

Redistricting Committee

December 9, 2014

Introductions

- Redistricting Committee Members
 - Beth Basile
 - Steve Brandt
 - Jim Ficarra
 - June Hunt
 - Ali Johnson, Chairperson
 - Dawn Kline
 - Patrick McCandless
 - Jodi Pickering
 - Becky Smith
- Consultant
 - Robert Schoch

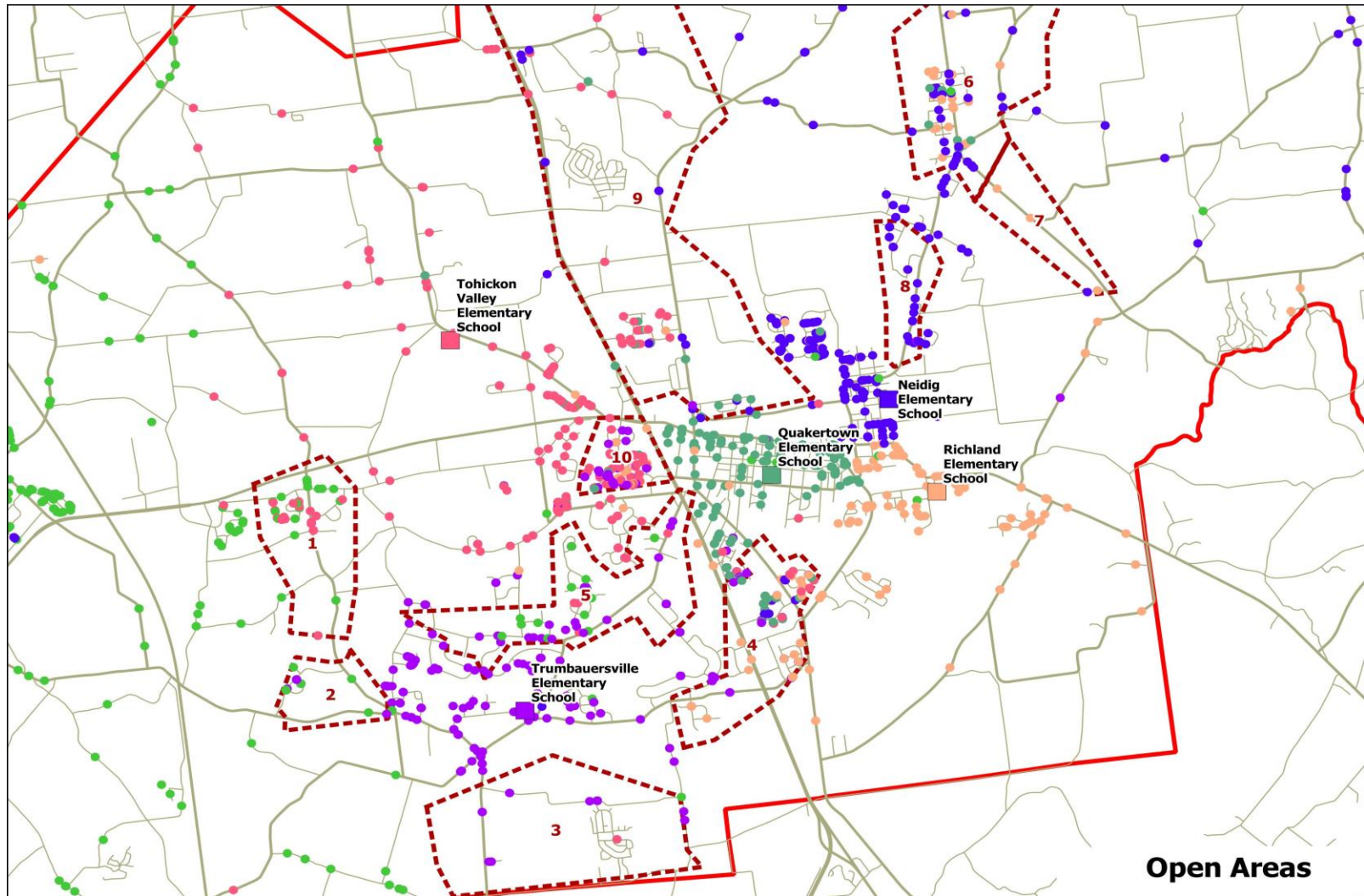
The Redistricting Committee's Decision Making Process

