



**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

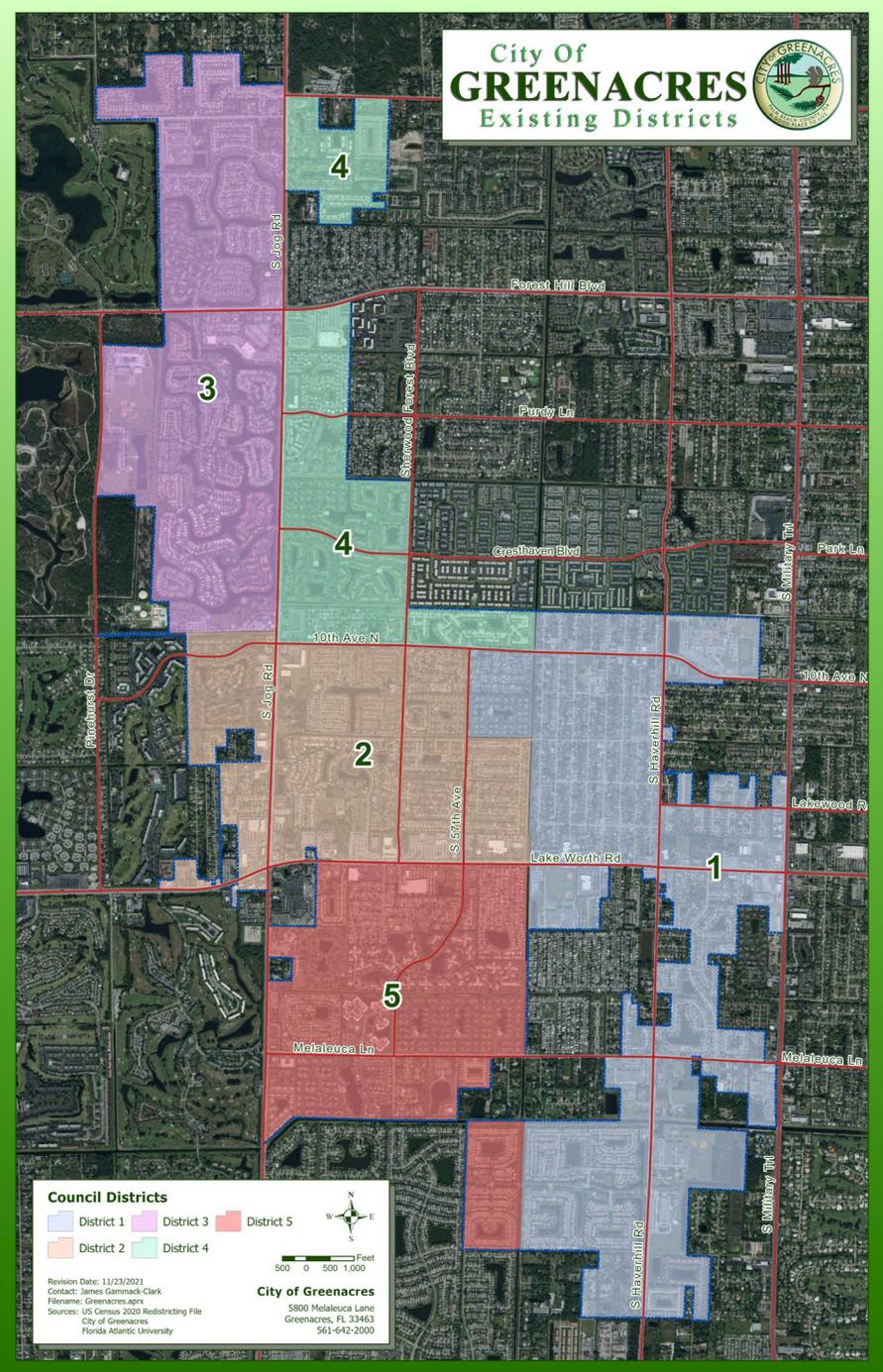


# Redistricting Parameters

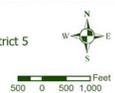
- The following guided our efforts:
  1. Reasonable population equality across districts
    - A maximum 10% overall deviation from the ideal size across districts
  2. Geographic contiguity and appropriate compactness
    - Follow major natural and manmade boundaries where possible
  3. Respect for 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



- Council Districts**
- District 1
  - District 2
  - District 3
  - District 4
  - District 5



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

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



# 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%
<b>Total</b>	<b>43,990</b>	<b>100</b>	<b>61.07%</b>	<b>44,999</b>	<b>100</b>	<b>66.22%</b>
<b>Average</b>	<b>8,798</b>	<b>20</b>	<b>12.21%</b>	<b>9,000</b>	<b>20</b>	<b>13.24%</b>



# 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%
<b>Total</b>	<b>43,990</b>	<b>100</b>	<b>61.07%</b>	<b>44,999</b>	<b>100</b>	<b>66.22%</b>
<b>Average</b>	<b>8,798</b>	<b>20</b>	<b>12.21%</b>	<b>9,000</b>	<b>20</b>	<b>13.24%</b>



# 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%
<b>Total</b>	<b>43,990</b>	<b>100</b>	<b>61.07%</b>	<b>44,999</b>	<b>100</b>	<b>66.22%</b>
<b>Average</b>	<b>8,798</b>	<b>20</b>	<b>12.21%</b>	<b>9,000</b>	<b>20</b>	<b>13.24%</b>



# Alternatives

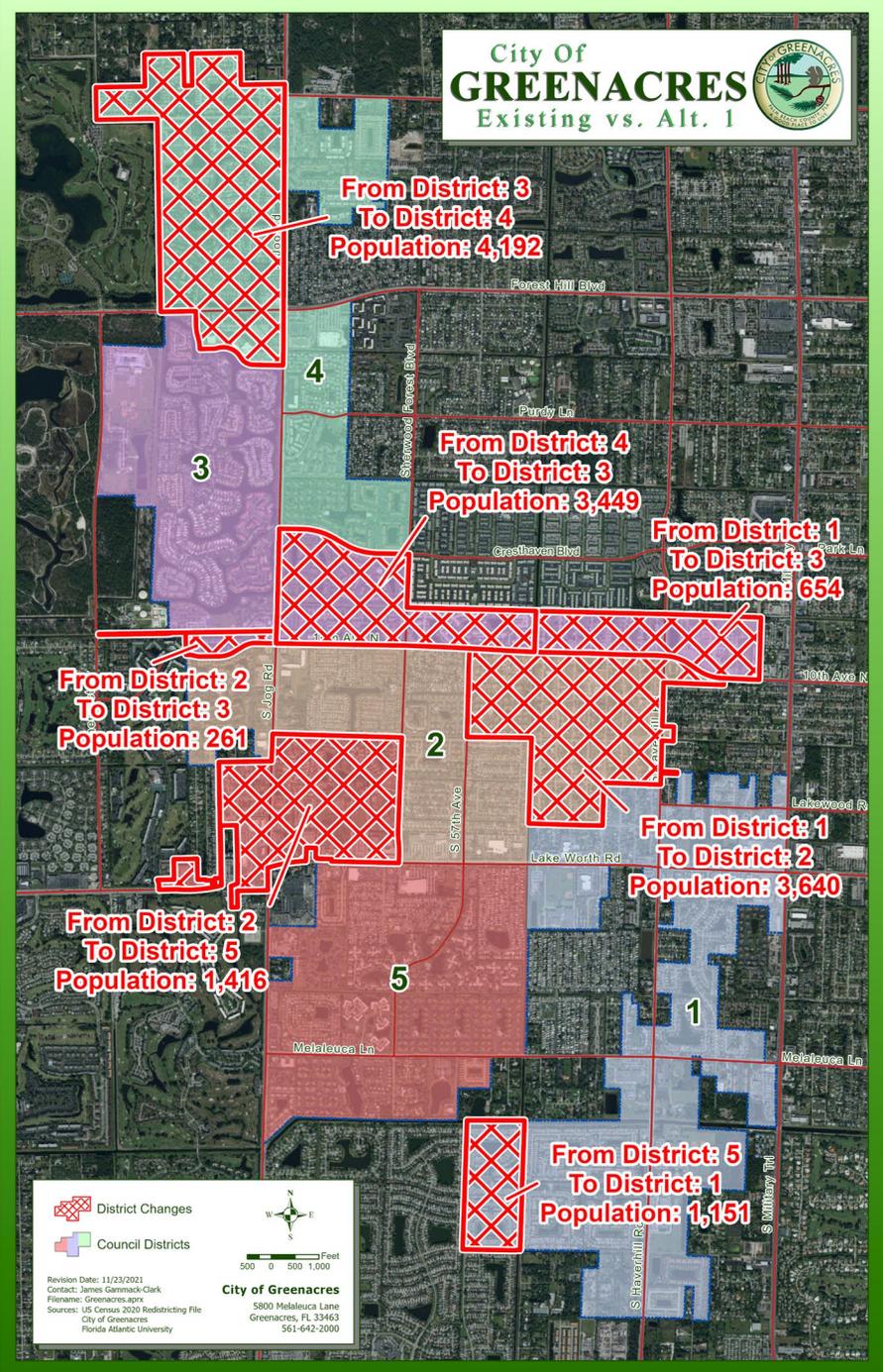
- Five Alternatives have been prepared for consideration:
  - All meet standard districting guidelines
    - Alternative ways to better balance district populations
    - Keep with the intent of the other identified guidelines
  - The overall pattern of district boundary changes needed to reduce the 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 10<sup>th</sup> Ave North serving as the demarcation line
- Improves overall population balance (Criterion #1), spatial compactness and contiguity (Criterion #2)

