

The background of the slide is a close-up, slightly blurred view of the stars and stripes of the United States flag. The stars are a deep blue, and the stripes are white and red, with the red stripe visible in the bottom right corner. The overall tone is patriotic and formal.

# **Redistricting Elements**

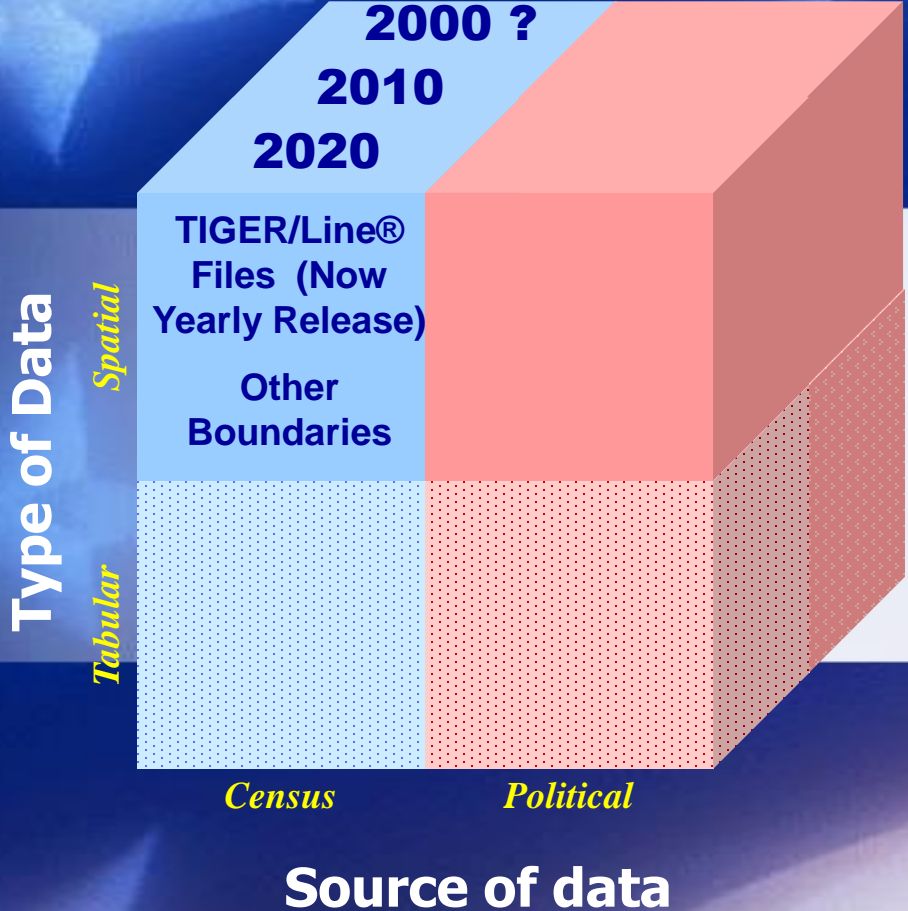
**By Kimball Brace**

**Election Data Services, Inc.**

**MI Independent Citizens Redistricting Comm. – June 10, 2021**

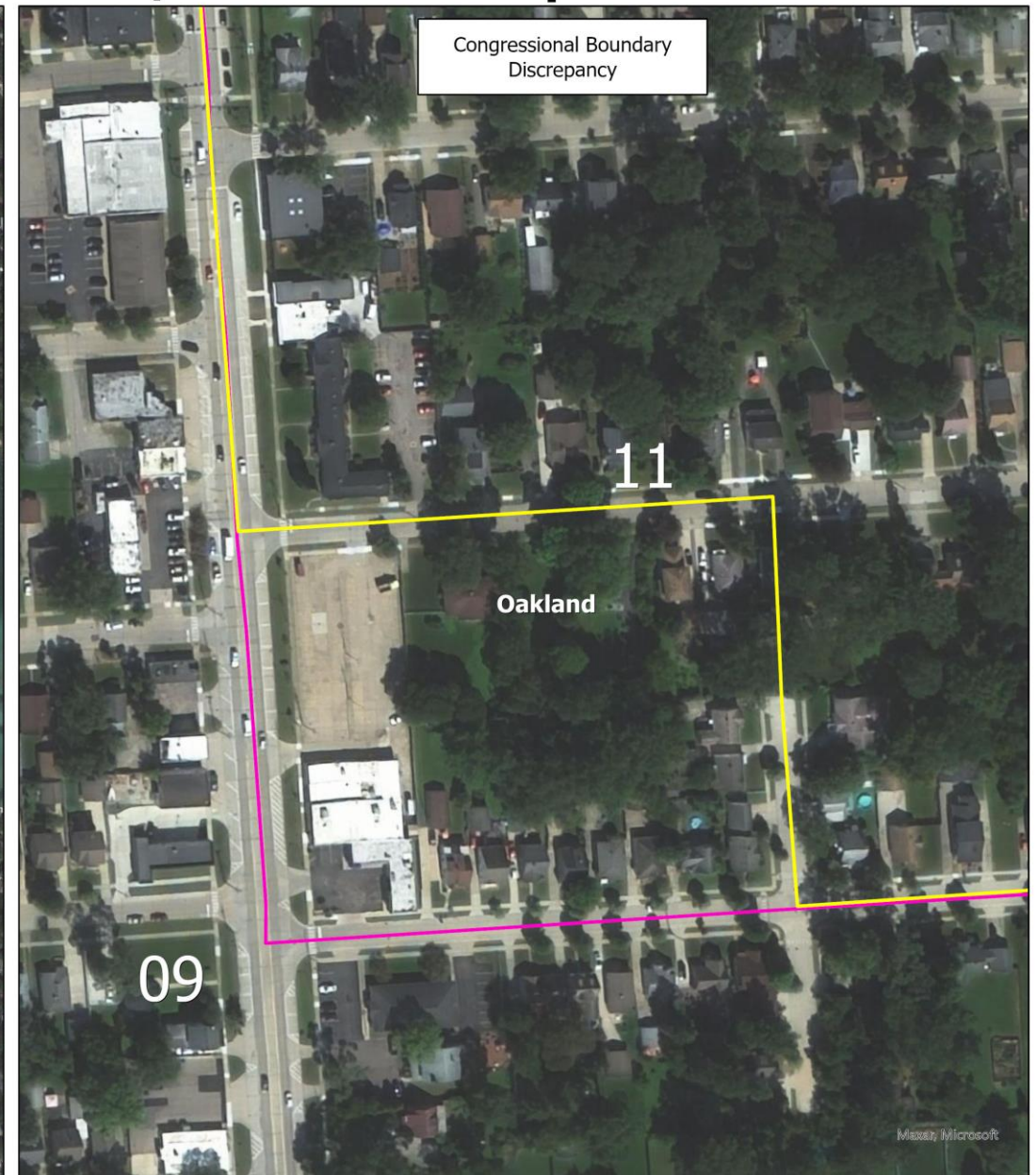
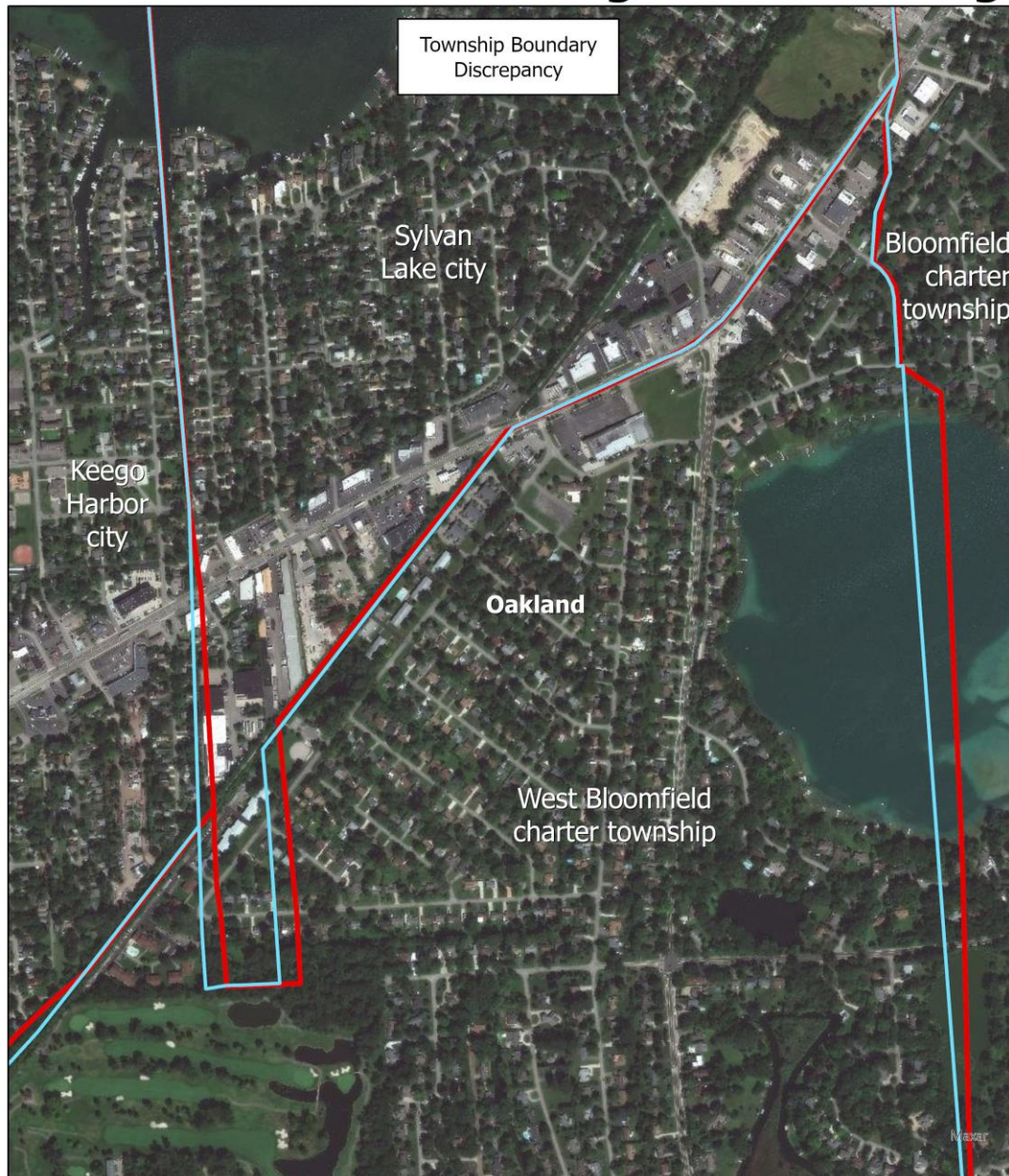
# Redistricting Data Cube

