



FLORIDA ATLANTIC UNIVERSITY

City of Greenacres Redistricting Alternatives

March 29, 2022



Meeting Agenda

- FAU Redistricting Team
- Data
- Redistricting Parameters
- Existing Districts and Future Growth
- Map Alternatives
- Summary
- Schedule



FAU Redistricting Team

- Steven C. 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
- Michael Stamm, Jr., MURP
 - Adjunct Faculty, Department of Urban and Regional Planning



Data

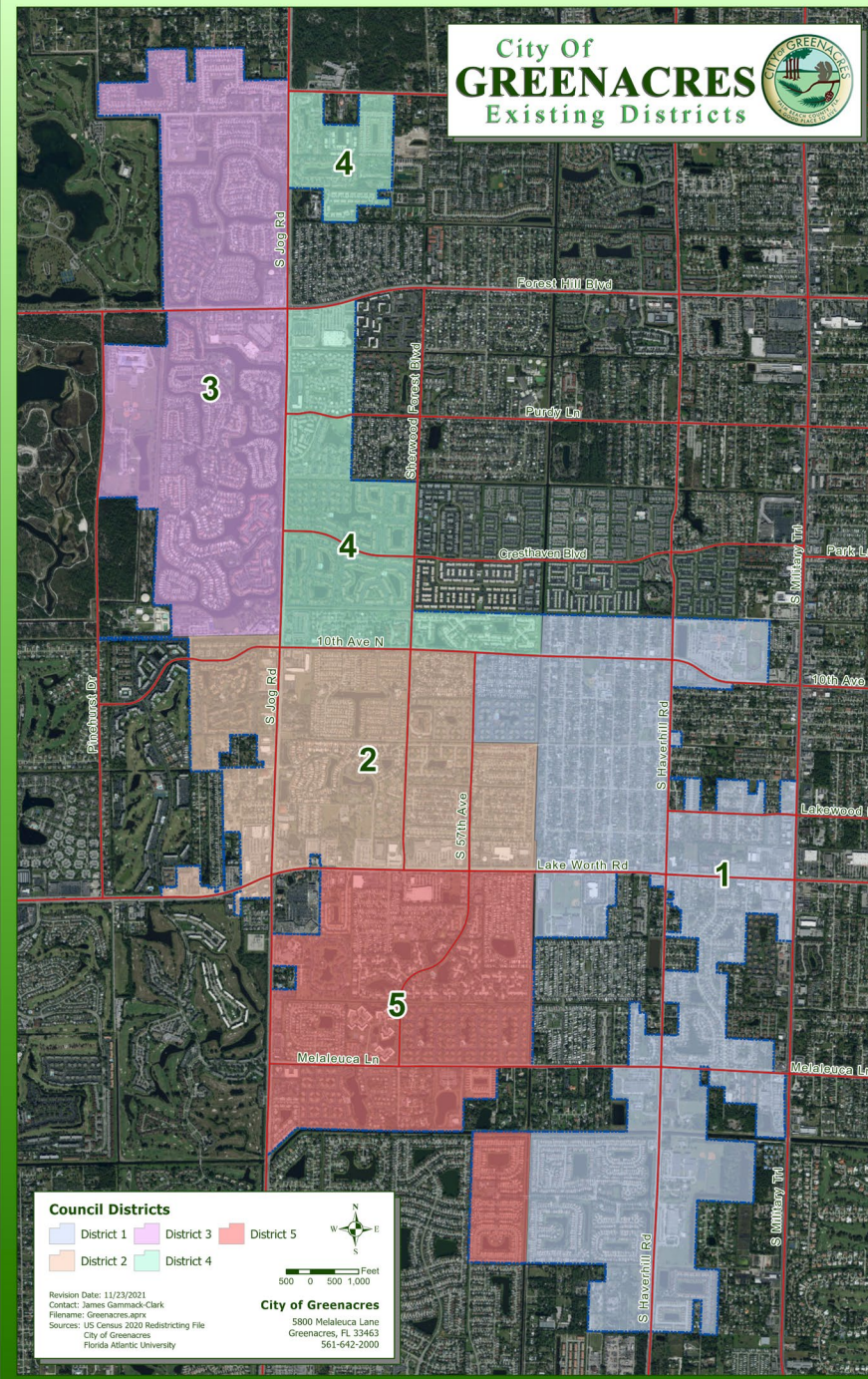
- U.S. Census Bureau's 2020 Census Redistricting Summary Files [Public Law 94-171]:
 - Resident population counts by census block
 - The smallest enumeration unit possible
 - Aggregated to form each of the six voting districts in the presented alternatives
- Housing data provided by City of Greenacres staff
 - Population estimates were derived to account for new housing, scheduled for construction by 2023 that was not included in 2020 Census



Redistricting Parameters

- The following guided our efforts:
 1. Reasonable population equality across districts
 - A maximum 10% overall deviation from the ideal size across districts
 2. Geographic contiguity and appropriate compactness
 - Follow major natural and manmade boundaries where possible
 3. Respect for the integrity of communities of interest and neighborhoods
- Population equality was of primary importance
 - The others were significant in guiding decisions towards reaching this reasonable population balance

City Of
GREENACRES
Existing Districts





2020 Enumeration and 2023 Population Projection

- 2020 US Census Blocks:
 - The population of the City of Greenacres is 43,990
 - Average population for each district is 8,798

Current Districts	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	11,484	26.11	30.53%	12,149	27.00	34.99%
District 2	6,902	15.69	-21.55%	7,032	15.63	-21.86%
District 3	8,867	20.16	0.78%	8,867	19.70	-1.48%
District 4	8,076	18.36	-8.21%	8,290	18.42	-7.89%
District 5	8,661	19.69	-1.56%	8,661	19.25	-3.76%
Total	43,990	100	61.07%	44,999	100	66.22%
Average	8,798	20	12.21%	9,000	20	13.24%



2020 Enumeration and 2023 Population Projection

- 2023 Population Projection:
 - The population of the City of Greenacres will be 44,999
 - Average population for each district will be 9,000

Current Districts	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	11,484	26.11	30.53%	12,149	27.00	34.99%
District 2	6,902	15.69	-21.55%	7,032	15.63	-21.86%
District 3	8,867	20.16	0.78%	8,867	19.70	-1.48%
District 4	8,076	18.36	-8.21%	8,290	18.42	-7.89%
District 5	8,661	19.69	-1.56%	8,661	19.25	-3.76%
Total	43,990	100	61.07%	44,999	100	66.22%
Average	8,798	20	12.21%	9,000	20	13.24%



2020 Enumeration and 2023 Population Projection

- The current Council Districts are heavily unbalanced
 - Total Deviation of 66.22% between all five districts
 - Spread = 56.85% (34.99% + 21.86% between highest and lowest districts)
 - Exceeding max. 10% overall deviation from the ideal size across districts

Current Districts	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	11,484	26.11	30.53%	12,149	27.00	34.99%
District 2	6,902	15.69	-21.55%	7,032	15.63	-21.86%
District 3	8,867	20.16	0.78%	8,867	19.70	-1.48%
District 4	8,076	18.36	-8.21%	8,290	18.42	-7.89%
District 5	8,661	19.69	-1.56%	8,661	19.25	-3.76%
Total	43,990	100	61.07%	44,999	100	66.22%
Average	8,798	20	12.21%	9,000	20	13.24%



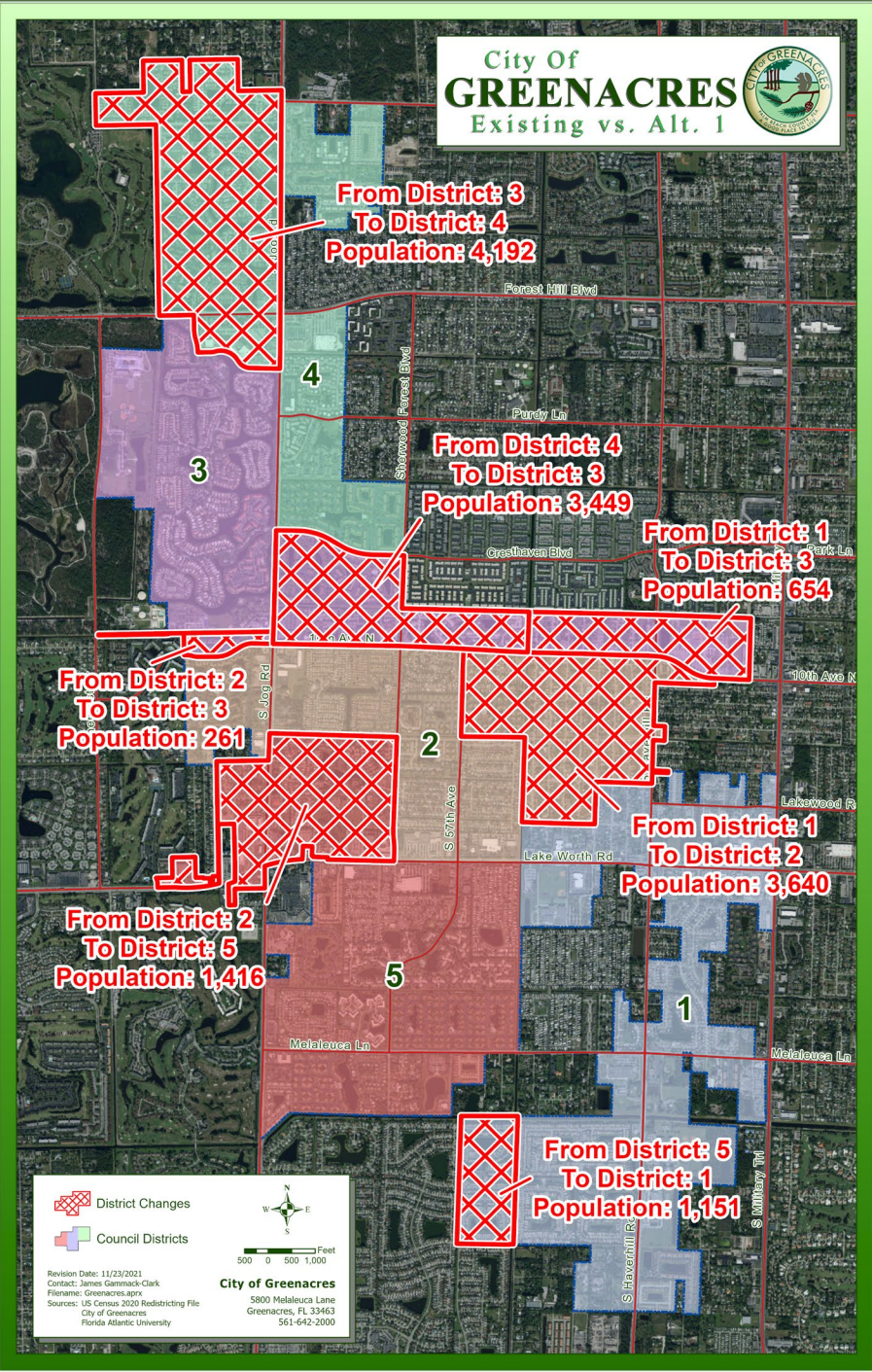
Alternatives

- Five Alternatives have been prepared for consideration:
 - All meet standard districting guidelines
 - 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 that of Districts 2
 - This necessitated an adjustment of the geographic boundaries where District 1 contracted in size, while District 2 added territory
 - Improved spatial compactness and contiguity were also sought
 - Two areas of concern in particular: one in the north, the other in the south

