

**Beavercreek City Schools
Redistricting Study
Meeting 1**

November 8, 2018

CropperGIS

Cropper GIS Consulting

K-12 school planning is our business and our passion. Our specialty is school redistricting.

Cropper/McKibben works with K-12 school districts to:

- develop redistricting plans,
- facilitate community engagement,
- research, map and write demographic studies,
- prepare long-range facility master plans,
- author site feasibility studies,
- conduct & publish housing impact and yield factor studies, and
- provide GIS implementation & training.

Who We Are

Cropper GIS is an ESRI Authorized Business Partner



Recent Projects:

- Beaver Creek City Schools, OH
- Hamilton City Schools, OH
- Marysville City Schools, OH
- South-Western City Schools, OH
- Akron Public Schools, OH
- Union County Public Schools, NC
- Brunswick County Public Schools, NC
- Richmond Public Schools, VA
- Henrico County Public Schools, VA
- Frederick County Public Schools, MD
- Baltimore County Public Schools, MD
- Alexandria City Public Schools, VA



Matthew Cropper

- 20 years experience providing GIS mapping and analysis services to school districts and other clients.
- Manages and Facilitates K-12 redistricting and facility planning projects across the U.S.
- Expert consultant for U.S. Department of Justice, Civil Right's Division
- Published numerous papers about using GIS in master planning and educational planning.

Who We Are

- Provide capacity relief to Trebein Elementary
 - 116 students over the school's capacity
 - Main Elementary School, which is adjacent to Trebein, has available space.

Elementary School	2018-19 Capacity	KG	1	2	3	4	5	Total Enrolled	Enrolled Utilization
Fairbrook Elementary	529	101	107	85	91	90	86	560	105.9%
Main Elementary	690	101	95	92	93	121	102	604	87.5%
Parkwood Elementary	457	78	75	72	76	83	81	465	101.8%
Shaw Elementary	679	104	113	118	109	114	100	658	96.9%
Trebein Elementary	700	131	125	140	140	132	148	816	116.6%
Valley Elementary	506	71	87	86	86	64	103	497	98.2%
Total	3561	586	602	593	595	604	620	3600	101.1%

- Examine imbalance between middle school utilization
 - Coy MS is approaching capacity, when Ankeney MS has more space.
 - Study middle schools to determine if any adjustments should be made to balance utilization.

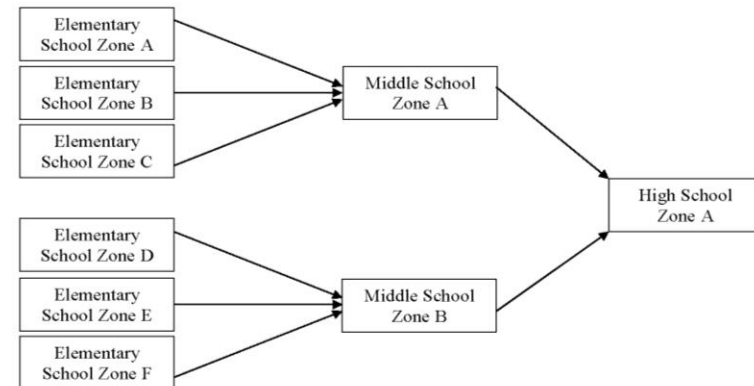
Middle School	2018-19 Capacity	6	7	8	Total Enrolled	Enrolled Utilization
Ankeney Middle School	962	206	232	275	713	74.1%
Jacob Coy Middle School	1150	328	329	362	1019	88.6%
Total	2112	534	561	637	1732	82.0%

Redistricting Guidelines / Criteria

- Balance building utilization. Wherever possible, ensure that buildings have equitable utilization across the district.
 - Building utilization should not include the use of portable or semi-permanent spaces in the total building capacity.
- Minimize the impact on students. When making boundary adjustments, attempt to minimize the amount of students impacted with any adjustment.
 - Make all efforts to minimize the amount of times any single child must move through a rezoning plan.
- Use major roads and natural boundaries whenever feasible to define attendance zones. Minimizing the amount of students that need to cross major roads or other barriers such as railroad tracks maximizes the safety and security of students.

