



FLORIDA ATLANTIC UNIVERSITY

City of Cooper City Redistricting Alternatives

City of Cooper City, Florida



Outline

- The FAU Redistricting Team
- The City Charter
- Existing Districts
- Redistricting Parameters
- Alternatives
- Summary



FAU Redistricting Team

- 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



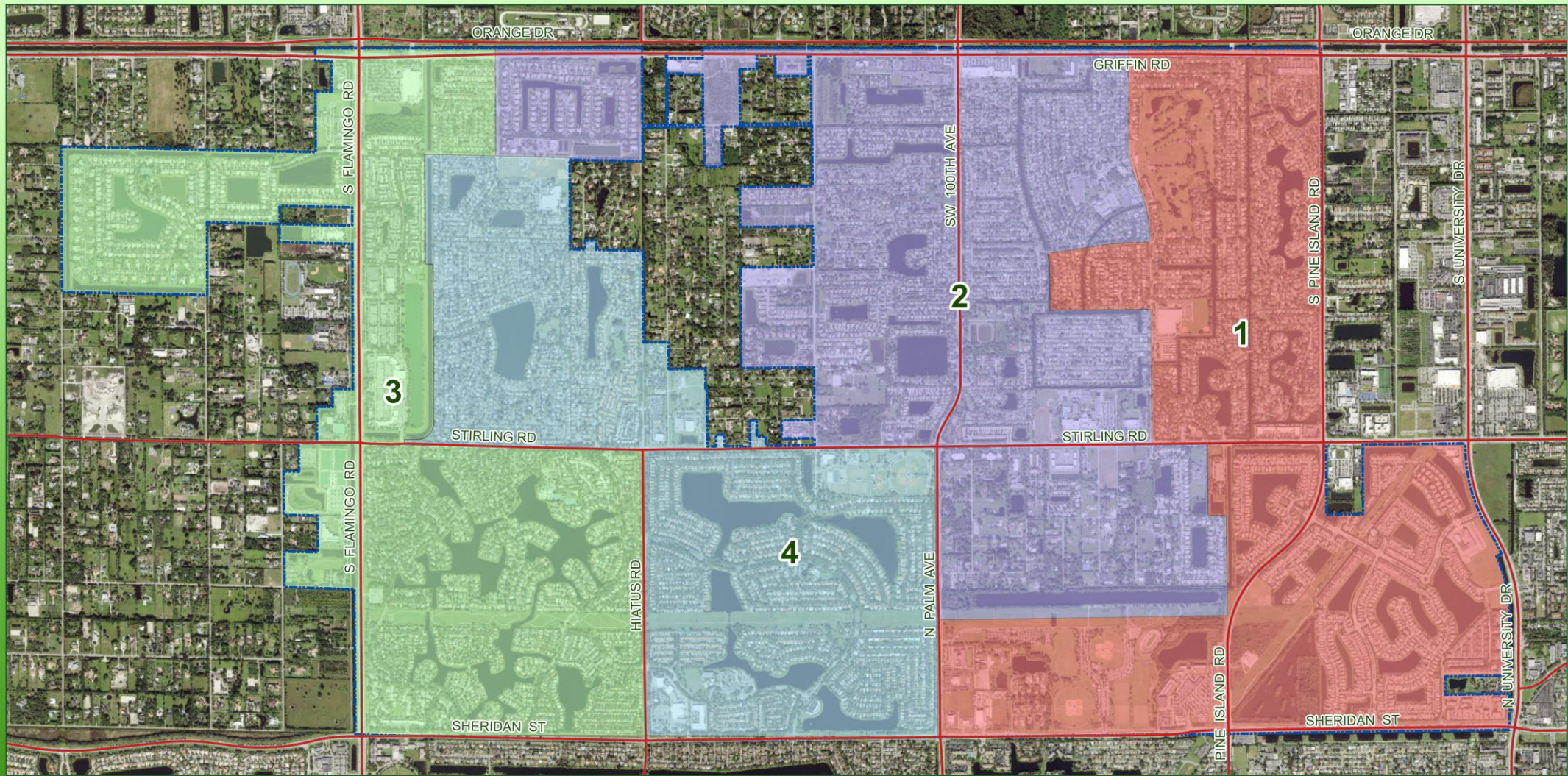
Redistricting Parameters

- 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...
 - ... (2)(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) 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... 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.”
- 1965 Voting Rights Act and its Amendments



Data

- U.S. Census Bureau's 2020 Census Redistricting Summary Files [Public Law 94-171]:
 - Resident population counts by census block
 - The smallest enumeration unit possible
 - Aggregated to form each of the four voting districts
- Housing Data provided by The City of Cooper City
 - From which Population Estimates were derived to account for new housing, scheduled for construction by January of 2023



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Existing Districts

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



Current Districts	2023 Population	% of City	Deviation From Average
District 1	9,679	27.60	10.38%
District 2	8,899	25.37	1.49%
District 3	8,275	23.59	-5.63%
District 4	8,222	23.44	-6.24%
Total	35,075	100	23.73%
Average	8,769	25	5.93%



2020 Enumeration and 2023 Population Projection

- Current Districts are unbalanced
 - Total deviation of 20.77% between all four districts
 - Spread between largest and smallest districts is 13.6%
 - Exceeding stipulated Max. 10% deviation from average across districts

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%



Redistricting Parameters

- The following guide our efforts:
 1. Reasonable population equality across districts
 - A maximum 10% overall deviation from the ideal size across districts.
 - Adhere to Section 2 of the Voting Rights Act of 1965: Arbitrary dilution of minority population clusters and other discriminatory practices are prohibited.
 2. Geographic contiguity and appropriate compactness
 - Follow major natural and manmade boundaries where possible.
 - Respect for the integrity of communities of interest.
 - Minimize the degree of change in pre-existing patterns of districts.
- Population equality is of primary importance
 - The others are significant in guiding decisions towards reaching reasonable population balance.