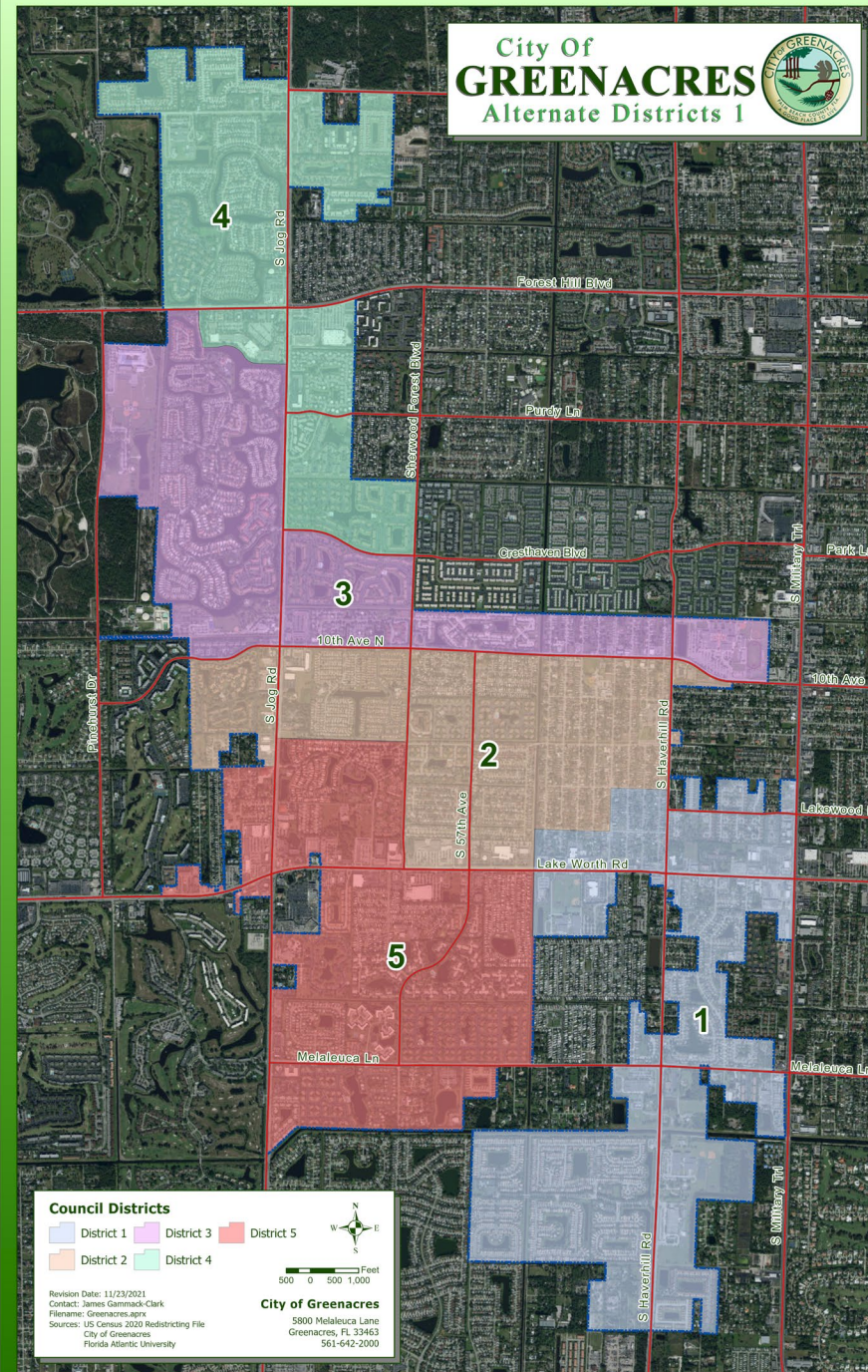


Alternative 1

- Working towards the middle
 - Given the shape of the city, it is necessary to define the districts found at its northern and southern ends and then work towards the middle
 - It is here where there is greater flexibility in the districts' boundaries
 - This is the case in all the alternatives presented
 - The alternatives effectively break down into permutations of what should be done with the districts in the northern and southern halves of the city, with 10th Ave North serving as the demarcation line
 - Improves overall population balance (Criterion #1), spatial compactness and contiguity (Criterion #2)



City Of
GREENACRES
Alternate Districts 1



Council Districts

District 1	District 3	District 5
District 2	District 4	

Revision Date: 11/23/2021
Contact: James Gammack-Clark
Filename: Greenacres.aprx
Source: US Census 2010 Redistricting File
City of Greenacres
Florida Atlantic University

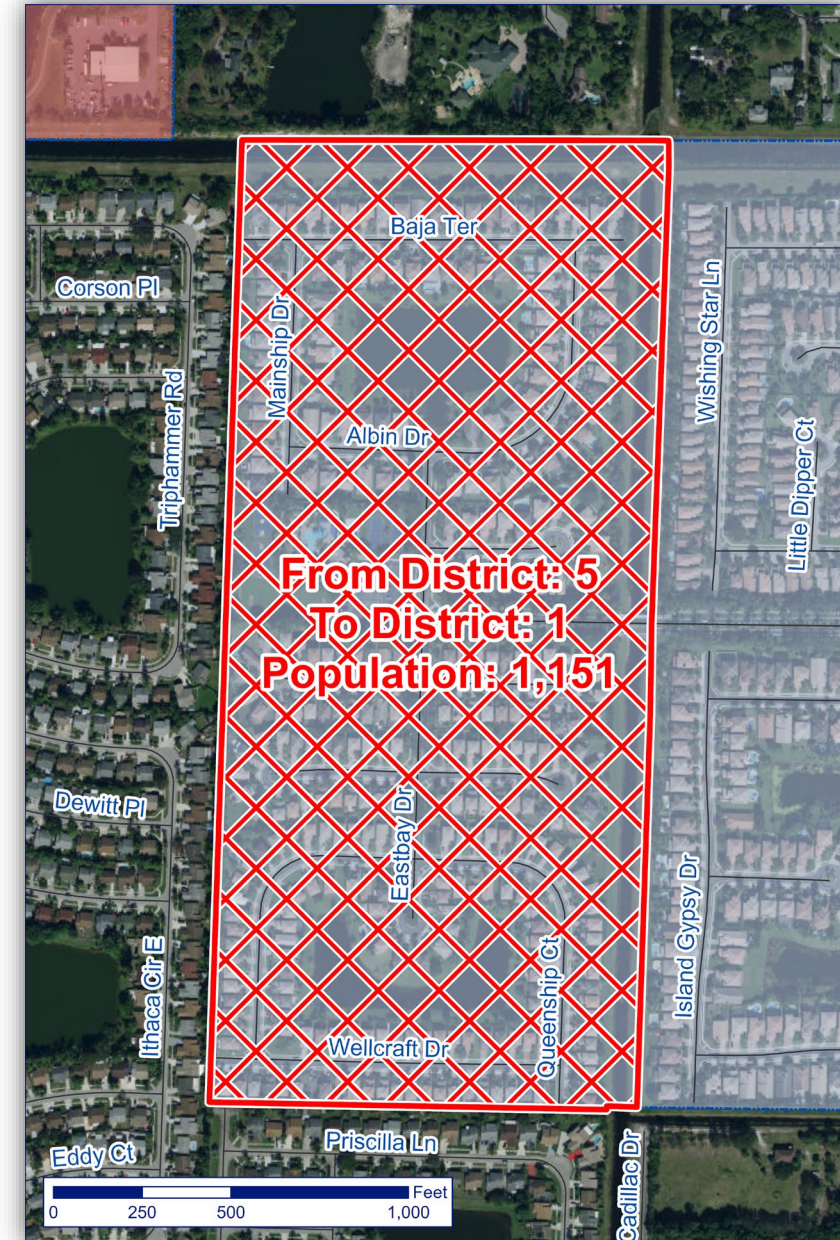
City of Greenacres
5800 Melaleuca Lane
Greenacres, FL 33463
561-642-2000

500 0 500 1,000 Feet



Alternative 1

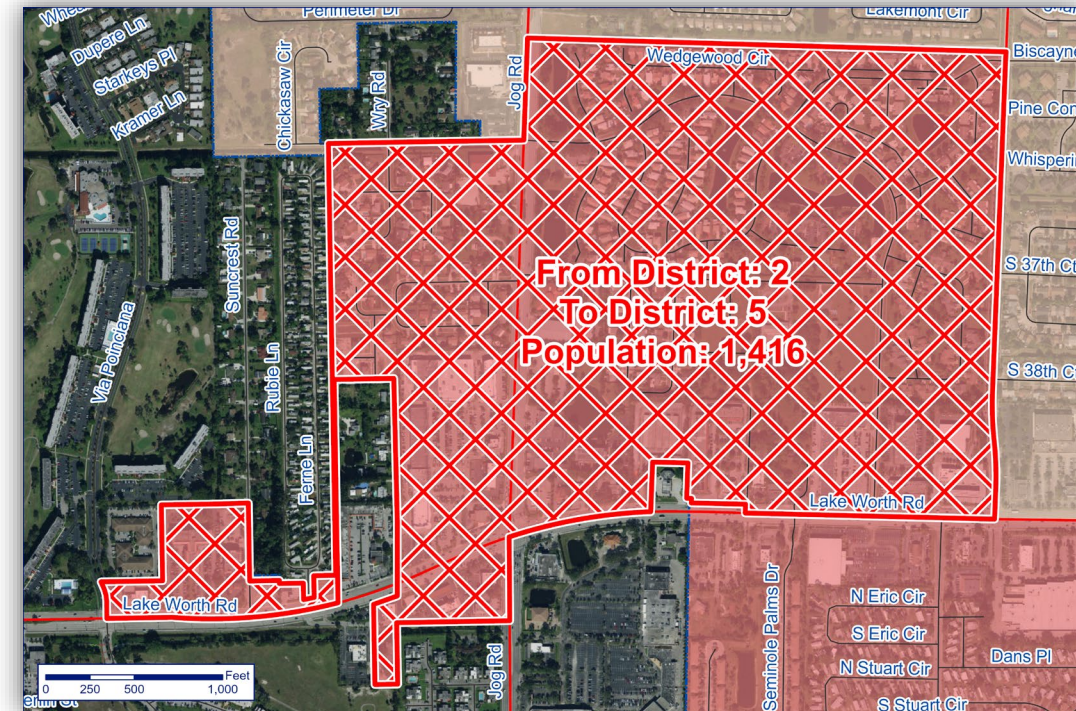
- Beginning in the south...
- District 1:
 - The western portion of Nautica Isles is non-contiguous with District 5
 - 1,151 people moved from District 5 to District 1
 - That portion of the neighborhood found to the west of the LWDD E-3 canal
 - (Included in ALL Alternatives)





