } \\ & \text { CO } \end{aligned}$ |  |  |  |  | $\underset{\sim}{\tilde{N}}$ | N |  | ๗̧ | $\begin{aligned} & \text { CO } \\ & \text { in } \end{aligned}$ | $\stackrel{\stackrel{+}{2}}{\stackrel{2}{2}}$ | $\stackrel{\bullet 8}{\underline{2}}$ | $\underset{\sim}{\circ}$ | $\infty_{0}^{\infty}$ | $\stackrel{\stackrel{+}{2}}{\underline{2}}$ | $\begin{aligned} & \text { CO } \\ & \text { © } \end{aligned}$ |  |  | $\stackrel{\stackrel{1}{*}}{\square}$ | $\stackrel{6}{\square}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ^ıełиәшә旧 spoom иодеәчм |  |  | Woodlin Elementary |  |  |  |  |  | Piney Branch Elementary |  |  |  | 2  <br>   <br>   |  |  |  |  |  |  | $\begin{array}{ll} \text { Z } \\ \hline ⿹ \zh26 灬 \end{array}$ |



| ㄲ | әuoz भा＇M u！słuәpnis ${ }^{7} 9 \mathrm{~d}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\sim}{\circ} \end{aligned}$ | $\stackrel{\text { Nे }}{\substack{0}}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{0}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{array}{ll} \circ 0 \\ 0 & 0 \\ \dot{N} & \stackrel{0}{m} \end{array}$ | $\stackrel{\circ}{\circ}$ |  | $\begin{aligned} & \circ \\ & \hline- \end{aligned}$ | $\stackrel{\text { ® }}{\substack{~}}$ | $\begin{aligned} & \circ \circ \\ & \text { @ } \\ & \text { ó } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{\text { ®}}{ } \end{aligned}$ | $\stackrel{\nwarrow}{\Sigma}$ | $\frac{\circ}{\infty}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \text { Ne } \\ & \text { è } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \text { é } \end{aligned}$ |  |  | $\begin{aligned} & \circ 0 \\ & \stackrel{0}{\rightleftharpoons} \\ & \stackrel{0}{2} \end{aligned}$ | $\stackrel{\text { - }}{\stackrel{\circ}{\mathrm{m}}}$ | $\begin{aligned} & \circ \\ & \text { O. } \\ & \text { © } \end{aligned}$ | ®০ | $\begin{aligned} & \stackrel{\circ}{\mathrm{\gamma}} \\ & \stackrel{1}{2} \end{aligned}$ | $\stackrel{\pi}{2}$ | $\stackrel{\circ}{\stackrel{-}{N}}$ | $\stackrel{\text { ¢ }}{\text { ¢ }}$ | $\stackrel{\text { ®๐ }}{\stackrel{\text { ®® }}{ }}$ | $\stackrel{\text { ®े }}{\stackrel{\text { ® }}{+}}$ | $\begin{aligned} & \text { oे } \\ & \dot{-} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{0}{6} \\ & \stackrel{N}{2} \end{aligned}$ |  | $$ | ○ㅇ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 言 |  | $\underset{\sim}{\square}$ | $\stackrel{+}{\text { i }}$ | $9$ | $\stackrel{\cdots}{=}$ | $\overline{\mathrm{N}}$ | $\stackrel{\bigcirc}{0}$ |  | $\stackrel{y}{\mathrm{~N}}$ | $\stackrel{ }{-}$ | $\stackrel{\circ}{\mathrm{N}}$ | $\stackrel{m}{\mathrm{~N}}$ | $\underset{\sim}{N}$ | $\stackrel{\bigcirc}{+}$ | $\stackrel{\bullet}{\circ}$ | $\stackrel{0}{\circ}$ | $\hat{o}$ | $\hat{j}$ | $\stackrel{9}{0}$ | $\stackrel{\text { }}{+}$ | $\hat{O}$ | $\stackrel{\text { }}{+}$ | $\stackrel{ }{\gtrless}$ | $\stackrel{\bigcirc}{\circ}$ | へ | $\stackrel{\rightharpoonup}{\ulcorner }$ | $\stackrel{\square}{-}$ | $\stackrel{+}{-}$ | $\stackrel{\bullet}{\circ}$ | $0$ | §． | $\stackrel{O}{\mathrm{~N}}$ | ${ }_{0}^{\infty}$ |
|  | $\begin{gathered} \text { j0049S Ol } \\ \text { is!d } 6 \wedge \forall \end{gathered}$ | $\stackrel{\Gamma}{\square}$ | $\overline{\mathrm{m}}$ | $0$ | $\stackrel{M}{\leftarrow} \underset{\sim}{\underset{\sim}{2}}$ | $\stackrel{\circ}{\mathrm{M}}$ | $\digamma$ | $\stackrel{O}{\mathrm{i}}^{\prime}$ | $\stackrel{\sim}{\forall}$ | $\stackrel{\circ}{\mathrm{N}}$ | $\stackrel{\varrho}{\infty}$ | $\stackrel{\sigma}{\dot{\gamma}}$ | $\stackrel{\mathrm{m}}{\mathrm{~N}}$ | $\stackrel{\uparrow}{\rightleftharpoons}$ | $\hat{o}$ | $0$ | $\stackrel{\infty}{0}_{\infty}$ | oo | $\stackrel{\odot}{\square}$ | 入 | $\stackrel{\infty}{0}_{0}$ | $\stackrel{\sim}{\square}$ | $\stackrel{m}{\mathrm{~N}}$ | $\stackrel{\sim}{\circ}$ | $\stackrel{\rightharpoonup}{\mathrm{i}}$ | $\digamma$ | $\mathrm{O}_{\mathrm{i}}$ | $\stackrel{\sim}{\mathrm{N}}$ | $\stackrel{\bullet}{0}$ | $\stackrel{\circ}{\mathrm{N}}$ | $\stackrel{\text { No}}{ }$ | $\stackrel{\sim}{\mathrm{N}}$ | $\stackrel{+}{-}$ |
| $\frac{2}{2}$ | 7sarean $\varepsilon$ ot Кఛ！ие！！u！̣s！a иоээә－о！эos | $\begin{aligned} & \mathrm{o} \\ & \stackrel{\ominus}{\mathrm{o}} \\ & \stackrel{1}{\mathrm{~N}} \end{aligned}$ | $\begin{array}{ll} 0 & 0 \\ \infty & \vdots \\ 0 & \vdots \\ 0 & j \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{~}{\mp} \end{aligned}$ |  | $\begin{aligned} & \text { ò } \\ & \text { ¿̀ } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\text { N }}{\mathrm{N}}}$ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\stackrel{\stackrel{\circ}{\circ}}{\stackrel{1}{\infty}}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{*}} \\ & \dot{\sim} \end{aligned}$ | $\stackrel{\circ}{\infty}$ | $\stackrel{\circ}{\stackrel{\circ}{\succ}}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{+}{\circ} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\oplus}{6} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\overleftarrow{\circ}} \\ & \stackrel{y}{2} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\stackrel{\circ}{\circ}$ | no | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\mp} \end{aligned}$ | $\frac{\text { ol }}{\stackrel{-}{j}}$ | $\begin{gathered} \text { Ǹ } \\ \text { Ǹ } \end{gathered}$ | $\underset{\text { cু }}{\stackrel{\rightharpoonup}{\mathrm{c}}}$ | $\begin{aligned} & \circ \\ & \stackrel{0}{\infty} \\ & \infty \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\mathrm{N}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{1}{2} \end{aligned}$ | $\stackrel{\circ}{\odot}$ | $\begin{aligned} & \circ \circ \\ & \infty \\ & \underset{\sim}{j} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\ominus}}$ | $\begin{aligned} & \text { ô } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\text { N}} \\ & \stackrel{\sim}{N} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{\rightharpoonup}{\mathrm{N}} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\circ}{\circ} \\ & \hline \end{aligned}$ | $\stackrel{\text { ®® }}{\stackrel{1}{3}}$ |
