

Lee Board of County Commissioners

District 1Kevin Ruane

District 2Cecil Pendergrass

District 3Ray Sandelli

District 4Brian Hamman

District 5Frank Mann

County Manager Roger Desjarlais

County Attorney
Richard Wesch

Prepared By:

Lee County Department of Community Development

Redistricting Report

Lee County, Florida



Commission Chambers 2120 Main Street Fort Myers

County Administration 2115 Second Street Fort Myers

Web: leegov.com

Switchboard: (239) 533-2111









2021 Lee County Commission Redistricting

The U.S. Constitution provides that a population census be conducted every ten years. This census data is used to apportion Congressional seats and allocate some federal funding among the states. At the state level, the data are used to draw congressional district boundaries and state legislative districts.

At the local level, configuration of county commission districts is guided by the Florida Constitution and Florida Statutes. Specifically, these laws require: 1) "[a]fter each decennial census the board of county commissioners shall divide the county into districts of contiguous territory as nearly equal in population as practicable." FL Constitution Article VIII, Section 1(e); and 2) "[t]he Board of County Commissioners shall from time to time, fix the boundaries of the above districts so as to keep them as nearly equal in proportion to population as possible; provided, that changes made in the boundaries of the county commissioner districts pursuant to this section shall be made only in odd-numbered years." Chap. 124.01(3), F.S.

Lee County's Home Rule Charter dictates that Commission district boundaries can only be changed after notice and public hearing pursuant to general law. Additionally, the Charter reads:

The governing body of the County shall be a Board of County Commissioners composed of five (5) members serving staggered terms of four (4) years. There shall be one Commissioner for each of the five (5) County Commission districts established pursuant to general law and they shall be elected in a partisan election on a county-wide basis by the electors of the County. Each County Commissioner during the term of office shall reside in the district from which such County Commissioner ran for office, provided that any County Commissioner who is removed from a district by redistricting may continue to serve during the balance of the term of office. Lee County Charter, Section 2.2

This report presents five alternatives for the 2021 redistricting of the commissioner districts (see Appendixes for maps depicting the five alternatives). The district boundaries were last updated in 2011 using the population figures obtained from the 2010 Census (see Appendix A). The 2020 U.S. Census population figures show considerable population growth in certain areas of the county which caused an imbalance in population figures between districts. The alternatives presented here are five possible ways in which the current district boundaries can be updated to reduce the imbalance between districts. Each of the alternatives presented in this report meet or exceed the standards for redistricting that have been set forth by case law precedents for equal population.

The five redistricting alternatives reduce the imbalance in population distribution between districts; a redistricting objective that is statutorily mandated. Other criteria, drawn from case law precedents and common redistricting practices, are also used to guide changes to the commission district boundary lines. Each alternative was also devised to adhere to the following criteria as closely as possible, and as such, can be considered to have:

- an equal population distribution
- compact boundaries
- alignment with Census geography
- boundaries that follow prominent physical features
- limited splitting of established neighborhoods

- similar boundaries to existing districts
- avoided packing and diluting minority population
- considered population growth for future population equity

Lee County Population Change

The U.S. Census Bureau population counts for the 2020 Census signify a 23 percent increase in the Lee County population since the 2010 Census. The increase in population did not occur evenly across the county; District 2, which includes South Fort Myers, Gateway, and the area surrounding Florida Gulf Coast University, had the largest population increase (29.51%) while District 1, which includes Sanibel, Pine Island, and parts of Cape Coral, had the lowest (16.47%) increase between the two Census reports.

Before drawing new district boundaries, a comparison of the 2020 U.S. Census population was made to the 2010 U.S. Census population figures using the 2011 district boundaries. The comparison in population distribution is presented in Table 1 below.

Table 1: Commission District Population Figures, 2010 & 2020								
Commission District	2010 Population	Deviation from 2010 Target	2020 Population	% Deviation from 2020 Target				
1	123,749	0.0%	144,126	-5.28%				
2	123,653	-0.08%	160,138	5.24%				
3	123,883	0.11%	146,619	-3.64%				
4	123,590	-0.13%	152,571	0.27%				
5	123,879	0.10%	157,368	3.42%				
Total	618,754		760,822					

2010 Target Commission District Population* = 123,751 2020 Target Commission District Population* = 152,164

Source: U.S. Census Bureau

Redistricting Alternatives

The redistricting process involves updating the Lee County commissioner district boundary lines in such a manner that all five districts achieve a population as close to the target population figure (152,164 persons¹) as possible. Given the growth patterns in Lee County since the 2010 Census, each alternative presented with this report resolves the need to allocate considerable population from districts 2 and 5, which collectively received 49.25% of the county population increase, to districts 1 and 3, which collectively received only 30.35% of the county population increase. District 4 grew the closest to the county average receiving 20.4% of the county population increase.

A discussion of the above enumerated redistricting criteria follows:

Equal Population Distribution – The primary goal of redistricting every 10 years is to establish commission districts that are "as nearly equal in proportion to population as possible..." (F.S. 124.01 [3]). For state level redistricting, case law precedent generally requires that district populations do not vary by more than 2.5 percent of the target population - that is 2.5 percent more or less than the target population—although a larger variation is allowed for local legislative districts. This measure, known as *relative range*, is calculated by taking the difference between the actual population of each district and the target population and dividing the difference by the target population. Table 2 shows that all five of the alternatives presented with this report adhere to this criterion.

-

^{*}The Target Commission District Population is calculated by dividing the total census population for the census year by the number of commission districts.

¹ Target Population (152,164) = Total county population(760,822)/number of districts (5)

Ta	Table 2: Population Distribution by Commission District – Relative Range							
	Commission District	1	2	3	4	5		
Current District	Population	144,126	160,138	146,619	152,571	157,368		
Boundaries	% Deviation from Target	-5.28%	5.24%	-3.64%	0.27%	3.42%		
Altanatha A	Population	152,117	152,562	152,622	152,234	151,287		
Alternative 1	% Deviation from Target	-0.03%	0.26%	0.30%	0.05%	-0.58%		
Altomotive O	Population	152,117	153,105	152,827	152,345	150,428		
Alternative 2	% Deviation from Target	-0.03%	0.62%	0.44%	0.12%	-1.14%		
Altamatica O	Population	152,506	150,968	150,944	152,996	153,408		
Alternative 3	% Deviation from Target	0.22%	-0.79%	-0.80%	0.55%	0.82%		
Altamatica 4	Population	152,263	151,083	154,800	152,061	150,615		
Alternative 4	% Deviation from Target	0.07%	-0.71%	1.73%	-0.07%	-1.02%		
A14 41 E	Population	152,267	152,137	152,172	152,123	152,123		
Alternative 5	% Deviation from Target	0.07%	-0.02%	0.01%	-0.03%	-0.03%		
Source: U.S. Cen	sus Bureau							

In addition to relative range, several other methods exist for measuring equal population. The *overall range*, which is calculated by subtracting the district with the smallest population from the district with the largest population, can also be used. The overall range calculations for the current district boundaries and five alternatives are shown in Table 3 below. While alternative 5 does have the smallest population difference between districts, all of the alternatives are within an acceptable range.

Table 3: Population Distribution by Commission District – Overall Range								
	High Low Difference							
Current District Boundaries	160,138	144,126	16,012					
Alternative 1	152,622	151,287	1,335					
Alternative 2	153,105	150,428	2,677					
Alternative 3	153,408	150,944	2,464					
Alternative 4	154,800	150,615	4,185					
Alternative 5	152,267	152,123	144					
Source: U.S. Census	Bureau							

Another measure that is used in redistricting is known as the *relative standard deviation*. This measure is calculated by adding up the squared deviations of each district (how far off each district is from the target population) and dividing that number by the number of districts, in this case five. The square root of this value is then divided by the target population figure. The *relative standard deviation* is a more stable form of measurement because in the case of range calculations, a large value can be obtained because of substantial deviations between just two districts. Table 4 contains the deviation of each commission district population from the target population for the current district boundaries and for each alternative. The relative standard deviation of Alternative 5 is the lowest.

