



**FLORIDA ATLANTIC UNIVERSITY**

**City Commission Election District Analysis**

October 6, 2022 • City of Lake Worth Beach, Florida



# Agenda

- The FAU Redistricting Team
- The City Charter
- The Process
- District Population Analysis
  - 2020 Enumeration
  - 2024 Projection
- Next Steps
- Redistricting Criteria
- Map Alternatives 1 to 4
- Summary of Map Alternatives



# FAU Redistricting Team

- **Steven C. Bourassa, Ph.D.**
  - Professor and Chair, Runstad Department of Real Estate, University of Washington;  
Formerly 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

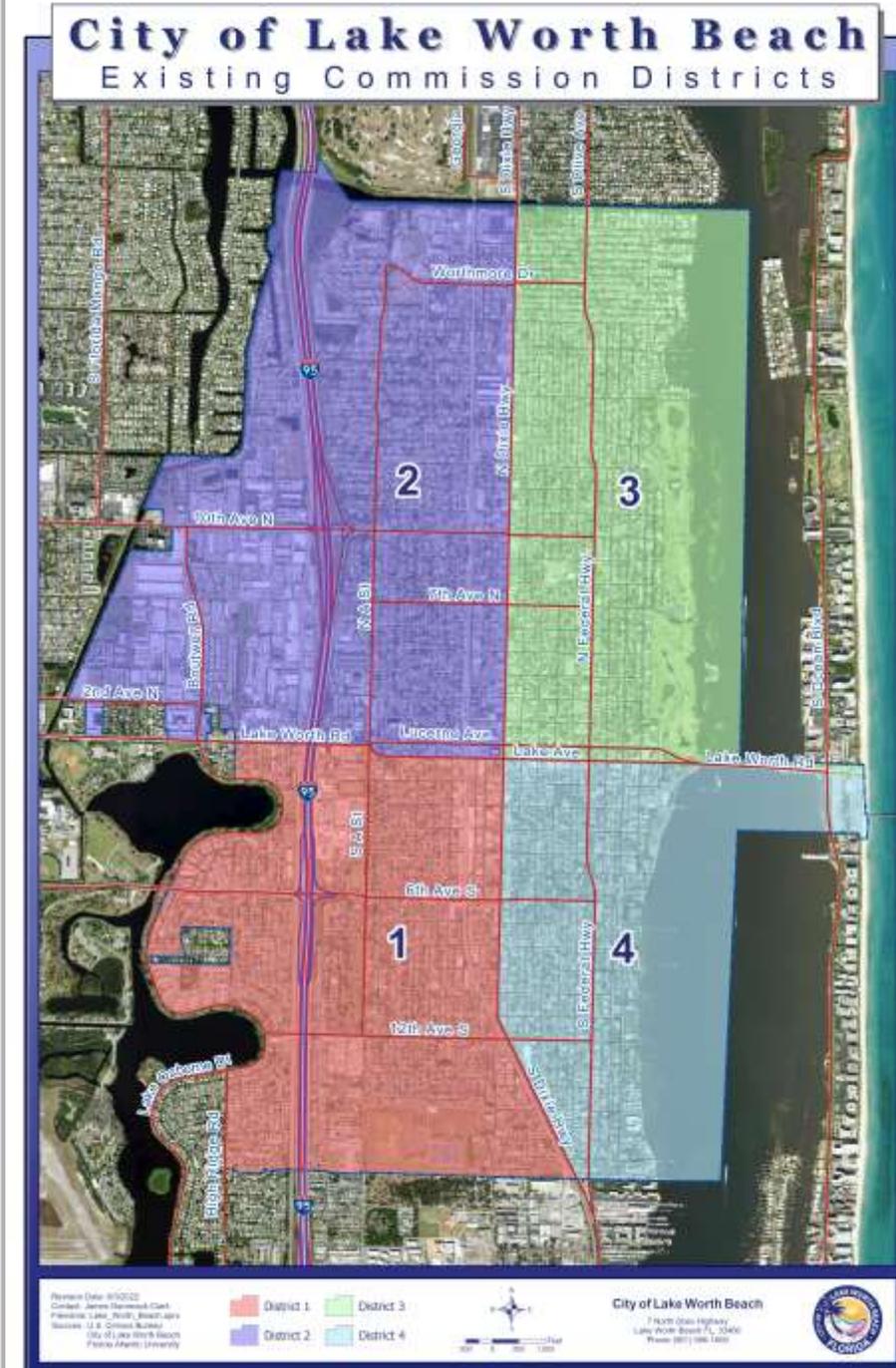


# City Charter Current Election Districts

Four election districts

All territory lying:

1. West of Dixie Hwy and south of Lake Ave
2. West of Dixie Hwy and north of Lake Ave
3. East of Dixie Hwy and north of Lake Ave
4. East of Dixie Hwy and south of Lake Ave





## The Process

- Part A – Current District Analysis and Population Projections
  - September 7, 2022: report submitted to City
  - September 12, 2022: City Commission voted to proceed to Part B
- Part B – Creation of Redistricting Map Alternatives
  - Presentation of alternatives to City Commission and public
  - Map selection and adoption by ordinance



## 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 Lake Worth Beach
  - From which Population Estimates were derived to account for new housing, completed since April 1, 2020 (Census Day) or scheduled for completion and occupancy by February of 2024



# 2020 Enumeration and 2024 Population Projection

- 2020 US Census Blocks:
  - The population of the City of Lake Worth Beach is 42,219
  - Average population for each district is 10,555

Current Districts	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	13,996	33.15	32.60%	14,593	31.60	26.41%
District 2	14,149	33.51	34.05%	17,166	37.17	48.70%
District 3	7,535	17.85	-28.61%	7,717	16.71	-33.15%
District 4	6,539	15.49	-38.05%	6,701	14.51	-41.95%
<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>133.31%</b>	<b>46,177</b>	<b>100</b>	<b>150.21%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>33.33%</b>	<b>11,544</b>	<b>25</b>	<b>37.55%</b>



## Existing Districts – Projections

- Projection required to determine future population equity
- 3,958 people will be added to the city by 2024
  - The majority of which (3,018) will be located in District 2

Subdivision	Units	Population Estimate	Current District	Completion Date
The One	14	41	4	2020
The Mid	230	667	2	2021
Aviara	49	142	3	2022
The Bohemian	200	580	1	2022
129 South K Street	4	12	4	2023
1303/1305 Lucerne Avenue	4	12	2	2023
15 North E Street	2	6	2	2023
211 Ocean Breeze	3	9	4	2023
230 North L Street	6	17	3	2023
320 Lake Osborne Drive	6	17	1	2023
509 North H Street	3	9	2	2023
Advantix	189	548	2	2023
Alora	12	35	4	2023
Casa Bella	18	52	2	2023
Deco Green	125	363	2	2023
Detroit Street Apartments	81	235	2	2023
Lake Worth Apartments	24	70	2	2023/2024
Lake Worth Station	81	235	2	2023/2024
Serendipity	12	35	2	2023/2024
Solimar	8	23	3	2023/2024
The Avery	200	580	2	2023/2024
The Cloisters Phase III	15	44	4	2023/2024
The Lord's Place	7	21	4	2023/2024
The Perch	18	52	2	2023/2024
Village Flats Phase I	41	119	2	2023/2024
Village Flats Phase II and III	12	35	2	2023/2024
	<b>1,364</b>	<b>3,959</b>		



# 2020 Enumeration and 2024 Population Projection

- 2024 population projection :
  - The population of the City of Lake Worth Beach will be 46,177
  - Average population for each district will be 11,544

Current Districts	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	13,996	33.15	32.60%	14,593	31.60	26.41%
District 2	14,149	33.51	34.05%	17,166	37.17	48.70%
District 3	7,535	17.85	-28.61%	7,717	16.71	-33.15%
District 4	6,539	15.49	-38.05%	6,701	14.51	-41.95%
<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>133.31%</b>	<b>46,177</b>	<b>100</b>	<b>150.21%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>33.33%</b>	<b>11,544</b>	<b>25</b>	<b>37.55%</b>



