2021 Apportionment Plan Review



FORTON PLAN

Compiled by Macomb County Department of Planning and Economic Development



CONTENTS

Macomb County Department of Planning and Economic Development Validation Summary	3
State of Michigan County Commissioner District Apportionment Tool Report	7
District Map	12

Performed by Macomb County Department of Planning and Economic Development

Methodology

Michigan Charter Counties Act 293 of 1966 MCL45.505(2)

Each district shall be contiguous, compact, and as nearly square in shape as is practicable, depending on the geography of the county area involved, and shall be drawn without regard to partisan political advantage. Each city and township shall be apportioned so that it shall have the largest possible number of complete districts within its boundaries before any part of the city or township is joined to territory outside the boundaries of the city or township to form a district. Townships, villages, cities, and precincts shall be divided only if necessary to meet the population standard.

United States Supreme Court 377 U.S. 633 (1964), 20 WMCA, Inc. v. Lomenzo

Case set standard 11.9% population varience for districts

District Contiguousness

All Districts are Contiguous

Performed by Macomb County Department of Planning and Economic Development

Measure of District Population Varience

District Target Population: 67.682 (County Population 879,872* / 13 Districts)

^{*} State of Michigan CCD Tool Population Total = 881,217 - 1,345 [SOM Macomb Correctional Facility pop.]

District Total Target		Variance	Variance %	
	Population	Population		
District #1	67,549	67,682	-133	-0.197%
District #2	67,575	67,682	-107	-0.158%
District #3	67,174	67,682	-508	-0.751%
District #4	66,974	67,682	-708	-1.046%
District #5	68,171	67,682	489	0.722%
District #6	67,763	67,682	81	0.120%
District #7	67,725	67,682	43	0.064%
District #8	67,975	67,682	293	0.433%
District #9	67,567	67,682	-115	-0.170%
District #10	67,894	67,682	212	0.313%
District #11	68,118	67,682	436	0.644%
District #12	67,558	67,682	-124	-0.183%
District #13	67,829	67,682	147	0.217%
	879,872			

Maximum Allowable Varience: less than 11.99% Permitted Plan Varience: 0.722% to -11.268% Actual Plan Varience: 0.722% to -1.046%

Plan Meets the 11.9% Standard

Performed by Macomb County Department of Planning and Economic Development

Measure of Compactness

Polsby-Popper

Score

	Score
District #1	0.693 Most Comp
District #2	0.618
District #3	0.681
District #4	0.545
District #5	0.590
District #6	0.423 Least Comp
District #7	0.469
District #8	0.537
District #9	0.587
District #10	0.508
District #11	0.554
District #12	0.439
District #13	0.433

The Polsby–Popper test is a mathematical compactness measure of a shape developed to quantify the degree of gerrymandering of political districts. A district's Polsby–Popper score will always fall within the interval of 0-1, with a score of 0 indicating complete lack of compactness and a score of 1 indicating maximal compactness.

Formula:
$$PP(D) = \frac{4\pi A(D)}{P(D)^2}$$
 $A(D) = \text{Area of District}$
 $P(D) = \text{Perimeter of District}$

ANALYSIS

Mean (Avg)	0.544
Min	0.423
Max	0.693
Median	0.545
Ctd Day	0.000

Std. Dev. 0.089 (Average distance from mean value)

Performed by Macomb County Department of Planning and Economic Development

Analysis of Splits	Total 43 splits
Cities City of Eastpointe City of Roseville City of Sterling Heights City of Warren	4
Townships Clinton Township Harrison Township Macomb Township Shelby Township	4
<u>Villages</u>	0
<u>Census VTD</u>	35
Clinton Twp 3 Clinton Twp 13 Clinton Twp 14 Clinton Twp 42 Eastpointe 10 Eastpointe 11 Eastpointe 12 Harrison Twp 9 Macomb Twp 11 Macomb Twp 14 Macomb Twp 24 Macomb Twp 33 Macomb Twp 35 Macomb Twp 35 Macomb Twp 37 Roseville 15 Roseville 8 Shelby Twp 2 Shelby Twp 2 Sterling Heights 12 Sterling Heights 20 Sterling Heights 26 Sterling Heights 3	Sterling Heights 5 Sterling Heights 6 Sterling Heights 28 Warren 2-20 Warren 2-35 Warren 2-36 Warren 3-14 Warren 3-49 Warren 3-51 Warren 4-33 Warren 5-22