- Researched the redistricting processes used in other school districts
- Defined the problems and challenges
- Established objectives
- Researched related demographic issues
 - Residential growth-planned and approved and the number of students expected in future years , spoke to municipal officials and developers
 - Birth rates-understand the implications of recent decreases from former levels of 500+ births per year to most recent three years at 400 per year
 - Population shifts
- Reviewed school facility capacities, program locations and space requirements for special needs students
- Implemented a Geographic Information System (computer mapping)
- Developed and analyzed various map boundary options
- Evaluated map boundary options compared to prioritized objectives
- Evaluated alternative implementation schedules for the new boundaries
- Considered the tradeoff of keeping neighborhoods together vs. the use of Open Areas to balance class size, discussed alternative methods to achieve this objective

Defining the Problem and Challenges

- Elementary
 - Students in the same neighborhood are assigned to numerous elementary schools
 - See the map on following slide-each colored dot represents an elementary student with different colors for each school
- Middle School
 - Recent population shifts have resulted in imbalanced class sizes (Milford MS at 20/class and Strayer MS at 24/class)
 - The ideal team teaching size is 130 to 140 students per grade level team (Milford MS has one team per grade level and Strayer MS has two teams per grade level)

Map of Elementary Student Assignments in Open Areas



Establishing Objectives

- With an understanding of the problem, the Redistricting Committee set objectives applicable both to establishing a map that eliminates Open Areas and to scheduling the implementation.
- Several overarching objectives guided the Committee's work:
 - Consider the best interests of students
 - Listen to the community
 - Develop a plan that helps build a sense of community
 - Eliminate uncertainties caused by the Open Areas process
- The specific objectives prioritized by the Redistricting Committee are on the following slide:

Guidelines/Objectives Established and Prioritized by Redistricting Committee

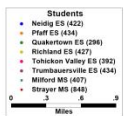
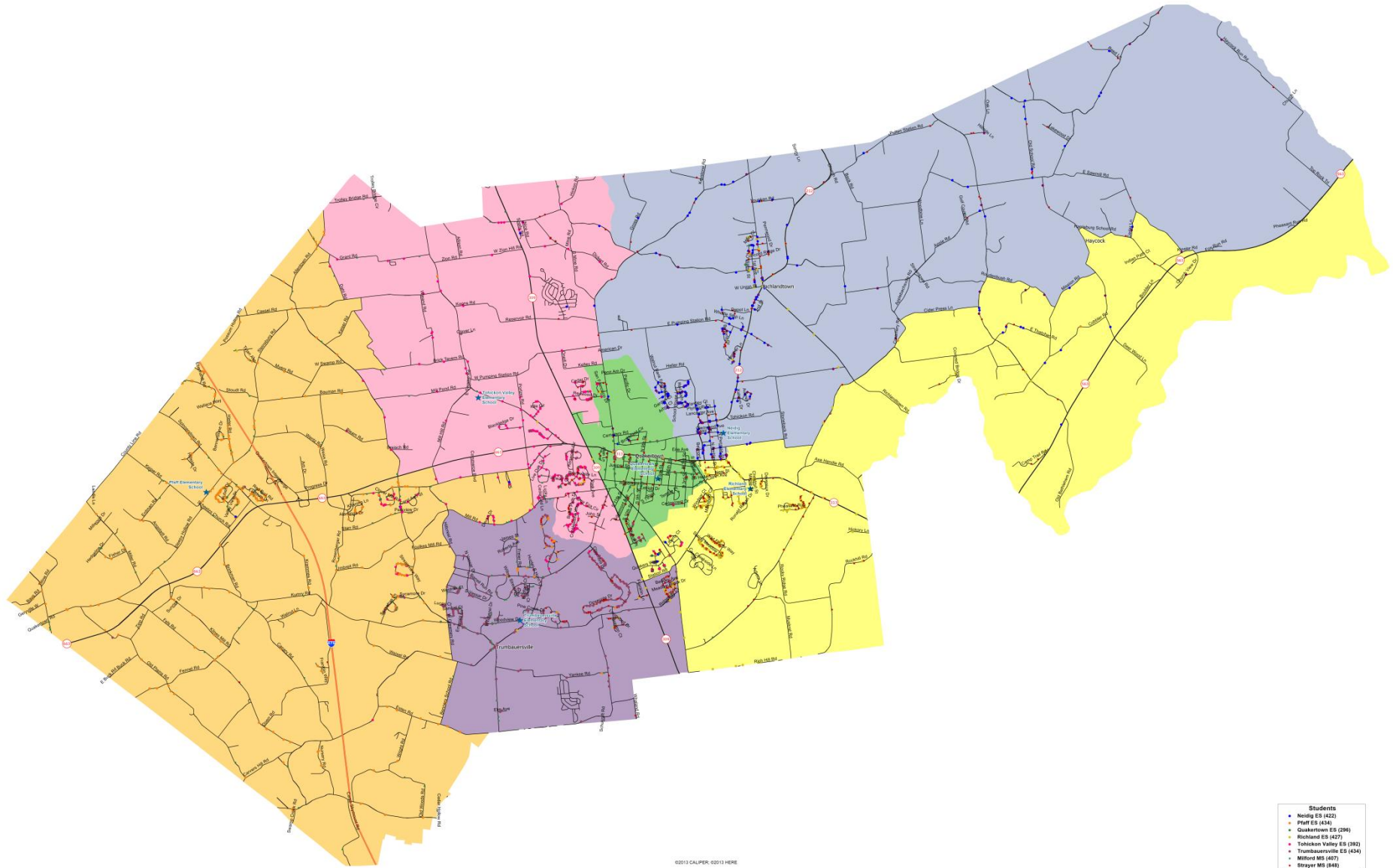
Rank	Guideline/Objective
1	Consider the best interest of students in all redistricting decisions.
2	Assign neighborhoods to the same school
3	Balance class size to minimize the number of classrooms and teachers needed
4	Keep siblings together at the same school
5	Minimize the number of times a students is transferred
6	Develop redistricting boundaries that remain valid for 5 years with only minor adjustments
7	Transition implementation by allowing voluntary moves to new school
8	Develop consistent feeder patterns from elementary to middle school
9	Minimize the number of students affected by redistricting
10	Assign students to school closest to home
11	Maintain diversity while minimizing the number of students transferred
12	Minimize transportation costs

Recommendation One

Establishing Elementary Boundaries

- The primary objective established by the School Board and confirmed by the Redistricting Committee priorities was to assign students from a neighborhood to the same school.
- Each Open Area was reviewed for the number of students at each grade level assigned to each school.
- Other objectives pertinent to the specific neighborhood were applied resulting in a map with fixed boundaries for each elementary school as shown on the following slide.
- The final recommendation resulted after reviewing six map options.

Proposed Elementary Boundaries



Recommendation Two

Establishing Middle School Boundaries

- The existing Middle School boundary requires students from Tohickon Valley ES and Trumbauersville ES to be assigned to both middle schools.
- The Redistricting Committee established an objective to have consistent feeder patterns from elementary to middle schools.
- Once elementary boundaries were established, it was possible to see if this objective could be met along with the objective of having balanced middle school class sizes and teams of 130 to 140 students per grade level.
- The Redistricting Committee recommends that Pfaff ES and Tohickon Valley ES feed Milford MS.

Evaluation of Middle School Feeder Pattern from Pfaff ES and Tohickon Valley ES

- Based on new elementary boundaries for Pfaff ES and Tohickon Valley ES, the combined approximate enrollments at the Milford MS will be as follows compared to an ideal team size of 130 to 140:
 - Current 5th grade entering 6th next year- 128
 - Current 4th grade entering 6th in two years- 150
 - Current 3rd grade entering 6th in three years- 169
 - Current 2nd grade entering 6th in four years- 161
 - Current 1st grade entering 6th in five years- 130
- If the implementation schedule is a two year transition:
 - Current 5th grade entering 6th next year- 136
 - Current 4th grade entering 6th in two years- 138
- Conclusion: Both objectives (consistent feeder pattern and balanced team/class size) can be met in 3 of 5 years if the recommended elementary boundary map implementation is transitioned over two years as discussed in the next recommendation.
 - Other staffing options may be available in years when the ideal size of 140 is exceeded by 21 or 29 students.