## District Analysis – PROJECTED (2024)

- Largest: District 2 will have 17,166 people
  - 5,622 (48.70%) more people than the projected average
- Smallest: District 4 will have 6,701 people
  - 4,483 (41.95%) fewer people than the projected average

Current Districts	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	13,996	33.15	32.60%	14,593	31.60	26.41%
District 2	14,149	33.51	34.05%	17,166	37.17	48.70%
District 3	7,535	17.85	-28.61%	7,717	16.71	-33.15%
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<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>133.31%</b>	<b>46,177</b>	<b>100</b>	<b>150.21%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>33.33%</b>	<b>11,544</b>	<b>25</b>	<b>37.55%</b>



## District Analysis - PROJECTED (2024)

- Population imbalance will become even more extreme
  - Total deviation of 150.21% across all four districts
  - Spread = 90.65% (48.7% + 41.95% 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	2024 Population Projection	% of City	Deviation From Average
District 1	13,996	33.15	32.60%	14,593	31.60	26.41%
District 2	14,149	33.51	34.05%	17,166	37.17	48.70%
District 3	7,535	17.85	-28.61%	7,717	16.71	-33.15%
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<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>133.31%</b>	<b>46,177</b>	<b>100</b>	<b>150.21%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>33.33%</b>	<b>11,544</b>	<b>25</b>	<b>37.55%</b>



## Next Steps:

- Part B
  - Election districts are severely out of balance
  - City needs to redistrict
    - The overall pattern of district boundary changes will need to increase the population of Districts 3 and 4, while reducing that of Districts 1 and 2
    - This will necessitate an adjustment of the geographic boundaries where District 3 and 4 must expand in size, while Districts 1 and 2 must contract
  - Creation of map options for Commission consideration
- The Charter does not provide guidance for redistricting
  - It only defines the existing district boundaries