City Of  
**GREENACRES**  
Existing vs. Alt. 1



District Changes  
 Council Districts

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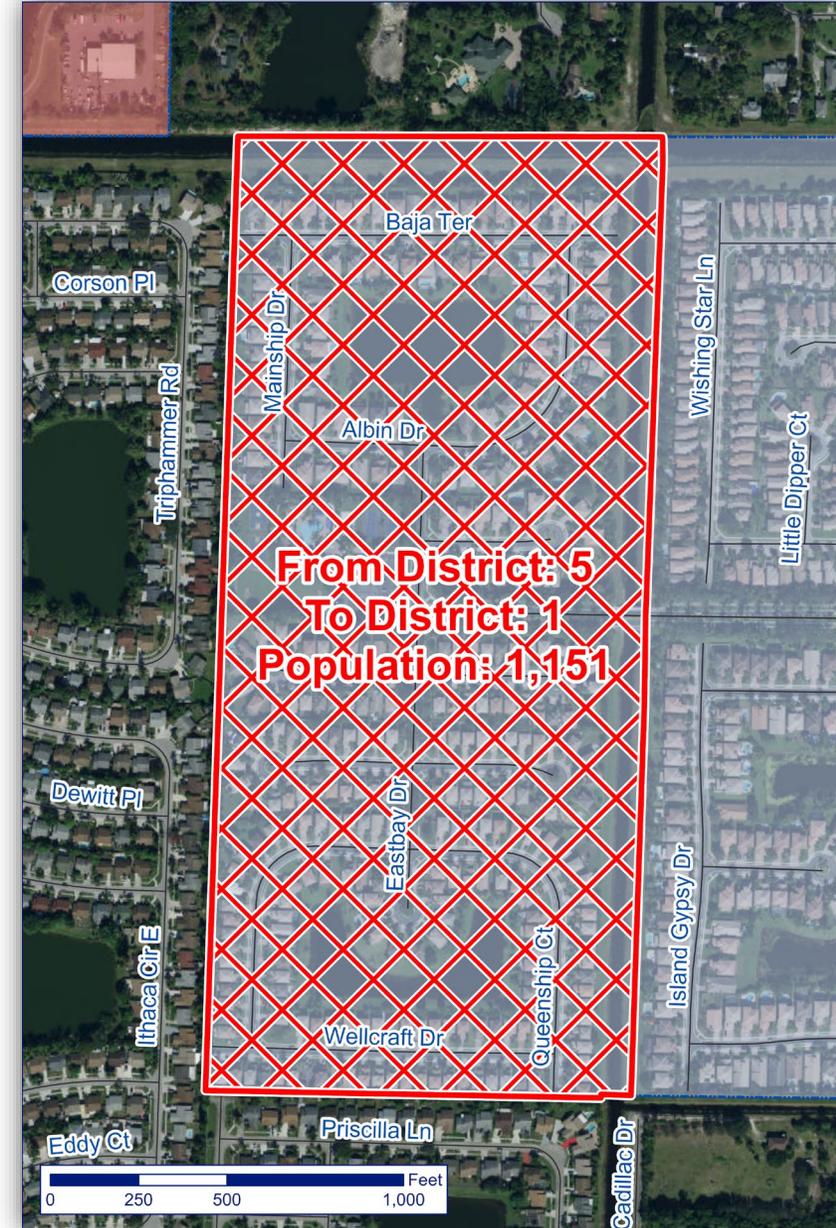
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**City of Greenacres**  
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# Alternative 1

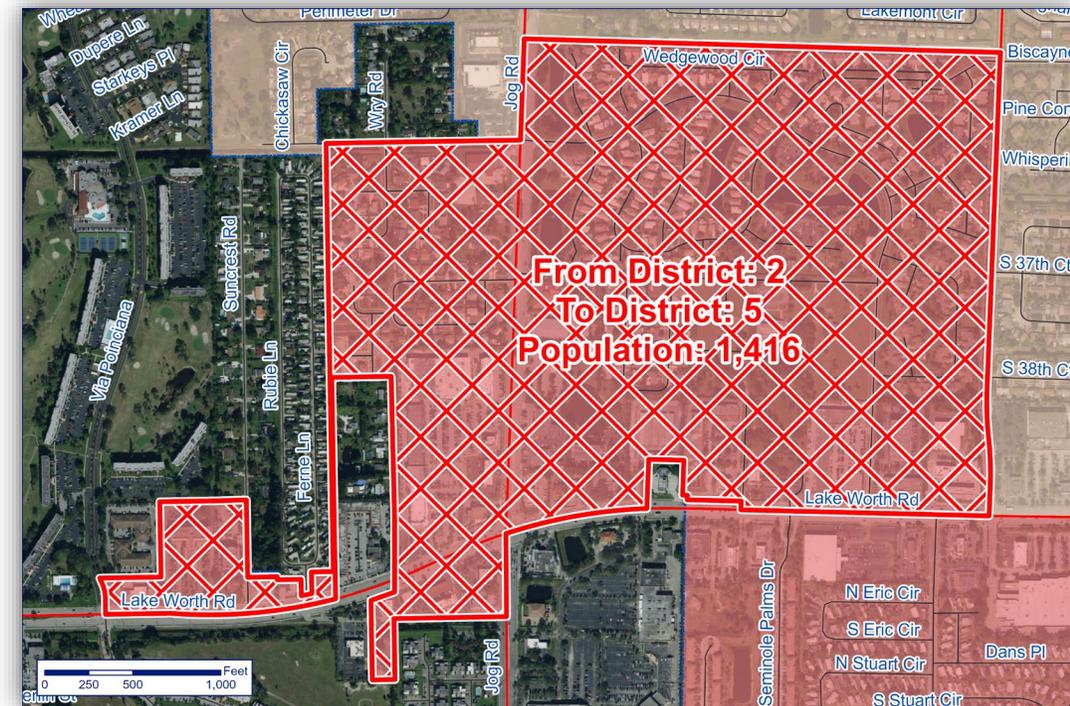
- Beginning in the south...
- District 1:
  - The western portion of Nautica Isles is non-contiguous with District 5
  - 1,151 people moved from District 5 to District 1
    - That portion of the neighborhood found to the west of the LWDD E-3 canal
  - (Included in ALL Alternatives)





# Alternative 1

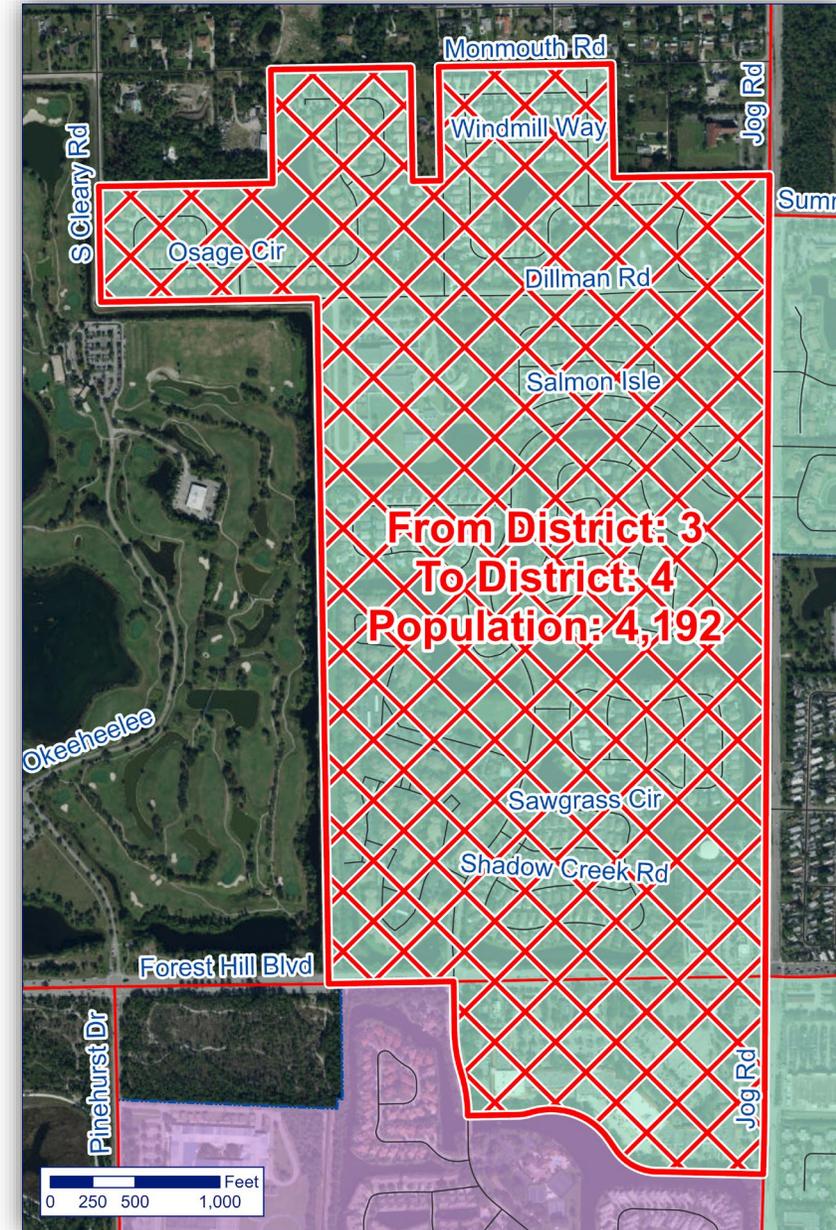
- District 5:
  - District 5 acquires 1,416 people from District 2:
    - That part of the city found between the LWDD L-11 canal and Lake Worth Rd in the north-south direction, and Sherwood Forest Blvd and Jog Rd in the east west direction, together with
    - That part of the city south of the LWDD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





# Alternative 1

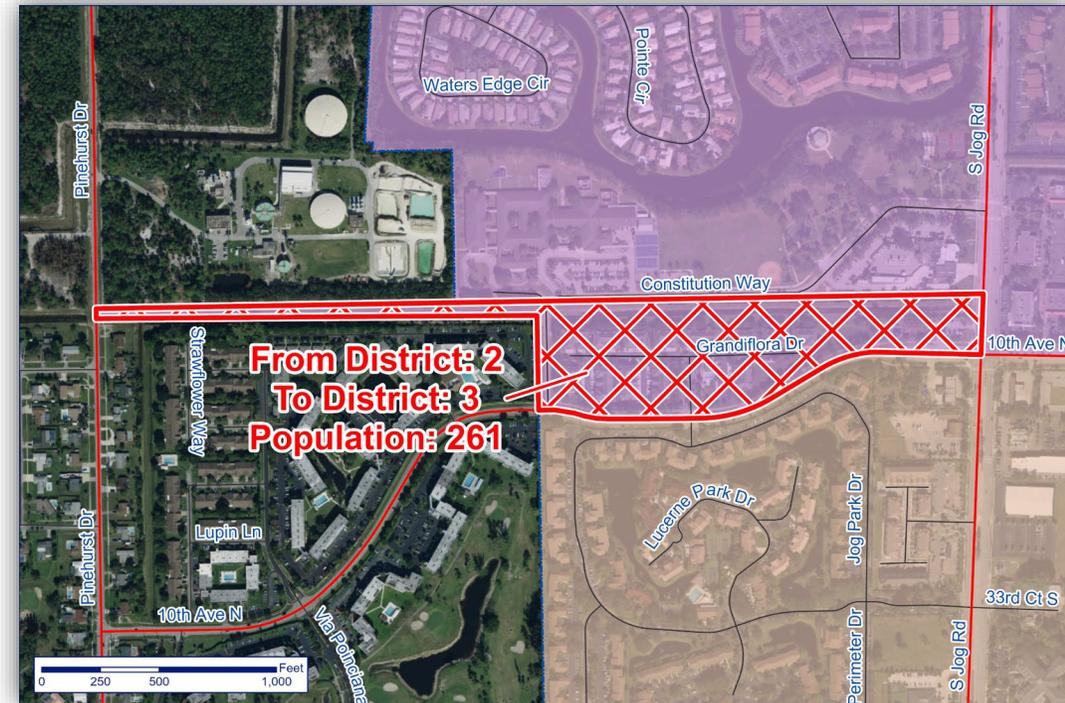
- Moving to the north...
- District 4:
  - The portion of the city that is north of the LWDD L7 canal and east of Jog Rd is non-contiguous with the rest of District 4
  - To address this, 4,192 people moved from District 3 to District 4
    - That portion of the city found to the north of the Forest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





