

REDISTRICTING 2021

LETS GET READY

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Agenda

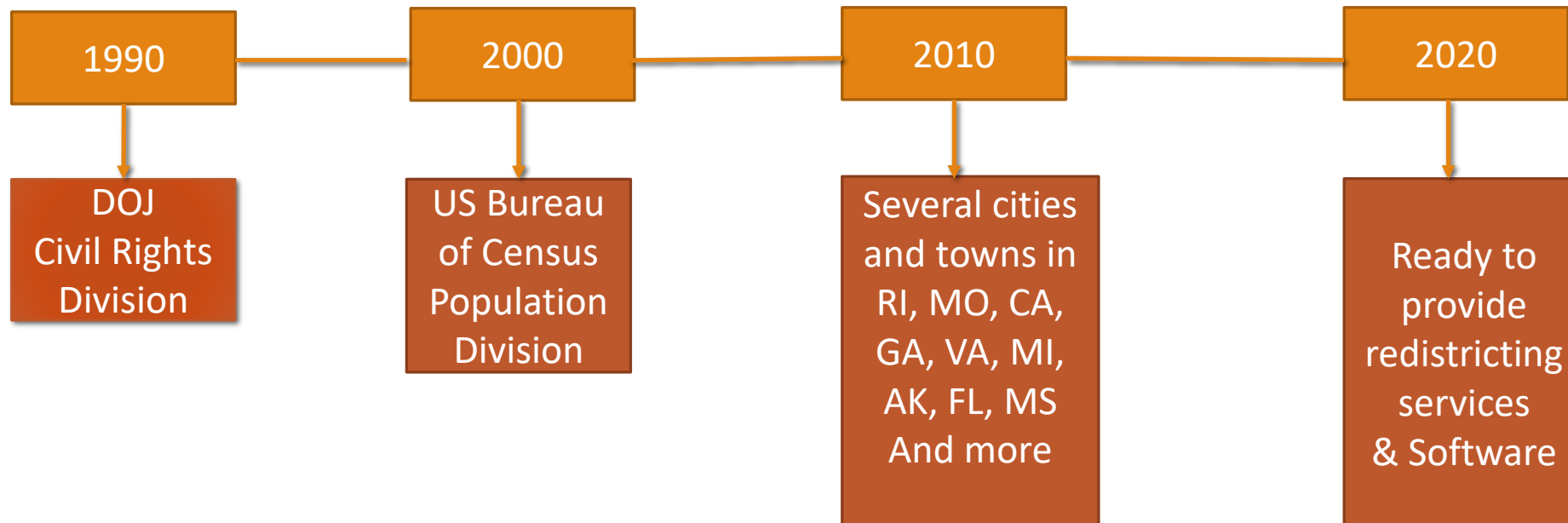
- Census 2020 and Redistricting
- Redistricting Data - PL94-171 Data & Census Geography
- Redistricting Criteria
- Redistricting Process
- Redistricting Services offered by ARCBridge

ARCBridge Consulting

Based in Sterling in Northern VA in the Washington DC Metro Area

Woman-owned small business

Now in the 4th cycle of redistricting



Why Redistrict?

- Every 10 years after the Decennial Census, every state, county, city, town, special district must redraw their district boundaries to reflect the changes in population.
- These districts are geographies and may be called council districts, wards etc.
- All redistricting must use the Census PL94-171 data and associated Census geography

Voting Rights of 1965

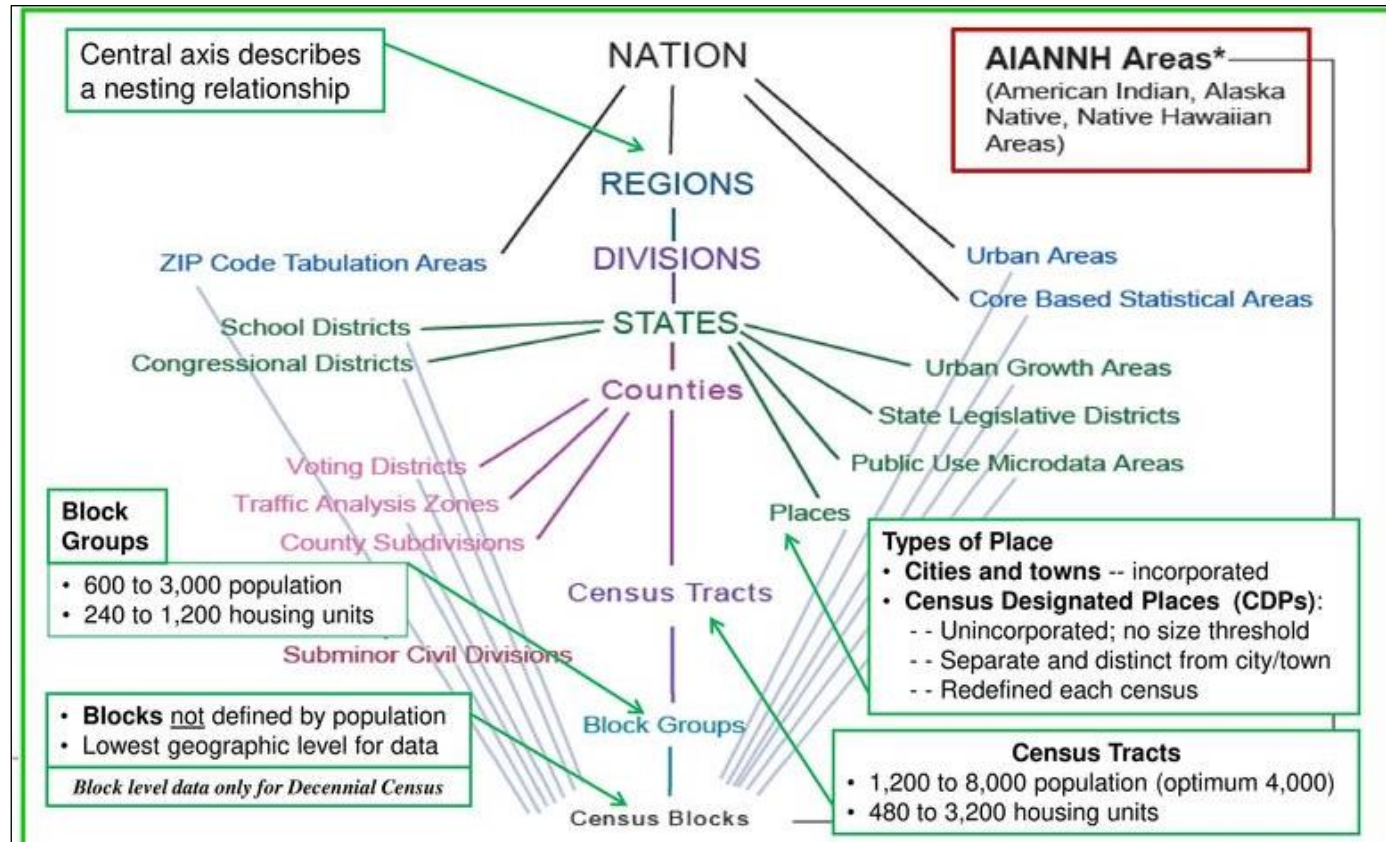
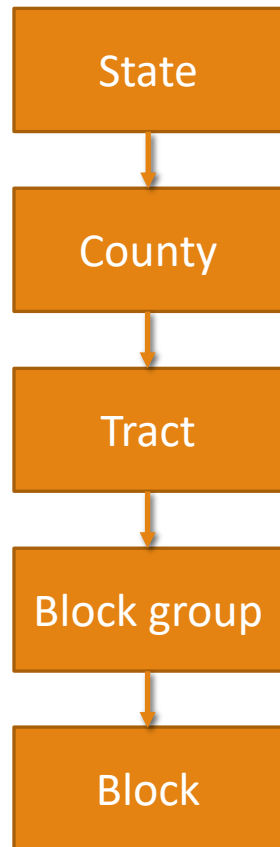
- Voting Rights Act of 1965 – to remedy the inequality of opportunity provided to racial and ethnic minorities to participate in elections
- Section 2 of The Voting Rights Act –prohibits any state from imposing a voting qualification or prerequisite to voting or standard, practice to deny the right to vote based on color or race.
- Section 5 of The Voting Rights Act – Preclearance – no longer valid