Section 1 - District Descriptions

District 1

Armada Township

Bruce Township

Lenox Township

City of Memphis

Ray Township

City of Richmond

Richmond Township

Washington Township

District 2

Shelby Charter Township (part) / VTD(s): Shelby Twp 1, Shelby Twp 10, Shelby Twp 11, Shelby Twp 12, Shelby Twp 13, Shelby Twp 14, Shelby Twp 15, Shelby Twp 16, Shelby Twp 17, Shelby Twp 18, Shelby Twp 19, Shelby Twp 2 (part), Shelby Twp 20, Shelby Twp 21, Shelby Twp 22, Shelby Twp 23, Shelby Twp 24, Shelby Twp 25 (part), Shelby Twp 26, Shelby Twp 3, Shelby Twp 3, Shelby Twp 5, Shelby Twp 6, Shelby Twp 7, Shelby Twp 8, Shelby Twp 9

District 3

Macomb Township (part) / VTD(s): Macomb Twp 1, Macomb Twp 10, Macomb Twp 11 (part), Macomb Twp 12, Macomb Twp 14 (part), Macomb Twp 15, Macomb Twp 16, Macomb Twp 17, Macomb Twp 18, Macomb Twp 20, Macomb Twp 21, Macomb Twp 22, Macomb Twp 23, Macomb Twp 24 (part), Macomb Twp 25, Macomb Twp 26, Macomb Twp 27, Macomb Twp 28, Macomb Twp 29, Macomb Twp 3, Macomb Twp 30, Macomb Twp 32, Macomb Twp 33 (part), Macomb Twp 34, Macomb Twp 35 (part), Macomb Twp 36, Macomb Twp 37 (part), Macomb Twp 7, Macomb Twp 9

District 4

Chesterfield Township

Harrison Charter Township (part) / VTD(s): Harrison Twp 9 (part)

Macomb Township (part) / VTD(s): Macomb Twp 11 (part), Macomb Twp 2, Macomb Twp 24 (part), Macomb Twp 31, Macomb Twp 35 (part), Macomb Twp 37 (part)

City of New Baltimore

District 5

City of Sterling Heights (part) / VTD(s): Sterling Heights 1, Sterling Heights 12 (part), Sterling Heights 13, Sterling Heights 14, Sterling Heights 15, Sterling Heights 16, Sterling Heights 17, Sterling Heights 2, Sterling Heights 22, Sterling Heights 23, Sterling Heights 24, Sterling Heights 3 (part), Sterling Heights 32, Sterling Heights 33, Sterling Heights 34, Sterling Heights 35 (part), Sterling Heights 43, Sterling Heights 44, Sterling Heights 45, Sterling Heights 5 (part), Sterling Heights 6 (part), Sterling Heights 7, Sterling Heights 8

District 6

Clinton Charter Township (part) / VTD(s): Clinton Twp 42 (part)

Macomb Township (part) / VTD(s): Macomb Twp 13, Macomb Twp 14 (part), Macomb Twp 19, Macomb Twp 33 (part), Macomb Twp 4, Macomb Twp 5, Macomb Twp 6, Macomb Twp 8

Shelby Charter Township (part) / VTD(s): Shelby Twp 2 (part), Shelby Twp 25 (part), Shelby Twp 27, Shelby Twp 28, Shelby Twp 29, Shelby Twp 4

City of Sterling Heights (part) / VTD(s): Sterling Heights 20 (part), Sterling Heights 25 (part), Sterling Heights 26 (part), Sterling Heights 27, Sterling Heights 28 (part), Sterling Heights 29, Sterling Heights 30, Sterling Heights 31, Sterling Heights 35 (part), Sterling Heights 36, Sterling Heights 37, Sterling Heights 38, Sterling Heights 39, Sterling Heights 40, Sterling Heights 41, Sterling Heights 42

City of Utica

District 7

Clinton Charter Township (part) / VTD(s): Clinton Twp 16, Clinton Twp 32

City of Fraser

City of Roseville (part) / VTD(s): Roseville 15 (part), Roseville 2, Roseville 8 (part)

