

Consultant Report: District Analysis for the City of Cooper City

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John Scott Dailey Florida Institute of Government
Florida Atlantic University

Steven Bourassa, Ph.D.
Professor and Chair, Department of Urban and Regional Planning

James Gammack-Clark, M.A., Ph.D. candidate (ABD)
Senior Instructor, Department of Geosciences

Ronald R. Schultz, Ph.D.
Professor Emeritus, Department of Geosciences

Introduction

The City of Cooper City contracted with Florida Atlantic University (FAU) to conduct an analysis of their City Commission election districts. The contract outlines a two-part process: Part A, a population analysis of the current election districts and recommendation for redistricting and Part B, if necessary, the creation of redistricting options for the City. FAU has performed redistricting services for the City of Cooper City in the past.

This report transmits a general analysis of the 2020 U.S. Census apportionment dataset, adjusted for future growth to the year 2023, as well as a population analysis of the existing City Commission election districts for the City. The report then provides a recommendation as to whether the City should conduct a full redistricting analysis.

The districting requirements in the City Charter are consistent with generally accepted standard practice, legal rulings and guidelines that emanate from the 1965 Voting Rights Act as well as its Amendments. The consulting team was tasked by the City to prepare an analysis of population balance among the districts that accounts for the 2020 U.S. Census population count to determine if the districts have fallen out of alignment.

The 2020 Census

There are two primary differences that make the 2020 U.S. Census stand out from those that preceded it: a significant delay in its release due to the COVID-19 pandemic, and the implementation of a brand new 'differential privacy' policy. We will briefly address both of these here for the sake of posterity and context.

The decennial census aims to capture a snapshot in time of the population of the United States of America. Understanding that the population is constantly changing, with births, deaths, and migration patterns constantly adjusting the fabric of the American people, Census Day represents a single moment in time for which the U.S. population is enumerated with the greatest precision possible. This day is always April 1st. By this date, every household in America received an invitation to participate in the 2020 census, with three options to respond: online, by mail, or by phone. The 2020 census was the first to include an online response option. Subsequent to this day is a period of time in which the U.S. Census Bureau follows up with non-responders and begins a quality control process. Traditionally, the Census Bureau would deliver

an apportionment count to the U.S. President on December 31st, followed by a distribution of redistricting data to the states exactly one year to the day after Census Day: in this case, April 1, 2021.

However, due to complications caused by the COVID-19 pandemic, the Census Bureau sought statutory relief from Congress that would allow for apportionment counts to be delivered to the President by April 30, 2021, and redistricting data to be delivered to the states no later than September 30, 2021. Additionally, the Census Bureau compressed the typical three-month nonresponse follow up enumeration period to two and half months. Ultimately, redistricting data were released in a 'legacy format' on August 12, 2021. This delay inevitably and unavoidably complicated redistricting efforts for every electoral district in the nation. It also meant that the amount of error in the data, inherent to every census where 100% accuracy is impossible, would likely be greater in the 2020 census. The Census Bureau has since confirmed that the rate of missing information was higher in the 2020 census than in the 2010 census. However, they have also stated that this rate was lower than they initially feared.

The 2020 redistricting data is the first to employ 'differential privacy protection'. This represents the Census Bureau's introduction of 'noise' into the data at the more local geographic scale (Blocks and Block Groups) with the intent to strike a balance between data protection and precision. The effect is that while the enumeration counts can be trusted at the Census Tract level, we must anticipate a certain degree of 'fuzziness' at the Block level. Specifically, while the aggregate count of population for a Census Tract will be accurate, a certain proportion of people/housing units will have been *deliberately* misallocated by the Census Bureau at the Block level. While this may not be problematic in the realignment of Congressional Districts, for example, it certainly represents a challenge for Municipal Districts, for which the geographic precision of Census Blocks is highly desirable.

Taken together, therefore, the complications related to the COVID-19 pandemic and the implementation of 'differential privacy' introduce a certain amount of additional uncertainty to the primary source of data for this analysis (2020 Census Redistricting Data (PL 94-171)) that is unprecedented. Nevertheless, these data remain the standard upon which municipal redistricting efforts shall be based across the nation.

City of Cooper City Charter

Per Section 3.03 Election Districts of the City Charter:

(1) The city commission shall establish four (4) election districts by ordinance, each containing as close to one-quarter (25%) of the total population of the city as possible in a contiguous region without dividing any residential community, and so that no election district has a population variance of more than 10% from any other election district. An election district map and a description of the districts shall be prepared which shall be available to the public.