## First Quadrant



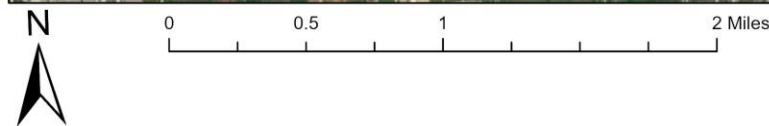
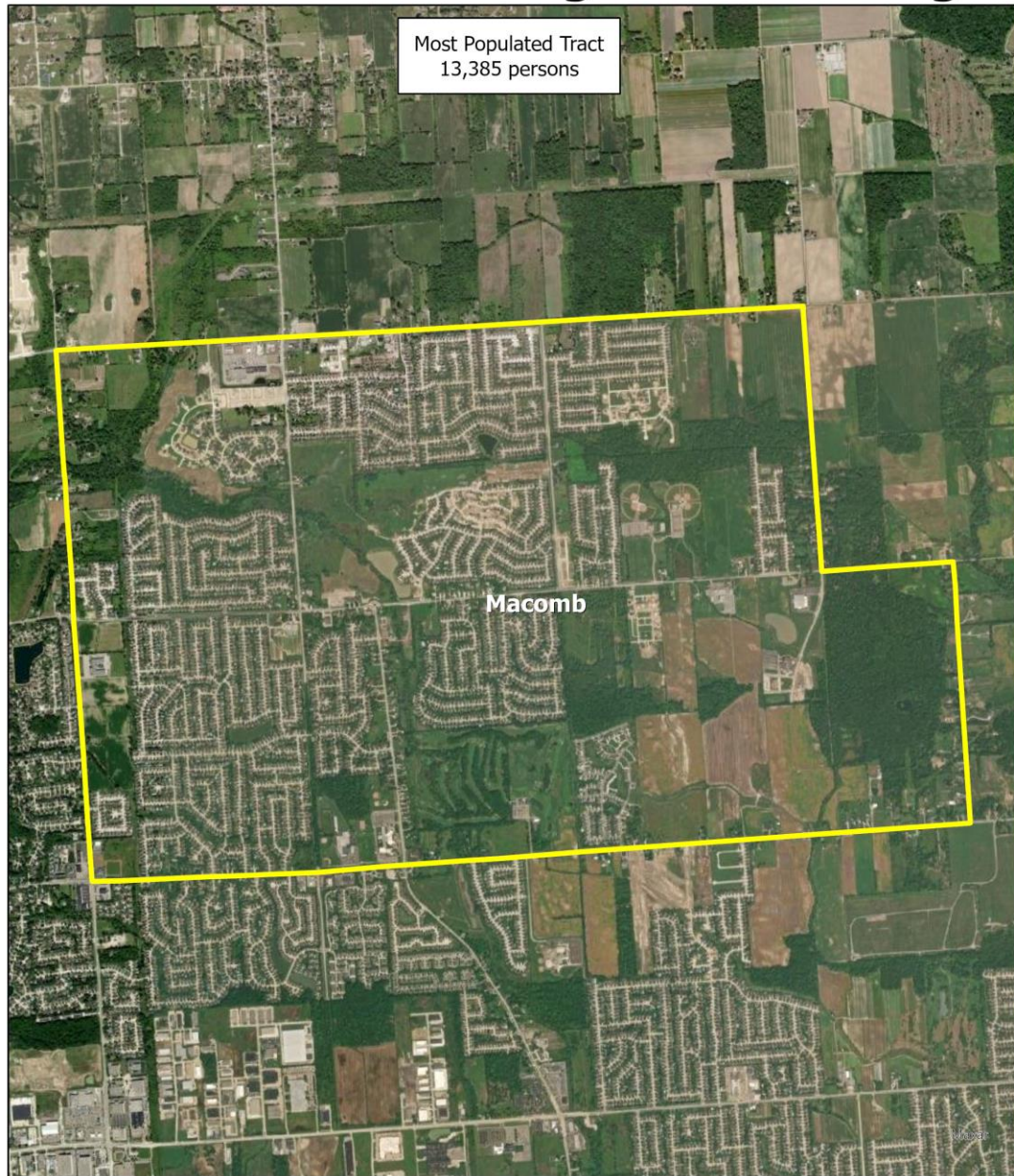