City of Sterling Heights (part) / VTD(s): Sterling Heights 10, Sterling Heights 11, Sterling Heights 12 (part), Sterling Heights 18, Sterling Heights 19, Sterling Heights 20 (part), Sterling Heights 21, Sterling Heights 25 (part), Sterling Heights 26 (part), Sterling Heights 3 (part), Sterling Heights 35 (part), Sterling Heights 4, Sterling Heights 5 (part), Sterling Heights 6 (part), Sterling Heights 9

City of Warren (part) / VTD(s): Warren 3-49 (part), Warren 3-51 (part), Warren 3-52, Warren 4-33 (part), Warren 4-50, Warren 4-58

District 8

Clinton Charter Township (part) / VTD(s): Clinton Twp 1, Clinton Twp 10, Clinton Twp 11, Clinton Twp 13 (part), Clinton Twp 14 (part), Clinton Twp 17, Clinton Twp 18, Clinton Twp 19, Clinton Twp 20, Clinton Twp 21, Clinton Twp 23, Clinton Twp 24, Clinton Twp 25, Clinton Twp 26, Clinton Twp 27, Clinton Twp 29, Clinton Twp 3 (part), Clinton Twp 33, Clinton Twp 34, Clinton Twp 35, Clinton Twp 36, Clinton Twp 37, Clinton Twp 38, Clinton Twp 39, Clinton Twp 40, Clinton Twp 41, Clinton Twp 42 (part), Clinton Twp 43, Clinton Twp 44, Clinton Twp 45, Clinton Twp 46

District 9

Clinton Charter Township (part) / VTD(s): Clinton Twp 12, Clinton Twp 13 (part), Clinton Twp 14 (part), Clinton Twp 15, Clinton Twp 2, Clinton Twp 22, Clinton Twp 28, Clinton Twp 3 (part), Clinton Twp 30, Clinton Twp 31, Clinton Twp 4, Clinton Twp 5, Clinton Twp 6, Clinton Twp 7, Clinton Twp 8, Clinton Twp 9

Harrison Charter Township (part) / VTD(s): Harrison Twp 1, Harrison Twp 10, Harrison Twp 2, Harrison Twp 3, Harrison Twp 4, Harrison Twp 5, Harrison Twp 6, Harrison Twp 7, Harrison Twp 8, Harrison Twp 9 (part)

City of Mt Clemens

District 10

City of Warren (part) / VTD(s): Warren 1-38, Warren 1-46, Warren 1-47, Warren 1-56, Warren 2-20 (part), Warren 2-35 (part), Warren 2-36 (part), Warren 2-41, Warren 2-43, Warren 2-44, Warren 2-45, Warren 2-48, Warren 2-55, Warren 2-57, Warren 3-14 (part), Warren 3-24, Warren 3-25, Warren 3-28, Warren 3-32, Warren 3-49 (part), Warren 3-51 (part), Warren 3-53, Warren 3-54, Warren 4-26, Warren 4-27, Warren 4-31, Warren 4-33 (part), Warren 5-22 (part)

District 11

City of Center Line

Macomb County Reapportionment Plan 2021

City of Warren (part) / VTD(s): Warren 1-1, Warren 1-19, Warren 1-34, Warren 1-5, Warren 1-6, Warren 2-20 (part), Warren 2-35 (part), Warren 2-36 (part), Warren 3-10, Warren 3-11, Warren 3-14 (part), Warren 4-15, Warren 4-17, Warren 5-12, Warren 5-13, Warren 5-18, Warren 5-22 (part), Warren 5-23, Warren 5-3, Warren 5-4, Warren 5-7, Warren 5-8, Warren 5-9

District 12

City of Eastpointe (part) / VTD(s): Eastpointe 1, Eastpointe 10 (part), Eastpointe 11 (part), Eastpointe 12 (part), Eastpointe 2, Eastpointe 3, Eastpointe 4, Eastpointe 5, Eastpointe 6, Eastpointe 7, Eastpointe 8

City of Roseville (part) / VTD(s): Roseville 1, Roseville 10, Roseville 11, Roseville 12, Roseville 13, Roseville 14, Roseville 15 (part), Roseville 3, Roseville 4, Roseville 5, Roseville 6, Roseville 7, Roseville 8 (part), Roseville 9

District 13

City of Eastpointe (part) / VTD(s): Eastpointe 10 (part), Eastpointe 11 (part), Eastpointe 12 (part), Eastpointe 13, Eastpointe 14, Eastpointe 9