| $\frac{3}{0}$ |  <br> Ки！ие！！u！ss！a <br> ןepry | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{\infty}{=} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{y}{\sim} \\ & \hline \end{aligned}$ | $\frac{\circ}{\sigma}$ | $\begin{array}{ll} \circ \circ & \circ \\ \circ & \circ \\ \infty & \circ \\ \hline \end{array}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \dot{\text { ® }} \end{aligned}$ | $\begin{gathered} \stackrel{\circ}{\mathrm{N}} \\ \underset{\sim}{\mathrm{~N}} \end{gathered}$ | $\stackrel{\circ}{\infty}$ | $\begin{aligned} & \circ \circ \\ & \text { ̀․ } \\ & \text { N. } \end{aligned}$ | $\begin{aligned} & \text { ®े } \\ & \stackrel{\text { ®冂e}}{ } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\oplus}}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{0}{\mathrm{~N}} \end{aligned}$ |  | $\stackrel{\circ}{\underset{~}{~}}$ | $\begin{aligned} & \circ 0 \\ & \infty \\ & \dot{\sim} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{+}} \underset{\underset{~}{\prime}}{ } \end{aligned}$ |  | $\begin{aligned} & \circ 0 \\ & \infty \\ & \infty \\ & \end{aligned}$ |  | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \circ \\ & \text { O. } \\ & \text { م̀ } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & \circ- \\ & \infty \\ & \infty \\ & \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\mathrm{O}} \\ & \stackrel{y}{\mathrm{G}} \end{aligned}$ | $\begin{aligned} & \text { O̊ } \\ & \text { م̀ } \end{aligned}$ | $\begin{aligned} & \text { ò } \\ & \stackrel{0}{\oplus} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \underset{\mathrm{j}}{ } \end{aligned}$ | $\begin{aligned} & \circ \\ & \infty \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{+}} \end{aligned}$ | $\begin{aligned} & \text { O- } \\ & \text { Ò } \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \infty \\ & \stackrel{0}{\circ} \end{aligned}$ | $\stackrel{\text { ®̀ }}{\text { N }}$ |
|  | әұеу <br> uо！¥ez！！！！ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{0}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  |  | $\begin{array}{ll} \circ & \circ \\ \uparrow & 0 \\ \dot{+} & \text { ®i } \end{array}$ |  | $\begin{aligned} & \text { N } \\ & \underset{\sim}{n} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\div} \end{aligned}$ |  |  | ò | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{-} \end{aligned}$ | ஃ̊ | $\begin{aligned} & \text { oे } \\ & \underset{\sim}{+} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\rightharpoonup}{6} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\infty} \\ & \stackrel{\infty}{\circ} \end{aligned}$ | $\begin{aligned} & \circ \\ & \hline 0 \\ & \text { ó } \\ & \stackrel{0}{\circ} \end{aligned}$ | $\begin{aligned} & \text { Oo } \\ & \hline 0.0 \\ & \hline 1 \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\rightharpoonup}{\mathrm{N}} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{6}{6} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{1}{\mathrm{~N}} \\ & \stackrel{y}{2} \end{aligned}$ | ঃ৭ | $\stackrel{\text { ®읃 }}{\stackrel{\circ}{\leftarrow}}$ |  | $\begin{aligned} & \text { ஃे } \\ & \infty \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{i} \\ & \stackrel{\circ}{8} \end{aligned}$ | $$ | $\stackrel{\stackrel{\circ}{\stackrel{0}{+}}}{\stackrel{\rightharpoonup}{\infty}}$ | $\begin{aligned} & \stackrel{\text { O}}{\stackrel{1}{+}} \\ & \stackrel{\text { In }}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\text { ®o }}{\stackrel{1}{+}} \\ & \stackrel{\text { N }}{ } \end{aligned}$ | $\stackrel{\stackrel{\circ}{\infty}}{\underset{\infty}{\infty}}$ | $\stackrel{\circ}{\infty}$ | Ơ O． N |
| $\pm$ | 人ұৃэедеэ ｜0049S | $\underset{\sim}{\underset{\sim}{N}}$ | $\underset{\sim}{\infty}$ | 万 | $\stackrel{\circ}{6} \text { 夺 }$ |  | $\stackrel{\llcorner }{\Gamma}$ | $\underset{\infty}{\underset{\infty}{J}}$ | $\stackrel{\bullet}{\circ}$ | \% | $\stackrel{\stackrel{N}{N}}{N}$ | $\stackrel{\Im}{\star}$ | 웅 | $\underset{\sim}{\mathcal{N}}$ | স্লু | $\stackrel{\ominus}{\odot}$ | $\stackrel{\circ}{\circ}$ | $\bigcirc$ | － | $\stackrel{\circ}{6}$ | © | $\stackrel{\text { ¢ }}{+}$ | $\begin{aligned} & \infty \\ & \underset{N}{\infty} \end{aligned}$ | $\stackrel{\circ}{\sim}$ | $\begin{aligned} & \infty \\ & \hline+ \\ & \hline \end{aligned}$ | ద్ల | $\stackrel{\circ}{\mathrm{O}}$ | $\frac{\varrho}{5}$ | $\stackrel{\llcorner }{\odot}$ | ${ }_{\mathrm{H}}^{\mathrm{N}}$ | $\underset{\sim}{\square}$ | $\stackrel{\stackrel{\circ}{\circ}}{\circ}$ | \％ |