Table 4: Population Distribution by Commission District – Relative Standard Deviation								
	District 1	District 2	District 3	District 4	District 5	Relative Standard Deviation		
Current District Boundaries	8,038	7,974	5,545	407	5,204	4.01%		
Alternative 1	47	398	458	70	877	0.31%		
Alternative 2	47	941	663	181	1,736	0.61%		
Alternative 3	342	1,196	1,220	832	1,244	0.68%		
Alternative 4	99	948	2,636	236	1,549	0.95%		
Alternative 5	103	27	8	41	41	0.04%		

2020 Target Commission District Population = 152,164

Source: U.S. Census Bureau

Compactness – A compact district minimizes the perimeter of the district relative to the size of the district. Compactness is an important criterion since absence of this factor, or districts with meandering or serpentine boundaries, may be interpreted as a gerrymandered redistricting solution and thus may be subject to legal challenge.

The most common measure of the "compactness" of the polygon representing each district is to compare the enclosed area of the shape to the area that would be enclosed by a circle with the same perimeter (circumference).² A circle is used for this calculation since it is the most compact geometric shape possible. The results of this test would be a number greater than 0 and less than 1. A compactness figure of 1 would be the result of a district that was a circle. There are no established standards of compactness, but the figures are useful in evaluating compactness of the various districts between the alternatives. The measure of compactness for the five alternative and the existing district boundaries are shown in Table 5. Of the five alternatives, alternative 1 would be considered the most compact with cumulative compactness score of 2.59, the sum of all five district compactness scores.

Table 5: Measure of Compactness										
	District 1 District 2 District 3 District 4 District 5 Cumulative Score									
Current District Boundaries	.59	.44	.38	.52	.56	2.49				
Alternative 1	.59	.44	.50	.59	.47	2.59				
Alternative 2	.58	.43	.39	.49	.58	2.47				
Alternative 3	.56	.44	.45	.50	.55	2.50				
Alternative 4	.58	.45	.38	.46	.55	2.42				
Alternative 5	.59	.45	.39	.45	.58	2.46				
Source: Lee County Plannin	Source: Lee County Planning/GIS geodatabase									

² The compactness (C) of a given polygon can be calculated as 4π times the area (a) divided by the perimeter (p) squared (C = $4\pi a/p^2$)

2021 Lee County, FL Commission Redistricting Department of Community Development

Alignment of District Boundaries with Census Geography – In order to accurately record the population in each district, it is important that the district boundaries follow Census geography. Without this, it would be much more difficult to determine the population distribution or use any of the Census information in analyzing each district. Census geography serves as important spatial units for statistical purposes, as well as a separator of prominent physical features. All of the commission district boundary alternatives follow Census geography at the Census Block level to create districts with as equal a distribution of population as feasible.

Alignment with Prominent Physical Features – This criterion serves multiple purposes. First, aligning commission district boundaries along major physical features reinforces the criterion of retaining established neighborhoods since, as noted, these areas are often delineated using prominent features. Second, this criterion allows commission districts to be more easily described and conceptualized. Finally, prominent features are frequently used by the Census Bureau and the Supervisor of Elections in designating census tract lines and voting precinct lines and in drawing other statistical boundary areas.

When possible, district boundaries mirror natural geographic features or prominent roads. District boundaries do deviate from these features in each of the alternatives in order to adhere to other redistricting practices, primarily equal population and following Census tract lines. In each alternative, as in the past, there are districts that span the Caloosahatchee River to equalize the population within the commission districts. Currently, over 64% of the residents of Lee County live "south" of the river while approximately 33% live "north" of the river and the remaining 3% live on the islands.

Retention of Established Neighborhoods and Communities – Whenever possible, the redrawing of the commission district boundaries should be done so that established communities and neighborhoods are kept intact and not split between districts. While some splitting of municipalities is inevitable—for instance, Cape Coral's population exceeds the target district population figure—every effort was made to preserve neighborhood boundaries.

Retaining Existing District Boundary Lines – Because drastic changes in district boundaries can lead to disruption of representative government and the orderly and expeditious provision of governmental services, it is important to retain existing district boundary lines when possible. Alternatives 2 and 5 most closely match the existing district boundaries; whereas, Alternative 1 deviates the most from the existing district boundaries. The attached maps depict the areas for each alternative where commission districts are changed.

Long Term Population Equity – This criterion is identified in an attempt to avoid the substantial inequities in district populations that may arise from future growth. An attempt is made to include areas targeted for future development within all districts in each alternative. This criterion must, however, be balanced against the statutory requirement of equal population, a requirement that essentially provides a "snapshot" view of the current population distribution and the measure of compactness.

Avoidance of Minority "Dilution" or "Packing" – Minority dilution means the intentional redrawing of lines so that minority populations are divided into two or more districts, thereby diluting minority-voting strength. Minority packing on the other hand entails the redrawing of district boundary lines to include a greater number of minorities into what are already "safe" minority districts, thus

effectively relegating minority representation to a limited number of districts. As defined by case law precedent, a "safe" minority district is one in which a minority group that is "geographically compact" and "politically cohesive" constitutes 60 to 65 percent of the total population of that district. In this instance, a minority group may be composed of more than one racial or ethnic minority, provided they meet the cohesive and compactness tests noted earlier.

Lee County has a relatively low minority population. Of the 760,800 total population counted in the 2020 Census, 230,185 are listed as minority (non-white). Of the 173,161 persons of Hispanic or Latino origin, 40,161 are listed as white. Adding the white Hispanic population to the minority population yields a minority/ethnic population of 270,346 persons in Lee County. This represents 35.53 percent of the total county population. Tables 6 and 7 on the following pages show the distribution of the minority and Hispanic/Latino population in each of the alternatives and the current commission districts. In all of these configurations, district 5 contains the highest concentration of non-white and Hispanic population. Given the compactness of the districts, it is clear that neither "packing" nor "dilution" of this population segment has occurred in any of the alternatives.

Conclusion

Historically, Lee County's redistricting process has begun in March or April of the year following the U.S. Census. However, release of Census data has been delayed many months because of the COVID-19 pandemic. While this delay condenses the timeline for redistricting at both the state and local levels, the County has undertaken the same process it would have otherwise but on a schedule that allows redistricting to be completed in the statutorily required odd-numbered year.

The five redistricting alternatives contained in this report comply with all legal requirements and satisfy common redistricting practices.