# COMMISSION ELECTION DISTRICT MAP ALTERNATIVES



# 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.

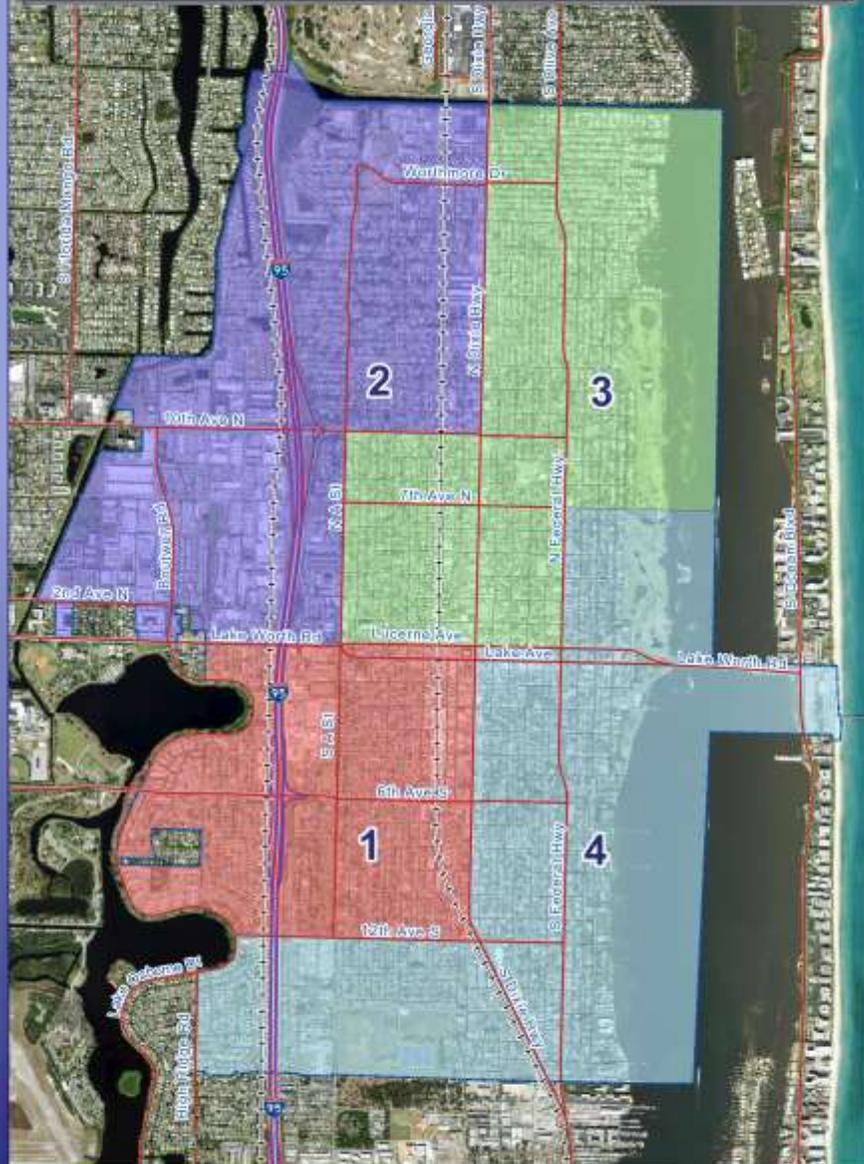


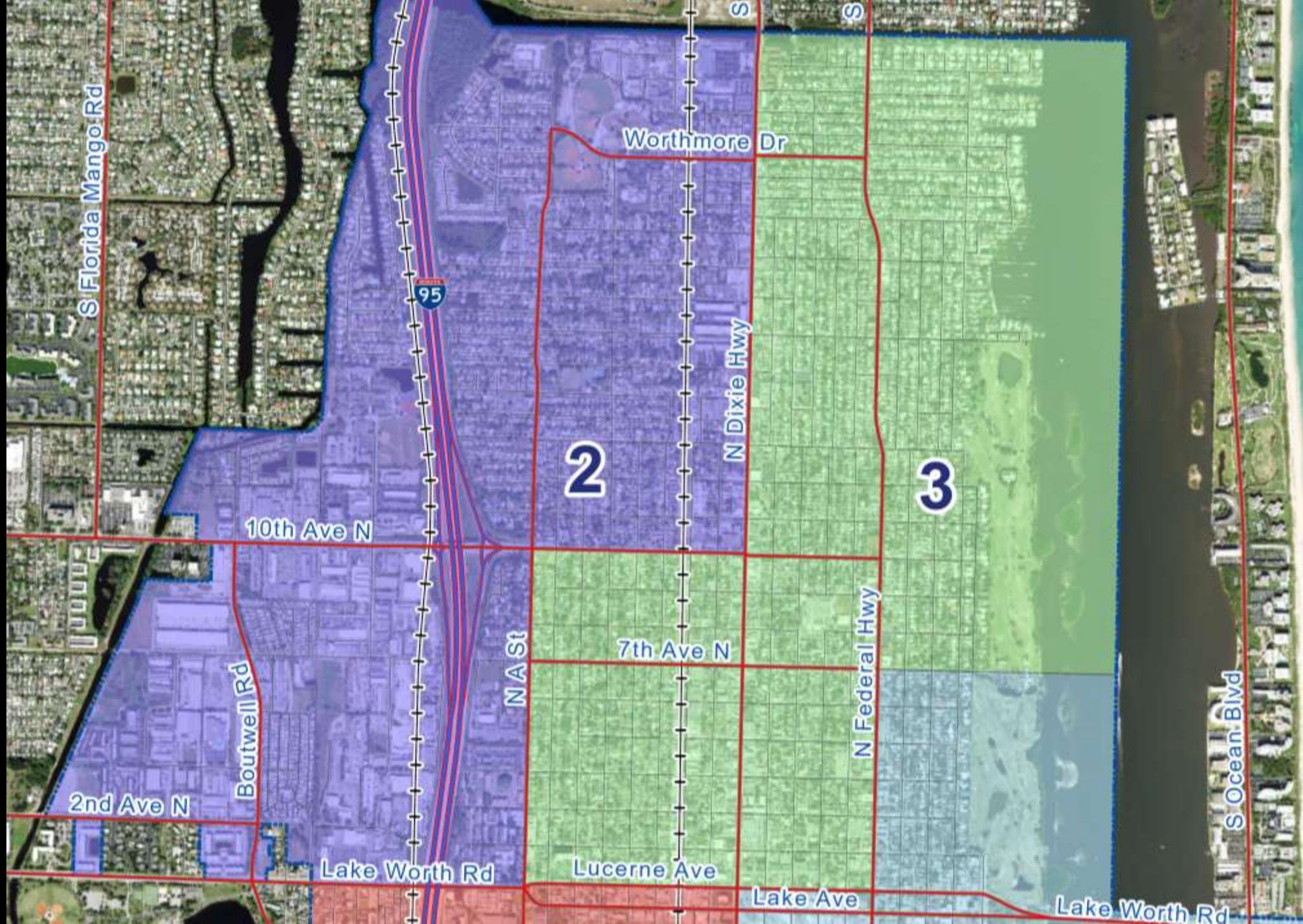
# Alternatives

- Four Alternatives have been prepared for consideration:
  - All meet standard districting guidelines
    - Alternative ways to better balance district populations
    - Keep with the intent of the other identified guidelines

## Alternative 1

- The biggest departure from the city's present four quadrant configuration:
  - North-South border becomes Lucerne Ave, except where District 4 projects north to 7<sup>th</sup> Ave, east of Federal Hwy
  - East-West border largely remains Dixie Hwy
  - Except for where District 3 projects west to North A St, south of 10th Ave, and where
  - District 4 projects west to High Ridge Rd south of 12<sup>th</sup> Ave S





