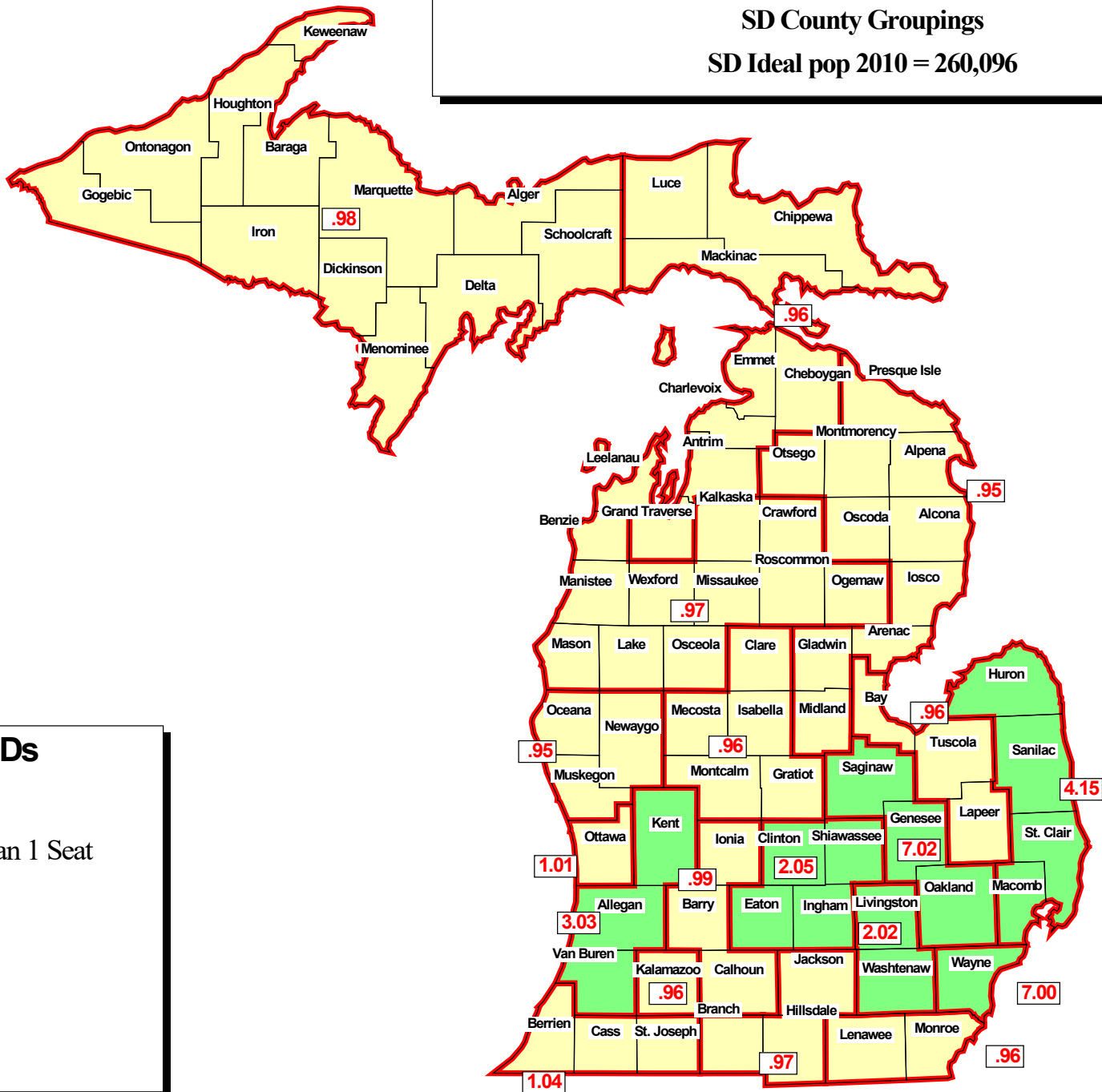
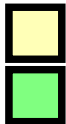


SD County Groupings

SD Ideal pop 2010 = 260,096



SDs

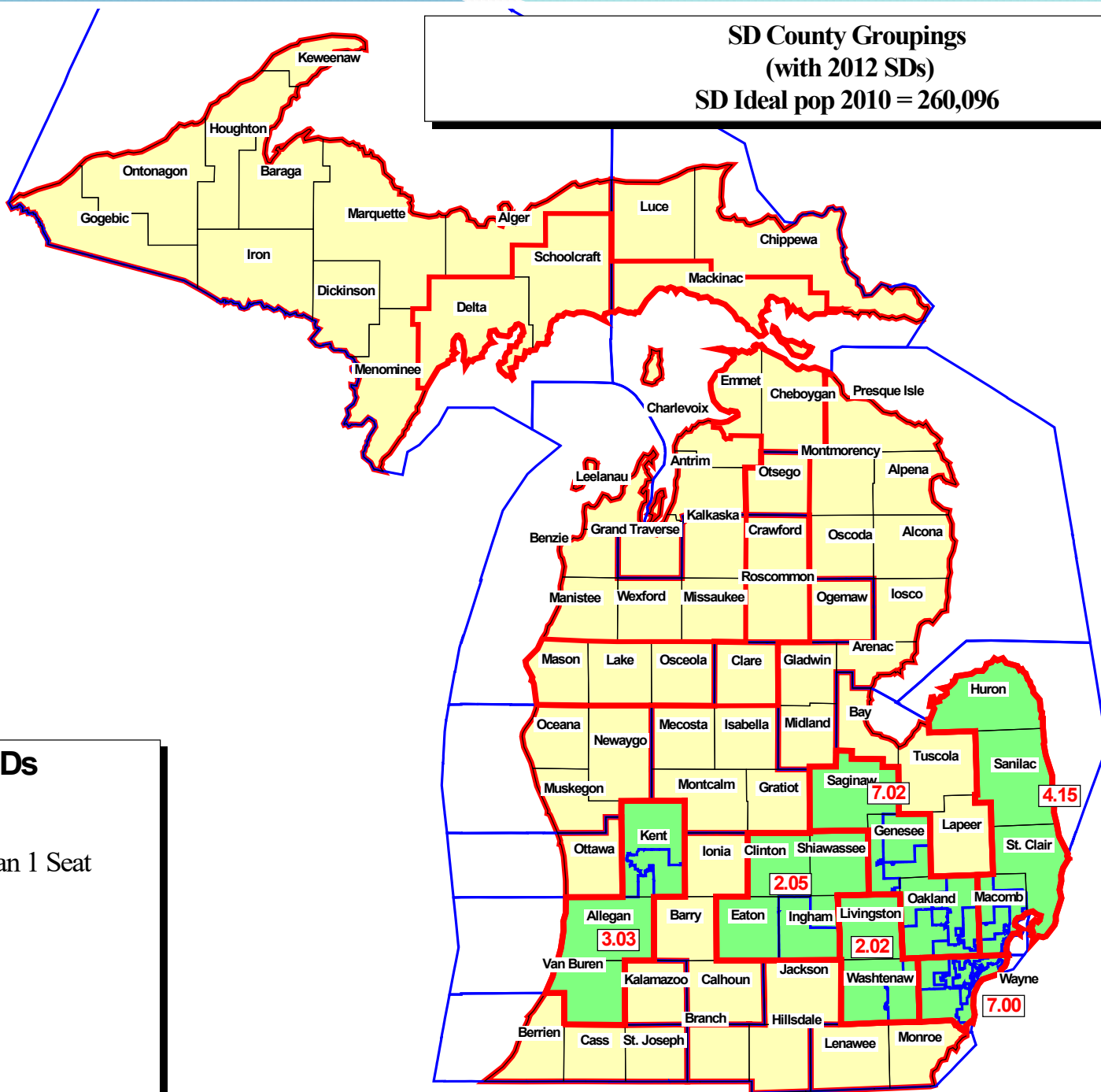
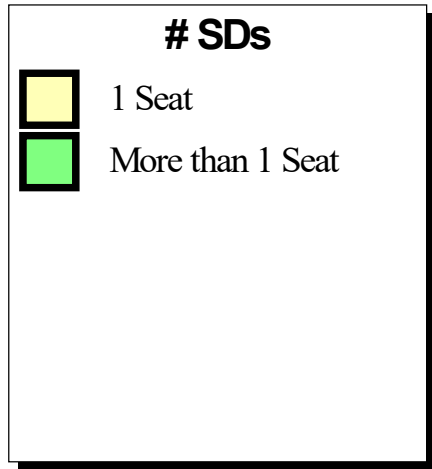


