CITY OF MANCHESTER
PLANNING AND COMMUNITY DEVELOPMENT

Planning & Land Use Management
Building Regulations
Code Enforcement Division
Community Improvement Program
Zoning Board of Adjustment

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November 8, 2021

Board of Mayor and Aldermen
C/o Matthew Normand, City Clerk
One City Hall Plaza
Manchester, New Hampshire 03101

Re: Ward Redistricting

Dear Mayor Craig and Honorable Aldermen:

Please find attached for your review a report and maps regarding proposed redistricting of aldermanic wards in the city. Due to population changes reported by the 2020 Census, it is the recommendation of City staff that you ordain fairly minimal adjustments to ward boundaries that would result in more equal population among the wards.

Sincerely,

Jeffrey Belanger, AICP
Senior Planner
Manchester Planning and Community Development Department

Cc: Matthew Normand, City Clerk
Kevin Sheppard, P.E., Director of Public Works
Emily Rice, City Solicitor

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2020 Census Redistricting Report

November 8, 2021

Planning and Community Development Department
Office of the City Clerk

I. Introduction

The purpose of this report is to provide the Board of Mayor and Aldermen with the information on demographics, law, and cartography that would be necessary to redistrict Manchester's 12 aldermanic wards. Redistricting is the process of redrawing the boundaries of legislative districts, such as Manchester's aldermanic wards. Legislatures across the United States, at all levels of government, engage in redistricting, usually to equalize the populations of districts.

In Manchester, Section 5.33 of the City Charter requires that the city be divided into 12 wards of populations that are as equal as practicable. It requires the Board to review ward boundaries every ten years, upon the issuance of the federal census, or as may be necessary to conduct fair elections, pursuant to the New Hampshire Constitution.

This report explains the population increases that have made Manchester's wards less equal since their redistricting after the 2010 Census. It then explains the legal standard for equality of population and proposes new ward boundaries that would bring the wards more in conformity with that standard.

II. Population

On August 12 and September 16, the U.S. Census Bureau released its redistricting data. As shown in Table 1, the Census Bureau found that the 2020 population of Manchester was 115,644, which was up 5.5% from the 2010 population of 109,565. The change in population was not evenly distributed among the wards. For instance, Ward 2 gained the least people, at 73, while Ward 12 gained the most people, at 1,012. Thus, the population of the wards has become less equal since the redistricting after the 2010 Census. After 2010, the difference between the most populous and least populous wards was 269 people. It is now 867 people.

TABLE 1 – POPULATION CHANGE IN MANCHESTER

Wards	2010 Population	2020 Population	Population Increase
1	9,121	9,696	575
2	9,219	9,292	73
3	9,113	9,959	846
4	9,115	9,468	353
5	9,250	9,626	376
6	9,260	9,737	477
7	9,178	9,610	432
8	9,135	9,482	347
9	9,169	9,864	695
10	9,012	9,147	135
11	8,991	9,749	758
12	9,002	10,014	1,012
Total	109,565	115,644	6,079

Source – U.S. Census Bureau

III. Legal Standard – The 10% Rule

As stated by the New Hampshire Supreme Court, the equal right to vote guaranteed by the New Hampshire Constitution requires approximately equal population among voting districts:

> "The overriding objective of redistricting must be substantial equality of population among the various legislative districts, so that the vote of any citizen is approximately equal in weight to that of any other citizen in the State."[1]

This standard for equality is often referred to as "one person, one vote."[2]

As stated by the Court, perfect equality of population is not necessary for compliance with the "one person, one vote" standard. It is adequate for legislative districts to have "approximately equal" populations. This requirement is similar to that of Manchester's charter, which requires that wards consist of "equal population as is practicable."[3]

The rule of thumb that the Court has used to ensure that a redistricting plan meets the constitutional requirements for equality is 10% total deviation from an ideal district. Such deviations are considered minor and are presumptively constitutional.[4]

There are three steps for determining total deviation of a redistricting plan. The first step is to find the population of an ideal district, which is the average of the population and the number of districts.[5] For Manchester's 2020 population, that would be:

$$115{,}644 \div 12 = 9{,}637$$

| People in All Wards | Wards | People in Ideal Ward |

The second step is to find the relative deviation of each voting district from the ideal district. That is done by dividing the difference between the district's population and the ideal population and dividing that by the ideal population.[6] For example, the relative deviation of Ward 1 would be found as follows:

$$(9{,}696 - 9{,}637) \div 9{,}637 = 0.61\%$$

| Ward 1 | Ideal Ward | Ideal Ward | Relative Deviation |

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[1] Below v. Gardner, 148 N.H. 1 (2002). Although the facts of this and other similar cases are about state legislative districts, the "one person, one vote" principle applies to local legislative districts, as well.