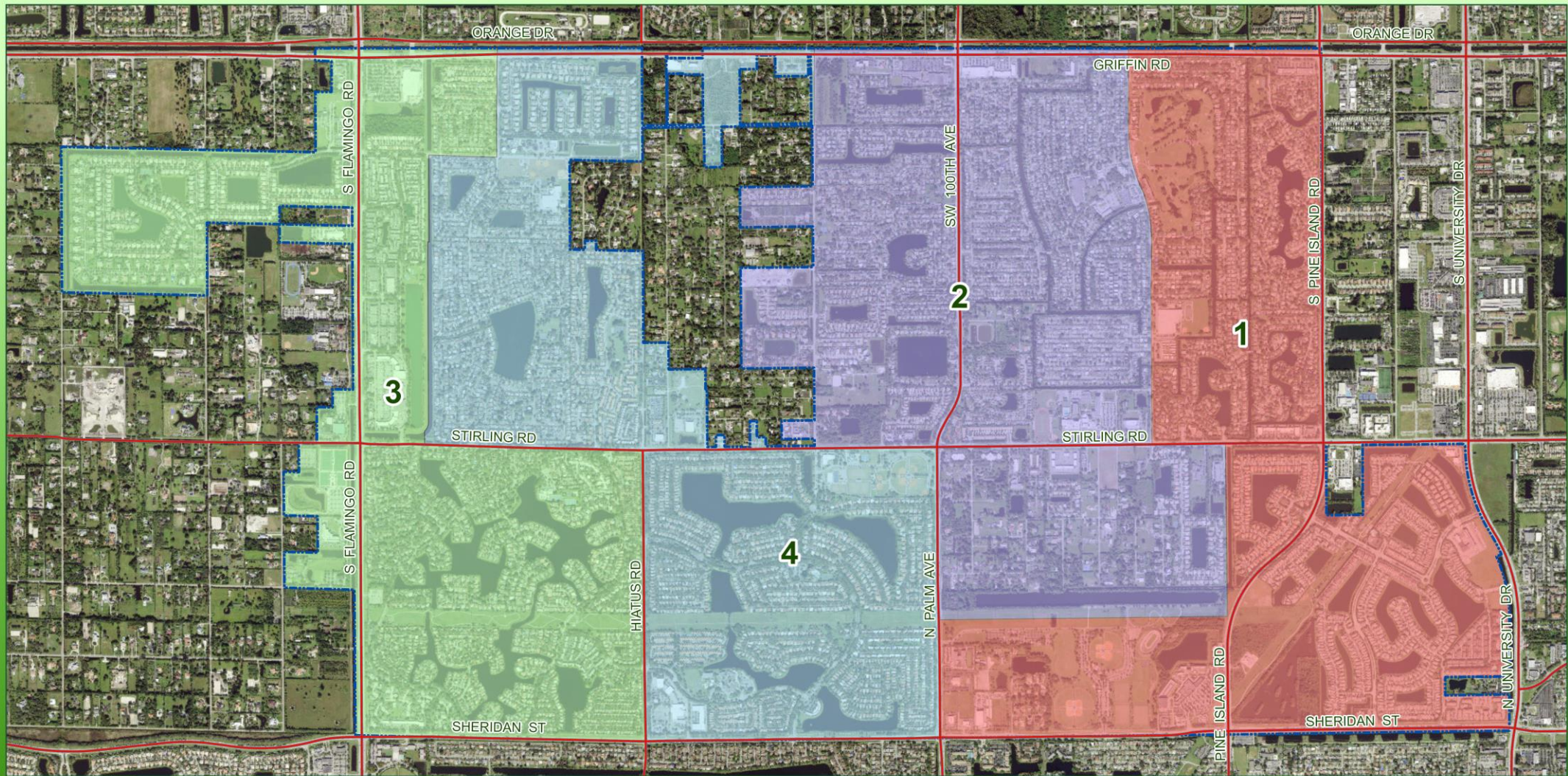
Alternatives

- Four Alternatives have been prepared for consideration:
 - All meet standard districting guidelines and the requirements of the City Charter
 - Alternative ways to better balance district populations
 - Keep with the intent of the other identified guidelines
 - The overall pattern of district boundary changes needed to reduce the population of District 1 and expand those of Districts 3 and 4.
 - This necessitated an adjustment of the geographic boundaries where District 1 contracted in size, while Districts 3 and 4 added territory.
- One of the Alternatives, 3B, is a slight tweak of Alternative 3



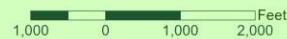
Alternative 1

- A Minimalist Approach
 - Improves overall population balance (Criterion #1) while making the least possible amount of alterations to the existing Districts
 - Achieved by moving territory from District 1 to District 2 and from District 2 to District 4
 - No change is made to District 3 under this Alternative



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Alternative 1

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

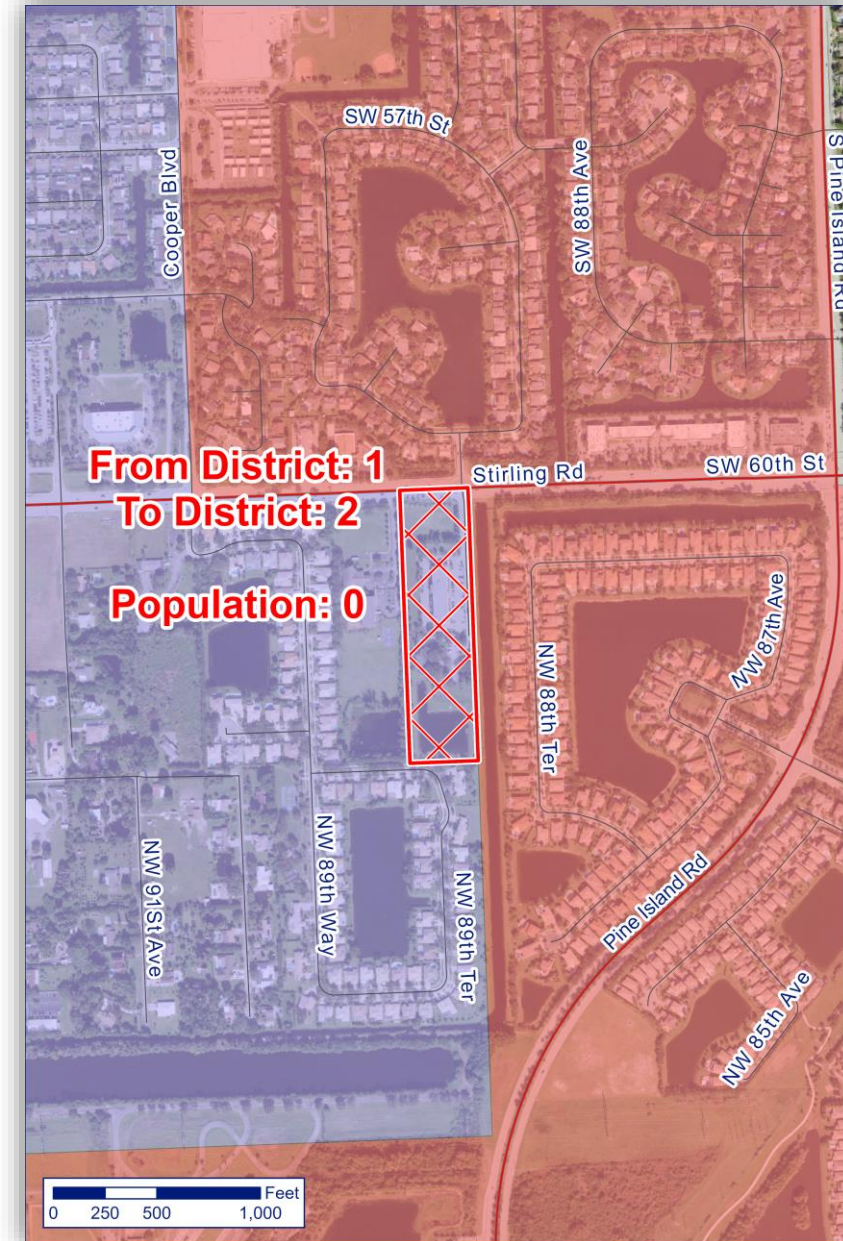


Alternative 1	2023 Population	% of City	Deviation From Average
District 1	8,683	24.95	-0.20%
District 2	9,125	26.22	4.88%
District 3	8,275	23.78	-4.89%
District 4	8,718	25.05	0.20%
Total	34,801	100	10.17%
Average	8,700	25	2.54%



