City of Wheaton 2022 Council Redistricting Proposals

Created 8/29/2022

Background

In 1993, the City was divided into 4 city council election districts (East, North, South, and West). The membership of the council was set at 6 council members with one member being elected from each district for a term of 4 years, and the mayor and two council members being elected at large, each for 4-year terms. Redistricting affects the boundaries of in-district councilmember elections.

The total population of Wheaton increased to 53,970 in the last census. Given that the City has four Council Districts, the "ideal population," the population for each district that results in a perfectly equal number of residents, is 13,492. The table below reflects the population of each district after incorporating data from the 2020 Census and shows how far they deviate from the "ideal population."

In the Percent Deviation from ideal, last column, note the percent over of 6.16% in the North District as compared to the 8.10% under in the South District. The "maximum deviation" between the North district, highest population, and South district, lowest population, is 1,925 or 14.26%.

District	2020 Census 53,970	Population Deviation from Ideal	Percent Deviation from Ideal
East	13,912	419.5	3.11%
North	14,324	831.5	6.16%
South	12,399	(1,093.5)	(8.10%)
West	13,335	(157.5)	(1.17%)

Governing Laws and Statutes

Illinois State Statute, 65 ILCS 5/5-2-18.7 - Change to Election of Council of Part At Large and Part from Districts with Staggered Four-Year Terms and Biennial Elections provides the following:

> *"The city council shall divide the city, whenever necessary thereafter, into districts which shall be as compact and contiguous territory as practicable and of approximately equal population"*

This section of Illinois State Statute directs division of districts be based upon equality of population and as compact and contiguous as practical. The "one person, one vote" standard mandated by the 14th Amendment to the U.S. Constitution also commands apportionment of local governmental bodies exercising general governmental authority be based upon equalization of the total population. Legally, an" ideal" deviation is a fundamental constitutional and statutory guideline supporting the cornerstone goal of one person, one vote. As a rule, the City should seek to minimize population differences between districts when they exceed a "maximum deviation" of 10% or more.

Recommendation

Although the upcoming 2023 municipal election is for the mayor and the two at large council seats, and is not impacted by a redistricting, it is appropriate to consider adjusting the boundaries now, considering the 2020 Census data. State Statute does require that redistricting shall be completed by mid-October 2022. After reviewing an initial set of proposals at the August 22, 2022, Planning Session, the City Council narrowed their selection down to the two proposals contained in this document. At the City's upcoming September 12, 2022, Planning Session, the City Council will select one of these proposals for the City to take to ordinance.

Guiding Principles

The City Council approved a set of guiding principles that would guide the creation of new council districts. These principles are listed on the following page (pg.2), accompanied by specific measures that can be used to compare the proposals.

Current Council Districts and Redistricting Proposal Information

Guiding Principles – Established Measures

1. Equal population per district "one person, one vote" principle, close to zero deviation from ideal

Measure: Minimize the total, or maximum, deviation between the most populous and least populous district from the "*ideal*," which is the population they would have if equal. This is quantified by a percent; m*aximum deviation = (High District Pop - Ideal Pop + Ideal Pop – Low District Pop) / Ideal Pop*

2. Districts composed of territory that is contiguous and reasonably compact

Measure - Contiguity: Staff verified that all created districts are fully contiguous in each proposal. This represented nominally; *districts are either all contiguous ("yes") or they are not ("no")*

Measure - Compactness: Staff used an open-source software "*DistrictBuilder.org*" to assess the compactness of shape for council district using the "*Polsby-Popper Test."* This test gives a score of 0-100%; 0 being least compact and 100 being most compact. Scores are generated by creating a circle of sufficient size to surround/overlap the whole district; the higher the degree of overlap, the more compact the districts. For each proposal, this is quantified by percent; *average district compactness score = (Sum of District Scores / 4)*

3. Each of the four districts will contain the residence of an incumbent district council member

Measure: Staff verified that all created districts contain one incumbent in-district councilmember. This is represented nominally; *districts all contain one incumbent ("yes"), or they do not ("no")*

4. Use key streets and geographic boundaries to facilitate voter comprehension

Measure: Staff categorized "*key streets*" as major and minor arterial roads and "*key geographic boundaries*" as either the Union Pacific Railroad or Spring Brook Creek. Staff then determined what proportion of all "*boundaries between council districts"* were either a key street or key geographic boundary. For simplicity, these proportions are determined by a count of boundaries, not by the length of those boundaries. Additionally, this count was limited to boundaries between council districts, and do not include any boundaries with adjacent cities or unincorporated Wheaton. This is quantified by a percent: *proportion of key streets and geographic boundaries between districts = (Count of Key Streets and Geographies / Count of District Boundaries)*

5. Use established precinct boundaries to minimize election administrative costs and avoid potential voting error (issuance of incorrect district ballots)

Measure: Staff identified where DuPage County's election precincts overlap with two or more council districts. Note, for comparison purposes, it is preferable that there are fewer precincts where this occurs. This is quantified by count; *total number of Precincts Split Across Districts*

6. Transparency; advance the ongoing public communications of the effort

Not Measured: Transparency cannot be quantified between proposals. However, staff will post informational materials on the City website detailing all redistricting proposals (including this document) and release notices of when this topic will be discussed by Council.