# Alternative 1

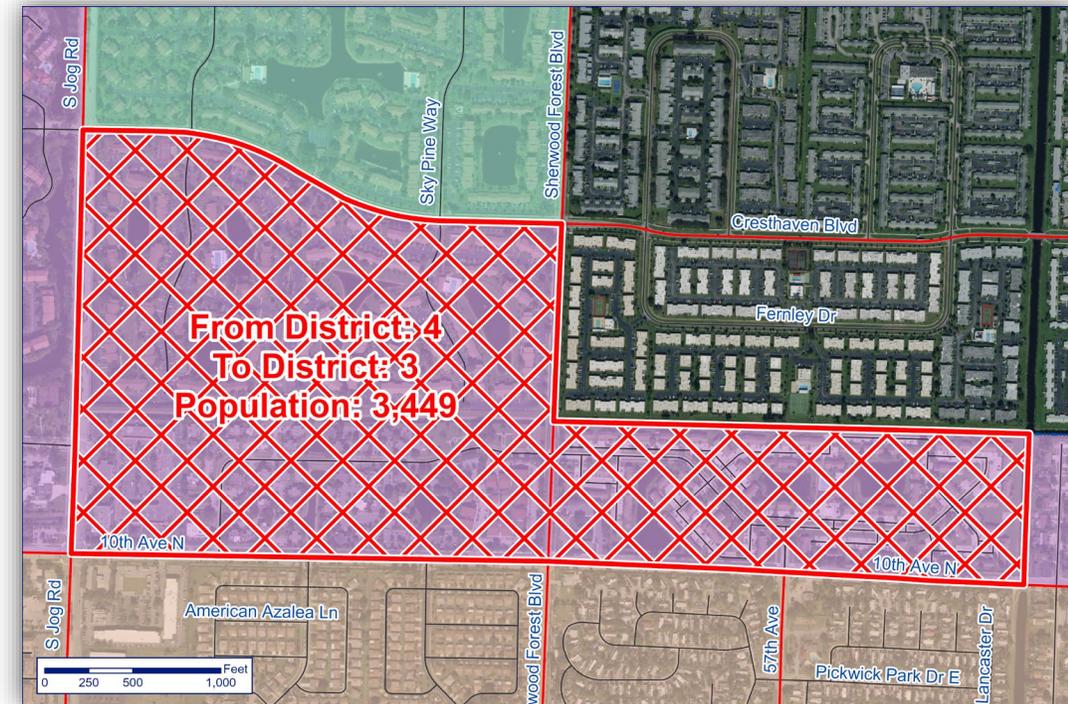
- Finishing in the middle of the city
- District 3:
  - Establish 10<sup>th</sup> Ave North as the north/south demarcation line
  - District 3 acquires 261 people from District 2:
    - That part of the city found between the LWDD L-10 canal and 10<sup>th</sup> Ave North in the north-south direction,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





# Alternative 1

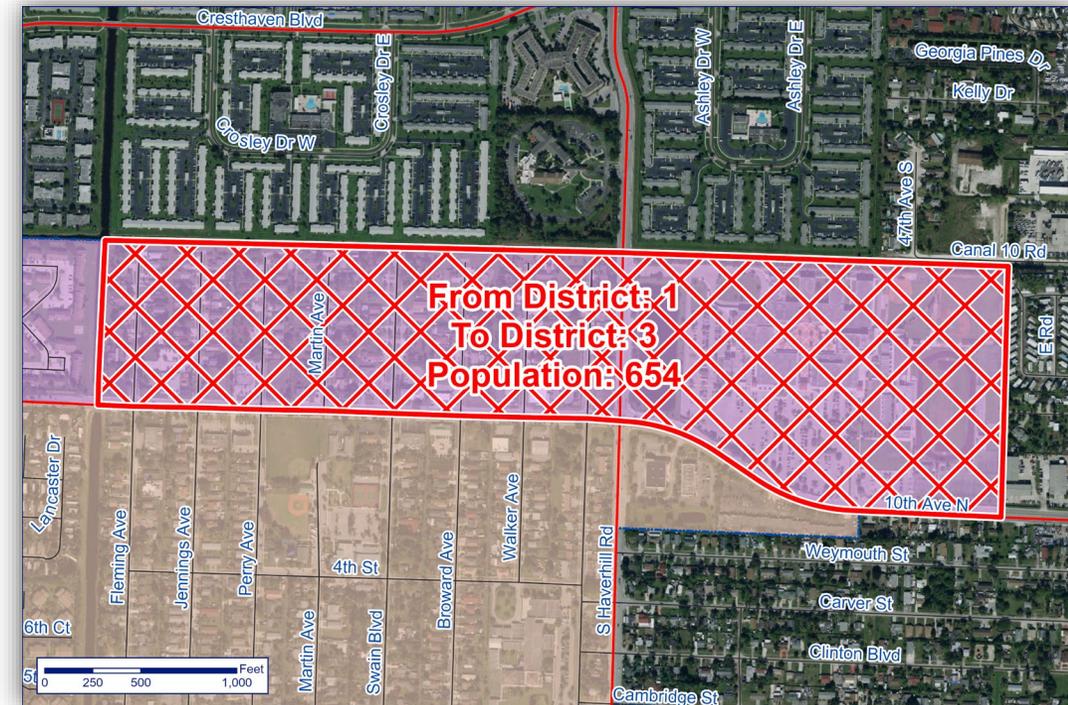
- District 3:
  - District 3 acquires 3,449 people from District 4:
    - That part of the city found between the LWDD E-3 canal and Jog Rd in the east-west, and between 10<sup>th</sup> Ave North and Cresthaven Blvd in the north-south direction
  - (Also included in Alternative 5)





# Alternative 1

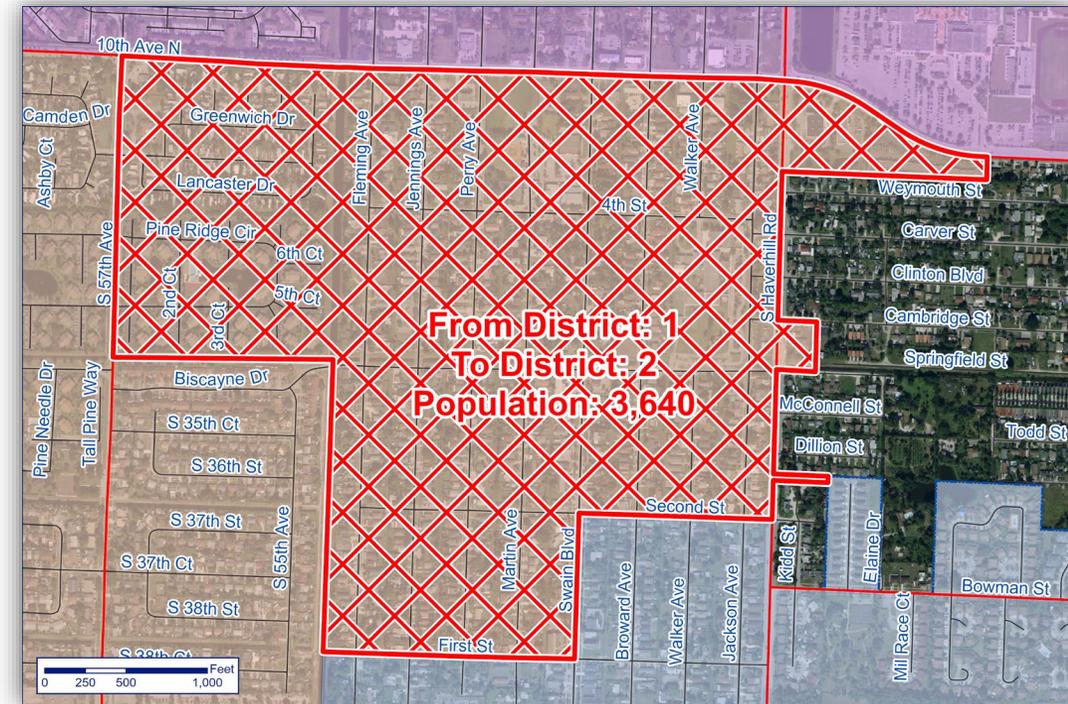
- District 3:
  - District 3 acquires 654 people from District 1:
    - That part of the city found to the east of the LWDD E-3 canal and north of 10<sup>th</sup> Ave North
  - (Also included in Alternative 5)





# 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 10<sup>th</sup> Ave North in the north-south direction, and east of S 57<sup>th</sup> 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%