[2] Id.

[3] Manchester City Charter, Section 5.33.

[4] City of Manchester v. Secretary of State, 163 N.H. 689, 701 (2012). It is possible for the presumption of constitutionality to be rebutted, meaning that population deviation greater than 10% could be constitutional, but the burden of proof would be on the legislature to provide justification for the disparity. Similarly, a population deviation less than 10% could be unconstitutional, but the burden of proof would be on any challenger to find evidence of arbitrariness or discrimination.

[5] Id. at 163 N.H. 699.

[6] Id.

Table 2 shows the relative deviation of each ward, as the boundaries are today:

TABLE 2 – RELATIVE DEVIATION FROM IDEAL WARD OF 9,637 PEOPLE

Ward	2020 Population	Relative Deviation
1	9,696	0.61%
2	9,292	-3.58%
3	9,959	3.34%
4	9,468	-1.75%
5	9,626	-0.11%
6	9,737	1.04%
7	9,610	-0.28%
8	9,482	-1.61%
9	9,864	2.36%
10	9,147	**-5.08%**
11	9,749	1.16%
12	10,014	**3.91%**

The third step is to calculate the total range of deviation. This is done by adding the highest and lowest percentages, without regard to algebraic sign.[7] This yields the total deviation, which should be under 10%. For the wards as they are today, Ward 12 has the highest relative deviation at 3.91% and Ward 10 has the lowest relative deviation at -5.08%. The equation finding their total deviation would be as follows:

$$3.91\% \quad + \quad |-5.08\%| \quad = \quad 8.99\%$$

Highest Relative Deviation	Lowest Relative Deviation	Total Deviation

If the ward boundaries were left as they are, the total deviation of population from the ideal ward would be 8.99% and, therefore, under the 10% maximum population deviation that is presumptively constitutional. Although leaving the ward boundaries as they are would be within constitutional limits, it would be close to them. If Manchester's population were to increase along the same trends, more inequality would result. It is, therefore, the recommendation of City staff that the Board of Mayor and Aldermen redistrict the ward boundaries to bring the total deviation well below 8.99%.

IV. Proposed Ward Boundaries
With the use of mapping software and population data from the U.S. Census Bureau, City staff are able to draw maps with different ward boundaries and calculate the populations that would be in the new wards. In preparing the maps included with this report, population equality among the wards was staff's primary objective. Staff also prioritized compliance with the statutory requirement that ward boundaries follow

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[7] Id. at 700.

"easily identifiable physical features," such as streets, public utility lines, railroad tracks, and surface waters.[8] Staff also ensured that the locations of polling places and the residences of aldermen, state representatives and senators, and members of the Board of School Committee have remained in existing wards.

There were also a few specific features of population and geography that had to be accounted for. First was the significant increase in population of Ward 12. Second, the redistricting of Ward 6 in 2019 to bring McLaughlin Middle School into the ward created a triangular boundary that was important to smooth for ease of understanding by the public. Third, Ward 3 gained nearly as much population as Ward 12, and that population needed to be distributed amongst a number of other wards.

The results of staff's efforts are shown on the maps included with this report. The maps are the same, except that one adds all census blocks with populations. With the ward boundaries as proposed on the maps, the total population deviation has been reduced from 8.99% to 0.96%. As shown on Table 3, the populations among all wards would be much closer to the 9,637 people of the ideal ward. The 0.96% total deviation results from adding the relative deviations of Ward 1, which is the highest, and Ward 6, without regard to algebraic sign, which is the lowest.