Alternative 1

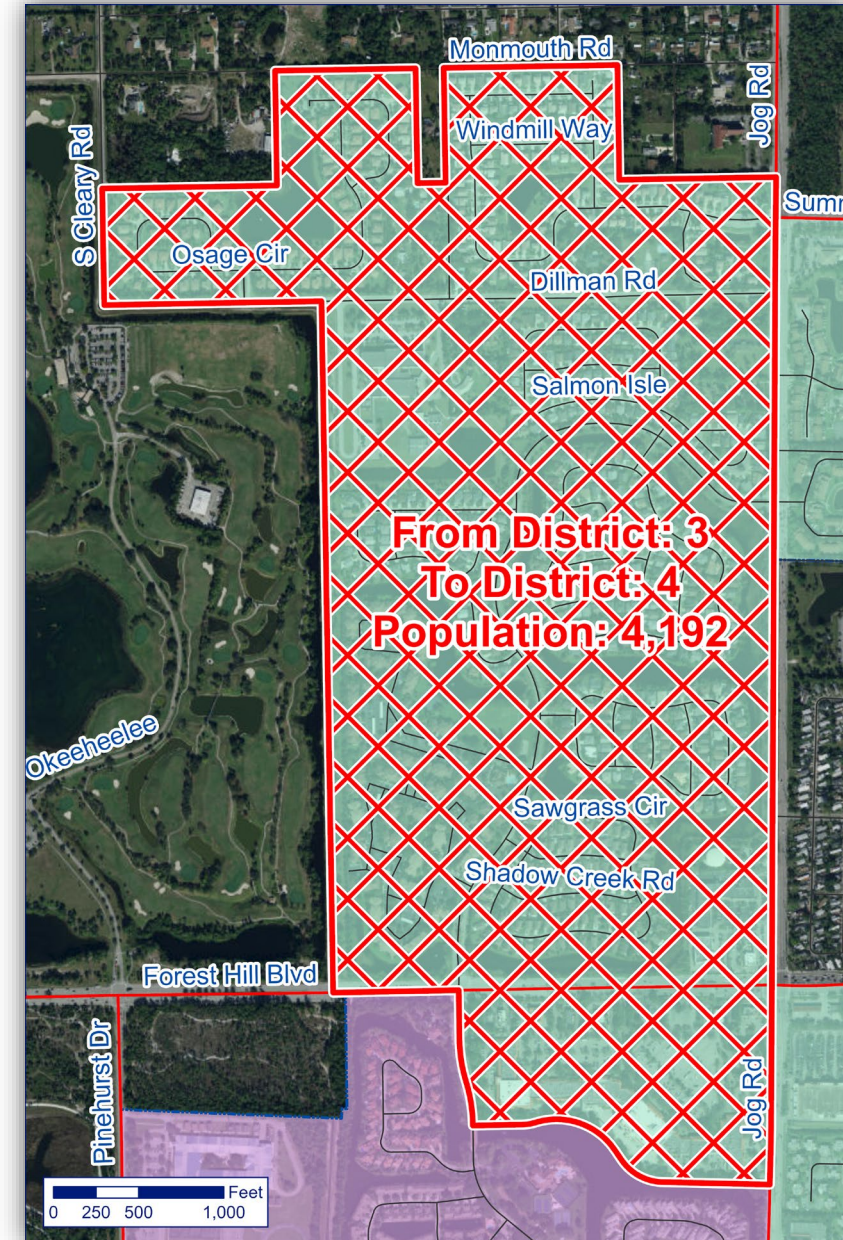
- District 5:
 - District 5 acquires 1,416 people from District 2:
 - That part of the city found between the LWDD L-11 canal and Lake Worth Rd in the north-south direction, and
 - Sherwood Forest Blvd and Jog Rd in the east west direction, together with
 - That part of the city south of the LWDD L-11 canal and west of Jog Rd
 - (Also included in Alternatives 2 and 3)





Alternative 1

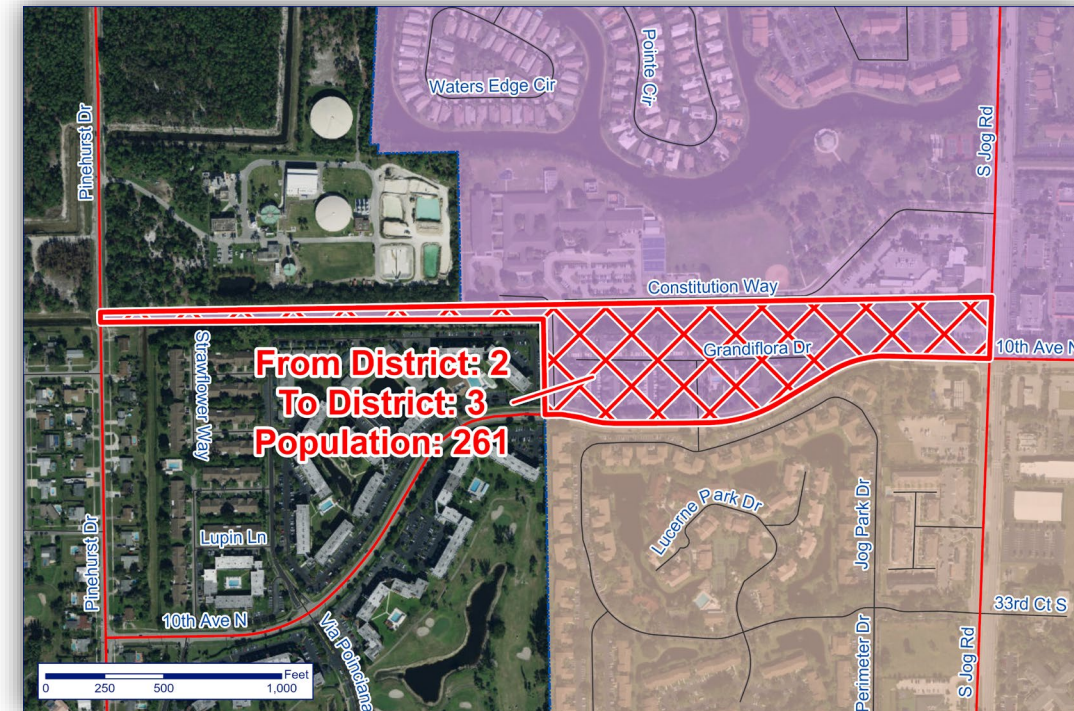
- Moving to the north...
- District 4:
 - The portion of the city that is north of the LWDD L7 canal and east of Jog Rd is non-contiguous with the rest of District 4
 - To address this, 4,192 people moved from District 3 to District 4
 - That portion of the city found to the north of the Forest Hill Blvd and west of Jog Rd, together with the River Bridge Shopping Center
 - (Also included in Alternative 5)





Alternative 1

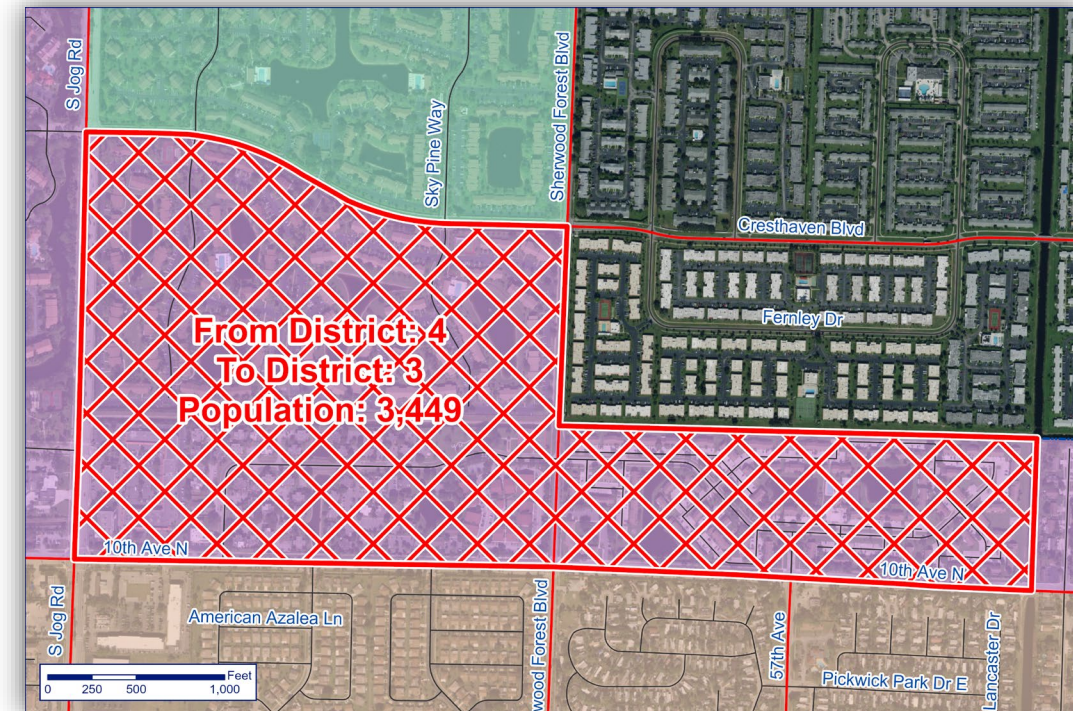
- Finishing in the middle of the city
- District 3:
 - Establish 10th Ave North as the north/south demarcation line
 - District 3 acquires 261 people from District 2:
 - That part of the city found between the LWDD L-10 canal and 10th Ave North in the north-south direction, and west of Jog Rd
 - (Also included in Alternative 5)





Alternative 1

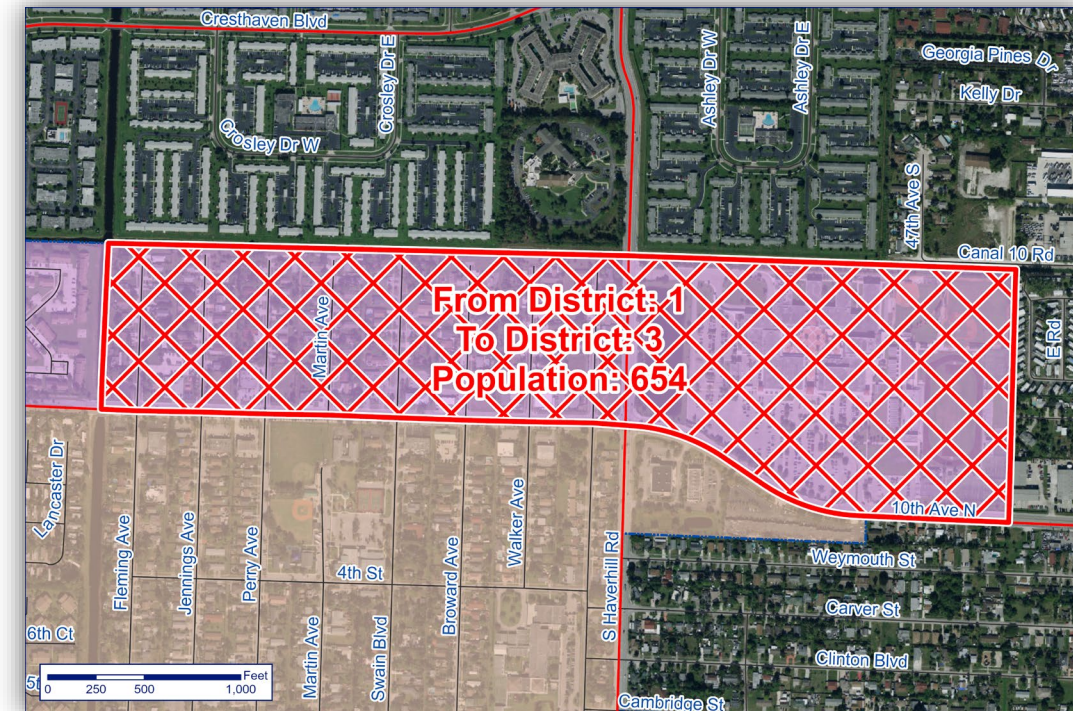
- District 3:
 - District 3 acquires 3,449 people from District 4:
 - That part of the city found between the LWDD E-3 canal and Jog Rd in the east-west, and between 10th Ave North and Cresthaven Blvd in the north-south direction
 - (Also included in Alternative 5)