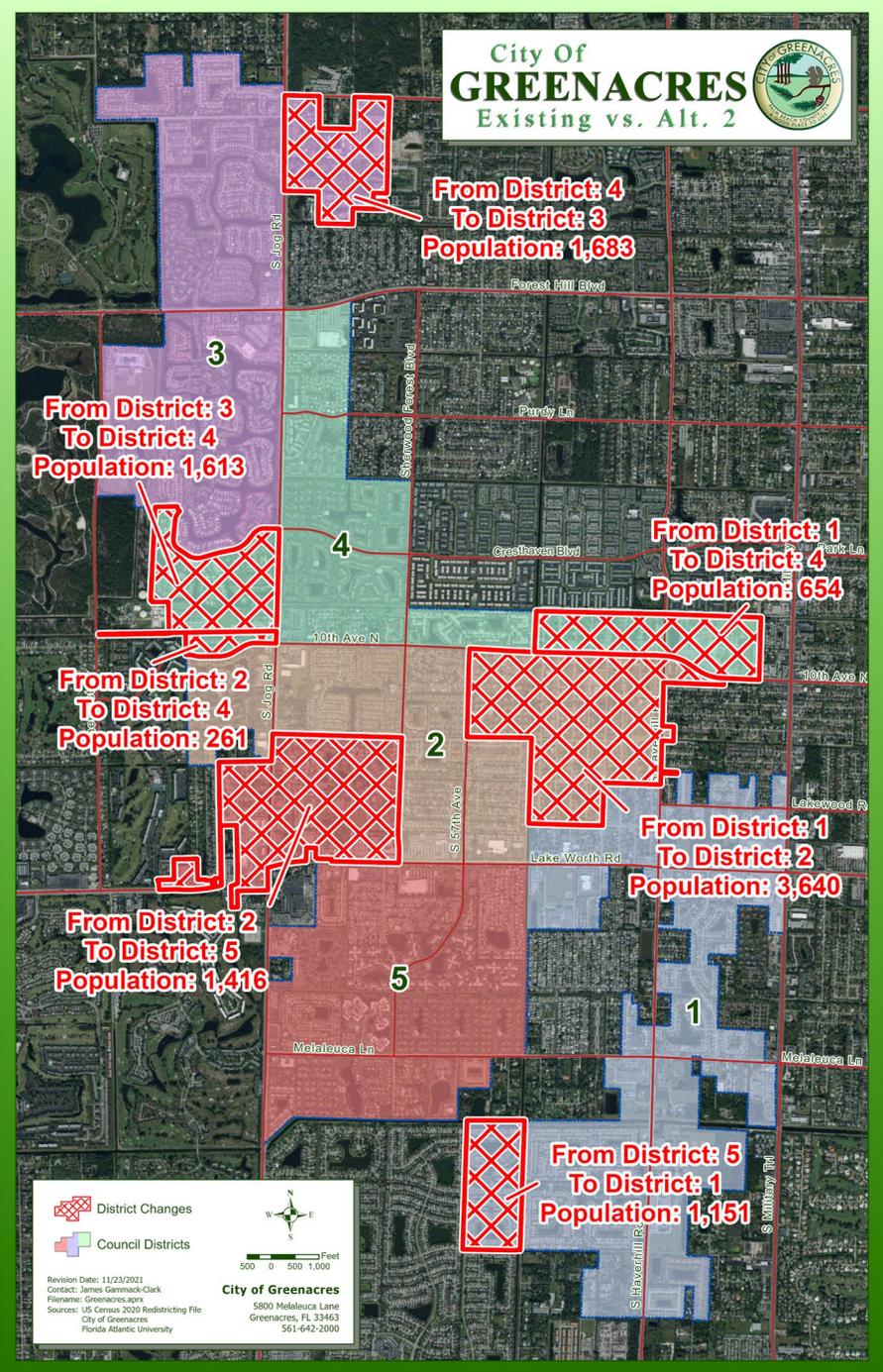
Alt. 1	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,923	20.28	1.42%	8,995	19.99	-0.05%
District 3	9,039	20.55	2.74%	9,039	20.09	0.44%
District 4	8,819	20.05	0.24%	9,033	20.07	0.37%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



## 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**  
Existing vs. Alt. 2



**From District: 4  
To District: 3  
Population: 1,683**

**From District: 3  
To District: 4  
Population: 1,613**

**From District: 1  
To District: 4  
Population: 654**

**From District: 2  
To District: 4  
Population: 261**

**From District: 1  
To District: 2  
Population: 3,640**

**From District: 2  
To District: 5  
Population: 1,416**

**From District: 5  
To District: 1  
Population: 1,151**

 District Changes  
 Council Districts

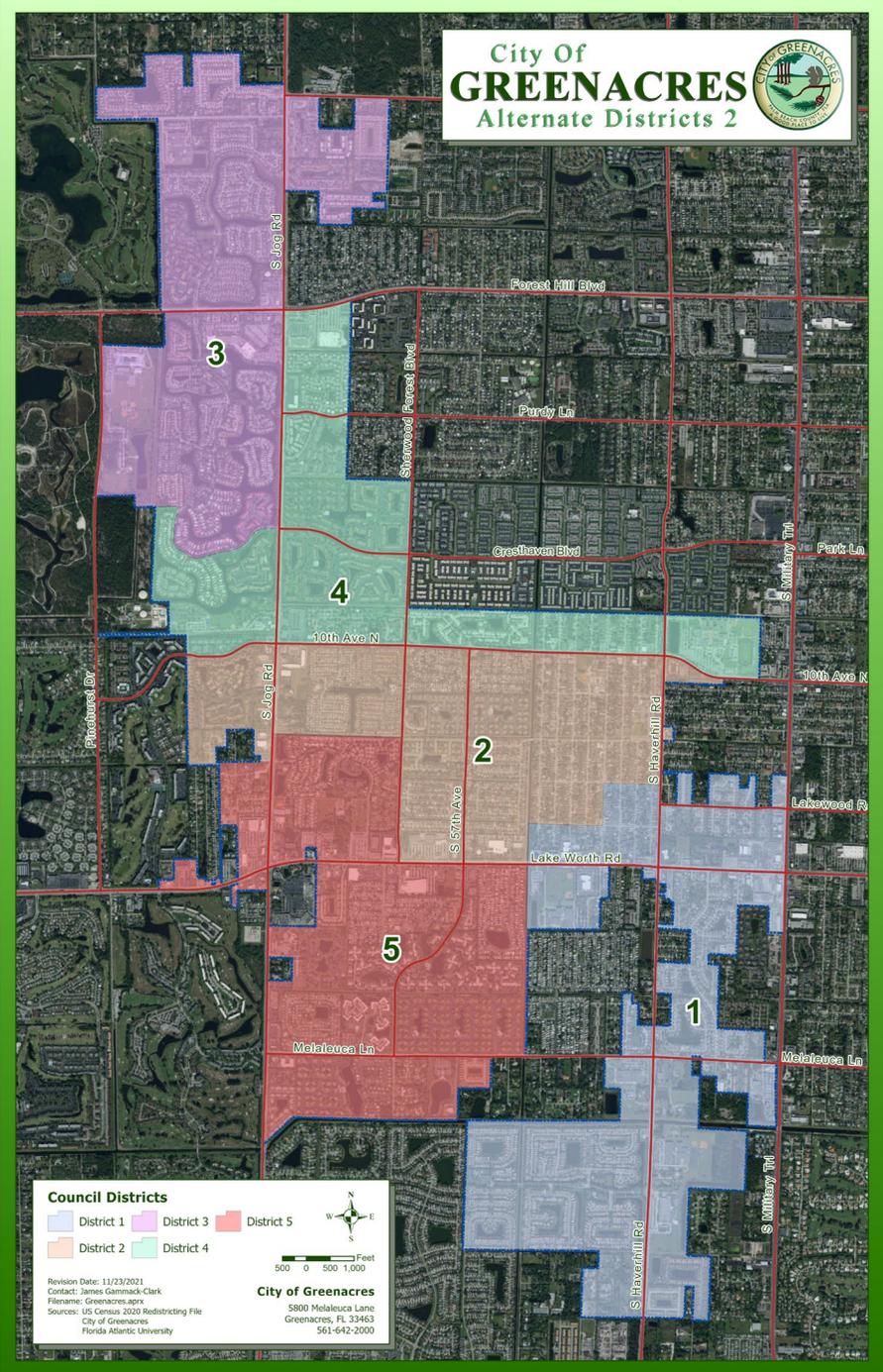
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500 0 500 1,000 Feet

**City of Greenacres**  
5800 Melaleuca Lane  
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561-642-2000

# City Of GREENACRES

## Alternate Districts 2

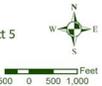


**Council Districts**

 District 1	 District 3	 District 5
 District 2	 District 4	

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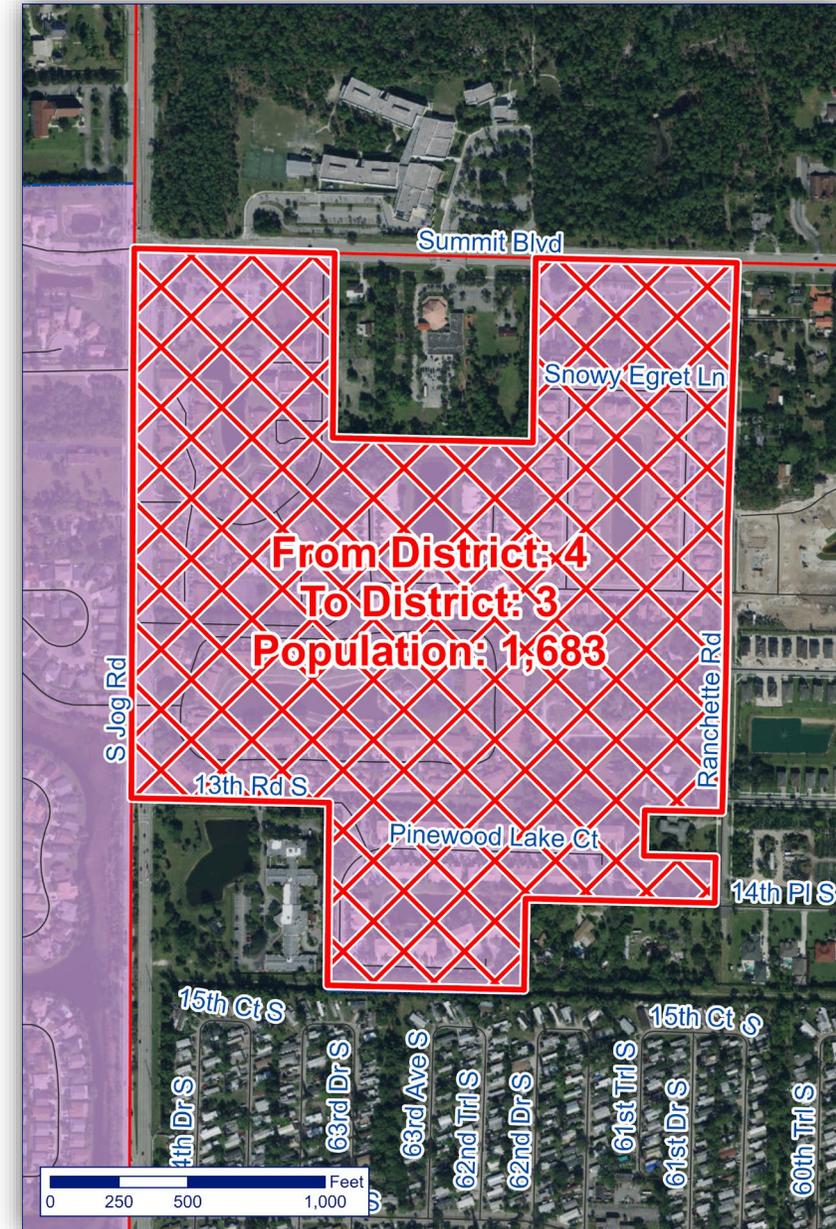
**City of Greenacres**  
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## Alternative 2

