 2011 Lee County Commission Redistricting Report

July 28, 2011

Prepared by Lee County Community Development Planning Division

## 2011 Lee County Commission Redistricting

## Introduction

The county commission redistricting process is mandated by Florida State Statutes, Chapter 124.01 (3), which stipulates that "The board of county commission shall from time to time, fix the boundaries [commission district boundaries] so as to keep them as nearly equal in proportion to population as possible..." The statutes provide for these changes to be made only in odd-numbered years.

This report presents five alternatives for the 2011 redistricting of the commissioner districts. The district boundaries were last updated in 2001 using the population figures obtained from the 2000 Census. In the same manner, the 2010 U.S. Census population information has been used to redraw the Lee County commissioner districts. The 2010 U.S. Census population figures show considerable population growth in certain areas of the county. This growth has not occurred evenly throughout each commission district causing an imbalance in population figures between districts. The alternatives presented here are just five possible ways in which the current district boundaries can be redrawn. Other redistricting proposals can be put forth or modifications can be made to any of the five alternatives. 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.

## Lee County Population Change

The U.S. Census Bureau population counts for the 2010 Census signify a 40.3 percent increase in the Lee County population since the 2000 Census. The increase in population did not, however, occur evenly across the county or across the five existing County Commission Districts. All 5 of the districts reported an increase in population. District 5, which includes Lehigh Acres, Gateway, and the area surrounding Florida Gulf Coast University, had the largest population increase (95.77\%) while District 2 had the lowest ( $6.68 \%$ ) increase between the two Census reports.

Before redrawing the new district boundaries, a comparison of the 2010 U.S. Census population was made to that of the 2000 U.S. Census population figures. The 2001 district boundaries were utilized for this comparison and the population distribution is presented in Table 1 below. The targets for district populations in 2000 and 2010 equal the total census population of that year divided by the number of districts.

Table 1

| Commission District Population Figures, 2000 \& 2010 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Commission District | $\begin{gathered} 2000 \\ \text { Population } \end{gathered}$ | Deviation from 2000 Target | 2010 <br> Population | \% Deviation from 2010 Target |
| 1 | 89,975 | 2.0\% | 111,416 | -10.0\% |
| 2 | 88,713 | 0.6\% | 94,635 | -23.5\% |
| 3 | 86,904 | -1.4\% | 120,976 | -2.2\% |
| 4 | 87,918 | -0.3\% | 120,663 | -2.5\% |
| 5 | 87,378 | -0.9\% | 171,064 | 38.2\% |
| Total | 440,888 |  | 618,754 |  |
| 2000 Target Commission District Population $=88,176$ <br> 2010 Target Commission District Population $=123,751$ <br> (Target Population $=$ Total County Population/5 Districts) <br> Source: U.S. Census Bureau |  |  |  |  |

## The Redistricting Process

The redistricting process involves redrawing the Lee County commissioner district boundary lines in such a manner that all five districts achieve a population close to the target population figure of 123,751 persons. ${ }^{1}$ Additionally, a number of criteria are used as guidelines while redrawing the boundary lines to produce new commission districts. The equal population objective is statutorily mandated while the other criteria are drawn from case law precedents or common redistricting practices. Given the growth patterns since the last Census, each alternative addresses the need to allocate considerable population from district 5 , which received $47 \%$ of the county population increase, to districts 1 and 2 , which collectively received only $15 \%$ of the county population increase. Districts 3 and 4 grew the closest to the county average with both receiving nearly $20 \%$ of the county population increase. The attached maps depict 5 Alternative redistricting approaches created by staff.

Each of the five alternatives was devised to adhere to the following redistricting practices as closely as possible. As such, all of the alternatives 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, and
- considered population growth for future population equity.

These criteria are discussed in greater detail in the following sections. Additionally, the Lee County School Board stated its desire to adopt the same alternative used by the County Commission Districts as the School Board Districts.

Equal Population Distribution - The primary goal of redistricting every 10 years in 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. This measure 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. Therefore, the range for acceptable commission district populations is between 120,657 and 126,845 . Table 2 shows that all five of the alternatives proposed by staff adhere to this criterion. It also shows that the current districts do not meet the equal population distribution criteria, and therefore must be amended.

Table 2

| Population Distribution by Commission District - Relative Range |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commission District |  | $\mathbf{1}$ | 2 | 3 | 4 | 5 |
| Current District Boundaries | Population | 111,416 | 94,635 | 120,976 | 120,663 | 171,064 |
|  | \% Deviation from Target | 10.0\% | -23.5\% | -2.2\% | -2.5\% | 38.2\% |
| Alternative 1 | Population | 124,503 | 124,101 | 124,203 | 122,890 | 123,057 |
|  | \% Deviation from Target | 0.6\% | 0.3\% | 0.4\% | -0.7\% | -0.6\% |
| Alternative 2 | Population | 123,266 | 123,772 | 123,933 | 124,079 | 123,704 |
|  | \% Deviation from Target | -0.4\% | 0.0\% | 0.2\% | 0.3\% | -0.0\% |
| Alternative 3 | Population | 123,492 | 123,745 | 123,764 | 123,669 | 124,084 |
|  | \% Deviation from Target | -0.2\% | 0.0\% | 0.0\% | -0.1\% | 0.3\% |
| Alternative 4 | Population | 124,058 | 123,807 | 124,052 | 123,526 | 123,311 |
|  | \% Deviation from Target | 0.3\% | 0.1\% | 0.2\% | -0.2\% | -0.4\% |
| Alternative 5 | Population | -123,130 | -123,926 | 123,756 | -123,629 | 124,313 |
|  | \% Deviation from Target | -0.5\% | 0.1\% | 0.0\% | -0.1\% | 0.5\% |
| Source: U.S. Census Bureau |  |  |  |  |  |  |