TABLE 3 – DIFFERENCES BETWEEN EXISTING AND PROPOSED WARD BOUNDARIES

Ward	Population Existing Wards	Population Proposed Wards	Relative Deviation Existing Wards	Relative Deviation Proposed Wards
1	9,696	9,696	0.61%	**0.61%**
2	9,292	9,657	-3.58%	0.21%
3	9,959	9,611	3.34%	-0.27%
4	9,468	9,643	-1.75%	0.06%
5	9,626	9,631	-0.11%	-0.06%
6	9,737	9,603	1.04%	**-0.35%**
7	9,610	9,644	-0.28%	0.07%
8	9,482	9,622	-1.61%	-0.16%
9	9,864	9,627	2.36%	-0.10%
10	9,147	9,608	**-5.08%**	-0.30%
11	9,749	9,665	1.16%	0.29%
12	10,014	9,637	**3.91%**	0.00%
Total Deviation			8.99%	0.96%

An important note about the census blocks shown on one of the maps is that they cannot be split. Census blocks are the most fine-grained data that is publicly issued by the Census Bureau. Although we know the population in each block, we do not know how the population in the block is distributed, so splitting a block would lead to

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[8] RSA 44:4-a.

inaccurate population numbers. The census blocks would not be shown on any finalized map, but they are shown on one of the maps included with this report for the Board's reference in considering any changes to ward boundary lines.

V. Conclusion

City staff's recommendation is that it would be in the Board's best interests to redistrict Manchester's wards. Doing so would create more equal voting weight among Manchester's citizens, and it would put the Board in a better position to comply with constitutional requirements. Increases in population are likely to continue, especially in Wards 3 and 12, which would further increase the total deviation and bring it above 10%. The map that City staff have provided with this report shows proposed ward boundaries that are more equal, but they are not the only possible configuration of wards. The Board is free to consider changes to the proposed map.

To redistrict ward boundaries, an amendment to Chapter 12 of the Manchester Code of Ordinances would be required. Some members of the Board may remember that the redistricting in 2011 included the placement of a question on a ballot that went to the citizens. That was required because the ward boundaries were described in the Manchester City Charter.[9] That is no longer the case. During a limited-purpose redistricting in 2019 for Ward 6, the legal descriptions of the wards were moved from the Charter to the Code of Ordinances. As a result, a redistricting would now simply require a public hearing and a majority vote by the Board.
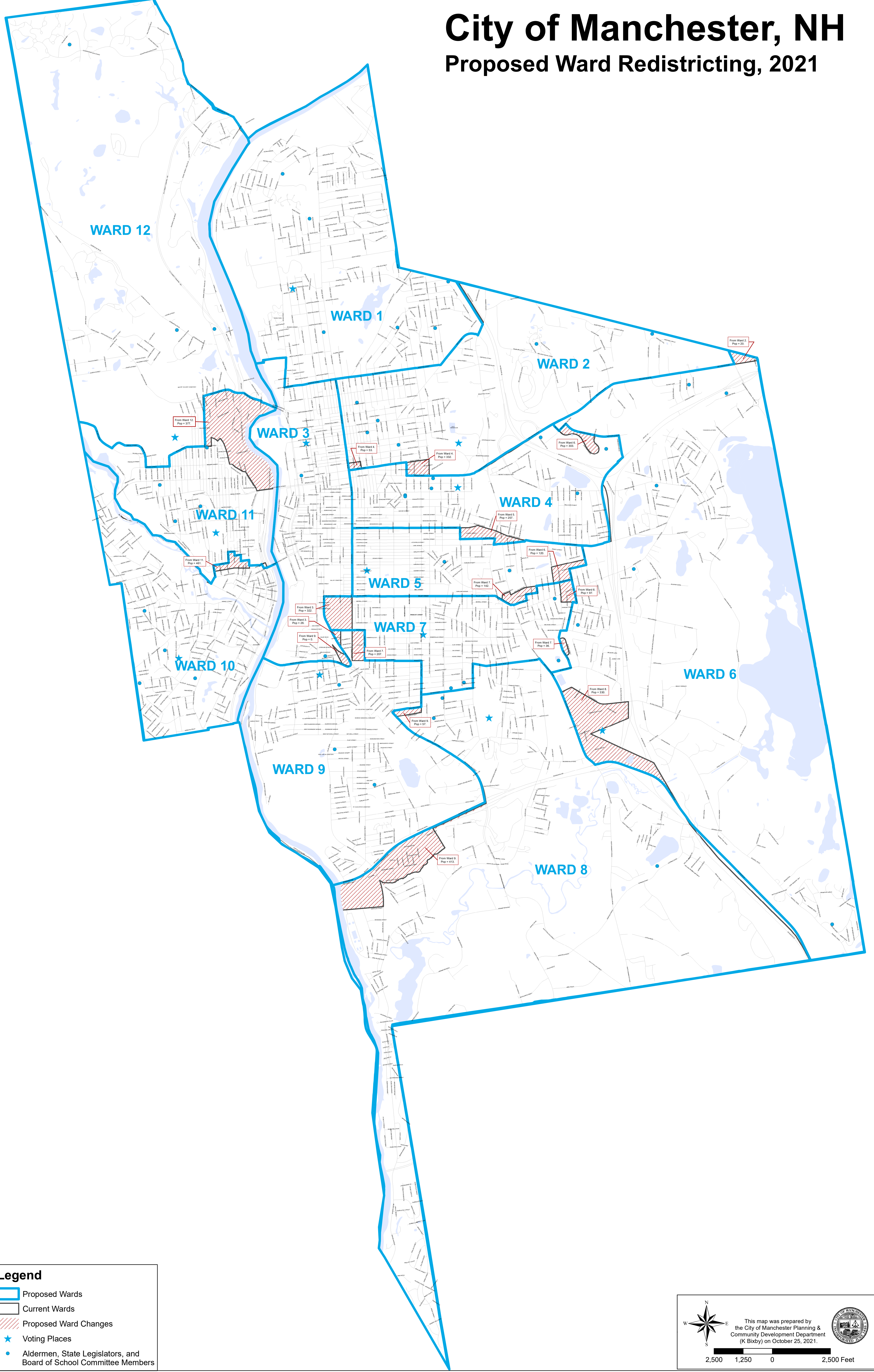
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[9] RSA 49-B:5

