Northwest Local School District, OH
Fall 2022 Redistricting Study

-Public Information Session 2-

December 13, 2022

Cropper GIS

Welcome and Introductions

Who We Are

Who We Are

Cropper GIS Consulting

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

Cropper 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.

Cropper GIS is an ESRI Authorized Business Partner

ESRI Technology
AUTHORIZED BUSINESS PARTNER

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Who We Are

Recent Projects:

- Cincinnati Public Schools, OH
- Columbus Public Schools, OH
- Groveport Madison Schools, OH
- Westerville City Schools, OH
- Worthington Schools, OH
- Huber Heights City Schools, OH
- Akron Public Schools, OH
- Concord Community Schools, IN
- Crown Point Community School Corp, IN
- Plymouth Community School Corp, IN
- Valparaiso Community Schools, IN
- MSD Washington Township, IN

Cincinnati Public Schools
Preparing Students for Life

Akron Public Schools

COLUMBUS
CITY SCHOOLS

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Matthew Cropper

- More than 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.

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Tonight's Purpose

1. <u>Learn</u> how the redistricting process has been working.

2. <u>Review</u> DRAFT realignment options 1 and 2 for Elementary/Middle/High Schools

3. <u>Complete</u> online surveys related to the options to provide valuable input regarding options that are being considered.

Why We're Here

With the support of the Board of Education, the Northwest Local School District is undertaking a redistricting study to address imbalances in school utilization and enrollment, and to pro-actively align with future facility plans. The Northwest Local School District has begun a redistricting study to meet the following key objectives:

Primary Objective: To relieve immediate overcrowding at elementary schools and balance school utilization, with boundary changes made effective Fall 2023. Middle and High School boundaries could also be adjusted to best align with feeder patterns.

Secondary Objectives: To make best efforts to ensure that Fall 2023 boundary changes align with long-term facilities and feeder patterns. Facility changes that have been identified include:
- New Colerain Elementary School
- New Colerain Middle School
- New Pleasant Run Middle School
- Discontinue use of White Oak Middle School

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Why We're Here

Cropper GIS Consulting was hired by Northwest Local School District to facilitate and manage the project. Our firm is tasked to:

A. *Develop* supporting materials to help facilitate the study.

B. *Facilitate* an expert-based process of developing a student redistricting plan.

C. *Empower* the community throughout the process.

D. *Leverage* expertise to develop logical, efficient, and effective student redistricting options with the planning team.

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Rules to Follow

Cropper GIS and the district have developed a body of criteria to guide this redistricting study. The following criteria are not listed in any particular order of importance:

- **Balance school facility utilization**

  Make every effort to have equitable utilization (where possible) across the district and in accordance with school capacities and funded allotment ratios in accordance with state law. Make efficient use of available space.

- **Account for future growth**

  Allow for increasing attendance in high growth areas.

- **Close Proximity**

 Students should be assigned to the school within the closest proximity to their homes where possible.

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Rules to Follow

- **<u>Maximize busing efficiencies in transportation of students</u>**

  Make every effort to account for transportation (school bus and car rider), parent commuting patterns, balance busing travel time, and costs.

- **<u>Establish clear feeder patterns and continuity</u>**

  Make every effort to establish a clear feeder pattern system.

Rules to Follow
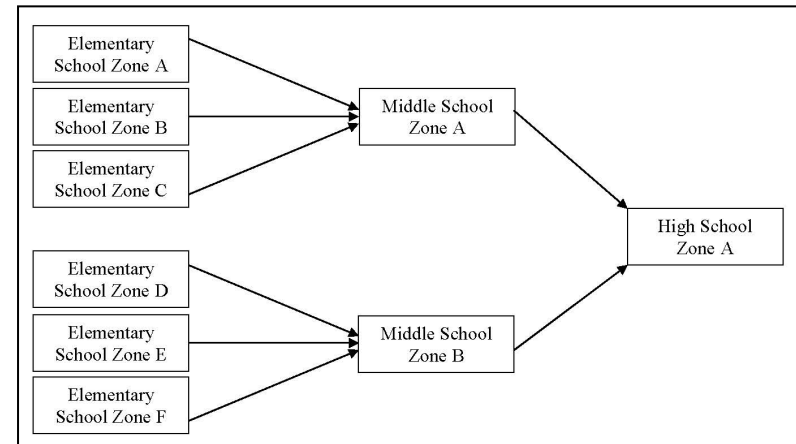
- **Allow for highest-grade at current school to legacy enroll**

  Allow for students who will be in the 5th grade in the first school year of redistricting to stay at their current school. This provision does not extend to siblings and transportation will not be provided.

  All Middle and High School students affected by the Fall 2023 changes have the option to remain at their current school.

- **Minimize impact on students**

  Attempt to minimize the number of students impacted when making boundary adjustments.

- **Account for economic, cultural, and ethnic diversity**

  Ensure schools are inclusionary and not adversely affected by redistricting decisions.

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Rules to Follow

- **<u>Make every effort to establish contiguous zones</u>**

  Avoid creating zones that are not connected to the primary attendance zone, where possible

- **<u>Use major roads and natural boundaries wherever feasible to define attendance zones</u>**

  Minimize the number of students who need to cross major roads and other barriers to maximize the safety and security of students and optimize transportation efficiency by containing bus routes within natural boundaries wherever possible to avoid traffic delays and late arrivals.

All criteria are in no particular order or priority, and the best plan is one that touches on all criteria but does not focus solely on one element of the criteria.

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Stakeholders

Outline of Stakeholder Responsibilities	
Consultant	• Schedule and facilitate internal planning team meetings. • Communicate updates with planning team, including updated handout and meeting schedule logistics. • Conduct public meetings to solicit feedback related to draft options that are under consideration. • Support the district in providing materials such as presentations, handouts, and online interactive maps for the public's consumption. • Coordinate and summarize online feedback received from general public and internal planning team.
Internal Planning Team	• Consists of key school district administrators including central office, transportation, planning, and school principals. • Group will work to review draft options that are being developed in preparation to share with the School Board and public. • Review input provided from the consultant and general public regarding draft options and continue to modify maps with a focus on the best solution for all students as a whole. • Share a redistricting plan with the School Board
General Public	• Informed through website. • Invited to submit comments and input throughout the entire process.. • Invited to participate in public information sessions (both virtual and in-person), and to provide input via surveys and online general feedback form.
School Board	• Charge internal planning team with its responsibilities. • Identify questions the planning team is expected to answer. • Advise staff and the process regarding policy related considerations and other board-level decisions.

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Timeline

Process & Timeline for Redistricting

	Oct. '22	Nov. '22	Dec. '22	Jan. '23	Feb. '23
Data Collection					
Data Analysis / Assimilation					
Baseline Options Development					
Internal Planning Team Work (1-2 meetings per month)		11/10, 11/29	12/7	1/10	
Public Information Session #1 : Present Project Process, Criteria, Timeline, and Redistricting Objectives to Community. Web-based meeting.		11/17			
Public Information Session #2: Present DRAFT Redistricting Options to General Public for Comment/Feedback. On-site meeting (or virtual if preferred) to review options and q/a at end of session.			12/13		
Presentation of Final Recommendations to the Board of Education					

Progress Report

Work done to date

- We are about 2/3 complete with the process.

- The Internal Planning Team has met three times since November 2022 and has spent many hours between meetings reviewing information.

- The IPT has reviewed 3 variations of DRAFT options since the process started
  - Started with 1 baseline DRAFT option; additional options generated each meeting based on the internal planning team and public feedback.

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Work done to date

- Data and information examined includes school enrollment and capacity, demographics, feeder pattern data, student impacts, and feedback from members of the public.

- Options are considered DRAFT throughout the process and continued dialog and consideration of data is always encouraged.

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- The planning team's charge is to share one option with the School Board.

- Nothing will be FINAL until the Superintendent determines the best plan for the district.

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Project Approach

Project Approach

Cropper has identified four phases of a community-driven redistricting study for NWLSD:

1. Data Collection
2. Data Analysis / Assimilation
3. Options Development
4. Internal Planning Team and Public Engagement

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Phase 1. Data Collection (October 2022)

Data availability and quality are central to this redistricting study. Fortunately, Northwest Local School District, and Cincinnati Area GIS will provide a comprehensive collection of data, including:

- School District– Official enrollment counts by school by grade, along with enrollment databases by address. Data/feedback regarding transportation, school locations, facility information. 2022-23 enrollment data is the basis for this study.

- City / County Sources– Base GIS data (address pts, municipalities, subdivisions, existing and planned road networks, etc.)

Data collection efforts have been underway through the Fall, and information will continue to be collected throughout the process if it is deemed useful.
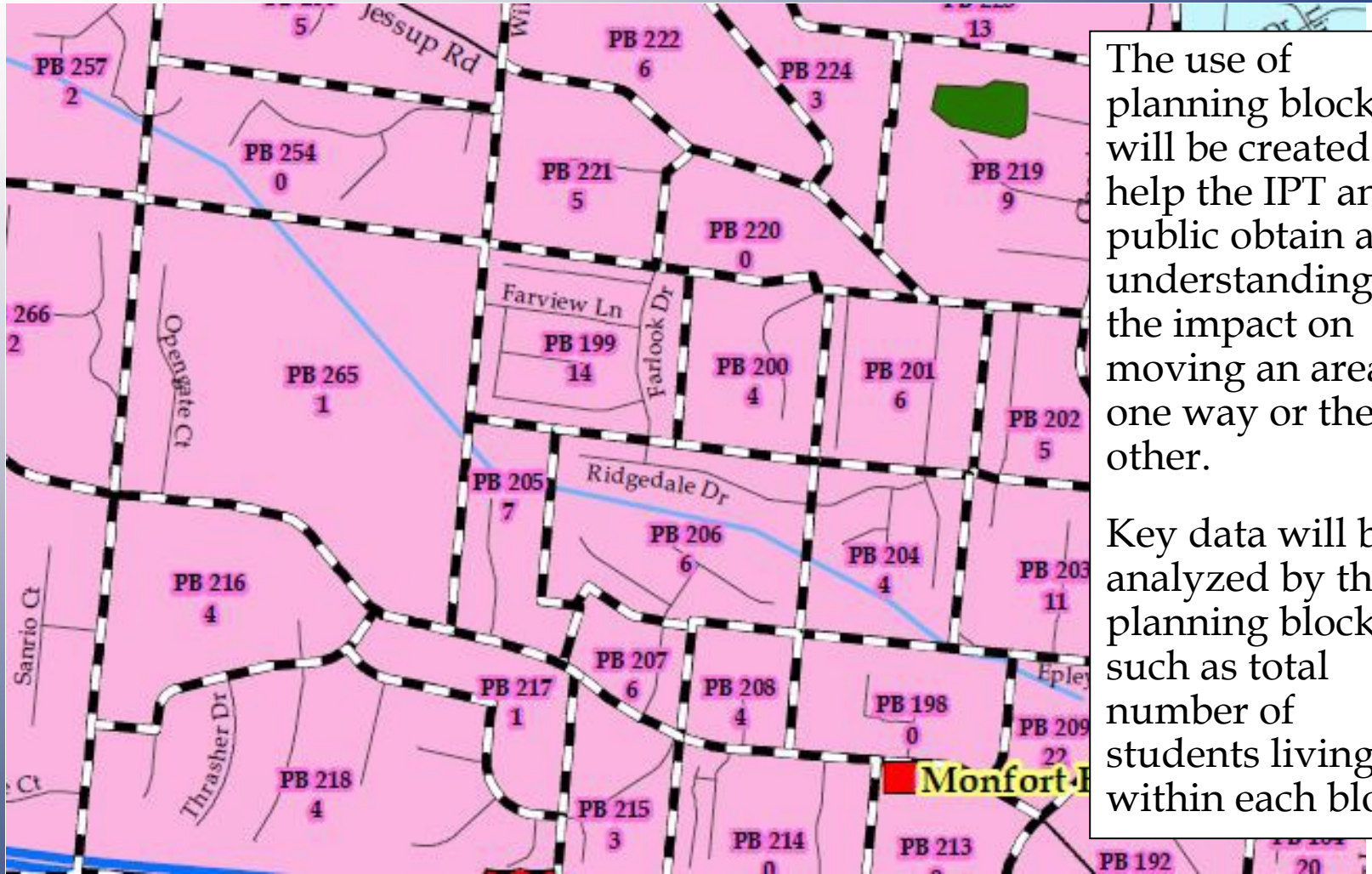
Project Approach