[^0]Several other methods exist for measuring equal population. In addition to the relative range figure, a simple calculation of the overall range can also be used. This figure is calculated by subtracting the district with the smallest population from the district with the largest population. The results of these calculations are shown in table 3 . Using the $2.5 \%$ variation criteria, the greatest acceptable overall range between the high and low population is 6,188 . However, neither the high nor the low commission district population should vary more than 3,094 persons from the target population. While alternative 3 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 | 171,064 | 94,635 | 76,429 |
| Alternative 1 | 124,503 | 122,890 | 1,613 |
| Alternative 2 | 124,079 | 123,266 | 813 |
| Alternative 3 | 124,084 | 123,492 | 592 |
| Alternative 4 | 124,058 | 123,311 | 747 |
| Alternative 5 | 124,313 | 123,130 | 1,183 |
|  |  |  |  |
| Source: U.S. Census Bureau |  |  |  |

Another measure that is used in redistricting is known as the percent relative mean deviation. This measure is calculated by adding up the absolute 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. This value is then divided by the target population figure. The percent relative mean 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, thus providing a deceptive notion of the results at first glance. Table 4 contains the deviation of each commission district population from the target population for each alternative. The percent relative mean of each the alternatives are within the accepted standards.

Table 4

| Population Distribution by Commission District - Percent Relative Mean |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | District 1 | District 2 | District 3 | District 4 | District 5 | Percent <br> Relative <br> Mean |
| Current Districts | 12,335 | 29,116 | 2,775 | 3,088 | 47,313 | $15.29 \%$ |
| Alternative 1 | 752 | 350 | 452 | 861 | 694 | $0.38 \%$ |
| Alternative 2 | 485 | 47 | 21 | 182 | 328 | $0.17 \%$ |
| Alternative 3 | 259 | 6 | 13 | 82 | 333 | $0.11 \%$ |
| Alternative 4 | 307 | 56 | 301 | 440 | 225 | $0.21 \%$ |
| Alternative 5 | 621 | 175 | 5 | 122 | 562 | $0.24 \%$ |
| 2010 Target Commission District Population $=123,751$ | (Target Population = Total County Population/5 Districts) |  |  |  |  |  |
| 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.

Compact districts limit the potential for gerrymandering, whether for political advantage, racial and ethnic considerations or to achieve other objectives. Political factors are not considered in this redistricting effort; all alternatives are developed without regard to political party affiliation, or the location or concentration of any political group.

An analytical measure of compactness is used in this report to describe each district's compactness in each alternative. The most common measure of the "compactness" ${ }^{2}$ of the polygon representing the district compares the enclosed area of the shape to the area that would be enclosed by a circle with the same perimeter (circumference). 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 alternatives and the existing districts are shown in Table 5.

Table 5

| Measure of Compactness |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | District 1 | District 2 | District 3 | District 4 | District 5 |  |
| Current Districts | .56 | .55 | .33 | .53 | .60 |  |
| Alternative 1 | .45 | .52 | .46 | .57 | .47 |  |
| Alternative 2 | .45 | .46 | .55 | .59 | .36 |  |
| Alternative 3 | .45 | .49 | .29 | .40 | .38 |  |
| Alternative 4 | .55 | .34 | .32 | .33 | .49 |  |
| Alternative 5 | .55 | .35 | .33 | .34 | .55 |  |
| Source: Lee County Planning/GIS shapefile |  |  |  |  |  |  |

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 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 - In dividing the districts, prominent features such as the Caloosahatchee River, Interstate 75, US 41, and other major roads were used. 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, each of the five alternative's district boundaries mirrors prominent physical features. 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

[^1]commission districts. Currently, over $62 \%$ of the residents of Lee County live "south" of the river while approximately $34 \%$ live "north" of the river and the remaining $4 \%$ live on the islands.

Retention of Established Neighborhoods and Communities - Whenever possible, the redrawing of the commissioner boundaries was done so that established communities and neighborhoods were kept intact and not split between districts. This helps to ensure that communities with a common set of issues or needs are able to unite under single district leadership. The City of Fort Myers is currently split between districts 2 and 5. Two of the alternatives include Fort Myers within a single district. The City of Cape Coral has a total population larger than the target district population it must be split into multiple districts in all 5 of the proposed alternatives. Three of the alternatives keep the City of Bonita Springs within a single district and two alternatives split the city between districts 3 and 5 . All of the alternatives keep the City of Sanibel and the Town of Fort Myers Beach within a single district.

Retaining Existing District Boundary Lines - In each of the five alternatives, the redistricting was done so that each Commissioner resided in their assigned district. This was an important criterion because it facilitates better communication and understanding of what is going on in each commissioner's own district. Because drastic changes in district boundaries can lead to disruption of representative government and the orderly and expeditious provision of governmental services, it was important to align the new district boundaries so they would be closely related to the old boundaries. Alternatives 1 and 2 most closely match the existing district boundaries. Alternative 3 deviates most from the existing district boundaries. The attached maps include a dashed line representing the existing commission districts. Furthermore, each alternative was drawn to include the school board member currently residing in each district.