Alternative 1

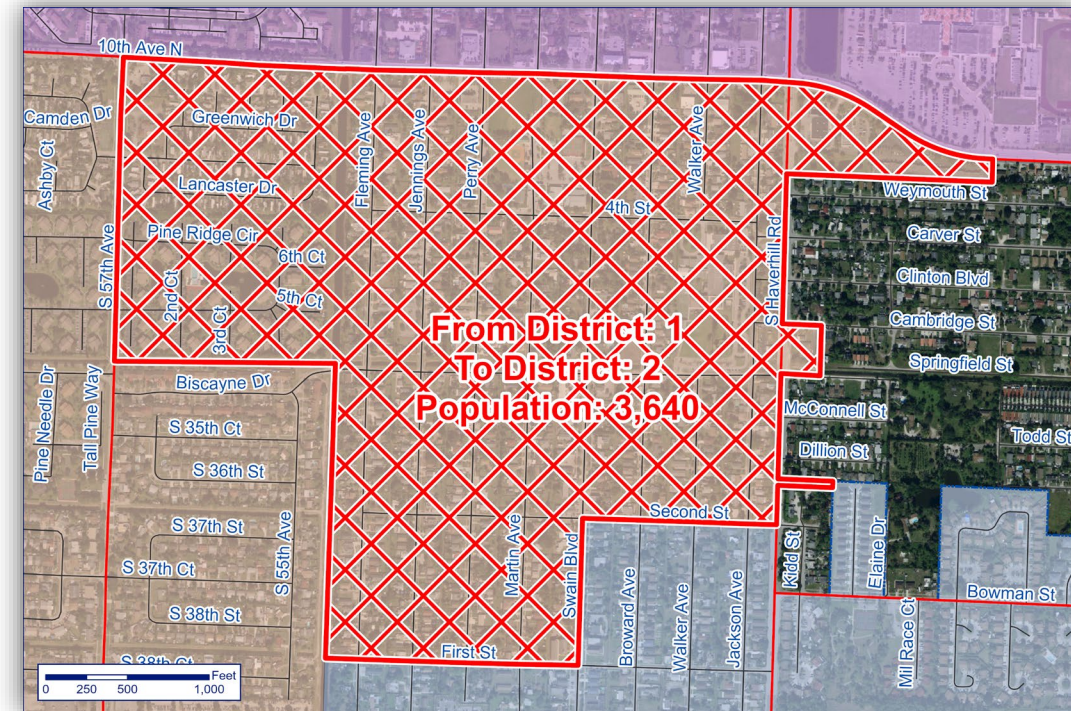
- District 3:
 - District 3 acquires 654 people from District 1:
 - That part of the city found to the east of the LWDD E-3 canal and north of 10th Ave North
 - (Also included in Alternative 5)





Alternative 1

- District 2:
 - District 2 acquires 3,640 people from District 1:
 - That part of the city found between the LWDD L-11 canal and 10th Ave North in the north-south direction, and east of S 57th Ave, together with
 - That part of the city found between the LWDD L-11 canal and Second St in the north-south direction, and east of the LWDD E-3 canal, together with
 - That part of the city found between the Second St and First St in the north-south direction, and the LWDD E-3 canal and Swain Blvd in the east-west direction.
 - (Included in ALL Alternatives)





Alternative 1

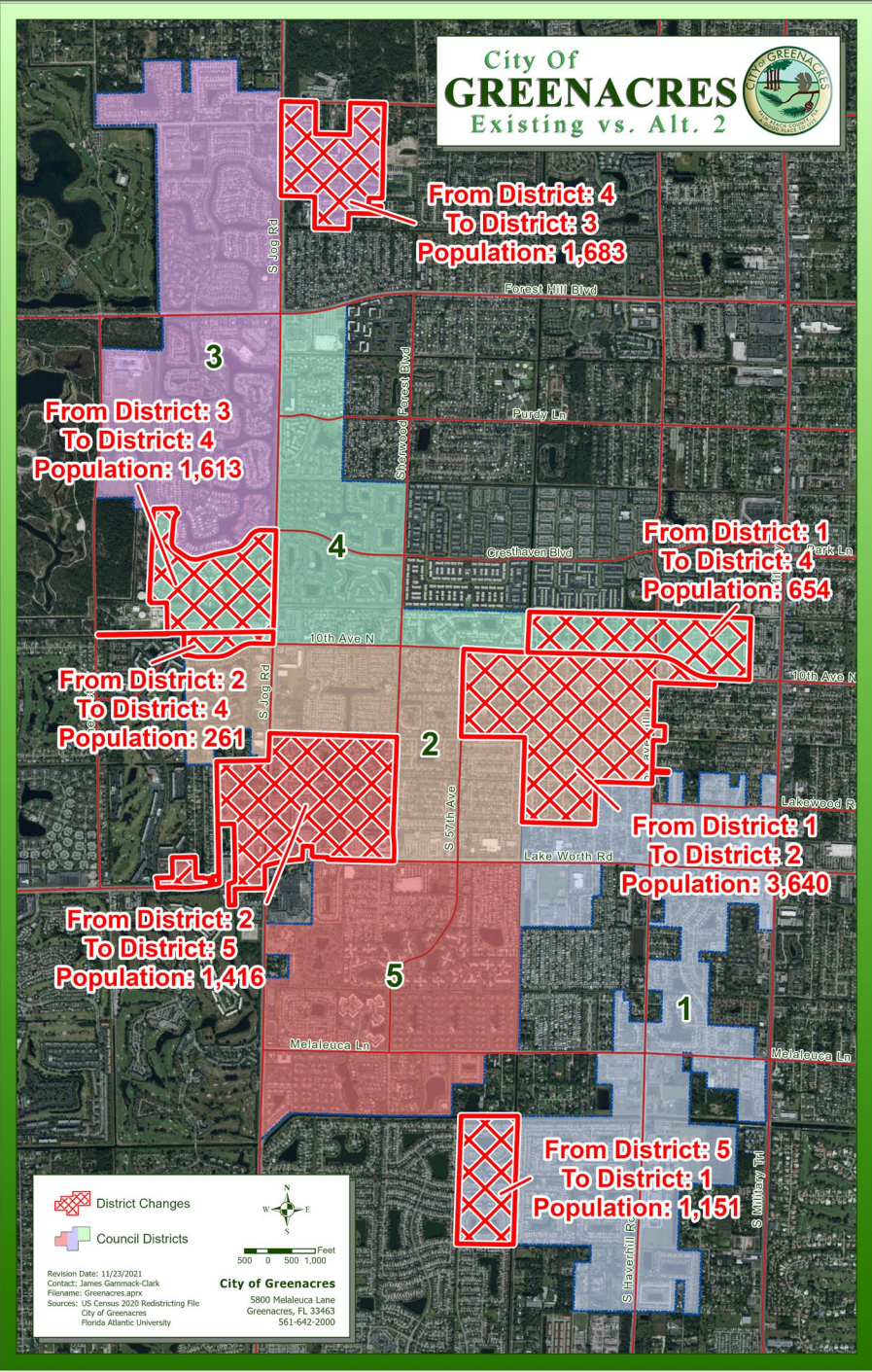
- Overall Deviation is much improved under Alternative 1
 - Total Deviation falls from 66.22% to 0.93%, while the Mean Deviation falls from 13.24% to 0.19% (both deviations tied for lowest of all alternatives)
 - The Spread falls from 56.85% to 1.26%

Alt. 1	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,923	20.28	1.42%	8,995	19.99	-0.05%
District 3	9,039	20.55	2.74%	9,039	20.09	0.44%
District 4	8,819	20.05	0.24%	9,033	20.07	0.37%
District 5	8,868	20.16	0.80%	8,926	19.84	-0.82%
Total	43,990	100	9.59%	44,999	100	0.93%
Average	8,798	20	1.92%	9,000	20	0.19%

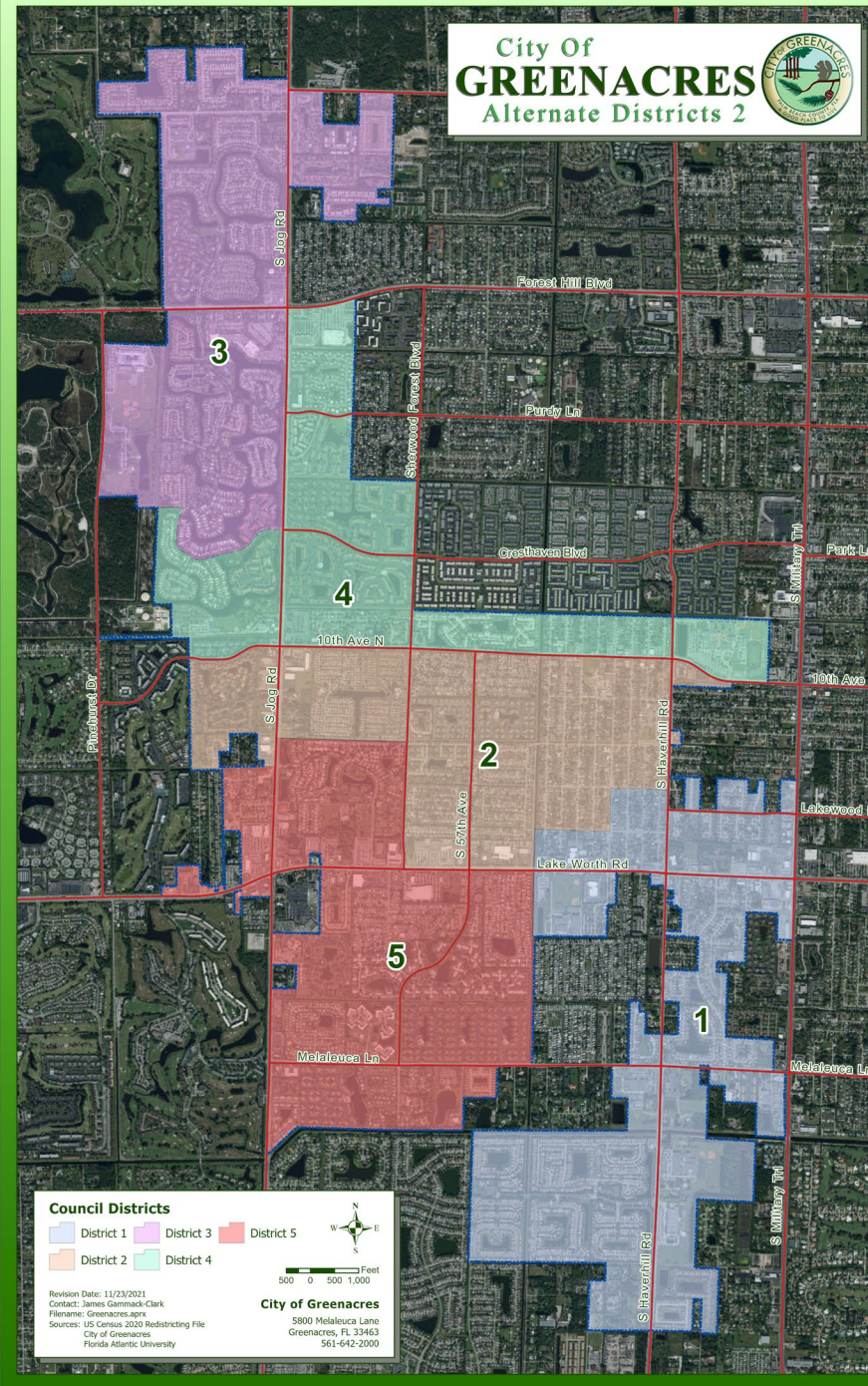


Alternative 2

- The southern half is identical to Alternative 1
- The northern half presents another solution to the contiguity issue north of the LWDD L7 canal and east of Jog Rd
 - In this case, the area is given to District 3
 - This necessitates a contraction of District 3 to the south
- Improves overall population balance (Criterion #1), spatial compactness and contiguity (Criterion #2)