- Cropper is tasked to develop several key pieces of information to help facilitate the redistricting process.

- Once data is collected, it is necessary to integrate it into GIS to enable quick and efficient analysis and redistricting options development.

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The use of planning blocks will be created to help the IPT and public obtain an understanding of the impact on moving an area one way or the other.

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

Northwest Local School District, OH
Monfort Heights Elementary School
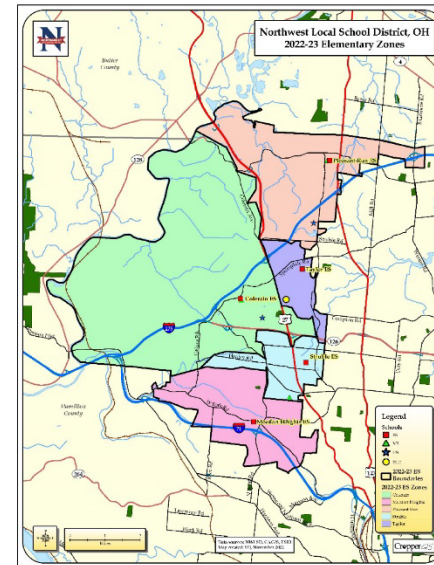**2022-23 Live-Attend Analysis**

- Background Report Purpose:
  - To expand the knowledge of each IPT member
  - To help IPT members share a message that is consistent and accurate

**Northwest Local School District, OH
Fall 2022 Redistricting Study**
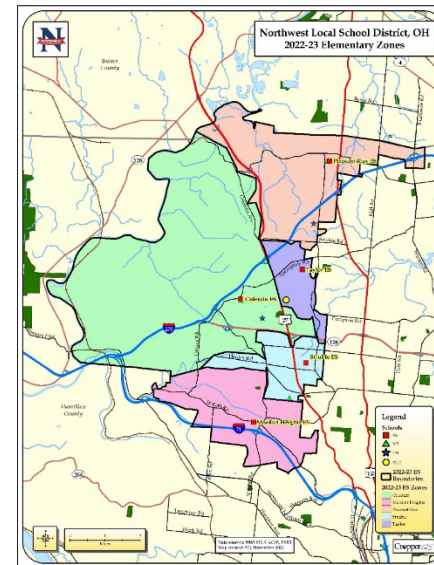
Background Report

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

- Key Objectives (p.1)
- Redistricting Criteria (p.1)
- Stakeholder Roles and Responsibilities (p.3)
- Timeline (p.4)
- Live-Attend Analysis (Appendix A)
- Maps (Appendix B)
- Enrollment and Utilization Tables (Appendix C)

Northwest Local School District, OH
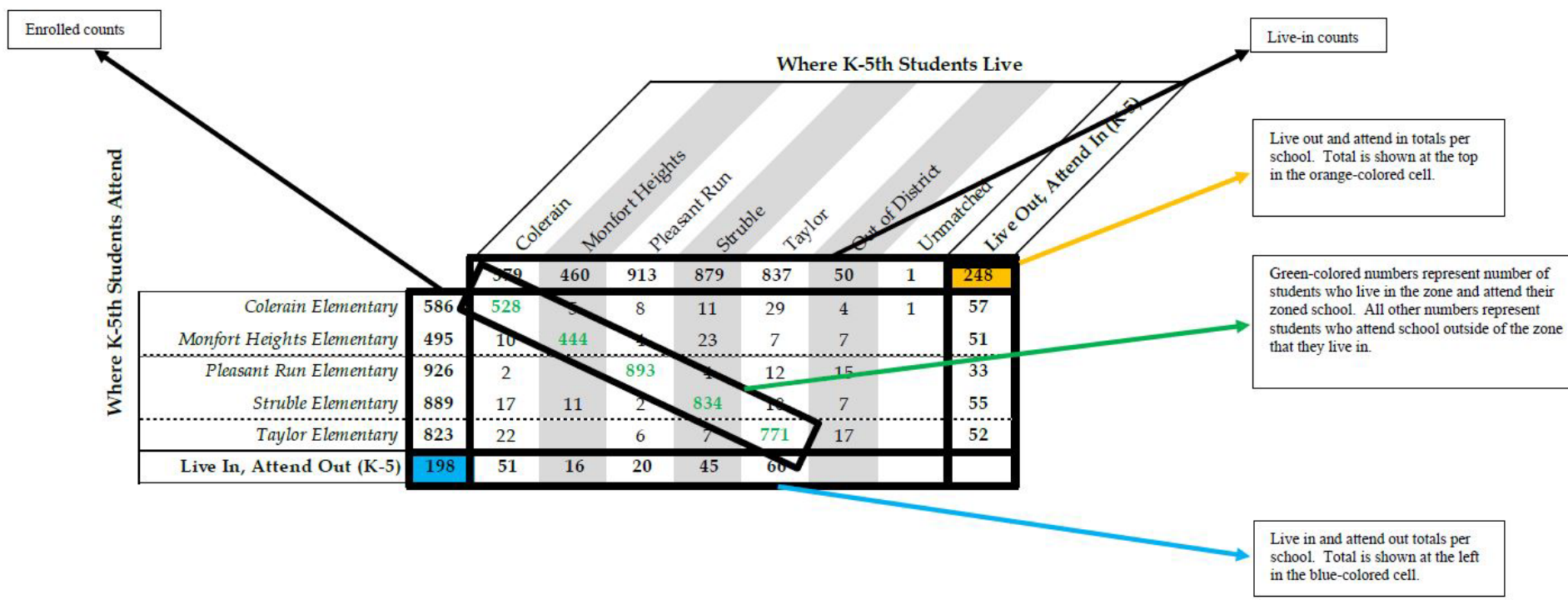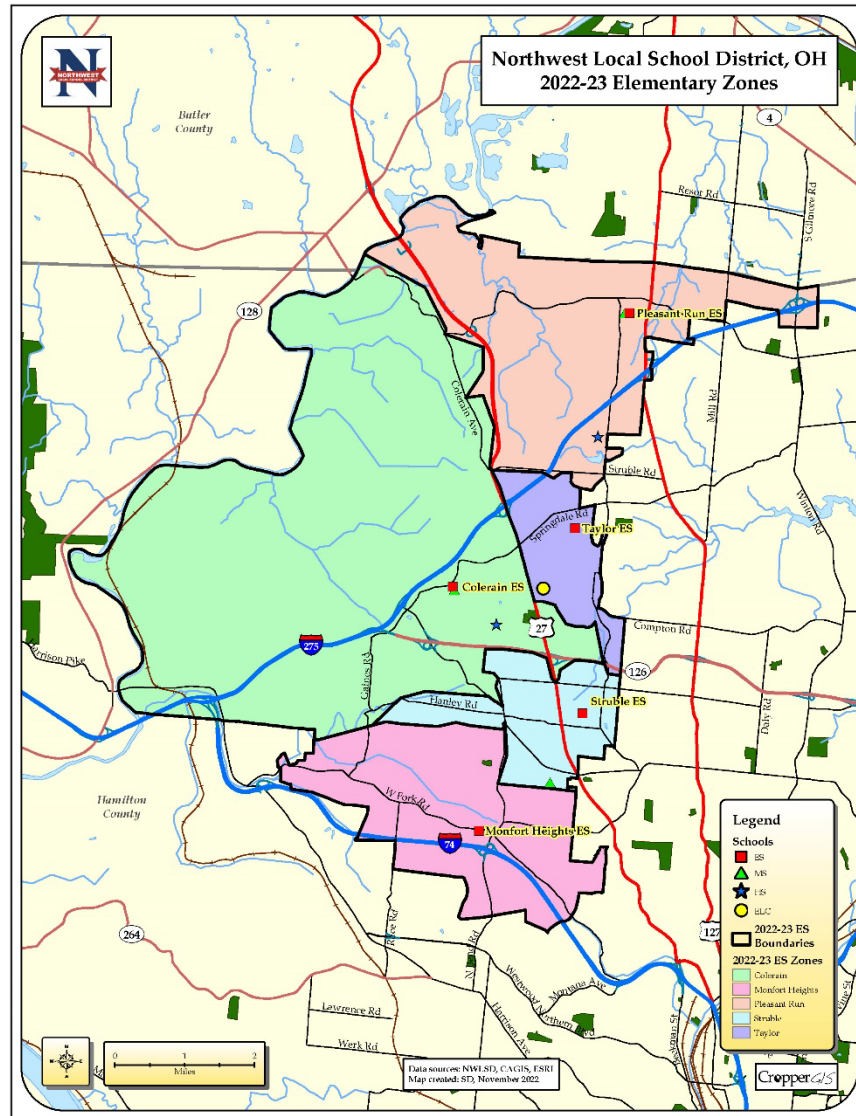**Fall 2022 Redistricting Study**

Background Report

Interpreting Live/Attend Matrices (p. 9)

Enrolled counts

Live-in counts

Where K-5th Students Live

Where K-5th Students Attend

		Colerain	Monfort Heights	Pleasant Run	Struble	Taylor	Out of District	Unmatched	Live Out, Attend In (K-5)
		579	460	913	879	837	50	1	248
Colerain Elementary	586	528	5	8	11	29	4	1	57
Monfort Heights Elementary	495	10	444		23	7	7		51
Pleasant Run Elementary	926	2		893		12	15		33
Struble Elementary	889	17	11	2	834	1	7		55
Taylor Elementary	823	22		6	7	771	17		52
Live In, Attend Out (K-5)	198	51	16	20	45	6			

Live out and attend in totals per school. Total is shown at the top in the orange-colored cell.