Long Term Population Equity - This criterion is identified in an attempt to avoid the substantial inequities in district populations that may arise in coming years. An attempt was 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" - This criterion is of great importance in the redrawing of district boundary lines. The concerns surrounding this issue have received a great deal of legal scrutiny, especially when the issues are related to the provisions of the 1965 Voting Rights Act and the subsequent amendments.

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 618,754 total population count in the 2010 Census count, 105,258 are listed as minority (non-white). Of the 113,308 persons of Hispanic or Latino origin, 74,448 are listed as white. Adding the white Hispanic population to the minority population yields a minority/ethnic population of 179,706 persons in Lee County. This represents 29.04 percent of the total county population. Table 6 shows the distribution of the minority and Hispanic/Latino population in each of the alternatives and the current commission districts. In all of these instances, district 2 contains the highest concentration of non-white and/or 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.

Table 6

| Minority (non-white) and Hispanic Population by Commission District |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | District 1 | District 2 | District 3 | District 4 | District 5 | County Total |
|  | Minority Population | 8,089 | 35,641 | 10,148 | 14,054 | 37,326 | 105,258 |
|  | Percent Minority | 7.26\% | 37.66\% | 8.39\% | 11.65\% | 21.82\% | 17.01\% |
|  | Hispanic or Latino | 13,667 | 21,165 | 16,449 | 20,837 | 41,190 | 113,308 |
|  | Hispanic or Latino/White | 10,575 | 10,403 | 10,405 | 14,924 | 28,141 | 74,448 |
|  | Percent Minority or Ethnic | 16.75\% | 48.65\% | 16.99\% | 24.02\% | 38.27\% | 29.04\% |
|  | Minority Population | 9,891 | 38,226 | 11,100 | 13,909 | 32,123 | 105,258 |
|  | Percent Minority | 7.94\% | 30.80\% | 8.94\% | 11.32\% | 26.11\% | 17.01\% |
|  | Hispanic or Latino | 15,785 | 23,597 | 18,071 | 20,681 | 35,174 | 113,308 |
|  | Hispanic or Latino/White | 11,368 | 12,281 | 11,613 | 15,537 | 23,947 | 74,448 |
|  | Percent Minority or Ethnic | 17.07\% | 40.70\% | 18.29\% | 23.46\% | 45.57\% | 29.04\% |
|  | Minority Population | 9,671 | 39,255 | 10,786 | 14,335 | 31,211 | 105,258 |
|  | Percent Minority | 7.85\% | 31.71\% | 8.70\% | 11.55\% | 25.23\% | 17.01\% |
|  | Hispanic or Latino | 15,251 | 25,329 | 17,674 | 21,507 | 33,547 | 113,308 |
|  | Hispanic or Latino/White | 11,368 | 13,279 | 11,272 | 15,537 | 22,992 | 74,448 |
|  | Percent Minority or Ethnic | 17.07\% | 42.44\% | 17.80\% | 24.08\% | 43.82\% | 29.04\% |
| $\begin{aligned} & \infty \\ & 0 \end{aligned}$ | Minority Population | 12,472 | 26,090 | 9,027 | 27,053 | 30,616 | 105,258 |
|  | Percent Minority | 10.10\% | 21.08\% | 7.29\% | 21.88\% | 24.67\% | 17.01\% |
|  | Hispanic or Latino | 21,736 | 16,583 | 15,030 | 25,726 | 34,233 | 113,308 |
|  | Hispanic or Latino/White | 16,774 | 10,152 | 9,651 | 14,677 | 23,194 | 74,448 |
|  | Percent Minority or Ethnic | 23.68\% | 29.29\% | 15.09\% | 33.74\% | 43.37\% | 29.04\% |
|  | Minority Population | 12,572 | 15,228 | 9,805 | 35,341 | 32,312 | 105,258 |
|  | Percent Minority | 10.13\% | 12.30\% | 7.90\% | 28.66\% | 26.16\% | 17.01\% |
|  | Hispanic or Latino | 21,745 | 17,602 | 15,901 | 23,783 | 34,277 | 113,308 |
|  | Hispanic or Latino/White | 16,736 | 11,656 | 9,996 | 12,590 | 23,470 | 74,448 |
|  | Percent Minority or Ethnic | 23.62\% | 21.71\% | 15.96\% | 38.87\% | 45.16\% | 29.04\% |
| $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \end{aligned}$ | Minority Population | 12,461 | 15,219 | 9,795 | 35,148 | 32,635 | 105,258 |
|  | Percent Minority | 10.12\% | 12.28\% | 7.91\% | 28.43\% | 26.25\% | 17.01\% |
|  | Hispanic or Latino | 21,570 | 17,617 | 15,882 | 23,522 | 34,717 | 113,308 |
|  | Hispanic or Latino/White | 16,592 | 11,666 | 9,982 | 12,628 | 23,580 | 74,448 |
|  | Percent Minority and/or Hispanic | 23.60\% | 21.69\% | 15.98\% | 38.64\% | 45.22\% | 29.04\% |
| Source: U.S. Census Bureau |  |  |  |  |  |  |  |

## Summary

In summary, Planning Staff believes that all of the alternatives presented meet or exceed all of the statutory and case law precedents or common redistricting practices. Staff recommends Alternative 1 as best meeting the established redistricting criteria. However, any of the alternatives meet these criteria and may be selected as presented or with minor modifications. Significant changes to the alternatives may require additional staff evaluation for compliance with the statutes and case law precedents.