|  |  |  |  |  | $$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\stackrel{\text { ৯o }}{\stackrel{-\infty}{\sim}}$ | $\begin{aligned} & \text { ®. } \\ & \text { ले } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & \text { ه⿵ } \\ & \stackrel{0}{\circ} \\ & \text { ¢ } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\aleph} \\ & \stackrel{\text { N}}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\text { No }}{1} \\ & \stackrel{1}{5} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\dot{-}} \\ & \stackrel{1}{-} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { è } \\ & \text { è } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{1}{0} \end{aligned}$ | $\begin{aligned} & \text { O̊ } \\ & \stackrel{+}{\mathrm{j}} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \text { M } \end{aligned}$ | $\stackrel{\text { ®}}{\underset{\sim}{\wedge}}$ | $\underset{\sim}{\text { No }}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{o}} \\ & \stackrel{\rightharpoonup}{\mathrm{~N}} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{\text { N }}{2} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\infty} \\ & \stackrel{1}{\mathrm{~N}} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\rightharpoonup}{\mathrm{M}} \\ & \text { ò } \end{aligned}$ | $\stackrel{\circ}{\infty}$ | $\begin{aligned} & \circ \\ & \text { o } \\ & \text { o } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{+}} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{0}{0} \\ & \underset{\sim}{n} \end{aligned}$ | $\begin{aligned} & \text { O. } \\ & \text { Ǹ } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{ }{N}} \end{aligned}$ | $\stackrel{\stackrel{\circ}{\mathrm{N}}}{\stackrel{-}{2}}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{\rightharpoonup}{\mathrm{~m}} \end{aligned}$ | ＋o |
|  | $7053{ }^{190}$ | $\begin{aligned} & \circ \stackrel{\circ}{0} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{\rightharpoonup}{C} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\infty} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{y}{\circ} \end{aligned}$ |  | $\begin{aligned} & \text { هे } \\ & \text { © } \\ & \text { Ñ } \end{aligned}$ | $\begin{aligned} & \text { ஃे } \\ & \stackrel{\circ}{\mathrm{C}} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{0} \\ & \stackrel{y}{2} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\infty}}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{ }{\circ}} \\ & \stackrel{\rho}{\circ} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\wedge}}$ | $\begin{aligned} & \stackrel{\circ}{\oplus} \\ & \stackrel{y}{4} \end{aligned}$ | $\stackrel{\text { Ǹ }}{\text { Ǹ }}$ | $\stackrel{\stackrel{\circ}{\mathrm{O}}}{\underset{\sim}{2}}$ | $\begin{aligned} & \stackrel{\circ}{\dagger} \\ & \underset{~}{2} \end{aligned}$ | $\begin{aligned} & \text { ®े } \\ & \text { ले } \\ & \text { ®े } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\Gamma} \\ & \stackrel{\circ}{\tau} \end{aligned}$ | ơ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\stackrel{\text { ®}}{\stackrel{\text { N}}{N}}$ | $\begin{aligned} & \stackrel{\circ}{\underset{~}{~}} \end{aligned}$ | $\stackrel{\stackrel{\circ}{\mathrm{\sim}}}{\stackrel{-1}{2}}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{N}}}$ | $\begin{aligned} & \text { oै } \\ & \text { மे } \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\infty} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{6} \\ & \stackrel{0}{2} \end{aligned}$ | $\begin{aligned} & \text { ơ } \\ & \text { مٌ } \end{aligned}$ | $\begin{aligned} & \text { ò } \\ & \text { N் } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\uparrow} \\ & \stackrel{\circ}{\tau} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{0}{0}} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\stackrel{\text { ®을 }}{\stackrel{1}{4}}$ | $\begin{aligned} & \stackrel{\circ}{N} \\ & \stackrel{0}{\circ} \end{aligned}$ | $\stackrel{\circ}{\infty}$ |
|  |  | $\begin{aligned} & \stackrel{\circ}{\aleph} \\ & \stackrel{\ddots}{\mathrm{O}} \end{aligned}$ | $\begin{array}{ll} \circ & \\ \infty \\ \infty \\ \infty \\ \sim \end{array}$ | $\begin{aligned} & \circ \\ & \text { ò } \\ & \stackrel{1}{\mathrm{~L}} \end{aligned}$ | $\begin{gathered} \circ \\ \stackrel{\circ}{\infty} \\ \underset{\infty}{\circ} \\ \hline 0 \\ \hline \end{gathered}$ | $\stackrel{\stackrel{\rightharpoonup}{\infty}}{\stackrel{\infty}{\infty}}$ | $\begin{aligned} & \circ \circ \\ & \text { ó } \\ & \text { jo } \end{aligned}$ | $\begin{aligned} & \text { ò } \\ & \text { Ǹ } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { مٌo } \\ & \text { 80 } \end{aligned}$ | $\begin{gathered} \stackrel{\circ}{\mathrm{N}} \\ \underset{\sim}{2} \end{gathered}$ | $\begin{aligned} & \text { O} \\ & \text { ¿̀ } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & \stackrel{0}{\mathrm{o}} \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{4} \\ & \dot{\delta} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \underset{\leftarrow}{2} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \underset{\sim}{\overleftarrow{\circ}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{N}{\mathrm{~N}} \end{aligned}$ | $\begin{aligned} & \circ \\ & \circ \\ & \infty \\ & \infty \\ & \hline \end{aligned}$ | £o | $\begin{aligned} & \stackrel{\circ}{\stackrel{0}{\sim}} \\ & \underset{\sim}{0} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\leftarrow}}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\text { N}} \\ & \stackrel{\sim}{\mathrm{m}} \end{aligned}$ | $\frac{\stackrel{-}{\mathrm{\sigma}}}{\stackrel{\rightharpoonup}{\tau}}$ | $\begin{aligned} & \circ \stackrel{\circ}{+} \\ & \text { N் } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\overleftarrow{~}} \\ & \stackrel{\circ}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { ®j }}{ } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{I}} \\ & \underset{~}{2} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\mathrm{N}} \\ & \mathrm{M} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{M}} \\ & \underset{寸}{ } \end{aligned}$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{N}}}{\stackrel{y}{*}}$ |  | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{y}{4} \end{aligned}$ | $\stackrel{\text { ¢ }}{\stackrel{\text { ¢ }}{+}}$ |