Green-colored numbers represent number of students who live in the zone and attend their zoned school. All other numbers represent students who attend school outside of the zone that they live in.

Live in and attend out totals per school. Total is shown at the left in the blue-colored cell.

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Map review : Attendance Zone Maps

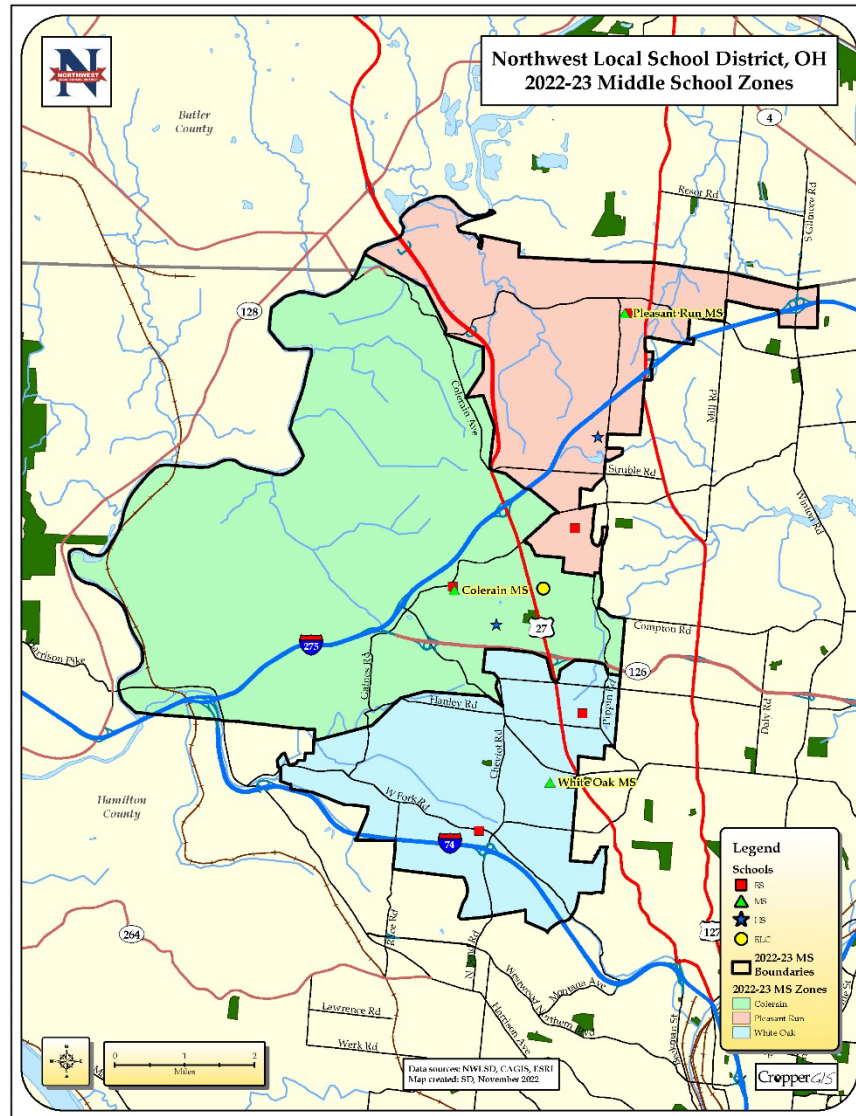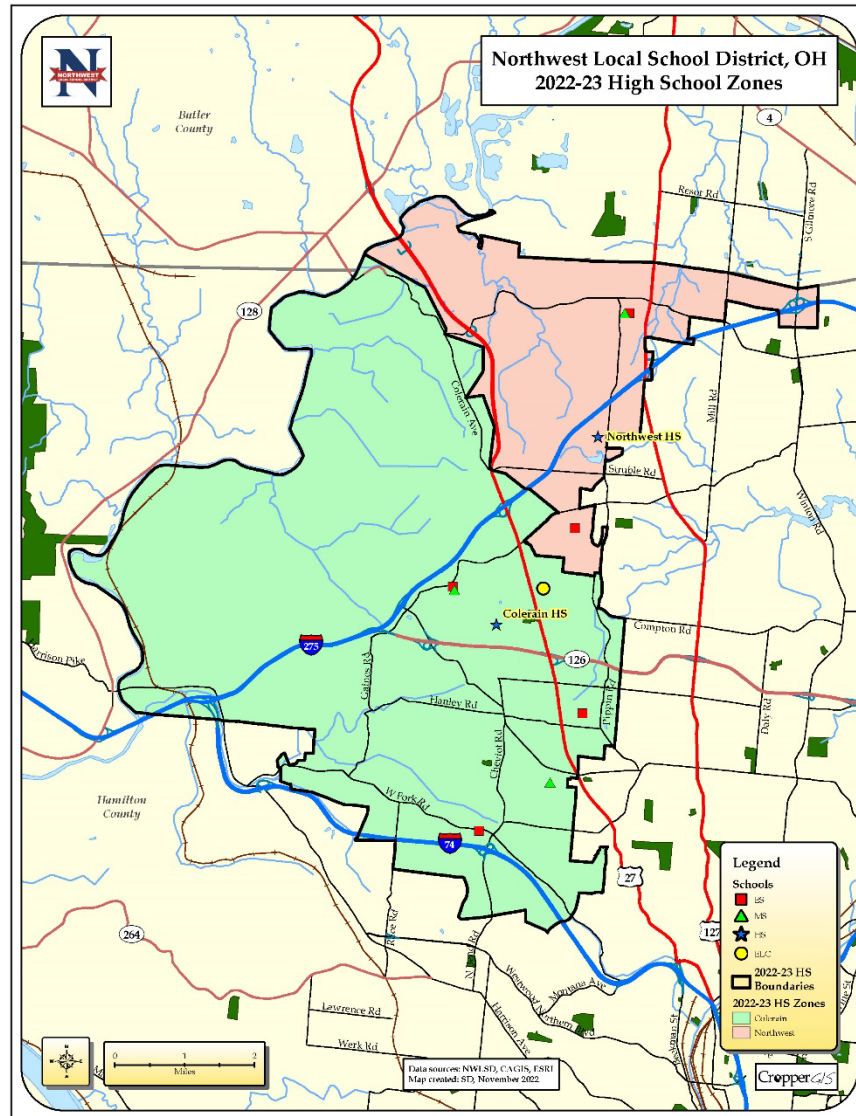- Maps showing attendance zones for all county schools, including Elementary, Middle, and High Schools

Map review : Attendance Zone Maps

- Maps showing attendance zones for all county schools, including Elementary, Middle, and High Schools

Map review : Attendance Zone Maps

- Maps showing attendance zones for all county schools, including Elementary, Middle, and High Schools

Online Map

- An online map has been developed to further inform all stakeholders on the work of the internal planning team.

- 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 internal planning team.

- Site can be viewed on any device, including mobile devices and tablets (with internet connection).

- Site address is:

www.croppermap.com/nwlsd

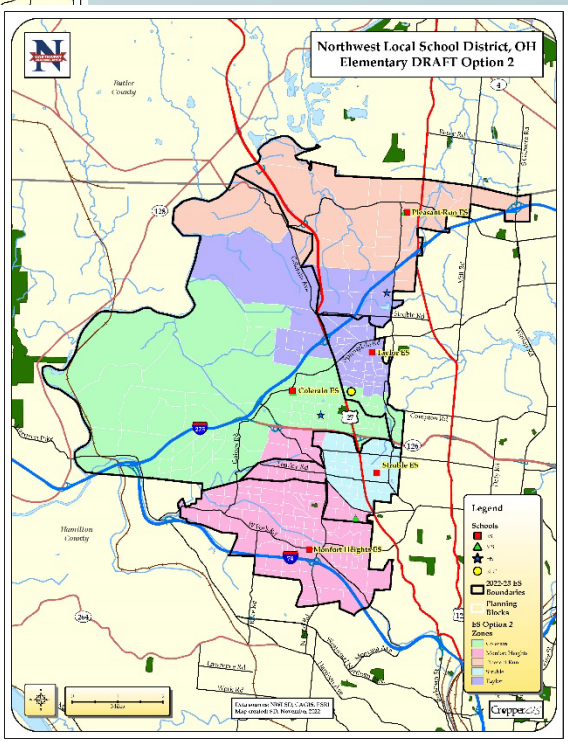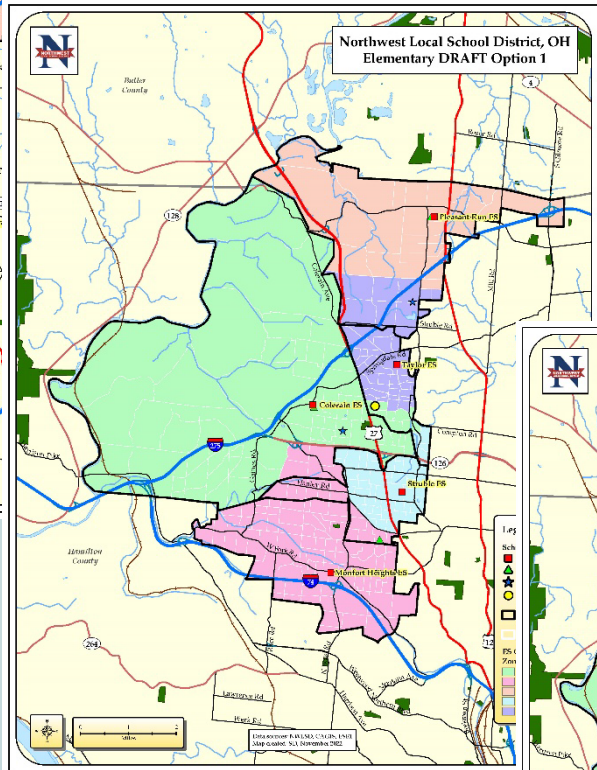# Online Map
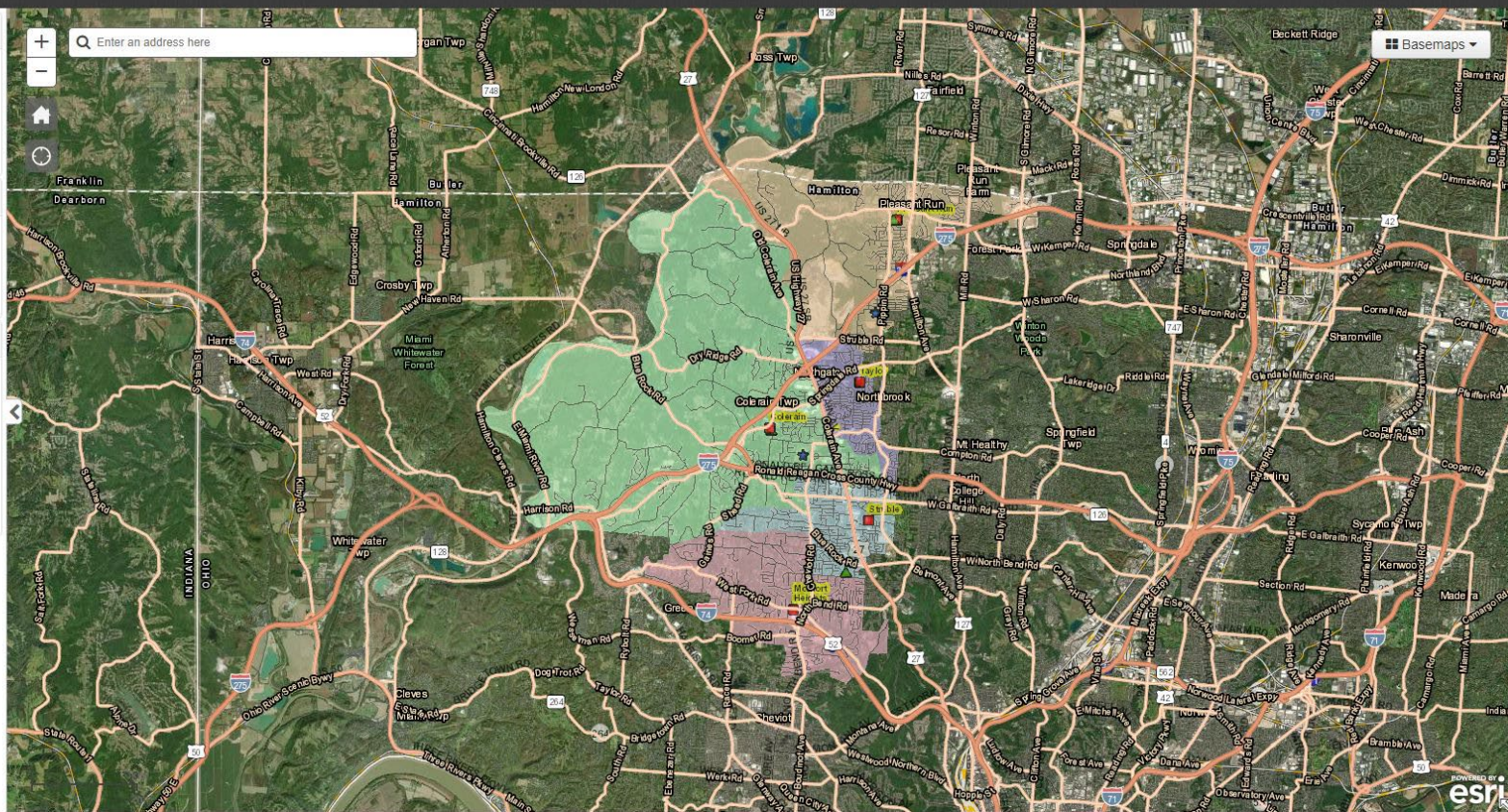
Phase 3. Options Development (Nov. 2022)

To expedite the process and empower the community, the best approach is to begin with a series of baseline realignment options. These options will be developed with the NWLSD redistricting criteria in mind.
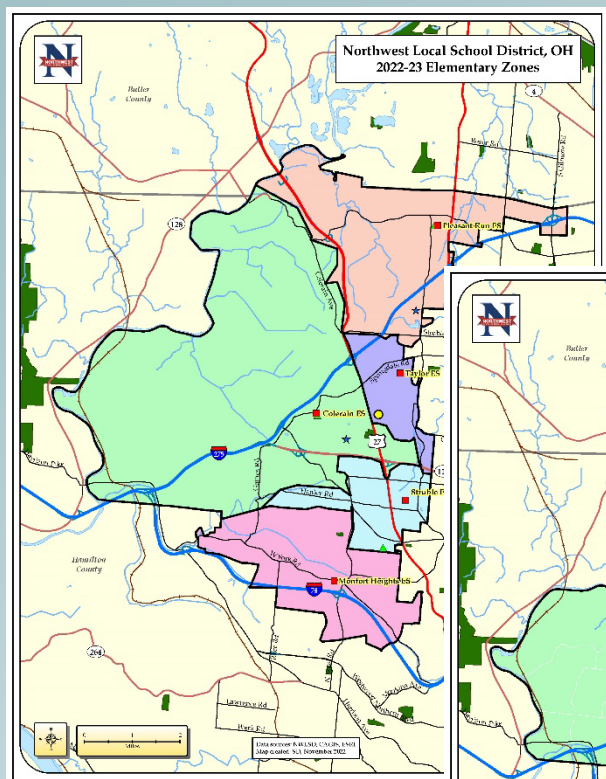
Once the options are presented the IPT may:
  A. Use or disregard baseline options.
  B. Improve upon the baseline options.
  C. Develop new options from scratch.

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Project Approach

The most important factor when working on a redistricting study is to keep all lines of communication open.

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Project Approach

The Internal Planning Team will meet from November 2022 through February 2023 to analyze data, review attendance zones, and develop redistricting options.

At two public information sessions, the work of the team will be shared, and community members will have an opportunity to discuss planning team work with staff and planning team members.

Valuable information will also be gathered via a community survey that will take place after the information session.

The consultant on behalf of the work by the Internal Planning Team and Public input will recommend a redistricting plan to the School Board in February 2023.

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NWLSD redistricting process website!:

- Helps to refer inquiring community to this website to answer questions about the student redistricting process, schedule and a quantity of data and maps.

- **http://www.nwlsdredistricting.com/**

- An **online feedback form and a survey** is on this page where any member of the public can provide ongoing input.

- Important statistics pertinent to the options are also posted on the website for the public's review.

Tonight

Tonight

- *Gallery Walk: Review Options 1 and 2 and related data, talk to IPT members*

  - Committee members, NWLSD staff, and consultants will be around the maps to discuss any thoughts the public may have.

  - Although discussions around the maps are very important, please submit your feedback via the online survey for the entire planning team's benefit.

Online Survey:

- <u>Begins December 13, 2022 and available through midnight, January 2, 2023:</u>
- *Participate in survey located at <u>www.nwlsdredistricting.com</u>*
  - Survey will help provide insight on the public's thoughts about the DRAFT options

  - Public feedback isn't intended to see which option gets the most votes from the public

  - The best feedback is constructive comments regarding changes that better adhere to the project objectives and redistricting criteria

  - Changes will only be made if it brings closer adherence to the objectives and criteria

Next Steps:

- Committee has 1 more meeting scheduled after the tonight's Public Info Session
  - Next committee meeting is January 10, 2022.

- Committee will review additional public feedback from online surveys and emails

- Adjustments could be made to DRAFT options, if suggestions help to better adhere to the objectives and considerations