## Division Of Planning

to: Board of County Commissioners
from: Rick Burris, Principal Planner
date: $\quad$ September 12, 2011
subject: 2011 Lee County Commission Redistricting
In preparation for tonight's public hearing on redistricting Lee County Commission Districts:
The attached supplement is an update to the 2011 Lee County Redistricting Report dated July 28, 2011. This supplement includes revised tables and maps to include a sixth alternative for the redistricting of Lee County. This alternative is based on input from the Management and Planning Meeting on August 8, 2001 and public comment from area residents.
cc: Karen Hawes, County Manager
Holly Schwartz, Assistant County Manager
Mary Gibbs, DCD/Director
Paul O'Connor, Planning Director
Michael Hunt, County Attorney
Donna Marie Collins, Assistant County Attorney
Planning File

## 2001 Lee County Commission Redistricting

## Revised Tables

The tables below have been revised to include data for a fifth alternative which was developed based on suggested changes made by the Board of County Commissioners and public comments received by the Planning Department.

Table 1

| Commission District Population Figures, 2000 \& 2010 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Commission District | 2000 <br> Population | Deviation from 2000 Target | 2010 <br> Population | \% Deviation from 2010 Target |
| 1 | 89,975 | 2.0\% | 111,416 | -10.0\% |
| 2 | 88,713 | 0.6\% | 94,635 | -23.5\% |
| 3 | 86,904 | -1.4\% | 120,976 | -2.2\% |
| 4 | 87,918 | -0.3\% | 120,663 | -2.5\% |
| 5 | 87,378 | -0.9\% | 171,064 | 38.2\% |
| Total | 440,888 |  | 618,754 |  |
| 2000 Target Commission District Population $=88,176$ <br> 2010 Target Commission District Population $=123,751$ <br> (Target Population $=$ Total County Population/5 Districts) <br> Source: U.S. Census Bureau |  |  |  |  |
|  |  |  |  |  |

Table 2

| Population Distribution by Commission District - Relative Range |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commission District |  | 1 | 2 | 3 | 4 | 5 |
| Current District Boundaries | Population | 111,416 | 94,635 | 120,976 | 120,663 | 171,064 |
|  | \% Deviation from Target | 10.0\% | -23.5\% | -2.2\% | -2.5\% | 38.2\% |
| Alternative 1 | Population | -124,503 | -124,101 | -124,203 | 122,890 | 123,057 |
|  | \% Deviation from Target | 0.6\% | 0.3\% | 0.4\% | -0.7\% | -0.6\% |
| Alternative 2 | Population | -123,266 | -123,772 | -123,933 | -124,079 | -123,704 |
|  | \% Deviation from Target | -0.4\% | 0.0\% | 0.2\% | 0.3\% | -0.0\% |
| Alternative 3 | Population | 123,492 | 123,745 | 123,764 | 123,669 | 124,084 |
|  | \% Deviation from Target | -0.2\% | 0.0\% | 0.0\% | -0.1\% | 0.3\% |
| Alternative 4 | Population | -124,058 | 123,807 | -124,052 | -123,526 | 123,311 |
|  | \% Deviation from Target | 0.3\% | 0.1\% | 0.2\% | -0.2\% | -0.4\% |
| Alternative 5 | Population | -123,130 | -123,926 | 123,756 | -123,629 | 124,313 |
|  | \% Deviation from Target | -0.5\% | 0.1\% | 0.0\% | -0.1\% | 0.5\% |
| Alternative 6 | Population | -124,294 | 123,445 | 124,284 | 123,210 | 123,521 |
|  | \% Deviation from Target | . $4 \%$ | -.3\% | . $4 \%$ | -. 4 | -.2\% |
| Source: U.S. Census Bureau |  |  |  |  |  |  |

Table 3
Population Distribution by Commission District - Overall Range

|  | High | Low | Difference |
| ---: | :---: | :---: | :---: |
| Current District Boundaries | 171,064 | 94,635 | 76,429 |
| Alternative 1 | 124,503 | 122,890 | 1,613 |
| Alternative 2 | 124,079 | 123,266 | 813 |
| Alternative 3 | 124,084 | 123,492 | 592 |
| Alternative 4 | 124,058 | 123,311 | 747 |
| Alternative 5 | 124,313 | 123,130 | 1,183 |
| Alternative 6 | 124,294 | 123,210 | 1,084 |
| Source: U.S. Census Bureau |  |  |  |

Table 4

| Population Distribution by Commission District - Percent Relative Mean |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | District 1 | District 2 | District 3 | District 4 | District 5 | Percent <br> Relative <br> Mean |
| Current Districts | 12,335 | 29,116 | 2,775 | 3,088 | 47,313 | $15.29 \%$ |
| Alternative 1 | 752 | 350 | 452 | 861 | 694 | $0.38 \%$ |
| Alternative 2 | 485 | 47 | 21 | 182 | 328 | $0.17 \%$ |
| Alternative 3 | 259 | 6 | 13 | 82 | 333 | $0.11 \%$ |
| Alternative 4 | 307 | 56 | 301 | 440 | 225 | $0.21 \%$ |
| Alternative 5 | 621 | 175 | 5 | 122 | 562 | $0.24 \%$ |
| Alternative 6 | 543 | 306 | 533 | 541 | 230 | $0.35 \%$ |