S Florida Mango Rd

Worthmore Dr

95

2

N Dixie Hwy

3

10th Ave N

N A St

7th Ave N

N Federal Hwy

2nd Ave N

Boutwell Rd

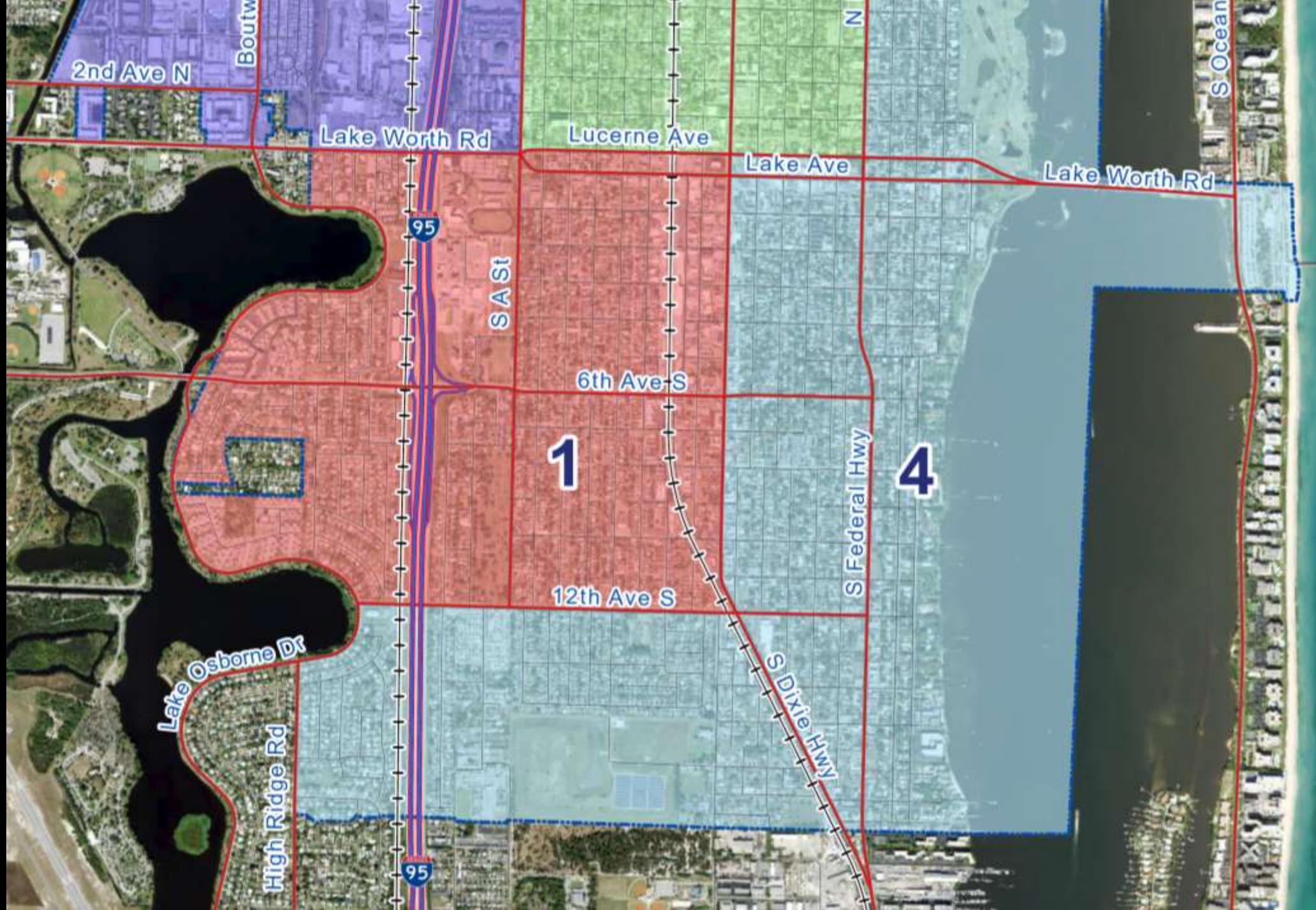
Lake Worth Rd

Lucerne Ave

Lake Ave

S Ocean Blvd

Lake Worth Rd



2nd Ave N

Boutw

Lake Worth Rd

Lucerne Ave

Lake Ave

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S Ocean

95

S A St

6th Ave S

1

4

12th Ave S

S Federal Hwy

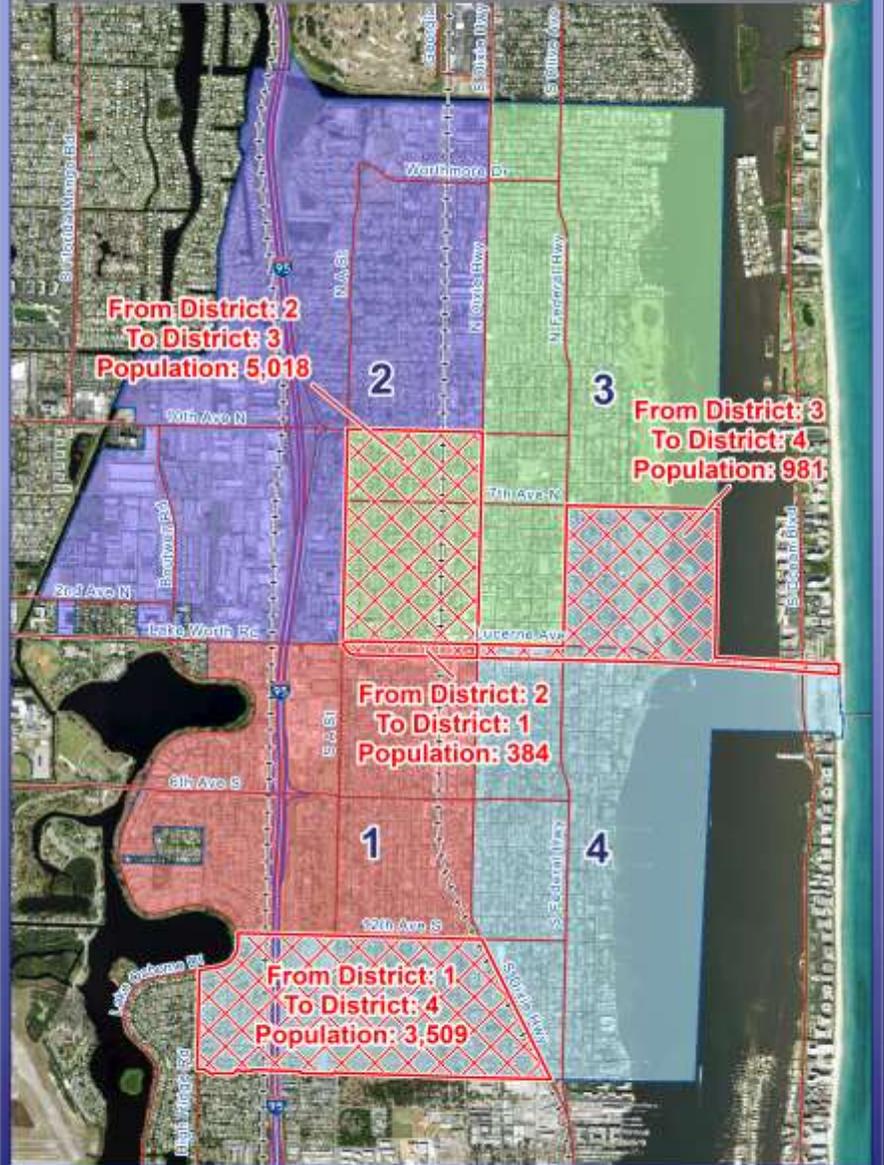
S Dixie Hwy

Lake Osborne Dr

High Ridge Rd

95

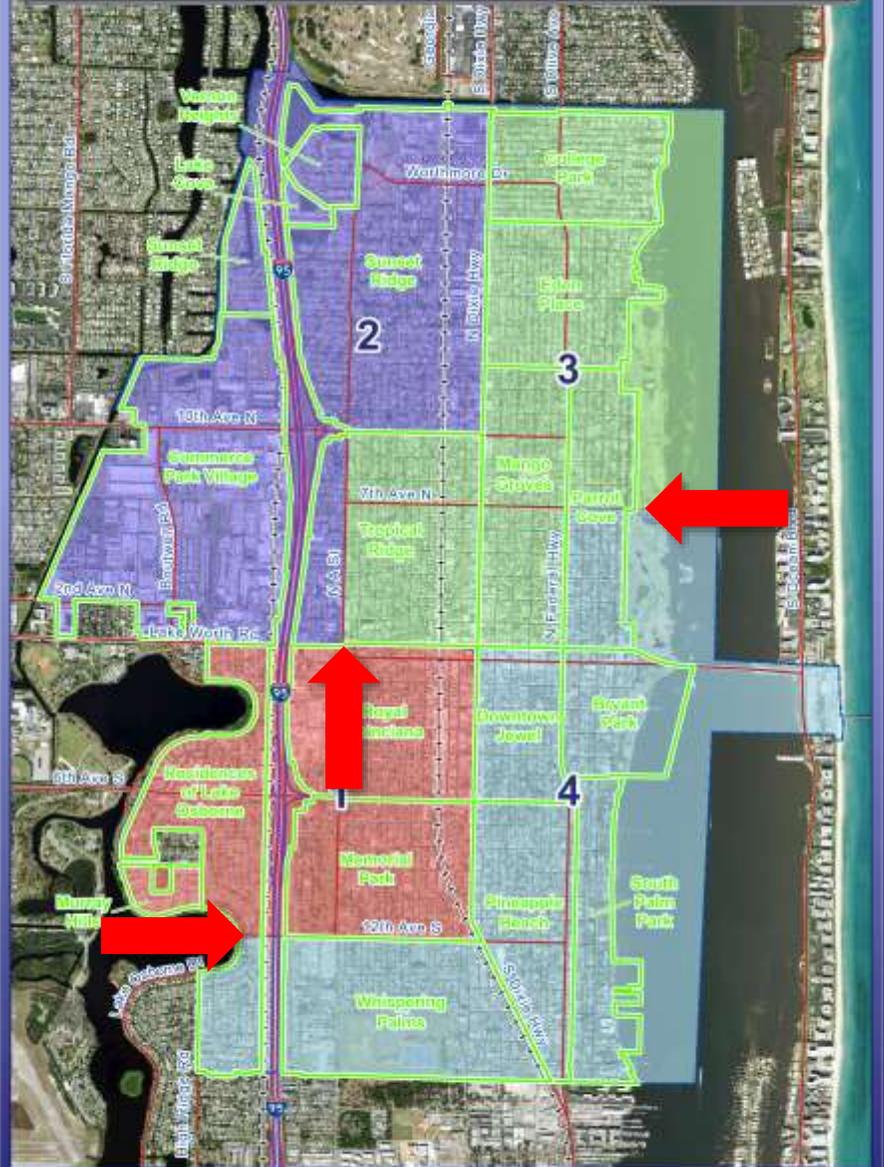
## Alternative 1



- District 1 gains:
  - 384 people from District 2
  - That area south of Lucerne Ave and west of Dixie Hwy
- District 3 gains:
  - 5,018 people from District 2
  - That part of the Tropical Ridge community found to the west of Dixie Hwy, east of A St, north of Lucerne Ave, and south of 10<sup>th</sup> Ave N
- District 4 gains:
  - 981 people from District 3
  - To the south and east Federal Hwy and 7<sup>th</sup> Ave N, and the area between Lucerne Ave and Lake Worth Rd, east of Dixie
  - 3,509 people from District 1
  - South of 12<sup>th</sup> Ave S and west of Dixie Hwy

## Alternative 1

- Only three neighborhoods are split:
  - Fewest among the four alternatives
  - Tropical Ridge, Parrot Cove, and Residences of Lake Osborne