Quick Review of Maps and Statistics

Northwest Local School District, OH
2022-23 Elementary Zones

Elementary DRAFT Option 1
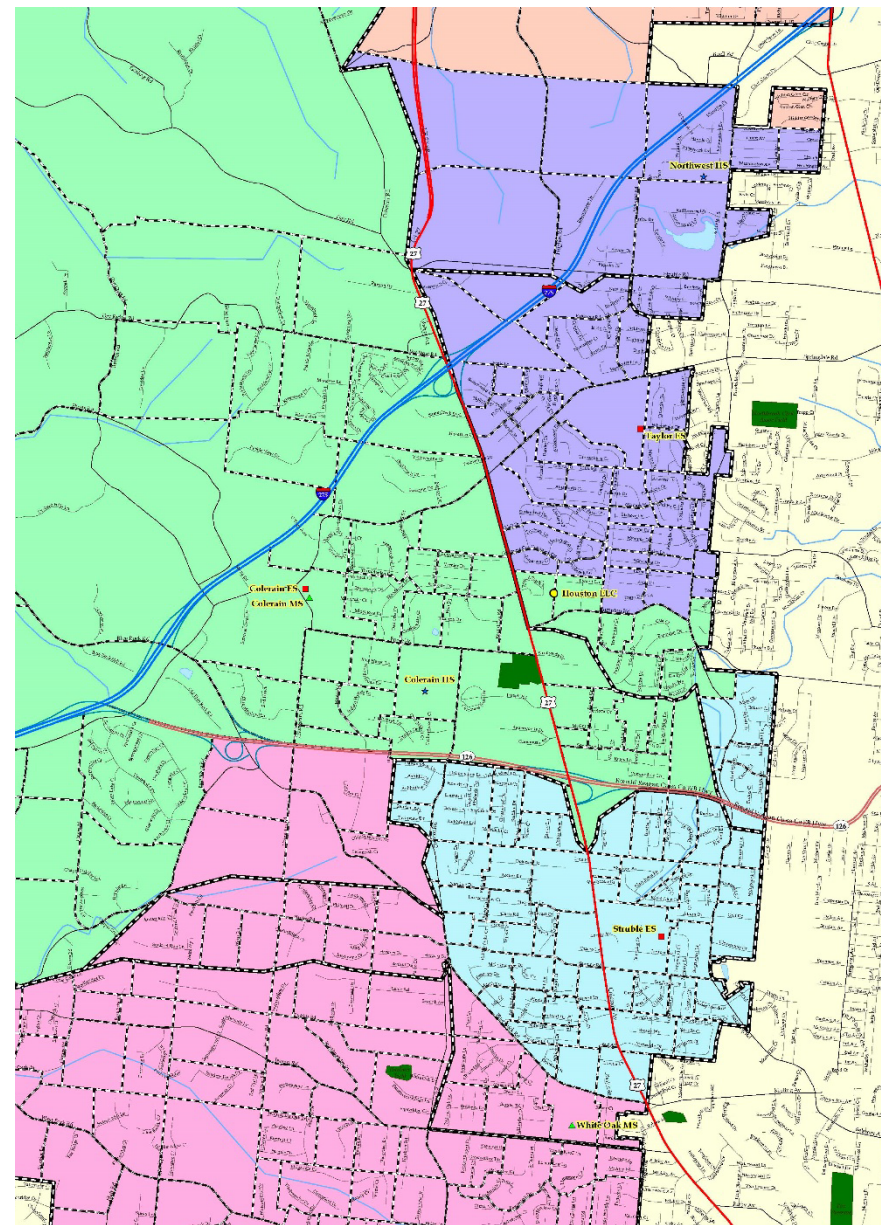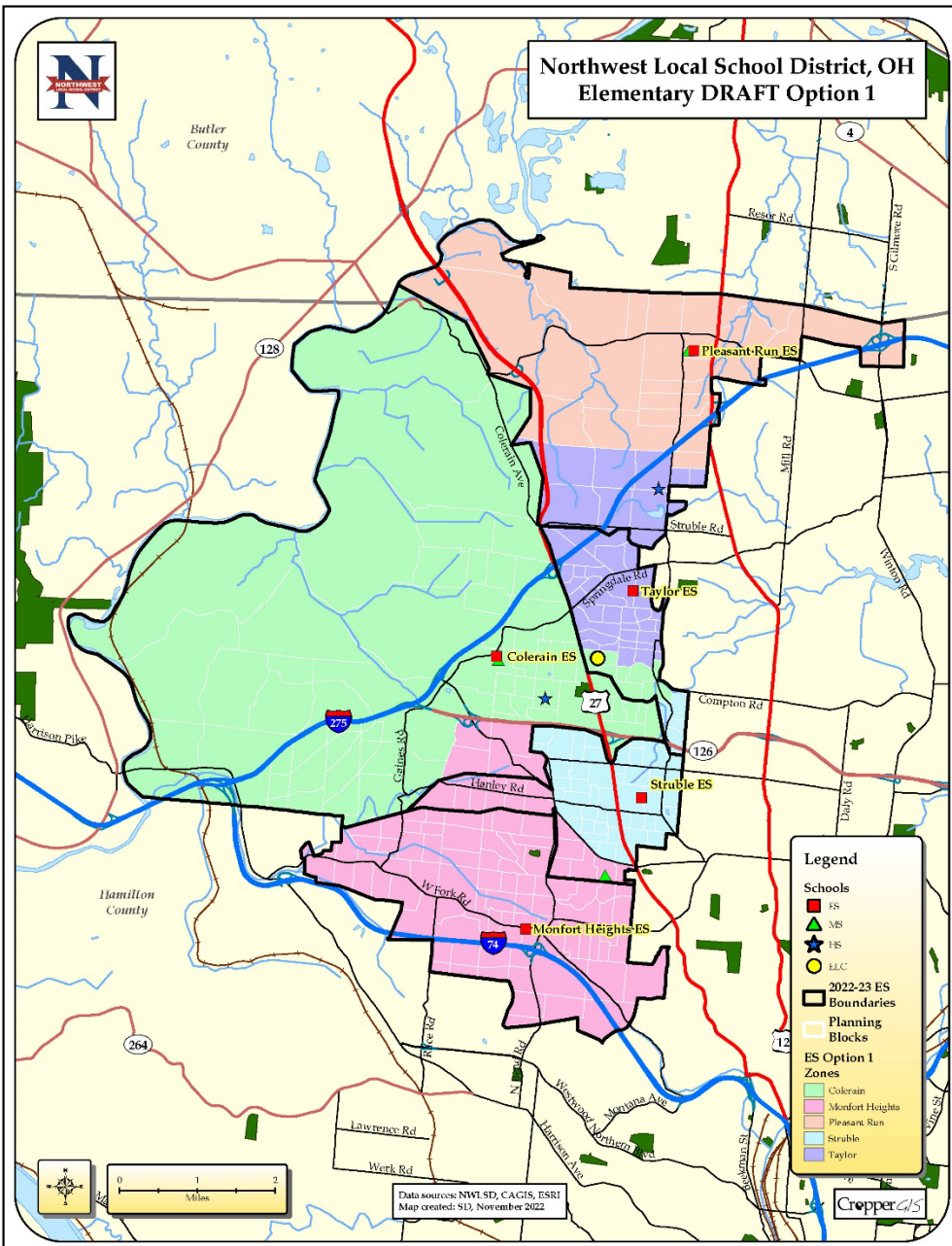
Elementary DRAFT Option 2