2010 Target Commission District Population $=123,751 \quad$ (Target Population $=$ Total County Population/5 Districts)
Source: U.S. Census Bureau

Table 5

| Measure of Compactness |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | District 1 | District 2 | District 3 | District 4 | District 5 |  |
| Current Districts | .56 | .55 | .33 | .53 | .60 |  |
| Alternative 1 | .45 | .52 | .46 | .57 | .47 |  |
| Alternative 2 | .45 | .46 | .55 | .59 | .36 |  |
| Alternative 3 | .45 | .49 | .29 | .40 | .38 |  |
| Alternative 4 | .55 | .34 | .32 | .33 | .49 |  |
| Alternative 5 | .55 | .35 | .33 | .34 | .55 |  |
| Alternative 6 | .73 | .62 | .62 | .72 | .75 |  |
| Source: Lee County Planning/GIS shapefile |  |  |  |  |  |  |

Table 6

| Minority (non-white) and Hispanic Population by Commission District |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | District 1 | District 2 | District 3 | District 4 | District 5 | County Total |
|  | Minority Population | 8,089 | 35,641 | 10,148 | 14,054 | 37,326 | 105,258 |
|  | Percent Minority | 7.26\% | 37.66\% | 8.39\% | 11.65\% | 21.82\% | 17.01\% |
|  | Hispanic or Latino | 13,667 | 21,165 | 16,449 | 20,837 | 41,190 | 113,308 |
|  | Hispanic or Latino/White | 10,575 | 10,403 | 10,405 | 14,924 | 28,141 | 74,448 |
|  | Percent Minority or Ethnic | 16.75\% | 48.65\% | 16.99\% | 24.02\% | 38.27\% | 29.04\% |
|  | Minority Population | 9,891 | 38,226 | 11,100 | 13,909 | 32,123 | 105,258 |
|  | Percent Minority | 7.94\% | 30.80\% | 8.94\% | 11.32\% | 26.11\% | 17.01\% |
|  | Hispanic or Latino | 15,785 | 23,597 | 18,071 | 20,681 | 35,174 | 113,308 |
|  | Hispanic or Latino/White | 11,368 | 12,281 | 11,613 | 15,537 | 23,947 | 74,448 |
|  | Percent Minority or Ethnic | 17.07\% | 40.70\% | 18.29\% | 23.46\% | 45.57\% | 29.04\% |
|  | Minority Population | 9,671 | 39,255 | 10,786 | 14,335 | 31,211 | 105,258 |
|  | Percent Minority | 7.85\% | 31.71\% | 8.70\% | 11.55\% | 25.23\% | 17.01\% |
|  | Hispanic or Latino | 15,251 | 25,329 | 17,674 | 21,507 | 33,547 | 113,308 |
|  | Hispanic or Latino/White | 11,368 | 13,279 | 11,272 | 15,537 | 22,992 | 74,448 |
|  | Percent Minority or Ethnic | 17.07\% | 42.44\% | 17.80\% | 24.08\% | 43.82\% | 29.04\% |
| $\begin{aligned} & \text { O } \\ & 0 \\ & 0 \end{aligned}$ | Minority Population | 12,472 | 26,090 | 9,027 | 27,053 | 30,616 | 105,258 |
|  | Percent Minority | 10.10\% | 21.08\% | 7.29\% | 21.88\% | 24.67\% | 17.01\% |
|  | Hispanic or Latino | 21,736 | 16,583 | 15,030 | 25,726 | 34,233 | 113,308 |
|  | Hispanic or Latino/White | 16,774 | 10,152 | 9,651 | 14,677 | 23,194 | 74,448 |
|  | Percent Minority or Ethnic | 23.68\% | 29.29\% | 15.09\% | $33.74 \%$ | 43.37\% | 29.04\% |
|  | Minority Population | 12,572 | 15,228 | 9,805 | 35,341 | 32,312 | 105,258 |
|  | Percent Minority | 10.13\% | 12.30\% | 7.90\% | 28.66\% | 26.16\% | 17.01\% |
|  | Hispanic or Latino | 21,745 | 17,602 | 15,901 | 23,783 | 34,277 | 113,308 |
|  | Hispanic or Latino/White | 16,736 | 11,656 | 9,996 | 12,590 | 23,470 | 74,448 |
|  | Percent Minority or Ethnic | $23.62 \%$ | $21.71 \%$ | 15.96\% | 38.87\% | 45.16\% | 29.04\% |
|  | Minority Population | 12,461 | 15,219 | 9,795 | 35,148 | 32,635 | 105,258 |
|  | Percent Minority | 10.12\% | 12.28\% | 7.91\% | 28.43\% | 26.25\% | 17.01\% |
|  | Hispanic or Latino | 21,570 | 17,617 | 15,882 | 23,522 | 34,717 | 113,308 |
|  | Hispanic or Latino/White | 16,592 | 11,666 | 9,982 | 12,628 | 23,580 | 74,448 |
|  | Percent Minority or Ethnic | 23.60\% | 21.69\% | 15.98\% | 38.64\% | 45.22\% | 29.04\% |
|  | Minority Population | 10,769 | 22,184 | 10,120 | 29,529 | 32,656 | 105,258 |
|  | Percent Minority | 8.66\% | 17.97\% | 8.14\% | 23.97\% | 26.44\% | 17.01\% |
|  | Hispanic or Latino | 17,692 | 18,398 | 16,093 | 26,386 | 34,739 | 113,308 |
|  | Hispanic or Latino/White | 13,503 | 11,670 | 10,119 | 15,562 | 23,594 | 74,448 |
|  | Percent Minority or Ethnic | 19.53\% | 27.42\% | 16.28\% | 36.60\% | 45.54\% | 29.04\% |
| Source: U.S. Census Bureau |  |  |  |  |  |  |  |

## Summary

In summary, Planning Staff believes that the Alternative 6, derived from the input received at the August 8, 2011 M\&P Meeting and community comments, meets or exceeds all of the statutory and case law precedents or common redistricting practices.