- 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

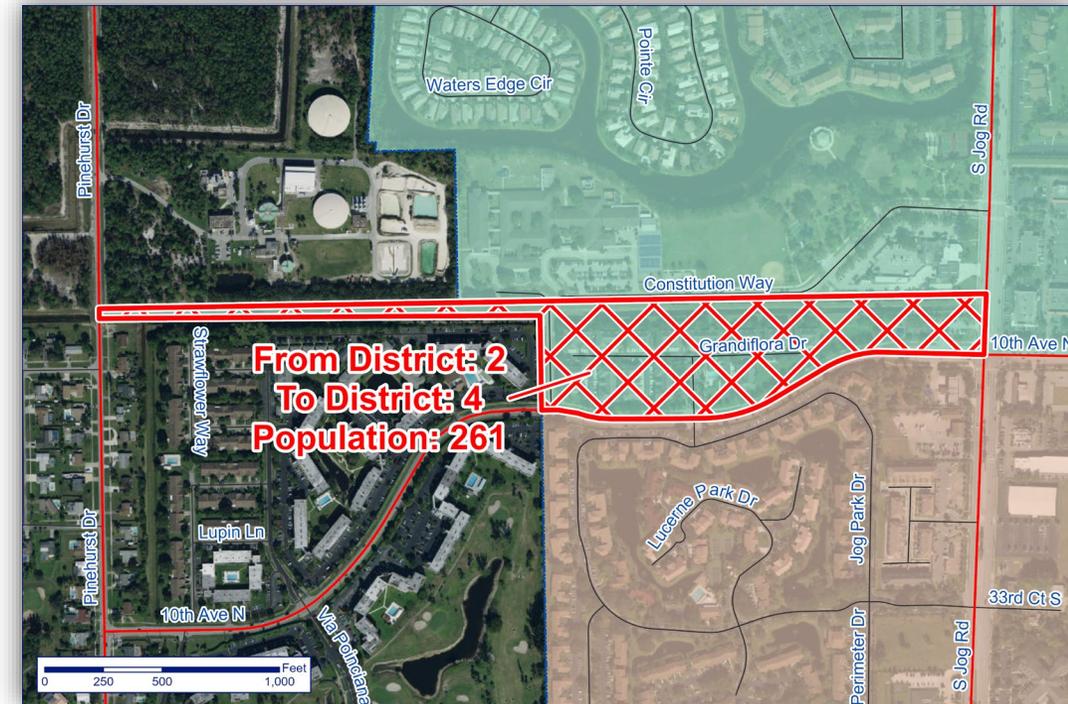
- District 4:
  - To offset the previous gain, District 3 must give up territory to its south
  - That part of District 3 presently found to the:
    - North of LWDD L-10 canal,
    - West of Jog Rd, and
    - South and west of a line that is the easterly extension of Freedom Park's southern boundary,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





## Alternative 2

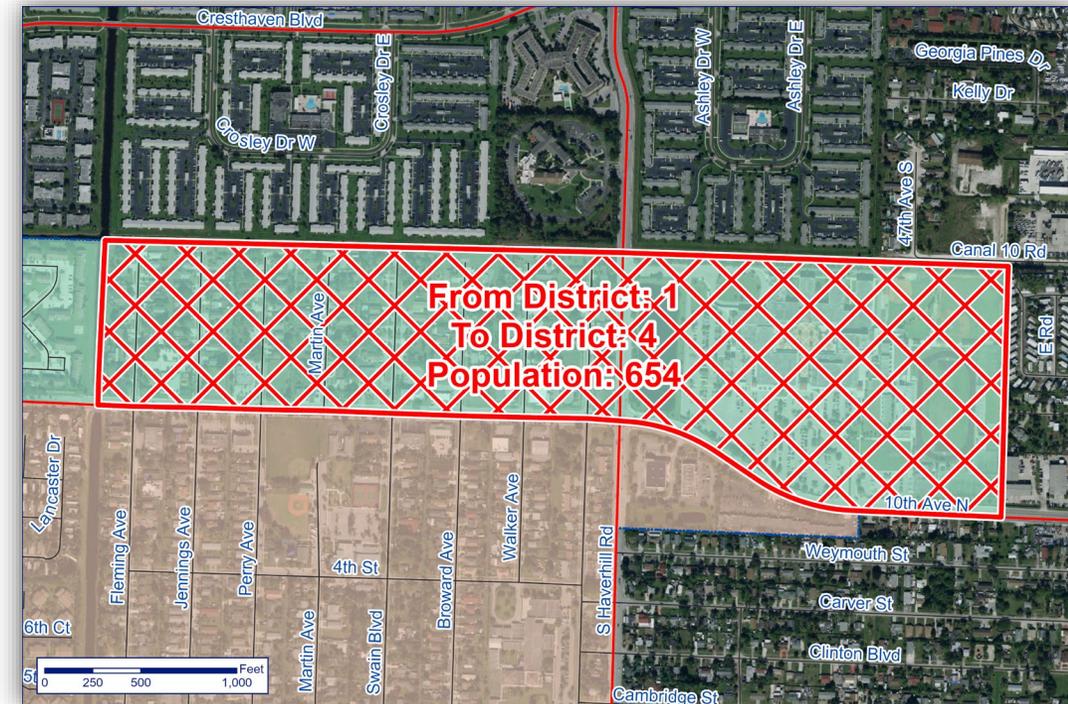
- District 4:
  - District 4 acquires 261 people from District 2:
    - The same area that was acquired by District 3 in Alternative 1
    - That part of the city found between the LWDD L-10 canal and 10<sup>th</sup> Ave North in the north-south direction, and west of Jog Rd
  - (Also included in Alternative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

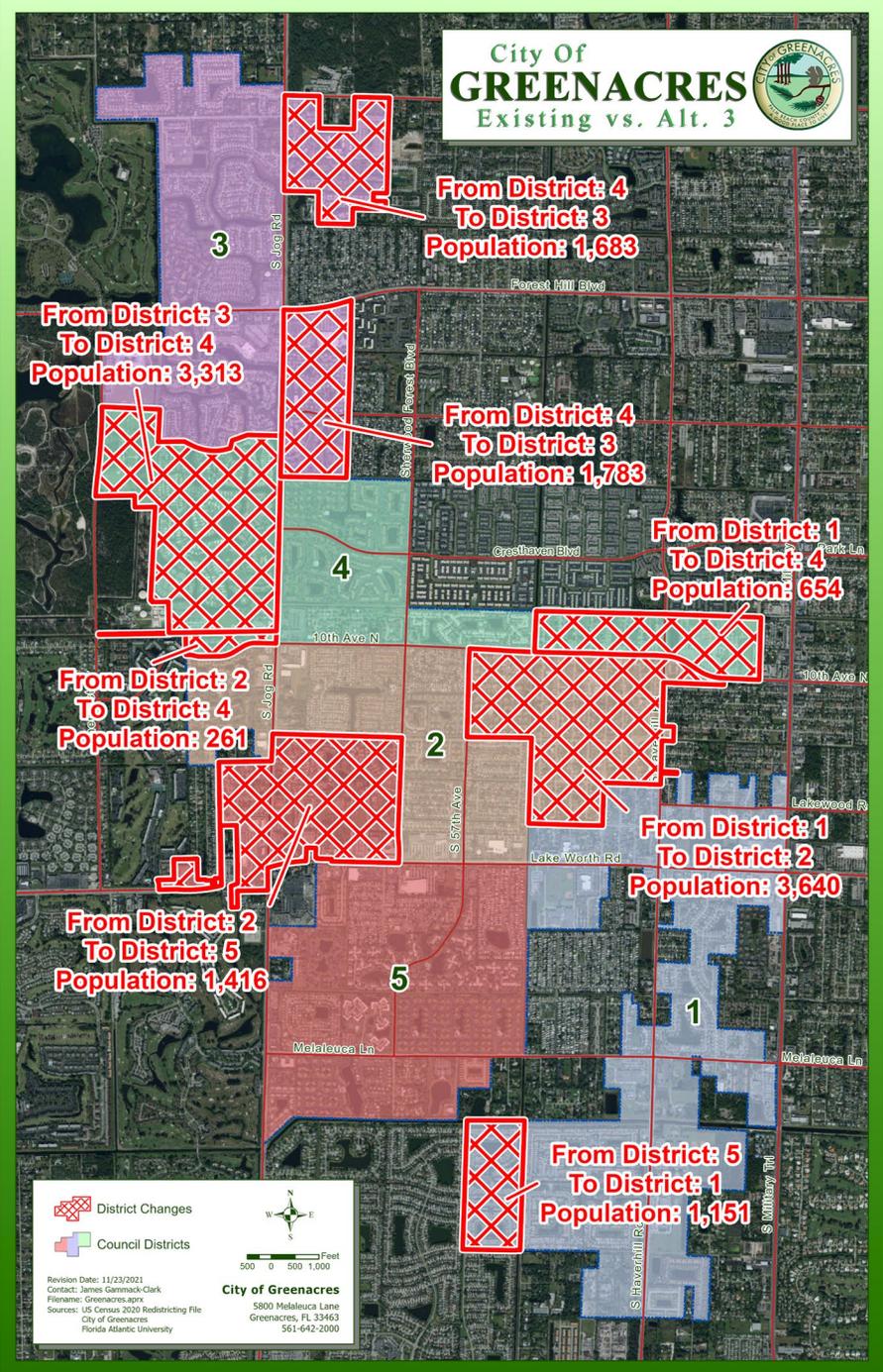
Alt. 2	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,923	20.28	1.42%	8,995	19.99	-0.05%
District 3	8,723	19.83	-0.85%	8,937	19.86	-0.70%
District 4	9,135	20.77	3.83%	9,135	20.30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