Recommendation Three: Implement New Boundary Maps in Two Year Transition

- Once the map with fixed boundaries is established, there are several implementation alternatives:
 - All at once in the next school year, 2015-16
 - Transition at one grade level a year-incoming Kindergarten students at elementary and incoming 6th grade students at middle school
 - Transition over two years period
- Committee considered advantages and disadvantages of implementation alternatives
- **Recommended implementation alternative:
Transition in two years**

324 Students Affected by Option 7 Boundary Map and Two Year Transition

Grade Level in Current Year, 2014-15	Students Redistricted
<i>Kindergarten, not moved since new to school</i>	83
First	106
Second	117
Third	<u>101</u>
Total Moved if Two Year Transition	324
<i>Fourth, allowed to stay at current school</i>	94
<i>Fifth, allowed to stay at current school</i>	105

Notes:

- Of 83 Kindergarten students, 38 have K-4th grade siblings, 19 of which attend different schools now
- Significant variation in numbers between grade levels (94 in 4th and 117 in 2nd)

Recommendation Four: Making Future Adjustments to Balance Class Size

- Adjustments may be necessary because of:
 - New residential developments not known at this time
 - More rapid development than expected at this time
 - Population shifts due to birth rates that vary by area
 - Changes to the ratio of public, nonpublic, and charter school students due to either opening or closing of nonpublic/charter schools

Parameters to Use When Making Any Future Adjustments

- Review options to move a teacher from one school to another to balance class size rather than students
- Students should not be moved more than once during elementary or middle school
- Assign entire neighborhoods to same school
- Move students near boundary lines

Examples of How Objectives Would be Applied to Future Adjustments

- Once the class sizes are significantly out of balance, a redistricting effort will begin.
- If a neighborhood is selected for a possible move as an entire neighborhood, it would be determined if these students have been moved in their elementary or middle school years already. If so, that area would not be moved again.

Example of Moving a Teacher to Balance Class Sizes Rather Than Students

- Due to population shifts, School A has 45 students after several students moved away and 3 teachers while a nearby School B has grown to 55 students with only 2 teachers. In this case, moving a teacher from School A to School B would result in classes of 22 and 23 at School A and 18, 18, and 19 at School B.