## Attachment 1

## 2001 Lee County Commission Redistricting

Page 3 of 3


Attachment 2

# MEMORANDUM <br> From The <br> Department of Community Development Division of Planning 

Date: October 26, 2011

To: Board of County Commissioners
From: Rick Burris
Principal Planner

## RE: November $1^{\text {st }} 9: 30$ Public Hearing 2011 Lee County Commission Redistricting

In preparation for the November $1^{\text {st }}$ public hearing on redistricting Lee County Commission Districts:

The attached supplement is an update to the 2011 Lee County Redistricting Report dated July 28, 2011. This supplement includes revised tables and maps for Lee County Redistricting Alternative 9. This alternative is based on comments received at and since the October $11^{\text {th }}$ Public hearing. Staff believes this alternative addresses resident and community concerns that have been submitted to the county staff.

## Attachments

cc: Karen Hawes, County Manager<br>Holly Schwartz, Assistant County Manager<br>Mary Gibbs, DCD/Director<br>Paul O'Connor, Planning Director<br>Michael Hunt, County Attorney<br>Andrea Fraser, Assistant County Attorney<br>Donna Marie Collins, Assistant County Attorney<br>Planning File

## 2011 Lee County Commission Redistricting

## Revised Tables

The tables below have been revised to include data for alternatives which were developed based on suggested changes made by the Board of County Commissioners and public comments received by the Planning Department.

Table 1

| Commission District Population Figures, 2000 \& 2010 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Commission <br> District | 2000 <br> Population | Deviation <br> from 2000 <br> Target | 2010 <br> Population | \% Deviation <br> from 2010 <br> Target |
| 1 | 89,975 | $2.0 \%$ | 111,416 | $-10.0 \%$ |
| 2 | 88,713 | $0.6 \%$ | 94,635 | $-23.5 \%$ |
| 3 | 86,904 | $-1.4 \%$ | 120,976 | $-2.2 \%$ |
| 4 | 87,918 | $-0.3 \%$ | 120,663 | $-2.5 \%$ |
| 5 | 87,378 | $-0.9 \%$ | 171,064 | $38.2 \%$ |
| Total 440,888 |  |  |  |  |
| 2000 Target Commission District Population $=88,176$ <br> 2010 Target Commission District Population $=123,751$ <br> (Target Population = Total County Population/5 Districts) <br> Source: U.S. Census Bureau |  |  |  |  |

Table 2

| Population Distribution by Commission District - Relative Range |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commission District |  | 1 | 2 | 3 | 4 | 5 |
| Current District Boundaries | Population | 111,416 | 94,635 | 120,976 | 120,663 | 171,064 |
|  | \% Deviation from Target | 10.0\% | -23.5\% | -2.2\% | -2.5\% | 38.2\% |
| Alternative 1 | Population | -124,503 | -124,101 | -124,203 | 122,890 | 123,057 |
|  | \% Deviation from Target | 0.6\% | 0.3\% | 0.4\% | -0.7\% | -0.6\% |
| Alternative 2 | Population | -123,266 | -123,772 | -123,933 | -124,079 | -123,704 |
|  | \% Deviation from Target | -0.4\% | 0.0\% | 0.2\% | 0.3\% | -0.0\% |
| Alternative 3 | Population | 123,492 | 123,745 | 123,764 | 123,669 | 124,084 |
|  | \% Deviation from Target | -0.2\% | 0.0\% | 0.0\% | -0.1\% | 0.3\% |
| Alternative 4 | Population | -124,058 | 123,807 | -124,052 | -123,526 | 123,311 |
|  | \% Deviation from Target | 0.3\% | 0.1\% | 0.2\% | -0.2\% | -0.4\% |
| Alternative 5 | Population | -123,130 | -123,926 | 123,756 | -123,629 | 124,313 |
|  | \% Deviation from Target | -0.5\% | 0.1\% | 0.0\% | -0.1\% | 0.5\% |
| Alternative 6 | Population | -124,294 | 123,445 | 124,284 | 123,210 | 123,521 |
|  | \% Deviation from Target | .4\% | -.3\% | .4\% | -4\% | -.2\% |
| Alternative 9 | Population | -123,749 | 123,653 | 123,883 | 123,590 | 123,879 |
|  | \% Deviation from Target | $0 \%$ | -. $1 \%$ | . $1 \%$ | -. $1 \%$ | .1\% |
| Source: U.S. Census Bureau |  |  |  |  |  |  |

## Attachment 1

Table 3
Population Distribution by Commission District - Overall Range

|  | High | Low | Difference |
| ---: | :---: | :---: | :---: |
| Current District Boundaries | 171,064 | 94,635 | 76,429 |
| Alternative 1 | 124,503 | 122,890 | 1,613 |
| Alternative 2 | 124,079 | 123,266 | 813 |
| Alternative 3 | 124,084 | 123,492 | 592 |
| Alternative 4 | 124,058 | 123,311 | 747 |
| Alternative 5 | 124,313 | 123,130 | 1,183 |
| Alternative 6 | 124,294 | 123,210 | 1,084 |
| Alternative 9 | 123,590 | 123,883 | 293 |
| Source: U.S. Census Bureau |  |  |  |