7. Minimize the number of residents impacted by redistricting

Measure: Staff looked at changes in population from current districts to different districts in each proposal. This is quantified by count; *total number of residents that will be in a different council district from the one they currently reside*

8. Incorporate neighborhood characteristics in redistricting

Measure: Staff identified the number of instances where a boundary between council districts split neighbors on the same street between two separate districts. To remain consistent with the "key streets and geographic boundaries" measure, staff limited this count to non-arterial streets, and additionally limited it to instances where addresses across from one another along the same street were split (which does not include corner lot properties). This is quantified by count; *the total number of non-arterial streets where neighbors are split between districts*

Current Council Districts – Assessment of Guiding Principles

District	2020 Population	Ideal Deviation
North	14,324	6.16%
East	13,912	3.11%
South	12,399	-8.10%
West	13,335	-1.17%

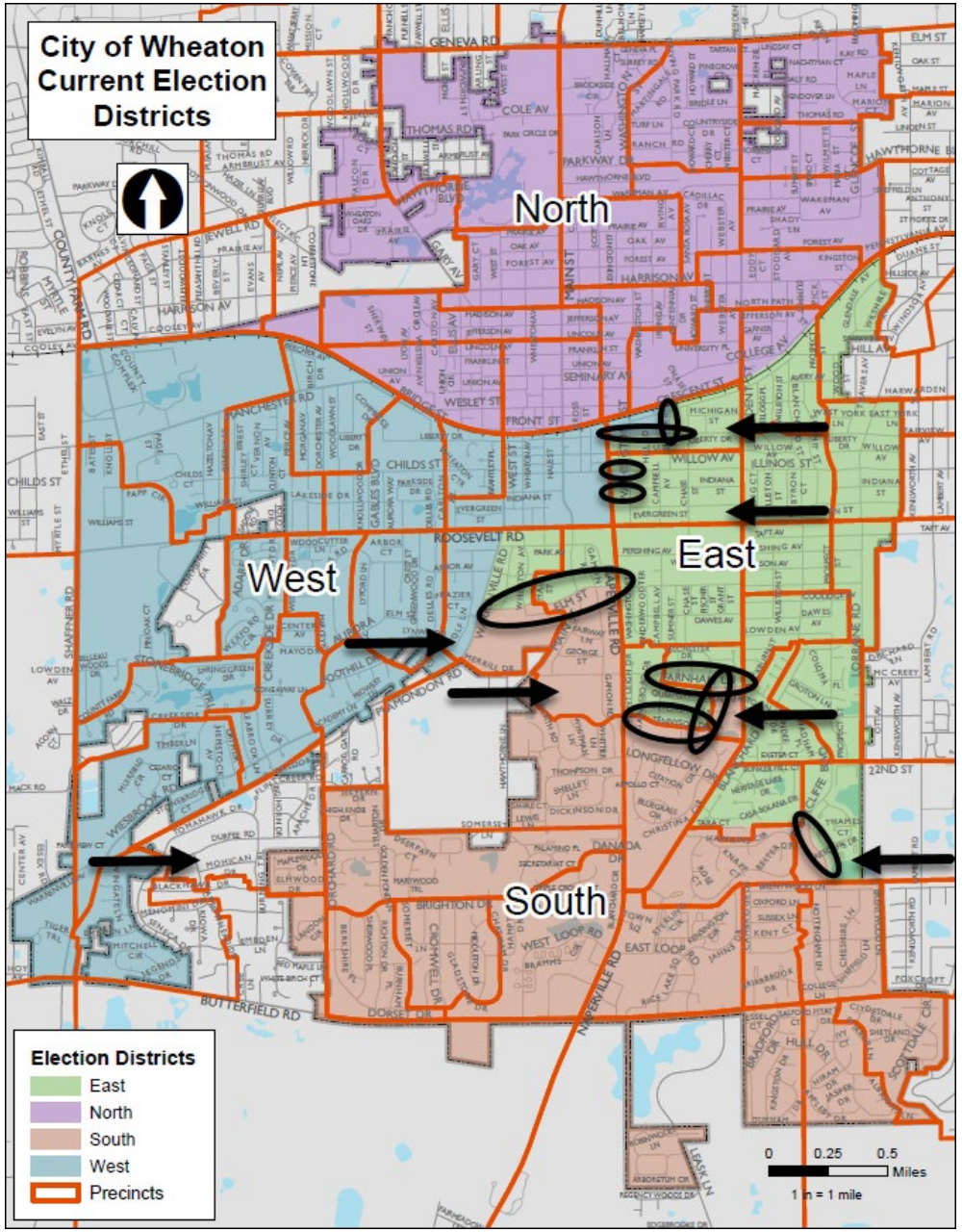
Maximum Deviation from Ideal	14.26%
All Districts are Contiguous	Yes
Average District Compactness (*Polsby-Popper Test: 0-100%*)	16.5%
All Districts Have an In-District Incumbent	Yes
Proportion of Arterial and Geographic Boundaries Between Districts	24%
Precincts that are Split Across Districts: Indicated by ←	7
Residents in New District	0
Non-Arterials Streets Split Between Districts: Indicated by ⬭	9