# State of Michigan - Census Tiger File / State GIS Comparisons



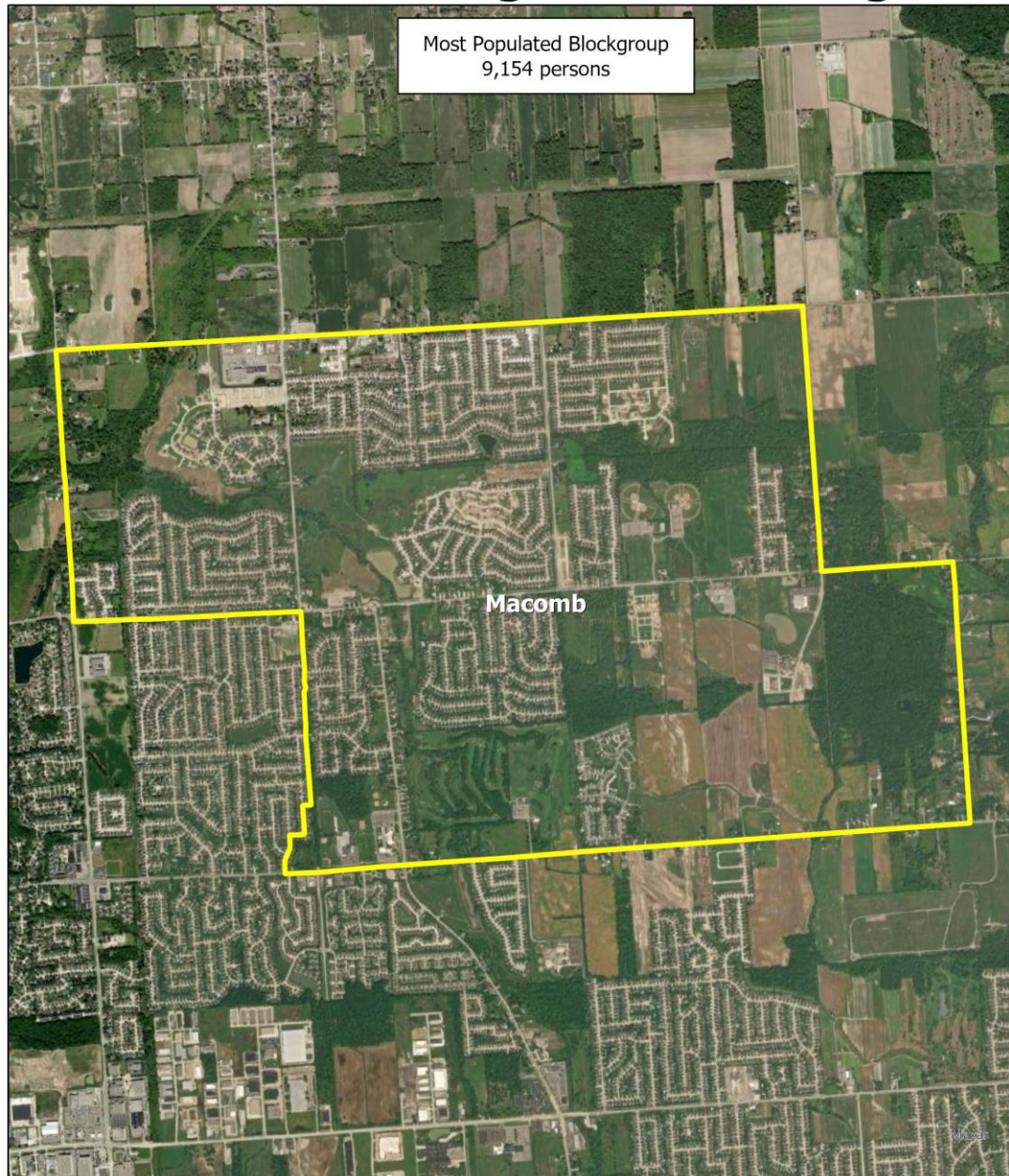


# State of Michigan - Census Tiger Files Comparisons (2010 Tracts)



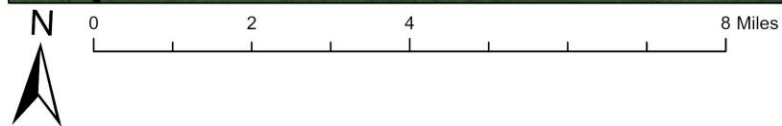


# State of Michigan - Census Tiger Files Comparisons (2010 Blockgroups)



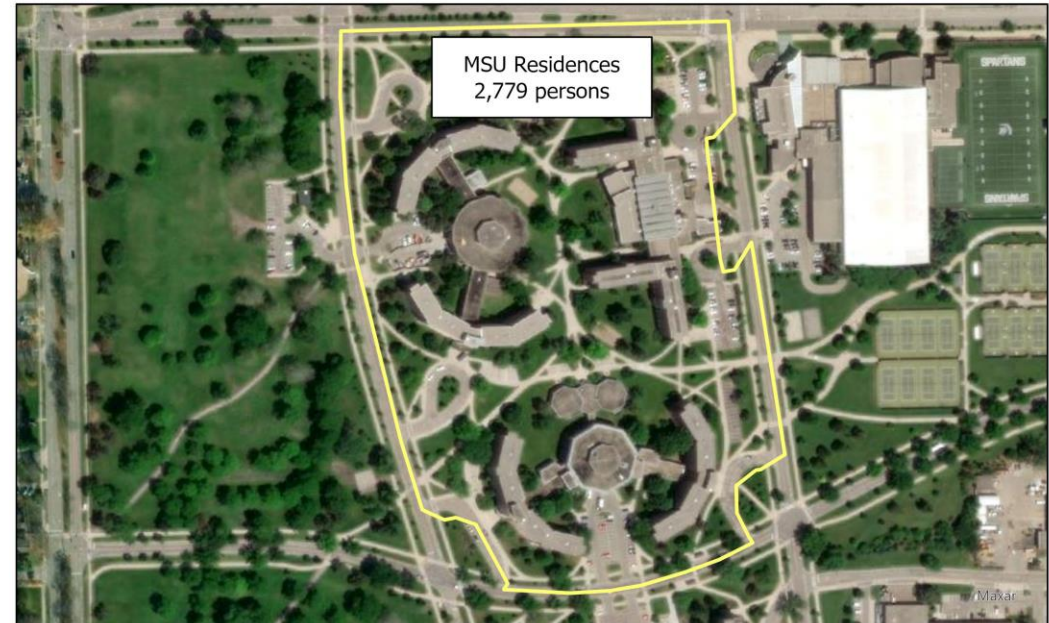


# State of Michigan - 2020 Census Tiger Files (Blocks)





# State of Michigan - Census Tiger Files - 4 largest populated blocks (2010)





The background of the slide is a close-up, slightly blurred image of the American flag, showing the stars and stripes in shades of blue, white, and red. The text is centered over the white field of the flag.

# **Questions about Geography?**



The background of the slide is a close-up, slightly blurred view of the stars and stripes of the United States flag. The stars are a deep blue, and the stripes are a mix of white and red, with the red stripes appearing in the bottom right corner. The overall lighting is soft, giving it a textured, fabric-like appearance.

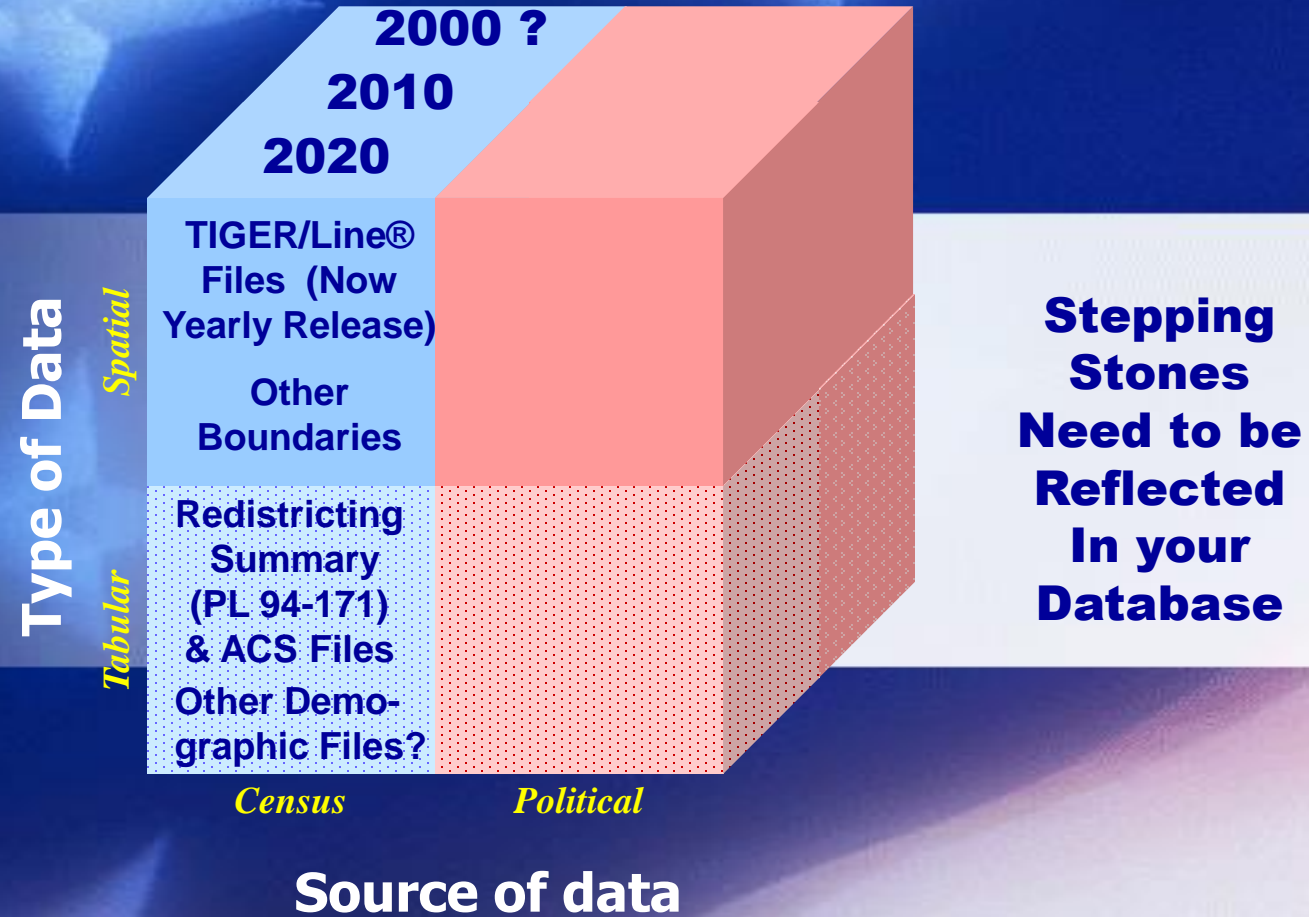
# **Redistricting Elements Part 2 – Census Data**