City Of
GREENACRES
Alternate Districts 2



Council Districts

District 1	District 3	District 5
District 2	District 4	

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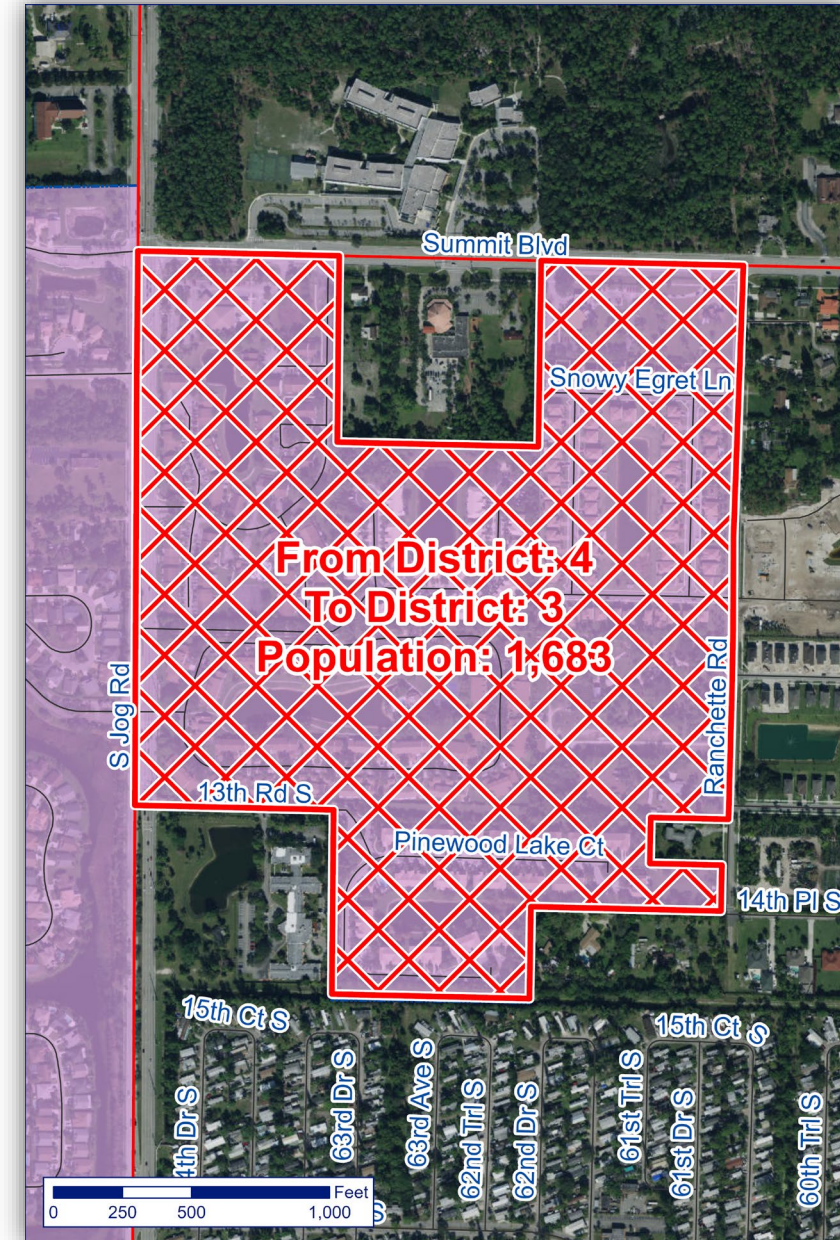
City of Greenacres
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561-642-2000

Revision Date: 11/23/2021
Contact: James Gammack-Clark
Filename: Greenacres.aprx
Source: US Census 2010 Redistricting File
City of Greenacres
Florida Atlantic University



Alternative 2

- District 3:
 - 1,683 people moved from District 4 to District 3, specifically, the portion of the city that is found:
 - North of the LWDD L7 canal
 - South of Summit Blvd
 - West of Ranchette Rd, and
 - East of Jog Rd
 - (Also included in Alternatives 3 and 4)





Alternative 2

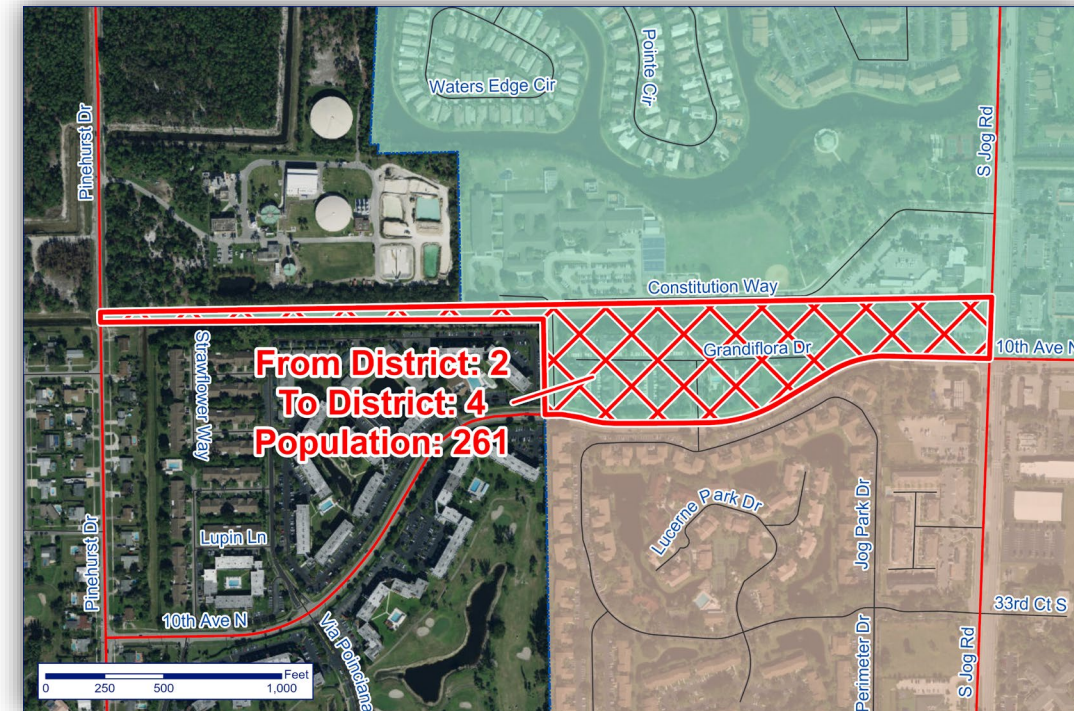
- District 4:
 - To offset the previous gain, District 3 must give up territory to its south
 - That part of District 3 presently found to the:
 - North of LWDD L-10 canal,
 - West of Jog Rd, and
 - South and west of a line that is the easterly extension of Freedom Park's southern boundary, then continuing south along Eagle Ridge Dr and east along River Bridge Blvd
 - This area is home to 1,613 residents





Alternative 2

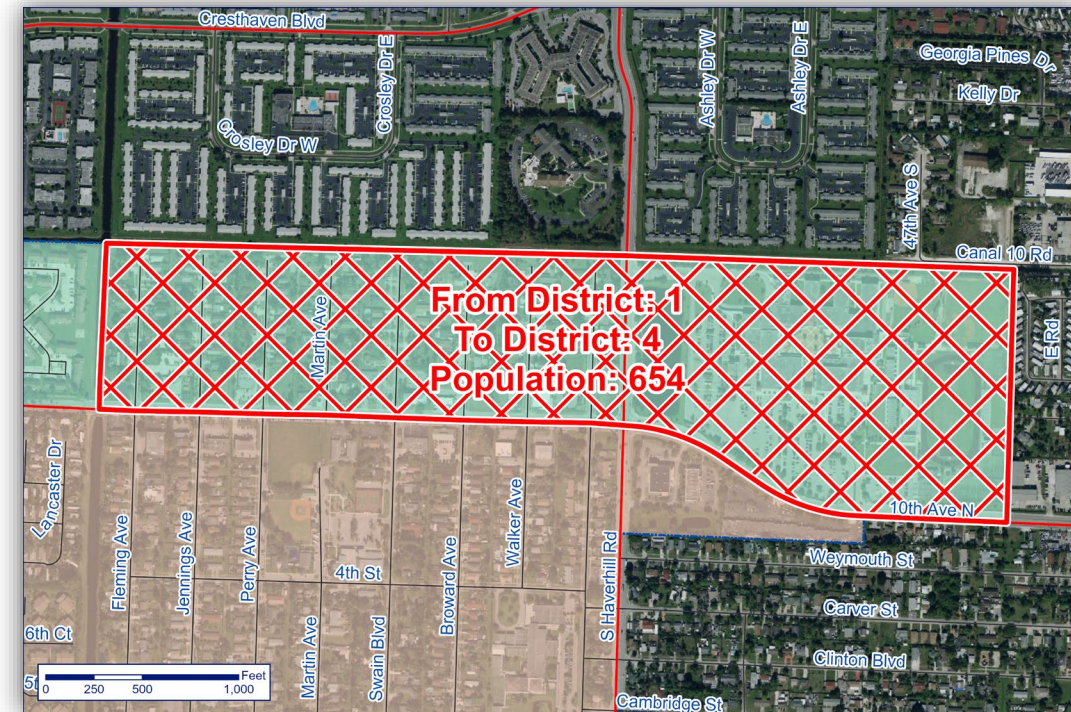
- District 4:
 - District 4 acquires 261 people from District 2:
 - The same area that was acquired by District 3 in Alternative 1
 - That part of the city found between the LWDD L-10 canal and 10th Ave North in the north-south direction, and west of Jog Rd
 - (Also included in Alternative 3 and 4)





Alternative 2

- District 4:
 - District 4 is completed by acquiring 654 people from District 1:
 - The same area that was acquired by District 3 in Alternative 1
 - That part of the city found to the east of the LWDD E-3 canal and north of 10th Ave North
 - (Also included in Alternatives 3 and 4)





Alternative 2

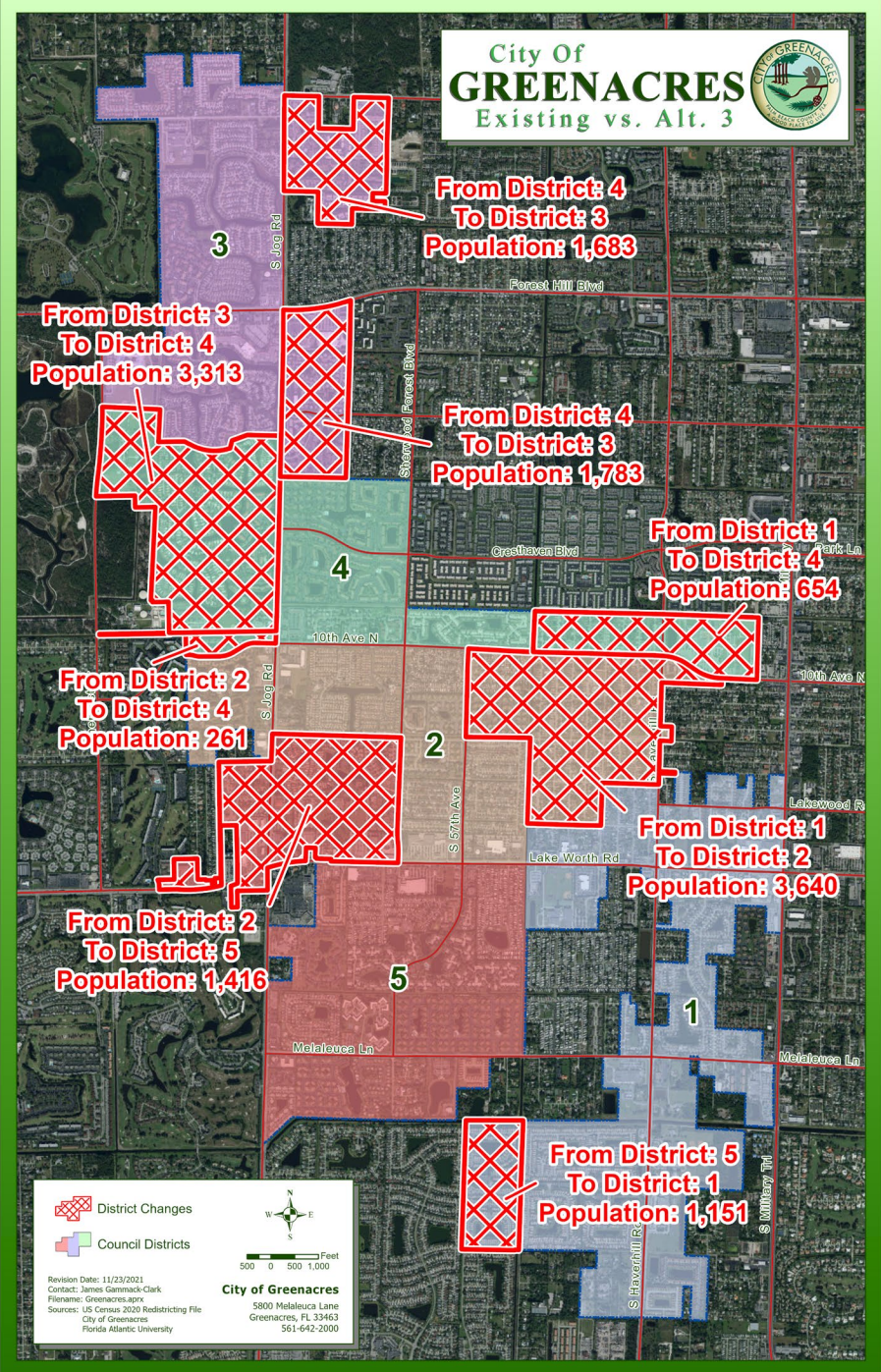
- Overall Deviation is much improved under Alternative 2
 - Total Deviation falls from 66.22% to 2.32%, while the Mean Deviation falls from 13.24% to 0.46% (both deviations are the highest of all alternatives)
 - The Spread falls from 56.85% to 2.32% (highest of all alternatives)