City of St Clair Shores

City of The Village of Grosse Pointe Shores A Michigan City

Section 2 – Data and Demographics

Population

District Name	Total Population	Target Population	Variance	Variance %	Compactness Polsby Popper	Compactness Schwartzberg
District 1	67,549	67,682	-133	-0.197	0.693	0.832
District 10	67,894	67,682	212	0.313	0.508	0.713
District 11	68,118	67,682	436	0.644	0.554	0.744
District 12	67,558	67,682	-124	-0.184	0.439	0.663
District 13	67,829	67,682	147	0.217	0.433	0.658
District 2	67,575	67,682	-107	-0.159	0.618	0.786
District 3	67,174	67,682	-508	-0.751	0.681	0.825
District 4	66,974	67,682	-708	-1.047	0.545	0.738
District 5	68,171	67,682	489	0.722	0.590	0.768
District 6	67,763	67,682	81	0.119	0.423	0.650

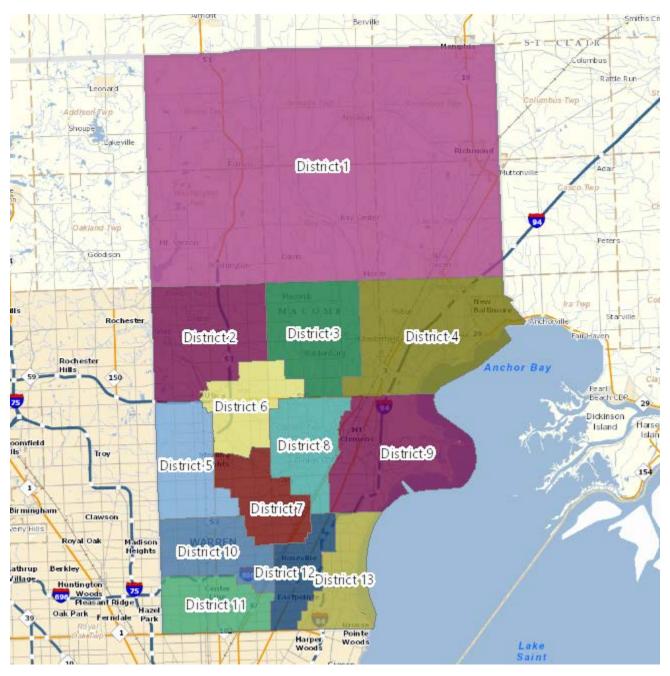
District 7	67,725	67,682	43	0.063	0.469	0.685
District 8	67,975	67,682	293	0.432	0.537	0.733
District 9	67,567	67,682	-115	-0.171	0.587	0.766

Race

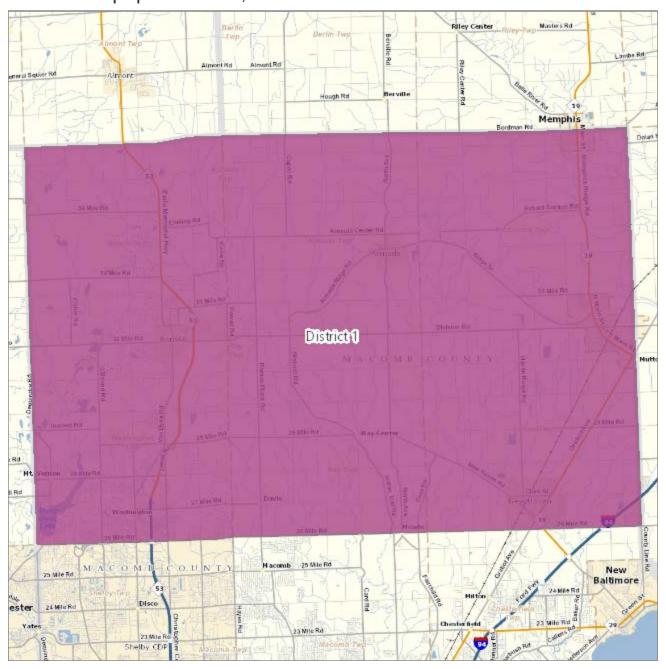
District Name	Total White Alone	Total Black Alone	Total American Indian And Alaskan Native Alone	Total Asian Alone	Total Native Hawaiian And Pacific Islander Alone	Total Other Alone
District 1	60,337	2,410	180	549	46	1,258
District 2	58,008	2,246	171	2,705	10	813
District 3	57,015	3,406	95	2,467	13	500
District 4	57,780	3,413	175	887	22	570
District 5	52,992	4,179	135	7,489	6	521
District 6	56,806	3,997	121	2,673	15	658
District 7	53,055	7,184	176	3,064	13	436
District 8	52,661	9,149	136	1,637	18	657
District 9	47,287	14,079	227	796	17	839
District 10	46,965	9,550	147	7,447	3	503
District 11	35,877	19,640	279	6,890	29	894
District 12	39,478	21,485	224	1,136	18	648
District 13	54,003	8,738	159	681	19	528