Key Streets and Geographic Boundaries between Districts

- Union Pacific Railroad
- Naperville Road
- Roosevelt Road
- Warrenville Road
- Blanchard Street
- President Street

Non-Arterial Streets with Neighborhoods Splits Between Districts

- Sumner Street
- Indiana Street
- Illinois Street
- Liberty Drive
- Briarcliff Boulevard
- Elm Street
- Farnham Lane
- Tennyson Drive
- Haverhill Drive



Redistricting Proposal 1 – Assessment of Guiding Principles

District	2020 Population	Ideal Deviation
North	13,489	-0.03%
East	13,399	-0.69%
South	13,936	3.29%
West	13,146	-2.57%

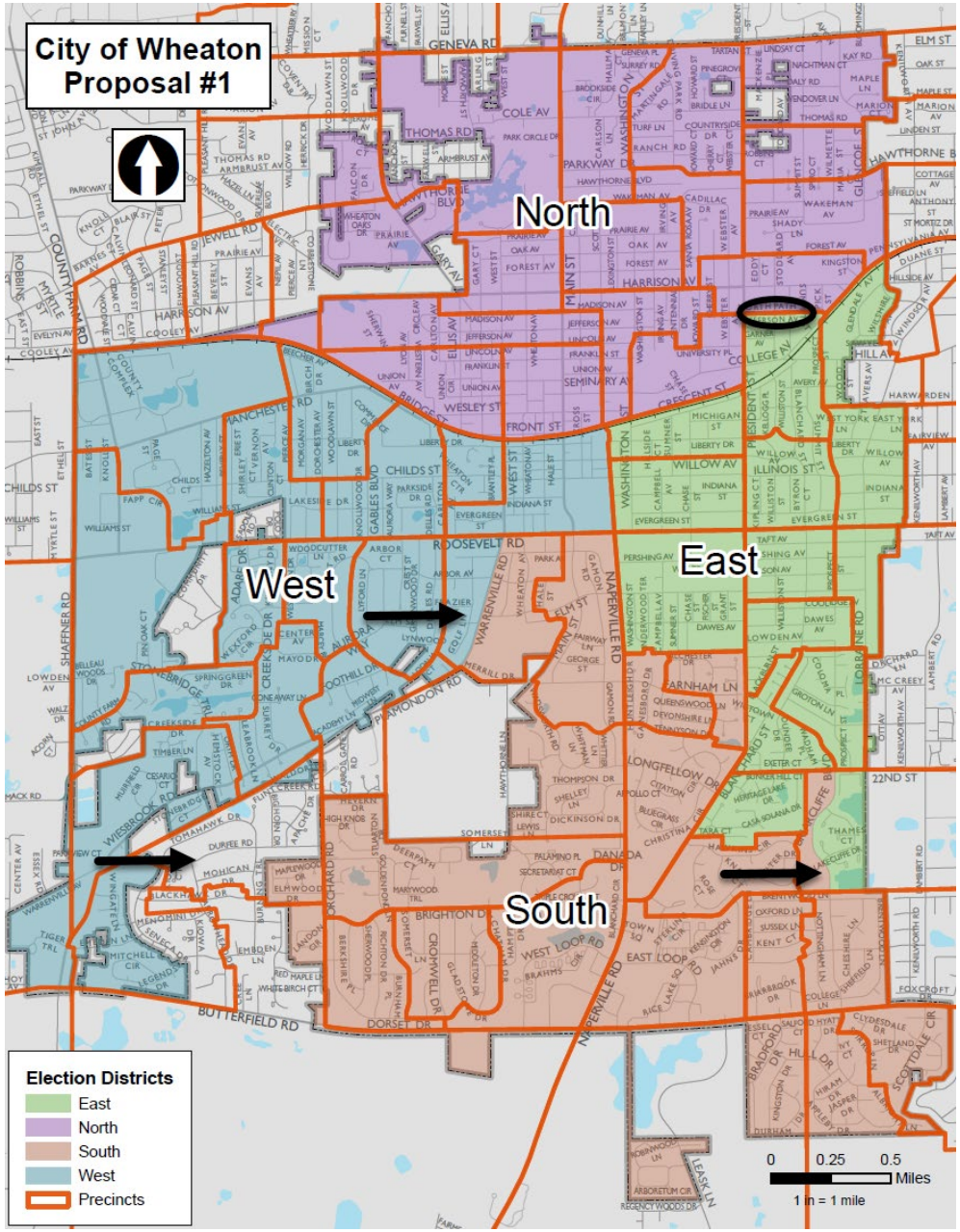
Maximum Deviation from Ideal	5.86%
All Districts are Contiguous	Yes
Average District Compactness (*Polsby-Popper Test: 0-100%*)	17.5%
All Districts Have an In-District Incumbent	Yes
Proportion of Arterial and Geographic Boundaries Between Districts	40%
Precincts that are Split Across Districts: Indicated by ←	3
Residents in New District	2,515
Non-Arterials Streets Split Between Districts: Indicated by ⬭	1