Redistricting Guidelines / Criteria

- Maximize walkability. Whenever possible, assign students closest to their home school to maximize the number of students who can safely walk to school. This minimizes transportation cost and is favorable by most communities.
- Establish clear feeder patterns and continuity. Make all efforts to establish a clean feeder pattern system, which reduces the amount of students who get split when they continue to the next school type.
 - If it is necessary to split a school zone to effectively feed into the next level (i.e. Elementary to Middle), make all efforts to divide a large enough population so the students continue to the next level with some familiar faces. In other words, aim for a balanced split as opposed to dividing a small percentage of a school if a split is necessary.



Redistricting Guidelines / Criteria

- Efforts will be made to ensure an efficient system of school bus transportation. Make every effort to account for school bus and parent commuting patterns when determining a boundary adjustment.
- Make all efforts to establish contiguous zones. Avoid creating 'satellite' zones, or zones that are not connected to the primary attendance zone.
- Make all efforts to minimize the division of clearly identifiable community components (i.e. apartments, residential subdivisions)

Redistricting Meeting Schedule / Agendas

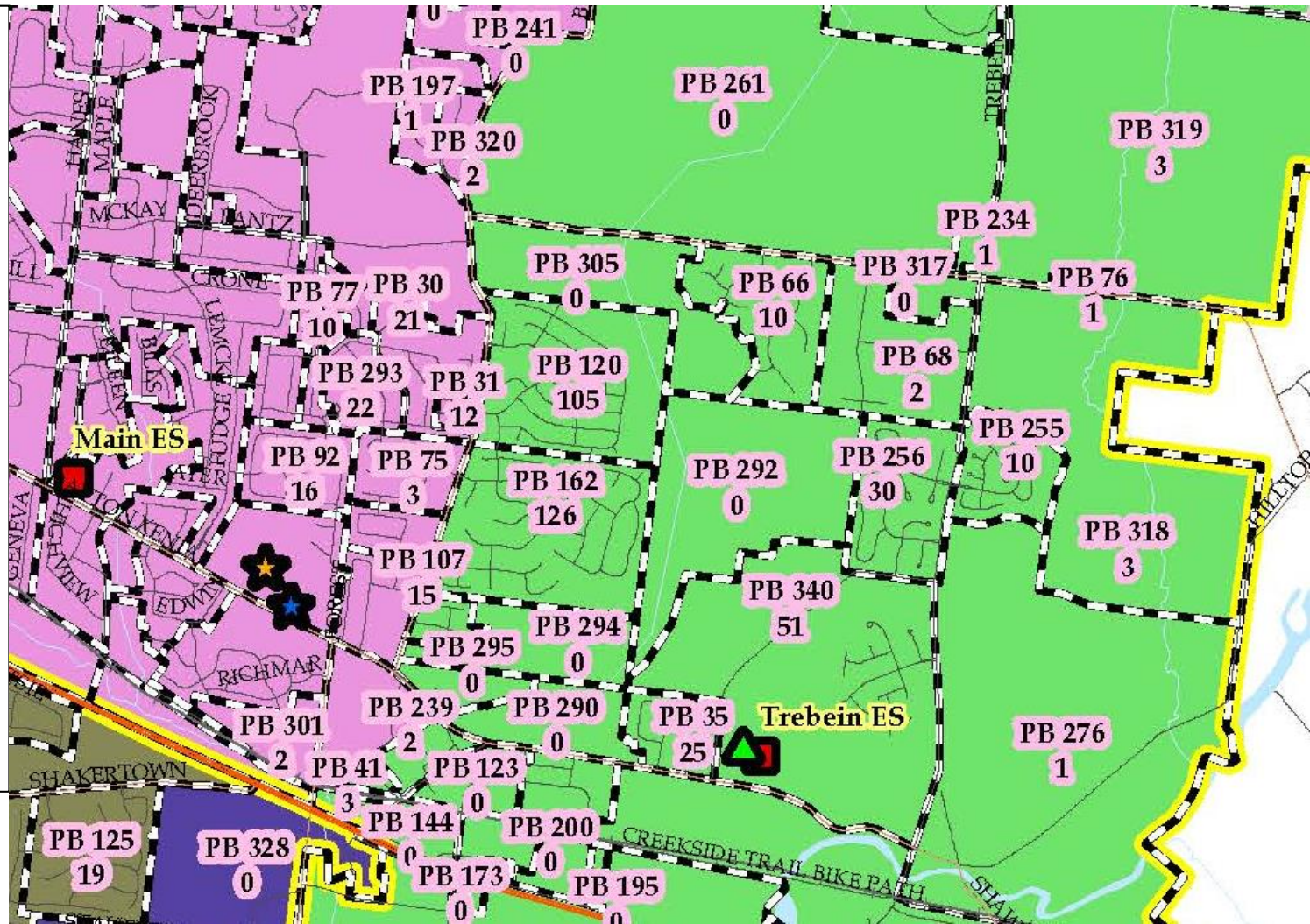
Process & Timeline for Redistricting Study					
	Oct. '18	Nov. '18	Dec. '18	Jan. '19	Feb. '19
<i>Redistricting Criteria / Guideline Development</i>					
Redistricting Study					
<i>Data Collection</i>					
<i>Data Analysis / Assimilation</i>					
<i>Internal Logistics Planning with district</i>					
<i>Background Report Development</i>					
<i>Baseline Options Development</i>					
<u><i>Committee Meeting 1</i></u> <i>- Orientation, Review Background Data, Introduce Baseline Options</i>		11/8			
<u><i>Committee Meeting 2</i></u> <i>- Options Development</i>		11/30			
<i>Public Information Session #1: Present Preliminary Redistricting Options to Community for Comment/Feedback</i>			12/18		
<u><i>Committee Meeting 3</i></u> <i>- Review public input, modify options</i>				1/4	
<u><i>Committee Meeting 4</i></u> <i>- Finalize Recommendations & Prepare for Board Presentation</i>				1/30	
<i>Presentation of Final Recommendations to the Board of Education</i>					TBD