1 Seat

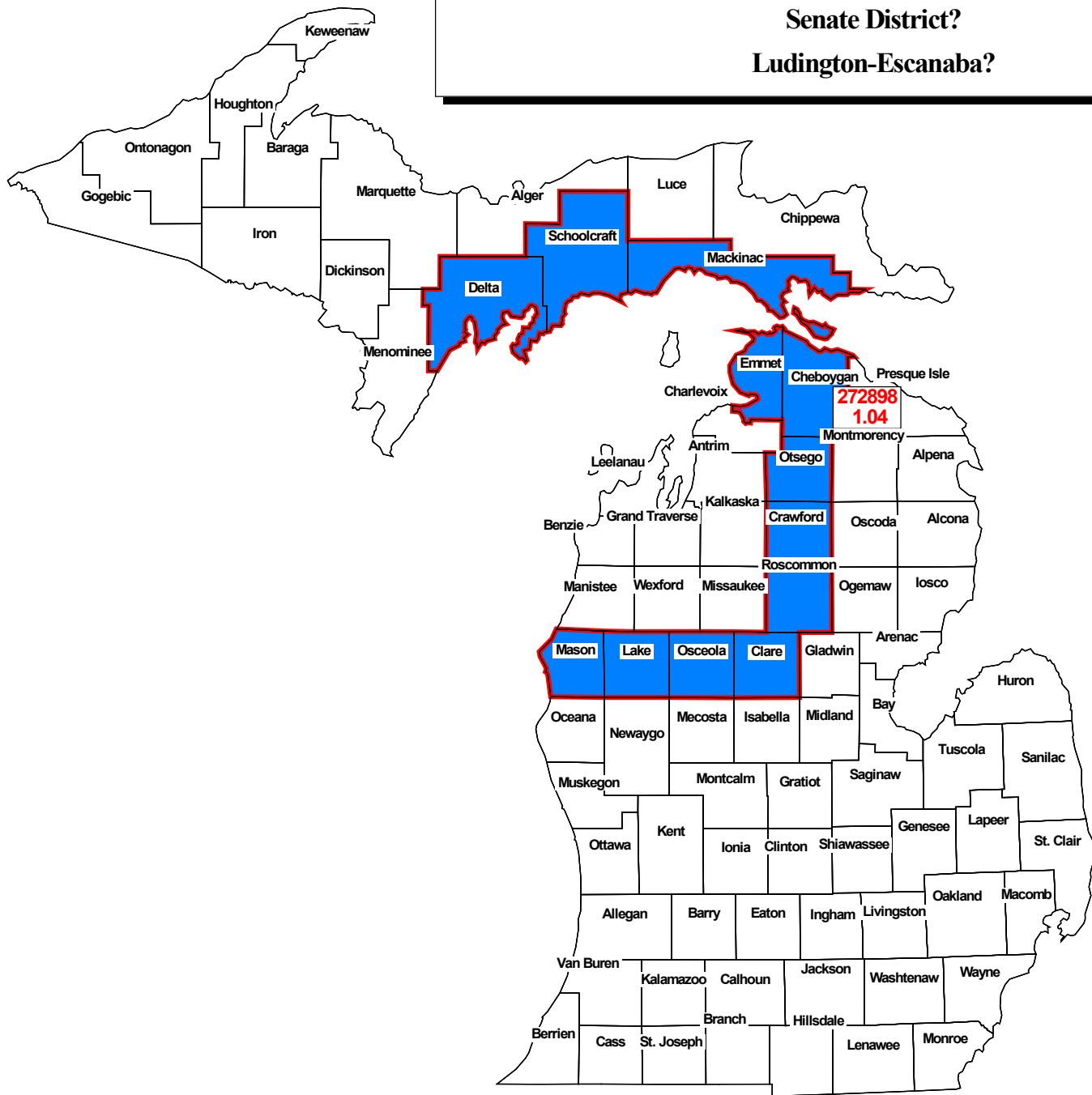
More than 1 Seat

SD County Groupings (with 2012 SDs)