Section 3 - Maps

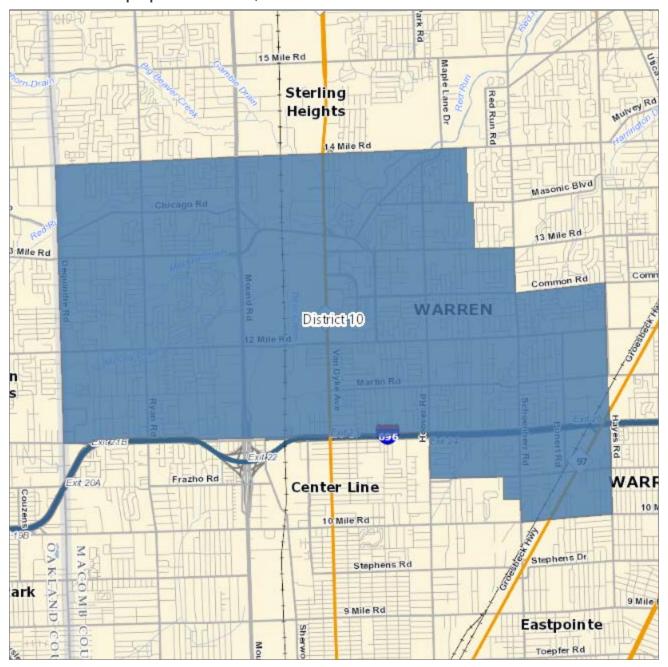
Macomb County District Map



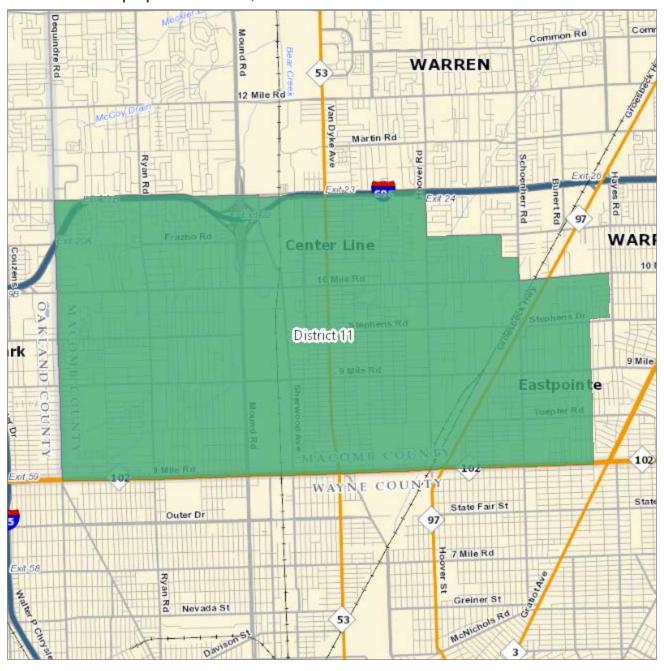
District 1 - population 67,549



District 10 - population 67,894



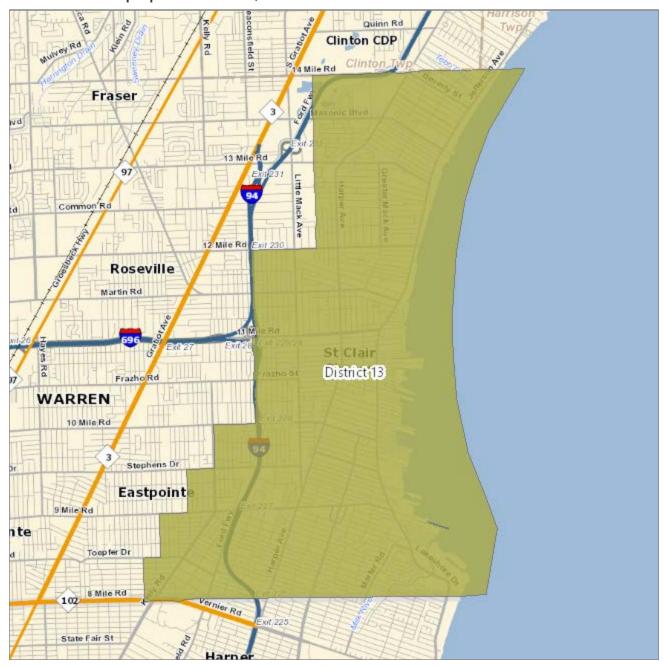