|  | SWY甘 <br> ${ }^{7} \mathrm{D}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\mathrm{O}} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\begin{array}{lll} \circ & \circ \\ \stackrel{\circ}{2} \\ & 0 \\ \end{array}$ | $\begin{aligned} & \circ \\ & \stackrel{+}{\dot{\circ}} \end{aligned}$ | $\begin{aligned} & \text { O〇 } \\ & \text { O. } \\ & \text { © } \end{aligned}$ | $\frac{\circ}{\circ}$ | $\begin{aligned} & \circ 0 \\ & \stackrel{0}{\circ} \\ & \infty \\ & \underset{\sim}{0} \end{aligned}$ | $\begin{aligned} & \text { Oे } \\ & \text { ó } \end{aligned}$ | $\begin{aligned} & \text { ô } \\ & \text { ô } \\ & \text { ণ } \end{aligned}$ |  | $\begin{aligned} & \text { oे } \\ & \text { ल్ల } \end{aligned}$ | $\begin{aligned} & \circ \\ & \infty \\ & \text { í } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ట్ర } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \stackrel{0}{\circ} \\ & \stackrel{\rightharpoonup}{6} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{\text { ®-j}}{2} \end{aligned}$ |  | $\begin{aligned} & \text { oे } \\ & \text {-̀ } \end{aligned}$ | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \text { O̊ } \\ & \text { ̇́ } \end{aligned}$ | $\begin{aligned} & \text { ®̀ } \\ & \text { N゙․ } \end{aligned}$ | $\begin{aligned} & \text { ơ } \\ & \text { Ǹ } \end{aligned}$ | $\frac{\circ}{\stackrel{\circ}{\circ}}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{1}{+} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\underset{~}{~}} \\ & \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\sim}{\mathrm{N}} \\ & \hline \end{aligned}$ | $\begin{aligned} & \circ \text { oे } \\ & \text { oे } \\ & \text { è } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ¢్ల } \end{aligned}$ | $\frac{\stackrel{\circ}{\mathrm{j}}}{\frac{-}{2}}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{\rightharpoonup}{\mathrm{~N}} \end{aligned}$ | $\stackrel{\text { ®๐ }}{\stackrel{\text { ® }}{\infty}}$ |
|  | ข！！ЧМ ${ }^{17} \mathrm{~d}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\rightharpoonup}{=} \end{aligned}$ |  | $\stackrel{\text { ®̀ }}{\underset{\sim}{N}}$ | $\begin{array}{ll} \circ \circ & \circ \\ \stackrel{\circ}{\circ} & 0 \\ \text { ci } \end{array}$ |  | $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \text { oे } \\ & \text { ì } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ம⿵ } \end{aligned}$ | $\stackrel{\text { ®}}{\stackrel{\circ}{\mathrm{N}}}$ | $\begin{aligned} & \stackrel{\circ}{\aleph} \\ & \text { çi } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{o}} \\ & \stackrel{\text { ® }}{2} \end{aligned}$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{N}}}{\underset{\sim}{2}}$ | $\begin{aligned} & \circ \\ & \infty \\ & \stackrel{0}{\circ} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\text { ® }}{2} \end{aligned}$ | $\begin{gathered} \text { ペ } \\ \text { © } \end{gathered}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{+} \\ & \stackrel{y}{2} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { ô } \\ & \text { N் } \end{aligned}$ | $\frac{\circ}{\circ}$ | $\stackrel{\text { ®}}{\stackrel{\sim}{j}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \text { ஸ̀ } \\ & \text { Ǹ } \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\begin{gathered} \stackrel{\circ}{+} \\ \stackrel{\circ}{\circ} \end{gathered}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \text { ©் } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { N }}{2} \end{aligned}$ |  | $\begin{aligned} & \text { oे } \\ & \stackrel{0}{\infty} \\ & \underset{\sim}{0} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\sim}{\mathrm{N}} \\ & \text { ले } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\infty}}$ | $\stackrel{\text { No }}{\underset{N}{n}}$ | $\stackrel{\circ}{\circ}$ |
|  |  | $\stackrel{\circ}{\circ} \stackrel{0}{\circ}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{-}{+} \end{aligned}$ | $\stackrel{\stackrel{\circ}{\mathrm{o}}}{\stackrel{-}{c}}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\mathrm{j}} \end{aligned}$ | ○○ | $\begin{aligned} & \text { oे } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ભे } \end{aligned}$ | $\stackrel{\therefore \circ}{\stackrel{\circ}{\grave{N}}}$ | $\begin{aligned} & \circ \\ & \text { ò } \\ & \hline+ \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{+}{2} \end{aligned}$ | $\stackrel{\stackrel{\circ}{\circ}}{\substack{2}}$ | $\begin{aligned} & \circ \circ \\ & \text { of } \end{aligned}$ | $\stackrel{\circ}{\infty}$ | ○゚ | $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \circ \\ & \text { ó } \\ & \text { م̀ } \end{aligned}$ | $\stackrel{\text { ® }}{-}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { م̀ } \end{aligned}$ | $\stackrel{\circ}{-}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { か〇 } \\ & \text { مٌ } \end{aligned}$ |  | $\stackrel{\circ}{\text { Nָ }}$ | $\stackrel{\stackrel{-}{\circ}}{\stackrel{-}{\circ}}$ | $\stackrel{\circ}{\stackrel{\circ}{\succ}}$ |  | $\stackrel{\circ}{\stackrel{\circ}{\odot}}$ | $\stackrel{\text { ®o }}{\text { ¢ }}$ |