Alt. 2	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,923	20.28	1.42%	8,995	19.99	-0.05%
District 3	8,723	19.83	-0.85%	8,937	19.86	-0.70%
District 4	9,135	20.77	3.83%	9,135	20.30	1.50%
District 5	8,868	20.16	0.80%	8,926	19.84	-0.82%
Total	43,990	100	11.30%	44,999	100	2.32%
Average	8,798	20	2.26%	9,000	20	0.46%

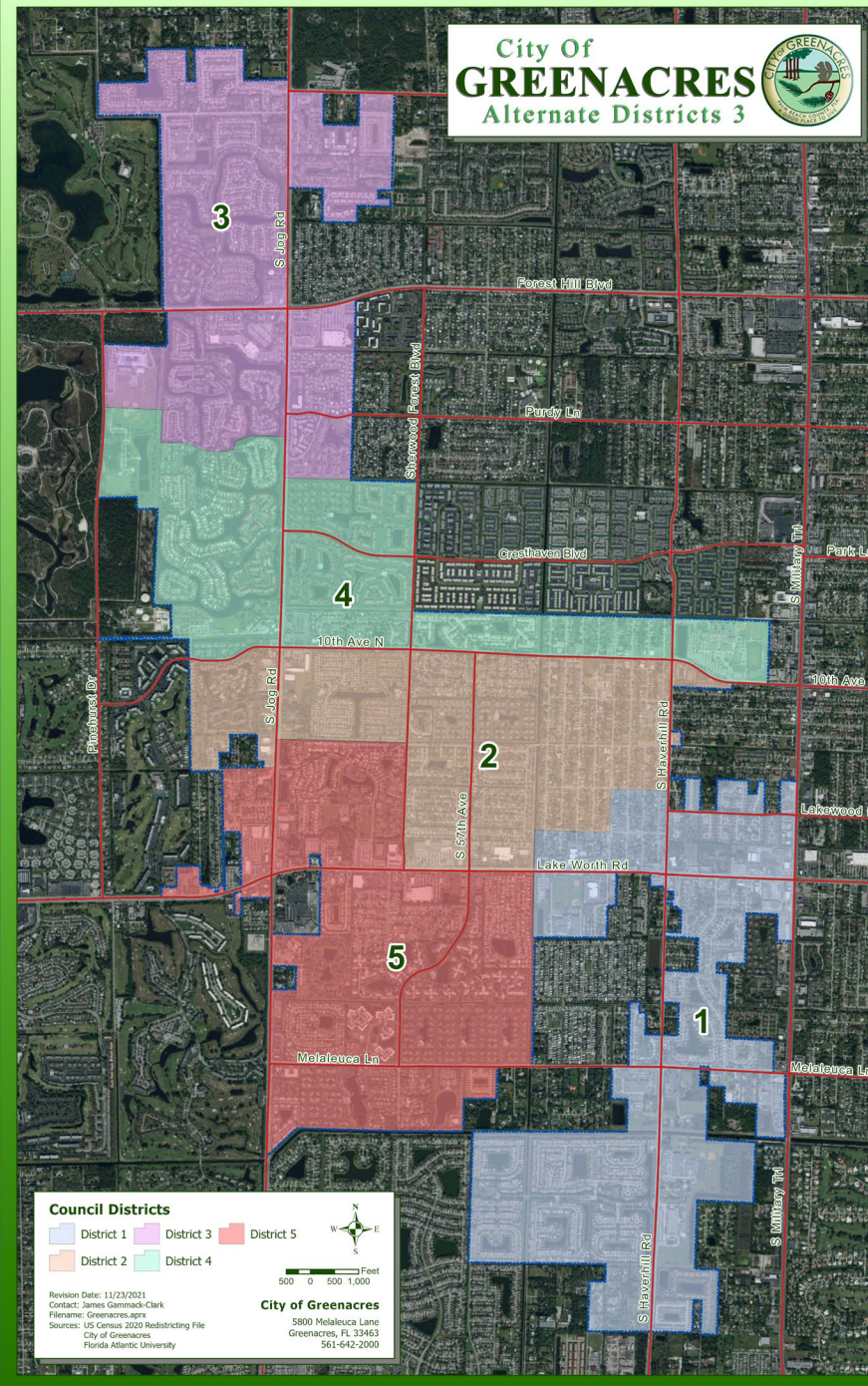


Alternative 3

- Builds off Alternative 2
 - Seeks improved compactness and population balance for Districts 3 and 4
 - Another approach to dealing with the northern portion of the city
- Improves overall population balance (Criterion #1), spatial compactness and contiguity (Criterion #2)



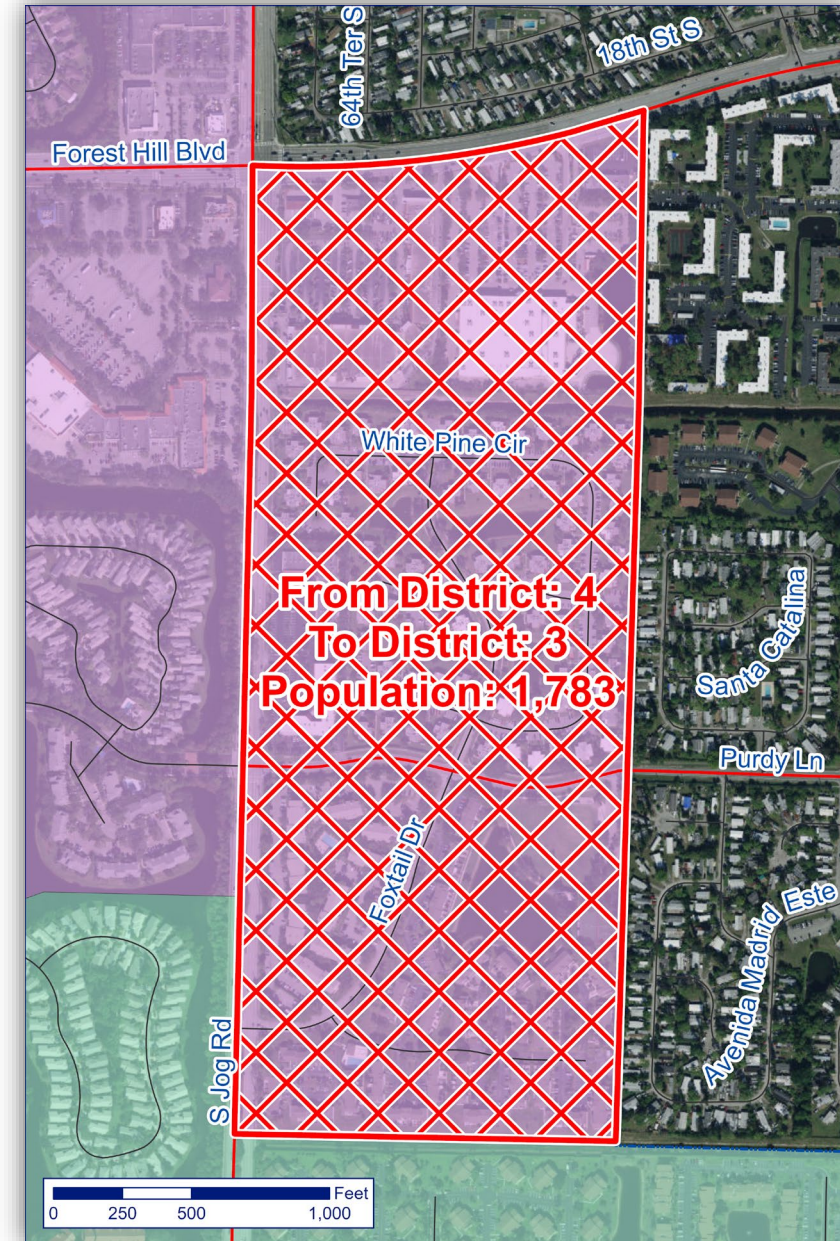
City Of
GREENACRES
Alternate Districts 3





Alternative 3

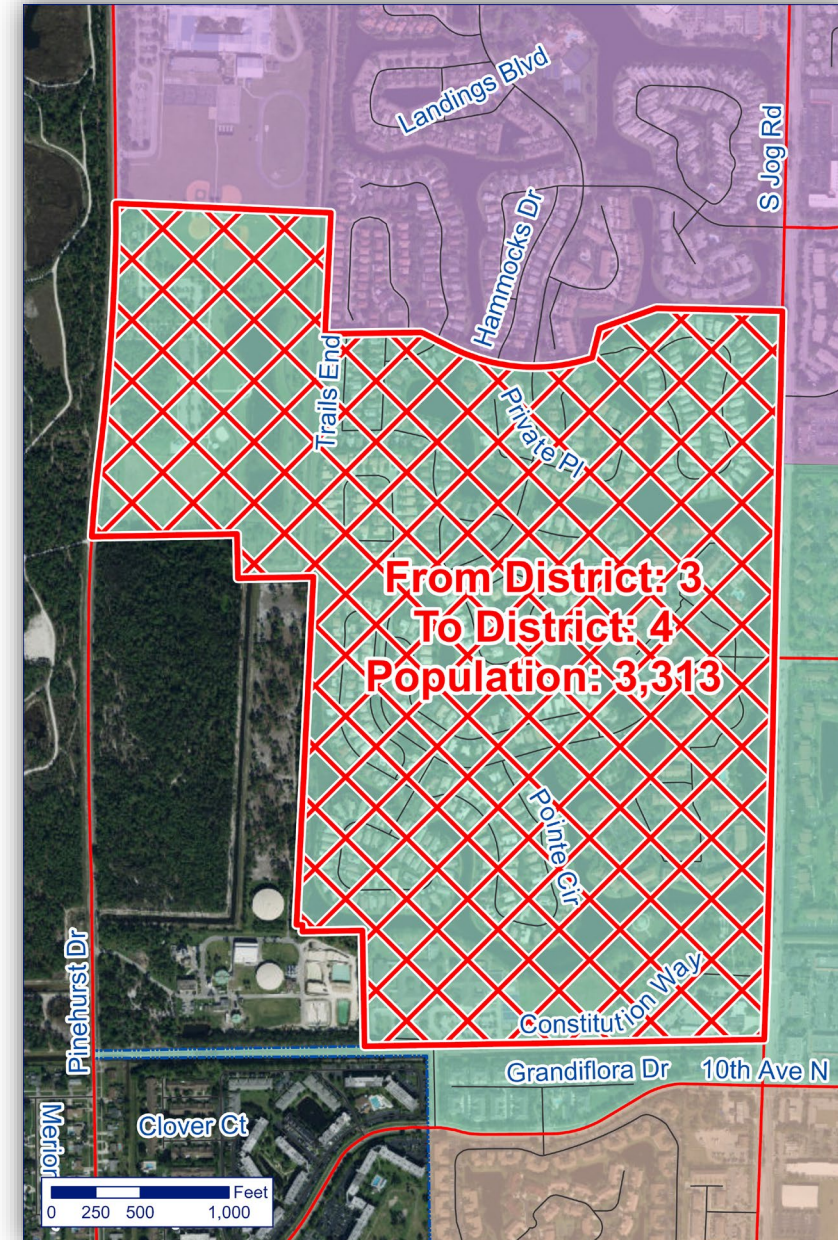
- District 3:
 - District 3 migrates again east of Jog Rd, and thus all the northern portion of the city
 - Absorbs 1,783 people from District 4
 - The portion of the city that is found:
 - North of the LWDD L9 canal
 - South of Forest Hill Blvd, and
 - East of Jog Rd
 - (Also included in Alternative 4)