## 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**  
Existing vs. Alt. 3



District Changes  
 Council Districts

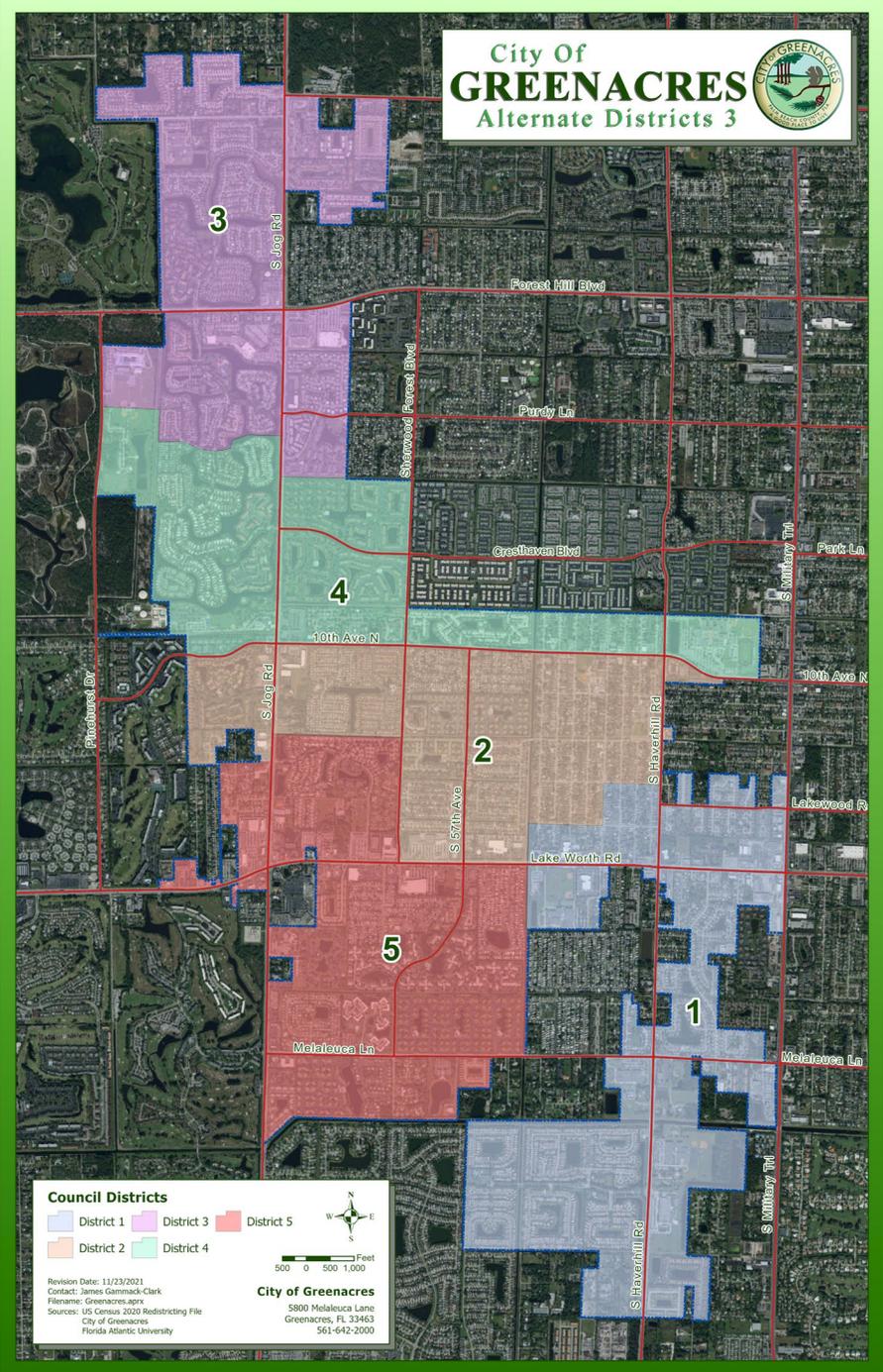
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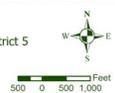
# City Of GREENACRES

## Alternate Districts 3



**Council Districts**

District 1	District 3	District 5
District 2	District 4	



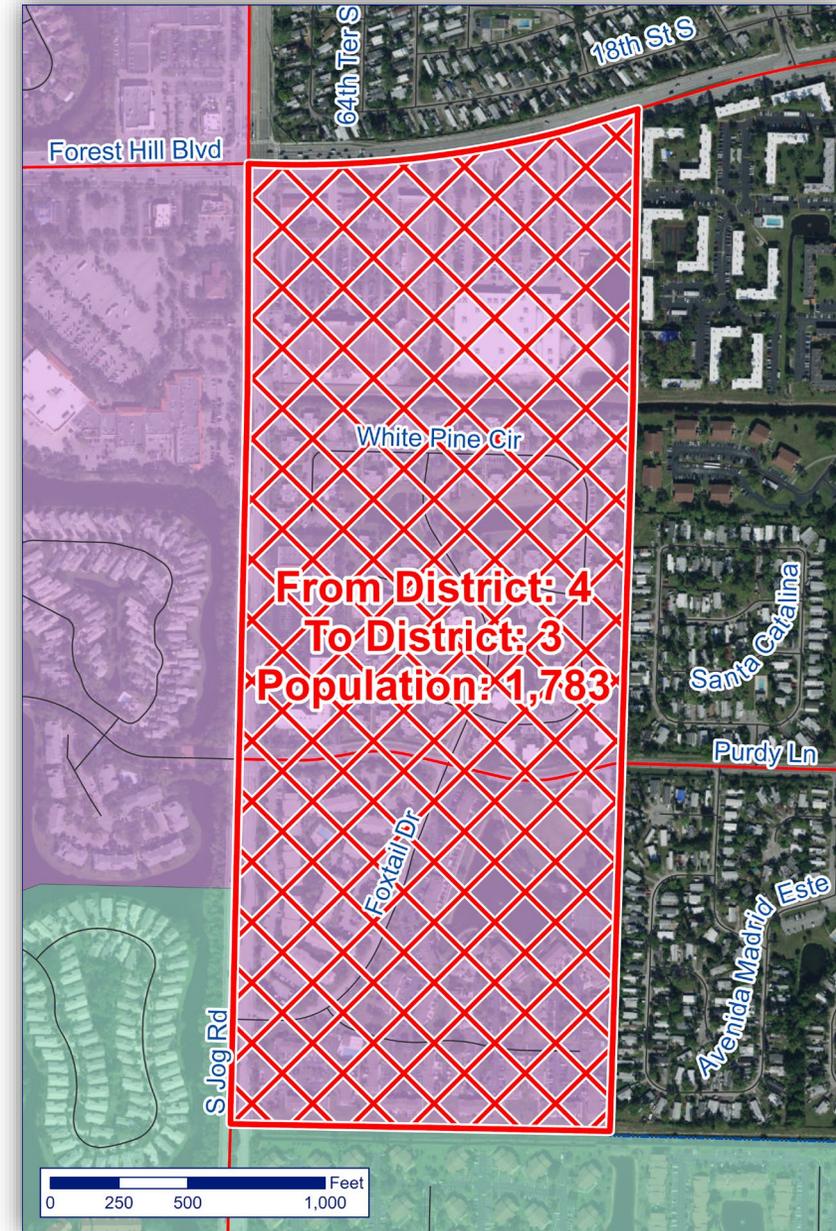
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## Alternative 3

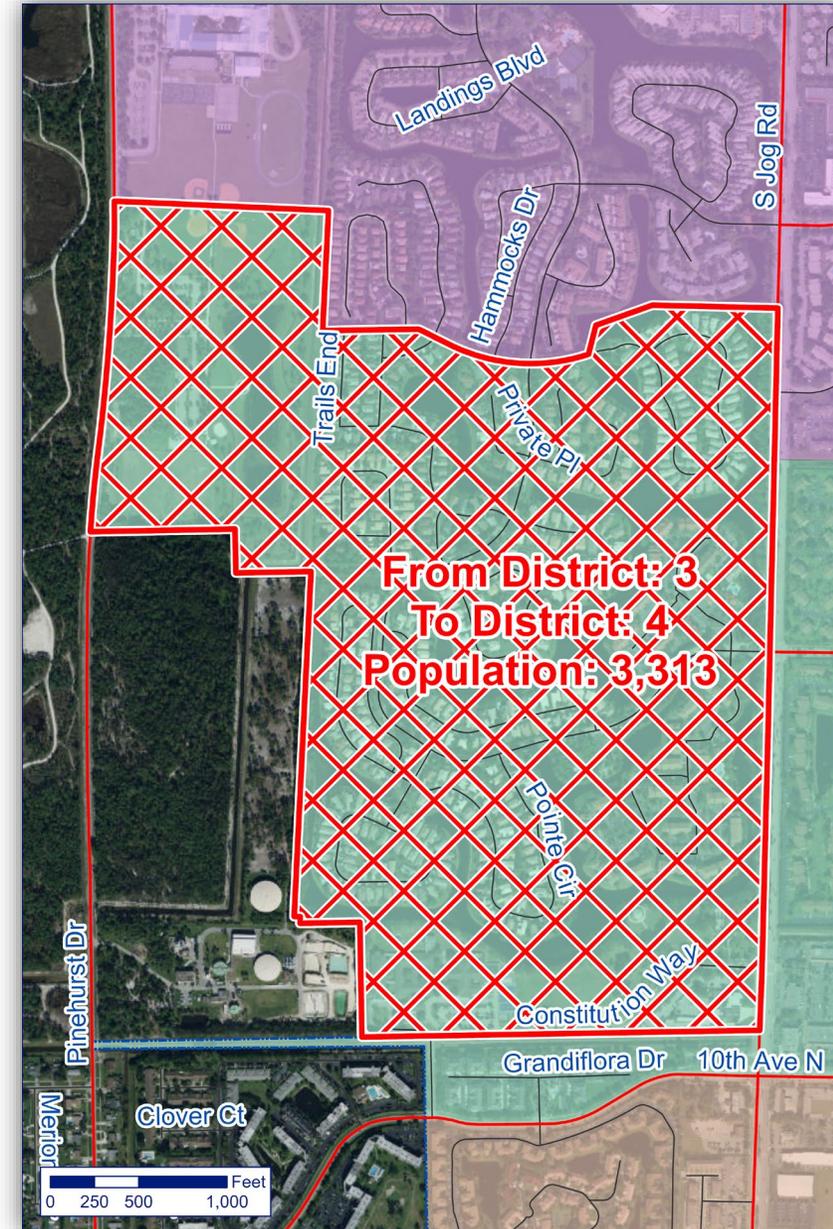
- District 3:
  - District 3 migrates again east of Jog Rd, and thus all the northern portion of the city
  - Absorbs 1,783 people from District 4
  - The portion of the city that is found:
    - North of the LWDD L9 canal
    - South of Forest Hill Blvd, and
    - East of Jog Rd
  - (Also included in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