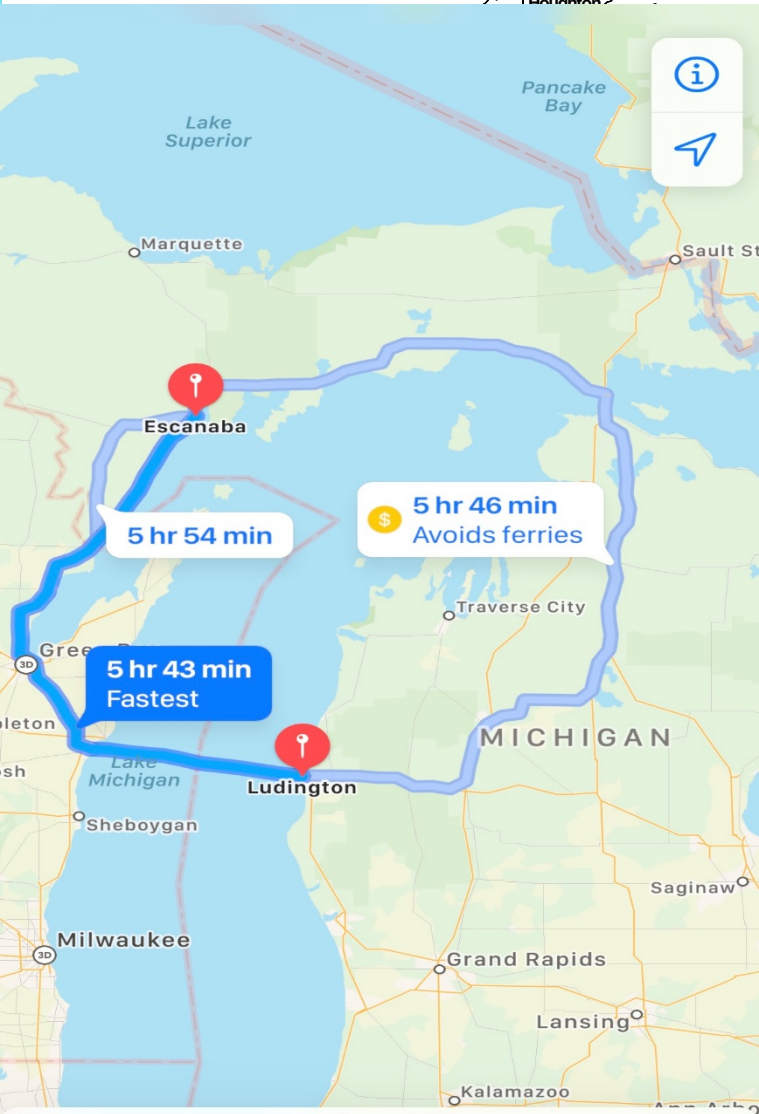
SD Ideal pop 2010 = 260,096



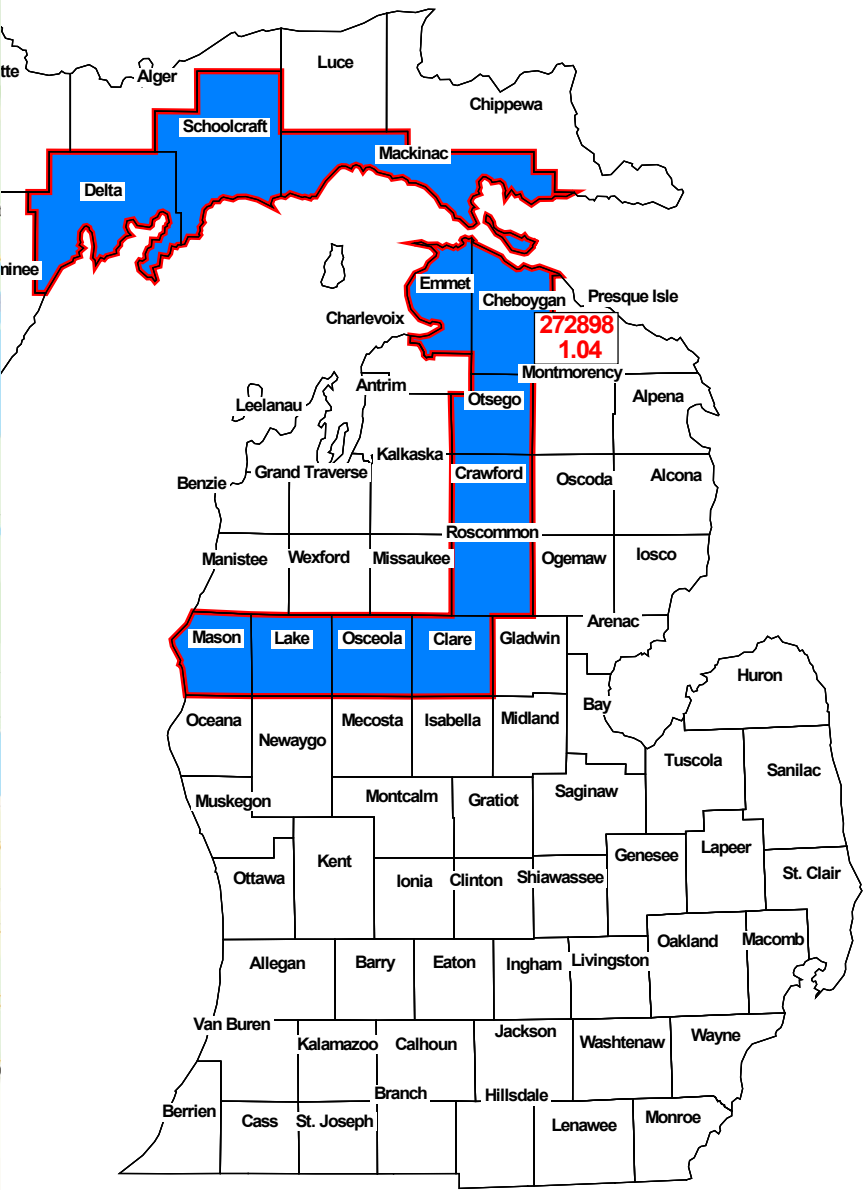
Senate District? Ludington-Escanaba?



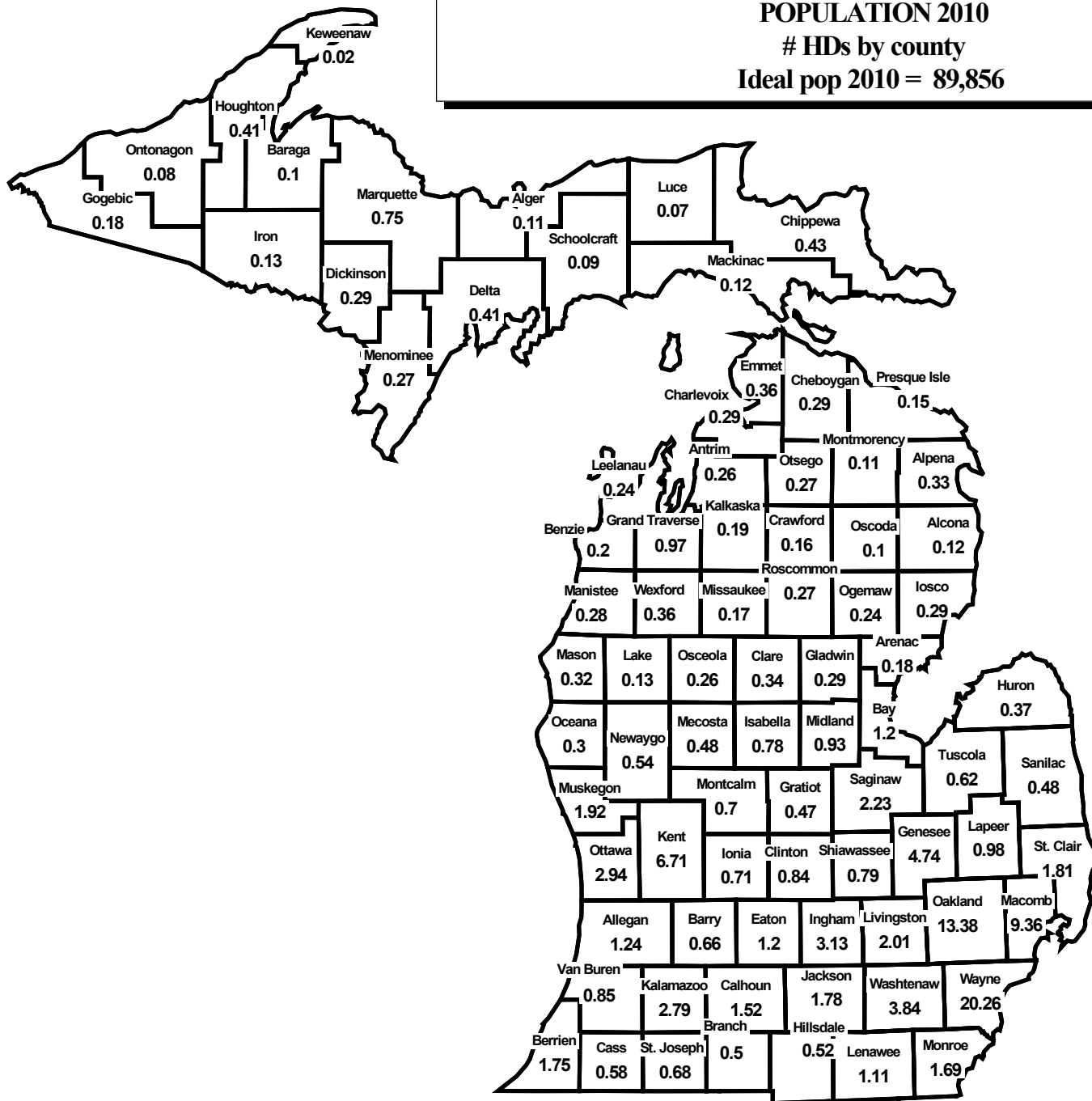
Senate District? Ludington-Escanaba?