Alternative 1

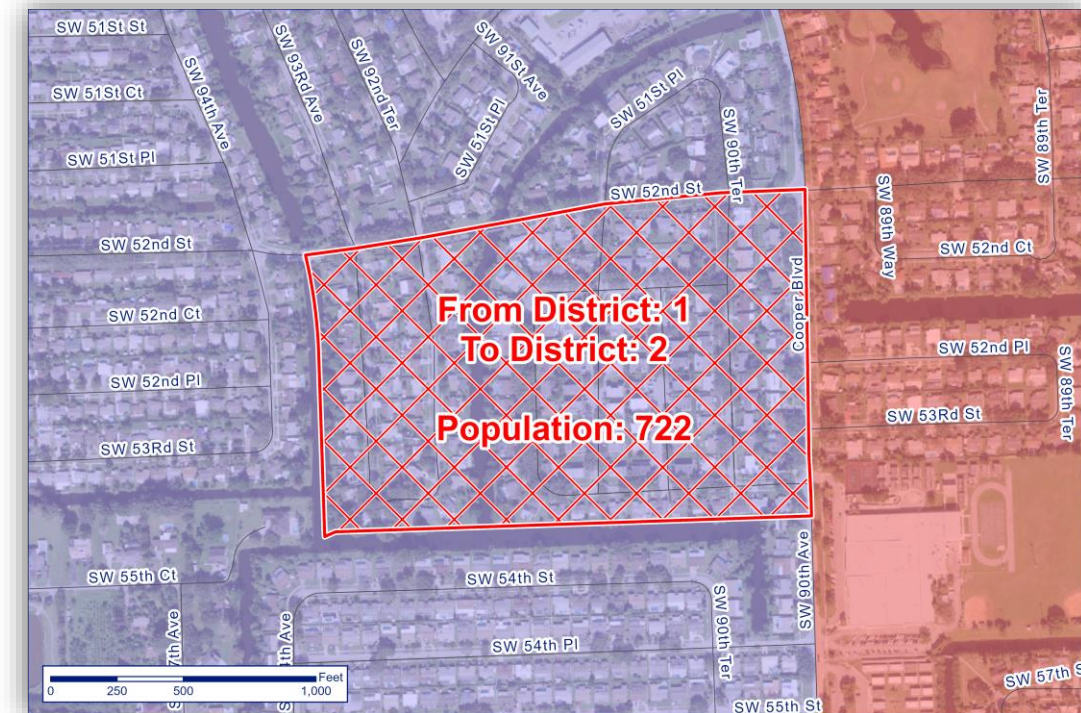
- District 2:
 - Absorbs the non-residential parcel on the southwest corner of Stirling Road and NW 89th Ave.
 - Taken from District 1
 - Change made for improved compactness, and to have the District boundary follow the canal.
 - (Also included in Alternative 2)





Alternative 1

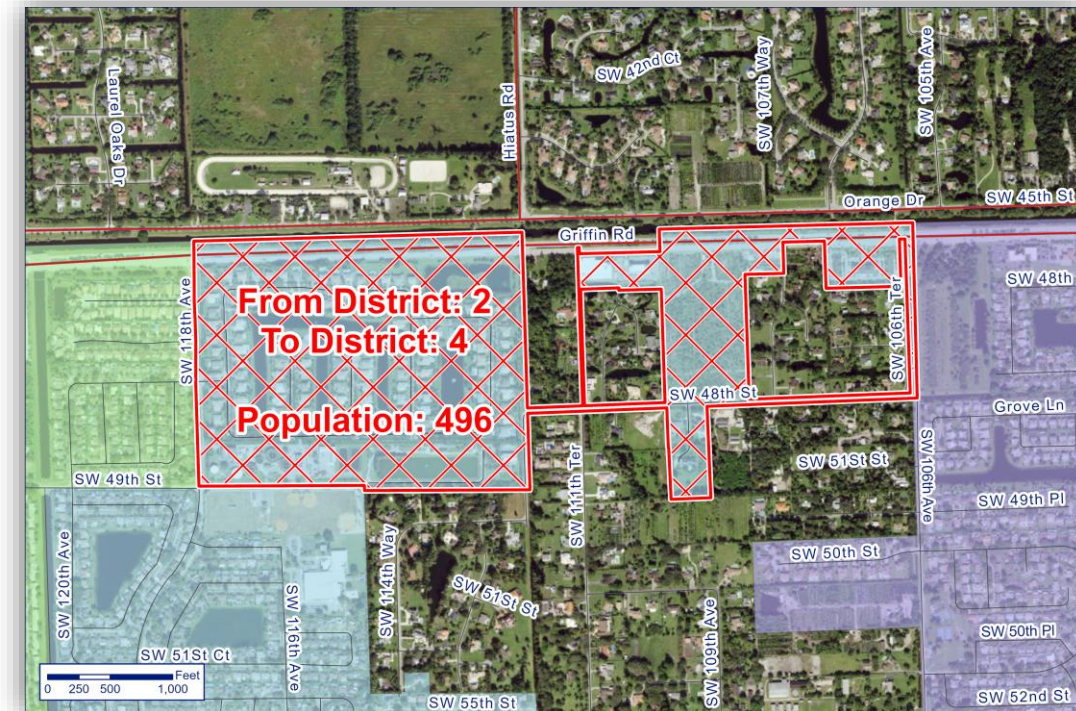
- District 2:
 - That portion of District 1 that presently protrudes west of Cooper Blvd, south of SW 52nd, and north and east of the bounding canals, are absorbed into District 2
 - The projected population of District 1 is 705 people greater than the ideal average of 8,700.
 - This adjustment addresses the imbalance of District 1 and improves the overall spatial compactness
 - (Also included in Alternative 2)
 - Cooper Colony Estates remains split between Districts 1 & 2





Alternative 1

- District 4:
 - The neighborhood Hibbs Grove, and that part of Cooper City found between Hibbs Grove and SW 106th Ave, are moved from District 2 to District 4
 - This adjustment affects 496 residents.
 - Improves the overall spatial compactness of the Districts
 - Following the prior additions to District 2, this subtraction brings it within tolerance





Alternative 1

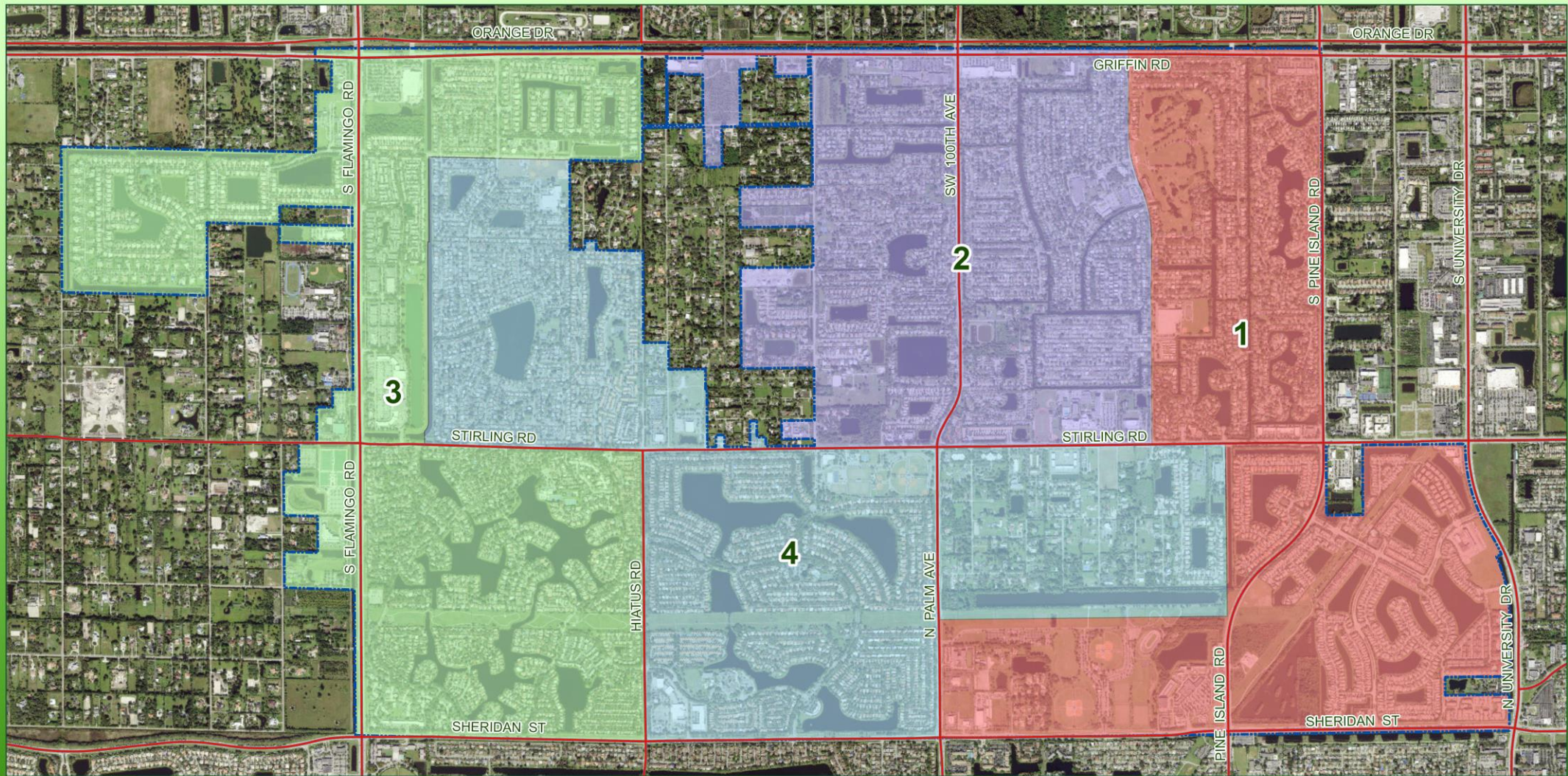
- Overall Deviation is much improved under Alternative 1
 - Total Deviation falls from 20.77% to 10.17%, while the Mean Deviation falls from of 5.19% to 2.54%
 - The Spread falls from 13.6% to 9.77% (highest spread of all alternatives)