Key Streets and Geographic Boundaries between Districts

- Union Pacific Railroad
- Naperville Road
- Roosevelt Road
- Warrenville Road
- President Street
- Blanchard Street

Non-Arterial Streets with Neighborhoods Splits Between Districts

- North Path



Redistricting Proposal 2 – Assessment of Guiding Principles

District	2020 Population	Ideal Deviation
North	13,489	-0.03%
East	13,445	-0.35%
South	13,549	0.40%
West	13,489	-0.03%

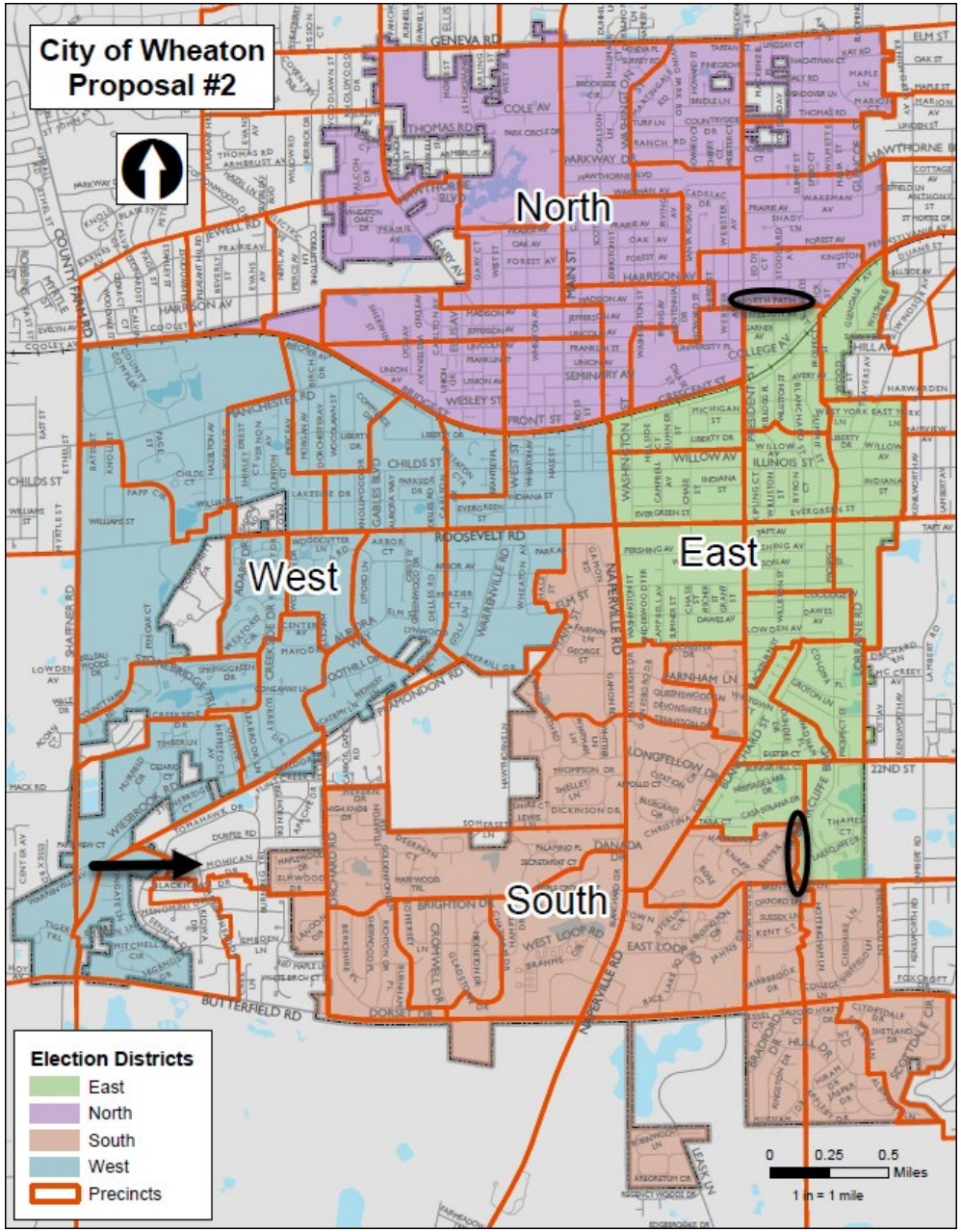
Maximum Deviation from Ideal	0.75%
All Districts are Contiguous	Yes
Average District Compactness (*Polsby-Popper Test: 0-100%*)	19.0%
All Districts Have an In-District Incumbent	Yes
Proportion of Arterial and Geographic Boundaries Between Districts	35%
Precincts that are Split Across Districts: Indicated by	1
Residents in New District	2,565
Non-Arterials Streets Split Between Districts: Indicated by	2