Alternative 3

- District 4:
 - In turn, District 3 migrates north and west
 - That part of District 3 presently found to the:
 - West of Jog Rd,
 - North of LWDD L-10 canal
 - South of the Harbour Pointe and Crosswinds at River Bridge communities, and south of Harbor Lakes Circle and Arbor Lakes Rd
 - Together with Freedom Park
 - This area is home to 3,313 residents





Alternative 3

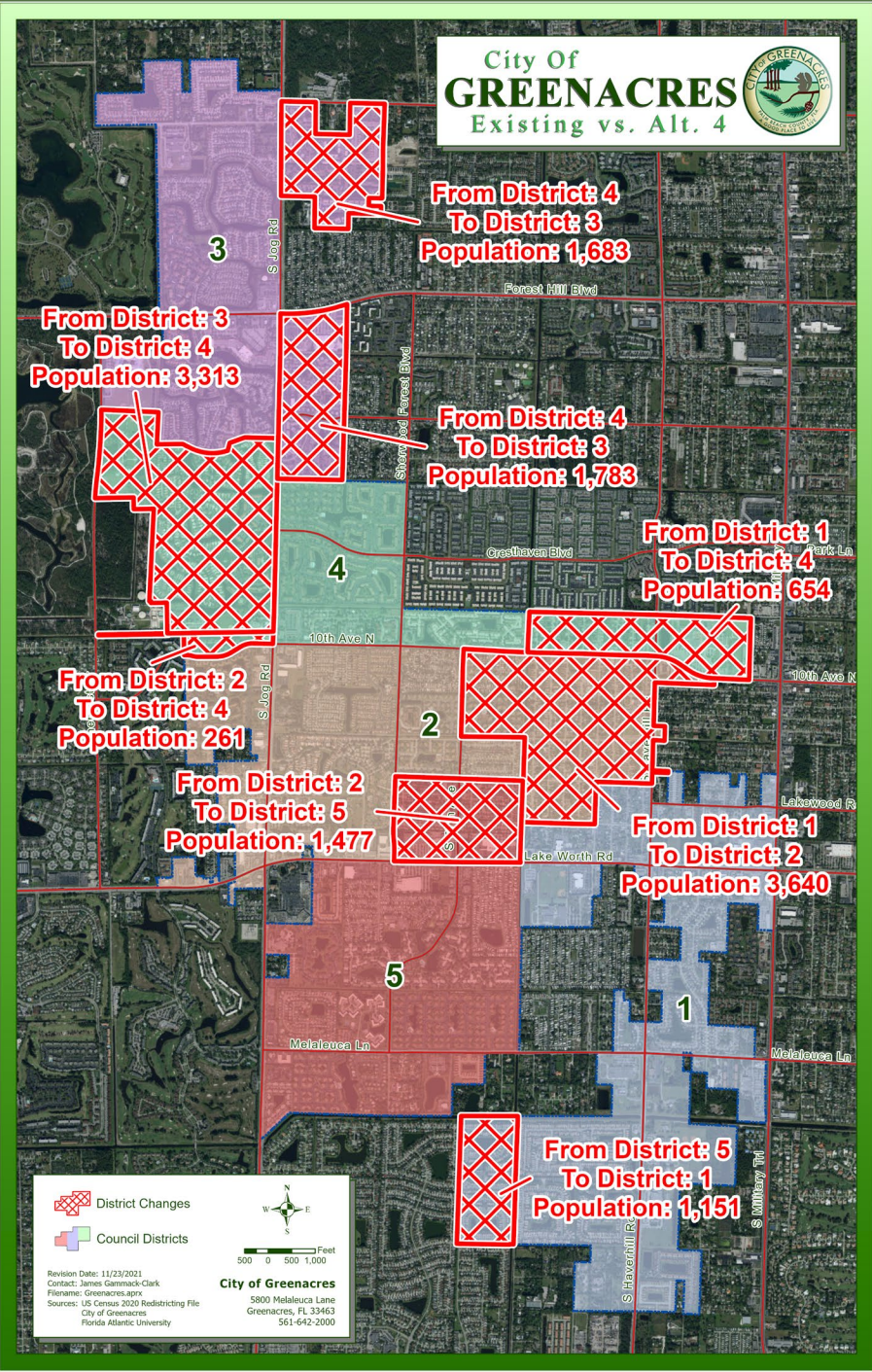
- Compared to Alternative 2
 - Total Deviation falls from 2.32 % to 0.93%, while the Mean Deviation falls from 0.46% to 0.19% (both deviations are tied for lowest of all alternatives)
 - The Spread falls from 2.32% to 1.4%

Alt. 3	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,923	20.28	1.42%	8,995	19.99	-0.05%
District 3	8,806	20.02	0.09%	9,020	20.04	0.22%
District 4	9,052	20.58	2.89%	9,052	20.12	0.58%
District 5	8,868	20.16	0.80%	8,926	19.84	-0.82%
Total	43,990	100	9.59%	44,999	100	0.93%
Average	8,798	20	1.92%	9,000	20	0.19%

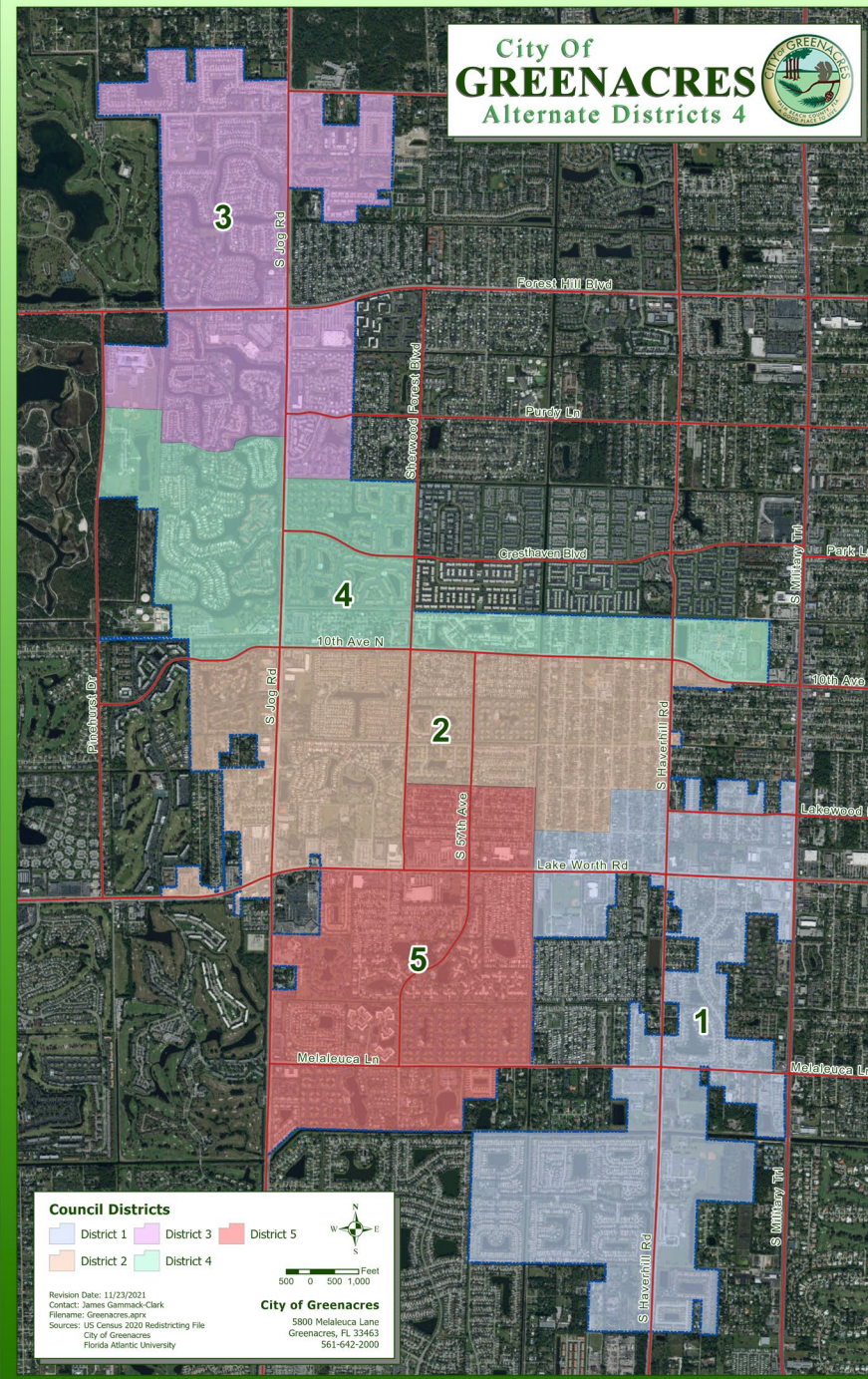


Alternative 4

- Seeks another configuration for the southern portion of the city
 - Retains the northern boundaries seen in Alternative 3
- Improves overall population balance (Criterion #1), spatial compactness and contiguity (Criterion #2)



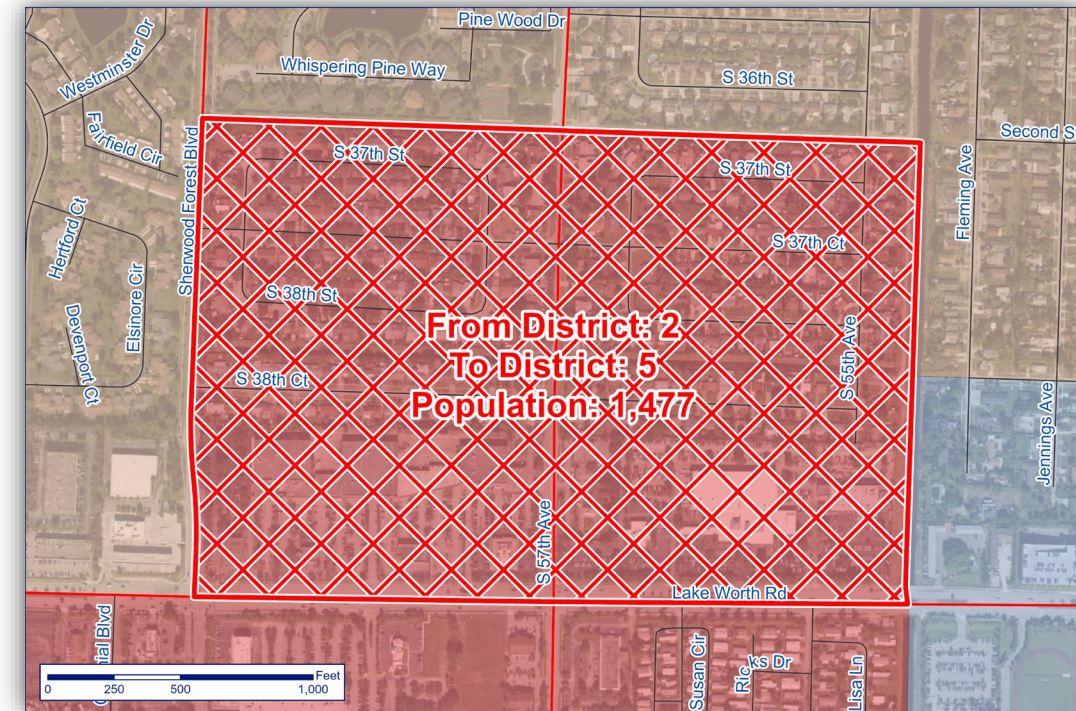
City Of
GREENACRES
Alternate Districts 4