**June 17, 2021**



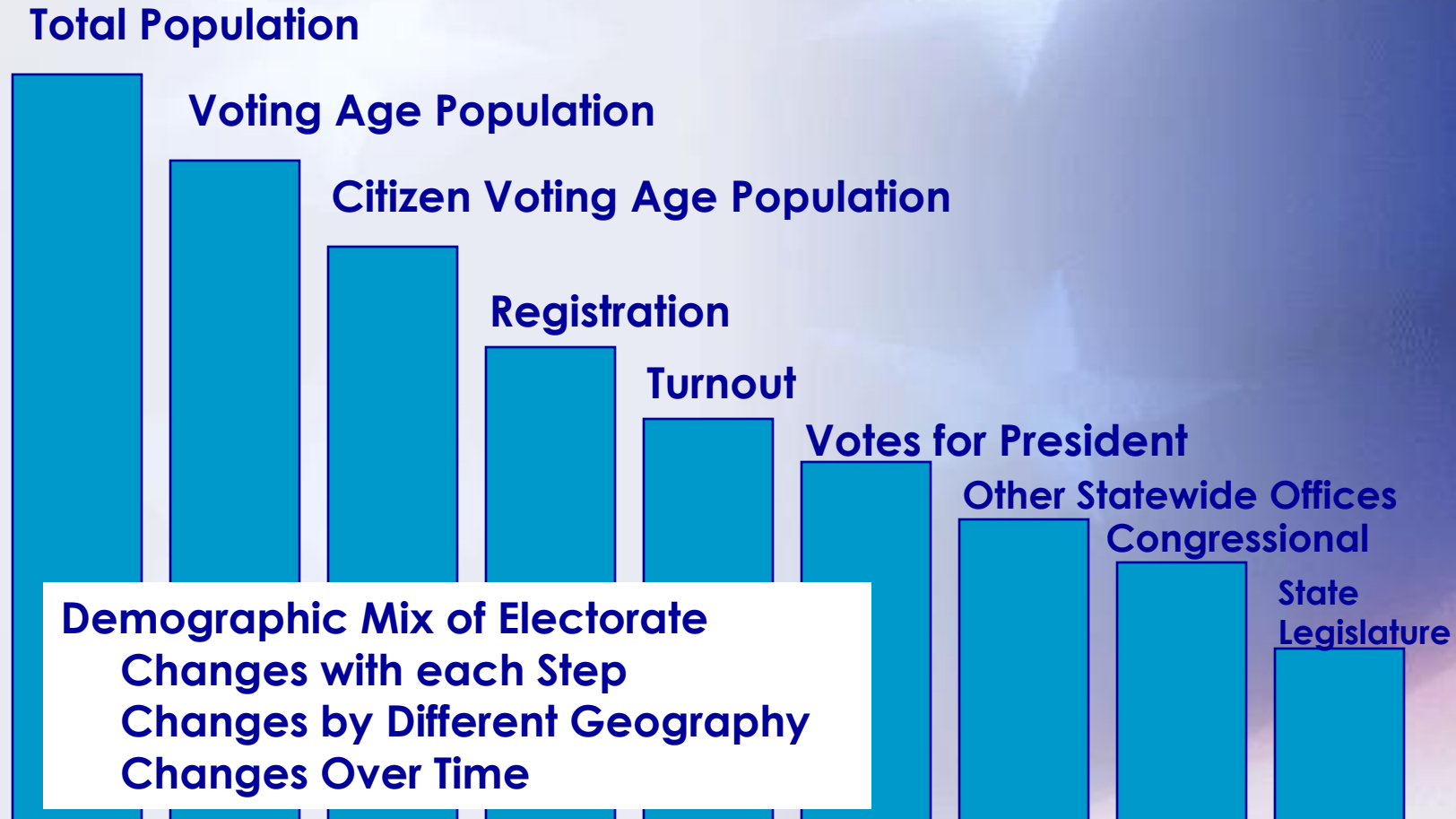
# Redistricting Data Cube

## Second Quadrant





# The Election Process – From a data element prospective



**Stepping Stones of the Election Process  
Play Important Part of Redistricting**



# Today's Major Discussions

- **Total Population**
- **Voting Age Population**
- **Distribution of Michigan's Population**
- **Racial Compilation of Population**



# Michigan's 2020 Census numbers announced to date

- **10,084,442**      **Apportionment Count**  
Means lost Congressional  
District (14 to 13) by 208,960 people
- **7,111**      **Overseas Population**
- **10,077,331**      **Residence Population**  
Used for Redistricting



# 3 Numbers to Memorize

**Ideal District Size for:**

**775,179**

**13 Congressional Districts**

**265,193**

**38 State Senate Districts**

**91,612**

**110 State House Districts**



## Ideal District Windows - With 2020 Residential Population

	<b>Congressional</b>	<b>State Senate</b>	<b>State House</b>
Number of Members	13	38	110
Ideal District Size	<b>775,179</b>	<b>265,193</b>	<b>91,612</b>
Acceptable Deviation	1.0%	10.0%	10.0%
Overall Deviation Window	7,752	26,519	9,161
One-sided Deviation Window	3,876	13,260	4,581
High Range (Raw Numbers)	779,055	278,453	96,193
High Range (Percentages)	0.5%	5.0%	5.0%
Low Range (Raw Numbers)	771,303	251,933	87,031
Low Range (Percentages)	-0.5%	-5.0%	-5.0%
<b>Statewide Population</b>	10,077,331	10,077,331	10,077,331