Redistricting Demographic Data - Census PL94-171 Data

- In 1975 PL94-171 was enacted to create the data required for Redistricting
- Bureau of Census Redistricting Office releases this demographic data
- 100% Count of Total Population and Voting Age Population by Race and Ethnicity (Hispanic)
- Data is summarized at various levels of geography
- This year this data release has been delayed due to the pandemic
- The data will be released on September 30th or in August 2021

Data is delayed due to the pandemic

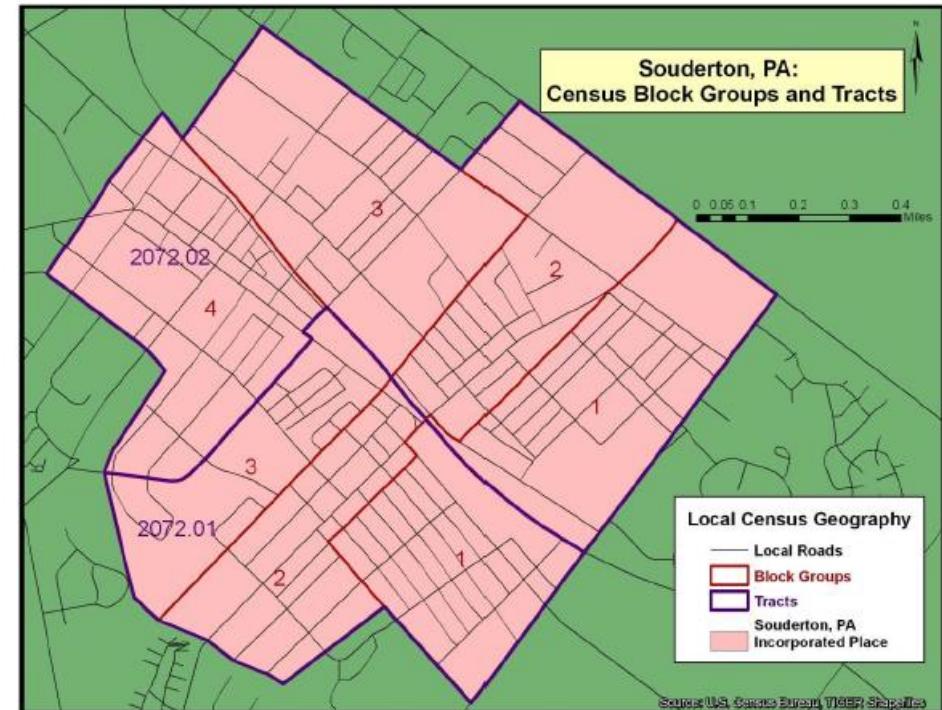
Redistricting Spatial Data - Census Geographies



This data is ready

Census Blocks

- Smallest units for 100% data tabulation
- Cover entire nation
- Nest within all other types of geographic areas
- Generally bounded by visible features or boundaries



Redistricting Requirements

- Equal Population – as equal as possible
- create districts that have a total population deviation of no more than 10% between their most heavily populated district and the least populated district.
- Compact
- Contiguous
- Minorities are fairly represented
- Communities of Interest

Redistricting Process

Process Census PL94-171 data

Using New Census, create existing districts/wards – AS-IS Plan

Test for redistricting requirements – check for population, compute ideal population, check for compactness, contiguity and minority population

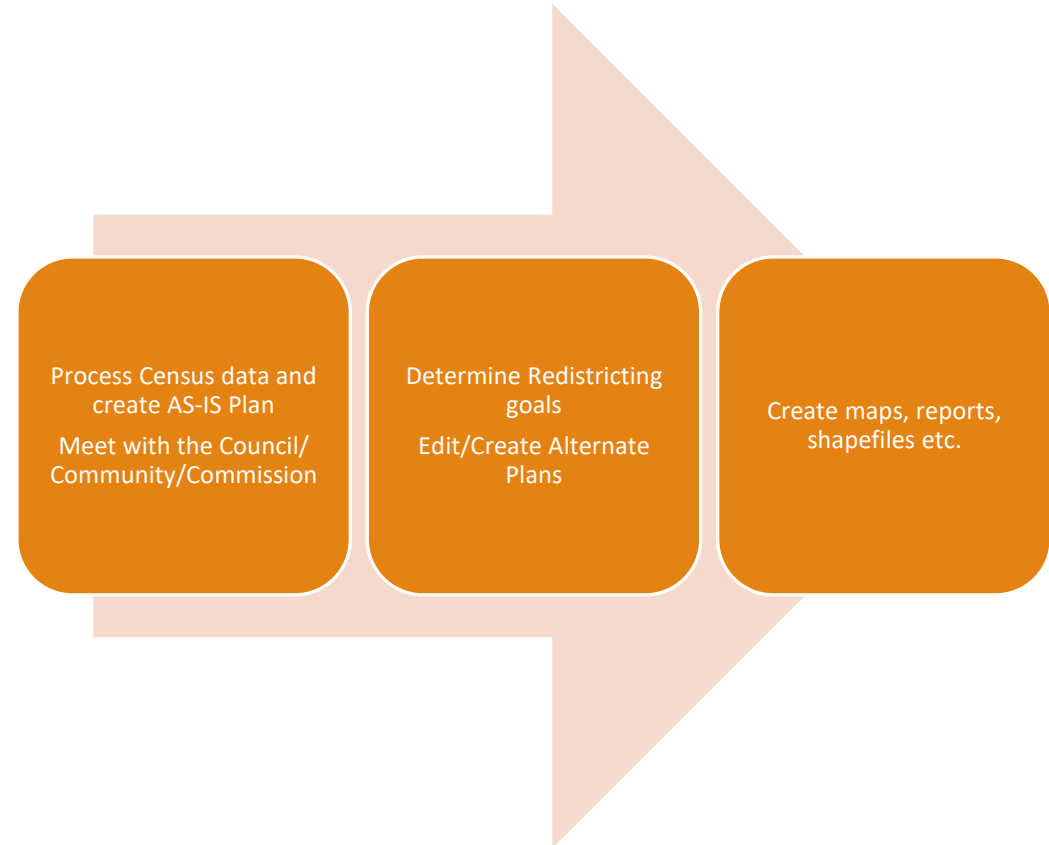
Determine if redistricting is required

If districts are out of balance, begin editing the existing districts

Submit alternate plans for Council review

After the Council approves a plan – create maps, reports, provide a description of the district boundaries for the city ordinance