District 11 - population 68,118



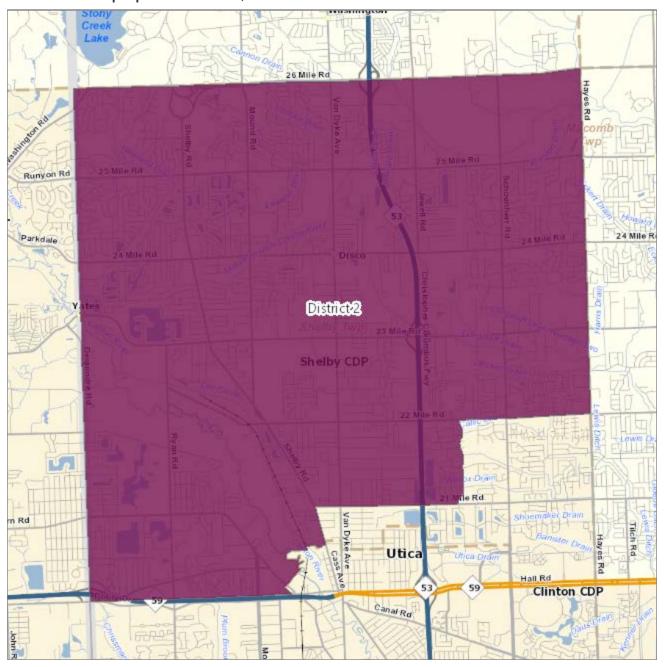
District 12 - population 67,558



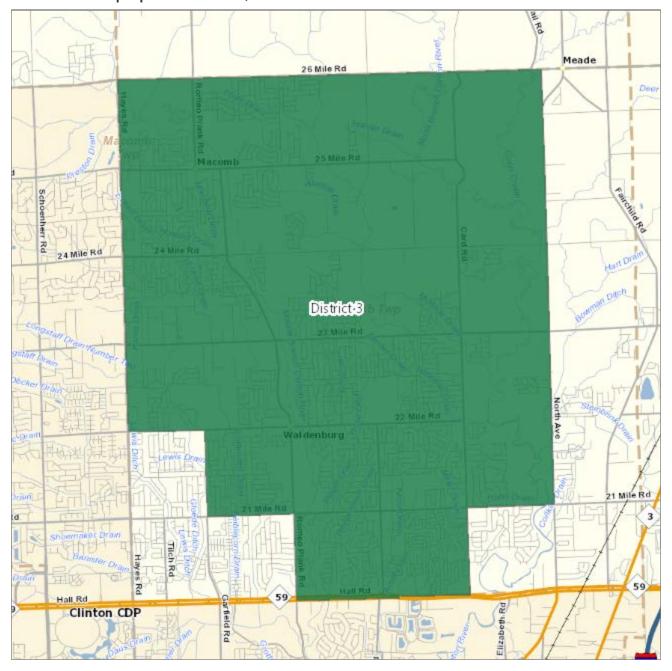
District 13 - population 67,829



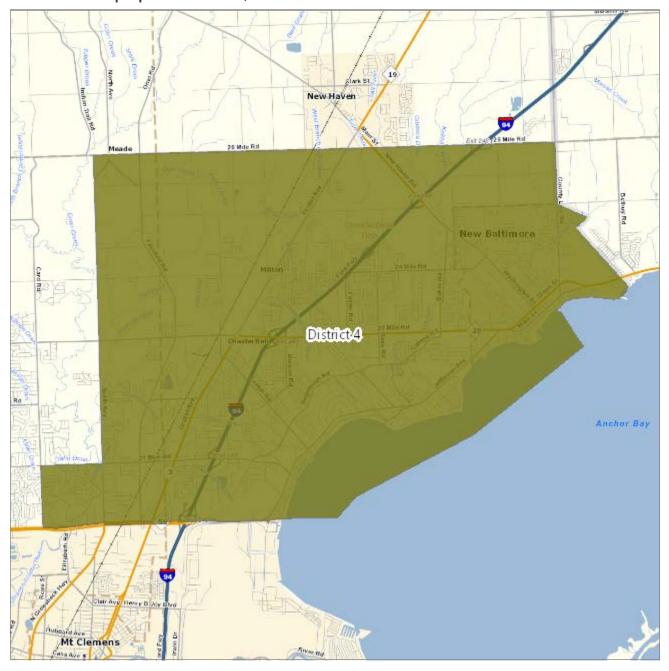
District 2 - population 67,575