Key Streets and Geographic Boundaries between Districts

- Union Pacific Railroad
- Naperville Road
- Roosevelt Road
- Spring Brook Creek
- President Street
- Blanchard Street

Non-Arterial Streets with Neighborhoods Splits Between Districts

- North Path
- Hawkins Circle

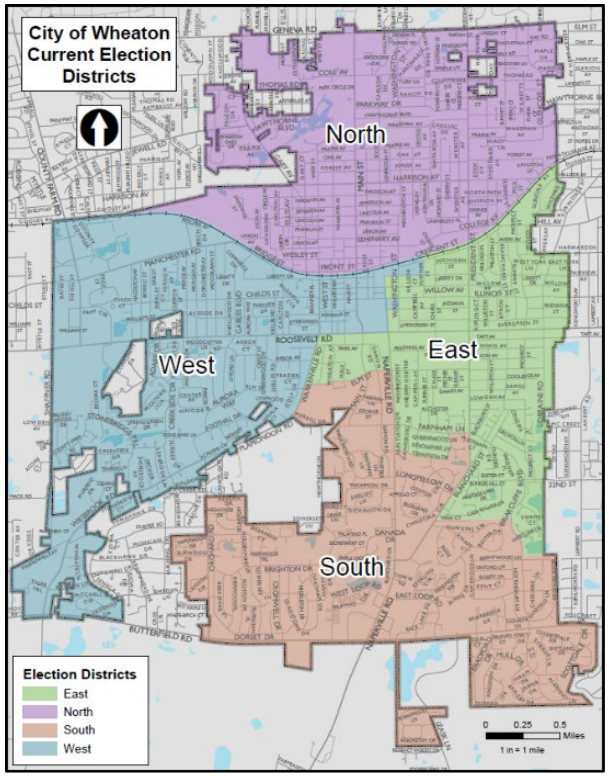


Summary Comparison of Proposals by Guiding Principles

Current Wheaton Council Districts

District	2020 Population	Ideal Deviation
North	14,324	6.16%
East	13,912	3.11%
South	12,399	-8.10%
West	13,335	-1.17%

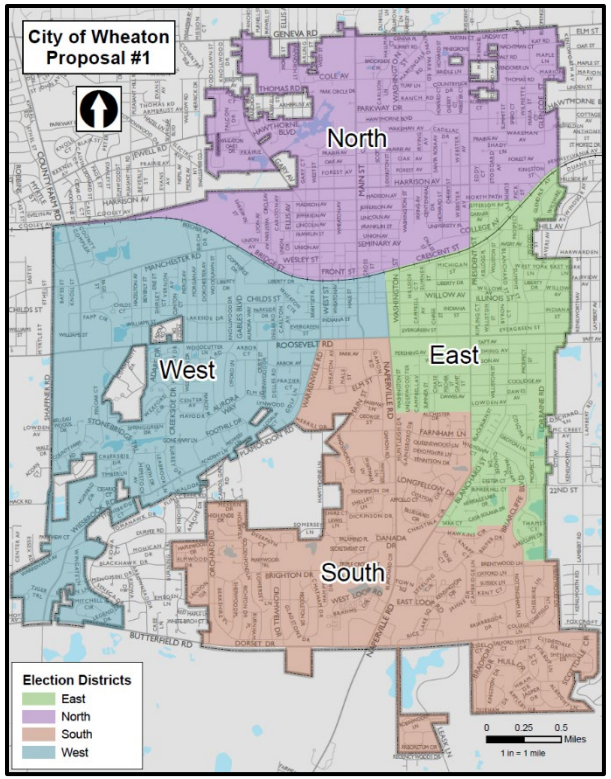
Maximum Deviation from Ideal	14.26%
All Districts are Contiguous	Yes
Average District Compactness Polsby-Popper Test (0-100%)	16.5%
All Districts Have an In-District Incumbent	Yes
Proportion of Arterial and Geographic Boundaries between Districts	24%
Precincts that are Split Across Districts	7
Residents Located in a New District	0
Non-Arterials Streets Split Between Districts	9