(2) (a) Following the amendment of this section 3.03 at the election of November 6, 2012, the commission shall by ordinance, which is adopted at least six (6) months prior to the commencement of the candidate qualifying period for the November 2014 regular city commission election, adjust the election district configurations so that no election district has a population variance of more than 10% from any other election district.

(b) The commission shall review the election districts to determine if the population of the city remains evenly distributed within the four (4) districts within six (6) months after the release of any U.S. Decennial Census.

(3) Upon completion of the review required by paragraph (2)(b) above, in the event that the commission finds that the population of the city is not distributed among the election districts as required by paragraph (1) above, and further finds that the redistribution of population may be accomplished without dividing any residential community, the commission shall by ordinance, which is adopted no less than six (6) months prior to the commencement of the candidate qualifying period for the next regular city commission election, adjust the election district configurations accordingly.

(4) Further, if it shall come to the attention of the commission subsequent to the adjustment of election districts pursuant to paragraph (2)(a) or paragraph (3) above, that a population variance of more than 10% between the population of election districts has arisen, the commission shall again adjust the election district configurations accordingly, upon finding that the redistribution of population may be accomplished without dividing any residential community and upon finding that such adjustment may be accomplished no less than six (6) months prior to the commencement of the candidate qualifying period for the next regular city commission election.

Current Districts

Evaluation of Future Growth:

City staff identified two developments that are expected to be constructed and occupied by 2023: King Fisher Reserve and Monterra (55+ Community). A population projection was established for King Fisher Reserve project by multiplying the number of units by the Persons Per Household (PPH) value established by the U.S. Census for the City of Cooper City (2015-2019): 3.15 (with the result rounded to the nearest whole number). The units for Monterra, meanwhile, were multiplied by the more conservative value of 1.58 PPH due to the fact that it is intended to be a retirement community. As neither the US Census, nor University of Florida’s Bureau of Economic and Business Research (BEBR) maintain PPH statistics for retirement communities, this value of 1.58 was modeled on that of nearby Century Village. These properties and their population projections are listed in **Table 1** below. In total, an additional 400 people will be added to the city’s total population count, with the majority (277) being allotted to District 1. The remainder will be added to District 2.

*Table 1 – City of Cooper City
Population Estimates for Approved Developments*

Subdivision	Units	Population Estimate	Current District
King Fisher Reserve	39	123	2
Monterra (55+ Community)	175	277	1
	214	400	

Evaluation of Present Conditions:

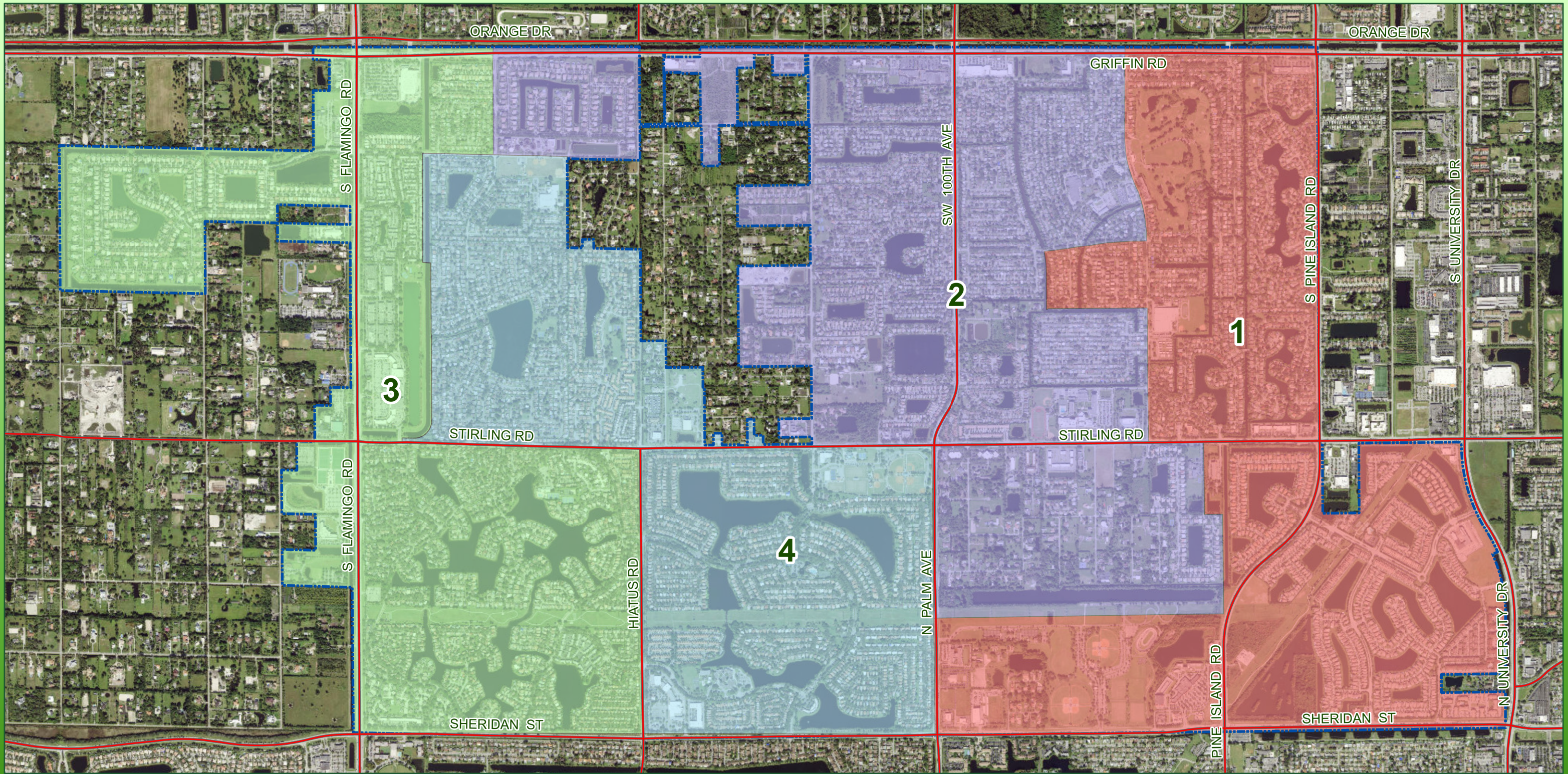
Accounting for this anticipated growth, the 2023 projected population for the City of Cooper City is 34,801. Dividing by four puts the average population for each district at 8,700. The **Existing Districts Map** and **Table 2** show the geographic boundaries and population counts for the current districts. The district with the greatest projected population is District 1 with 9,405 residents; the district with the smallest projected population is District 4 with 8,222 residents. District 2, with a projected population of 8,899, is closest to the ideal district size.

The data show that the current Commission Districts are unbalanced and that the deviation is sufficient to warrant redistricting (see **Table 2**). District 1 accounts for the greatest portion of the city’s projected population at 27.03%. This deviates from the theoretical average population of 8,700 by 8.1%.





District 4, the smallest district, has 23.63% of the projected population and deviates from the average by -5.5%. This represents a difference of 1,183 people between the two districts. Therefore, the spread or range between the largest and smallest districts is **13.6%** (8.1% + 5.5%). District 3 is 4.89% below the average, while District 2 is 2.28% above the average. This aggregates to a sum deviation of **20.77%** across all four districts. As such, the current population imbalance exceeds the stipulation in the criteria for redistricting: there must be no more than a 10% deviation between districts.

*Table 2 – Current Commission Districts – City of Cooper City
2020 Enumeration and 2023 Population Projection*

Current Districts	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	9,128	26.53	6.14%	9,405	27.03	8.10%
District 2	8,776	25.51	2.04%	8,899	25.57	2.28%
District 3	8,275	24.05	-3.78%	8,275	23.78	-4.89%
District 4	8,222	23.90	-4.40%	8,222	23.63	-5.50%
Total	34,401	100	16.36%	34,801	100	20.77%
Average	8,600	25	4.09%	8,700	25	5.19%



CITY OF
Cooper City
 Existing Districts

-  District 1
-  District 2
-  District 3
-  District 4



Current Districts	2023 Population	% of City	Deviation From Average
District 1	9,405	27.03	8.10%
District 2	8,899	25.57	2.28%
District 3	8,275	23.78	-4.89%
District 4	8,222	23.63	-5.50%
Total	34,801	100	20.77%
Average	8,700	25	5.19%

Redistricting Criteria and Data Sources

The City's Charter provides specific framework for redistricting whereas, the City will review the election districts to determine if the population of the City remains evenly distributed among the four election districts within six months of the release of any U.S. Decennial Census. The Charter states that election districts should each contain as close to one-quarter (25%) of the total population of the City in a contiguous region without dividing any residential community and so that no district has a population variance of more than 10% from another election district.