We are here



The use of planning blocks were created to help all stakeholders understand the impact on moving an area one way or the other.

Key data have been analyzed by these planning blocks, such as total number of students living within each block.



- Background Report

Purpose:

- To expand the knowledge of each committee member and member of the public.
- To help committee and public members share a message that is consistent and accurate



Beavercreek City School District, OH
Redistricting Study

Background Report

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Please be familiar with the entire report, and note some key sections:

- Key Objectives (p.1)
- Student Redistricting Criteria (p.1)
- Timeline (p.3)
- Live-Attend Analysis (Appendix A, p.8)
- Maps (Appendix B, p.10)
- Enrollment, Utilization, and Options Analysis (Appendix C)

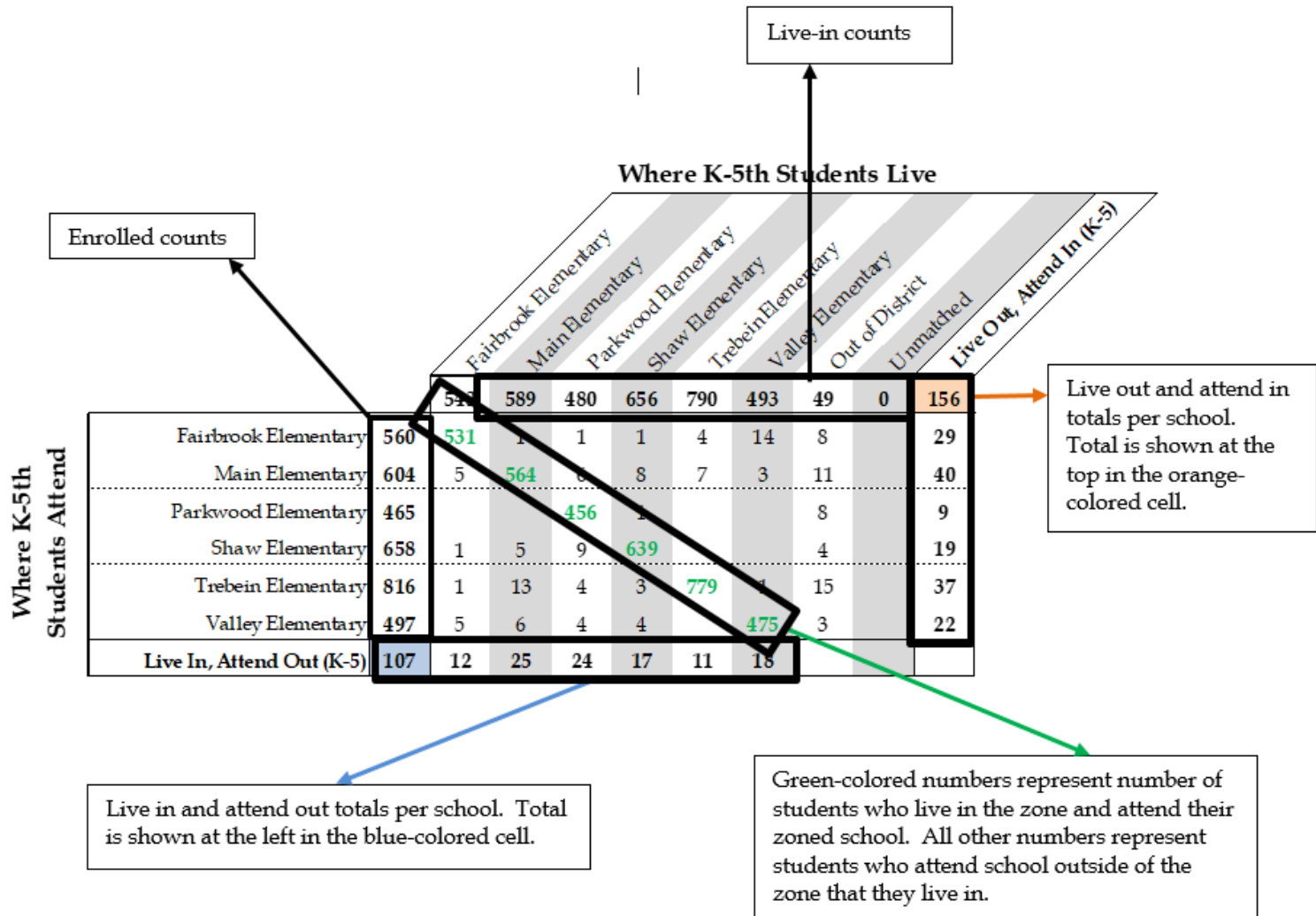


Beavercreek City School District, OH
Redistricting Study

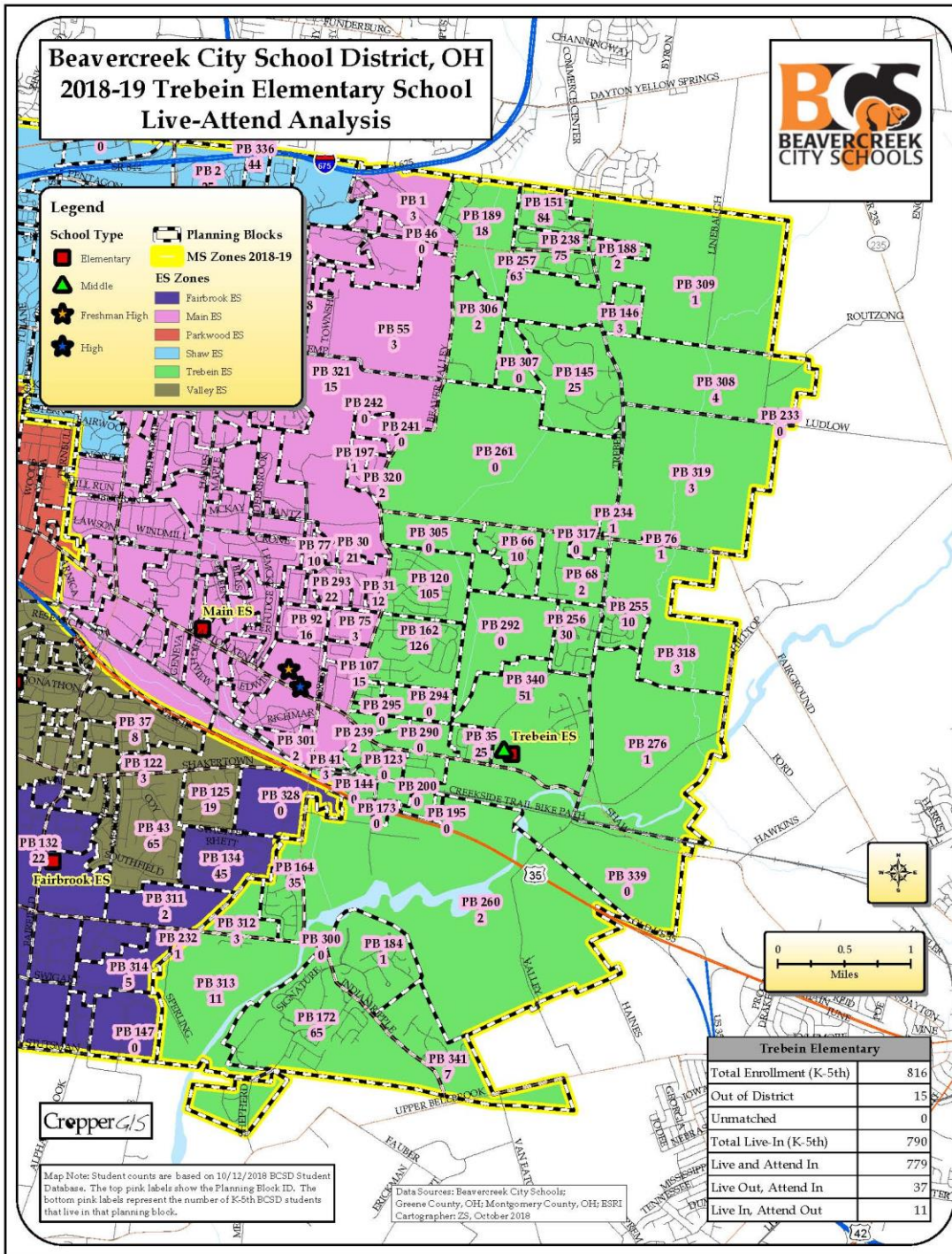
Background Report

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Interpreting Live/Attend Matrices (p. 8)

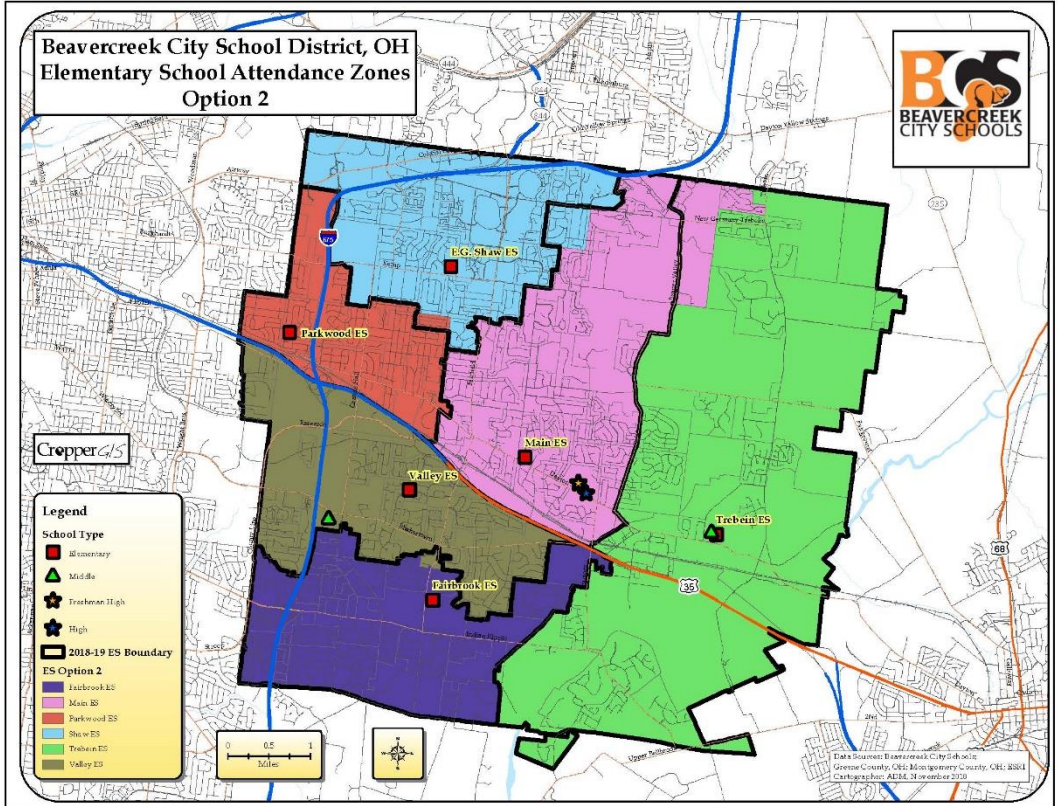
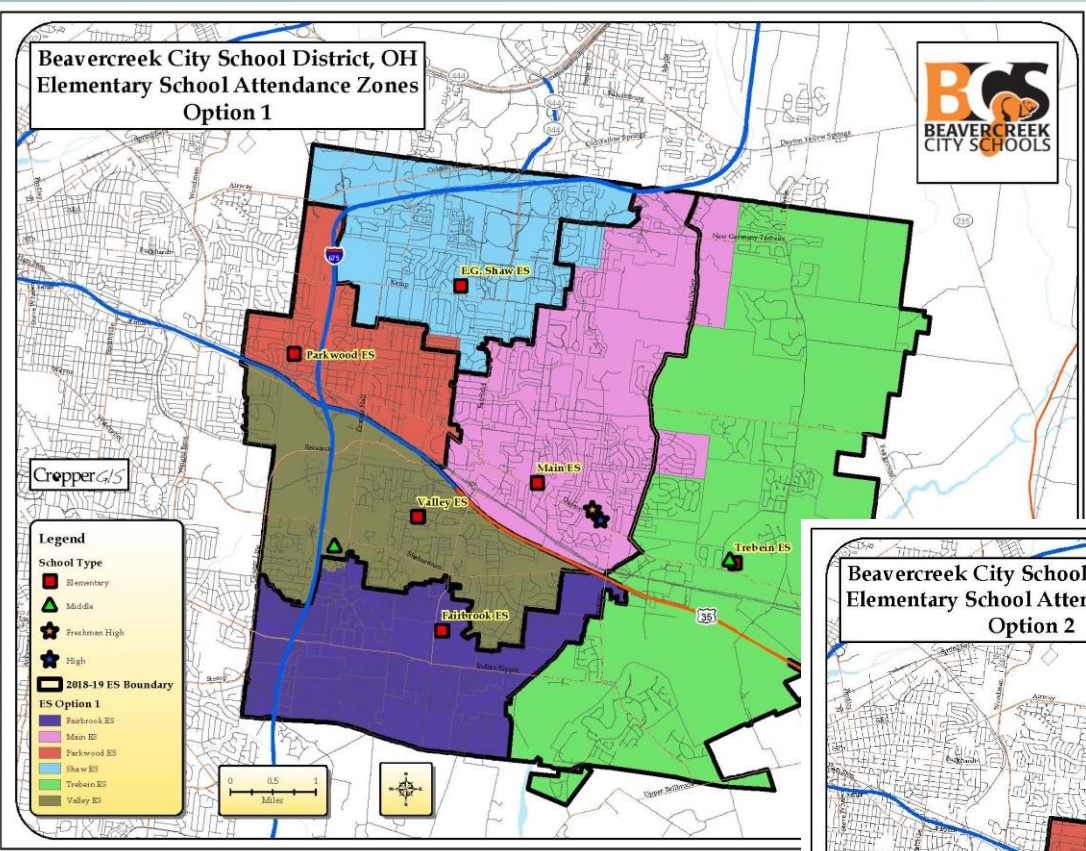