Proposal 1 – Least Changed

District	2020 Population	Ideal Deviation
North	13,489	-0.03%
East	13,399	-0.69%
South	13,936	3.29%
West	13,146	-2.57%

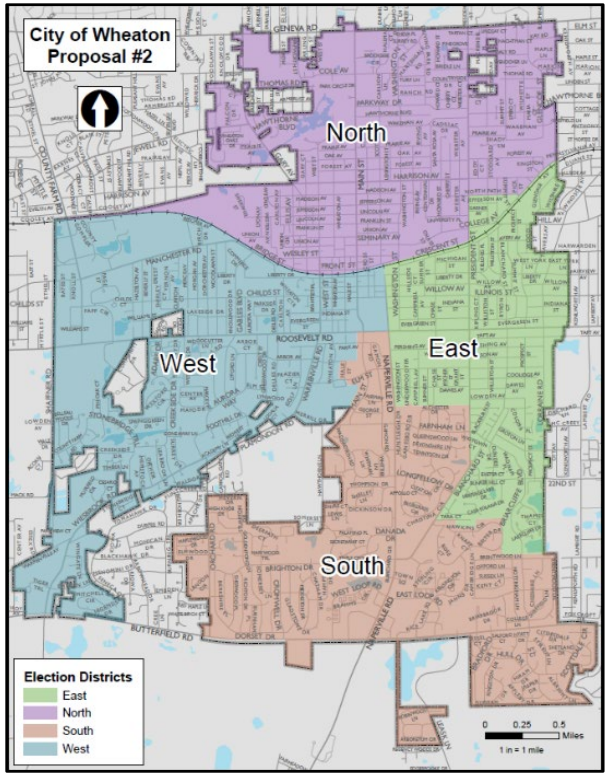
Maximum Deviation from Ideal	5.86%
All Districts are Contiguous	Yes
Average District Compactness Polsby-Popper Test (0-100%)	17.5%
All Districts Have an In-District Incumbent	Yes
Proportion of Arterial and Geographic Boundaries between Districts	40%
Precincts that are Split Across Districts	3
Residents Located in a New District	2,515
Non-Arterials Streets Split Between Districts	1



Proposal 2 – Most Balanced

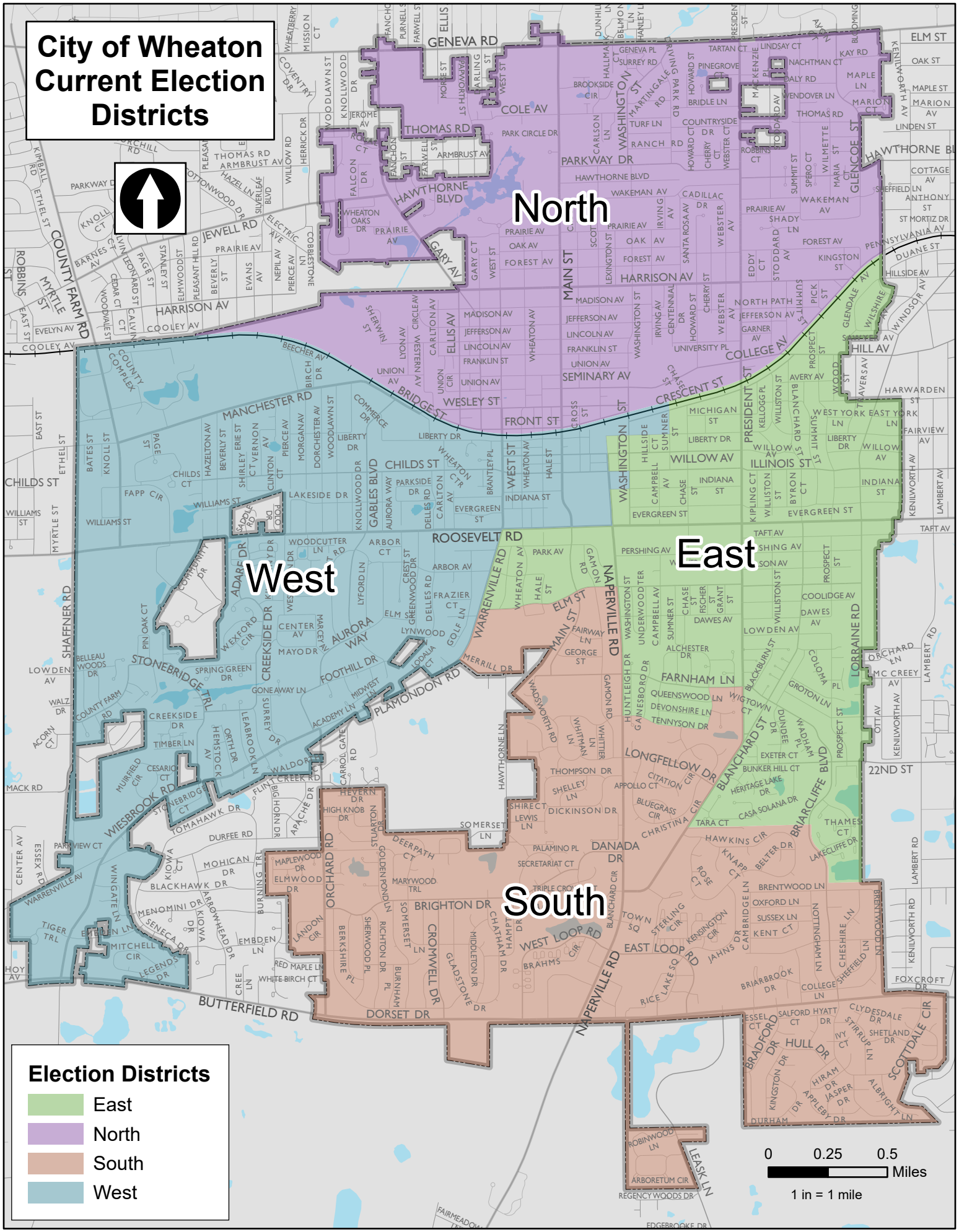
District	2020 Population	Ideal Deviation
North	13,489	-0.03%
East	13,445	-0.35%
South	13,549	0.40%
West	13,489	-0.03%