Middle School DRAFT Option 1

Northwest Local School District, OH
Middle School DRAFT Option 1

Middle School DRAFT Option 1

Northwest Local School District, OH
Middle School DRAFT Option 2
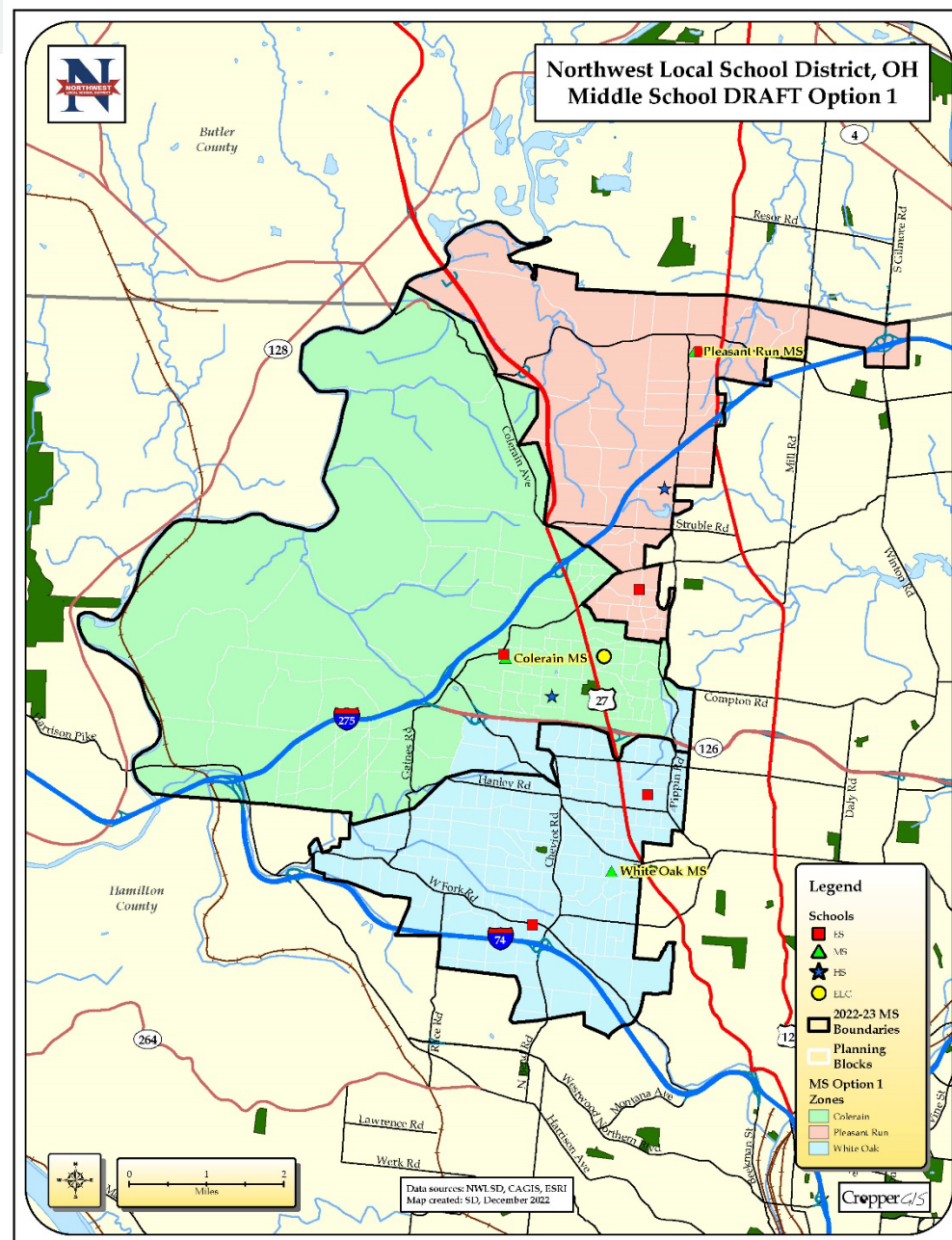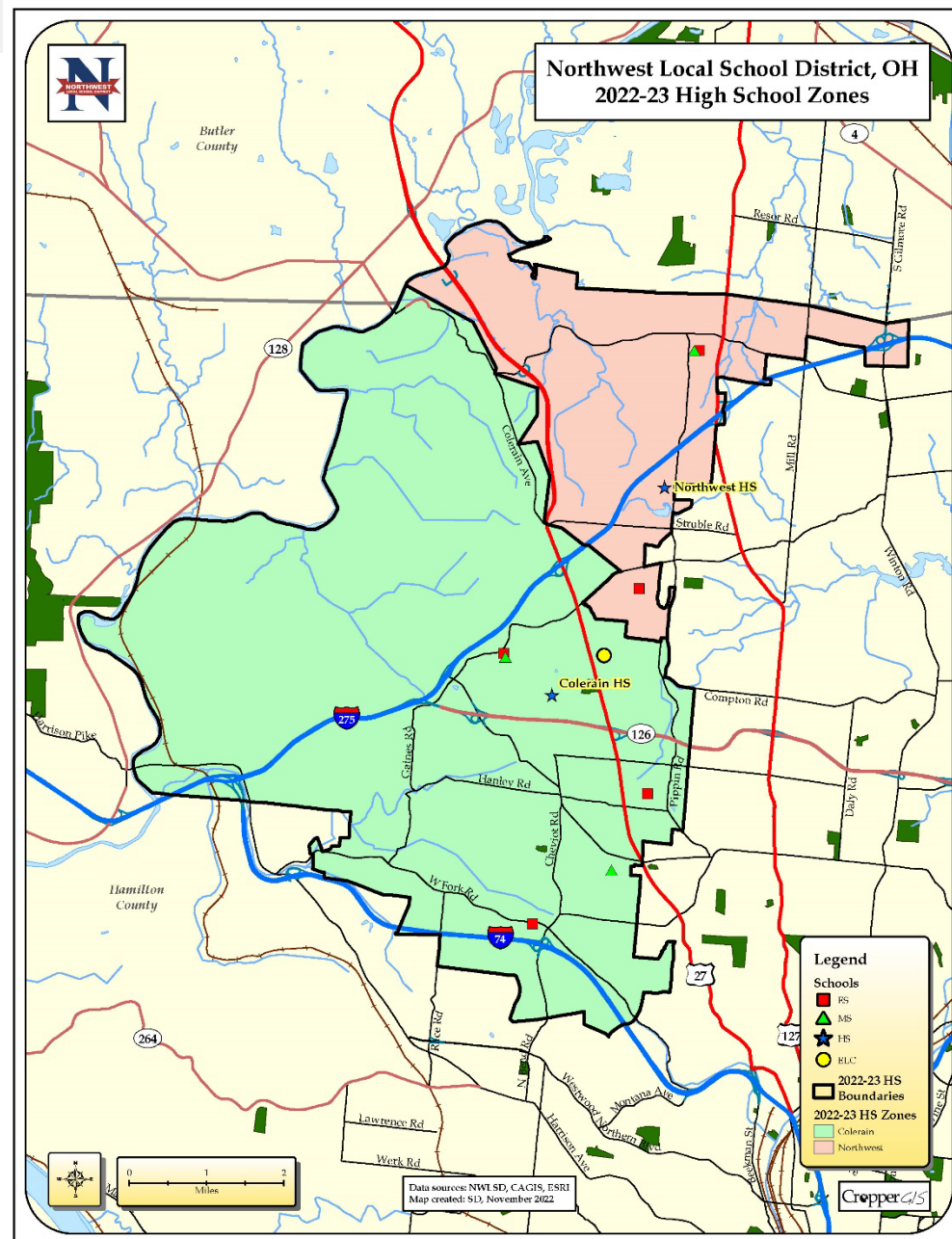
Northwest Local School District, OH
High School DRAFT Option 2
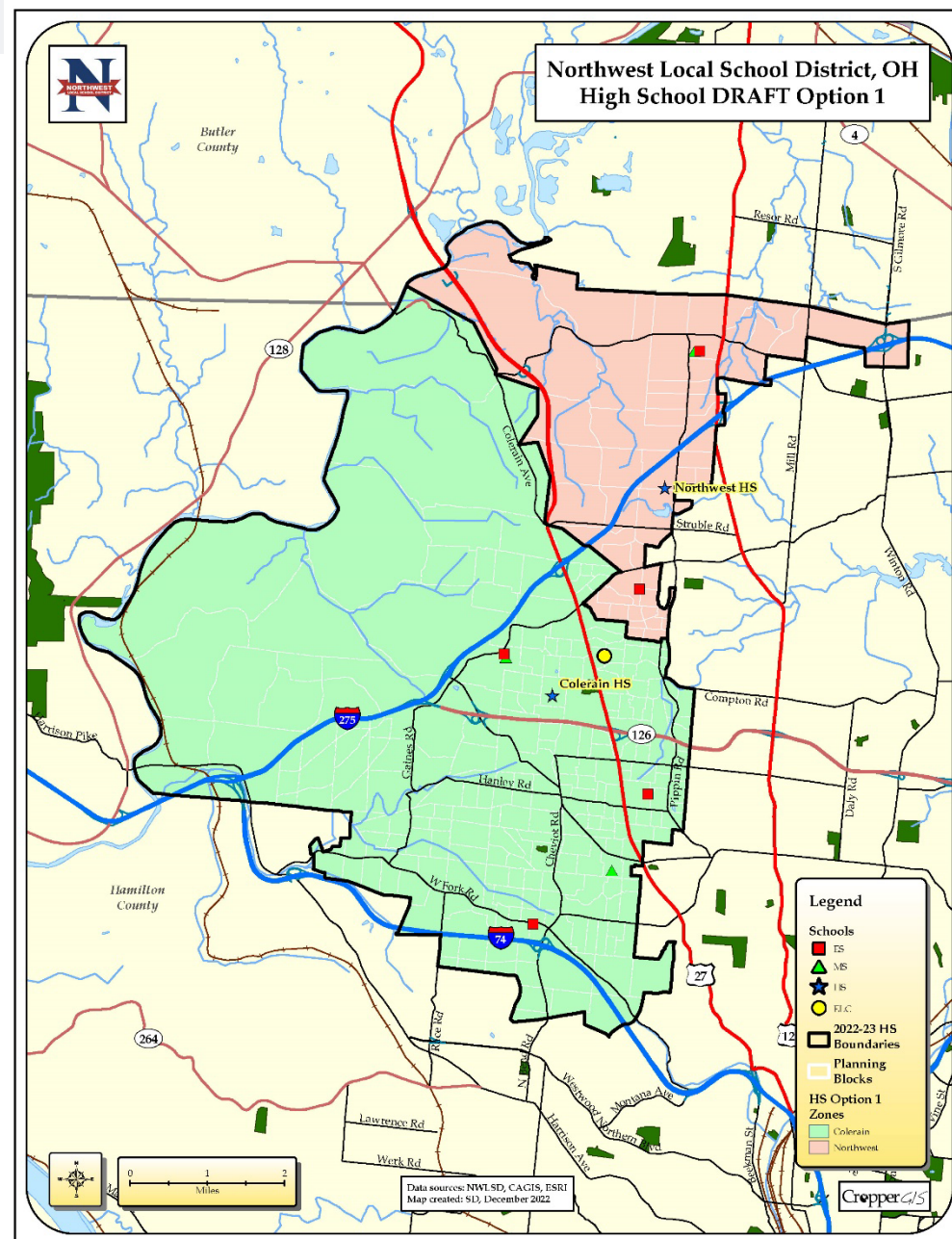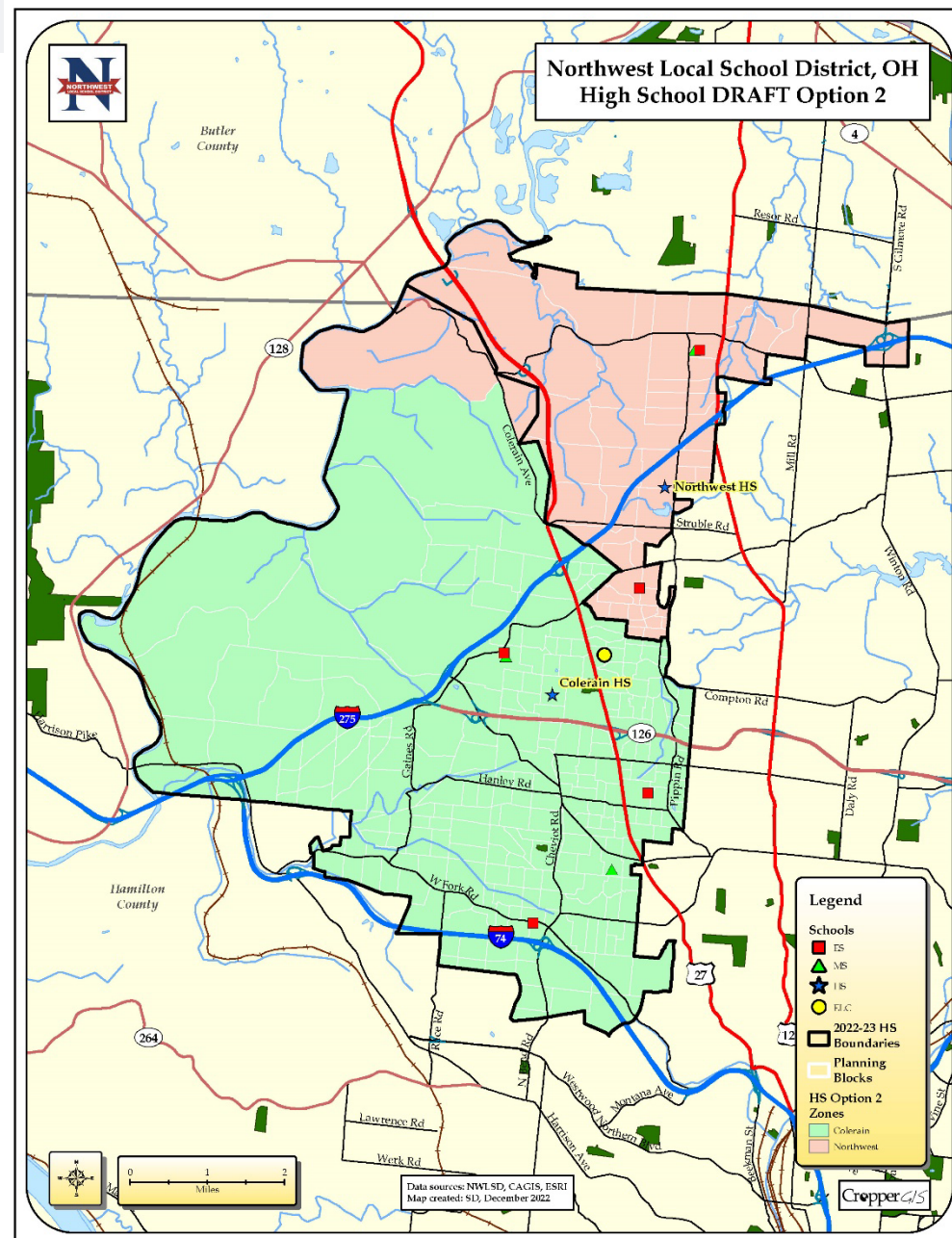
We will now review a series of tables that depict statistics for current schools and boundaries that are being evaluated.