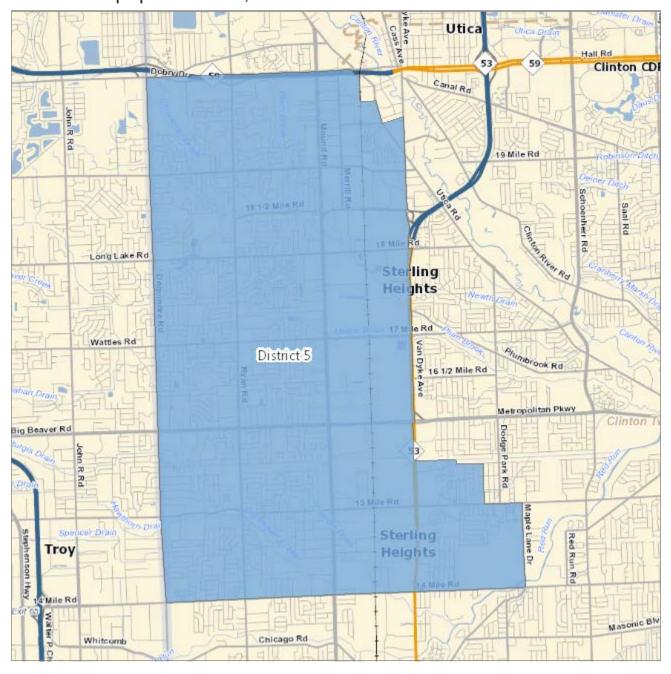
District 3 - population 67,174



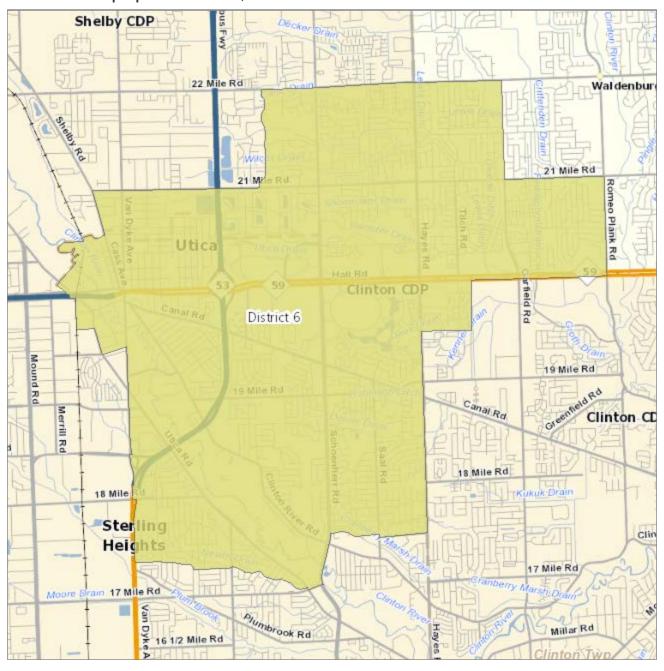
District 4 - population 66,974



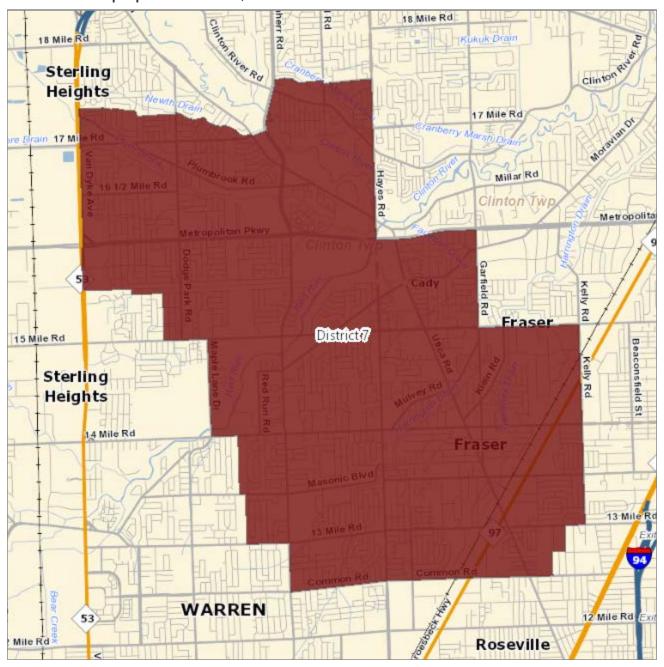
District 5 - population 68,171