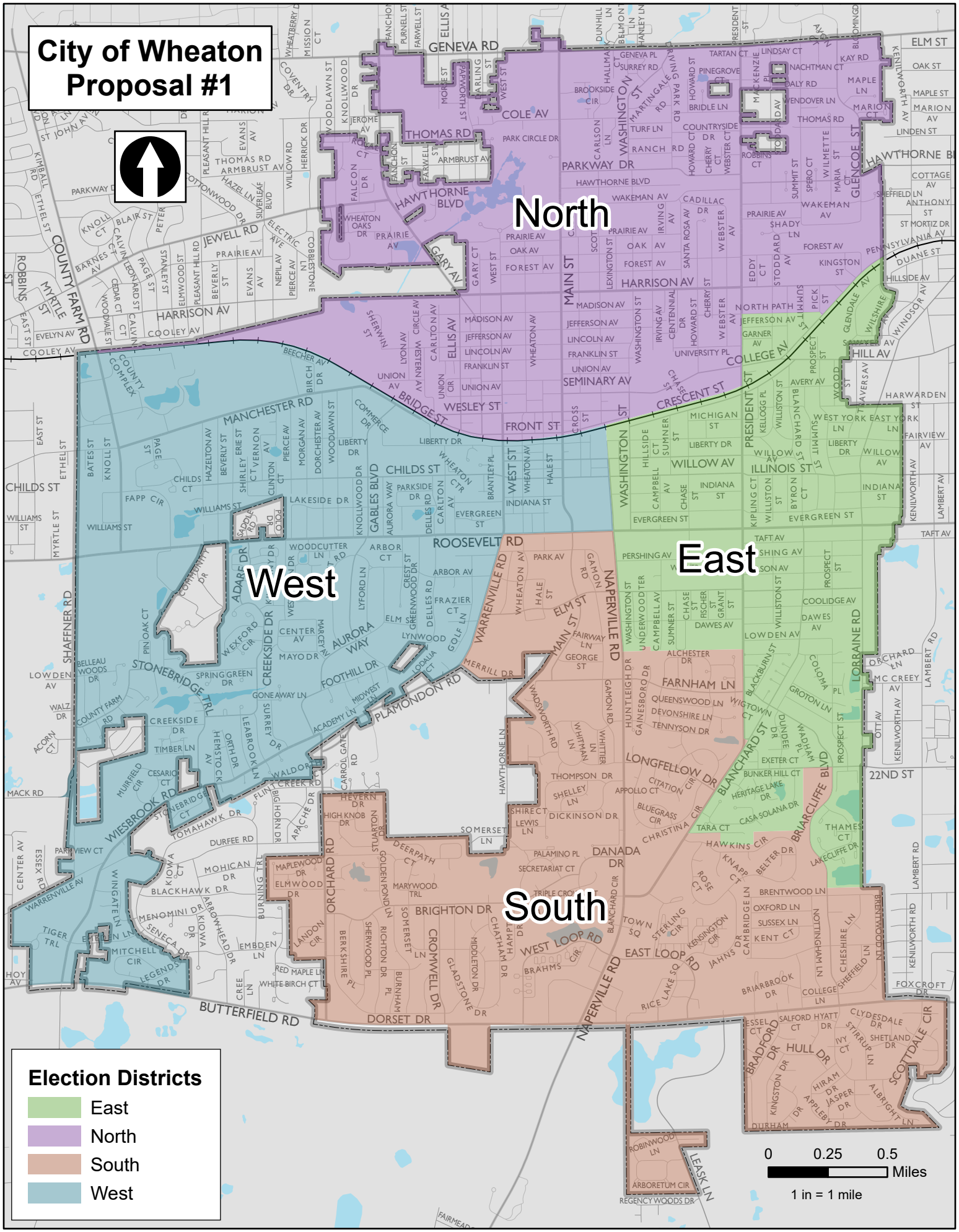
Maximum Deviation from Ideal	0.75%
All Districts are Contiguous	Yes
Average District Compactness Polsby-Popper Test (0-100%)	19.0%
All Districts Have an In-District Incumbent	Yes
Proportion of Arterial and Geographic Boundaries between Districts	35%
Precincts that are Split Across Districts	1
Residents Located in a New District	2,565
Non-Arterials Streets Split Between Districts	2