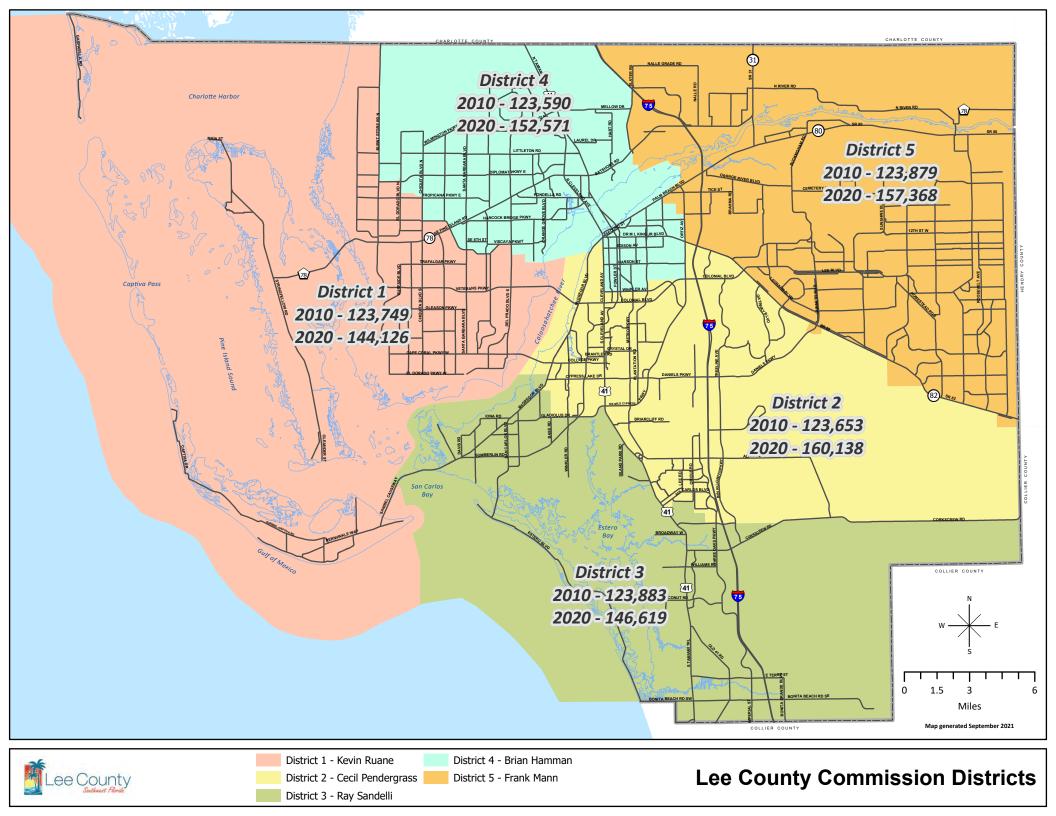
	Table 6: Lee County Population - Race									
	District 1	District 2	District 3	District 4	District 5	County Total				
	Current	Commission D	istricts							
Total Population	144,126	160,138	146,619	152,571	157,368	760,822				
	112,974	119,481	123,167	97,105	77,910	530,637				
White, alone	78%	75%	84%	64%	50%	70%				
Black or African American,	4,188	8,975	2,027	19,193	24,533	58,916				
alone	3%	6%	1%	13%	16%	8%				
American Indian and Alaska	427	593	501	870	1,437	3,828				
Native, alone	0%	0%	0%	1%	1%	1%				
A sign along	2,273	4,349	2,580	1,883	2,005	13,090				
Asian, alone	2%	3%	2%	1%	1%	2%				
Native Hawaiian and Other	75	45	69	61	62	312				
Pacific Islander, alone	0%	0%	0%	0%	0%	0%				
Carra Othan Basa alama	6,425	9,221	7,523	11,807	21,885	56,861				
Some Other Race, alone	4%	6%	5%	8%	14%	7%				
T M D	17,764	17,474	10,752	21,652	29,536	97,178				
Two or More Races	12%	11%	7%	14%	19%	13%				
	31,152	40,657	23,452	55,466	79,458	230,185				
Total Minority	22%	25%	16%	36%	50%	30%				
	Α	Iternative One	_							
Total Population	152,117	152,562	152,622	152,234	151,287	760,822				
	118,671	110,160	128,158	96,520	77,128	530,637				
White, alone	82%	69%	87%	63%	49%	70%				
	4,632	10,628	2,218	17,491	23,947	58,916				
Black or African American, alone	3%	7%	2%	11%	15%	8%				
American Indian and Alaska	451	575	519	1,320	963	3,828				
Native, alone	0%	0%	0%	1%	1%	1%				
	2,375	4,031	2,672	1,751	2,261	13,090				
Asian, alone	2%	3%	2%	1%	1%	2%				
Native Hawaiian and Other	79	47	70	55	61	312				
Pacific Islander, alone	0%	0%	0%	0%	0%	0%				
,	6,919	9,517	7,790	13,913	18,722	56,861				
Some Other Race, alone	5%	6%	5%	9%	12%	7%				
	18,990	17,604	11,195	21,184	28,205	97,178				
Two or More Races	13%	11%	8%	14%	18%	13%				
	33,446	42,402	24,464	55,714	74,159	230,185				
Total Minority	23%	26%	17%	37%	47%	30%				

Table 6: Lee County Population - Race									
	District 1	District 2	District 3	District 4	District 5	County Total			
Alternative Two									
Total Population	152,117	153,105	152,827	152,345	150,428	760,822			
	118,671	113,984	128,330	95,078	74,574	530,637			
White, alone	82%	71%	88%	62%	47%	70%			
	4,632	8,273	2,221	19,812	23,978	58,916			
Black or African American, alone	3%	5%	2%	13%	15%	8%			
American Indian and Alaska	451	577	519	1,205	1,076	3,828			
Native, alone	0%	0%	0%	1%	1%	1%			
	2,375	4,277	2,672	1,801	1,965	13,090			
Asian, alone	2%	3%	2%	1%	1%	2%			
Native Hawaiian and Other	79	42	70	60	61	312			
Pacific Islander, alone	0%	0%	0%	0%	0%	0%			
	6,919	8,921	7,801	12,977	20,243	56,861			
Some Other Race, alone	5%	6%	5%	9%	13%	7%			
	18,990	17,031	11,214	21,412	28,531	97,178			
Two or More Races	13%	11%	8%	14%	18%	13%			
	33,446	39,121	24,497	57,267	75,854	230,185			
Total Minority	23%	24%	17%	38%	48%	30%			
	Al	ternative Three)						
Total Population	152,506	150,968	150,944	152,996	153,408	760,822			
·	125,712	90,922	123,149	111,099	79,755	530,637			
White, alone	87%	57%	84%	73%	51%	70%			
	3,735	22,263	2,503	6,806	23,609	58,916			
Black or African American, alone	3%	14%	2%	4%	15%	8%			
American Indian and Alaska	381	1,345	632	486	984	3,828			
Native, alone	0%	1%	0%	0%	1%	1%			
	2,591	3,525	2,692	2,305	1,977	13,090			
Asian, alone	2%	2%	2%	2%	1%	2%			
Native Hawaiian and Other	80	36	70	64	62	312			
Pacific Islander, alone	0%	0%	0%	0%	0%	0%			
	5,615	14,500	8,889	9,105	18,752	56,861			
Some Other Race, alone	4%	9%	6%	6%	12%	7%			
	14,392	18,377	13,009	23,131	28,269	97,178			
Two or More Races	10%	11%	9%	15%	18%	13%			
	26,794	60,046	27,795	41,897	73,653	230,185			
Total Minority	19%	37%	19%	27%	47%	30%			