|  | ग！ueds！ ${ }^{7}{ }^{2} \mathrm{~d}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \underset{\sim}{+} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\mathrm{O}} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ò } \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{+}{\dot{\infty}} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { ò } \\ & \text { Nì } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\infty} \\ & \stackrel{+}{\dot{\sigma}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \dot{\tau} \end{aligned}$ | $\frac{\circ}{\stackrel{\circ}{N}}$ | $\begin{aligned} & \text { ò } \\ & \text { N} \\ & \text { Ni } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{~}{\sim} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { م } \\ & \text { م̀ } \end{aligned}$ |  | $\begin{aligned} & \text { oे } \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \text { ®̀ } \\ & \stackrel{1}{+} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\sim} \end{aligned}$ | $\stackrel{\text { ¢ }}{\stackrel{\text { ® }}{\text { ¢ }}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{1}{\mathrm{~N}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{*}} \\ & \stackrel{y}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\mathrm{N}}{\mathrm{~N}} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \text { ஹ̀ } \\ & \hline \end{aligned}$ | $\stackrel{\circ}{\mathrm{N}}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \stackrel{\mathrm{j}}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\sim}{\mathrm{m}} \end{aligned}$ | $\begin{aligned} & \text { oै } \\ & \stackrel{\rightharpoonup}{\dot{N}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{O}} \\ & \stackrel{\circ}{\mathrm{o}} \end{aligned}$ | $\frac{\stackrel{\circ}{-}}{\stackrel{1}{\dot{m}}}$ |  |
|  |  | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\varphi} \\ & \text { ¢ } \end{aligned}$ |  | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \odot \end{aligned}$ | $\begin{array}{lll} \circ \circ & \circ \\ \stackrel{0}{0} & 0 \\ \circ & 0 \\ \hline 1 & \circ \end{array}$ | $\begin{aligned} & \text { oे } \\ & \text { ì } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\subsetneq}}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\text { ol }}{\stackrel{y}{\circ}} \end{aligned}$ | $\begin{aligned} & \text { ô } \\ & \stackrel{\circ}{\mathrm{O}} \end{aligned}$ | $\stackrel{\text { ® }}{\stackrel{-}{\pi}}$ | $\begin{aligned} & \circ 0 \\ & \infty \\ & \text { of } \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \hline 8 \end{aligned}$ | $\begin{aligned} & \text { ô } \\ & \text { மे } \end{aligned}$ | $\frac{\text { ol }}{\stackrel{\circ}{\mathrm{m}}}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{O}} \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \circ \\ & \text { ó } \\ & \text { M } \end{aligned}$ |  | $\begin{aligned} & \circ \circ \\ & \text { O. } \\ & \text { O. } \end{aligned}$ | $\stackrel{\circ}{\underset{\sim}{2}}$ | $\begin{aligned} & \circ 0 \\ & \text { ó } \\ & \text { © } \end{aligned}$ |  | $\stackrel{\stackrel{\circ}{\mathrm{M}}}{\stackrel{1}{\sim}}$ | $\begin{aligned} & \circ \\ & \text { ò } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\stackrel{\circ}{\circ}} \stackrel{1}{6} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \infty \\ & \stackrel{0}{\circ} \end{aligned}$ | $\frac{\circ}{\sigma}$ | $\stackrel{\circ}{\stackrel{\circ}{\star}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \infty \\ & \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{y}{*} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\stackrel{\text { ® }}{\text { ¢ }}$ |
|  | ue！s＊${ }^{19} \mathbf{d}$ |  | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\begin{aligned} & \circ \\ & 0 \\ & \infty \\ & \infty \end{aligned}$ |  | $\begin{aligned} & \text { oे } \\ & \text { ó } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{i}}}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{o}} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \circ \\ & \text { ò } \\ & \text { ○ } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { oे } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{\rightharpoonup}{\mathrm{N}} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{1}{\mathrm{~N}} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\risingdotseq} \\ & \stackrel{0}{\rightleftharpoons} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{1} \end{aligned}$ | $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{O}} \\ & \underset{\sim}{n} \end{aligned}$ |  | $\stackrel{\text { ले }}{\text { ¢ }}$ |  | $\begin{gathered} \stackrel{\circ}{\mathrm{o}} \\ \stackrel{\infty}{\sim} \end{gathered}$ | $\stackrel{\text { ® }}{\text { N }}$ |  | $\begin{aligned} & \circ \\ & \stackrel{0}{\infty} \\ & \text { in } \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\stackrel{\text { Ñ }}{ }$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \underset{\sim}{\mathrm{~N}} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{~}}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\dot{J}} \end{aligned}$ | $\stackrel{\bigcirc}{\stackrel{\text { ® }}{+}}$ | $\stackrel{\text { ® }}{\stackrel{\text { d }}{\text {－}}}$ |  | $\stackrel{\text { ®o }}{\stackrel{\circ}{\infty}}$ |
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|  | рәліеs sәредפ | $\begin{array}{\|l\|l} \stackrel{L}{\mathrm{~S}} \\ \mathbf{S} \end{array}$ | $$ | $\begin{aligned} & \text { セֻ } \\ & \text { فُ } \end{aligned}$ |  | $\stackrel{\infty}{0}$ | $\begin{aligned} & \text { L? } \\ & \text { C) } \end{aligned}$ | $\stackrel{\infty}{6}$ | $\infty$ | ${ }_{\circ}^{\infty}$ | $\frac{N}{\sigma}$ | $\stackrel{N}{\omega}$ | $\stackrel{N}{\sigma}$ | $\stackrel{\llcorner }{\dot{L}}$ | $\stackrel{\bullet}{\mathrm{L}}$ |  | $\stackrel{\text { ¢ }}{1}$ | － | $\stackrel{\square}{\square}$ | $\stackrel{\square}{\square}$ | $\begin{aligned} & \text { Cis } \\ & \text { in } \end{aligned}$ | $\stackrel{\infty}{\circ}$ | $\underset{\omega}{N}$ | $\stackrel{\text { 号 }}{\underline{2}}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\stackrel{\bullet}{2}}{\underline{2}}$ | $\underset{\omega}{N}$ | $\stackrel{\stackrel{L}{\circ}}{\underline{2}}$ | $\begin{aligned} & \text { CO } \\ & \text { CO } \\ & \hline \end{aligned}$ | $\stackrel{+}{\square}$ | $\begin{aligned} & \text { COS } \\ & \text { CO } \end{aligned}$ | $\stackrel{\infty}{\infty}$ | ＋0¢ |