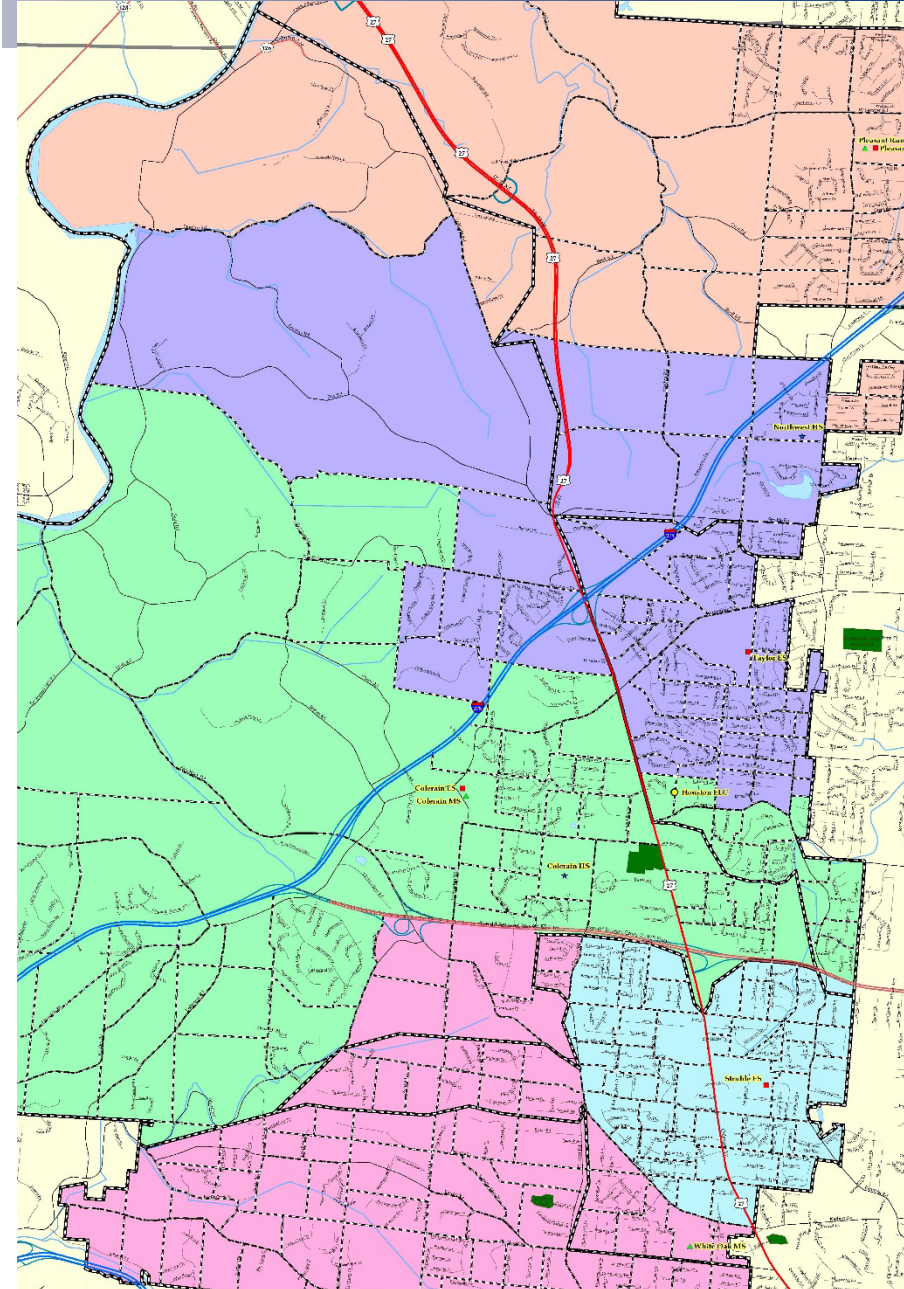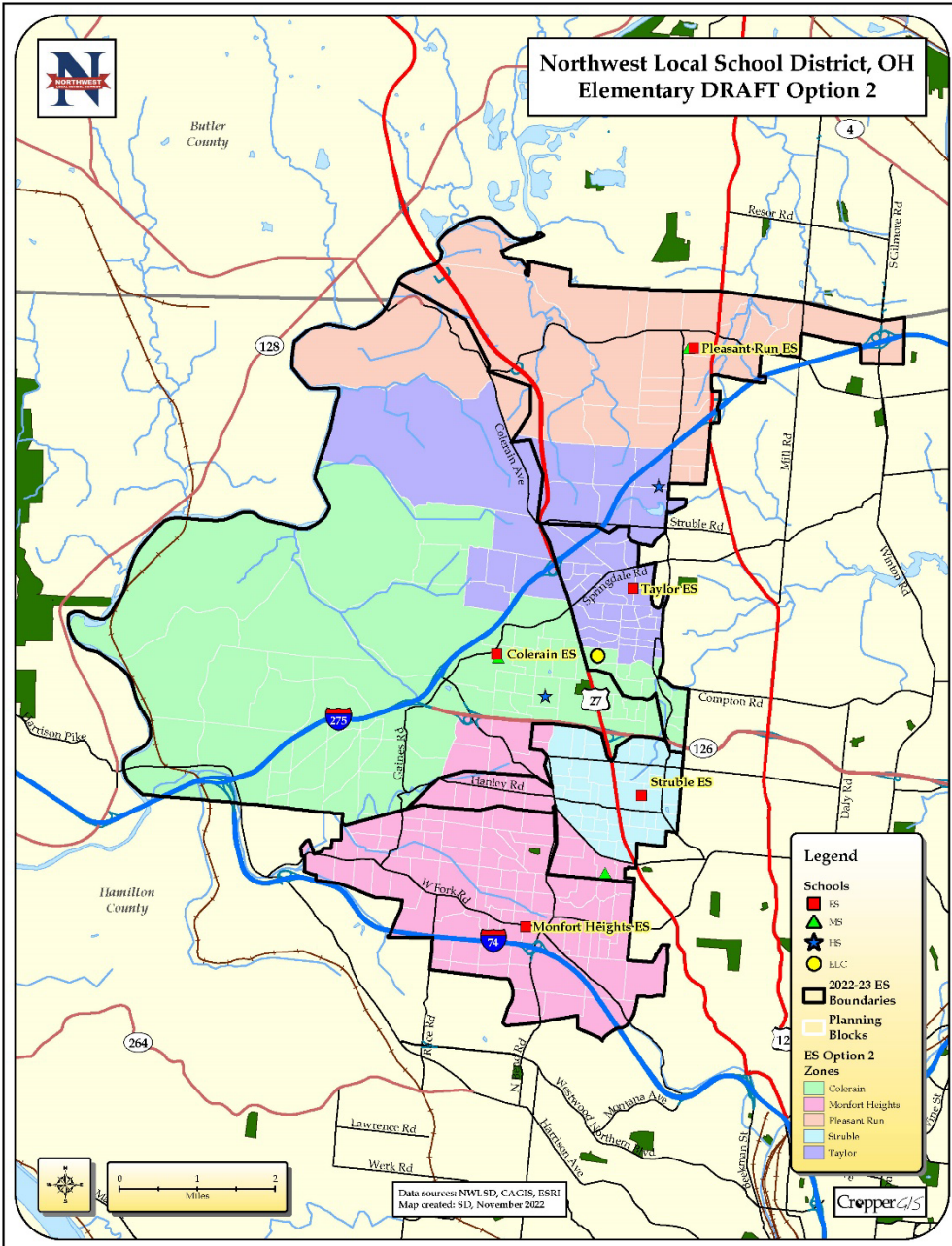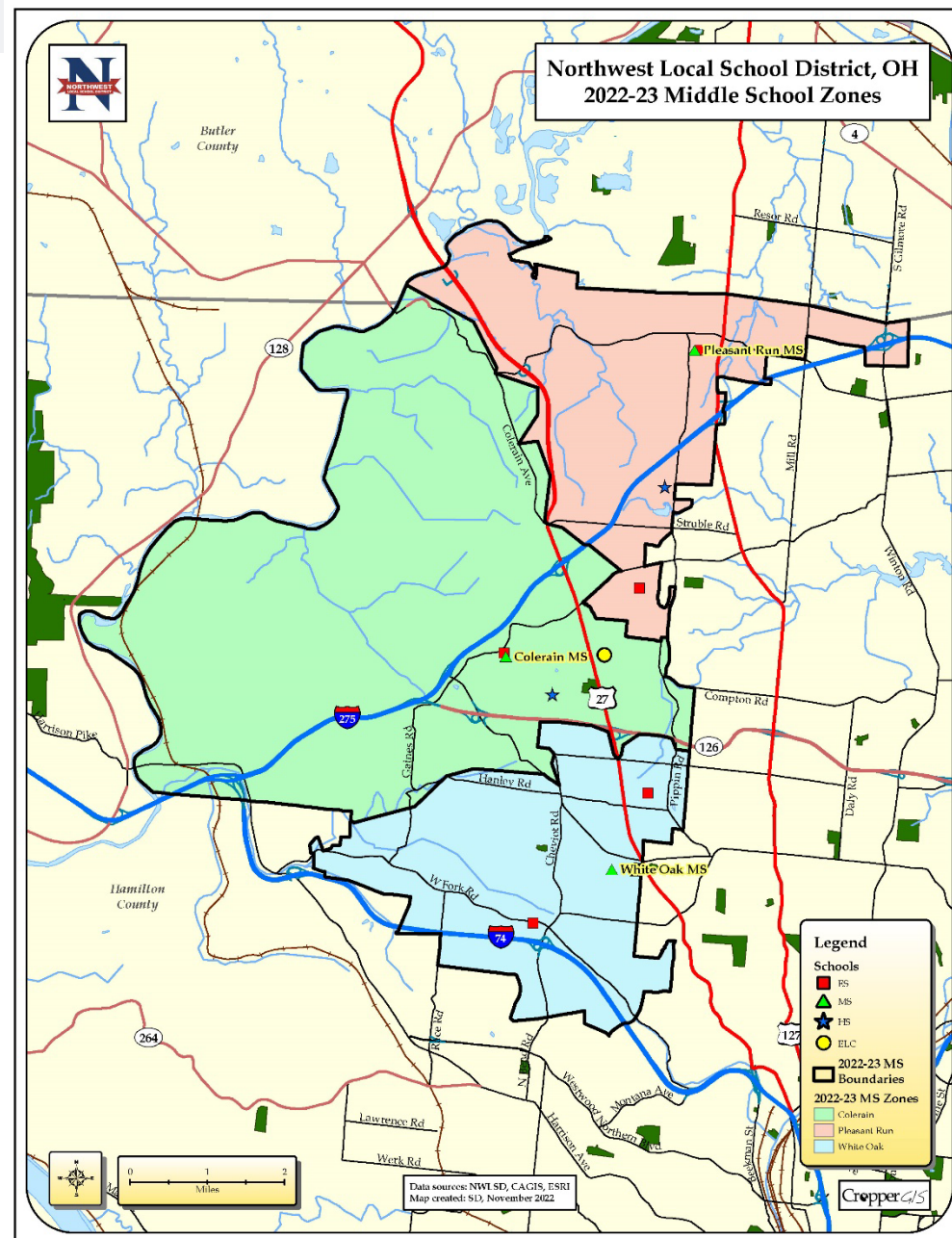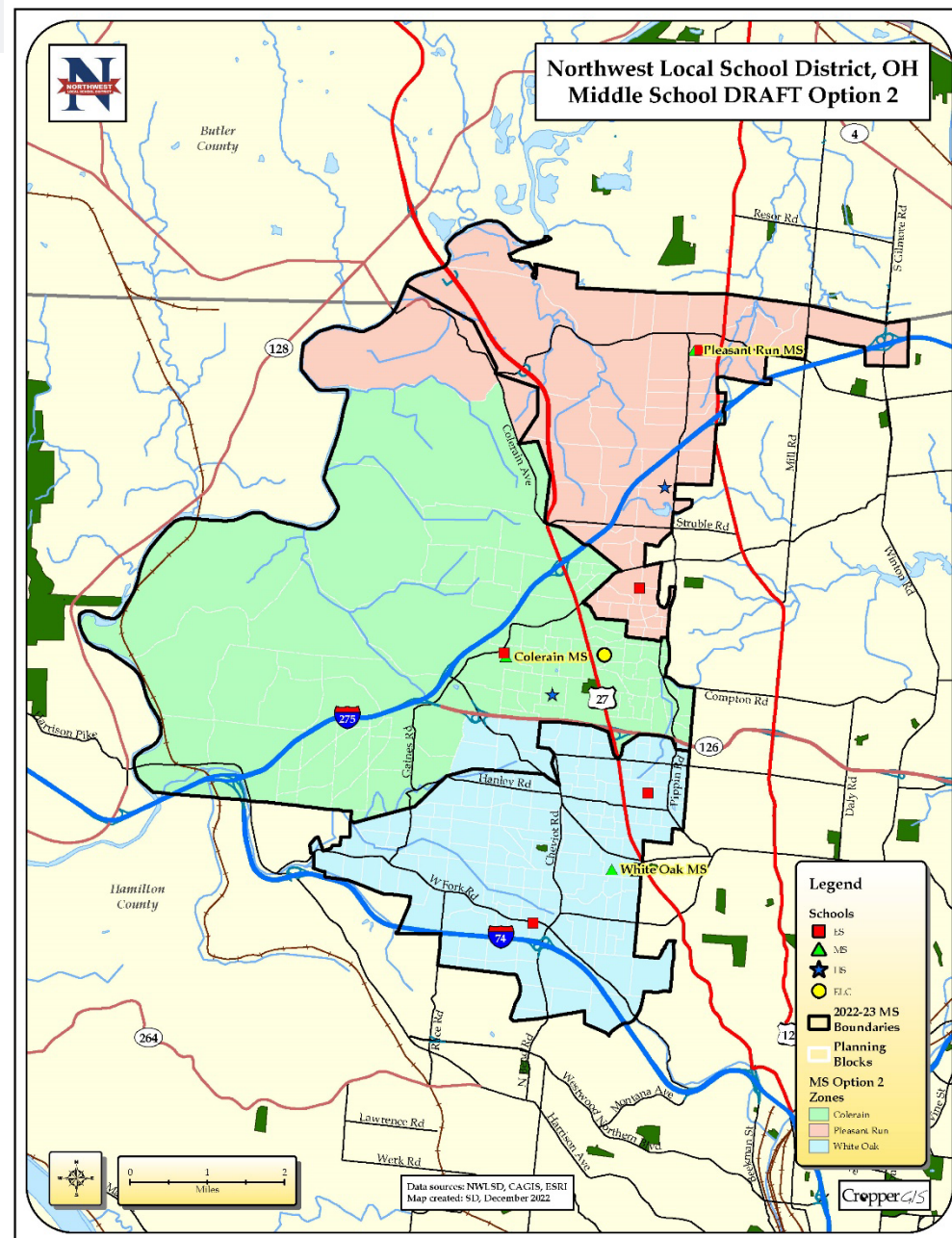This information will help inform all stakeholders on how schools could be potentially impacted as a result of potential redistricting adjustments.