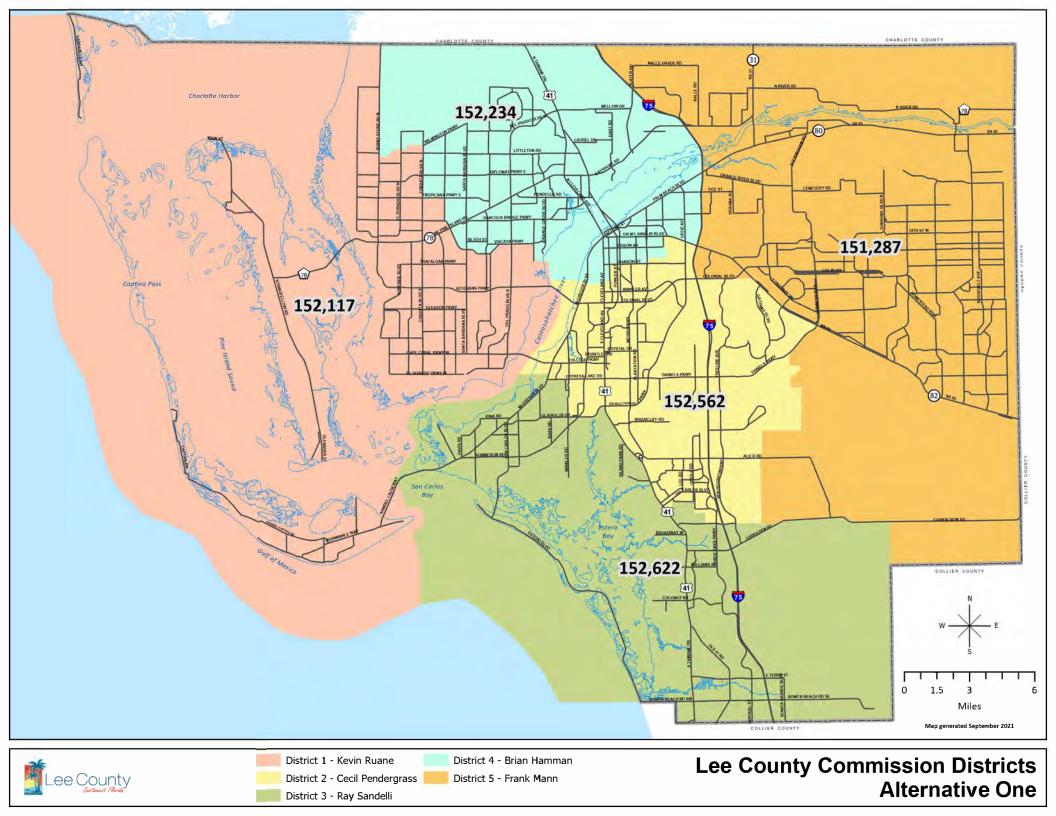
	Table 6: Lee County Population - Race									
	District 1	District 2	District 3	District 4	District 5	County Total				
	Α	Iternative Four								
Total Population	152,263	151,083	154,800	152,061	150,615	760,822				
	118,436	112,143	130,164	93,471	76,423	530,637				
White, alone	82%	70%	89%	61%	49%	70%				
	4,626	8,233	2,247	20,130	23,680	58,916				
Black or African American, alone	3%	5%	2%	13%	15%	8%				
American Indian and Alaska	461	560	536	1,219	1,052	3,828				
Native, alone	0%	0%	0%	1%	1%	1%				
	2,433	4,295	2,652	1,735	1,975	13,090				
Asian, alone	2%	3%	2%	1%	1%	2%				
Native Hawaiian and Other	78	44	68	60	62	312				
Pacific Islander, alone	0%	0%	0%	0%	0%	0%				
	7,134	8,880	7,831	13,788	19,228	56,861				
Some Other Race, alone	5%	6%	5%	9%	12%	7%				
	19,095	16,928	11,302	21,658	28,195	97,178				
Two or More Races	13%	11%	8%	14%	18%	13%				
	33,827	38,940	24,636	58,590	74,192	230,185				
Total Minority	23%	24%	17%	38%	47%	30%				
	Α	Iternative Five								
Total Population	152,279	152,137	152,172	152,111	152,123	760,822				
	118,209	114,499	126,808	94,453	76,668	530,637				
White, alone	82%	72%	86%	62%	49%	70%				
	4,688	8,396	2,195	19,677	23,960	58,916				
Black or African American, alone	3%	5%	1%	13%	15%	8%				
American Indian and Alaska	436	529	560	1,251	1,052	3,828				
Native, alone	0%	0%	0%	1%	1%	1%				
	2,320	4,195	2,667	1,916	1,992	13,090				
Asian, alone	2%	3%	2%	1%	1%	2%				
Native Hawaiian and Other	71	44	70	65	62	312				
Pacific Islander, alone	0%	0%	0%	0%	0%	0%				
	6,999	8,292	8,248	13,478	19,844	56,861				
Some Other Race, alone	5%	5%	6%	9%	13%	7%				
	19,556	16,182	11,624	21,271	28,545	97,178				
Two or More Races	14%	10%	8%	14%	18%	13%				
	34,070	37,638	25,364	57,658	75,455	230,185				
Total Minority	24%	24%	17%	38%	48%	30%				
Source: U.S. Census Bureau, 202	0 Decennial Ce	ensus Public La	aw 94-171 F	Redistricting	Data					

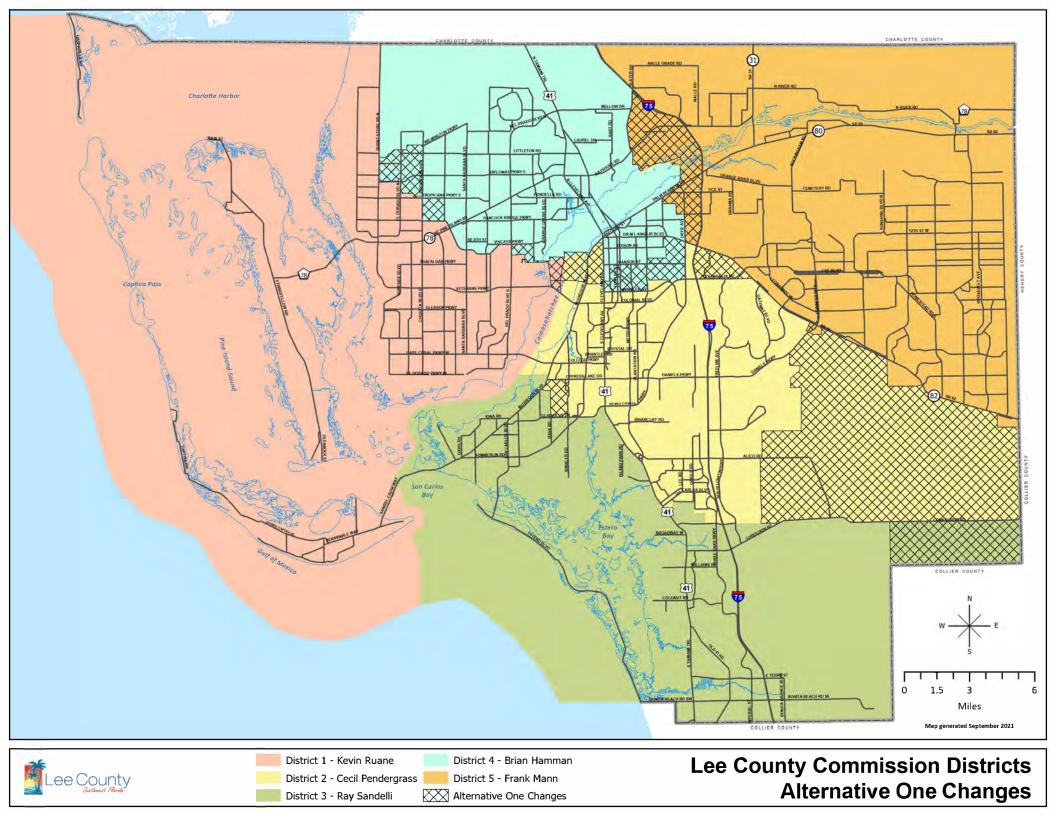
	Table 7	: Lee County F	Population - Et	hnicity		
	District 1	District 2	District 3	District 4	District 5	County Total
	C	Current Commi	ssion Districts			
Total Population	144,126	160,138	146,619	152,571	157,368	760,822
·	25,773	27,875	18,964	37,839	62,710	173,161
Hispanic or Latino	18%	17%	13%	25%	40%	23%
Hispanic or Latino	6,207	6,908	3,818	8,707	14,521	40,161
White, alone	4%	4%	3%	6%	9%	5%
		Alternati	ve One			
Total Population	152,117	152,562	152,622	152,234	151,287	760,822
	27,760	28,193	19,590	40,592	57,026	173,161
Hispanic or Latino	19%	18%	13%	27%	36%	23%
Hispanic or Latino	6,715	6,771	3,938	8,934	13,803	40,161
White, alone	5%	4%	3%	6%	9%	5%
		Alternati	ve Two			
Total Population	152,117	153,105	152,827	152,345	150,428	760,822
	27,760	26,994	19,616	39,455	59,336	173,161
Hispanic or Latino	19%	17%	13%	26%	38%	23%
Hispanic or Latino	6,715	6,557	3,949	8,906	14,034	40,161
White, alone	5%	4%	3%	6%	9%	5%
		Alternativ	e Three			
Total Population	152,506	150,968	150,944	152,996	153,408	760,822
10 2 1 0	20,316	35,461	23,841	36,476	57,067	173,161
Hispanic or Latino	14%	22%	16%	24%	36%	23%
Hispanic or Latino	4,779	6,972	5,406	9,166	13,838	40,161
White, alone	3%	4%	4%	6%	9%	5%
		Alternati				
Total Population	152,263	151,083	154,800	152,061	150,615	760,822
l lianania an Latina	28,119	26,881	19,707	40,720	57,734	173,161
Hispanic or Latino	20%	17%	13%	27%	37%	23%
Hispanic or Latino	6,745	6,514	3,991	9,059	13,852	40,161
White, alone	5%	4%	3%	6%	9%	5%
		Alternati				T ======
Total Population	152,279	152,137	152,172	152,111	152,123	760,822
Highania or Latina	28,119	26,881	19,707	40,720	57,734	173,161
Hispanic or Latino	20%	17%	13%	27%	37%	23%
Hispanic or Latino	6,518	8,870	635	10,041	14,097	40,161
White, alone	5%	6%	0%	7%	9%	5%
Source: U.S. Census Bureau, 2	2020 Decennial	Census Public	Law 94-171 Re	districting Data		