|  |  |  |  | Greencastle Elementary |  | $\begin{aligned} & \frac{0}{0} \\ & \sum_{0}^{0} \\ & \frac{v}{0} \\ & 0 \\ & 0 \\ & \vdots \\ & \vdots \end{aligned}$ |  | əાpp！w дə૪әuueg u！ue！uәg |  |  |  |  |  | 人ıełuәшәઇ uм0łsəuıe」 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | mn！ |  | 03 | ¢əり | YıON |  |  |  |  |  |  |  | OlS | n |  | Ч1 | 10 N |  |  |  |  | ә૦人 |  |  |  | $0$ |  | u！n |  |


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| 믄 |  | $\stackrel{ }{-}$ | $\stackrel{\square}{\square}$ | $\hat{0}^{\circ}{ }^{\circ}$ | $\begin{aligned} & 0 \\ & \hline \end{aligned}$ | $\begin{array}{ll} \infty \\ 0 & \circ \\ \end{array}$ | $\stackrel{\bullet}{\rightleftharpoons}$ | $\stackrel{\bullet}{\circ}$ | $\digamma$ | $\begin{array}{ll} \circ \\ 0 & 0 \\ \hline \end{array}$ | $\stackrel{+}{\stackrel{+}{+}}$ | $\stackrel{ }{-}$ | $\stackrel{\square}{\circ}$ | ${ }_{0}^{\infty}$ | oi | $\hat{0}$ | $\stackrel{\stackrel{~}{~}}{\rightleftharpoons}$ | $\stackrel{\square}{+}$ | $\stackrel{\sim}{+}$ | $\stackrel{\stackrel{~}{\leftarrow}}{\stackrel{-}{+}}$ | $\stackrel{\bigcirc}{\circ} \stackrel{-}{\square}$ | $\stackrel{\ominus}{\stackrel{\circ}{-}}$ | $\stackrel{\square}{+}$ | $\stackrel{+}{\mathrm{j}}$ | へo． | $\stackrel{\square}{0}$ | $\stackrel{\text { }}{\stackrel{-}{+}}$ |
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| ة |  <br> 人！！uе！！u！ss！a <br> ןeprey |  | $\begin{aligned} & \stackrel{0}{0} \\ & \underset{y}{c} \\ & \underset{\sim}{\circ} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{N}} \\ & \underset{\sim}{\mathrm{~N}} \\ & \hline \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\gtrless} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \stackrel{\circ}{\stackrel{1}{~}} \\ & \stackrel{\rightharpoonup}{\sim} \end{aligned}$ |  |  | $\begin{aligned} & \circ \\ & \infty \\ & \circ \\ & \circ \end{aligned}$ |  |  |  | $\frac{\circ 0}{\stackrel{\circ}{\circ}}$ |  |  | $\stackrel{\circ}{N}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{1}{c} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\mathrm{j}} \\ & \stackrel{\sim}{\sim} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \underset{\sim}{\circ} \\ & \hline \end{aligned}$ | $\begin{array}{lll} \circ & \circ \\ \hline & 0 \\ \hline \end{array}$ | $\begin{aligned} & \circ 0 \\ & \infty \\ & \text { ó } \end{aligned}$ | oे |  | $\stackrel{\text { ® }}{\text { ¢ }}$ |  |
| 등 | әұеу uо！ıez！！！ก | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{2}{\circ} \end{aligned}$ |  | $\begin{array}{ll} \circ \circ \\ \stackrel{\circ}{\infty} \\ \underset{\infty}{\infty} & \stackrel{0}{-} \end{array}$ | $\begin{aligned} & \circ 0 \\ & \stackrel{0}{\circ} \\ & \text { תু } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \text { 仓ㅇ } \\ & \text { 仓ㅇ } \end{aligned}$ | $\stackrel{\circ}{\text { な }}$ |  |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\Gamma} \end{aligned}$ | $\begin{aligned} & \circ \stackrel{0}{0} \\ & \dot{\infty} \end{aligned}$ |  | ঃ๐ | $\begin{aligned} & \text { ¿े० } \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\stackrel{\text { ুে }}{\stackrel{\circ}{\infty}}$ | $\begin{array}{lll} \circ & \circ \\ \stackrel{0}{2} & \stackrel{1}{2} \\ \dot{\infty} & \dot{\infty} \end{array}$ |  | oㅇ | $\frac{\circ}{\sigma}$ |  | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\mathrm{N}} \\ & \mathrm{~N} \end{aligned}$ | $\begin{array}{lll} \circ & \circ \\ \infty & \circ \\ \dot{0} & \text { D } \end{array}$ |
| $\pm$ | 人ұээедеэ j0049S | $\stackrel{\stackrel{\mathrm{m}}{5}}{1}$ | $\begin{aligned} & \overline{\text { N}} \\ & \stackrel{\infty}{\infty} \\ & \hline \end{aligned}$ | $\stackrel{\infty}{0} \underset{\sim}{\circ}$ | $\stackrel{\infty}{\ominus}$ | $\underset{\sim}{\mathbb{N}}$ | $\underset{\sim}{\underset{\sim}{\sim}} \underset{\sim}{\underset{\sim}{n}}$ | $\stackrel{\circ}{\circ}$ | $\frac{\varrho}{\tau}$ | $\stackrel{(10}{6} \text { 릉 }$ | $\underset{\infty}{\triangleleft}$ | $\stackrel{\sim}{\circ}^{\circ}$ | $\stackrel{+}{+}$ |  | $\grave{\star}$ | $\stackrel{\ominus}{\stackrel{\circ}{\wedge}}$ |  | $\stackrel{\text { N}}{\stackrel{\circ}{+}}$ | $\underset{\sim}{N}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\infty}{\stackrel{\infty}{\circ}} \stackrel{+}{\circ}$ | $\begin{aligned} & \text { Ne } \\ & \text { in } \\ & \hline \end{aligned}$ | $\bar{\varnothing}$ | $\stackrel{\text { ̇}}{\text { N }}$ |  | $\stackrel{\infty}{+}$ | $\stackrel{\circ}{\circ} \mathrm{O}$ $\stackrel{\circ}{\circ}$ |
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|  | $1053{ }^{10 \mathrm{~d}}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \underset{\leftarrow}{\prime} \end{aligned}$ | $\begin{array}{lc} \text { oे } & \text { ơ } \\ \text { Ǹ } \\ \text { Nob } \end{array}$ | $\begin{array}{lll} \circ \circ & \circ \\ \stackrel{0}{2} \\ \stackrel{0}{0} & \dot{j} \end{array}$ | $\begin{gathered} \text { oे } \\ \stackrel{\circ}{\dot{~}} \end{gathered}$ | $\stackrel{\oplus}{\infty}$ | $\begin{array}{cc} \circ & \stackrel{\circ}{\circ} \\ \stackrel{\circ}{\mathrm{N}} & \stackrel{\rightharpoonup}{2} \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \underset{~}{+} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{O}} \\ & \stackrel{y}{n} \end{aligned}$ |  |  |  | 잇 | $\begin{aligned} & \circ \\ & \stackrel{0}{\circ} \\ & \stackrel{\circ}{2} \end{aligned}$ | $\frac{\stackrel{\circ}{\circ}}{\underset{\sim}{ே}}$ |  | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\mathrm{N}} \end{aligned}$ | $\begin{array}{lc} \circ & \circ \\ \stackrel{\circ}{\sim} & \stackrel{\rightharpoonup}{\circ} \end{array}$ | $\begin{array}{ll} \text { oㅇ } \\ \stackrel{\circ}{\wedge} \\ \infty & \stackrel{+}{\circ} \end{array}$ | $\stackrel{\circ}{\stackrel{\circ}{+}}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { ® }}{ } \end{aligned}$ |  |  |  |