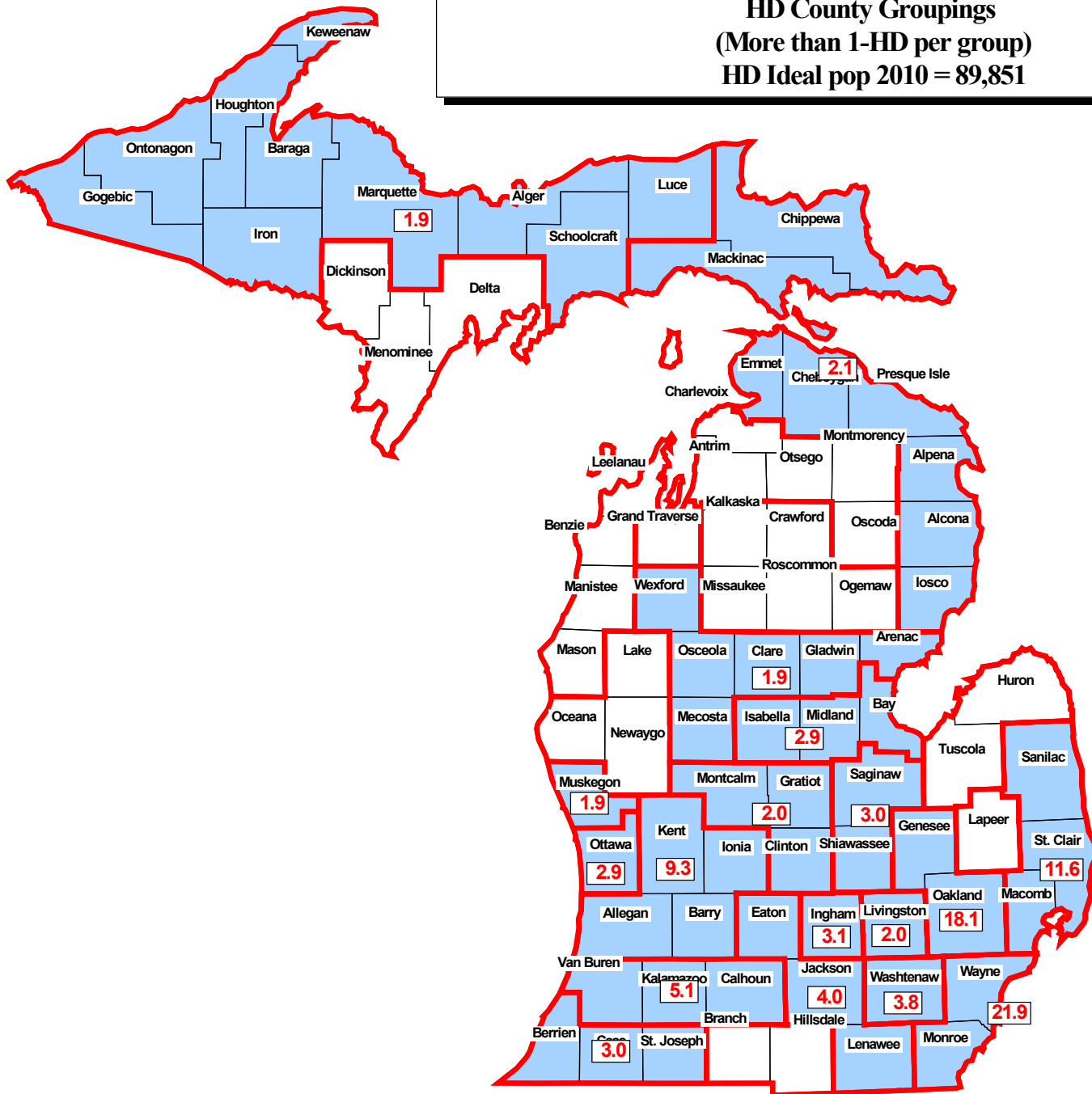
To Ludington
From Escanaba, MI



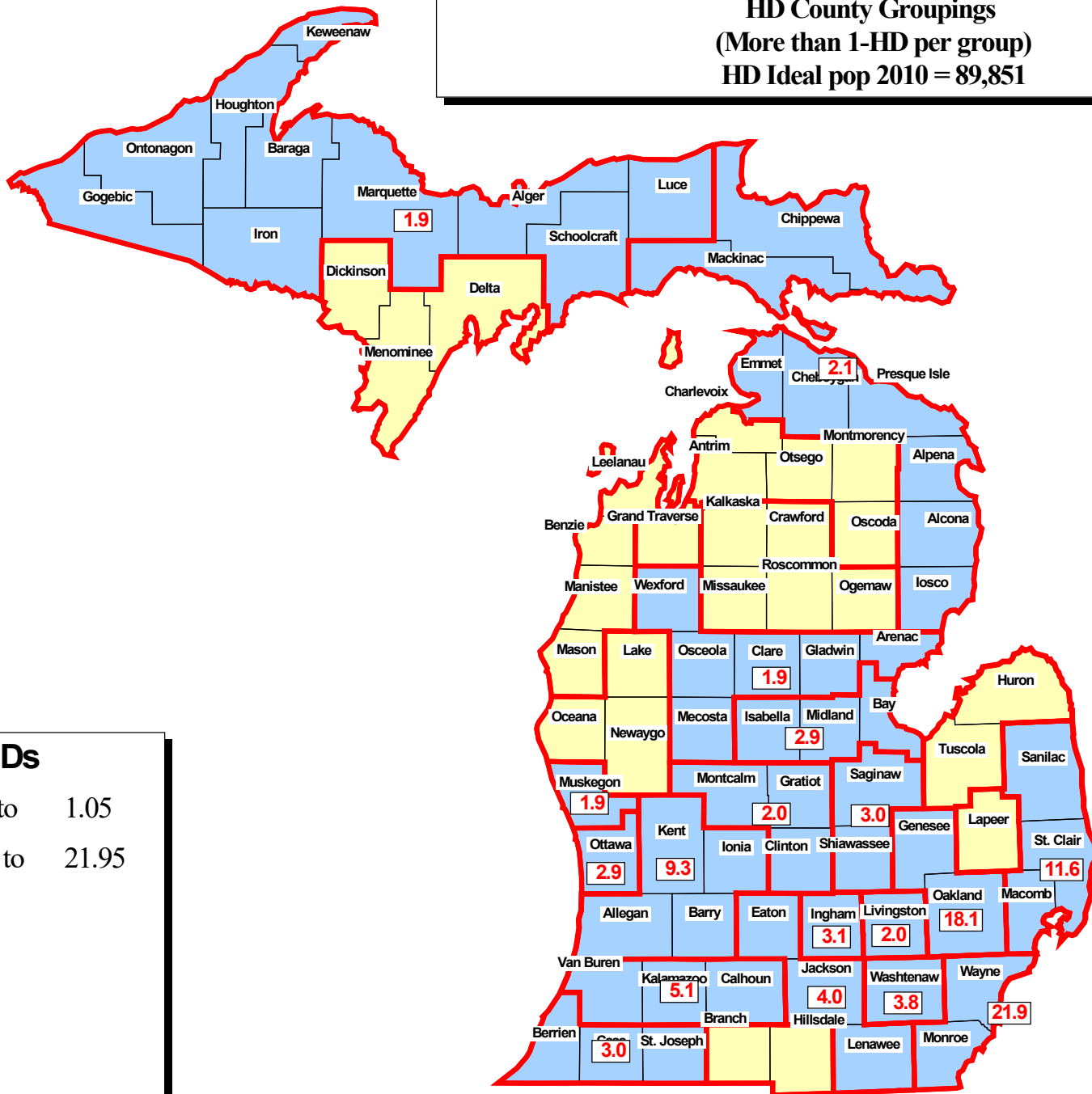
POPULATION 2010
HDs by county
Ideal pop 2010 = 89,856