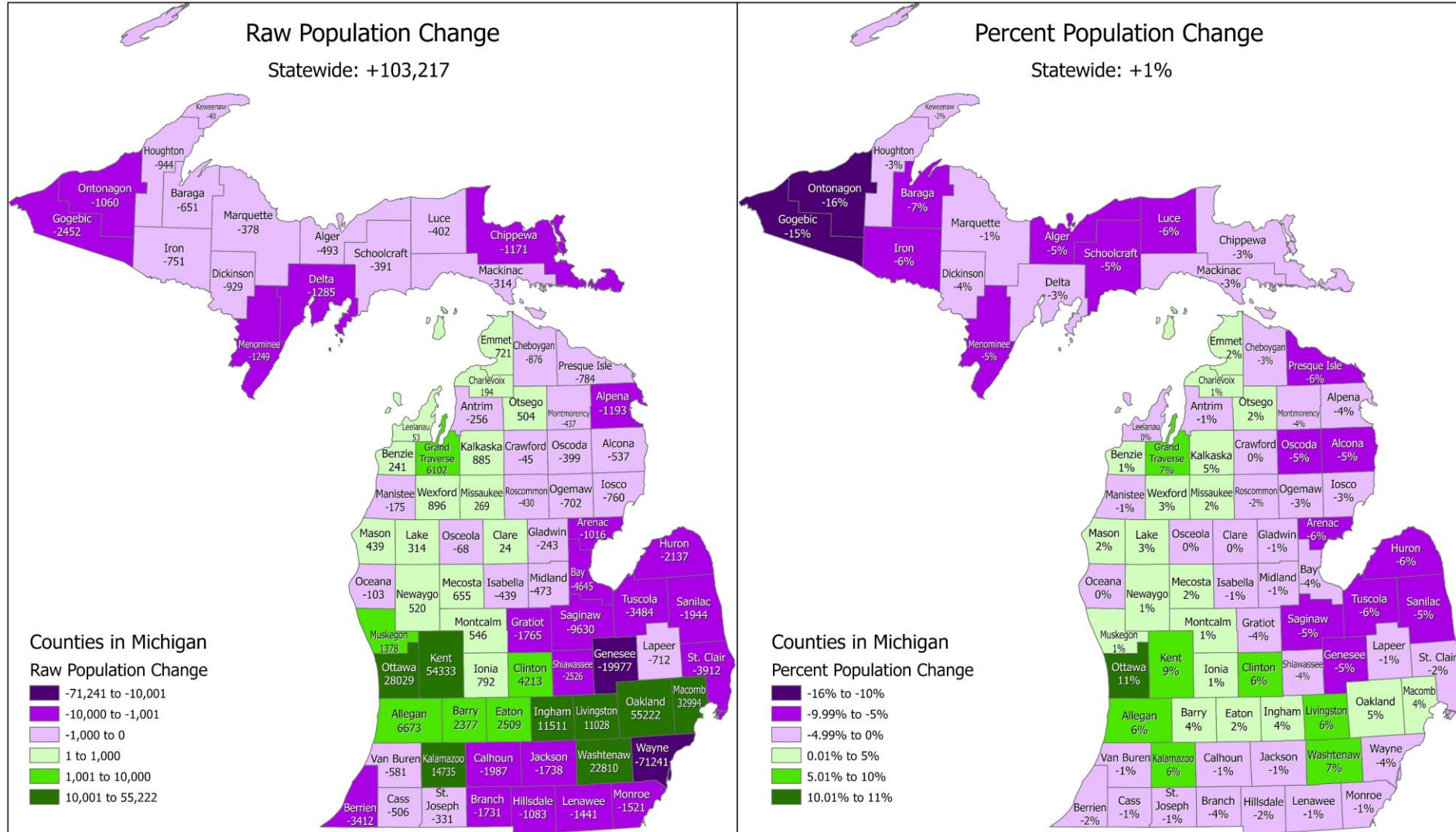
# **Michigan Population Distribution**

**Since PL files not available yet,  
Population Estimates give  
Preliminary Information**

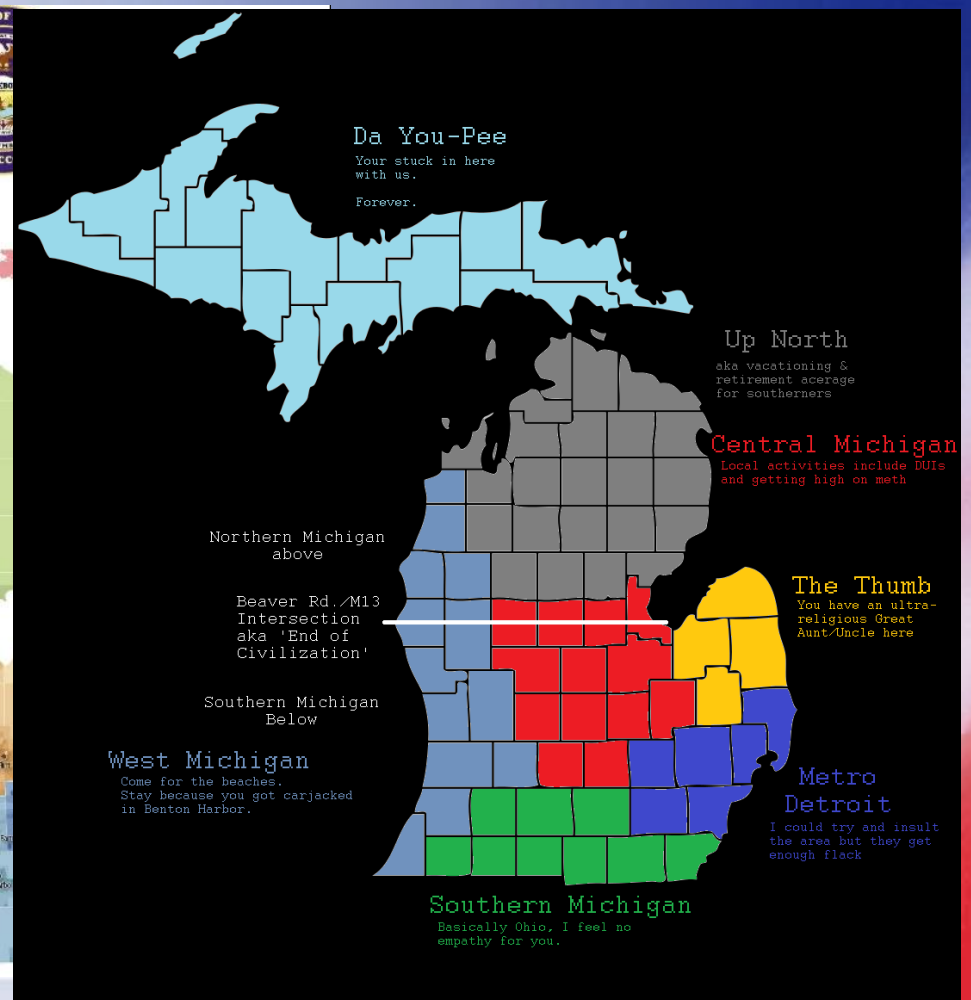
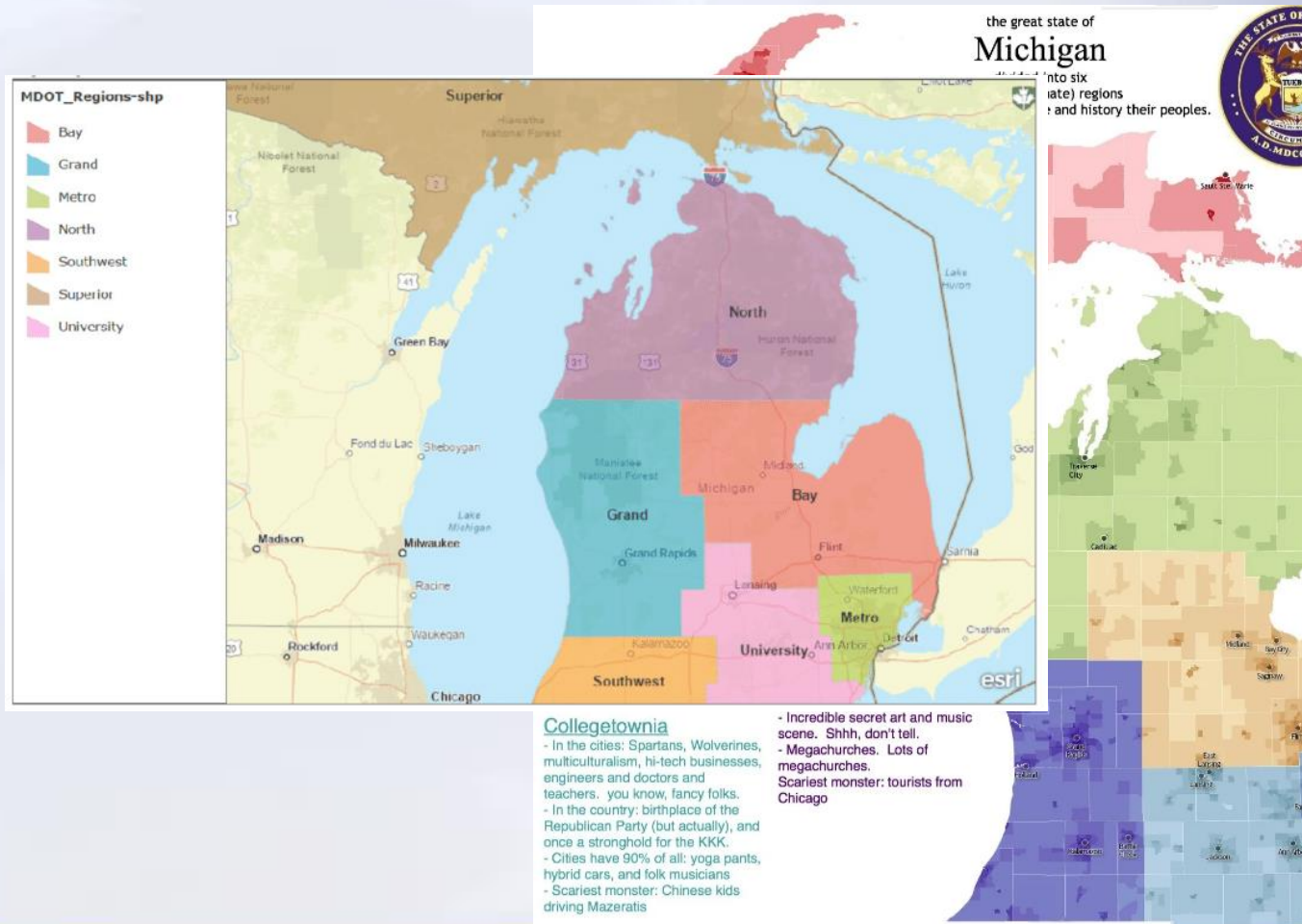