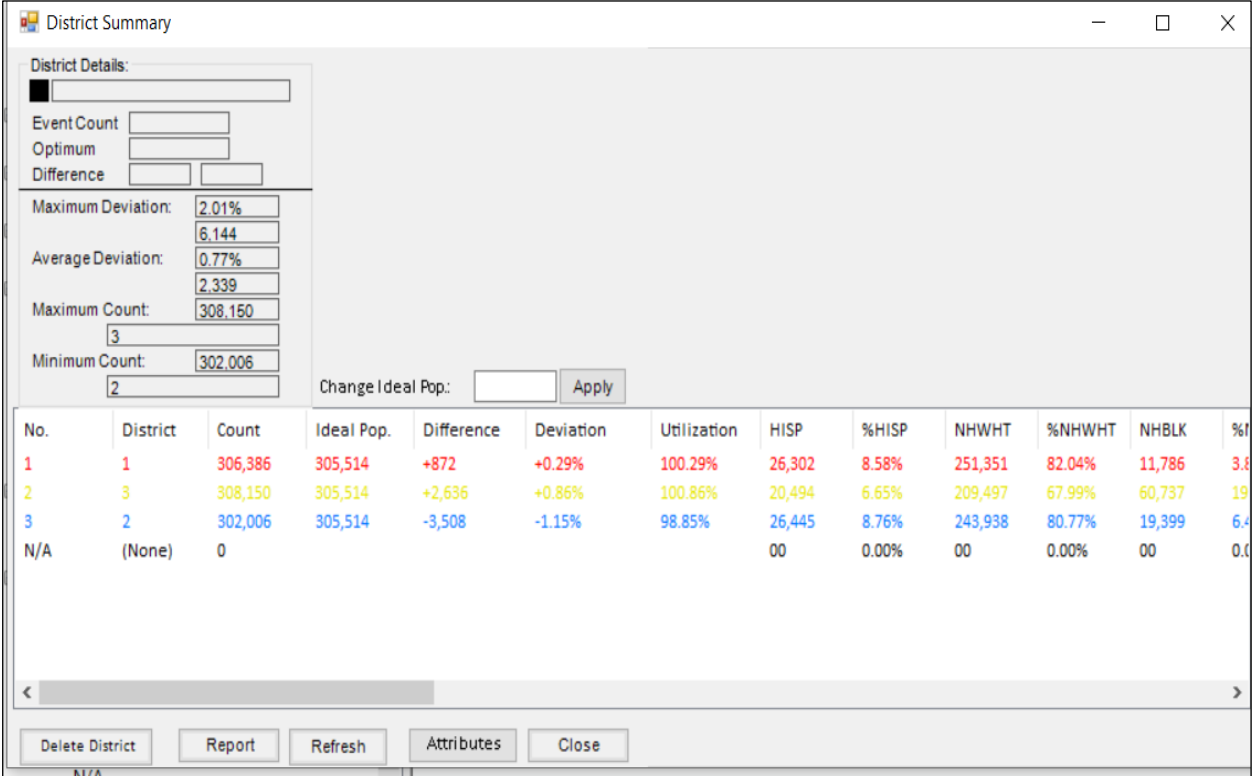
Update precincts if required



Tools for Redistricting

DISTRICTSolv by ARCBridge

- DISTRICTSolv - ArcGIS Extension developed by ARCBridge
- Works with ArcGIS Desktop
- Works with Census PL94-171 Data
- Census Geography like Census blocks, tracts, county, precincts
- Creates maps and reports



District Summary

District Details:

Event Count:

Optimum:

Difference:

Maximum Deviation: 2.01%

Average Deviation: 0.77%

Maximum Count: 308,150

Minimum Count: 302,006

Change Ideal Pop.: Apply

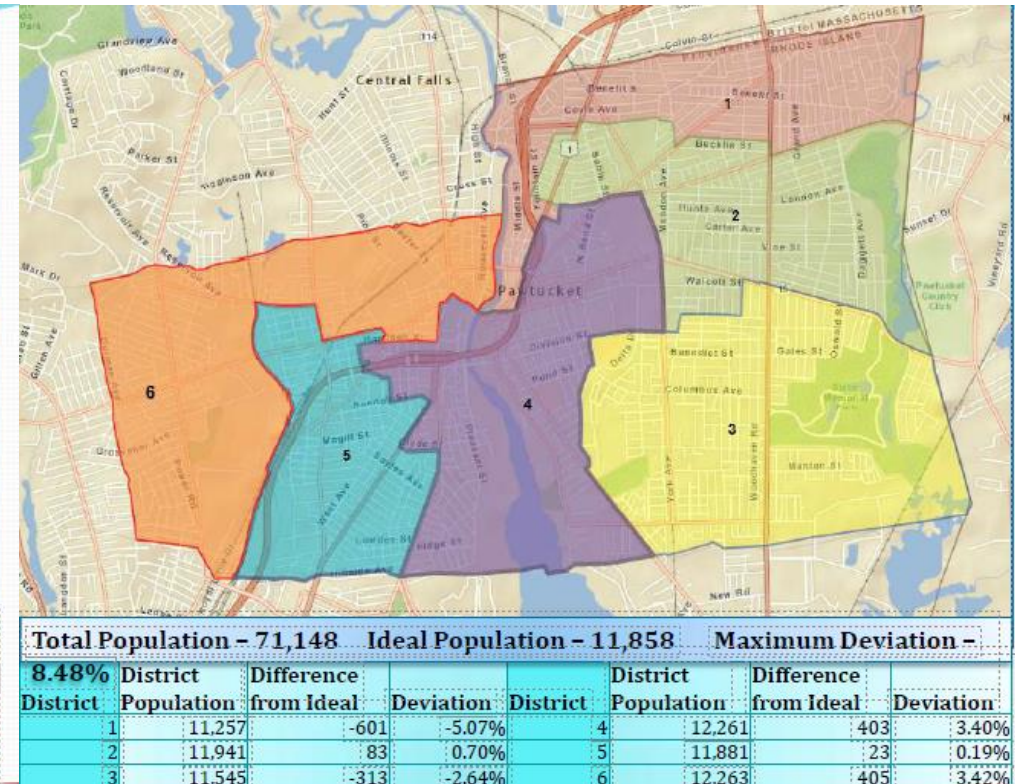
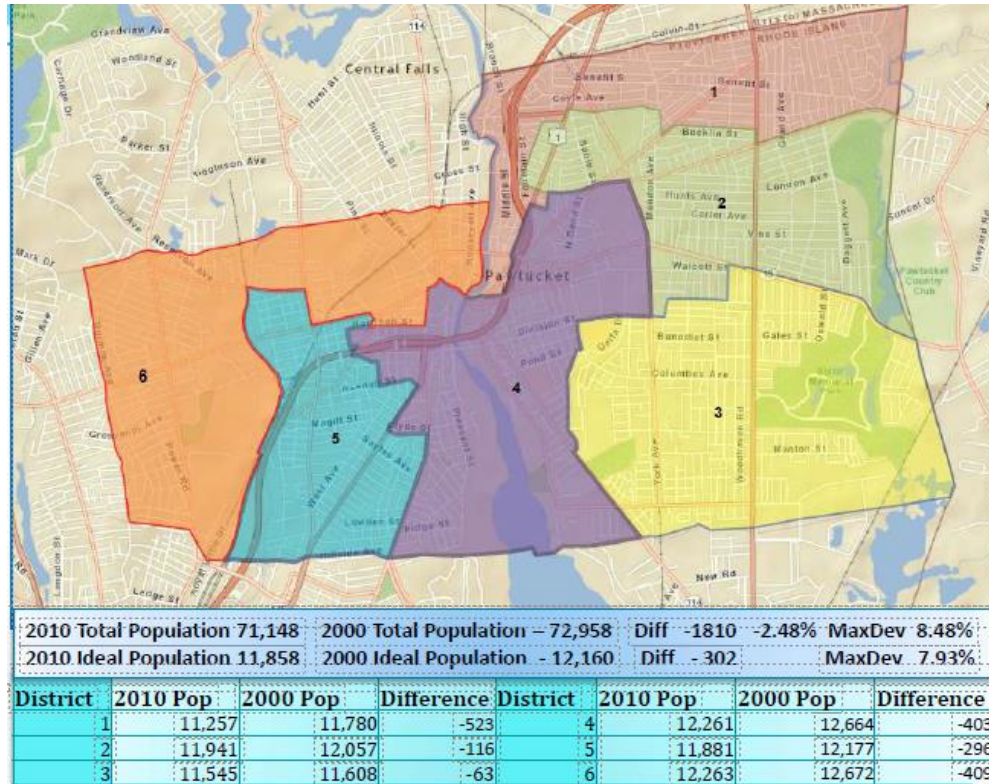
No.	District	Count	Ideal Pop.	Difference	Deviation	Utilization	HISP	%HISP	NHWHT	%NHWHT	NHBLK	%NHBLK
1	1	306,386	305,514	+872	+0.29%	100.29%	26,302	8.58%	251,351	82.04%	11,786	3.8%
2	3	308,150	305,514	+2,636	+0.86%	100.86%	20,494	6.65%	209,497	67.99%	60,737	19.8%
3	2	302,006	305,514	-3,508	-1.15%	98.85%	26,445	8.76%	243,938	80.77%	19,399	6.4%
N/A	(None)	0					00	0.00%	00	0.00%	00	0.00%