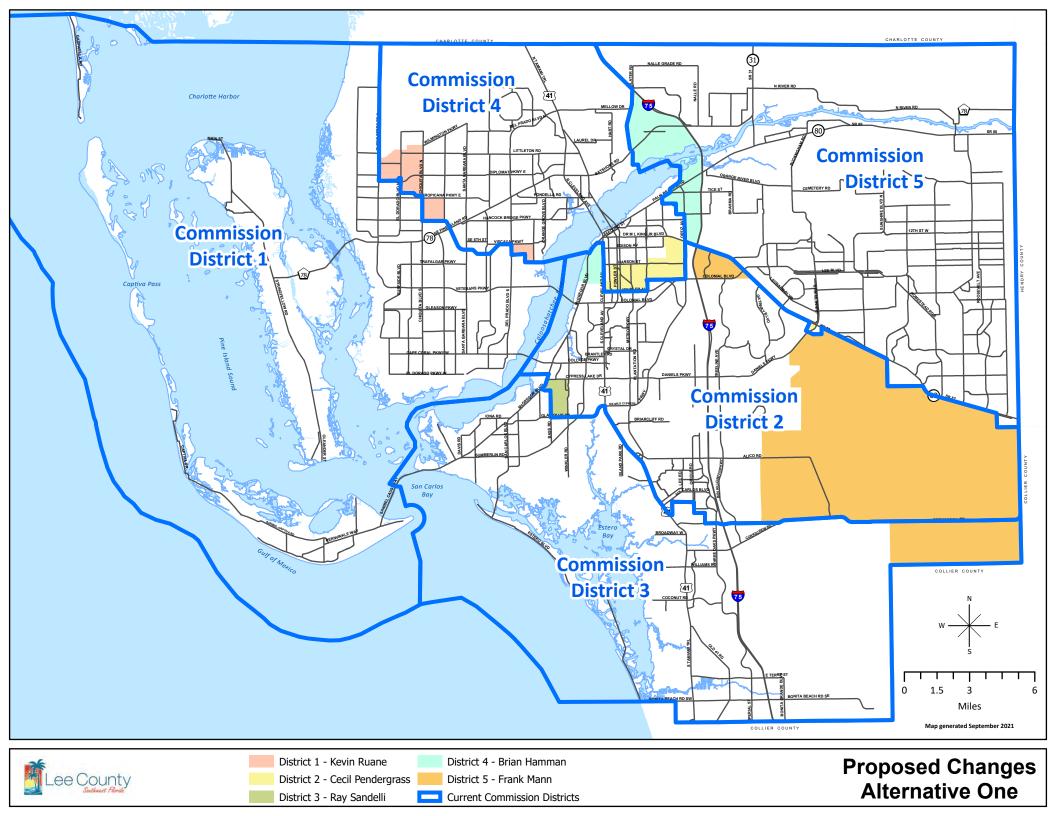
Appendix A: Current Lee County Commission Districts