- A map has been created for each school within the district. The map shows the schools attendance zone and planning blocks, including the number of students living and attending a zoned school within each block.
- There are also summary statistics showing student mobility (attend in/out)



Options Development

To expedite the process and empower the community, it is best to begin with a series of baseline redistricting options.



Options were developed with BCS redistricting criteria in mind.

The committee may:

- A. Use or disregard baseline options.
- B. Improve upon the baseline options.
- C. Develop new options from scratch.

- Statistics have been provided, which shows the current enrollment/utilization, as well as the options.
- Data is provided to show the actual estimate of students as well as the percent utilization.
- Middle School data is presented in the same format.

Elementary School	2018-19 Capacity	Total Enrolled	2018-19 Total Live-In	Out of District	ES Option 1 Estimated Enrollment ¹	ES Option 2 Estimated Enrollment ¹
Fairbrook Elementary	529	560	543	8	540	543
Main Elementary	690	604	589	11	691	670
Parkwood Elementary	457	465	480	8	503	503
Shaw Elementary	679	658	656	4	679	679
Trebein Elementary	700	816	790	15	680	701
Valley Elementary	506	497	493	3	507	504
Total	3561	3600	3551	49	3600	3600

Elementary School	2018-19 Capacity	Enrolled Utilization	ES Option 1 Estimated Utilization	ES Option 2 Estimated Utilization
Fairbrook Elementary	529	105.9%	102.1%	102.6%
Main Elementary	690	87.5%	100.1%	97.1%
Parkwood Elementary	457	101.8%	110.1%	110.1%
Shaw Elementary	679	96.9%	100.0%	100.0%
Trebein Elementary	700	116.6%	97.1%	100.1%
Valley Elementary	506	98.2%	100.2%	99.6%
Total	3561	101.1%	101.1%	101.1%

Student counts are based on the 10/12/2018 BCSD student database.