HD County Groupings (More than 1-HD per group) HD Ideal pop 2010 = 89,851



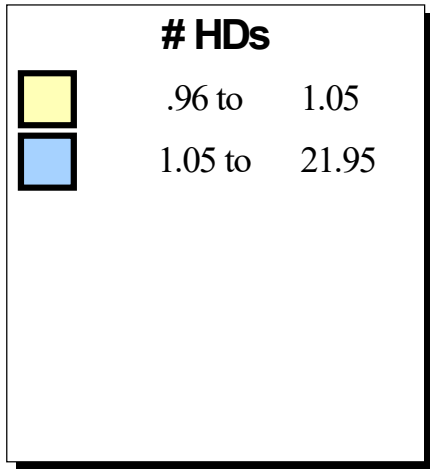
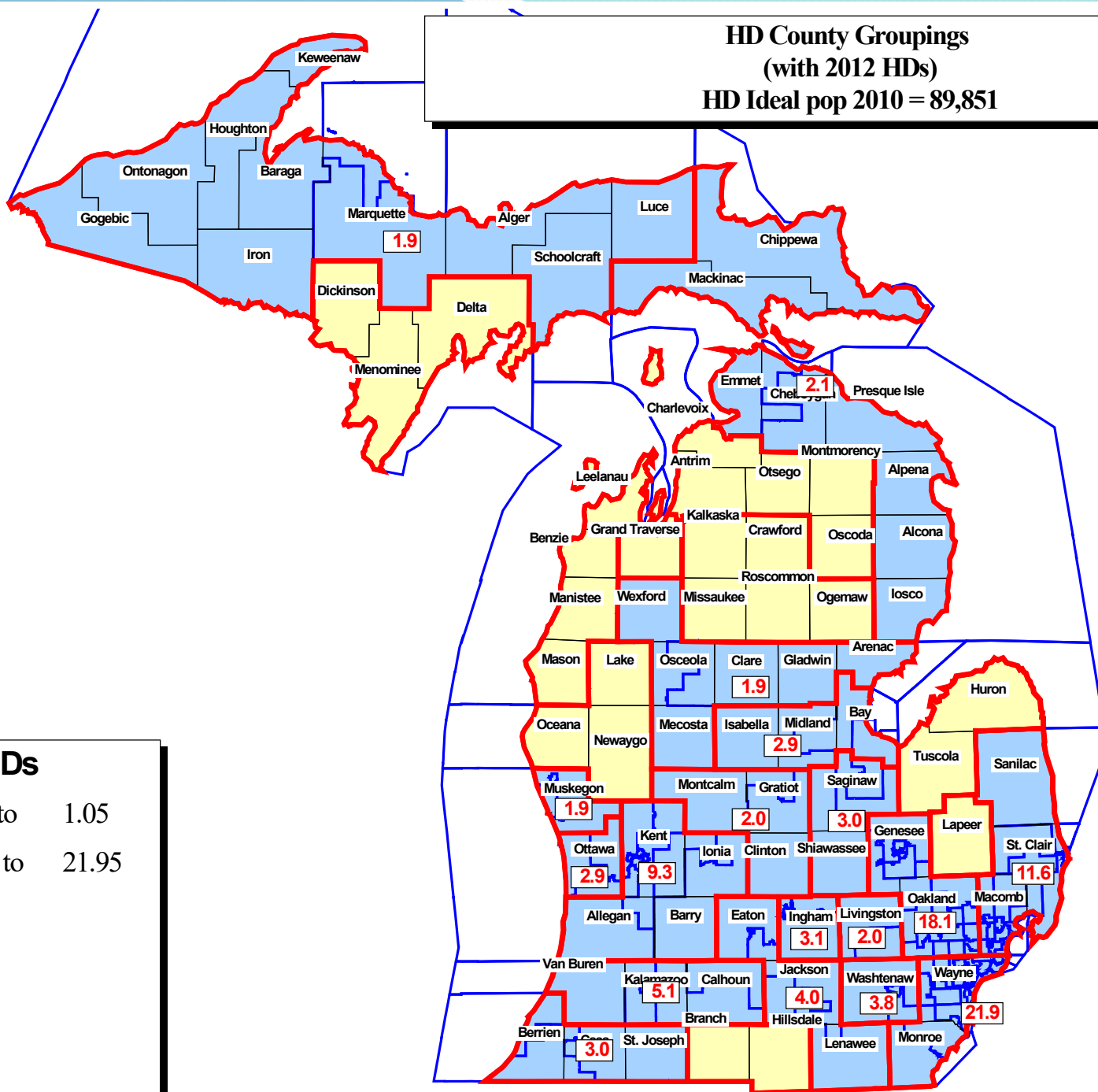
HD County Groupings (More than 1-HD per group) HD Ideal pop 2010 = 89,851



# HDs	
	.96 to 1.05
	1.05 to 21.95

HD County Groupings (with 2012 HDs)

HD Ideal pop 2010 = 89,851



Flexible boxes



- Districts are equalized based on population – concept of one person, one vote
- Districts can be valid within a range of deviation from the ideal district size – a flexible box
- The flexible boxes are filled with bricks of different sizes
- Or the different sized bricks build the districts

Ideal District Windows - With 2020 Residential Population

	Congressional	State Senate	State House
Number of Members	13	38	110
Ideal District Size	775,179	265,193	91,612
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%
Statewide Population	10,077,331	10,077,331	10,077,331

Top 15 Municipalities by Population 2010

Rank	Name	Pop 2010	2010 Pop
1	Detroit city	713,777	Ideal SD = 260,096
2	Grand Rapids city	188,040	Ideal HD = 89,856
3	Warren city	134,056	
4	Sterling Heights city	129,699	
5	Ann Arbor city	113,934	2010 Pop
6	Lansing city	109,563	Greater than 1 SD
7	Flint city	102,434	Greater than 1 HD
8	Dearborn city	98,153	
9	Livonia city	96,942	
10	Clinton charter township	96,796	
11	Canton charter township	90,173	
12	Westland city	84,094	
13	Troy city	80,980	
14	Farmington Hills city	79,740	
15	Macomb township	79,580	

Bricks and chips



- Counties, townships and cities come in all shapes and sizes
- These municipalities can form the bricks to build Districts