Delete District Report Refresh Attributes Close

ARCBridge Redistricting Services

- Recreate existing 2010 districts – AS-IS Plan
 - Use digital shapefiles, maps, Excel files with block and district definition to create existing districts in our system using Census 2010 data
- Discuss the redistricting goals/criteria with the City Council
- When 2020 data is released, our team processes the data and works with Census blocks
- We create thematic maps to identify minority population concentrations
- Work with Communities of Interest – Identify communities of interest and work with them
- Incumbents data
- Edit the Districts and create alternate plans for City Council to review
- Upon adoption of a plan, we provide the street information for each district which is used by the state to update the voter registration file
- Update precincts if needed
- Create maps, reports, district descriptions

AS-IS Plan Analysis and Comparison

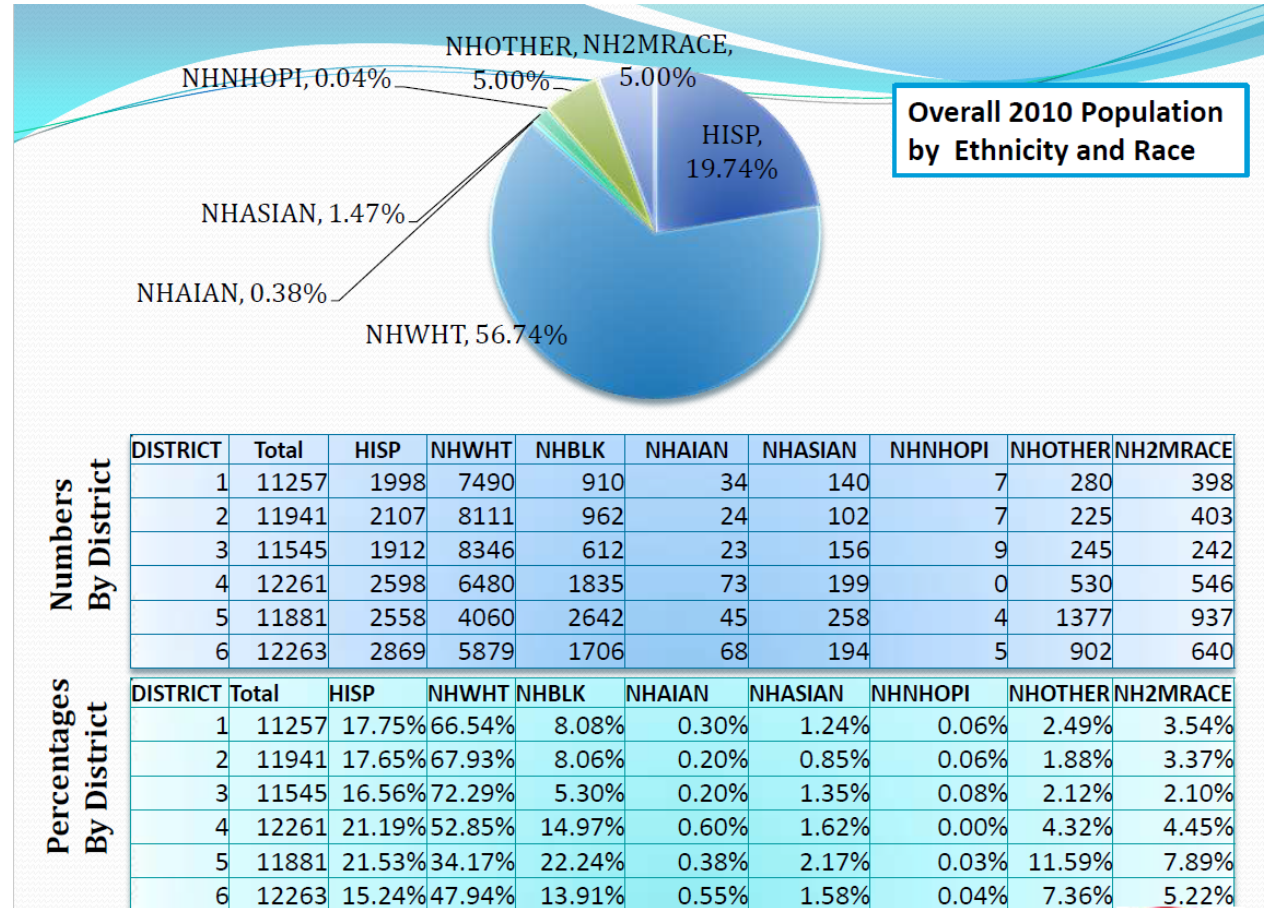


Process PL94-171 Demographic Data – Race and Ethnicity; Total and VAP

Total	Voting Age
Total Population	Total Voting Age Population
Hispanic	Voting Age Hispanic
Non Hispanic White	Voting Age White
Non Hispanic Black	Voting Age Non Hispanic Black
Non Hispanic Asian	Voting Age Non Hispanic Asian
Non Hispanic Hawaiian/Pacific Islander	Voting Age Non Hispanic Hawaiian/Pacific Islander
Non Hispanic Native Americans	Voting Age Non Hispanic Native Americans
Non Hispanic Other	Voting Age Non Hispanic Other
Non Hispanic Persons of 2 or more Races	Voting Age Non Hispanic Persons of 2 or more Races