Table 4

| Population Distribution by Commission District - Percent Relative Mean |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | District 1 | District 2 | District 3 | District 4 | District 5 | Percent Relative Mean |
| Current Districts | 12,335 | 29,116 | 2,775 | 3,088 | 47,313 | 15.29\% |
| Alternative 1 | 752 | 350 | 452 | 861 | 694 | 0.38\% |
| Alternative 2 | 485 | 47 | 21 | 182 | 328 | 0.17\% |
| Alternative 3 | 259 | 6 | 13 | 82 | 333 | 0.11\% |
| Alternative 4 | 307 | 56 | 301 | 440 | 225 | 0.21\% |
| Alternative 5 | 621 | 175 | 5 | 122 | 562 | 0.24\% |
| Alternative 6 | 543 | 306 | 533 | 541 | 230 | 0.35\% |
| Alternative 9 | 2 | 98 | 132 | 161 | 128 | 0.08\% |
| 2010 Target Commissi Source: U.S. Census B | District Pop reau | $\text { lation }=123,7$ | (Target | $\text { pulation }=\mathrm{Tot}$ | County Pop | on/5 Districts) |

Table 5

| Measure of Compactness |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | District 1 | District 2 | District 3 | District 4 | District 5 |  |
| Current Districts | .56 | .55 | .33 | .53 | .60 |  |
| Alternative 1 | .45 | .52 | .46 | .57 | .47 |  |
| Alternative 2 | .45 | .46 | .55 | .59 | .36 |  |
| Alternative 3 | .45 | .49 | .29 | .40 | .38 |  |
| Alternative 4 | .55 | .34 | .32 | .33 | .49 |  |
| Alternative 5 | .55 | .35 | .33 | .34 | .55 |  |
| Alternative 6 | .54 | .38 | .39 | .52 | .56 |  |
| Alternative 9 | .57 | .44 | .40 | .52 | .56 |  |
| Source: Lee County Planning/GIS shapefile |  |  |  |  |  |  |

## Attachment 1

Table 6

| Minority, Black or African American and Hispanic Population by Commission District |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { District } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \hline \text { District } \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \hline \text { District } \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { District } \\ 4 \\ \hline \end{gathered}$ | District 5 | County Total |
|  | Minority Population | 8,089 | 35,641 | 10,148 | 14,054 | 37,326 | 105,258 |
|  | Percent Minority | 7.26\% | 37.66\% | 8.39\% | 11.65\% | 21.82\% | 17.01\% |
|  | Black or African American Population | 3,160 | 23,097 | 2,204 | 6,158 | 21,395 | 56,014 |
|  | Percent Black or African American | 2.84\% | 24.41\% | 1.82\% | 5.10\% | 12.51\% | 9.05\% |
|  | Hispanic or Latino | 13,667 | 21,165 | 16,449 | 20,837 | 41,190 | 113,308 |
|  | Hispanic or Latino/White | 10,575 | 10,403 | 10,405 | 14,924 | 28,141 | 74,448 |
|  | Percent Minority or Ethnic | 16.75\% | 48.65\% | 16.99\% | 24.02\% | 38.27\% | 29.04\% |
|  | Minority Population | 9,891 | 38,226 | 11,100 | 13,909 | 32,123 | 105,258 |
|  | Percent Minority | 7.94\% | 30.80\% | 8.94\% | 11.32\% | 26.11\% | 17.01\% |
|  | Black or African American Population | 3,795 | 24,130 | 2,341 | 6,165 | 19,583 | 56,014 |
|  | Percent Black or African American | 3.05\% | 19.44\% | 1.88\% | 5.02\% | 15.91\% | 9.05\% |
|  | Hispanic or Latino | 15,785 | 23,597 | 18,071 | 20,681 | 35,174 | 113,308 |
|  | Hispanic or Latino/White | 11,368 | 12,281 | 11,613 | 15,537 | 23,947 | 74,448 |
|  | Percent Minority or Ethnic | 17.07\% | 40.70\% | 18.29\% | 23.46\% | 45.57\% | 29.04\% |
|  | Minority Population | 9,671 | 39,255 | 10,786 | 14,335 | 31,211 | 105,258 |
|  | Percent Minority | 7.85\% | 31.71\% | 8.70\% | 11.55\% | 25.23\% | 17.01\% |
|  | Black or African American Population | 3,739 | 24,502 | 2,230 | 6,343 | 19,200 | 56,014 |
|  | Percent Black or African American | 3.03\% | 19.81\% | 1.80\% | 5.12\% | 15.91\% | 9.05\% |
|  | Hispanic or Latino | 15,251 | 25,329 | 17,674 | 21,507 | 33,547 | 113,308 |
|  | Hispanic or Latino/White | 11,368 | 13,279 | 11,272 | 15,537 | 22,992 | 74,448 |
|  | Percent Minority or Ethnic | 17.07\% | 42.44\% | 17.80\% | 24.08\% | 43.82\% | 29.04\% |
| $\begin{aligned} & \text { M } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Minority Population | 12,472 | 26,090 | 9,027 | 27,053 | 30,616 | 105,258 |
|  | Percent Minority | 10.10\% | 21.08\% | 7.29\% | 21.88\% | 24.67\% | 17.01\% |
|  | Black or African American Population | 5,384 | 16,420 | 1,797 | 14,288 | 18,125 | 56,014 |
|  | Percent Black or African American | 4.36\% | 13.27\% | 1.45\% | 11.55\% | 14.61\% | 9.05\% |
|  | Hispanic or Latino | 21,736 | 16,583 | 15,030 | 25,726 | 34,233 | 113,308 |
|  | Hispanic or Latino/White | 16,774 | 10,152 | 9,651 | 14,677 | 23,194 | 74,448 |
|  | Percent Minority or Ethnic | 23.68\% | 29.29\% | 15.09\% | 33.74\% | 43.37\% | 29.04\% |
|  | Minority Population | 12,572 | 15,228 | 9,805 | 35,341 | 32,312 | 105,258 |
|  | Percent Minority | 10.13\% | 12.30\% | 7.90\% | 28.66\% | 26.16\% | 17.01\% |
|  | Black or African American Population | 5,456 | 6,260 | 2015 | 22,489 | 19,794 | 56,014 |
|  | Percent Black or African American | 4.40\% | 5.06\% | 1.62\% | 18.24\% | 16.02\% | 9.05\% |
|  | Hispanic or Latino | 21,745 | 17,602 | 15,901 | 23,783 | 34,277 | 113,308 |
|  | Hispanic or Latino/White | 16,736 | 11,656 | 9,996 | 12,590 | 23,470 | 74,448 |
|  | Percent Minority or Ethnic | $23.62 \%$ | 21.71\% | 15.96\% | 38.87\% | 45.16\% | 29.04\% |
|  | Minority Population | 12,461 | 15,219 | 9,795 | 35,148 | 32,635 | 105,258 |
|  | Percent Minority | 10.12\% | 12.28\% | 7.91\% | 28.43\% | 26.25\% | 17.01\% |
|  | Black or African American Population | 5,383 | 6,242 | 2,015 | 22,419 | 19,955 | 56,014 |
|  | Percent Black or African American | 4.37\% | 5.04\% | 1.63\% | 18.13\% | 16.05\% | 9.05\% |
|  | Hispanic or Latino | 21,570 | 17,617 | 15,882 | 23,522 | 34,717 | 113,308 |
|  | Hispanic or Latino/White | 16,592 | 11,666 | 9,982 | 12,628 | 23,580 | 74,448 |
|  | Percent Minority or Ethnic | 23.60\% | 21.69\% | 15.98\% | 38.64\% | 45.22\% | 29.04\% |