|  |  | $\begin{aligned} & \text { oे } \\ & \text { ผ̂ } \\ & \text { ले } \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\gtrless} \\ & \stackrel{\oplus}{\mp} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{+} \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{array}{ll} \text { oे ơ } \\ \text { iे } \\ \text { è } \end{array}$ |  | $\begin{aligned} & \circ \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { هे } \\ & \text { ¢ } \\ & \text { ¢ } \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { N}}{ } \end{aligned}$ | $\begin{aligned} & \text { M } \\ & \text { ○ٌ } \end{aligned}$ |  | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\infty} \\ & \stackrel{0}{+} \end{aligned}$ | $\stackrel{\text { ®๐ }}{\substack{6}}$ | $\begin{aligned} & \text { ஷ० } \\ & \text { © } \end{aligned}$ | $\frac{\stackrel{\circ}{\oplus}}{\stackrel{\circ}{6}}$ | $\begin{aligned} & \text { oे } \\ & \text { + } \\ & 0 \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\circ} \\ & \stackrel{y}{2} \end{aligned}$ |  | $\begin{array}{ll} \circ & \circ \\ \text { ले } \\ \text { ò } \\ \text { N Ni } \end{array}$ | $\begin{aligned} & \stackrel{\text { ®O }}{\text { N }} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{o}} \\ & \underset{\sim}{\infty} \end{aligned}$ |  | $\stackrel{\circ}{\circ}$ | $\begin{array}{cc} \circ \\ \hline \end{array} \stackrel{\circ}{\square}$ |
|  | SWY甘」 <br> ${ }^{7} \mathrm{D}$ | $\begin{aligned} & \stackrel{\circ}{+} \\ & \stackrel{\rightharpoonup}{\sim} \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{0} \\ & \text { oे } \\ & \dot{\sim} \\ & \text { N } \\ & \hline \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\ominus} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ |  |  | $\begin{aligned} & \text { مి } \\ & \text { مٌ } \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{+} \end{aligned}$ | $\begin{array}{llll} \stackrel{\circ}{\circ} \\ \stackrel{y}{c} \\ \stackrel{\sim}{c} & 0 \\ \hline \end{array}$ | $\stackrel{\circ}{\stackrel{\circ}{\star}}$ | ふ் |  |  | $\frac{\circ}{\circ}$ |  | $\begin{aligned} & \text { oे } \\ & \text { ¢ } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{r} \\ & \stackrel{q}{9} \end{aligned}$ | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{m}}}$ |  | $\begin{array}{ll} \stackrel{\circ}{\circ} & \circ \\ \stackrel{\rightharpoonup}{\tau} & \stackrel{\rightharpoonup}{\circ} \end{array}$ | $\begin{array}{lll} \circ \circ & \circ \\ \stackrel{\circ}{\circ} \\ \stackrel{y}{c} & \stackrel{1}{2} \end{array}$ | $\stackrel{\text { ®}}{\stackrel{\text { ® }}{+}}$ | ¢ٌ $\stackrel{\text { ¢ }}{\text { ¢ }}$ |  | O̊ | $\stackrel{\circ}{\stackrel{\circ}{\star}} \stackrel{\stackrel{-}{+}}{+}$ |
|  |  | $\stackrel{\stackrel{\circ}{\mathrm{j}}}{\stackrel{1}{-}}$ |  | $\begin{array}{ll} \circ \circ & \circ \\ \stackrel{\circ}{\circ} & \circ \\ \circ & \circ \end{array}$ | $\frac{\circ}{\stackrel{\circ}{\mathrm{j}}}$ |  |  |  |  |  | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{+}} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\mathrm{m}} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \text { ○○ } \\ & \stackrel{0}{\circ} \end{aligned}$ |  |  | $\stackrel{\text { ® }}{\text { ¢ }}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{y}{\circ} \end{aligned}$ | $\stackrel{\text { ® }}{\stackrel{\text { a }}{ }}$ | $\begin{aligned} & \circ \\ & \circ \\ & 0 \\ & 0 \end{aligned}$ | $\begin{array}{lll} \circ \circ \\ \stackrel{\circ}{\circ} & \circ \\ \text { ¢ } & \dot{\circ} \end{array}$ |  |  | $\begin{aligned} & \circ \circ \\ & \infty \\ & \infty \\ & \text { ó } \end{aligned}$ |  |  |  |
|  |  | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ | $\begin{array}{cc} \stackrel{\circ}{\circ} & \circ \\ \stackrel{\circ}{\circ} & \circ \end{array}$ | $\begin{array}{ll} \circ \circ & \circ \\ 0 & \circ \\ 0 & ल \end{array}$ | $\begin{array}{lll} 9 & \circ \\ 0 & \circ \\ j & \circ \\ \hline \end{array}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \mathrm{o} \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  | $\stackrel{\text { NO }}{\substack{~+~}}$ | $\begin{aligned} & \circ \\ & \circ \\ & \circ \\ & \hline \end{aligned}$ | $\begin{array}{cc} \stackrel{\circ}{\stackrel{\circ}{\infty}} & \stackrel{\circ}{\circ} \\ \hline \end{array}$ |  | $\stackrel{\text { ¢ }}{\stackrel{1}{+}}$ | ले | － | $\stackrel{\circ}{\circ}$ | $\stackrel{+}{\square}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{o}} \\ & \text { © } \end{aligned}$ | $\stackrel{\circ}{\square}$ | $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | $\begin{aligned} & \text { ơ ơ } \\ & \stackrel{\circ}{\rightleftharpoons} \stackrel{0}{\gtrless} \end{aligned}$ | ¢๐ | $\stackrel{\text {－}}{\stackrel{\circ}{\circ}}$ |  |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{y}{*} \\ & \underset{\sim}{\circ} \\ & \end{aligned}$ |