¹ Estimated enrollment is calculated by adding the 2018-19 Out of District students to their currently enrolled school, plus the K-5th grade live-in totals within each option.

- Impact data shows the number of students impacted per any option.
- The rows shown in tan represent students who are moved. You can see the school they are moved to, as well as the number of students moved.
- Middle School data is presented in the same format.

Option	Total K-5th Live-In Students Impacted
Option 1	185
Option 2	161

ES Zone 2018-19	ES Option 1 Zone	Total 6-8th Live In Students
Fairbrook ES	Fairbrook ES	532
Fairbrook ES	Valley ES	11
Main ES	Main ES	555
Main ES	Shaw ES	34
Parkwood ES	Parkwood ES	480
Shaw ES	Parkwood ES	15
Shaw ES	Shaw ES	641
Trebein ES	Main ES	125
Trebein ES	Trebein ES	665
Valley ES	Valley ES	493

ES Zone 2018-19	ES Option 2 Zone	Total 6-8th Live In Students
Fairbrook ES	Fairbrook ES	535
Fairbrook ES	Valley ES	8
Main ES	Main ES	555
Main ES	Shaw ES	34
Parkwood ES	Parkwood ES	480
Shaw ES	Parkwood ES	15
Shaw ES	Shaw ES	641
Trebein ES	Main ES	104
Trebein ES	Trebein ES	686
Valley ES	Valley ES	493

- Feeder patterns will be monitored throughout the process.
- As you can see in the tables to the right, there are no schools split from Elementary to Middle School in current options.
- If the committee examines an option that does split feeders, they will be represented in these tables in terms of the number of students that are split, as well as the total percentage of the school population that is split.

2018-19 ES Zone	2018-19 MS Zone	Total K-5th Live-In	ES Attendance
Fairbrook ES	Ankeney MS	543	100%
Main ES	Coy MS	589	100%
Parkwood ES	Ankeney MS	480	100%
Shaw ES	Coy MS	656	100%
Trebein ES	Coy MS	790	100%
Valley ES	Ankeney MS	493	100%

ES Option 1 Zone	MS Option 1 Zone	Total K-5th Live-In	ES Attendance
Fairbrook ES	Ankeney MS	532	100%
Main ES	Coy MS	680	100%
Parkwood ES	Ankeney MS	495	100%
Shaw ES	Coy MS	675	100%
Trebein ES	Coy MS	665	100%
Valley ES	Ankeney MS	504	100%

ES Option 2 Zone	MS Option 2 Zone	Total K-5th Live-In	ES Attendance
Fairbrook ES	Ankeney MS	535	100%
Main ES	Coy MS	659	100%
Parkwood ES	Ankeney MS	495	100%
Shaw ES	Coy MS	675	100%
Trebein ES	Coy MS	686	100%
Valley ES	Ankeney MS	501	100%

Online Map

- An online map has been developed to further inform the committee and public on the work of the committee.
- Current zones and options can be viewed on the map.
- Other features can be turned on/off on the map, including planning blocks.
- Map is customizable, and can/will be updated during the process to show new options along with other information requested by the committee.
- Site can be viewed on any device, including mobile devices and tablets (with internet connection).
- Site address is:

www.croppermap.com/beavercreek

Questions

- Direct questions you are unable to answer to either BCS Admins or Cropper.
- **BCS student realignment process website!**
 - Helps to refer inquiring community to this website to answer questions about the student realignment process, schedule and a quantity of data and maps.
 - www.bcsredistricting.com
 - An online feedback form is on this page where any member of the public can provide ongoing input.
- Remember to refer to your Background Report.

Contact Info:

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Members of the public, please use the online comment form for general comments.

Questions

Small Group Exercise

Break into 2 groups

Each group review the options tables and maps.

Please feel free to note any changes or highlight any part of the map you want to discuss.

Please mark any concerns or things you feel should be modified on the maps.

Once you've had time to evaluate the info, the groups will report to the full committee.

Next Meeting is Friday, November 30th.

**9am @ Beavercreek City Schools
Central Office**