# Population Shifts Within Michigan

## State of Michigan Population Change 2010 - 2019



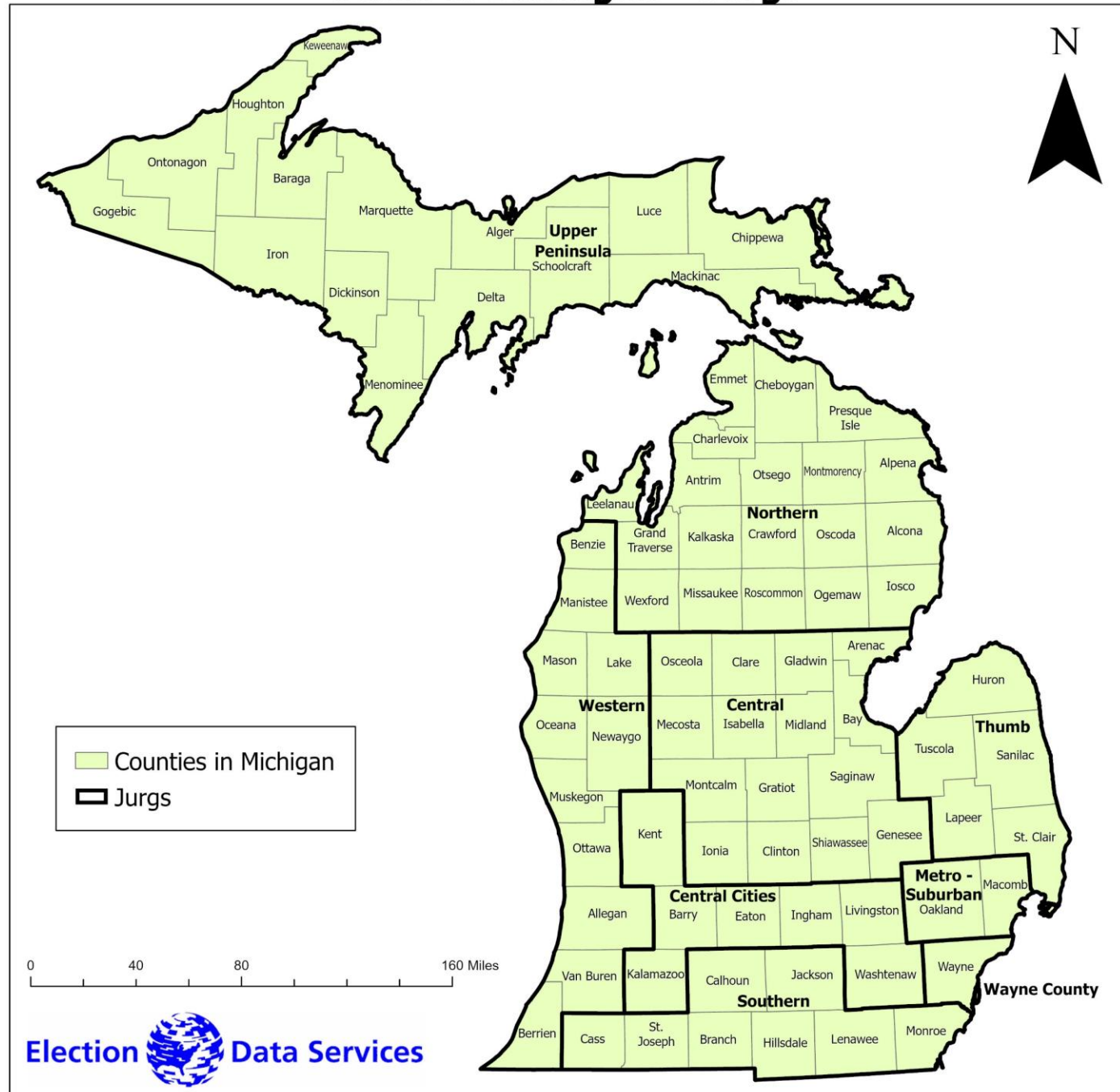
# Regionally, How can we look at the state?





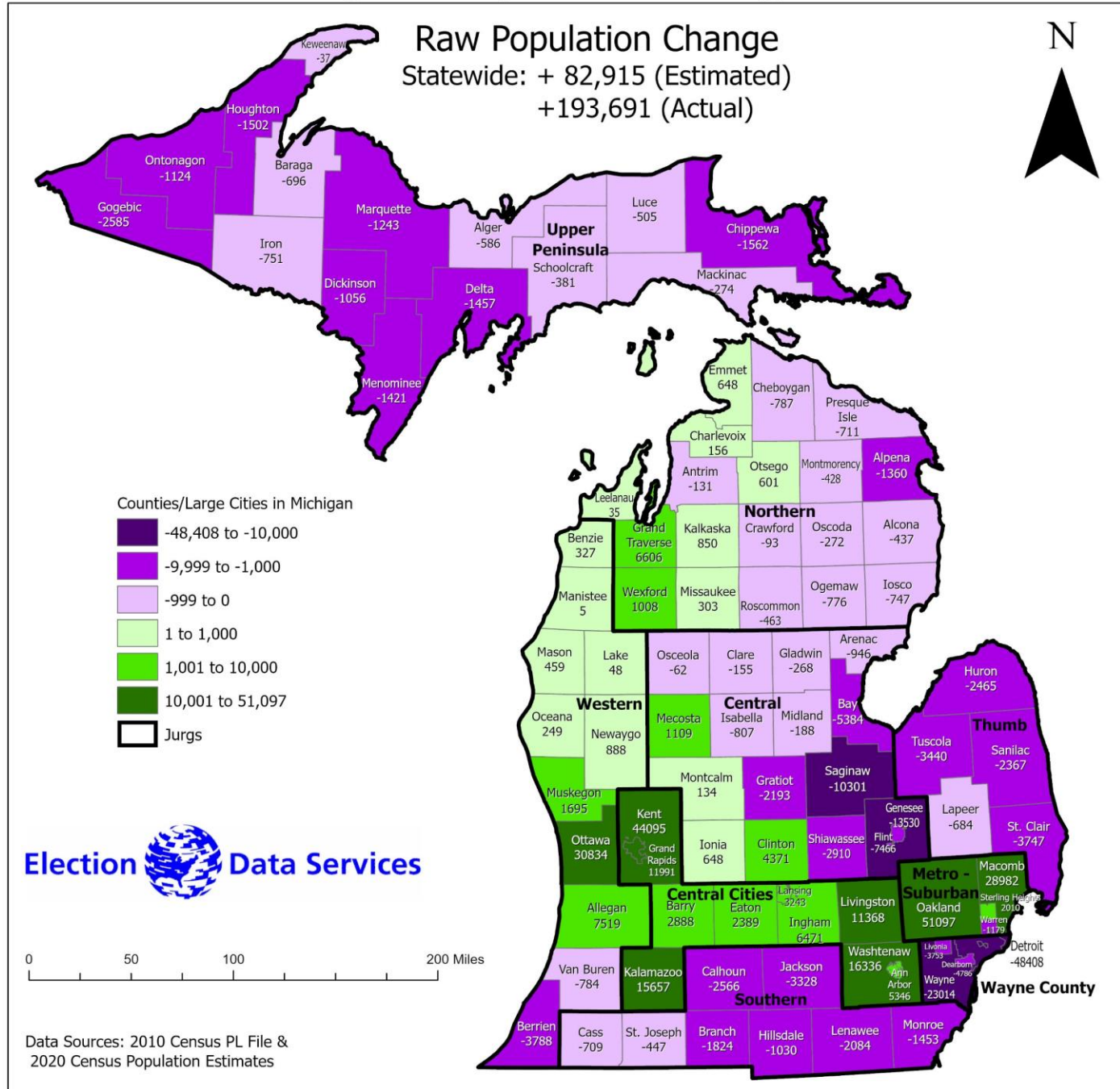
# EDS Regions

## State of Michigan - Jurgs



# Population Shifts Within Michigan

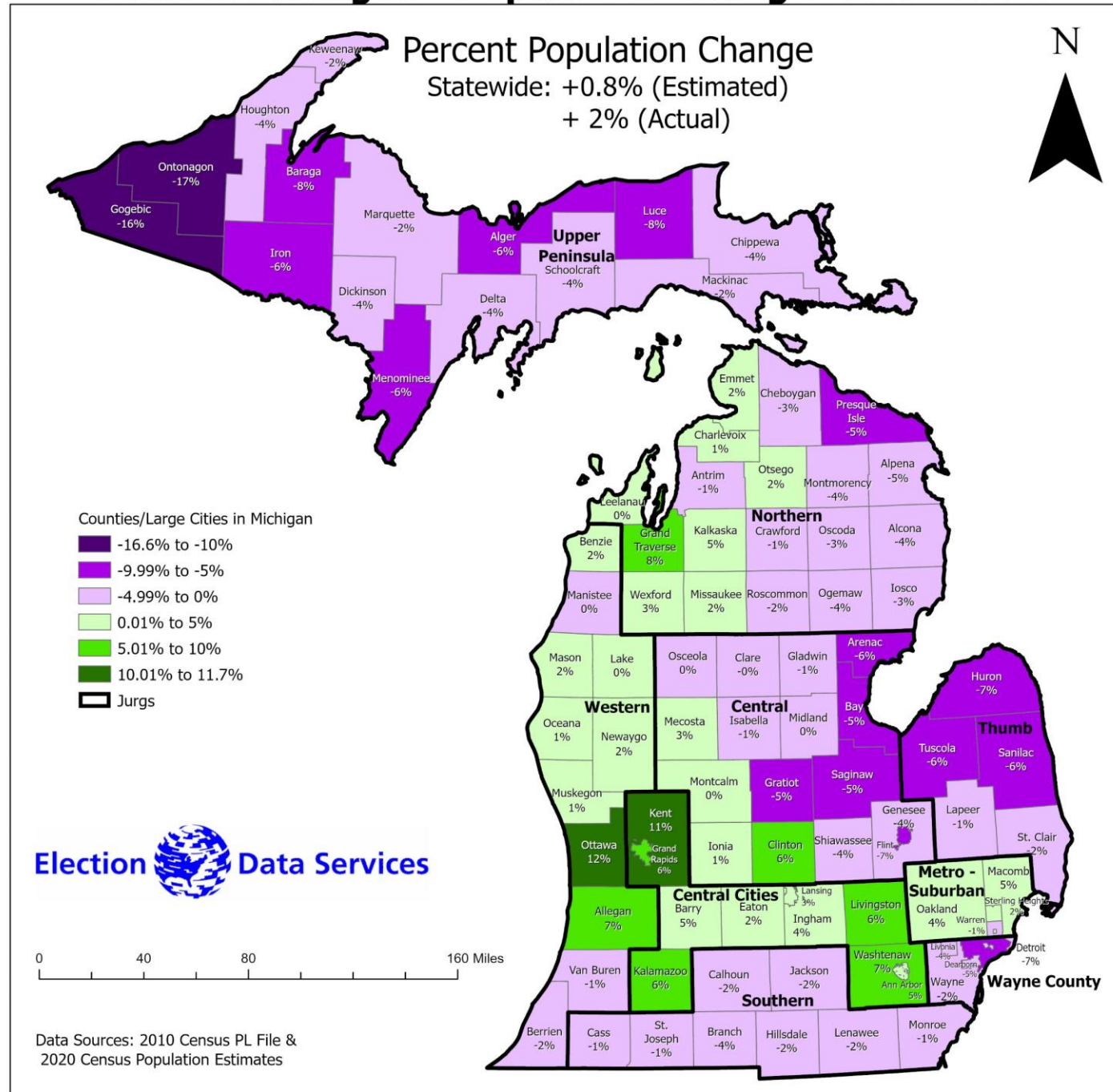
## State of Michigan - Population Change 2010 - 2020