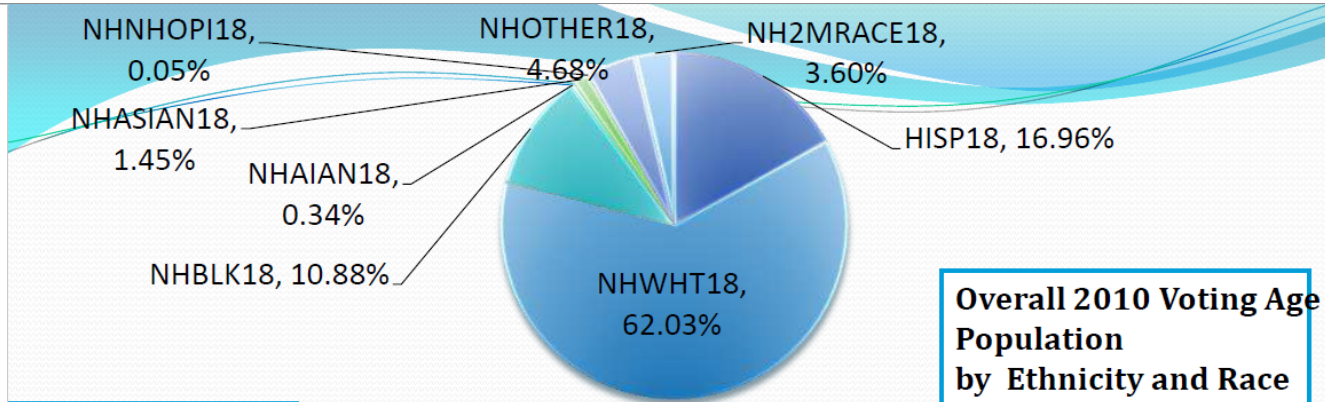
Demographic Analysis of PL94-171 Data

Total Population



Demographic Analysis of PL94-171 Data

Voting Age Population



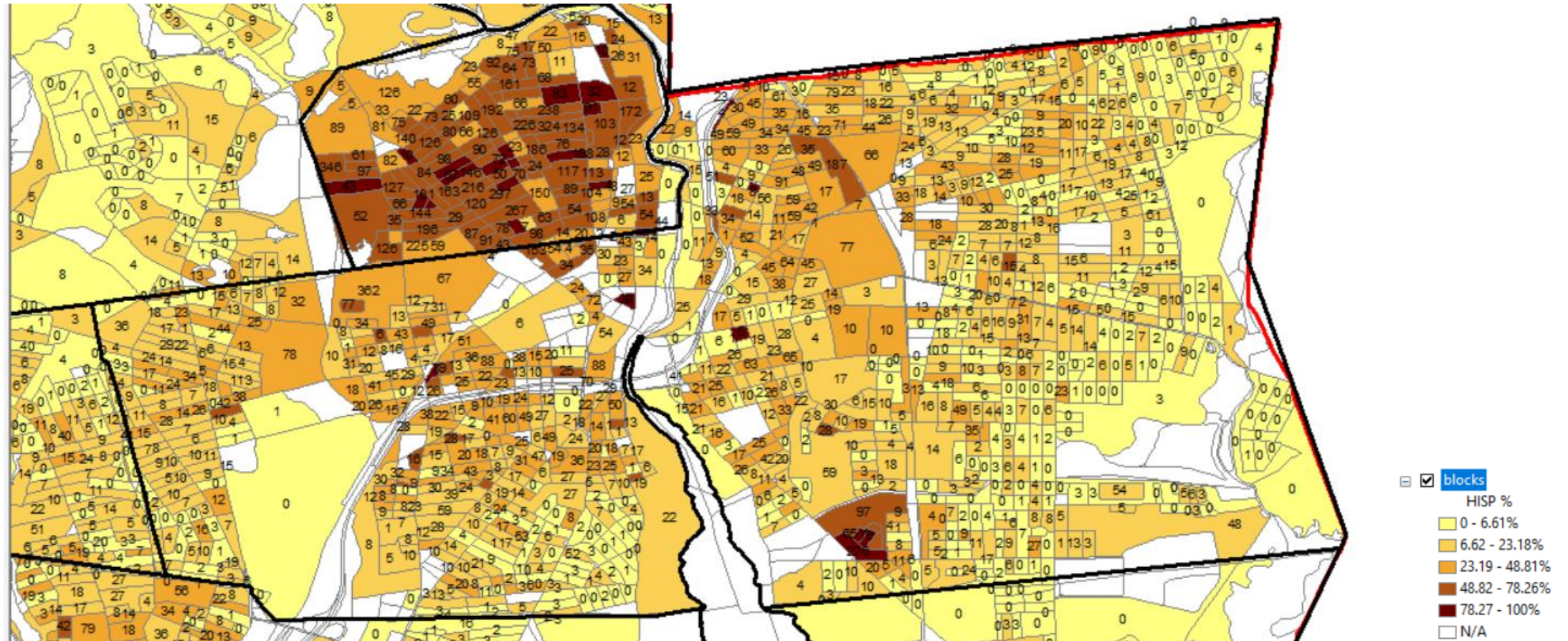
Numbers By District

DISTRICT	TOTAL18	HISP18	NHWHT18	NHBLK18	NHAIAN18	NHASIAN18	NHNHOPI18	NHOTHER18	NH2MRACE18
1	8753	1300	6244	636	28	109	6	185	245
2	9088	1380	6536	672	14	79	5	156	246
3	9111	1197	7075	408	21	105	7	171	127
4	9389	1746	5478	1241	49	156	0	382	337
5	8848	1682	3478	1839	30	187	2	1013	617
6	9384	1952	5042	1144	42	157	5	648	394

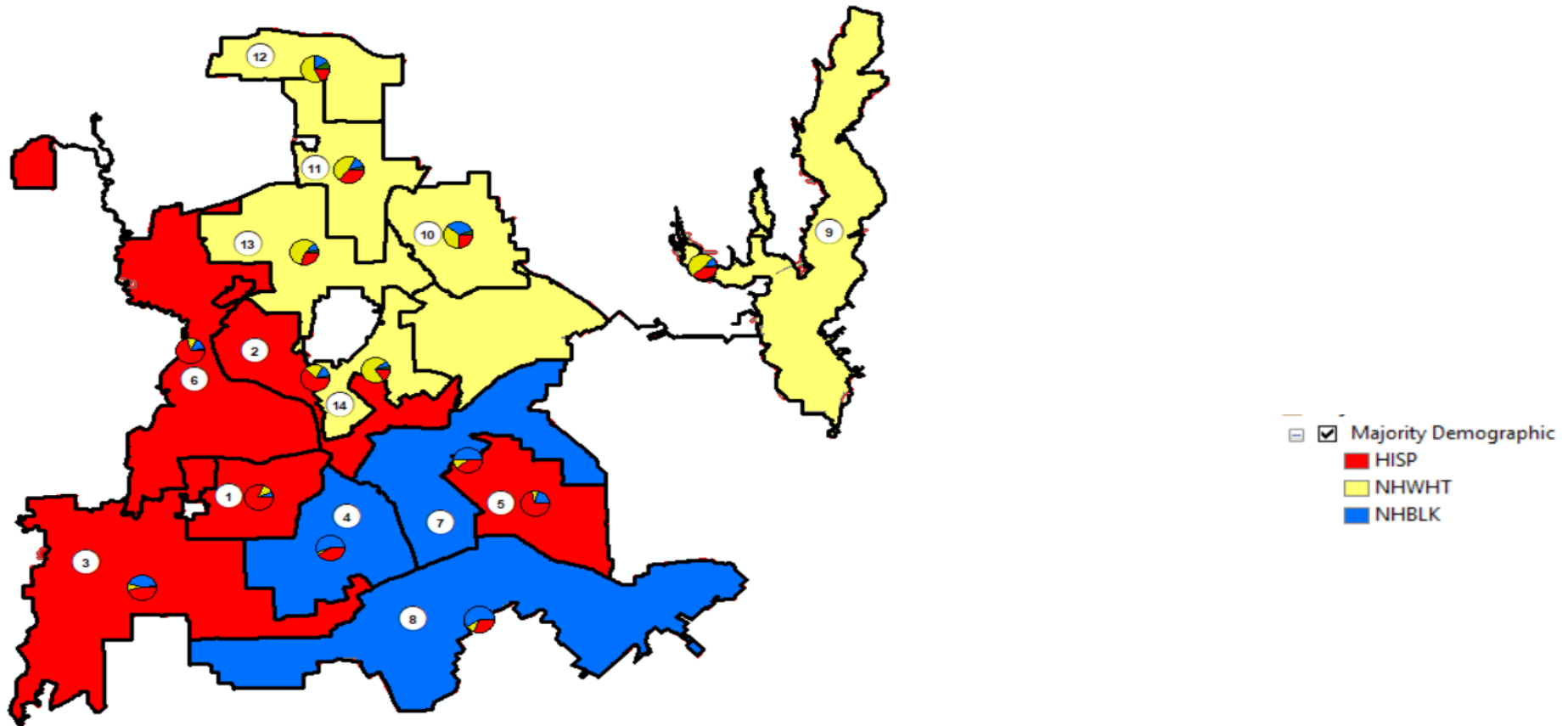
Percentages By District

DISTRICT	TOTAL18	HISP18	NHWHT18	NHBLK18	NHAIAN18	NHASIAN18	NHNHOPI18	NHOTHER18	NH2MRACE18
1	8753	14.85%	71.34%	7.27%	0.32%	1.25%	0.07%	2.11%	2.80%
2	9088	15.18%	71.92%	7.39%	0.15%	0.87%	0.06%	1.72%	2.71%
3	9111	13.14%	77.65%	4.48%	0.23%	1.15%	0.08%	1.88%	1.39%
4	9389	18.60%	58.34%	13.22%	0.52%	1.66%	0.00%	4.07%	3.59%
5	8848	19.01%	39.31%	20.78%	0.34%	2.11%	0.02%	11.45%	6.97%
6	9384	20.80%	53.73%	12.19%	0.45%	1.67%	0.05%	6.91%	4.20%