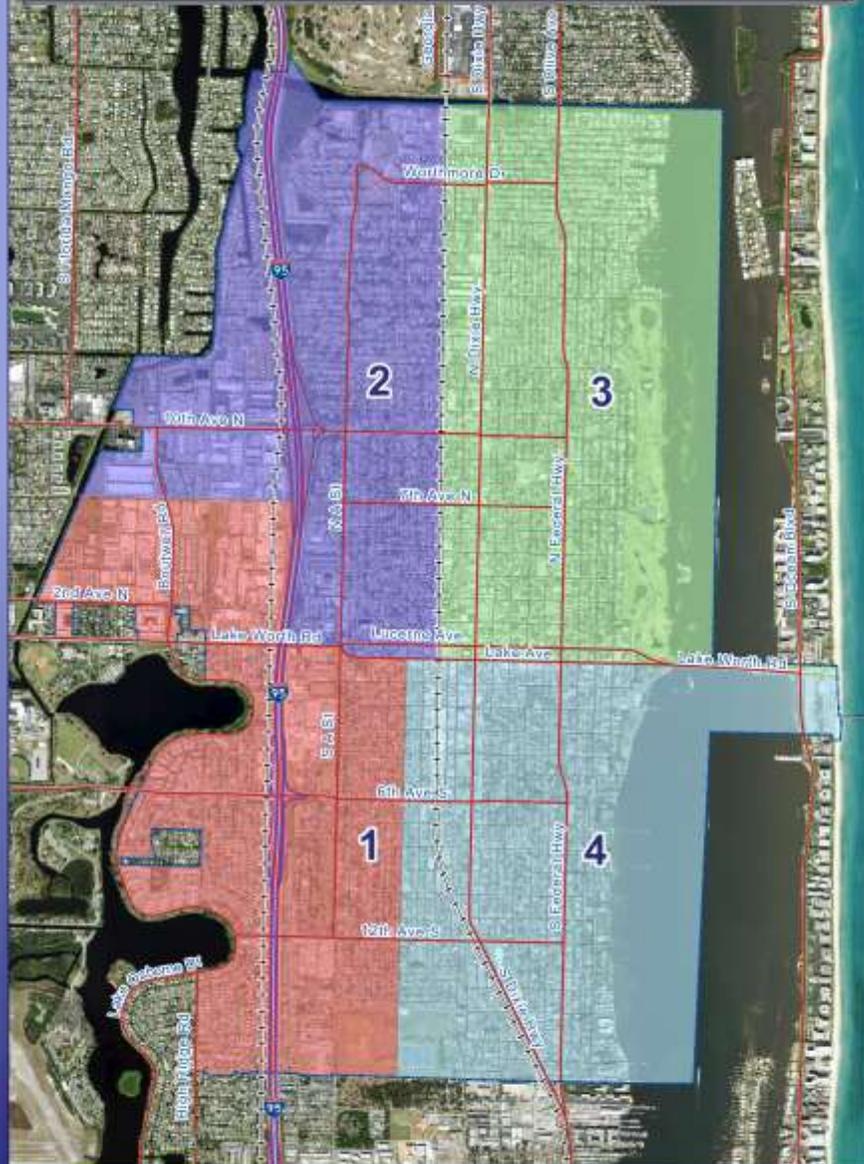
# Alternative 1

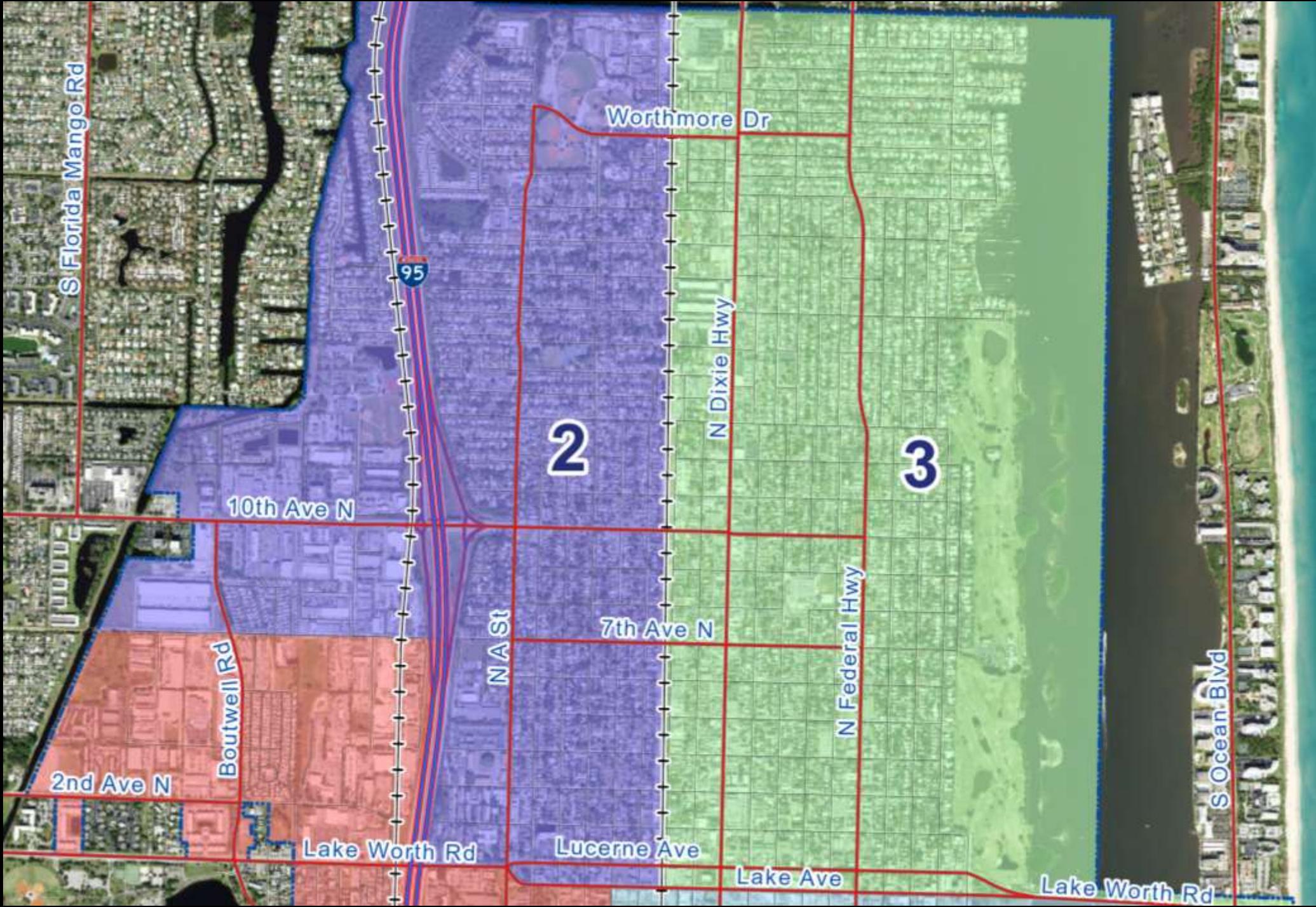
- Overall deviation is much improved under Alternative 1
  - Total deviation falls from 150.21% to 7.44%
  - Mean deviation falls from of 37.55% to 1.86%
  - The spread falls from 90.65% to 4.96%

Alt. 1	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	10,648	25.22	0.88%	11,468	24.83	-0.66%
District 2	9,249	21.91	-12.37%	11,764	25.48	1.90%
District 3	11,293	26.75	6.99%	11,754	25.45	1.82%
District 4	11,029	26.12	4.49%	11,191	24.24	-3.06%
<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>24.74%</b>	<b>46,177</b>	<b>100</b>	<b>7.44%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>6.19%</b>	<b>11,544</b>	<b>25</b>	<b>1.86%</b>

## Alternative 2

- Maintains, somewhat, the four quadrant arrangement of the existing Districts:
  - Though the four districts no longer meet at a common intersection
  - North-South border remains Lake Worth Rd, except where District 1 expands north to the west of I-95, south of 7<sup>th</sup> Ave N
  - East-West border between Districts 2 and 3 moves west to the FEC Railway
  - Between Districts 1 & 4, the East-West boundary moves west to South E St