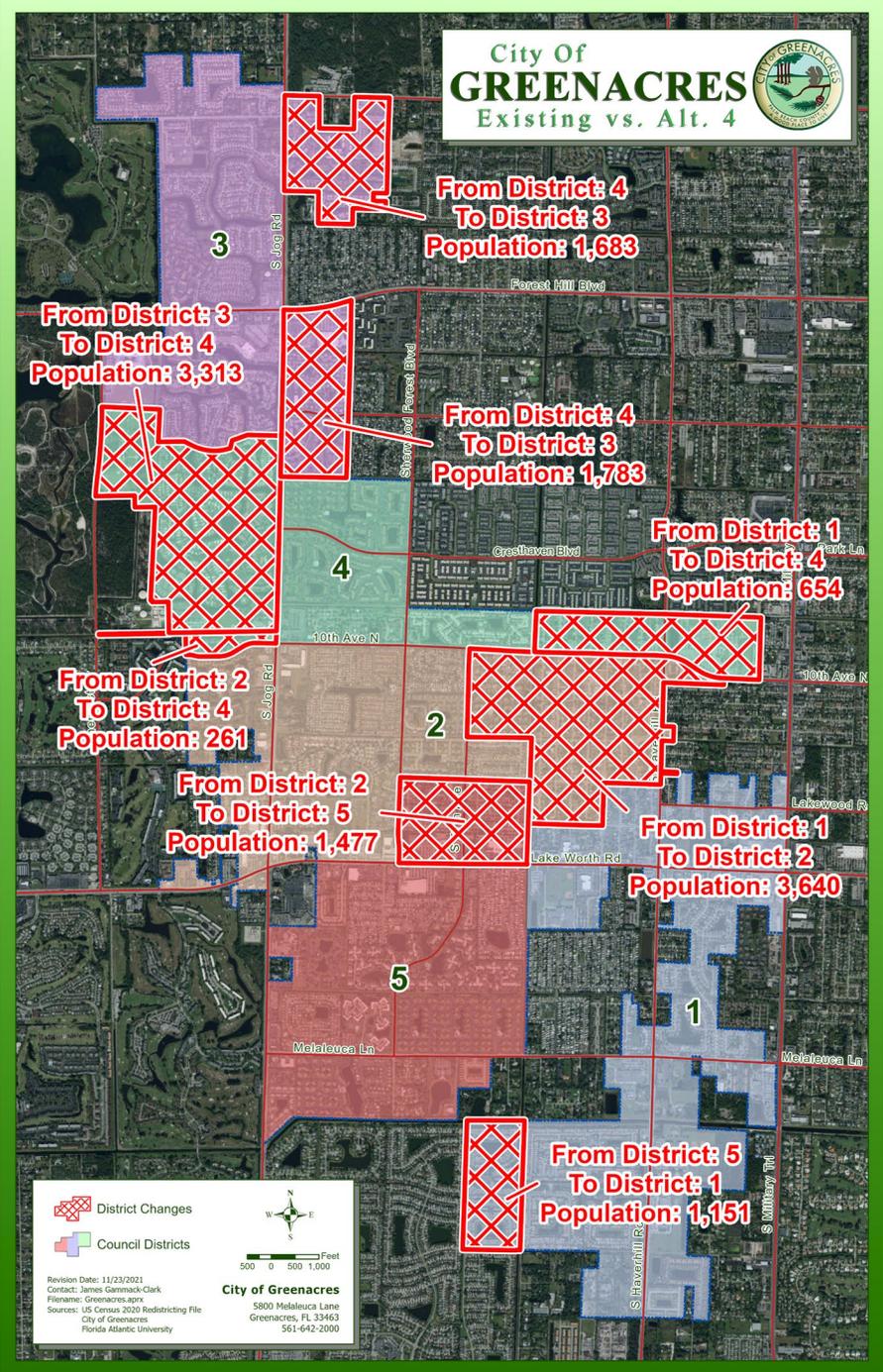
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District 2	8,923	20.28	1.42%	8,995	19.99	-0.05%
District 3	8,806	20.02	0.09%	9,020	20.04	0.22%
District 4	9,052	20.58	2.89%	9,052	20.12	0.58%
District 5	8,868	20.16	0.80%	8,926	19.84	-0.82%
<b>Total</b>	<b>43,990</b>	<b>100</b>	<b>9.59%</b>	<b>44,999</b>	<b>100</b>	<b>0.93%</b>
<b>Average</b>	<b>8,798</b>	<b>20</b>	<b>1.92%</b>	<b>9,000</b>	<b>20</b>	<b>0.19%</b>



## 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**  
Existing vs. Alt. 4



District Changes  
 Council Districts

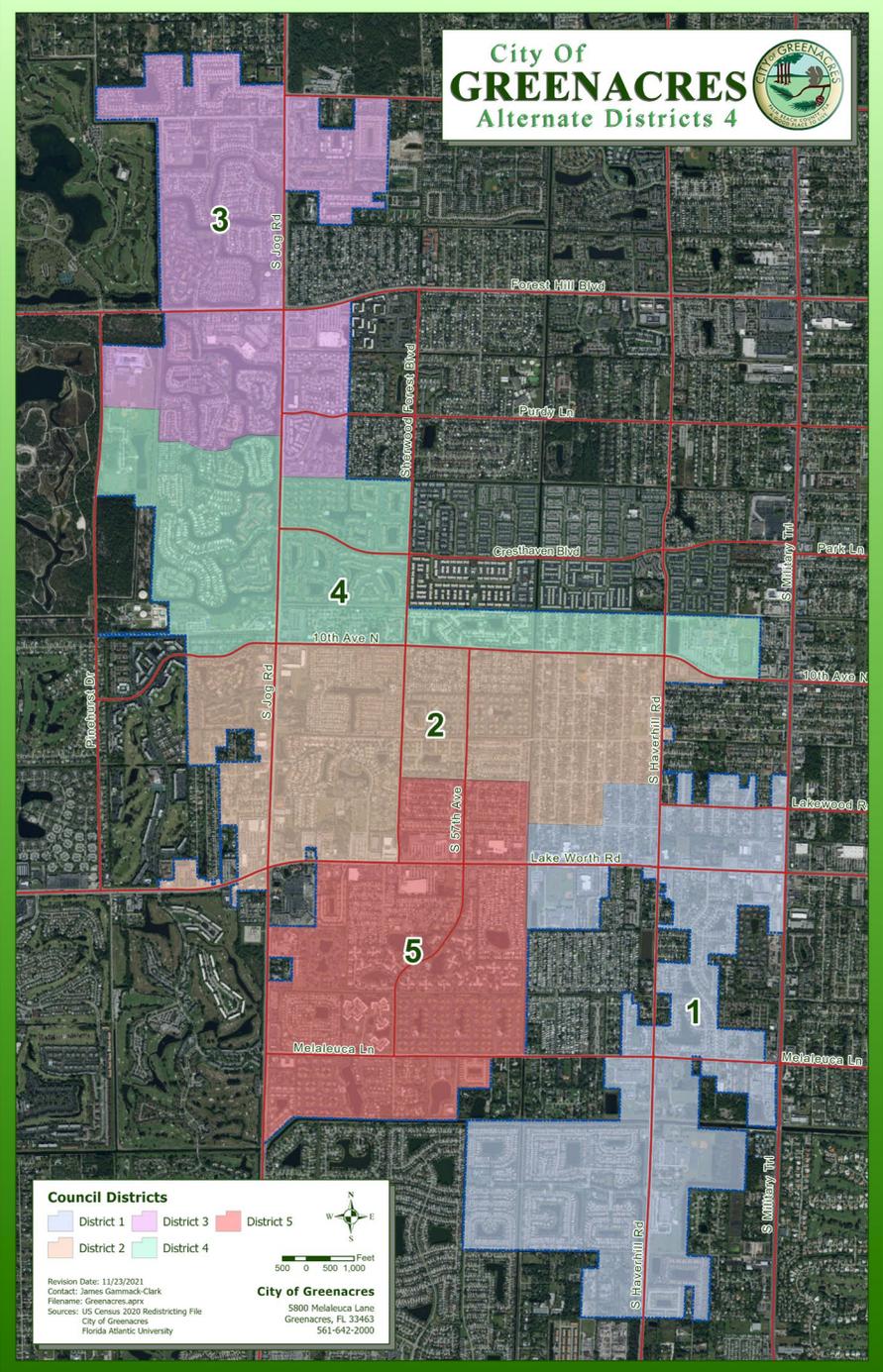
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# City Of GREENACRES

## Alternate Districts 4

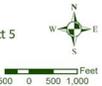


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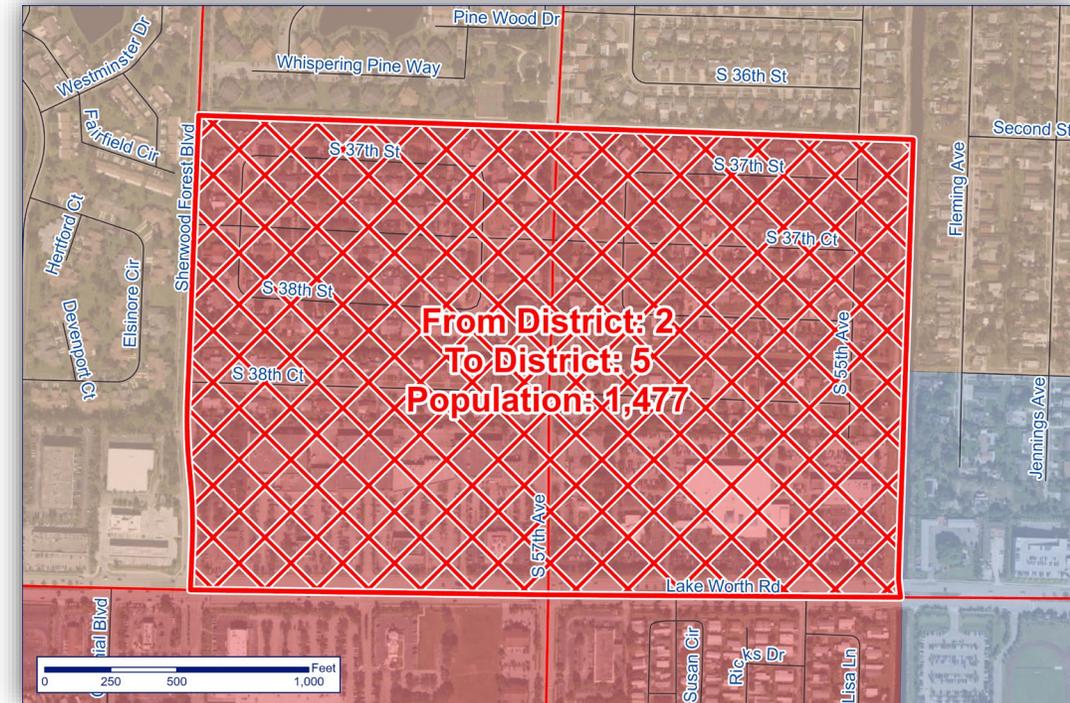
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# Alternative 4