All calculations were derived from the district's 2022-23 Enrollment student database dated October 4, 2022.

Glossary of Terms

Capacity –the number of students that an individual school has the physical capacity to enroll and can be reasonably accommodated in a facility.

Utilization - Utilization is the total enrollment divided by the capacity, described as a percentage.

Live-in students – Students residing inside of a school attendance boundary, regardless of where that student attends school.

Live and Attend – Students who attend the assigned schools for the zones where they live.

Live Out Attend In – Students that live outside of their attending school's boundary but reside within the Northwest Local School District's boundary.

Out of District students – Students that live outside of the Northwest Local School District's boundary.

Unmatched students – Students whose address was not able to be located by the GIS.

Feeder Pattern – The number of students living within the attendance boundary of both a lower grade cohort (ex. Elementary schools) and a higher-grade cohort (i.e., Middle School). This is given as both the number of Live-In students and described as a percentage.

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Elementary School Enrollment Statistics

ES Current (2022-23)

Enrollment and Utilization

Elementary School	2022-23 Capacity	Grade Config.	0	1	2	3	4	5	Current Enrollment	Current Utilization	Trend
Colerain Elementary	760	K-5	93	99	96	96	88	114	586	77%	▼
Monfort Heights Elementary	695	K-5	80	80	65	77	95	98	495	71%	▼
Pleasant Run Elementary	834	K-5	136	174	156	159	158	143	926	111%	▬
Struble Elementary	834	K-5	143	155	146	130	155	160	889	107%	▼
Taylor Elementary	834	K-5	141	146	135	139	141	121	823	99%	▲
Total	**3,957**		**593**	**654**	**598**	**601**	**637**	**636**	**3,719**	**94%**	▼

ES Option 1

Enrollment and Utilization

Elementary School	2022-23 Capacity	Grade Config.	KG	01	02	03	04	05	Estimated Enrollment	Estimated Utilization	Trend
Colerain Elementary	760	K-5	115	127	112	110	103	129	696	92%	▬
Monfort Heights Elementary	695	K-5	91	107	92	91	118	126	625	90%	▼
Pleasant Run Elementary	834	K-5	114	137	129	135	146	126	787	94%	▼
Struble Elementary	834	K-5	134	134	124	130	141	137	800	96%	▼
Taylor Elementary	834	K-5	139	149	141	135	129	118	811	97%	▲
Total	**3,957**		**593**	**654**	**598**	**601**	**637**	**636**	**3,719**	**94%**	▼

ES Option 2

Enrollment and Utilization

Elementary School	2022-23 Capacity	Grade Config.	KG	01	02	03	04	05	Estimated Enrollment	Estimated Utilization	Trend
Colerain Elementary	760	K-5	110	127	105	112	109	120	683	90%	▬
Monfort Heights Elementary	695	K-5	93	109	99	93	120	128	642	92%	▼
Pleasant Run Elementary	834	K-5	126	148	141	145	149	130	839	101%	▬
Struble Elementary	834	K-5	124	122	115	116	127	130	734	88%	▼
Taylor Elementary	834	K-5	140	148	138	135	132	128	821	98%	▲
Total	**3,957**		**593**	**654**	**598**	**601**	**637**	**636**	**3,719**	**94%**	▼

Elementary School Demographic Statistics

ES Current (2022-23)

Elementary School	Race / Ethnicity Percentage								Lunch Percentage	
	Asian	Black	Hispanic	American Indian	Mutli-racial	Native Hawaiian or P.I.	White	No Race Code	Free	Reduced
Colerain Elementary	6%	**19%**	6%	0%	14%	0%	**55%**	1%	39%	9%
Monfort Heights Elementary	5%	22%	3%	0%	12%	0%	**57%**	0%	36%	9%
Pleasant Run Elementary	6%	43%	8%	0%	12%	0%	29%	1%	42%	6%
Struble Elementary	14%	34%	6%	0%	10%	0%	35%	1%	44%	7%
Taylor Elementary	1%	42%	10%	0%	14%	1%	30%	1%	48%	6%
Total	**7%**	**34%**	**7%**	**0%**	**12%**	**0%**	**39%**	**1%**	**43%**	**7%**

ES Option 1

Elementary School	Race / Ethnicity Percentage								Lunch Percentage	
	Asian	Black	Hispanic	American Indian	Mutli-racial	Native Hawaiian or P.I.	White	No Race Code	Free	Reduced
Colerain Elementary	5%	23%	6%	0%	14%	0%	51%	1%	36%	8%
Monfort Heights Elementary	9%	20%	4%	0%	11%	0%	**56%**	0%	35%	9%
Pleasant Run Elementary	7%	44%	8%	0%	12%	0%	28%	1%	41%	6%
Struble Elementary	12%	40%	6%	0%	11%	0%	31%	1%	48%	7%
Taylor Elementary	2%	39%	9%	0%	14%	1%	33%	1%	50%	6%
Total	**7%**	**34%**	**7%**	**0%**	**12%**	**0%**	**39%**	**1%**	**43%**	**7%**

ES Option 2

Elementary School	Race / Ethnicity Percentage								Lunch Percentage	
	Asian	Black	Hispanic	American Indian	Mutli-racial	Native Hawaiian or P.I.	White	No Race Code	Free	Reduced
Colerain Elementary	5%	27%	7%	0%	14%	0%	44%	1%	39%	8%
Monfort Heights Elementary	10%	21%	4%	0%	11%	0%	**57%**	0%	36%	9%
Pleasant Run Elementary	7%	45%	9%	0%	13%	0%	32%	1%	44%	6%
Struble Elementary	11%	35%	5%	0%	10%	0%	29%	1%	44%	6%
Taylor Elementary	2%	39%	9%	0%	14%	1%	35%	1%	48%	6%
Total	**7%**	**34%**	**7%**	**0%**	**12%**	**0%**	**39%**	**1%**	**43%**	**7%**

Elementary to Middle School Feeder Patterns

	ES to MS Splits	MS to HS Splits
Current	1	0
Option 1	1	0
Option 2	1	0

2022-23 ES Zone	2022-23 MS Zone	ES Attendance
Colerain	Colerain	100%
Monfort Heights	White Oak	100%
Pleasant Run	Pleasant Run	100%
Struble	White Oak	100%
Taylor	Colerain	49%
Taylor	Pleasant Run	51%

ES Option 1	MS Option 1	ES Attendance
Colerain	Colerain	100%
Monfort Heights	White Oak	100%
Pleasant Run	Pleasant Run	100%
Struble	White Oak	100%
Taylor	Colerain	28%
Taylor	Pleasant Run	72%

ES Option 2	MS Option 2	ES Attendance
Colerain	Colerain	100%
Monfort Heights	White Oak	100%
Pleasant Run	Pleasant Run	100%
Struble	White Oak	100%
Taylor	Colerain	34%
Taylor	Pleasant Run	66%

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Elementary DRAFT Options Impacts

Student Impact Estimates		
Option	Total K-5th Live-In Students Impacted	Percent K-5th Live-In Students Impacted
ES Option 1	484	13.2%
ES Option 2	524	14.3%

ES Zone 2022-23	ES Option 1	Total 2022-23 K-5th Live-In Students
Colerain	Colerain	559
Colerain	Monfort Heights	19
Monfort Heights	Monfort Heights	459
Pleasant Run	Pleasant Run	772
Pleasant Run	Taylor	141
Struble	Monfort Heights	140
Struble	Struble	741
Taylor	Colerain	132
Taylor	Struble	52
Taylor	Taylor	653

ES Zone 2022-23	ES Option 2	Total 2022-23 K-5th Live-In Students
Colerain	Colerain	497
Colerain	Monfort Heights	19
Colerain	Pleasant Run	13
Colerain	Taylor	49
Monfort Heights	Monfort Heights	459
Pleasant Run	Pleasant Run	811
Pleasant Run	Taylor	102
Struble	Monfort Heights	157
Struble	Struble	724
Taylor	Colerain	181
Taylor	Struble	3
Taylor	Taylor	653

Middle and High School Enrollment Statistics are provided in the same format as the elementary schools.

Plots showing all statistics are displayed next to maps.

Now it is time to migrate to the maps, where we look forward to having conversations about the options and answer any questions you may have.

We wish everyone a Happy Holiday!