THE TWO PROPOSED REDISTRICTING WARD MAPS ON THE FOLLOWING PAGES ARE TOO LARGE TO VIEW IN PRINT SO YOU ONLY SEE A SMALL PORTION. IF YOU WOULD LIKE TO SEE THE FULL MAPS IN PRINT, THEY ARE AVAILABLE AT THE OFFICE OF THE CITY CLERK, ONE CITY HALL PLAZA.

City of Manchester, NH
Proposed Ward Redistricting, 2021

WARD 12

Legend

☐ Proposed Wards

☐ Current Wards

▨ Proposed Ward Changes

★ Voting Places

● Aldermen, State Legislators, and Board of School Committee Members

WARD 1

WARD 2

From Ward 2
Pop = 20

From Ward 12
Pop = 377

WARD 3

From Ward 4
Pop = 53

From Ward 4
Pop = 332

From Ward 6
Pop = 303.

WARD 11

WARD 4

From Ward 5
Pop = 257

From Ward 6
Pop = 120

From Ward 11
Pop = 461

From Ward 7
Pop = 142

From Ward 6
Pop = 97

WARD 5

From Ward 3
Pop = 322.

WARD 7

From Ward 3
Pop = 26

From Ward 9
Pop = 8

From Ward 7
Pop = 207

From Ward 7
Pop = 36

WARD 10

From Ward 8
Pop = 330.

WARD 6

From Ward 9
Pop = 57

WARD 9

From Ward 9
Pop = 413.