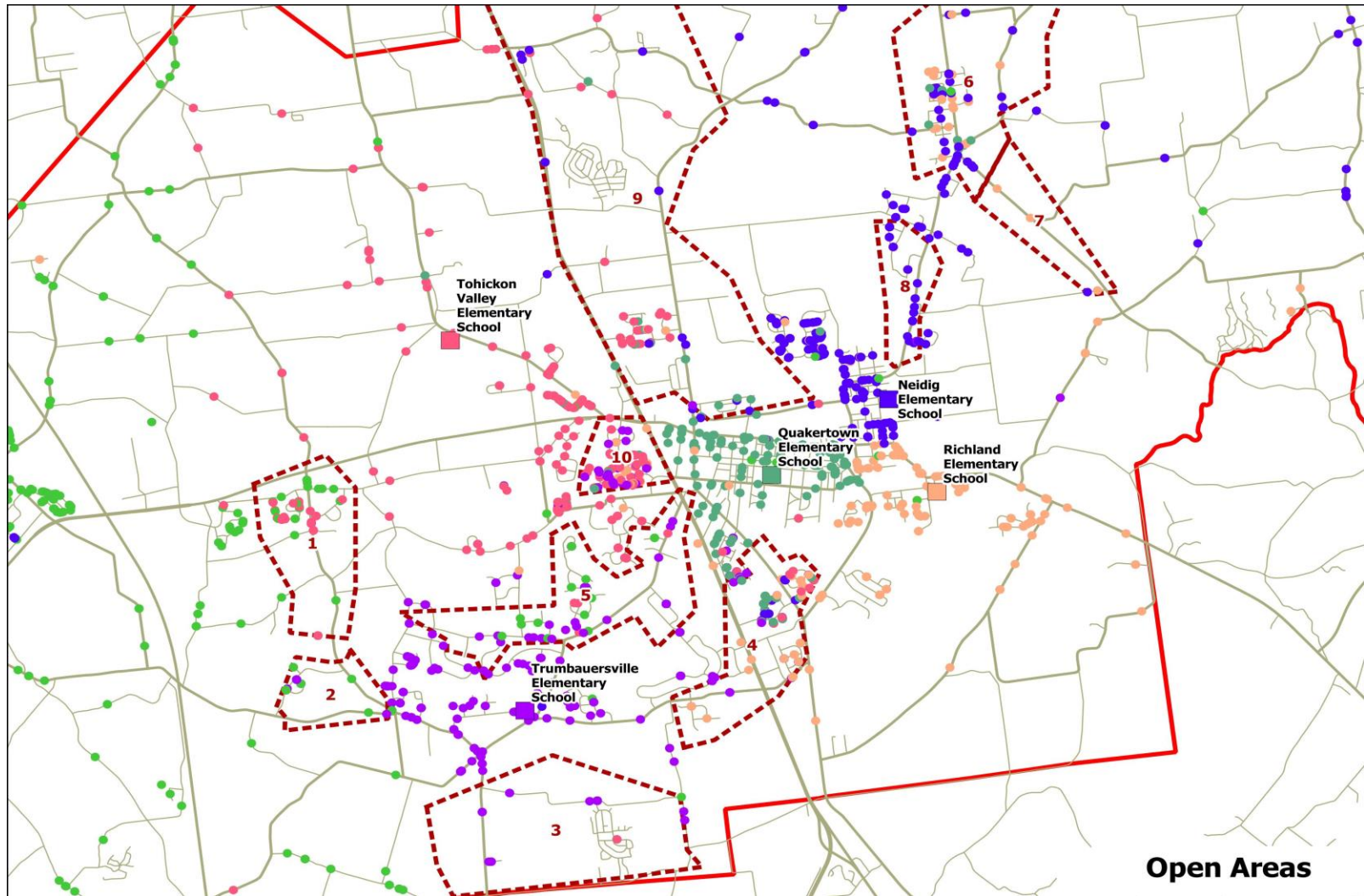
Example of Balancing Class Size by Voluntary Transfers

- Two nearby elementary schools have 45 and 55 students at the second grade level. Each school has two teachers resulting in class sizes of 22 and 23 at one school and 27 and 28 at the other school.
 - To balance class sizes, 5 students living near the boundary lines could be allowed to move voluntarily in order to balance the number of students at each school at 50.