Supplemental Maps

Following this page are maps of the current council districts and redistricting proposals for review. For clarity, they contain no precinct boundaries or other added markers.





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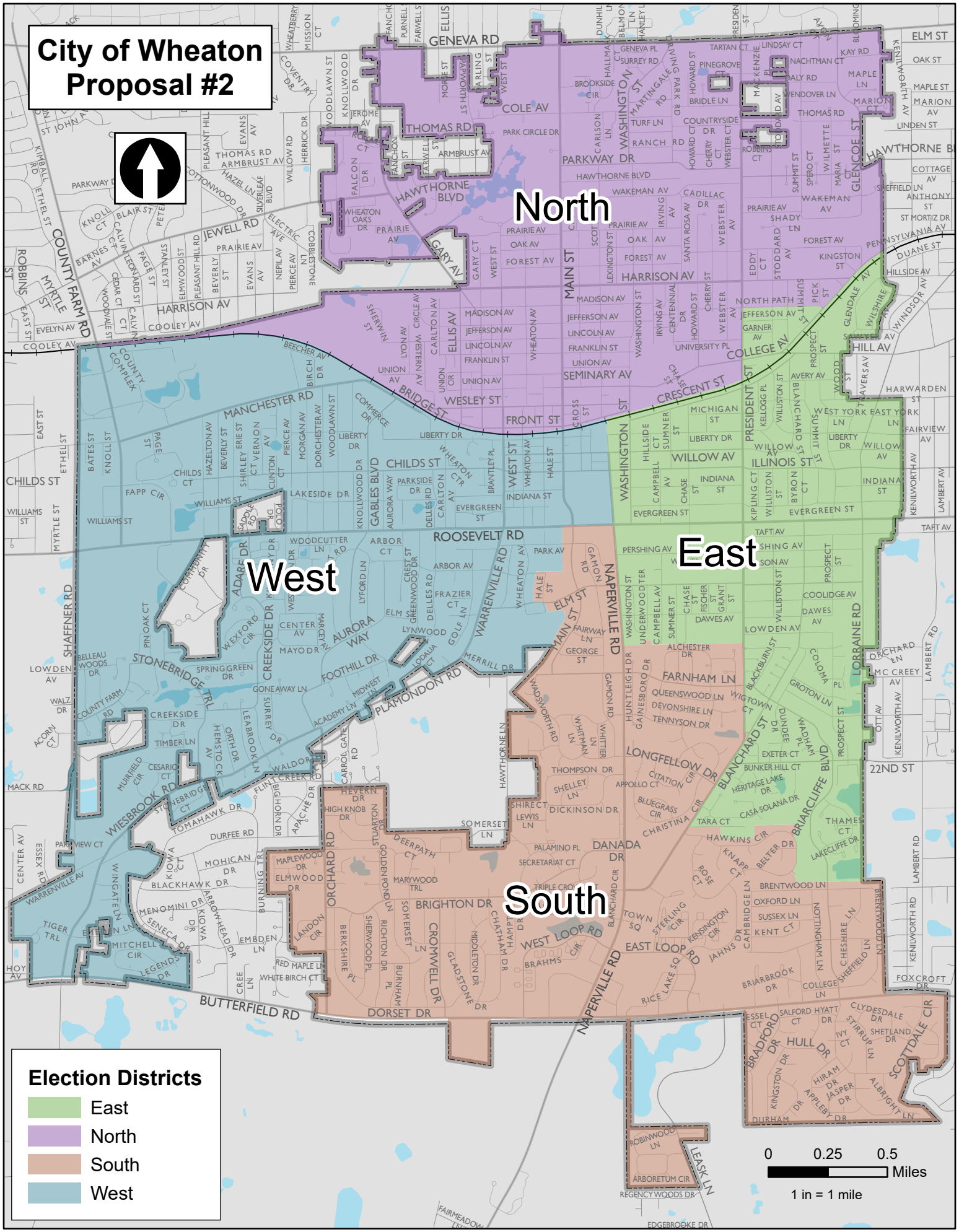

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