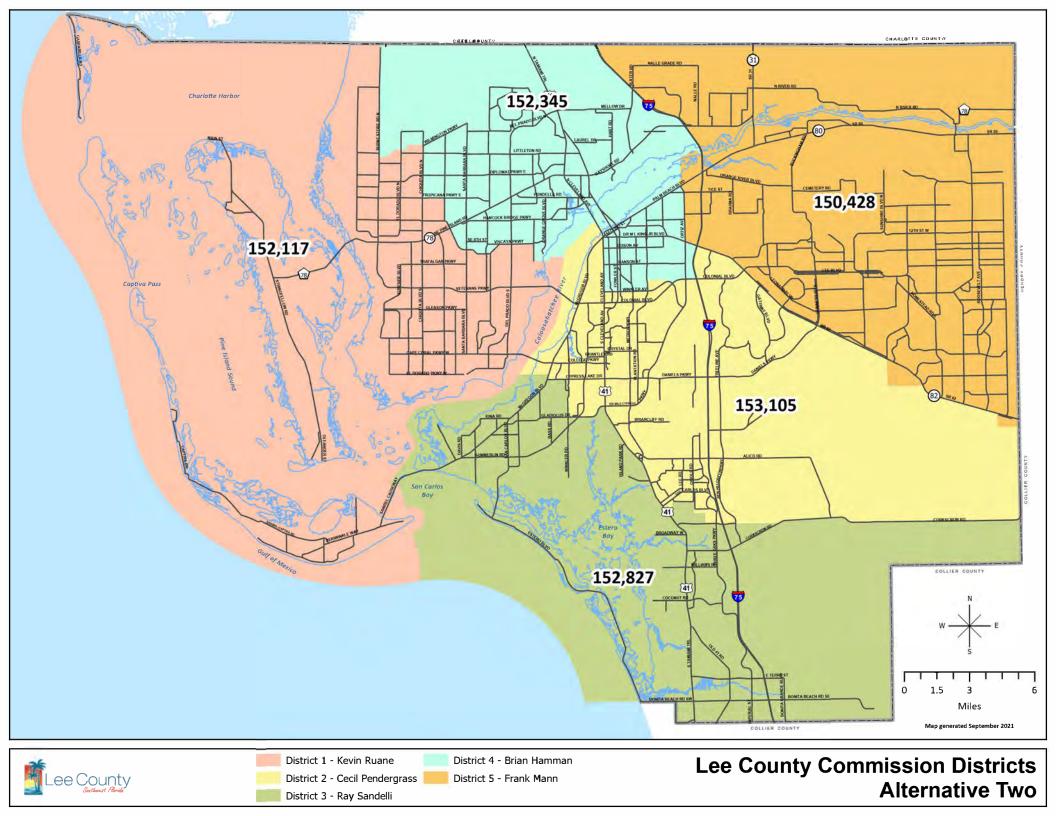
Appendix B: Alternative One

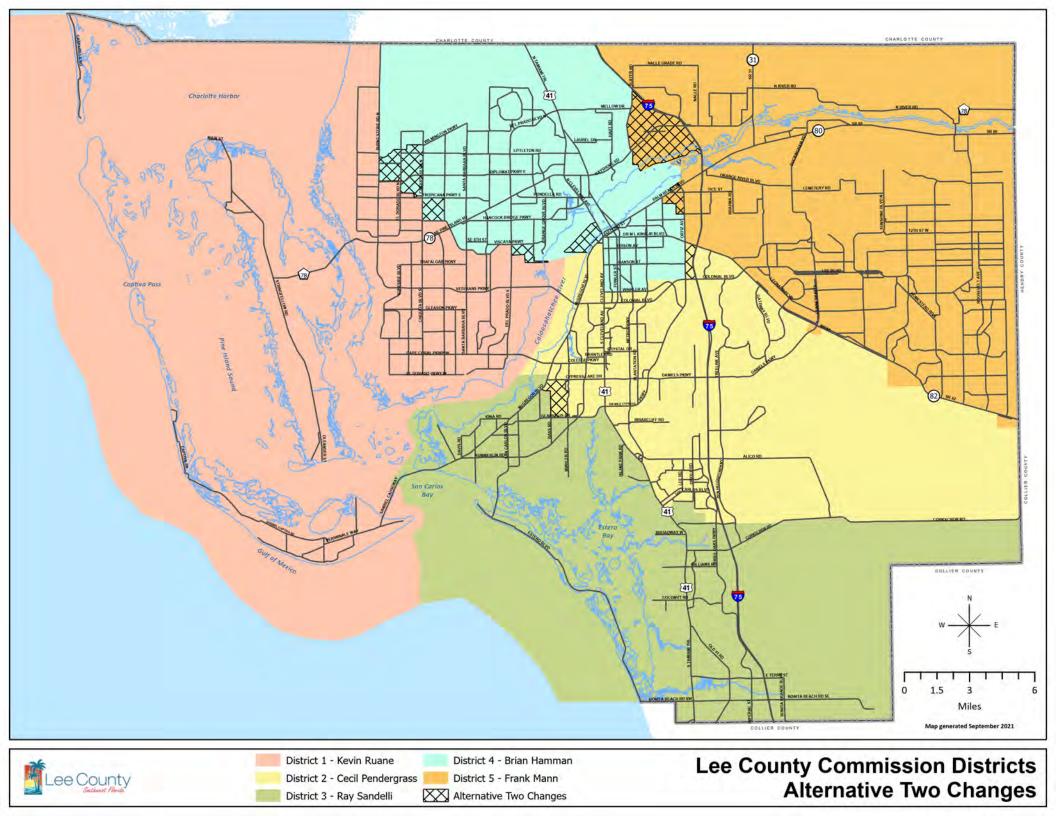


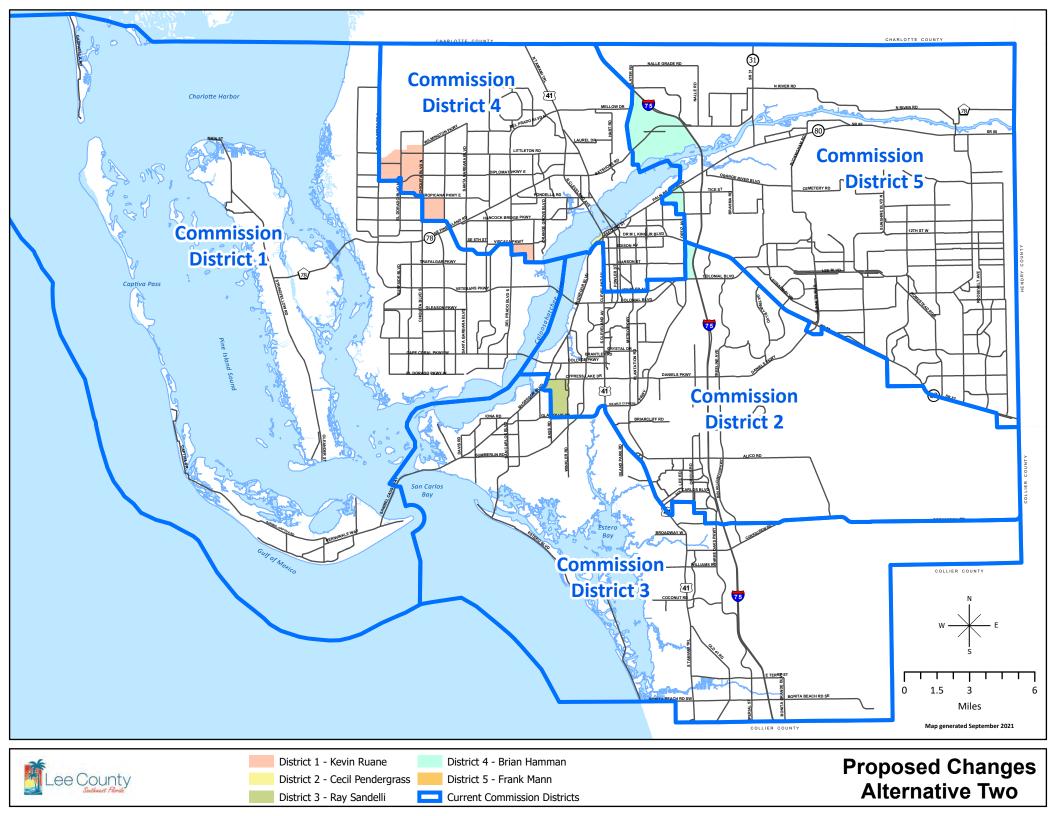




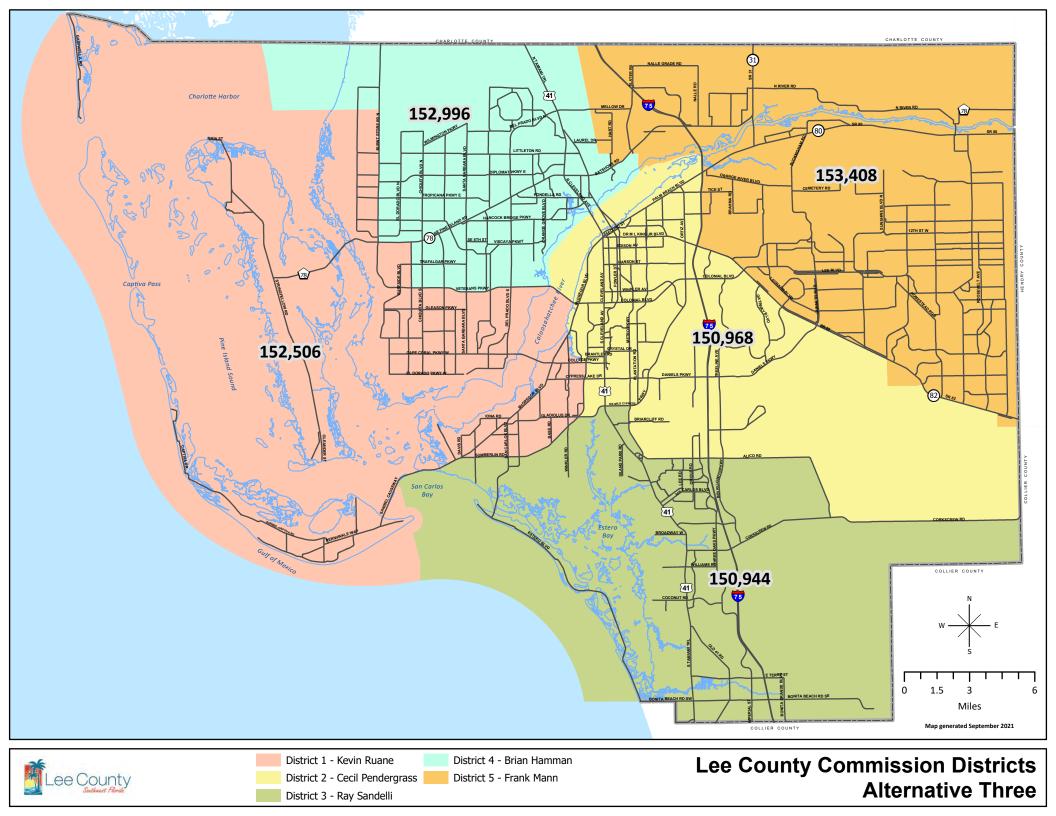