# Population Shifts Within Michigan

## State of Michigan - Population Change 2010 - 2020



# Population Shifts within Michigan Regions

## Michigan Population Analysis

### County Summary

Annual Unmodified Estimates of the Resident Population: April 1, 2010 to July 1, 2020

										2000 to 2010		2010 to 2020	
										Total	Percent	Total	Percent
Jurg Areas	Jurg	2000 TOT Pop	2010 TOT Pop	2015 EST Pop	2016 EST Pop	2017 EST Pop	2018 EST Pop	2019 EST Pop	2020 EST Pop	Change	Change	Change	Change
Wayne County	1	2,061,180	1,820,584	1,764,866	1,760,835	1,757,874	1,755,868	1,750,093	1,740,623	-240,596	-11.67%	-79,961	-4.39%
Metro Suburban	2	1,982,466	2,043,340	2,109,926	2,119,892	2,127,345	2,129,561	2,130,115	2,124,250	467,188	16.87%	80,910	3.96%
Central Cities	3	1,732,690	1,826,538	1,903,315	1,920,002	1,934,581	1,942,709	1,945,657	1,946,322	69,977	10.57%	119,784	6.56%
Central-Mid	4	1,342,502	1,342,266	1,314,827	1,312,218	1,311,369	1,308,823	1,307,155	1,304,318	-236	-0.02%	-37,948	-2.83%
Southern MI	5	747,144	753,831	743,281	741,888	742,227	742,552	742,759	740,390	6,687	0.90%	-13,441	-1.78%
West Coast	6	907,740	938,000	954,267	958,601	964,012	968,449	970,977	975,452	-327,234	4.27%	37,452	3.99%
Thumb	7	391,051	383,320	375,080	373,873	372,726	372,291	371,626	370,617	-724,445	-2.03%	-12,703	-3.31%
Up North	8	456,450	464,400	463,482	463,958	464,609	466,353	467,577	468,402	7,950	1.74%	4,002	0.86%
Upper Peninsula	9	317,600	311,361	305,439	302,850	302,009	300,680	298,836	296,181	-6,239	-1.96%	-15,180	-4.88%



# Population Shifts within Michigan Regions

## Impact on Redistricting – State House Districts

### Michigan Legislative Seat Distribution - State House of Representatives

With 2020 Estimated Population Reported by Census Bureau (modified)

Decennial Census count of the Resident Population: April 1, 2010 to April 1, 2020

Statewide count released April 26, 2021. County populations are 2020 Census Estimates increased 1.11% to match statewide residential total

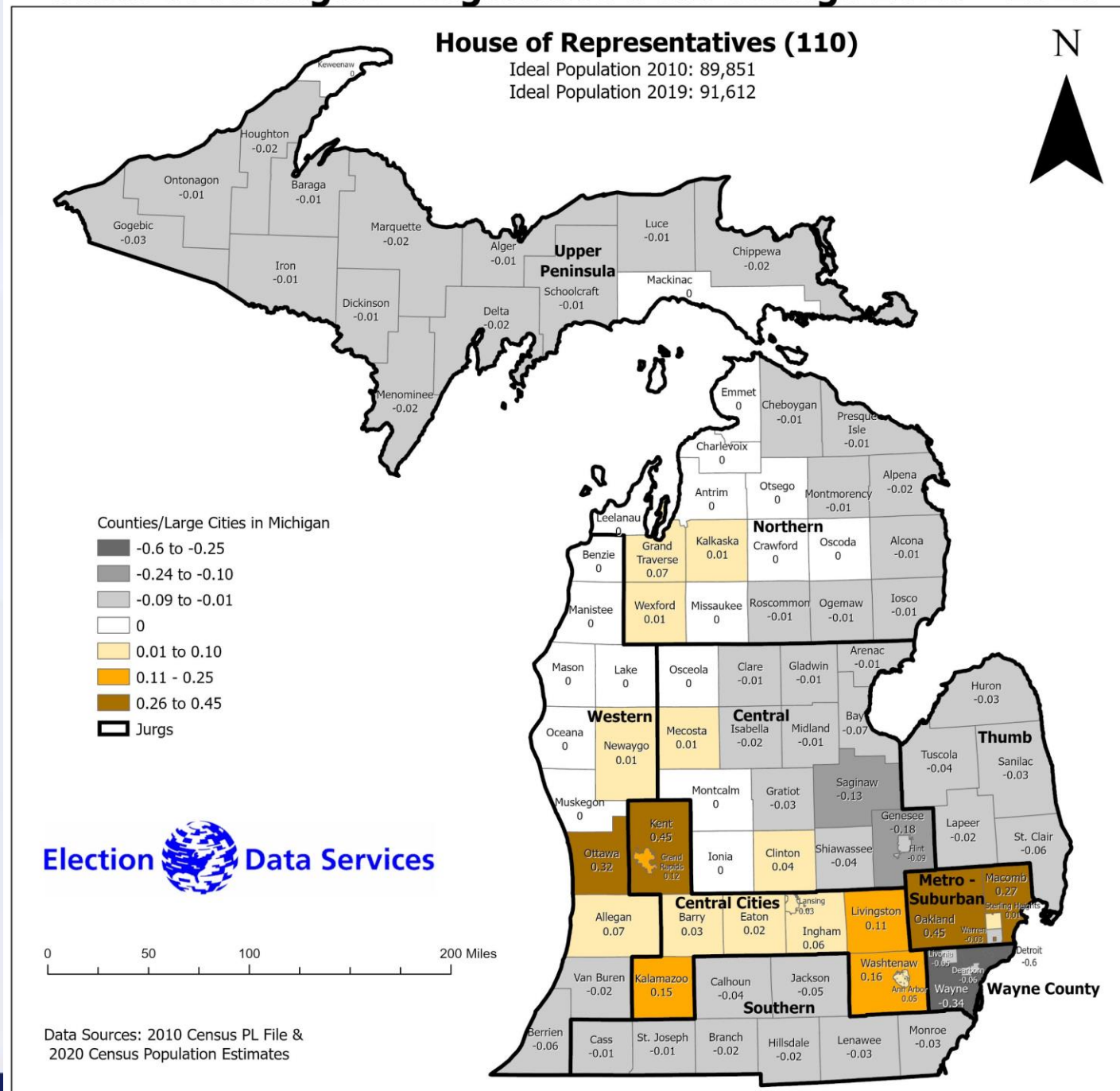
Type of Districts:	House
Number of Districts:	110
Ideal District size:	91,612
Acceptable Window - Low:	87,031
Acceptable Window - High:	96,193