Alternative 1	2023 Population	% of City	Deviation From Average
District 1	8,683	24.95	-0.20%
District 2	9,125	26.22	4.88%
District 3	8,275	23.78	-4.89%
District 4	8,718	25.05	0.20%
Total	34,801	100	10.17%
Average	8,700	25	2.54%



Alternative 2

- Seeks both improved population (Criterion #1) balance and geographic compactness (Criterion #2) by more aggressively adjusting the existing Commission District boundaries
 - Achieved by moving territory from District 1 to District 2, from District 2 to District 3, and from District 2 to District 4



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 Alternative 2

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

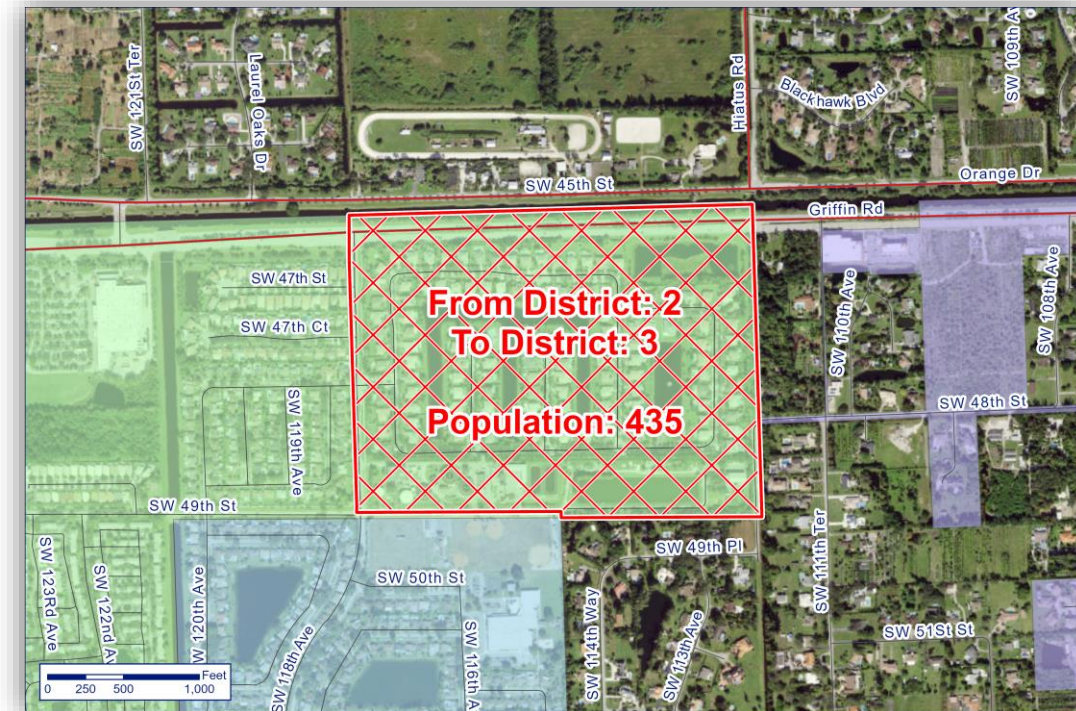


Alternative 2	2023 Population	% of City	Deviation From Average
District 1	8,683	24.95	-0.20%
District 2	8,397	24.13	-3.49%
District 3	8,710	25.03	0.11%
District 4	9,011	25.89	3.57%
Total	34,801	100	7.37%
Average	8,700	25	1.84%



Alternative 2

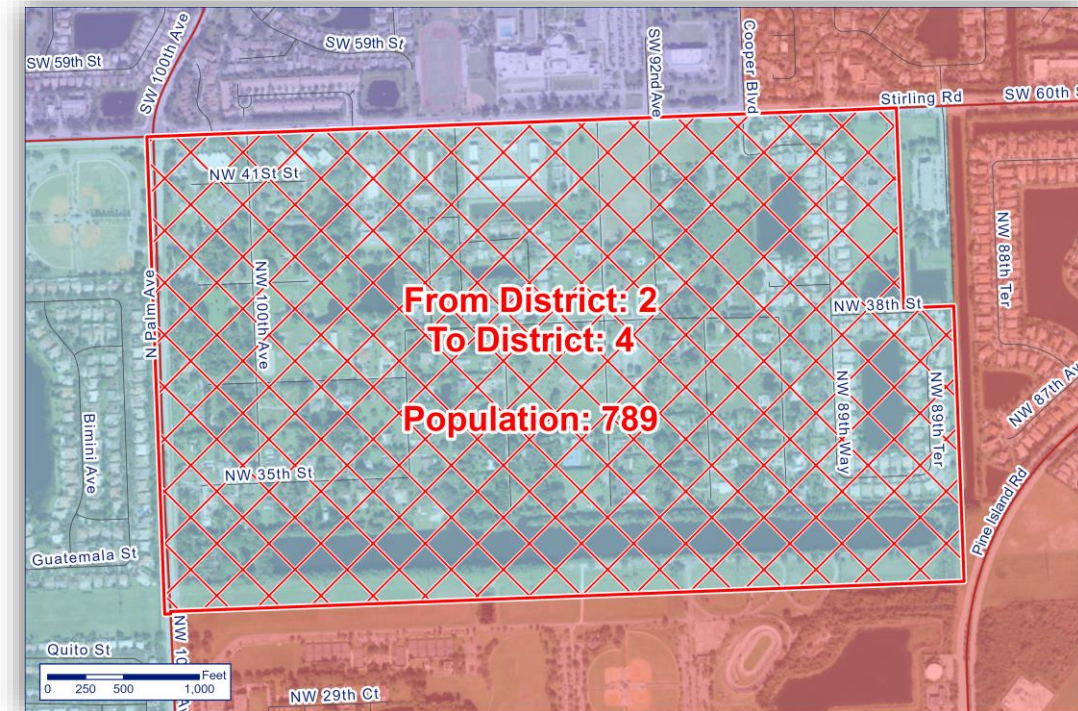
- District 3:
 - Under this alternative, the Hibbs Grove neighborhood (and its 435 residents) is moved from District 2 to District 3
 - Under the current Districts, the projected population is 425 people fewer than the ideal average of 8,700
 - Population would be 8,710
 - This adjustment improves both population balance and spatial compactness.