- 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%

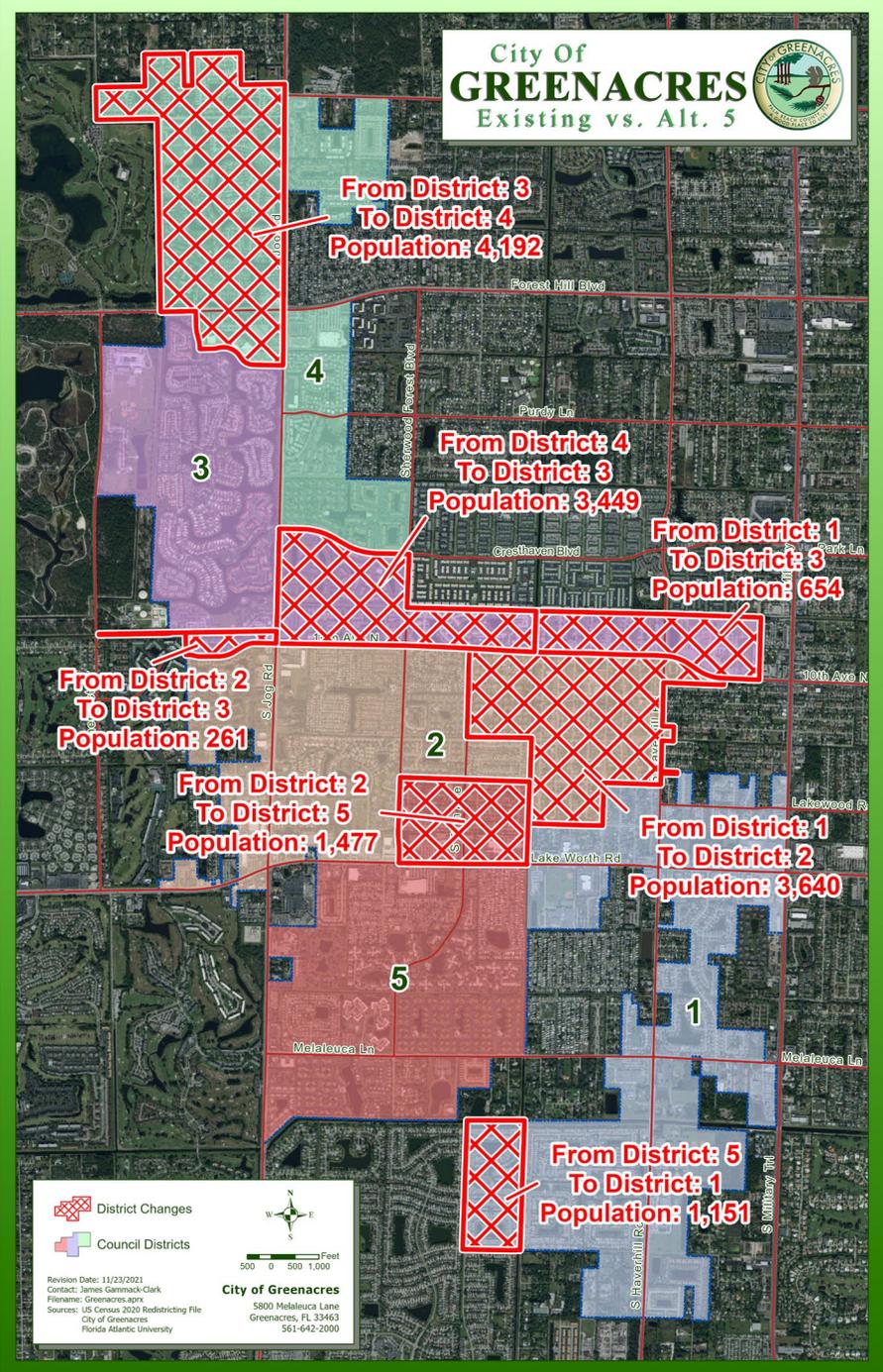
Alt. 4	2020 Population	% of City	Deviation From Average	2023 Population Projection	% of City	Deviation From Average
District 1	8,341	18.96	-5.19%	9,006	20.01	0.07%
District 2	8,804	20.01	0.07%	8,934	19.85	-0.73%
District 3	8,806	20.02	0.09%	9,020	20.04	0.22%
District 4	9,052	20.58	2.89%	9,052	20.12	0.58%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



## 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**  
Existing vs. Alt. 5



**From District: 3  
To District: 4  
Population: 4,192**

**From District: 4  
To District: 3  
Population: 3,449**

**From District: 1  
To District: 3  
Population: 654**

**From District: 2  
To District: 3  
Population: 261**

**From District: 2  
To District: 5  
Population: 1,477**

**From District: 1  
To District: 2  
Population: 3,640**

**From District: 5  
To District: 1  
Population: 1,151**

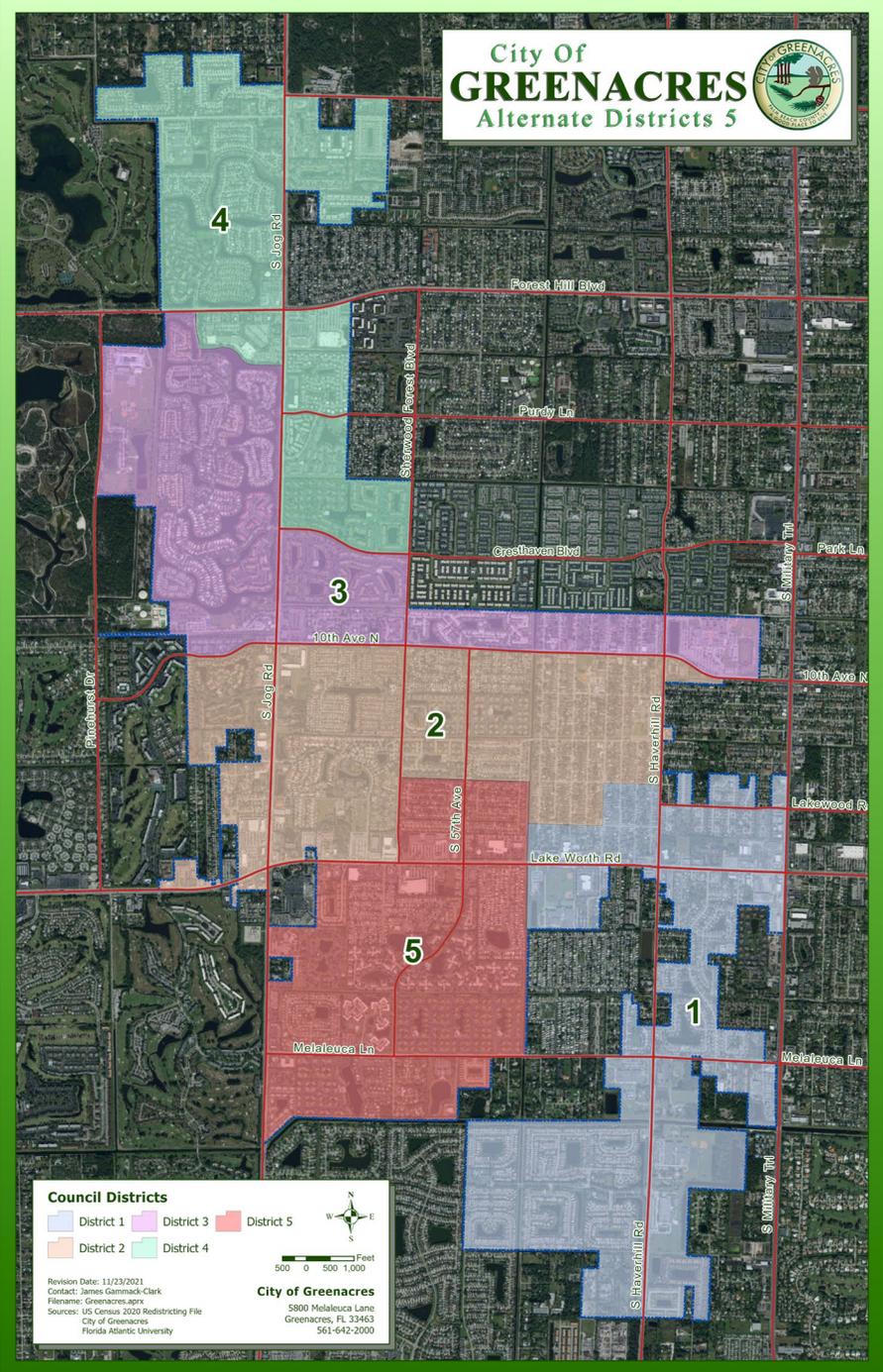
District Changes  
 Council Districts

Revision Date: 11/23/2021  
Contact: James Gammack-Clark  
Filename: Greenacres.aprx  
Sources: US Census 2020 Redistricting File  
City of Greenacres  
Florida Atlantic University

500 0 500 1,000 Feet  
**City of Greenacres**  
5800 Melaleuca Lane  
Greenacres, FL 33463  
561-642-2000

# City Of GREENACRES

## Alternate Districts 5



**Council Districts**

 District 1	 District 3	 District 5
 District 2	 District 4	

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

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



# 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%
<b>Total</b>	<b>43,990</b>	<b>100</b>	<b>8.24%</b>	<b>44,999</b>	<b>100</b>	<b>1.60%</b>
<b>Average</b>	<b>8,798</b>	<b>20</b>	<b>1.65%</b>	<b>9,000</b>	<b>20</b>	<b>0.32%</b>



# 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