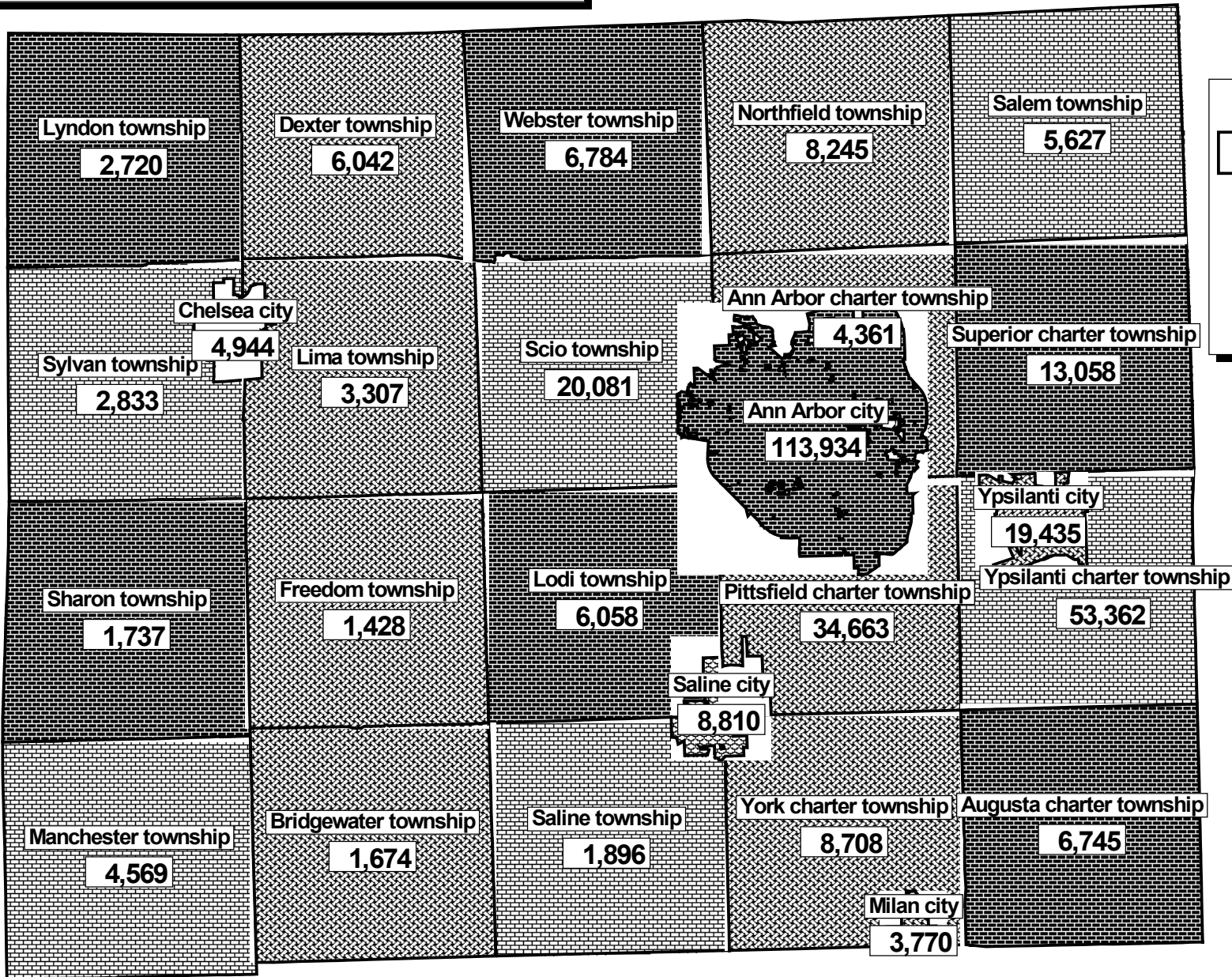
- Sometimes the bricks are split
- Counties split into municipalities (Twps & Cities)
- Municipalities split into voting precincts



- Sometimes the fragments are split
- Voting precincts are split into census blocks (sometimes tracts or block groups)