S Florida Mango Rd

Worthmore Dr

95

2

3

10th Ave N

N Dixie Hwy

NAST

7th Ave N

N Federal Hwy

2nd Ave N

Boutwell Rd

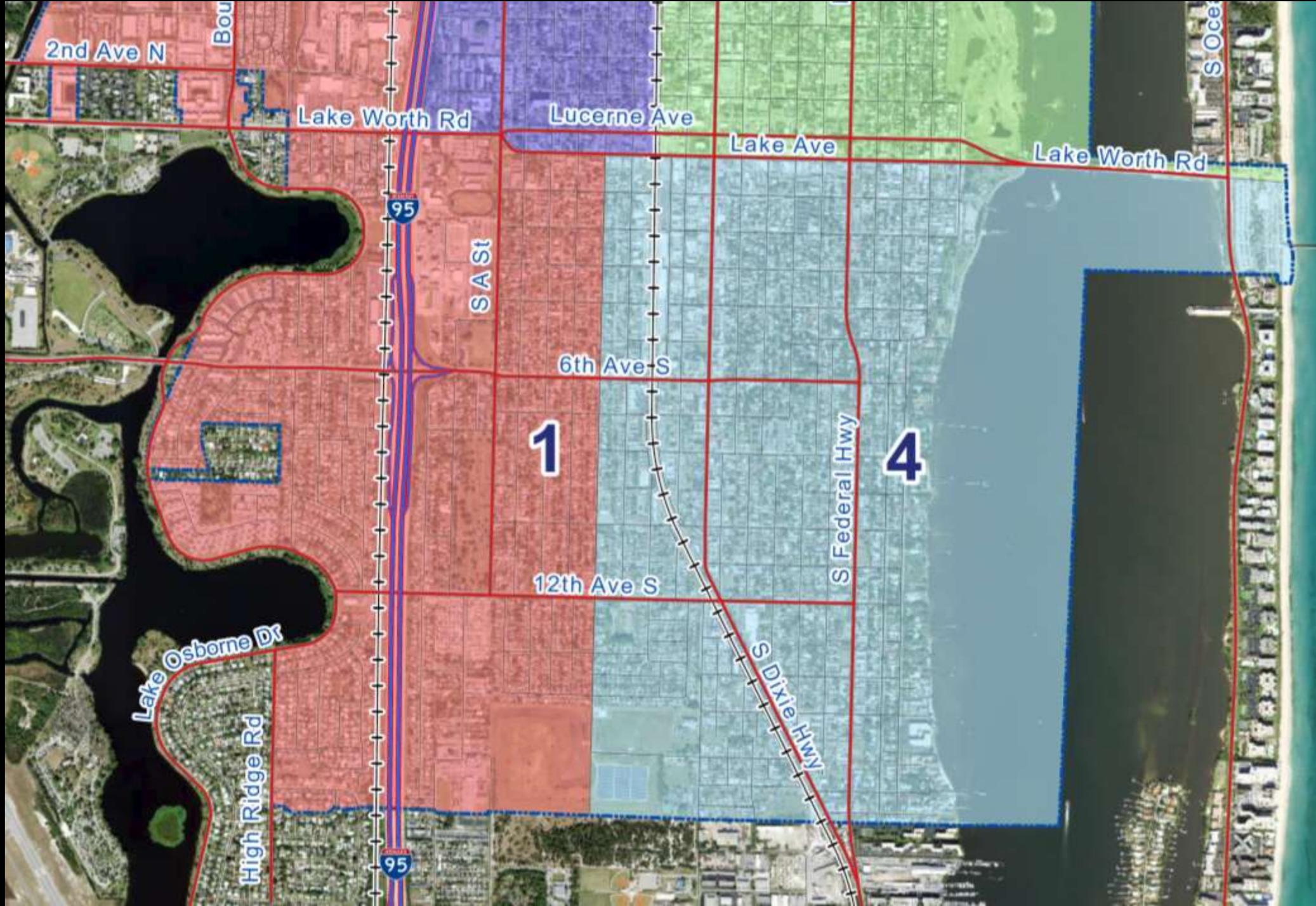
Lake Worth Rd

Lucerne Ave

Lake Ave

S Ocean Blvd

Lake Worth Rd



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Lake Worth Rd

Lucerne Ave

Lake Ave

Lake Worth Rd

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12th Ave S

S Federal Hwy

S Dixie Hwy

Lake Osborne Dr

High Ridge Rd

95

S Ocea







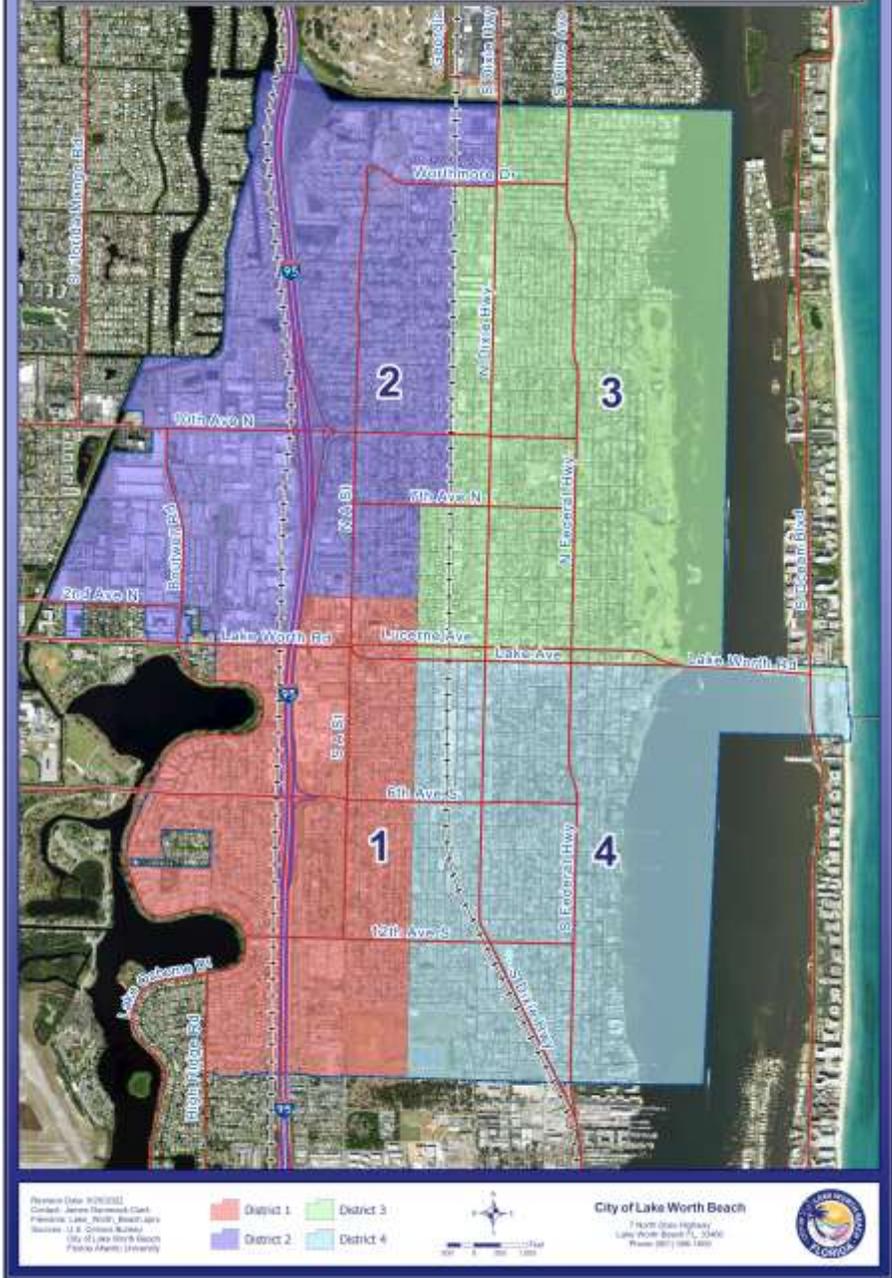
## Alternative 2

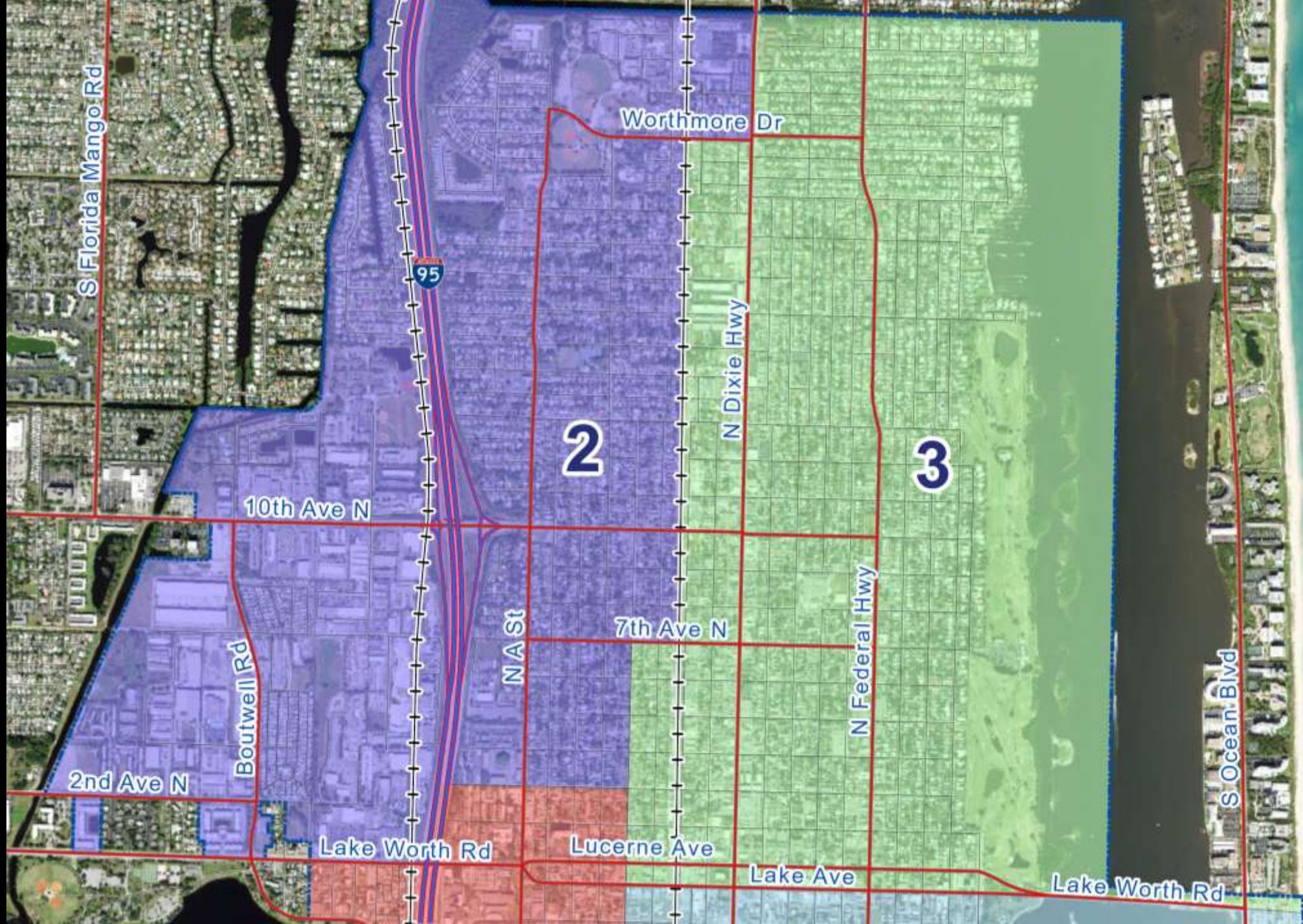
- Overall deviation is much improved under Alternative 2
  - Total deviation falls from 150.21% to 11.27%
  - Mean deviation falls from of 37.55% to 2.82% (highest of the alternatives)
  - The spread falls from 90.65% to 8.28% (highest of the alternatives)

Alt. 2	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	11,594	27.46	9.85%	11,846	25.65	2.61%
District 2	10,420	24.68	-1.28%	11,893	25.76	3.02%
District 3	9,446	22.37	-10.50%	10,937	23.68	-5.26%
District 4	10,759	25.48	1.94%	11,501	24.91	-0.37%
<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>23.56%</b>	<b>46,177</b>	<b>100</b>	<b>11.27%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>5.89%</b>	<b>11,544</b>	<b>25</b>	<b>2.82%</b>

## Alternative 3

- Variant of Alternative 2 that creates a more compact and balanced District 1 while leaving District 4 unchanged:
  - North-South border remains Lake Worth Rd, except where District 1 expands north to 3rd Ave N, east of I-95
  - To improve population equity between Districts 2 and 3, several jogs are introduced to their East-West border: from Dixie Hwy to the FEC railway south of Worthmore Dr, then to E St south of 7th Ave N
  - Between Districts 1 and 4, the East-West boundary moves west to South E St