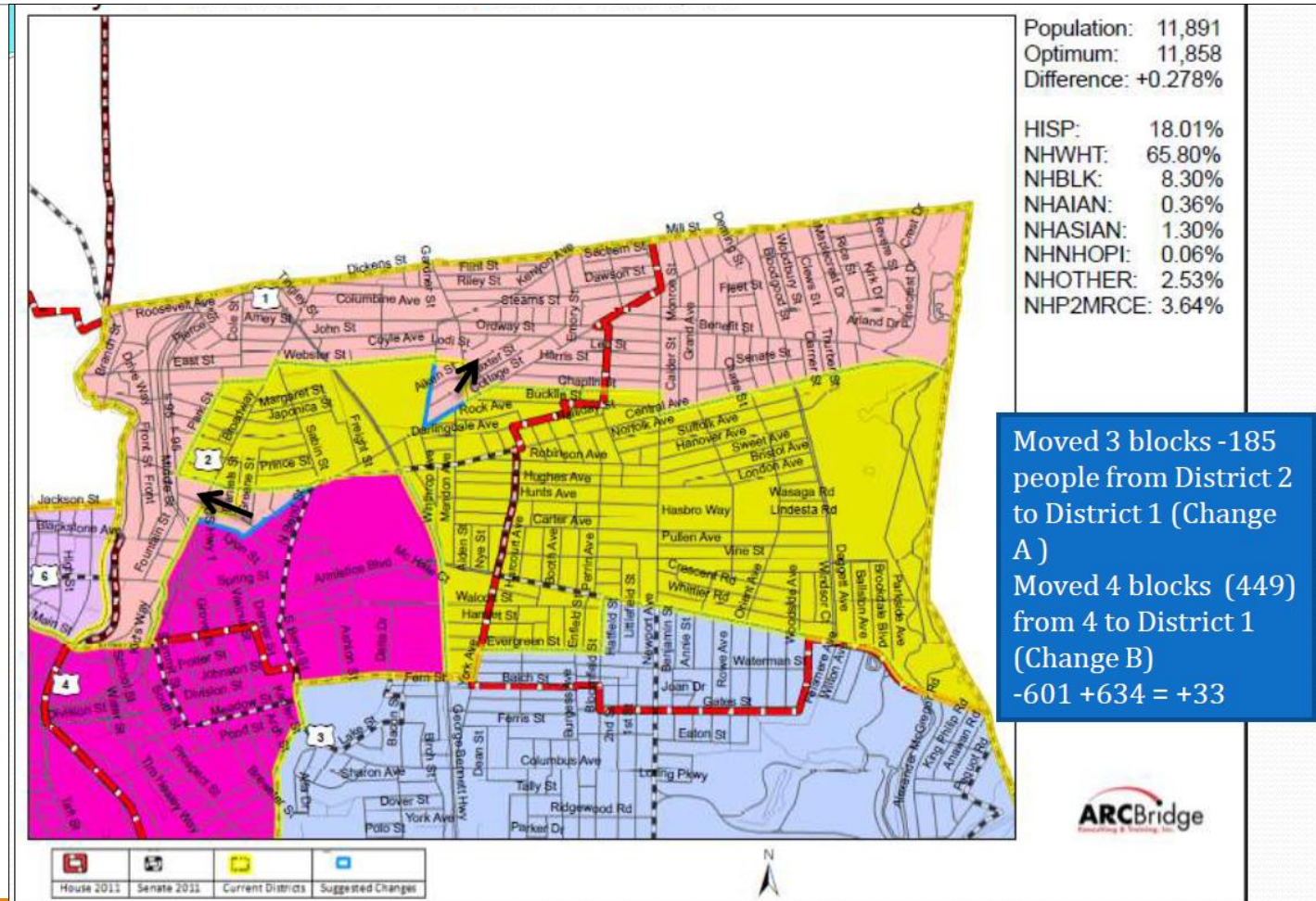
Thematic Mapping – Distribution of Hispanic population by block



Majority- Minority Districts

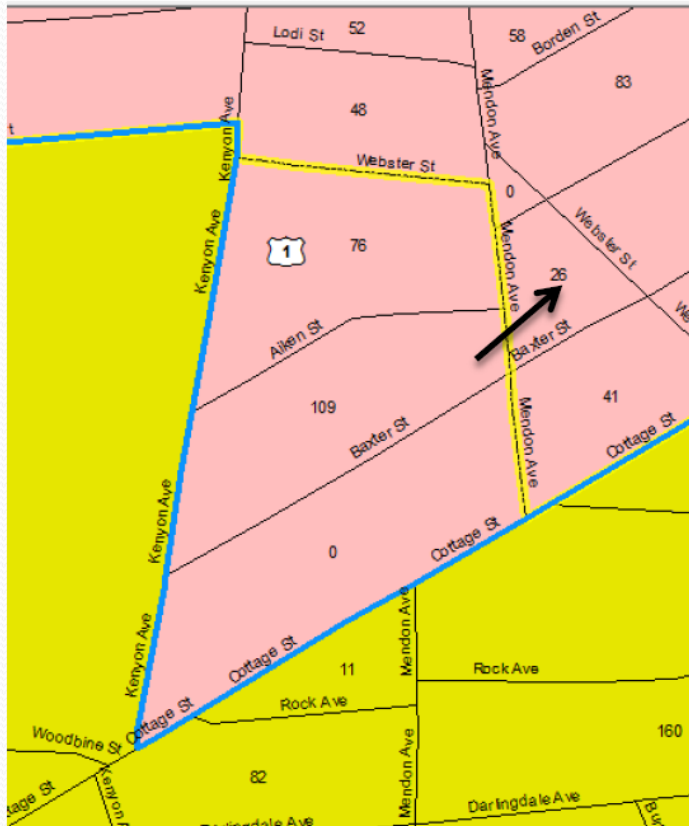


Suggested Edits to each district



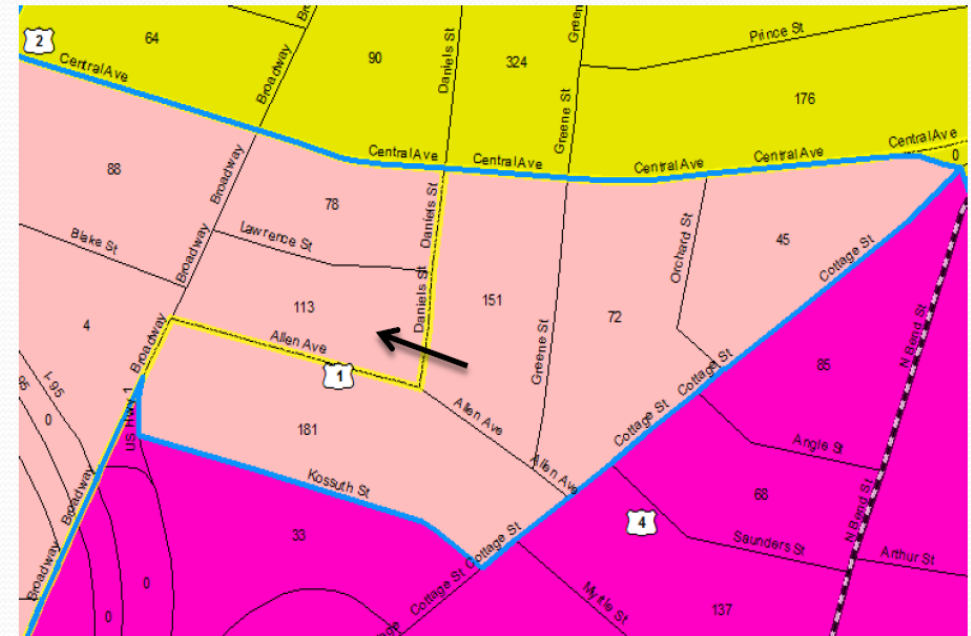
Edits to District 1

A Moved 3 blocks from District 2 to 1 (185 people)



171 -199 Webster St.
218 -275 Mendon Ave
420 -491 Cottage St.
58-166 Kenyon Ave
1 – 99 Aiken St.
1 – 90 Baxter St.