Alternative 4

- District 5:
 - District 5 acquires 1,477 people from District 2:
 - South of the Pine Ridge IV subdivision,
 - North of Lake Worth Rd
 - East of Sherwood Forest Blvd, and
 - West of the LWDD E-3 canal
 - (Also included in Alternatives 5)





Alternative 4

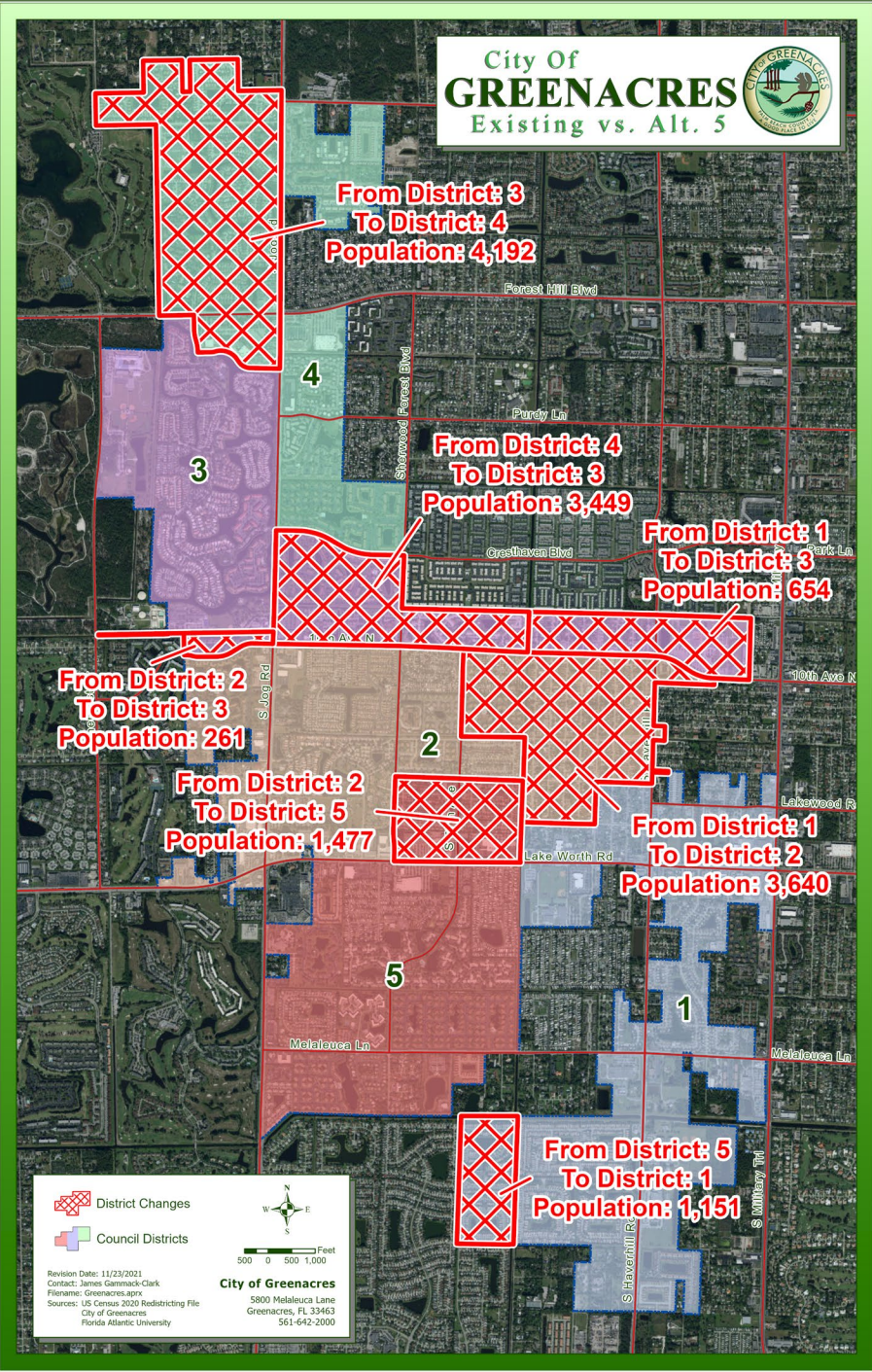
- Overall Deviation is much improved under Alternative 4
 - Total Deviation falls from 66.22% to 1.6%, while the Mean Deviation falls from 13.24% to 0.32%
 - The Spread falls from 56.85% to 1.31%

Alt. 4	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,804	20.01	0.07%	8,934	19.85	-0.73%
District 3	8,806	20.02	0.09%	9,020	20.04	0.22%
District 4	9,052	20.58	2.89%	9,052	20.12	0.58%
District 5	8,987	20.43	2.15%	8,987	19.97	-0.14%
Total	43,990	100	8.24%	44,999	100	1.60%
Average	8,798	20	1.65%	9,000	20	0.32%

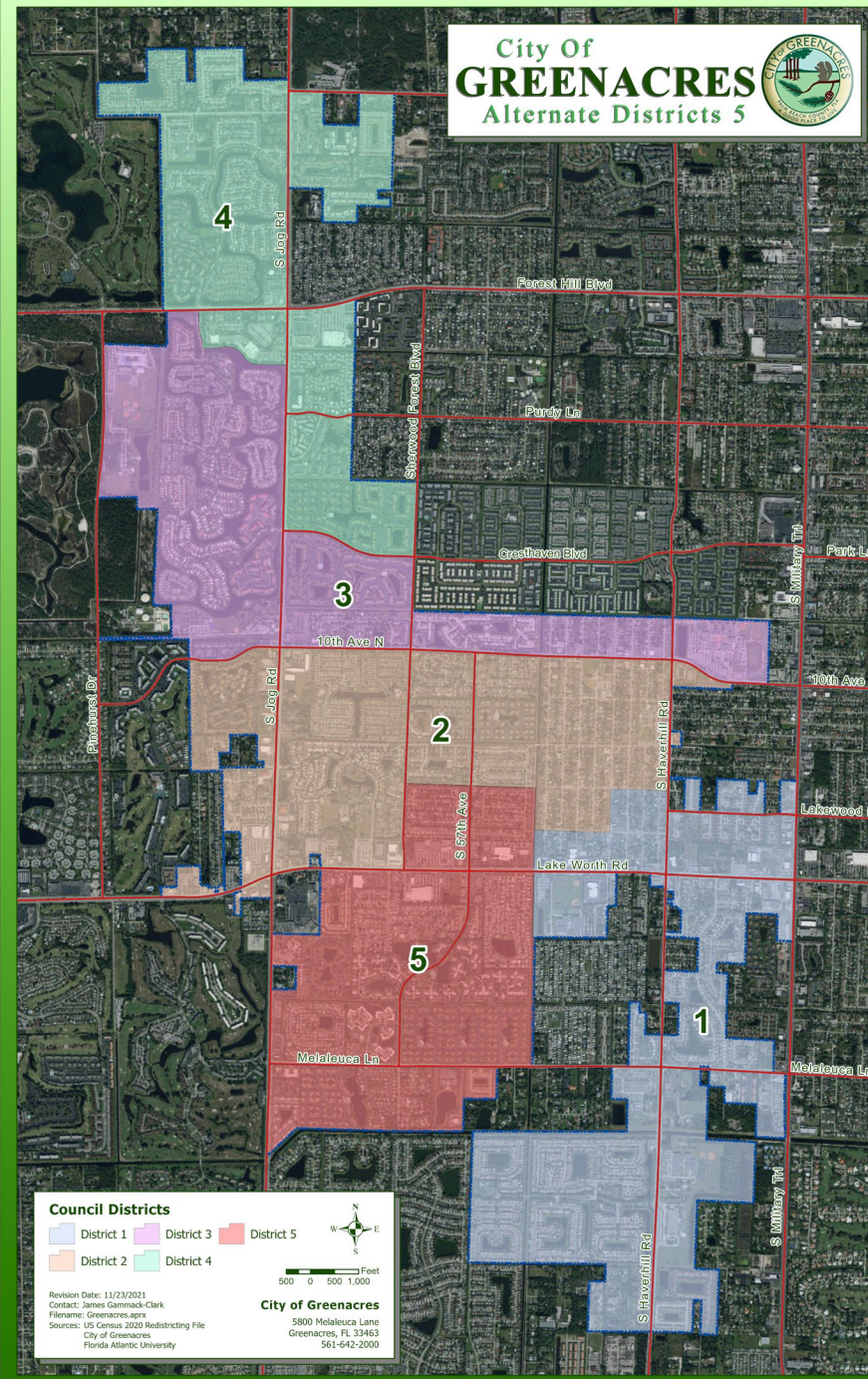


Alternative 5

- A combination of Alternatives 1 and 4
 - The northern half of Alternative 1
 - The southern half of Alternative 4
- Improves overall population balance (Criterion #1), spatial compactness and contiguity (Criterion #2)



City Of
GREENACRES
Alternate Districts 5





Alternative 5

- Overall Deviation is much improved under Alternative 5
 - Total Deviation falls from 66.22% to 1.6%, while the Mean Deviation falls from 13.24% to 0.32%
 - The Spread falls from 56.85% to 1.17% (lowest of all alternatives)

Alt. 5	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,804	20.01	0.07%	8,934	19.85	-0.73%
District 3	9,039	20.55	2.74%	9,039	20.09	0.44%
District 4	8,819	20.05	0.24%	9,033	20.07	0.37%
District 5	8,987	20.43	2.15%	8,987	19.97	-0.14%
Total	43,990	100	8.24%	44,999	100	1.60%
Average	8,798	20	1.65%	9,000	20	0.32%



Jog and Lake Worth ISBA

- Under Alternatives 4 and 5:
 - Ideally, Lake Worth Rd should divide Districts 2 and 5
 - However, for continuity reasons, the Crossroads Plaza at the SE corner of Lake Worth Rd and Jog Rd is part of District 2
 - This area is home to 0 residents
- If the council selects either Alternative 4 or 5, and the ISBA at Jog Rd and Lake Worth Rd is ultimately adopted, we recommend amending the district boundaries accordingly





Summary

- All the alternatives dramatically improve population balance among the 5 districts, and resolve the existing contiguity issues
 - All are well below the 10% Deviation threshold

Configuration	Total Deviation	Mean Deviation	Spread
Existing	66.22	13.24	12.83
Alternative 1	0.93	0.19	1.26
Alternative 2	2.32	0.46	2.32
Alternative 3	0.93	0.19	1.40
Alternative 4	1.60	0.32	1.31
Alternative 5	1.60	0.32	1.17



FLORIDA ATLANTIC UNIVERSITY

Questions?

City of Greenacres Redistricting Alternatives

March 29, 2022