## Attachment 1

| Minority, Black or African American and Hispanic Population by Commission District |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | District 1 | District $2$ | District 3 | District 4 | District <br> 5 | County Total |
|  | Minority Population | 10,769 | 22,184 | 10,120 | 29,529 | 32,656 | 105,258 |
|  | Percent Minority | 8.66\% | 17.97\% | 8.14\% | 23.97\% | 26.44\% | 17.01\% |
| $\stackrel{\sim}{3}$ | Black or African American Population | 4,303 | 12,156 | 2,124 | 17,445 | 19,986 | 56,014 |
| EI | Percent Black or African American | 3.46\% | 9.85\% | 1.71\% | 14.16\% | 16.18\% | 9.05\% |
|  | Hispanic or Latino | 17,692 | 18,398 | 16,093 | 26,386 | 34,739 | 113,308 |
|  | Hispanic or Latino/White | 13,503 | 11,670 | 10,119 | 15,562 | 23,594 | 74,448 |
|  | Percent Minority or Ethnic | 19.53\% | 27.42\% | 16.28\% | 36.60\% | 45.54\% | 29.04\% |
|  | Minority Population | 10,613 | 17,430 | 10,065 | 31,114 | 36,036 | 105,258 |
|  | Percent Minority | 8.58\% | 14.10\% | 8.12\% | 25.18\% | 29.09\% | 17.01\% |
| E | Black or African American Population | 4,324 | 7,824 | 2,101 | 21,066 | 20,699 | 56,014 |
| $\stackrel{E}{\pi}$ | Percent Black or African American | 3.49\% | 6.33\% | 1.70\% | 17.05\% | 16.71\% | 9.05\% |
|  | Hispanic or Latino | 18,008 | 17,693 | 16,040 | 22,837 | 38,730 | 113,308 |
|  | Hispanic or Latino/White | 13,929 | 11,654 | 10,090 | 20,227 | 18,548 | 74,448 |
|  | Percent Minority or Ethnic | 19.83\% | 23.52\% | 16.27\% | 41.54\% | 44.06\% | 29.04\% |

Source: U.S. Census Bureau

## Summary

In summary, Planning Staff believes that the Alternatives 6 and 9 , derived from the input received since the August 8, 2011 M\&P Meeting and community comments, meet or exceed all of the statutory and case law precedents or common redistricting practices.

## Attachment 1



Attachment 2


[^0]:    ${ }^{1}$ Target Population $(123,751)=$ Total county population $(618,754) /$ number of districts $(5)$

[^1]:    ${ }^{2}$ The compactness (C) of a given polygon can be calculated as $4 \pi$ times the area (a) divided by the perimeter (p) squared ( $C=4 \pi \mathrm{~m} / \mathrm{p}^{2}$ )