Alternative 2

- District 4:
 - In the present configuration, District 4 has 478 fewer residents than the 2023 projected ideal average, and thus has a deviation of -5.5%.
 - The following neighborhoods are moved from District 2 to District 4:
Royal Palm Ranches, Stirling Village, and Diamond Head.
 - Their collective population is 789.
 - District 4's deviation is reduced to 3.57%





Alternative 2

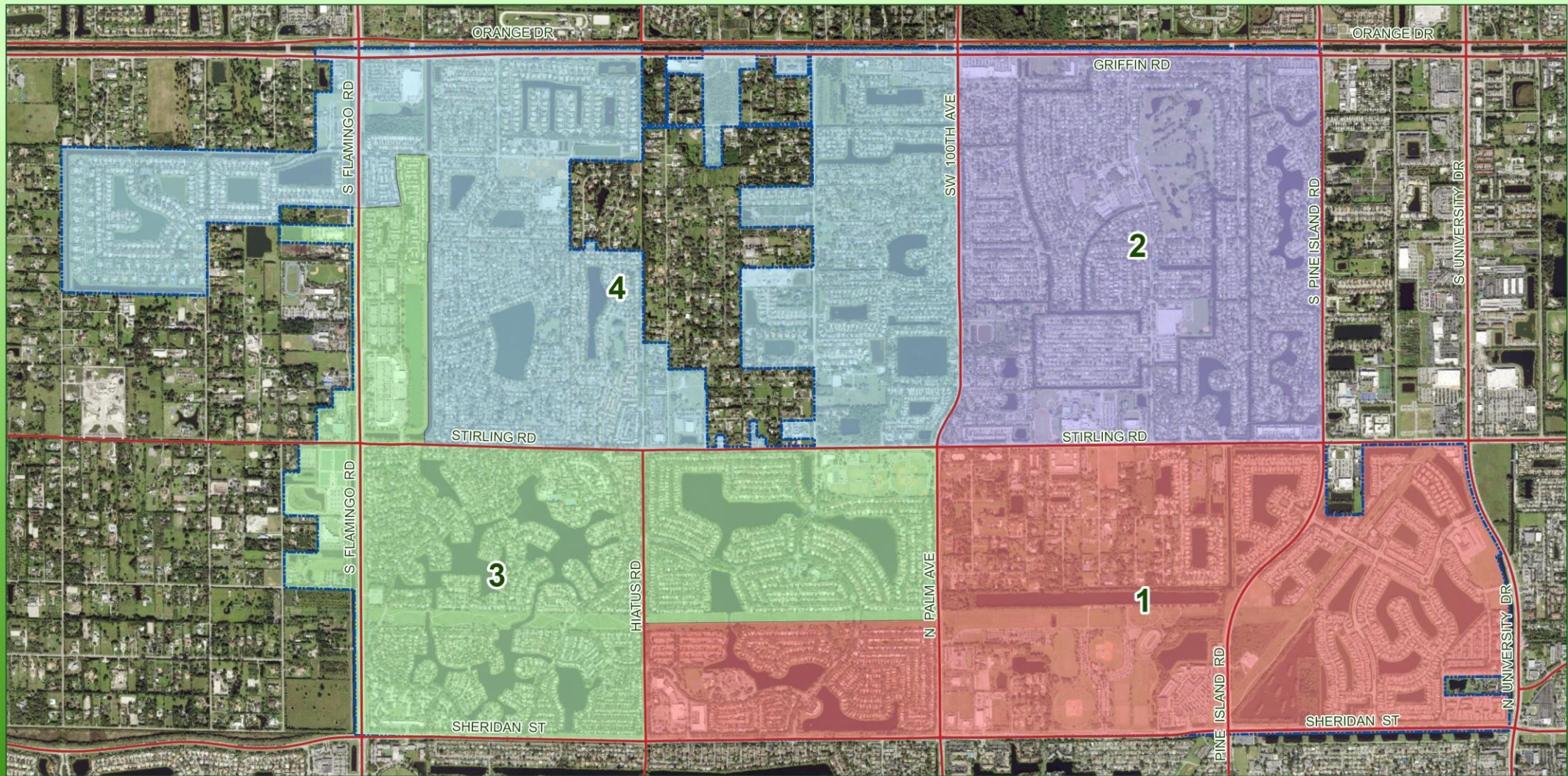
- Improves compactness and population equity, while retaining the core of the city's existing commission districts
 - Total Deviation falls from 20.77% to 7.37%, while the Mean Deviation falls from of 5.19% to 1.84%
 - The Spread falls from 13.6% to 7.06%

Alternative 2	2023 Population	% of City	Deviation From Average
District 1	8,683	24.95	-0.20%
District 2	8,397	24.13	-3.49%
District 3	8,710	25.03	0.11%
District 4	9,011	25.89	3.57%
Total	34,801	100	7.37%
Average	8,700	25	1.84%



Alternative 3

- Seeks to reorganize the Commission Districts into 4 quadrants
 - Where Stirling Road serves as the north-south dividing line, and Palm Avenue serves as the east-west dividing line
 - The cores of the existing Districts are retained
 - This particular Alternative is in response to a request made by the City Commission at the November 9th public meeting



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 Alternative 3

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

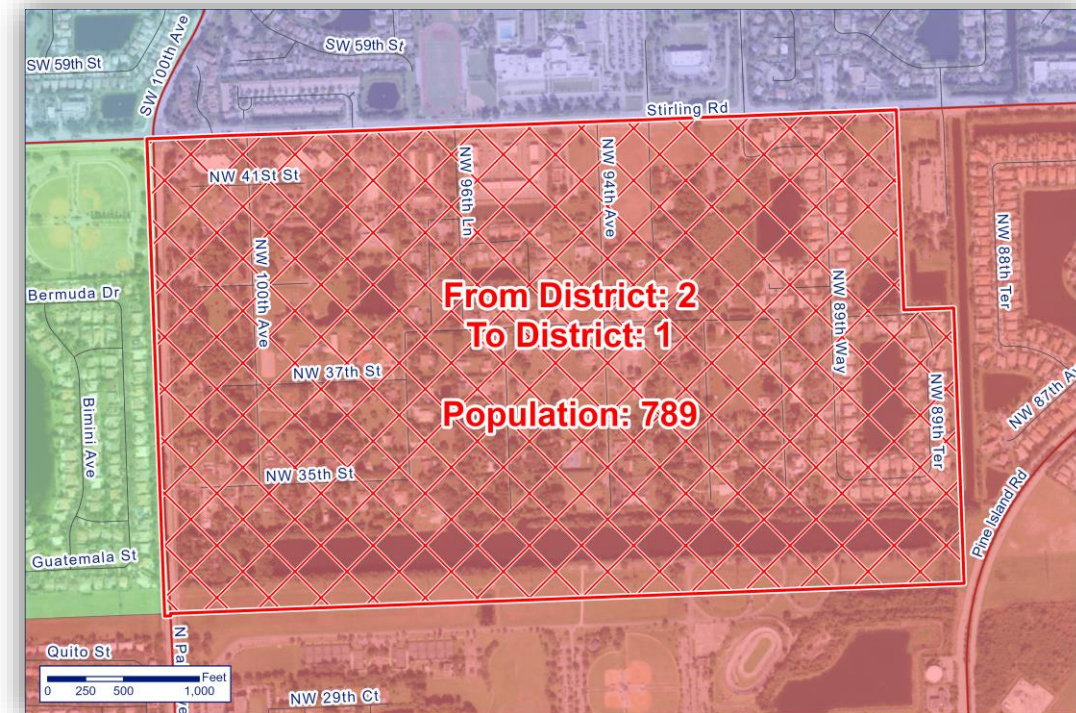


Alternative 3	2023 Population	% of City	Deviation From Average
District 1	8,424	24.21	-3.18%
District 2	8,680	24.94	-0.23%
District 3	8,790	25.26	1.03%
District 4	8,907	25.59	2.38%
Total	34,801	100	6.82%
Average	8,700	25	1.70%