B Moved 4 blocks from District 4 to 1 (449 people)



1-99 Kossuth St
149 – 262 Cottage St
157-249 Central Avenue

1-99 Orchard St.
1-49 Greene St.
1-99 Allen Ave

1-43 Daniels Ave
323-358 Broadway

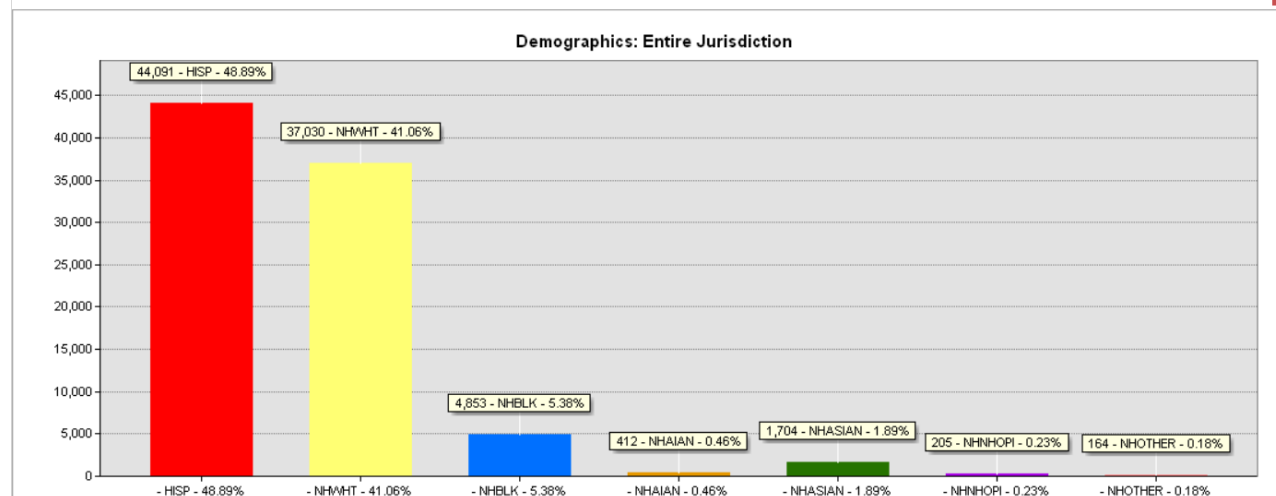
Reports

District Summary

<div> <div> <div>1</div> <div>of 1</div> </div> <div> <div>Find</div> <div>Next</div> </div> </div>					
<div> <div>District Summary</div> <div>Hesperia5</div> </div>					
District Count:			5		
Total Population:			90,176		
Maximum Deviation:			231		
			1.28%		
Average Deviation:			51		
			0.28%		
Minimum Count:			17,912		
Maximum Count:			18,143		
District	Name	Count	Optimum	Deviation	Deviation %
1	District 1	18,042	18,035	7	0.04%
	District 2	18,143	18,035	108	0.60%
	District 3	18,048	18,035	13	0.07%
	District 4	18,031	18,035	-4	-0.02%
	District 5	17,912	18,035	-123	-0.68%

District	Name	Count	Optimum	Deviation	Deviation %
1	District 1	90,176	90,175	1	0.04%
	HISP:	9,260	51.32%		
	NHWHT:	6,284	34.83%		
	NHBLK:	1,282	7.11%		
	NHAIAN:	76	0.42%		
	NHASIAN:	691	3.83%		
	NHNHOPI:	38	0.21%		
	NHOTHER:	42	0.23%		