Appendix C: Alternative Two

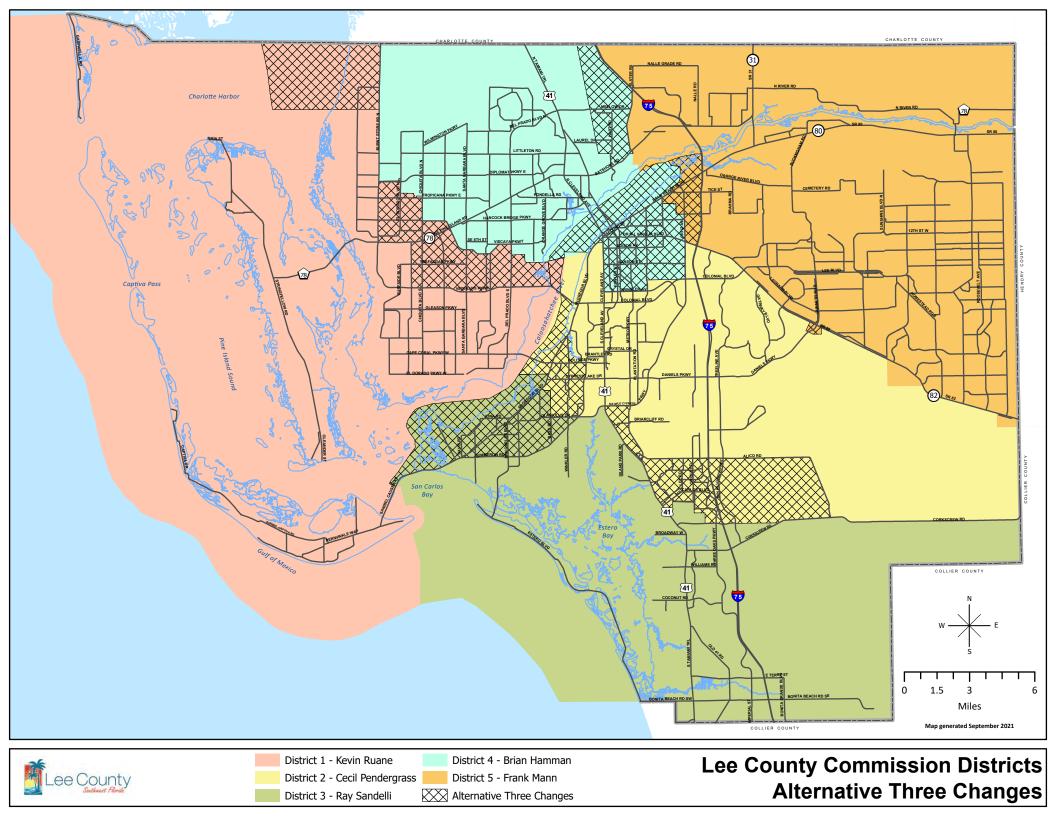


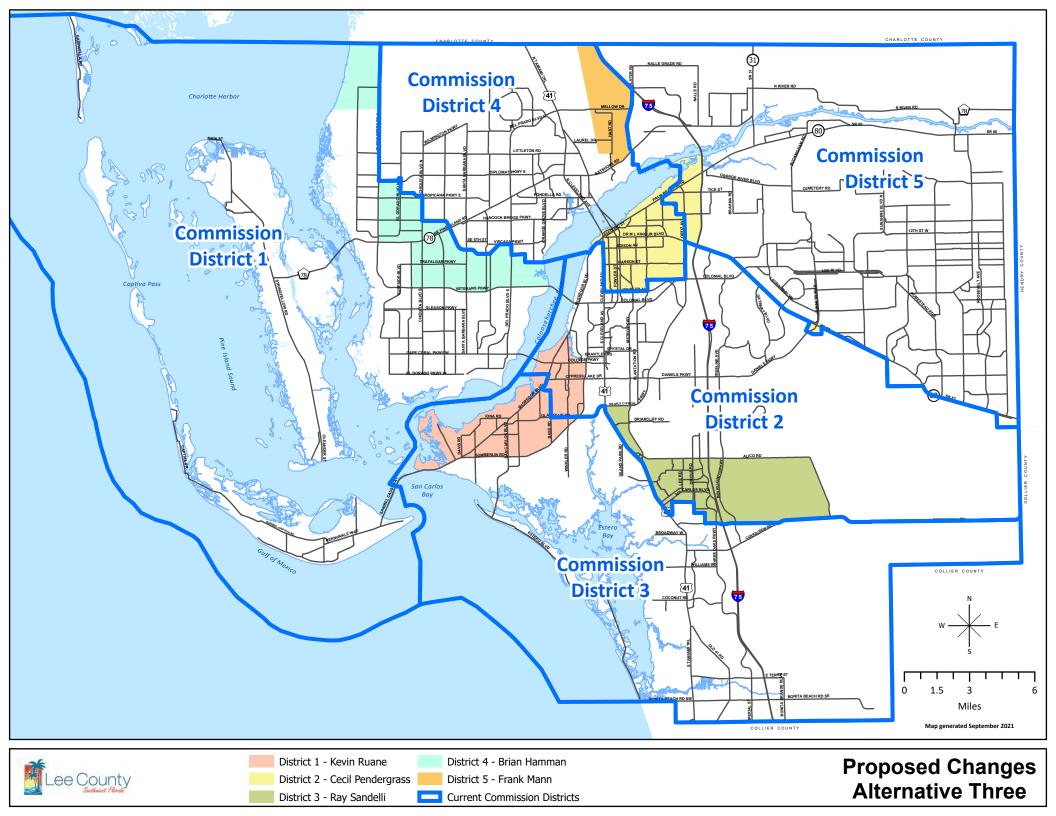




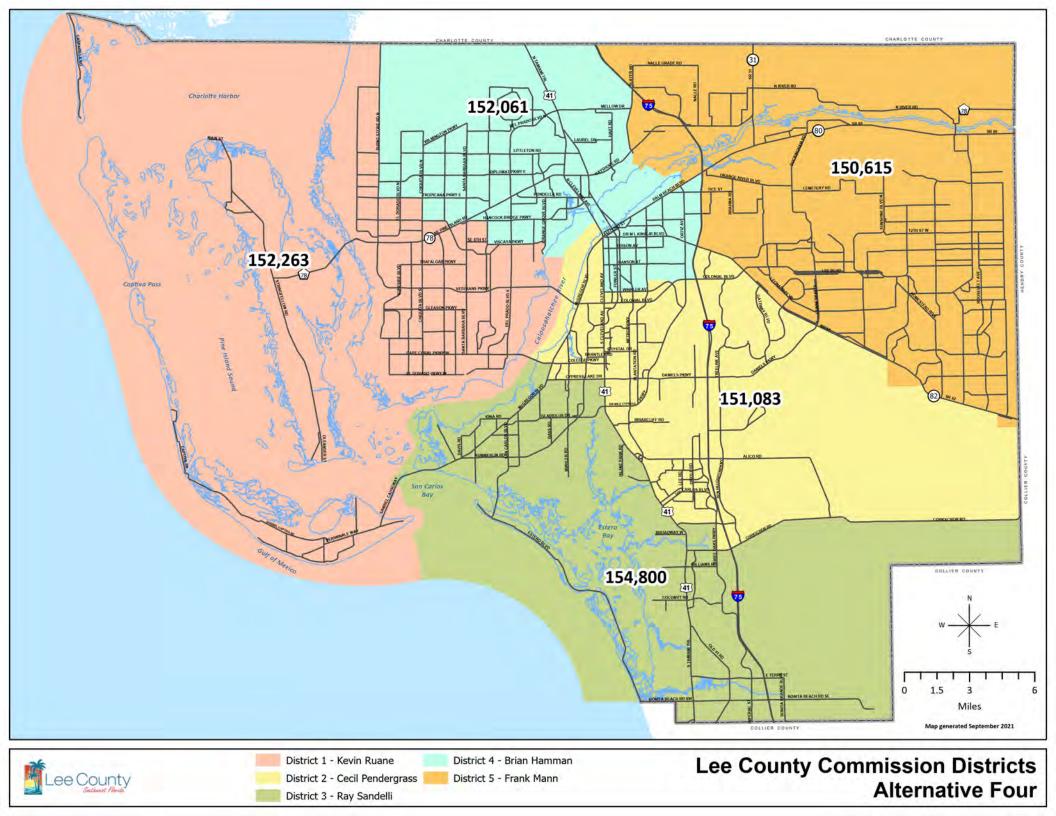