Alternative 3

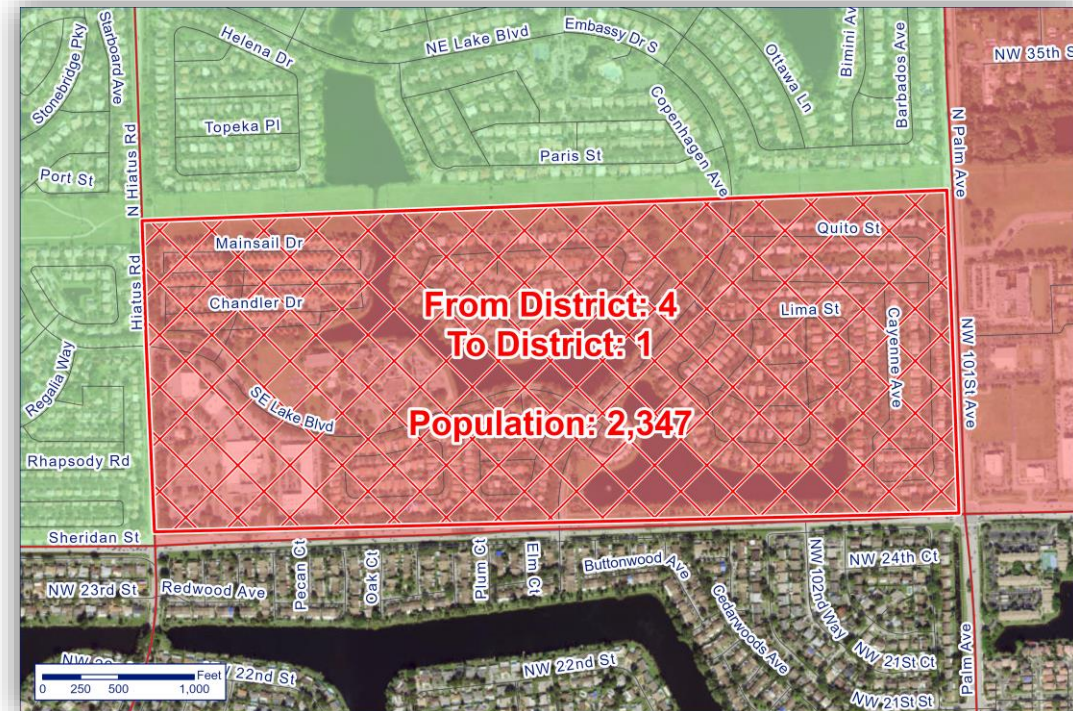
- District 1:
 - The effort to build a southeast quadrant begins with that area south of Stirling Rd and east of Palm Ave that is not presently in District 1.
 - The following neighborhoods are moved from District 2 to District 1: Royal Palm Ranches, Stirling Village, and Diamond Head.
 - Their collective population is 789.
 - Collectively, 6,077 residents are found to the SE of the intersection of Stirling and Palm. Additional #'s are required.





Alternative 3

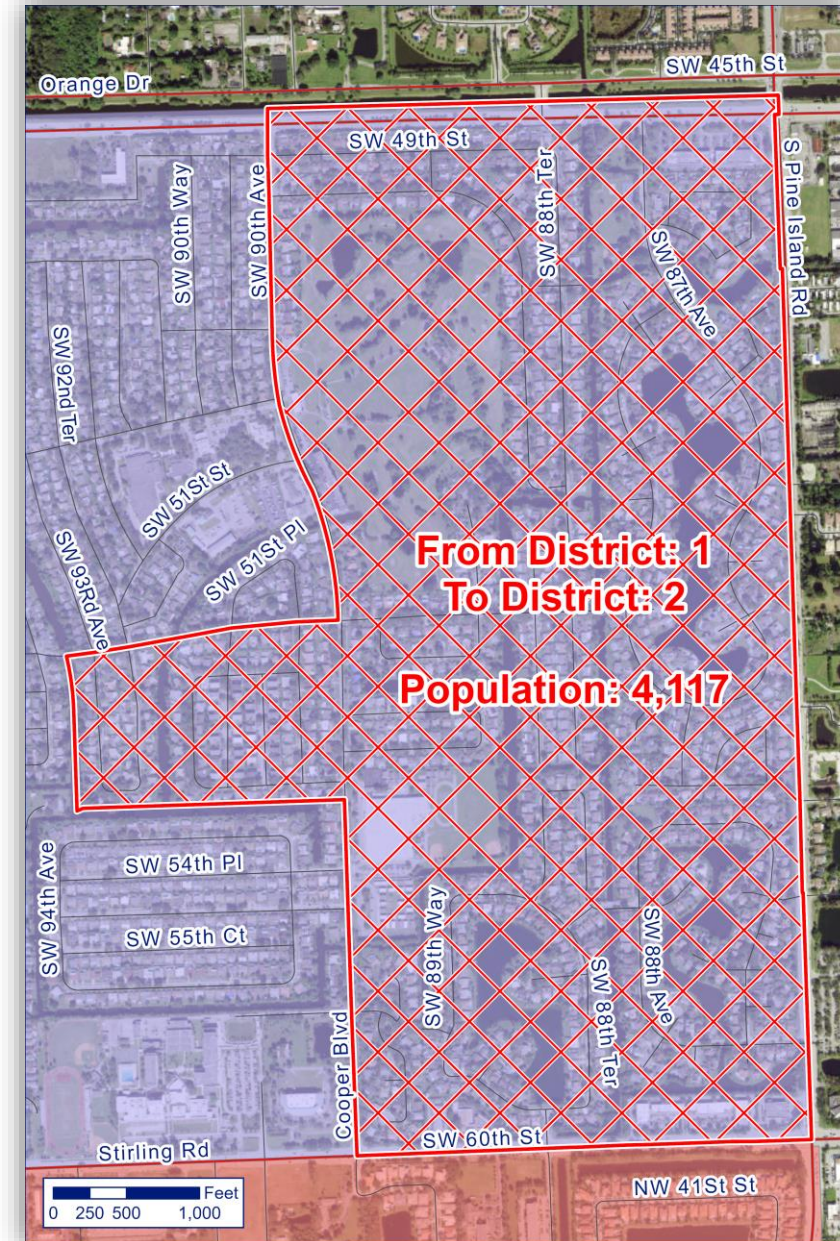
- District 1:
 - Also absorbs the southern half of the Embassy Lakes neighborhood that is found to the south of the FPL Easement. Taken from District 4.
 - 2,347 residents are found in this area.
 - The Easement serves as a logical District boundary, and is consistent with both our Redistricting parameters and standard practice.
 - However, it divides the residential community, which is contrary to the City Charter.