Demographics Graph

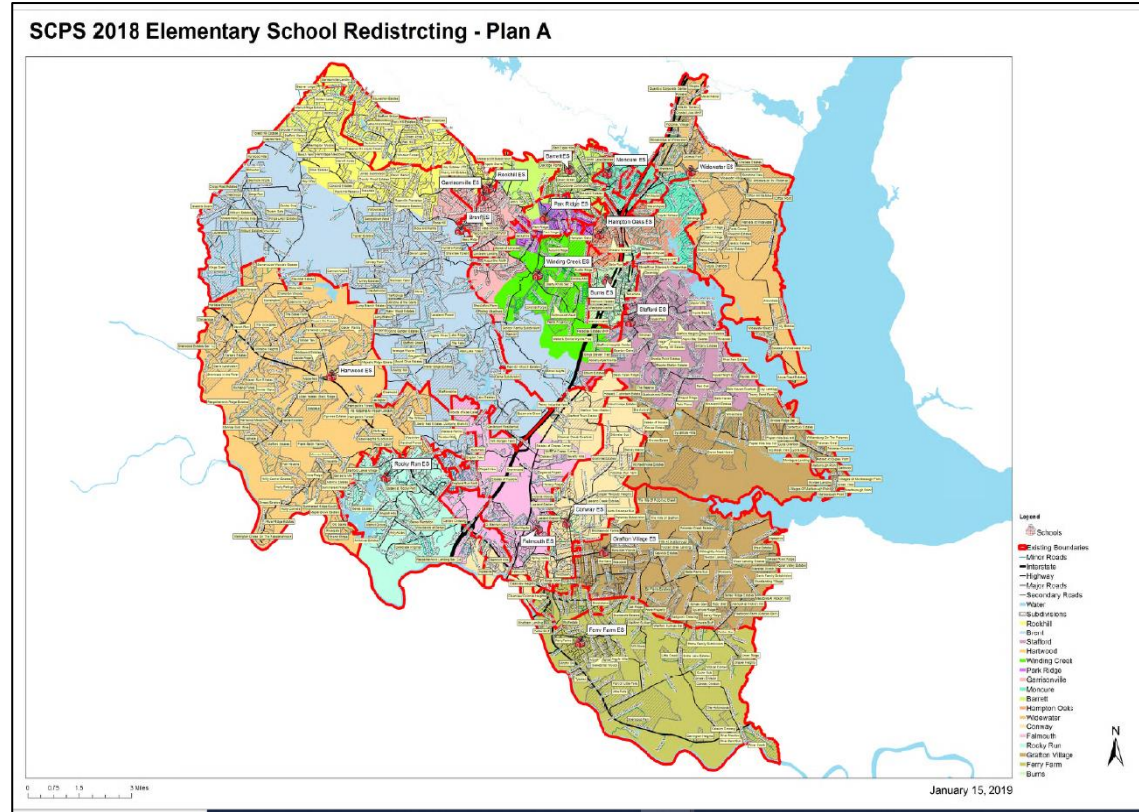


Compactness Report

1 of 1 100%

District Compactness

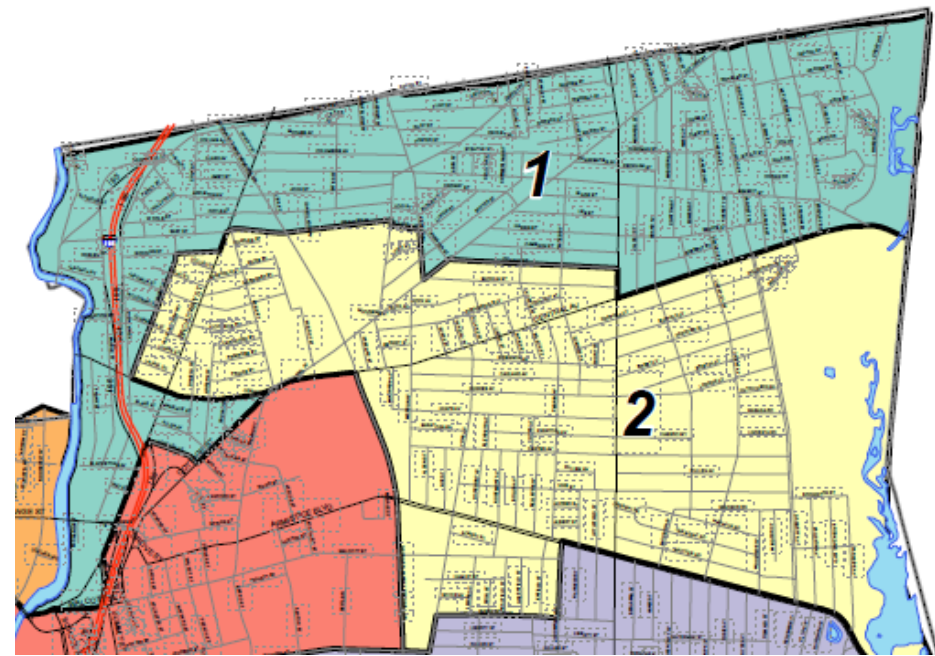
District	Name
1	District 1
Area:	1,621.08
Perimeter:	270.35
Width/Length Ratio:	0.921
Population Density:	324.62
Reock Test:	0.296
Polsby-Popper Test:	0.279
Convex Hull Ratio:	0.755
Schwarzberg Test:	1.894
Grofman Test:	6.715
2	District 2
Area:	441.74



Descriptive District Boundaries

Councilmanic District One

Councilmanic district one comprises all the tract of land or territory included within the following described boundaries, viz; beginning at the intersection of Park Street and Central Avenue; thence Easterly on Central Avenue to Cottage Street; thence southwesterly on Cottage Street to Kossuth Street; thence westerly on Kossuth Street to Broadway; thence southerly on Broadway to Kid's Way; thence southeasterly on Kid's Way and its extension to Interstate Route 95; thence southerly on Interstate Route 95 to Walcott Street; thence westerly on Walcott Street to Broadway; thence continuing westerly on Broadway to Main Street; thence continuing westerly on Main Street to the Blackstone River; thence northerly along the Blackstone river to the Rhode Island-Massachusetts state boundary line; thence easterly and southerly along the Rhode Island-Massachusetts state boundary line to Central Avenue; thence westerly on Central Avenue to Newport Avenue; thence northerly on Newport Avenue to Chaplin Street; thence westerly on Chaplin Street to Cottage Street; thence southwesterly on Cottage Street to Mendon Avenue; thence northerly on Mendon Avenue to Webster Street; thence westerly on Webster Street to Kenyon Avenue; thence northerly on Kenyon Avenue to Webster Street; thence westerly on Webster Street to Broadway; thence southerly on Broadway to Gooding Street; thence westerly on Gooding Street to Park Street; thence southwesterly on Park Street to the place or point of beginning.



Street Address and District info

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	CITY	LOWRAN	HIGHRAN	SI	PI	ST_NAME	ST_TYPE	ST	POST_CITY	zip	ZIP4	Precinc	Cong_D	St_Sen	St_Hous	REP_VO	Ward	W_D
2	PAWTUCKET	101	195	O		1ST	ST		PAWTUCKET	02861		2628	1	18	62	28	3	
3	PAWTUCKET	1	1	O		ACORN	ST		PAWTUCKET	02860		2603	1	15	58	03	6	
4	PAWTUCKET	10	98	E		EDDINGTON	ST		PAWTUCKET	02861		2619	1	8	61	19	2	
5	PAWTUCKET	1	125	O		ARLAND	DR		PAWTUCKET	02861		2618	1	8	61	18	1	
6	PAWTUCKET	1	19	O		COLVIN	ST		PAWTUCKET	02861		2612	1	8	60	12	1	
7	PAWTUCKET	1	147	O		CAMERON	ST		PAWTUCKET	02861		2612	1	8	60	12	1	
8	PAWTUCKET	1	75	O		ORMS	ST		PAWTUCKET	02861		2612	1	8	60	12	1	
9	PAWTUCKET	10	100	E		ABBOTT	ST		PAWTUCKET	02860		2605	1	16	58	05	5	
10	PAWTUCKET	10	16	E		AVON	ST		PAWTUCKET	02860		2629	1	18	62	29	3	
11	PAWTUCKET	10	46	E		CORRENTE	AVE		PAWTUCKET	02861		2629	1	18	62	29	3	
12	PAWTUCKET	10	110	E		BOOTH	AVE		PAWTUCKET	02861		2620	1	8	61	20	2	
13	PAWTUCKET	10	84	E		LITTLEFIELD	ST		PAWTUCKET	02861		2620	1	8	61	20	2	
14	PAWTUCKET	102	144	E		PROGRESS	ST		PAWTUCKET	02860		2608	1	15	59	08	5	
15	PAWTUCKET	10	42	E		WALKER	ST		PAWTUCKET	02860		2608	1	15	59	08	5	
16	PAWTUCKET	101	395	O		BROADWAY			PAWTUCKET	02860		2613	1	8	60	13	1	
17	PAWTUCKET	10	180	E		BEECHWOOD	AVE		PAWTUCKET	02860		2627	1	15	62	27	4	
18	PAWTUCKET	103	171	O		GARDEN	ST		PAWTUCKET	02860		2607	1	15	59	07	4	
19	PAWTUCKET	10	16	E		CLYDE	ST		PAWTUCKET	02860		2607	1	15	59	07	4	
20	PAWTUCKET	104	168	E		GARDEN	ST		PAWTUCKET	02860		2607	1	15	59	07	4	
21	PAWTUCKET	102	180	E		HATFIELD	ST		PAWTUCKET	02861		2623	1	18	61	23	3	
22	PAWTUCKET	10	38	E		MAYFIELD	ST		PAWTUCKET	02861		2622	1	18	61	22	2	
23	PAWTUCKET	10	10	E		EXCHANGE	CT		PAWTUCKET	02860		2615	1	8	60	15	4	
24	PAWTUCKET	10	54	E		EXCHANGE	ST		PAWTUCKET	02860		2611	1	16	59	11	6	
25	PAWTUCKET	10	10	E		GOFF	AVE		PAWTUCKET	02860		2611	1	16	59	11	6	
26	PAWTUCKET	10	20	E		MAYNARD	ST		PAWTUCKET	02860		2615	1	8	60	15	4	
27	PAWTUCKET	1	115	O		ANDERTON	AVE		PAWTUCKET	02860		2603	1	15	58	03	6	
28	PAWTUCKET	10	10	E		SHAW	AVE		PAWTUCKET	02860		2603	1	15	58	03	6	
29	PAWTUCKET	10	226	E		CHANDLER	AVE		PAWTUCKET	02860		2603	1	15	58	03	6	
30	PAWTUCKET	1	237	O		ORIOLE	AVE		PAWTUCKET	02860		2603	1	15	58	03	6	
31	PAWTUCKET	10	544	E		DAGGETT	AVE		PAWTUCKET	02861		2619	1	8	61	19	2	
32	PAWTUCKET	1	1	O		KAREN	DR		PAWTUCKET	02861		2618	1	8	61	18	1	
33	<																	>

Summary

- For Redistricting we need Census geography files and Census PL94-171 data
- Census PL94-171 data has been delayed - to be released in August 2021 and final release September 30th
- ARCBridge processes data, created AS-IS Plan, Edits/creates alternate plans for city governments
- Creates maps and reports and upon approval provides street updates for voter registration
- Provides updates to precincts, Creates maps, reports and digital shapefiles/file geodatabases
- We are ready to help you!
 - Priti Mathur
 - priti@arcbridge.com
 - 703-834-6511