|  | ग！ueds！H ${ }^{7} \mathbf{D}$ | $\stackrel{\stackrel{\circ}{+}}{\stackrel{+}{\dot{~}}}$ |  | $\begin{array}{ll} \stackrel{\circ}{\circ} \\ \stackrel{\circ}{j} \\ \stackrel{\rightharpoonup}{\mathrm{~N}} & \stackrel{1}{2} \end{array}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\infty} \\ & \infty \end{aligned}$ |  |  | $\begin{aligned} & \text { ঃ⿵冂 } \\ & \stackrel{\rightharpoonup}{\mathrm{m}} \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{0}{\circ} \\ & \stackrel{1}{2} \end{aligned}$ |  | $\begin{aligned} & \text { oे } \\ & \text { ம் } \end{aligned}$ |  | $\underset{e}{\dot{e}}$ |  |  | $\stackrel{\sim}{\mathrm{m}}$ | $\begin{aligned} & \text { oे } \\ & \stackrel{1}{\prime} \\ & \stackrel{\text { ® }}{ } \end{aligned}$ | $\begin{aligned} & \text { oे } \\ & \text { ó } \\ & \text { é } \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{N}} \\ & \stackrel{y}{m} \end{aligned}$ | $\begin{aligned} & \circ \\ & \circ \\ & \circ \\ & \circ \end{aligned}$ | $\begin{array}{ll} \circ \circ \\ \stackrel{\circ}{\circ} \\ \stackrel{y}{\circ} & \underset{~}{~} \end{array}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { ले }}{ } \end{aligned}$ | $\circ$ $\infty$ $\infty$ $\sim$ |  |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |
|  |  | $\begin{aligned} & \stackrel{\circ}{\mathrm{e}} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | $\begin{aligned} & \circ \\ & \infty \\ & \stackrel{\infty}{\circ} \\ & \underset{\sim}{\circ} \\ & \hline \end{aligned}$ |  |  | $\begin{array}{ll} \circ & \circ \\ \infty & \circ \\ \bullet & \infty \\ \bullet & \infty \end{array}$ | $\begin{aligned} & \circ \\ & \stackrel{\circ}{\infty} \\ & \infty \end{aligned}$ |  | $\begin{array}{lll} \circ & \circ \\ \underset{\sim}{c} & \text { ¢ } \\ \text { N } \end{array}$ |  |  | $\begin{aligned} & 0 \\ & \stackrel{e}{e} \end{aligned}$ |  | $\stackrel{\circ}{\stackrel{\circ}{\mathrm{m}}}$ | $\begin{aligned} & \circ \\ & \text { ণ } \end{aligned}$ |  | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \text { è } \\ & \text { è } \end{aligned}$ |  | $\begin{aligned} & \circ \\ & \circ \\ & \circ \\ & \hline \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\circ}{\stackrel{1}{2}} \\ & \stackrel{y}{2} \end{aligned}$ | $\begin{aligned} & \circ \\ & \text { oo } \\ & \stackrel{0}{\circ} \end{aligned}$ | $\begin{aligned} & \circ \circ \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  |  |
|  | uels ${ }^{10}$ Od | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{y}{+} \end{aligned}$ | $\begin{array}{ll} \circ \circ \\ \stackrel{\circ}{\circ} \\ \stackrel{y}{c} \end{array}$ | $\begin{aligned} & \circ \circ \\ & \circ \\ & \stackrel{\circ}{0} \\ & \underset{\sim}{\circ} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{\text { ® }}{+} \end{aligned}$ | $\begin{array}{ll} \stackrel{\circ}{\circ} & \circ \\ \stackrel{+}{\circ} \\ \stackrel{\circ}{\sim} & \infty \end{array}$ |  | $\begin{aligned} & \circ \\ & \infty \\ & \bullet \\ & \bullet \end{aligned}$ |  | $\begin{array}{lll} \circ \circ & \circ \\ \text { Mे } \\ \stackrel{\circ}{\circ} & \text { ㅌ } \end{array}$ |  |  | $\begin{aligned} & \text { 仓े } \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ |  |  |  | $\stackrel{\text { ®๐ }}{\stackrel{-}{\mathrm{N}}}$ | $\stackrel{\circ}{\stackrel{\circ}{\circ}}$ |  | $\stackrel{\circ}{\circ}$ | $\begin{array}{ll} \circ & \circ \\ \stackrel{\circ}{\circ} & \stackrel{0}{c} \\ & \infty \end{array}$ | $\begin{array}{ll} \stackrel{\circ}{\circ} \\ \stackrel{\circ}{\circ} \\ \stackrel{\rightharpoonup}{\circ} \\ \stackrel{\rightharpoonup}{2} \end{array}$ | － | $\stackrel{\text { ¢}}{\stackrel{\circ}{\text { ® }}}$ |  | $\stackrel{\text { ¢ }}{+}$ |  |
|  | słuәpmis ［172 | $\stackrel{\text { O}}{\sim}$ | $\frac{\stackrel{\circ}{N}}{\bar{\gamma}}$ | $\bar{\sim}$ | ৷্তু | $\stackrel{\circ}{\Gamma} \underset{\sim}{\infty}$ | $\stackrel{\hat{\circ}}{\stackrel{1}{N}} \text { ס }$ | $\stackrel{\text { ¢ }}{+}$ | ¢ | セัก |  |  | － |  | ${ }_{0}^{\circ}$ |  | ¢̧ | $\stackrel{\sim}{N}$ |  | $\stackrel{\infty}{\text { ¢ }}$ | ¢－N | $\underset{\sim}{\text { N }}$ | $\infty$ $\infty$ $\infty$ | $\stackrel{\text { ® }}{\sim}$ | $\stackrel{6}{m}$ |  | $\underset{\sim}{\dot{*}}$ |
|  | рәллаs sәрел | ${ }_{\circ}^{\infty}$ | $$ |  | $\begin{aligned} & \text { セٌ } \\ & \text { ஸ̧ } \end{aligned}$ | $\begin{array}{lc} \stackrel{\varphi}{4} & 0 \end{array}$ | $\underset{\omega}{\bar{\omega}}$ | $\begin{aligned} & \text { セ̧ } \\ & \text { ஸ̧エ } \end{aligned}$ | ＋ |  | $\stackrel{\oplus}{\circ}$ | 亏 | ¢ |  | $\begin{aligned} & \text { セ̧ } \\ & \text { ஸ̧ } \end{aligned}$ | $\stackrel{\text { L }}{+}$ | ${ }_{0}^{\infty}$ | $\stackrel{N}{\sigma}$ | $\stackrel{\infty}{\dot{o}}$ | $\stackrel{\stackrel{+}{2}}{\underline{2}}$ |  | $\stackrel{\llcorner }{\underline{\circ}} \underset{\underline{\circ}}{\underline{+}}$ | $\begin{gathered} \infty \\ 0 \end{gathered}$ | \％ |  | ！ | －＋＋ |
|  |  |  |  |  |  |  |  |  | Flower Valley Elementary |  |  |  |  |  |  <br> ウ |  | 乞 <br> 号 <br>  <br> $\stackrel{\stackrel{\rightharpoonup}{ \pm}}{\stackrel{5}{5}}$ <br> $\sum^{\frac{1}{0}}$ <br> 㐫 |  | Roberto W Clemente Middle | Belmont Elementary |  |  |  |  |  |  |  |
|  |  |  | 人əə | le | $10 \mathrm{~V}$ | $10$ <br> N pıey |  |  |  | シlsnlo <br> ！＾犭วОบ |  |  |  |  | ון, | loə |  |  |  |  |  | snlo M・コS |  |  |  | $10 \ldots 0$ | $\begin{aligned} & \text { snlO } \\ & \text { oom } \end{aligned}$ |



## MCPS Districtwide

 Boundary Analysis
[^0]:    1 Matthew M. Chingos. Brookings. "No More Free Lunch for Education Policymakers and Researchers." June 30, 2016. https://www.brookings.edu/research/no-more-free-lunch-for-education-policymakers-and-researchers/.
    2 Note: The acronym FRL stands for Free or Reduced Lunch and is used synonymously with FARMS.