Appendix D: Alternative Three

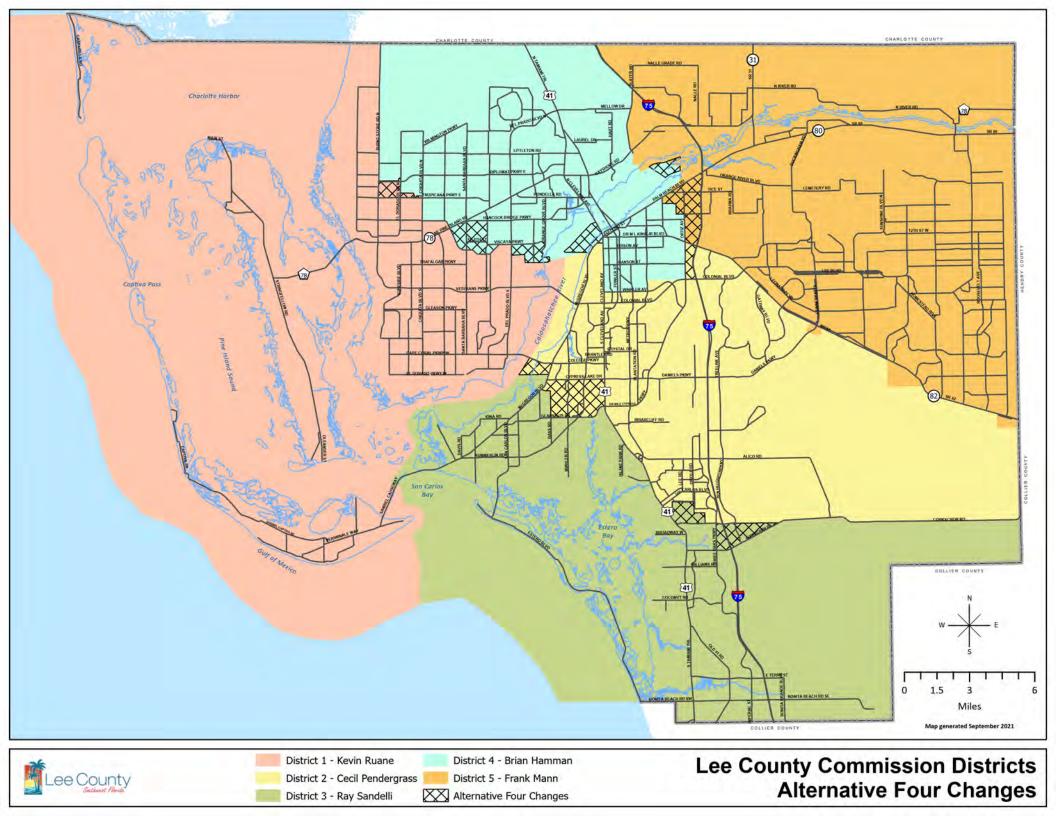


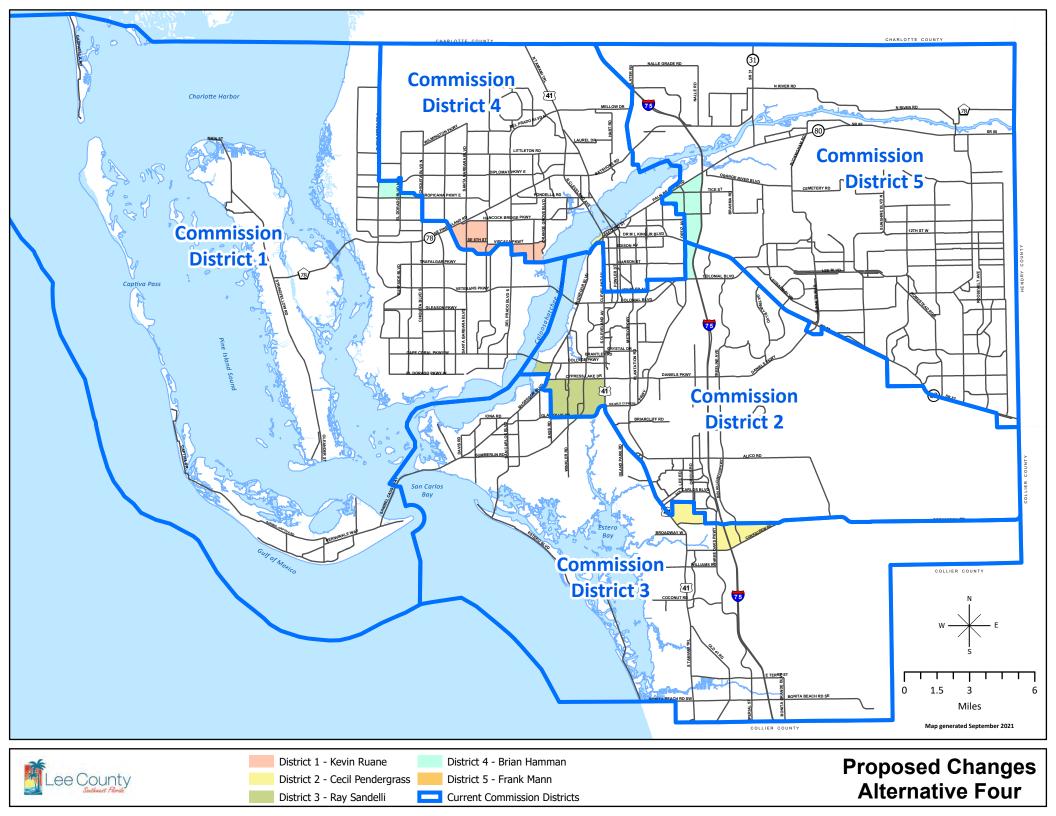




Appendix E: Alternative Four







Appendix F: Alternative Five