Additionally, the consultant will abide by the following standards by which rational districts are developed nationwide and which are supported by case law and practice throughout the nation. These criteria can be summarized as follows:

- 1) Reasonable population equality across districts:
 - Districts should have approximately the same number of people when all persons, regardless of age, are counted. Ideal district size is based on the total population divided by the number of districts.
 - Redistricting should adhere to Section 2 of the Voting Rights Act of 1965, as amended and interpreted through case law. This criterion requires that minority population clusters be respected in the development of district boundaries. Arbitrary dilution and other discriminatory practices are prohibited.
 - Redistricting should adhere to Florida's Fair Districting Amendment.
 - Although deviations should be avoided wherever possible, there must be no more than a 10% overall deviation from the ideal size across districts.
- 2) Geographic contiguity and appropriate compactness:
 - Follow major natural and manmade boundaries to the extent possible in defining boundaries of voting districts.
 - Maintain the integrity of communities of interest based on race, life cycle/age, income, and other community identity characteristics such as subdivisions.
 - Minimize the degree of change in pre-existing patterns of districts, to promote continuity of citizen identification with a district.
 - Maintain district compactness and spatial contiguity. A compact shape for each district will be sought in each redistricting option presented to the city.

The first criterion is of primary importance; the second is significant in guiding decisions in reaching reasonable population balance.

In developing revised election district for the City of Cooper City, the spatial units used in composing or building the districts are residential housing subdivisions (communities) and U.S. Census blocks. Subdivisions are typically homogeneous in their housing characteristics and thus serve households with broadly similar interests. Therefore, district borders are typically subdivision boundaries and associated major roadways or other obvious physical features. U.S. Census blocks are typically subunits in subdivisions and are the smallest spatial unit used in tabulating Census data.

Recommendation

It is the opinion of the FAU redistricting team that a realignment of City Commission election district boundaries, to better balance their population, is required. The overall pattern of district boundary changes will need to reduce the population of District 1 and expand those of Districts 3 and 4 to make the population more equitable between districts. This will, of course, necessitate an adjustment of the geographic boundaries where District 1 must contract in size, while Districts 3 and 4 must add territory. Thus, it is our recommendation, that the City of Cooper City engage in Part B of the proposal and begin the redistricting process.

It is the intent of the FAU team to provide the City of Cooper City Commission with at least three redistricting map alternatives for their consideration, consistent with the terms of the agreement between FAU and the City.

Appendix

District Demographics

The table below depicts the demographic information taken from the 2020 U.S. Census for the existing Commission districts. Note: The columns 'White' through 'Other' sum to the City's total population as they constitute the Census' definition of race. The last two columns 'Hispanic or Latino' and 'Not Hispanic or Latino' also sum to the City's total population as this represents the Census classification of ethnicity.

*Current Commission Districts – City of Cooper City
Expanded Demographics, U.S. Census 2020*

District (Existing)	Total Population	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other	Hispanic or Latino	Not Hispanic or Latino
1	9,128	5,130 (56.2%)	660 (7.23%)	32 (0.35%)	726 (7.95%)	3 (0.03%)	2,577 (28.23%)	3,037 (33.27%)	6,091 (66.73%)
2	8,776	5,223 (59.51%)	414 (4.72%)	35 (0.4%)	715 (8.15%)	5 (0.06%)	2,384 (27.16%)	2,836 (32.32%)	5,940 (67.68%)
3	8,275	4,732 (57.18%)	530 (6.4%)	16 (0.19%)	684 (8.27%)	1 (0.01%)	2,312 (27.94%)	2,715 (32.81%)	5,560 (67.19%)
4	8,222	5,329 (64.81%)	427 (5.19%)	16 (0.19%)	502 (6.11%)	8 (0.1%)	1,940 (23.6%)	2,352 (28.61%)	5,870 (71.39%)
	34,401	20,414 (59.34%)	2,031 (5.9%)	99 (0.29%)	2,627 (7.64%)	17 (0.05%)	9,213 (26.78%)	10,940 (31.8%)	23,461 (68.2%)