Washtenaw County
Population 2010 = 344,791
Ideal HDs = 3.84

Washtenaw County Municipalities

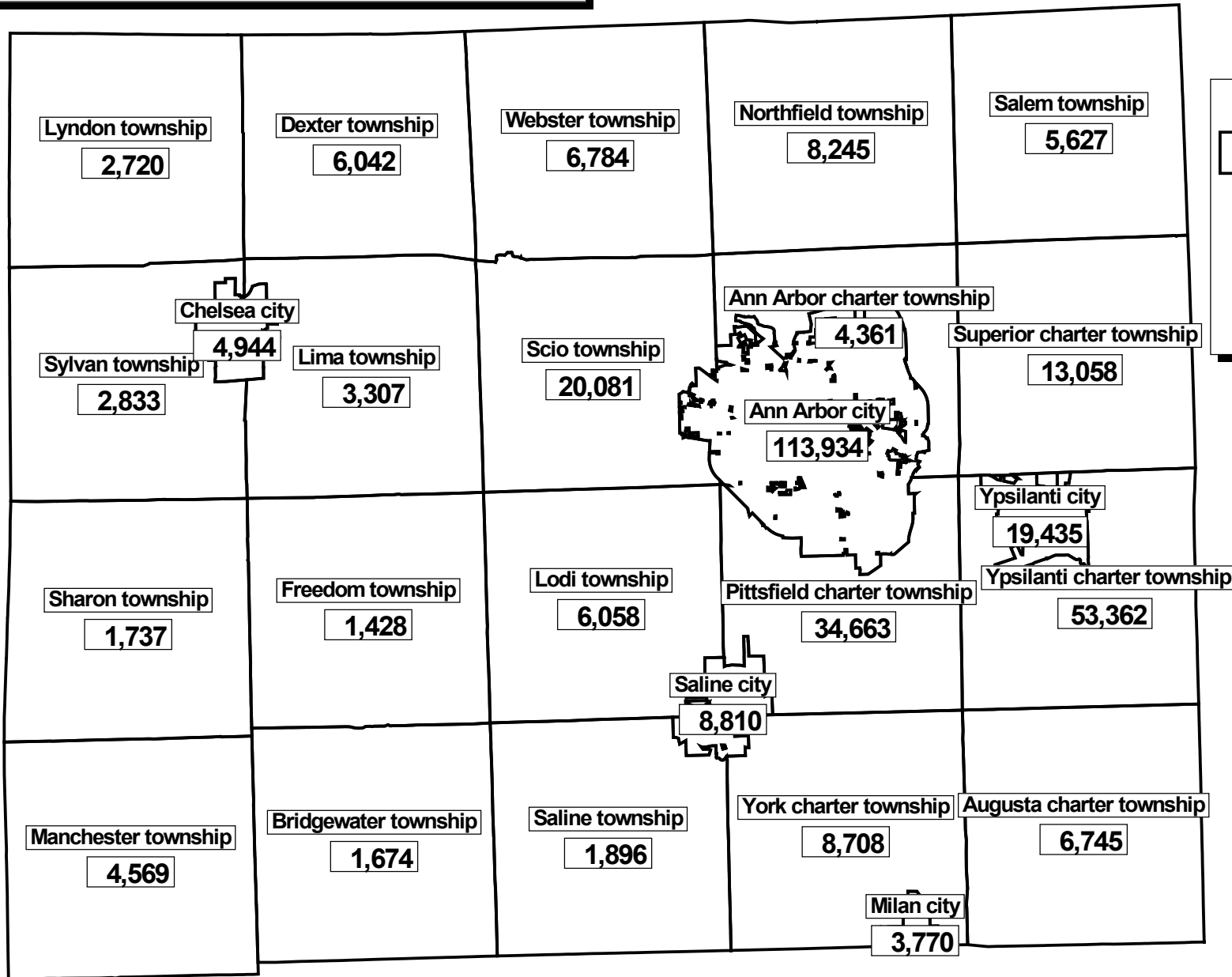


Layers

 Municipality

Washtenaw County
 Population 2010 = 344,791
 # Ideal HDs = 3.84

Washtenaw County Municipalities

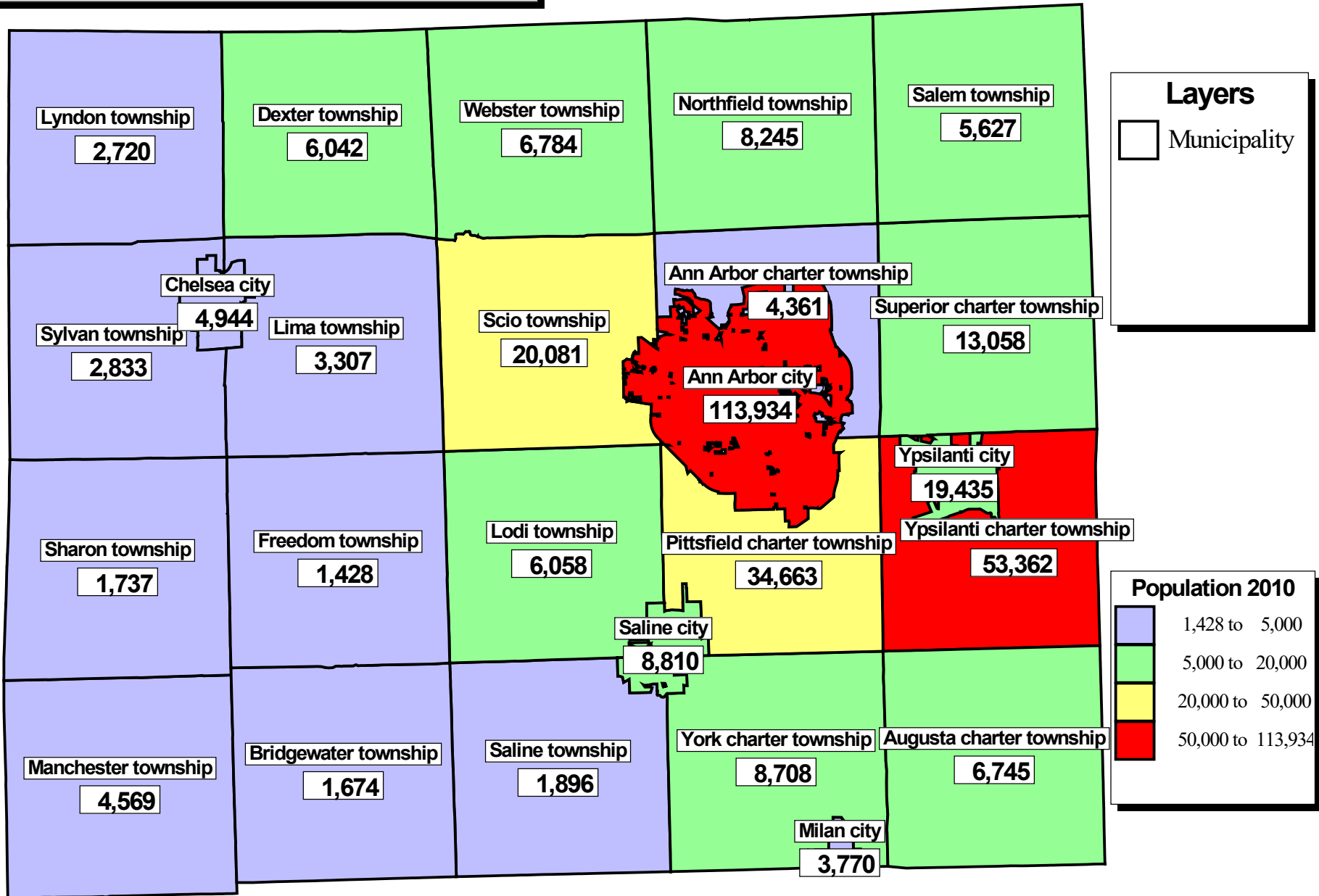


Layers

- Municipality

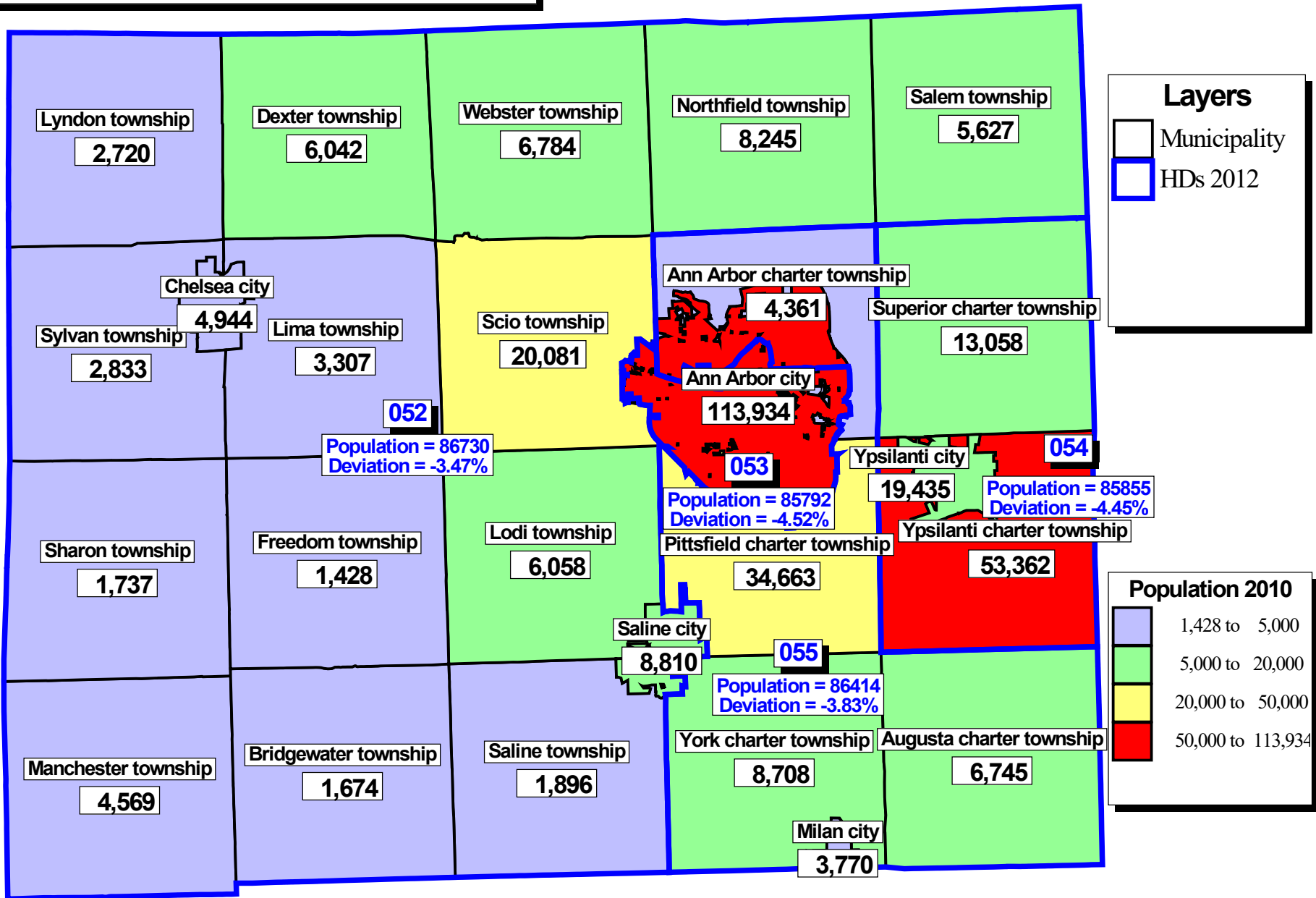
Washtenaw County
 Population 2010 = 344,791
 # Ideal HDs = 3.84