Alternative 3

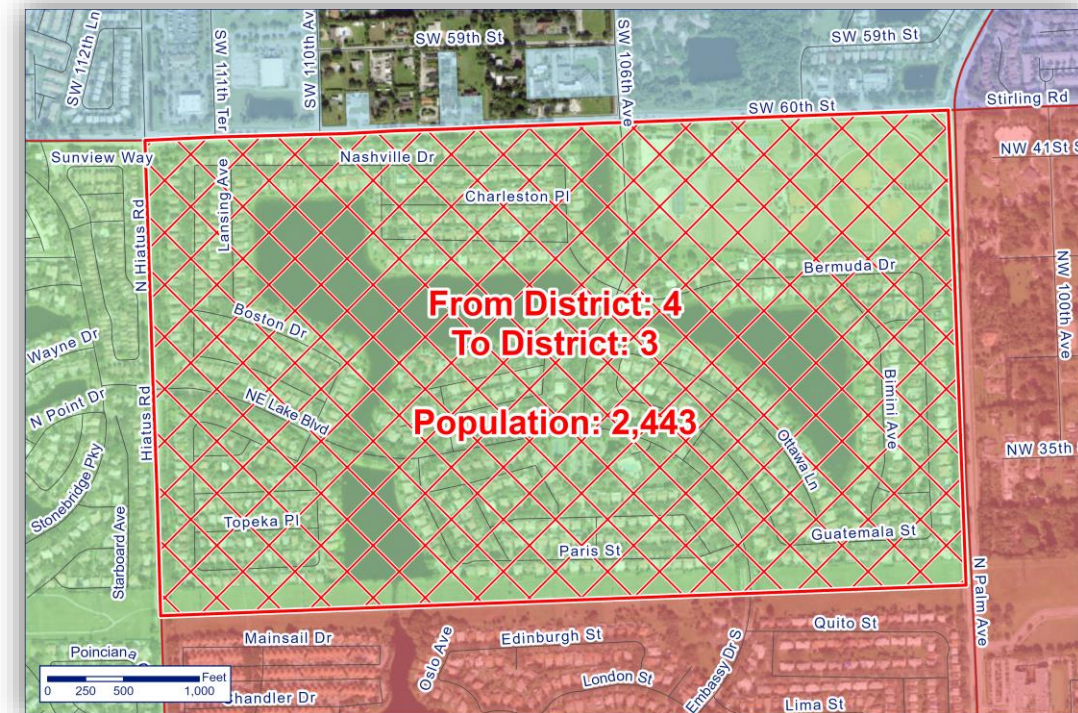
- District 2:
 - The NE quadrant is assembled by assigning that part of District 1 found to the north of Stirling Rd to District 2:
 - 4,117 people are moved into District 2.
 - This unifies the Cooper Colony Estates neighborhood.
 - The new NE quadrant has a population of 8,680
 - Just 20 below the ideal average of 8,700





Alternative 3

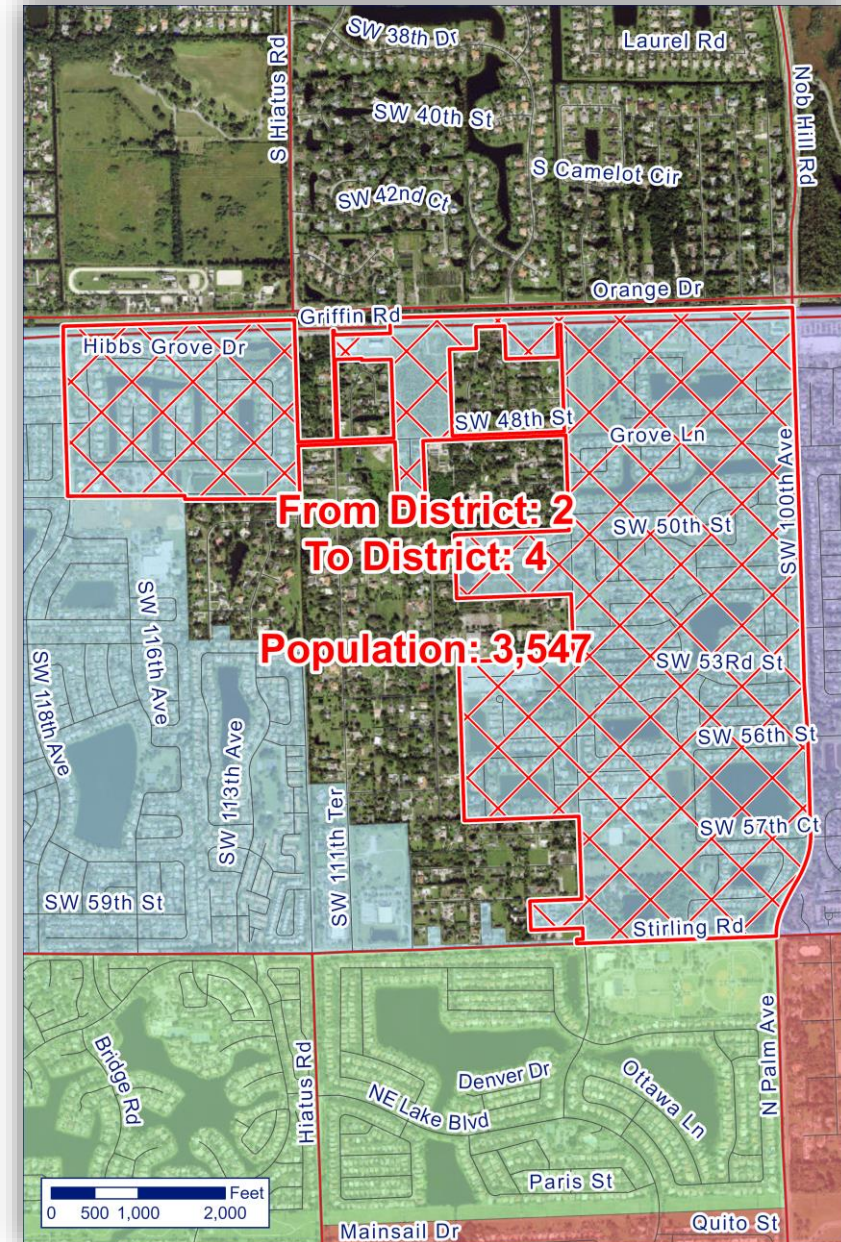
- District 3:
 - The SW quadrant builds off of the existing core of District 3 by adding that area between Palm Ave in the east and Hiatus Rd in the west, and Stirling Rd in the north and the FPL Easement to the south.
 - Taken from District 4.
 - This includes the northern half of the Embassy Lakes neighborhood.
 - 2,443 residents are found in this area.





Alternative 3

- District 4:
 - The NW quadrant is based upon the existing core of District 4.
 - That part of the District 2 that is found to the west of SW 100th Ave is moved to District 4
 - 3,547 people residents are reallocated by this adjustment.
 - This improves overall compactness.