		2020	Seat Distribution			2010	2000	Difference	Difference
Jurg Areas	Jurg	Calculated Pop	Low	Ideal	High	Ideal	Ideal	2000 to 2010	2010 to 2020
Wayne County	1	1,759,970	20.17	19.21	18.25	20.26	22.81	-2.55	-1.05
Metro Suburban	2	2,147,861	24.62	23.45	22.27	22.74	21.94	0.80	0.70
Central Cities	3	1,967,955	22.56	21.48	20.41	20.33	19.18	1.15	1.15
Central-Mid	4	1,318,815	15.12	14.40	13.68	14.94	14.86	0.08	-0.54
Southern MI	5	748,619	8.58	8.17	7.76	8.39	8.27	0.12	-0.22
West Coast	6	986,294	11.30	10.77	10.23	10.44	10.05	0.39	0.33
Thumb	7	374,736	4.29	4.09	3.89	4.27	4.33	-0.06	-0.18
Up North	8	473,608	5.43	5.17	4.91	5.17	5.05	0.12	0.00
Upper Peninsula	9	299,473	3.43	3.27	3.11	3.47	3.52	-0.05	-0.20

# State of Michigan - Legislative Seat Change 2010 - 2020

## Population Shifts Within Michigan

## Impact on Seat Allocation





# Population Shifts within Michigan Regions

## Impact on Redistricting – State Senate Districts

### Michigan Legislative Seat Distribution - State Senate

With 2020 Estimated Population Reported by Census Bureau (modified)

Decennial Census count of the Resident Population: April 1, 2010 to April 1, 2020

Statewide count released April 26, 2021. County populations are 2020 Census Estimates increased 1.11% to match statewide residential total

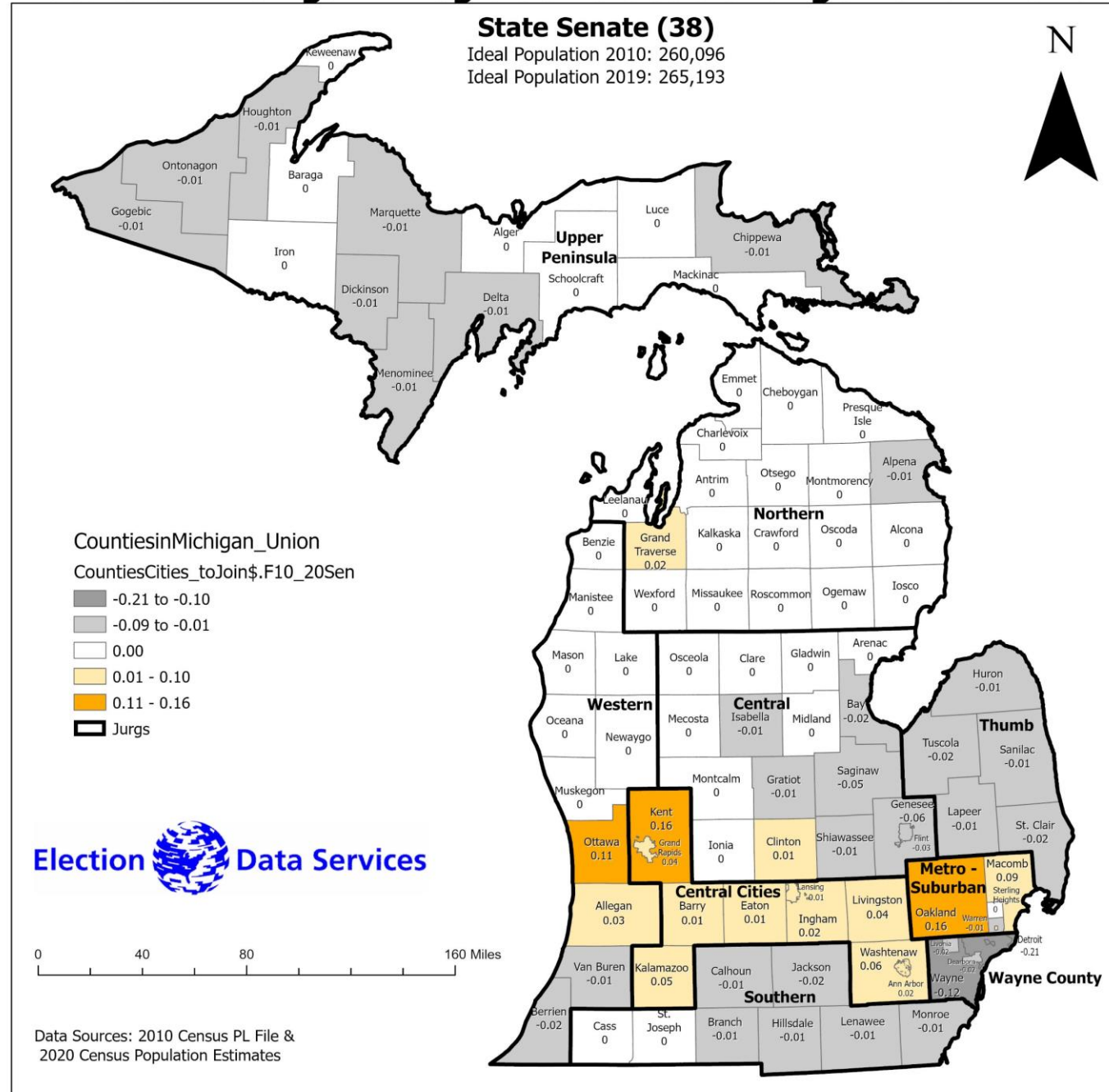
Type of Districts:	Senate
Number of Districts:	38
Ideal District size:	265,193
Acceptable Window - Low:	251,933
Acceptable Window - High:	278,453

		2020	Seat Distribution			2010	2000	Difference	Difference
Jurg Areas	Jurg	Calculated Pop	Low	Ideal	High	Ideal	Ideal	2000 to 2010	2010 to 2020
Wayne County	1	1,759,970	6.99	6.64	6.32	7.00	7.88	-0.88	-0.36
Metro Suburban	2	2,147,861	8.53	8.10	7.71	7.86	7.58	0.28	0.24
Central Cities	3	1,967,955	7.81	7.42	7.07	7.02	6.62	0.40	0.40
Central-Mid	4	1,318,815	5.23	4.97	4.74	5.16	5.13	0.03	-0.19
Southern MI	5	748,619	2.97	2.82	2.69	2.90	2.86	0.04	-0.08
West Coast	6	986,294	3.91	3.72	3.54	3.61	3.47	0.14	0.11
Thumb	7	374,736	1.49	1.41	1.35	1.47	1.50	-0.02	-0.06
Up North	8	473,608	1.88	1.79	1.70	1.79	1.75	0.04	0.00
Upper Peninsula	9	299,473	1.19	1.13	1.08	1.20	1.21	-0.02	-0.07

# Population Shifts Within Michigan

## Impact on Seat Allocation

### State of Michigan - Legislative Seat Change 2010 - 2020





# Population Shifts within Michigan Regions

## Impact on Redistricting – US Congressional Districts

### Michigan Congressional Seat Distribution - US House (13 Seats)

With 2020 Estimated Population Reported by Census Bureau (modified)

Decennial Census count of the Resident Population: April 1, 2010 to April 1, 2020

Statewide count released April 26, 2021. County populations are 2020 Census Estimates increased 1.11% to match statewide residential total

Type of Districts:		Congress									
Number of Districts:		13									
Ideal District size:		775,179									
Acceptable Window - Low:		736,420									
Acceptable Window - High:		813,938									
		2020			13 seats			14 seats	15 seats		
		Seat Distribution			2010	2000	Difference	Difference			
Jurg Areas	Jurg	Calculated Pop	Low	Ideal	High	Ideal	Ideal	2000 to 2010	2010 to 2020		
Wayne County	1	1,759,970	2.39	2.27	2.16	2.58	3.11	-0.53	-0.31		
Metro Suburban	2	2,147,861	2.92	2.77	2.64	2.89	2.99	-0.10	-0.12		
Central Cities	3	1,967,955	2.67	2.54	2.42	2.59	2.62	-0.03	-0.05		
Central-Mid	4	1,318,815	1.79	1.70	1.62	1.90	2.03	-0.12	-0.20		
Southern MI	5	748,619	1.02	0.97	0.92	1.07	1.13	-0.06	-0.10		
West Coast	6	986,294	1.34	1.27	1.21	1.33	1.37	-0.04	-0.06		
Thumb	7	374,736	0.51	0.48	0.46	0.54	0.59	-0.05	-0.06		
Up North	8	473,608	0.64	0.61	0.58	0.66	0.69	-0.03	-0.05		
Upper Peninsula	9	299,473	0.41	0.39	0.37	0.44	0.48	-0.04	-0.05		

# Michigan Population Distribution

**Flip to Excel Tables**

**Files will be sent to Commission  
For Commission's website**



The background of the slide is a close-up, slightly blurred view of the American flag, showing the stars and stripes in shades of blue, white, and red. The text is centered in the middle of the frame.

**Questions  
So far?**

***Thank you***



**Kimball Brace  
President**

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**[www.electiondataservices.com](http://www.electiondataservices.com)**