WARD 8
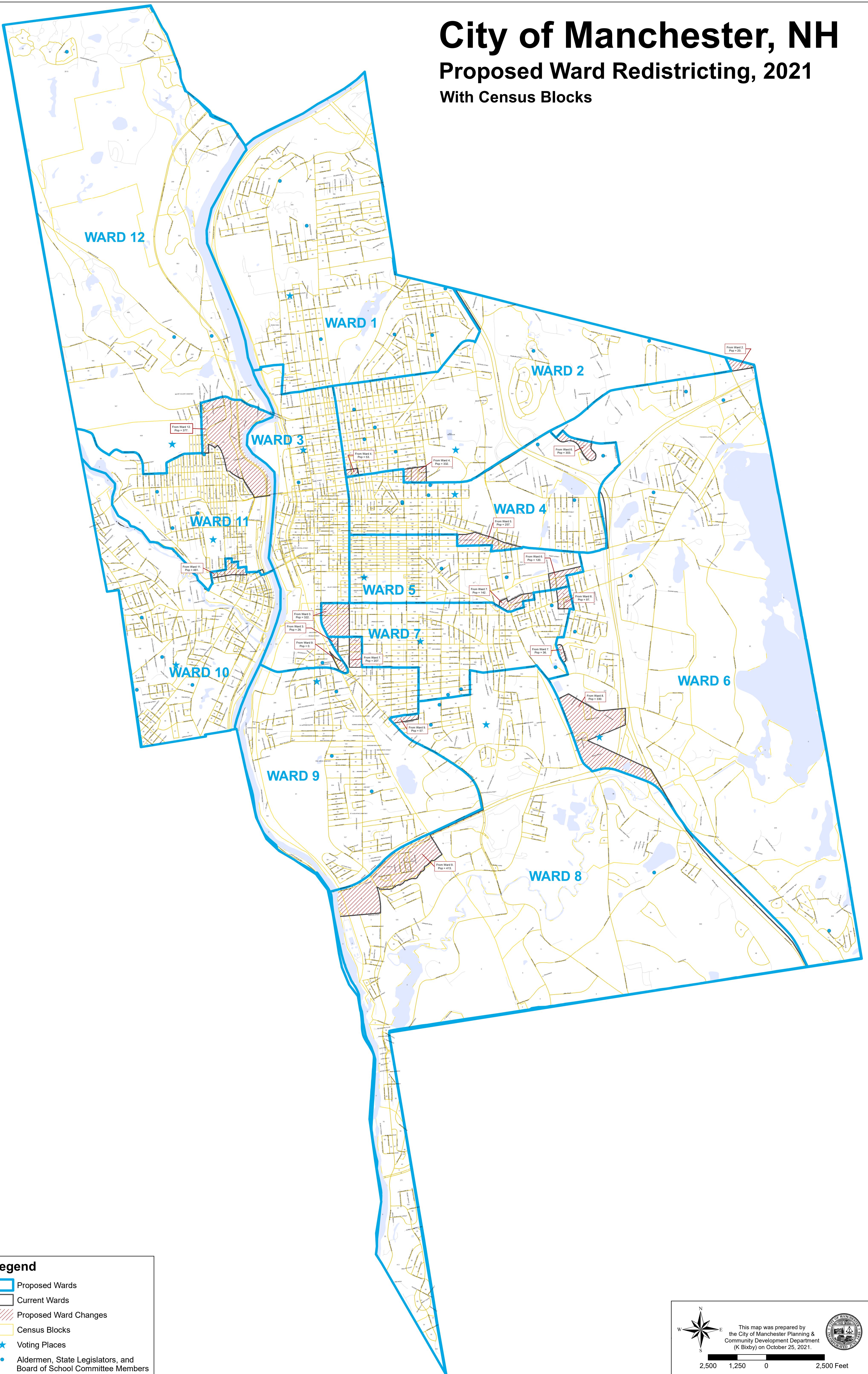
This map was prepared by
the City of Manchester Planning &
Community Development Department
(K Bixby) on October 25, 2021.

2,500 1,250 0 2,500 Feet

City of Manchester, NH
Proposed Ward Redistricting, 2021
With Census Blocks

WARD 12

WARD 1

WARD 2

From Ward 2
Pop = 20

From Ward 12
Pop = 377

WARD 3

From Ward 4.
Pop = 53

From Ward 4.
Pop = 332

From Ward 6.
Pop = 303

WARD 11

WARD 4

From Ward 5.
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WARD 10

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From Ward 8.
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WARD 9

From Ward 9.
Pop = 413

WARD 8

Legend

- Proposed Wards
- Current Wards
- Proposed Ward Changes
- Census Blocks
- ★ Voting Places
- ● Aldermen, State Legislators, and Board of School Committee Members

This map was prepared by
the City of Manchester Planning &
Community Development Department
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2,500   1,250   0   2,500 Feet