Alternative 3

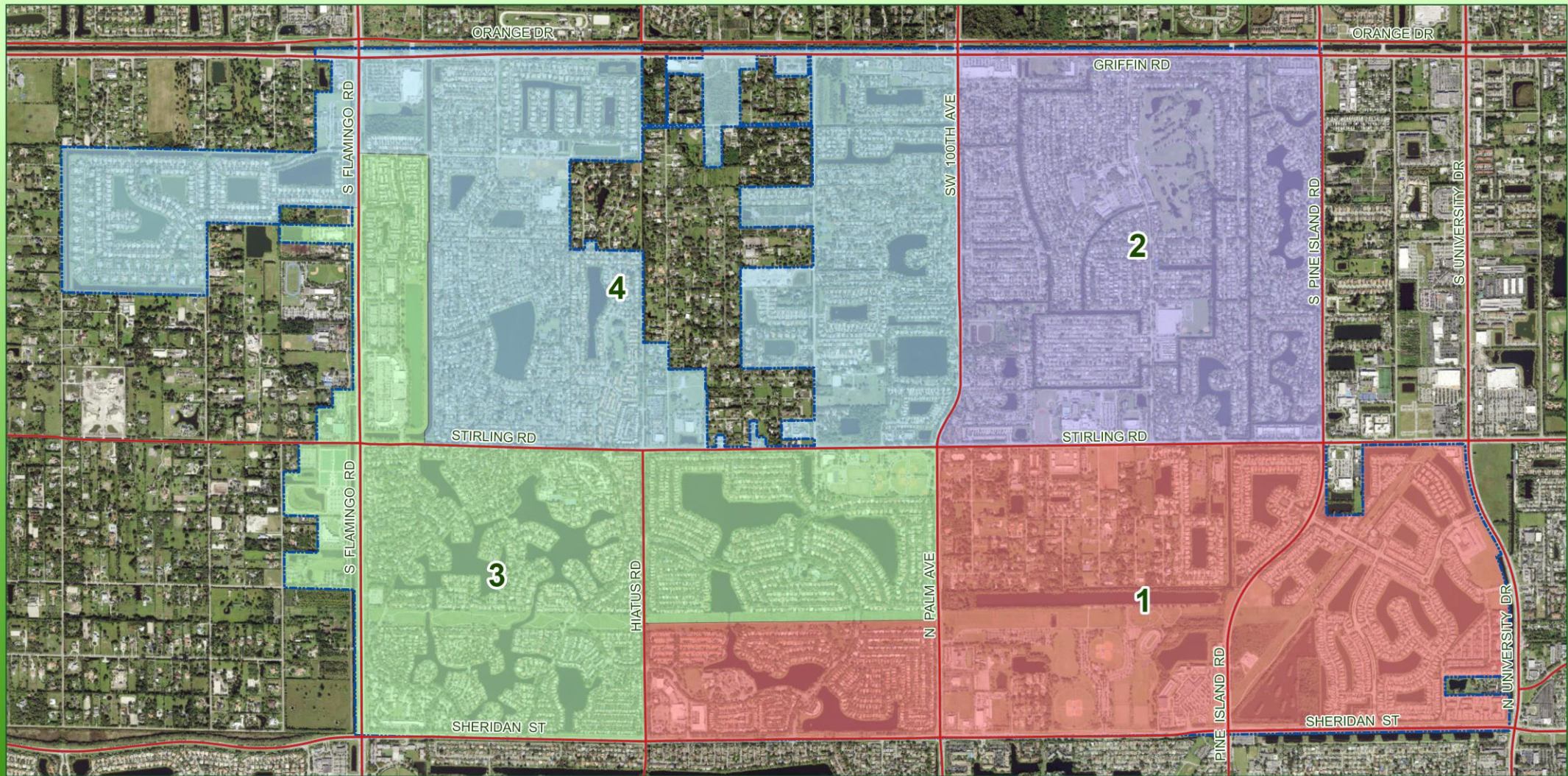
- Improves compactness and population equity, while establishing the desired NE, NW, SE and SW quadrants
 - Total Deviation falls from 20.77% to 6.82%, while the Mean Deviation falls from of 5.19% to 1.7% (lowest avg. dev. of all alternatives)
 - The Spread falls from 13.6% to 5.56% (lowest spread of all alternatives)

Alternative 3	2023 Population	% of City	Deviation From Average
District 1	8,424	24.21	-3.18%
District 2	8,680	24.94	-0.23%
District 3	8,790	25.26	1.03%
District 4	8,907	25.59	2.38%
Total	34,801	100	6.82%
Average	8,700	25	1.70%



Alternative 3B

- A slight adjustment of Alternative 3 to enhance compactness
 - Sacrifices some population equity in favor of improved spatial compactness, and keeping the residential community 'Flamingo Gardens Townhomes' in the same District.
 - This aligns with the Redistricting provisions of the City Charter.



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 Alternative 3B

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

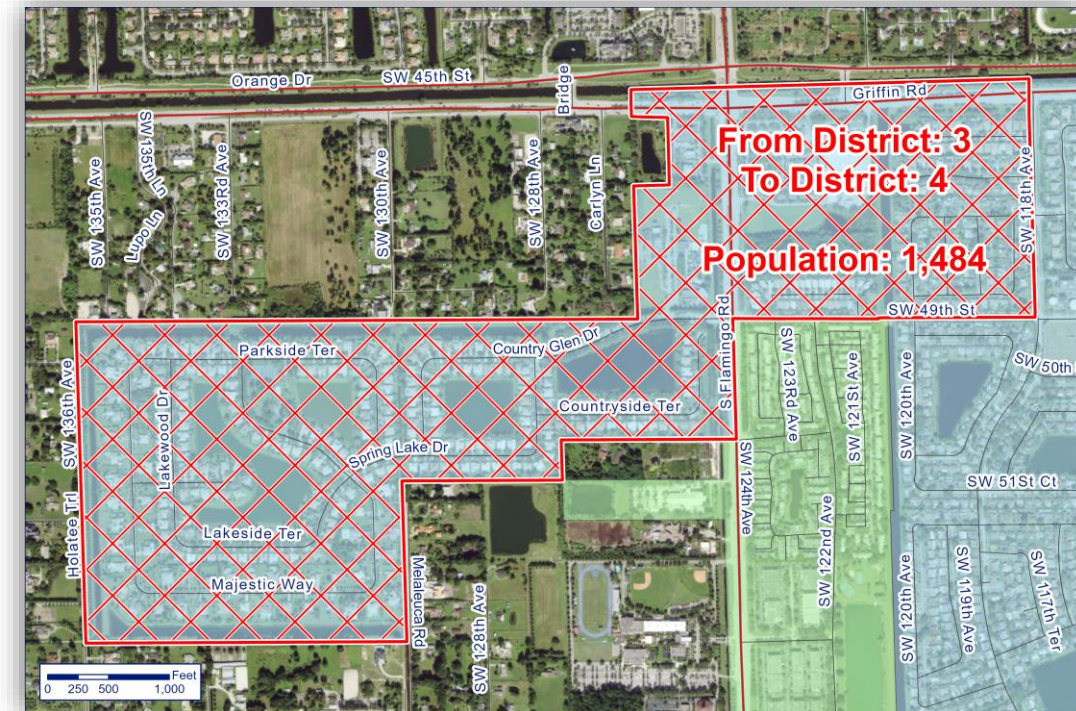


Alternative 3B	2023 Population	% of City	Deviation From Average
District 1	8,424	24.21	-3.18%
District 2	8,680	24.94	-0.23%
District 3	9,234	26.53	6.13%
District 4	8,463	24.32	-2.73%
Total	34,801	100	12.27%
Average	8,700	25	3.07%



Alternative 3B

- District 4:
 - Under this Alternative, District 4 adds that area to the north of SW 49th St and west of SW 118th Ave, together with the Country Glen neighborhood found to the west of Flamingo Rd.
 - Taken from District 3.
 - 1,484 residents are found in this area.





Alternative 3B

- Improves compactness and population equity, while establishing NE, NW, SE and SW quadrants for the Districts
 - Total Deviation falls from 20.77% to 12.27%, while the Mean Deviation falls from 5.19% to 3.07% (highest avg. dev. of all alternatives)
 - The Spread falls from 13.6% to 9.31%

Alternative 3B	2023 Population	% of City	Deviation From Average
District 1	8,424	24.21	-3.18%
District 2	8,680	24.94	-0.23%
District 3	9,234	26.53	6.13%
District 4	8,463	24.32	-2.73%
Total	34,801	100	12.27%
Average	8,700	25	3.07%



Summary

- All alternatives reduce population differences among the 4 districts
 - Alternative 1: Minimalist approach that improves population balance while making the least possible amount of alterations to the existing Districts
 - Alternative 2: Improves compactness and population equity, while retaining the core of the city's existing commission districts
 - Alternative 3: Reorganizes the Commission Districts into 4 quadrants
 - Alternative 3B: Sacrifices some population equity in favor of improved spatial compactness, and avoids splitting a residential community: 'Flamingo Gardens Townhomes'.



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Questions?

City of Cooper City Redistricting Alternatives

City of Cooper City, Florida