Washtenaw County Municipalities



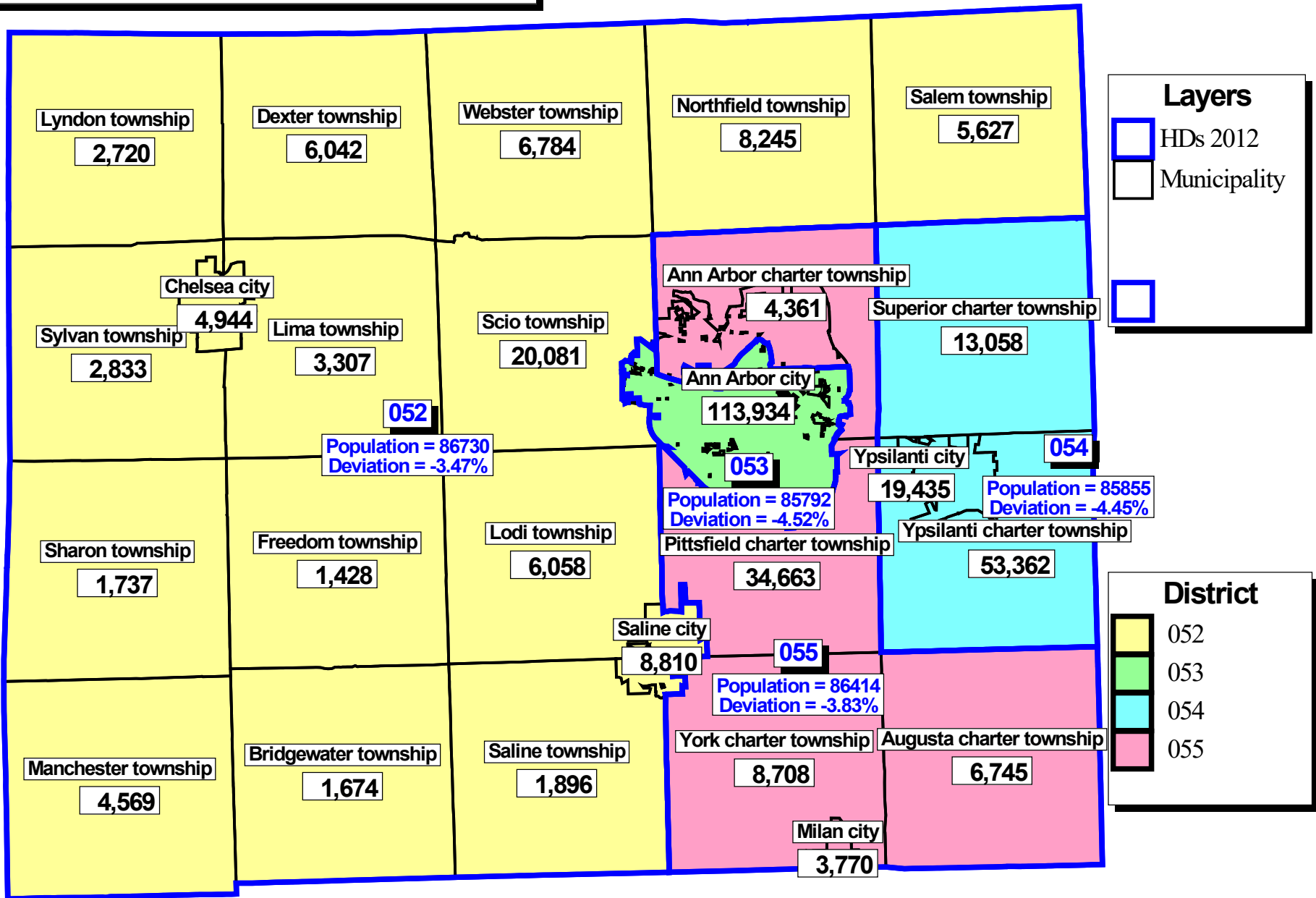
Washtenaw County
 Population 2010 = 344,791
 # Ideal HDs = 3.84

Washtenaw County Municipalities



Washtenaw County
 Population 2010 = 344,791
 # Ideal HDs = 3.84

Washtenaw County Municipalities



Layers

- HDs 2012
- Municipality

District

- 052
- 053
- 054
- 055

1946 - AMERICAN LEAGUE - Club Batting																	
8 Teams	AVG	OBP	SLG	G	AB	H	2B	3B	HR	R	R/G	SO	BB	LOB	SB	CS	SBP
Boston Red Sox	.274	.360	.407	154	5416	1484	249	53	121	894	5.8	687	755	1293	41	35	53.9
Washington Senators	.262	.334	.369	154	5304	1388	254	64	62	715	4.6	840	565	1205	55	23	70.5
Detroit Tigers	.253	.334	.374	154	5307	1344	193	37	125	736	4.8	704	649	1194	48	35	57.8
Chicago White Sox	.252	.315	.328	155	5341	1348	180	52	40	631	4.1	838	488	1130	61	43	58.7
St. Louis Browns	.248	.316	.362	153	5255	1301	211	40	103	655	4.3	765	531	1114	17	19	47.2
Cleveland Indians	.247	.313	.358	154	5261	1302	231	48	84	605	3.9	886	499	1163	59	36	62.1
Philadelphia Athletics	.239	.302	.321	154	5160	1231	210	45	42	524	3.4	732	476	1107	19	28	40.4
New York Yankees	.239	.322	.376	154	5203	1241	209	39	143	704	4.6	853	632	1132	47	25	65.3
AMERICAN LEAGUE	.252	.325	.362	616	42247	10639	1737	378	720	5464	8.9	6305	4595	9338	347	244	58.7

1946 - AMERICAN LEAGUE - Club Pitching																	
8 Teams	ERA	G	CG	SHO	QS	SV	IP	H	R	ER	HR	SO	BB	HB	WP	BK	OBA
Boston Red Sox	3.24	154	70	15	86	18	1399.1	1304	566	504	101	751	502	13	13	0	.247
Chicago White Sox	3.25	155	63	13	76	12	1394.2	1223	617	503	82	665	545	13	17	1	.234
New York Yankees	3.27	154	73	17	83	17	1387.0	1210	628	504	71	796	541	16	8	2	.234
Detroit Tigers	3.38	154	84	18	89	11	1405.2	1256	634	528	89	1043	565	11	17	4	.238
Washington Senators	3.64	154	77	11	74	8	1354.2	1381	707	548	92	651	523	13	20	2	.261
Cleveland Indians	3.92	154	65	15	72	15	1369.0	1359	741	597	102	937	653	25	15	0	.256
St. Louis Browns	4.02	153	54	12	65	12	1361.1	1427	721	608	70	730	604	17	30	1	.268
Philadelphia Athletics	4.81	154	60	4	61	12	1356.0	1479	850	724	113	732	662	21	9	6	.274
AMERICAN LEAGUE	3.69	616	556	105	606	105	11027.2	10639	5464	4516	720	6305	4595	129	129	16	.252

Review the plans

- Determine what to include in a standard report
 - Population deviation, census data, election data, other demographics
- What are the features of the plan options?
- Look at the input from others in the same way

Stay cool



- Redistricting can be a stressful experience
- People may lose their composure during redistricting
- Stay focused on the overall effort