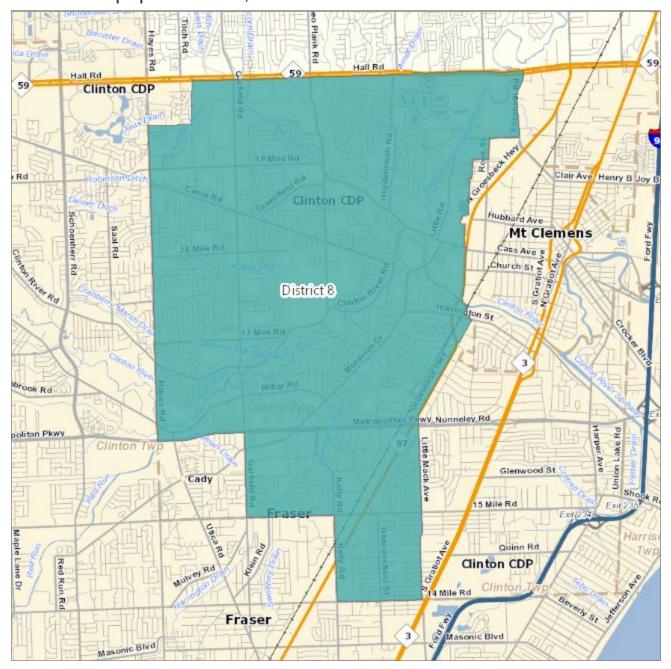
District 6 - population 67,763



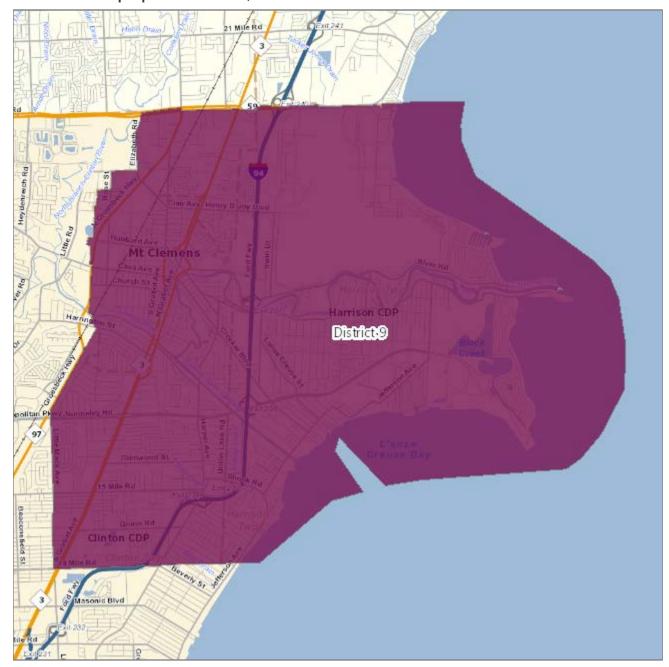
District 7 - population 67,725



District 8 - population 67,975



District 9 - population 67,567



Total population all districts: 879,872