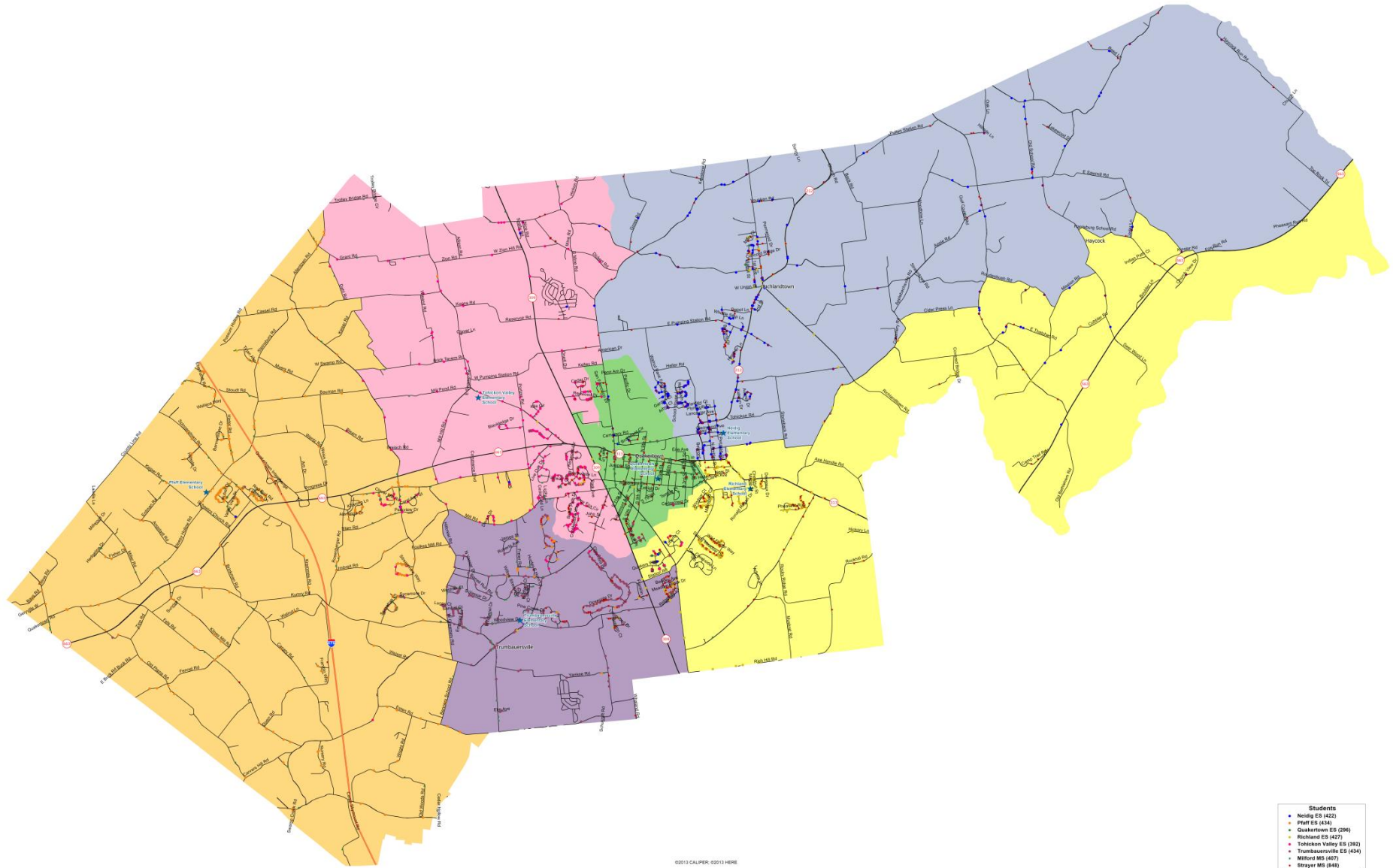
Conclusion

- **Contrasting the Before/After Maps**
 - **Elementary School**
 - Before-10 Open Areas meant no fixed boundaries
 - After-Fixed boundaries
 - **Middle School**
 - Before-Students from Tohickon Valley ES and Trumbauersville ES were sent to both middle schools
 - After-Milford MS would receive all students from Tohickon Valley Es and Pfaff ES

Map of Elementary Student Assignments in Open Areas



Proposed Elementary Boundaries



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Students

- Noling ES (422)
- Platt ES (434)
- Quakertown ES (296)
- Richland ES (427)
- Tohickon Valley ES (292)
- Trumbauersville ES (434)
- Milford MS (407)
- Strayer MS (846)

0 2 4 5
Miles

Conclusion

- Objectives Met by Recommended Future Boundary Map
 - Sent neighborhoods to the same school by eliminating Open Areas
 - Minimized the number of students moved by assigning neighborhood to the school with the majority of students now
- Objectives Met by Recommended Two Year Transition Plan
 - Minimized the number of students moved as the two grades of older students are allowed to stay at the same school until they graduate from that level
 - Balanced class sizes by recommended adjustment methods and parameters
- Other Benefits Achieved
 - Established consistent feeder patterns from elementary to middle school that meet ideal teaming sizes in most years
 - Provided more space for enrollment or program growth in eastern schools
 - Increased the longevity of the new boundaries through knowledge of population shifts and proposed residential growth
 - Increased the longevity of the new boundaries through a recommended adjustment method
 - Avoided adding transportation cost, while providing shorter rides for many students now that they live closer to their assigned school