S Florida Mango Rd

Worthmore Dr

95

2

3

10th Ave N

N Dixie Hwy

Boutwell Rd

NA St

7th Ave N

N Federal Hwy

2nd Ave N

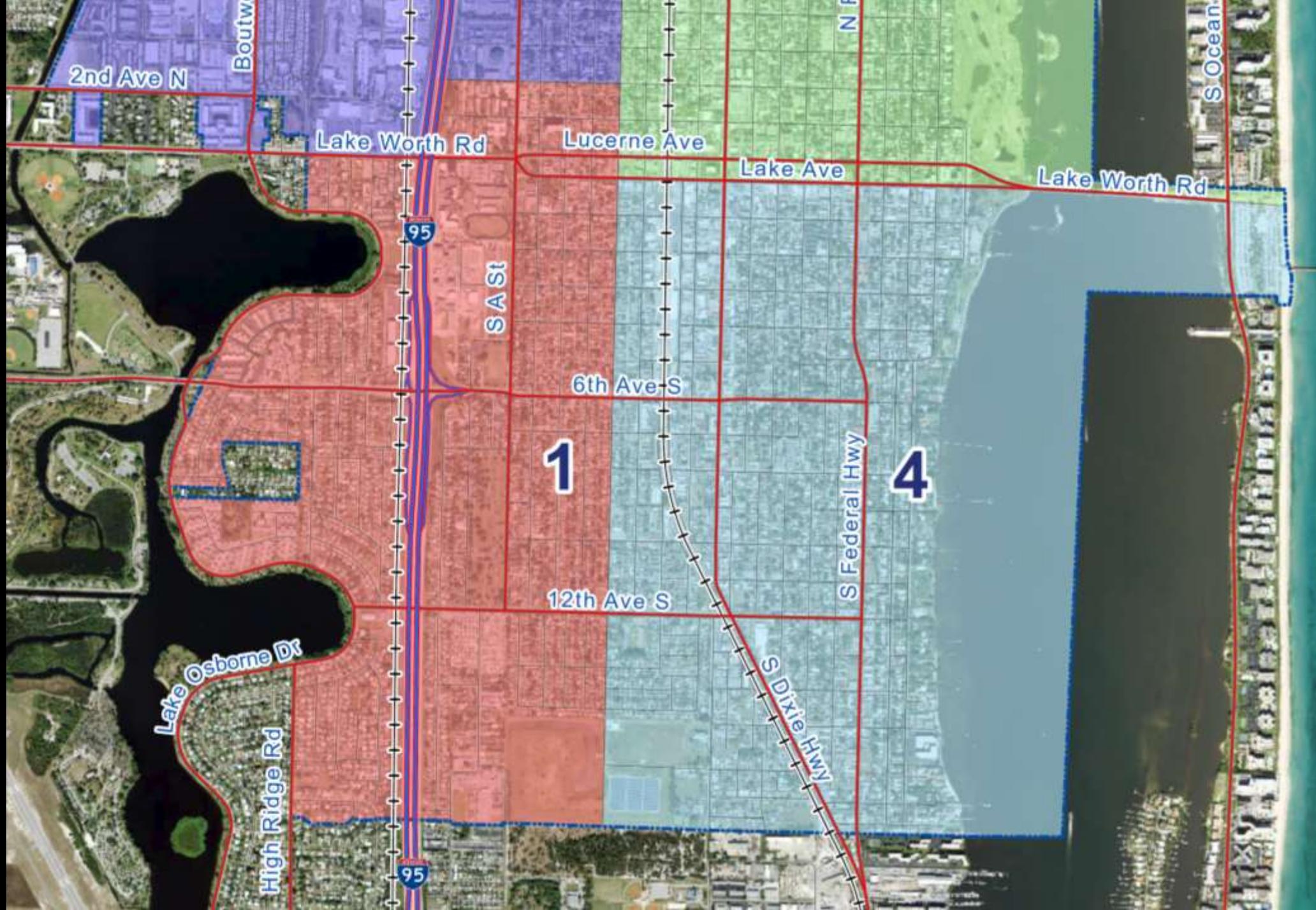
Lake Worth Rd

Lucerne Ave

Lake Ave

S Ocean Blvd

Lake Worth Rd



2nd Ave N

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Lucerne Ave

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6th Ave S

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4

S Federal Hwy

12th Ave S

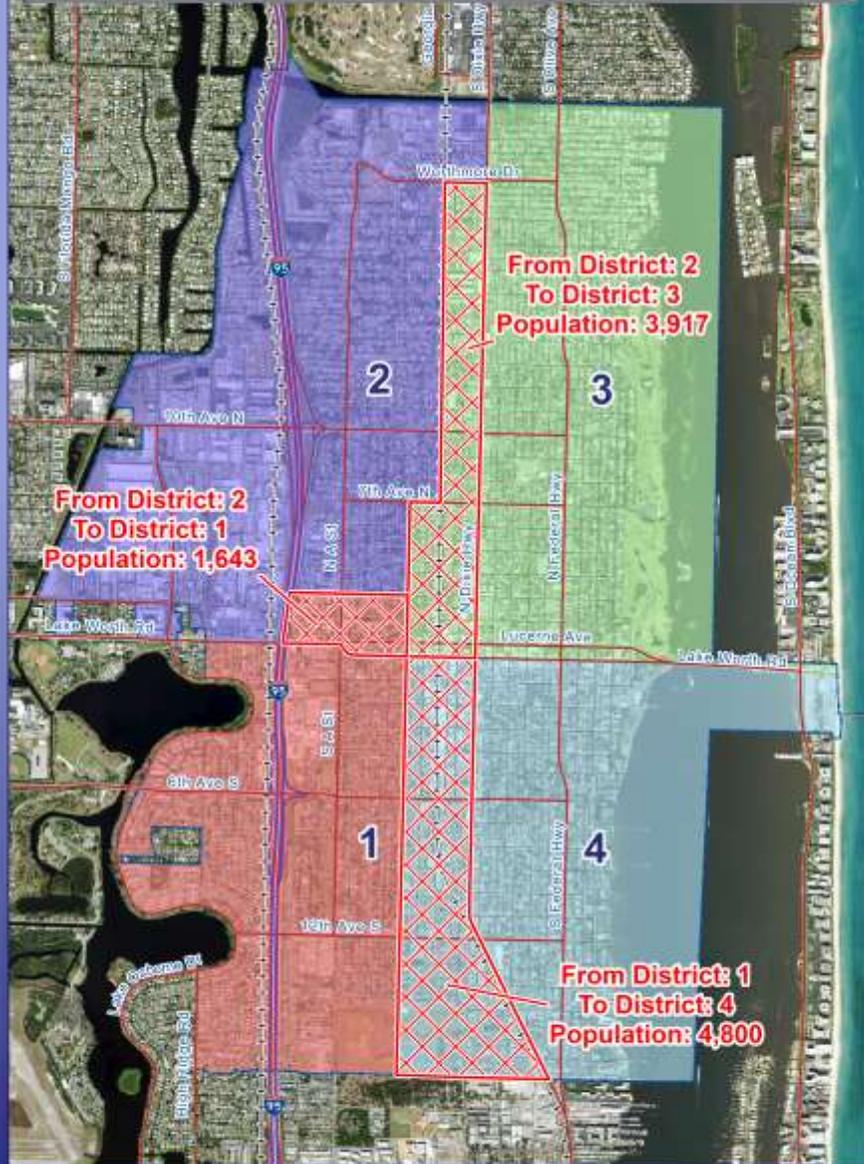
S Dixie Hwy

Lake Osborne Dr

High Ridge Rd

95

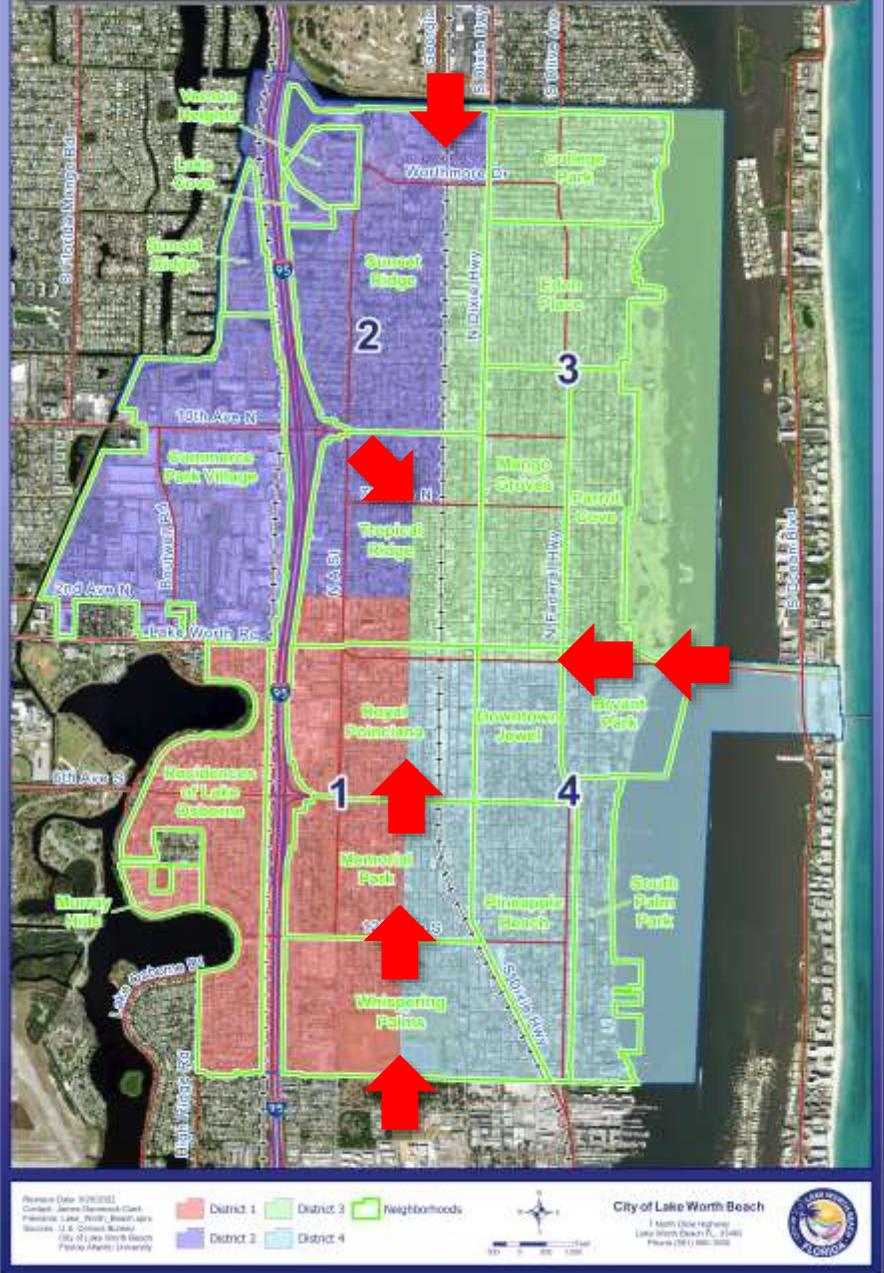
## Alternative 3



- District 1 gains:
  - 1,643 people from District 2
  - That portion of Tropical Ridge, south of 3rd Ave N and west of E St
- District 3 gains:
  - 3,917 people from District 2
  - That area between Dixie Hwy and the FEC Railway, north of 7<sup>th</sup> Ave N and south of Worthmore Dr, together with that area between Dixie Hwy and E St, south of 7<sup>th</sup> Ave N and north of Lake Worth Rd
- District 4 gains:
  - 4,800 people from District 1
  - That area between Dixie Hwy and the South E St, south of Lake Worth Rd

## Alternative 3

- Seven neighborhoods are split:
  - Sunset Ridge, Tropical Ridge, Royal Poinciana, Memorial Park, Whispering Palms, Downtown Jewel, and Bryant Park





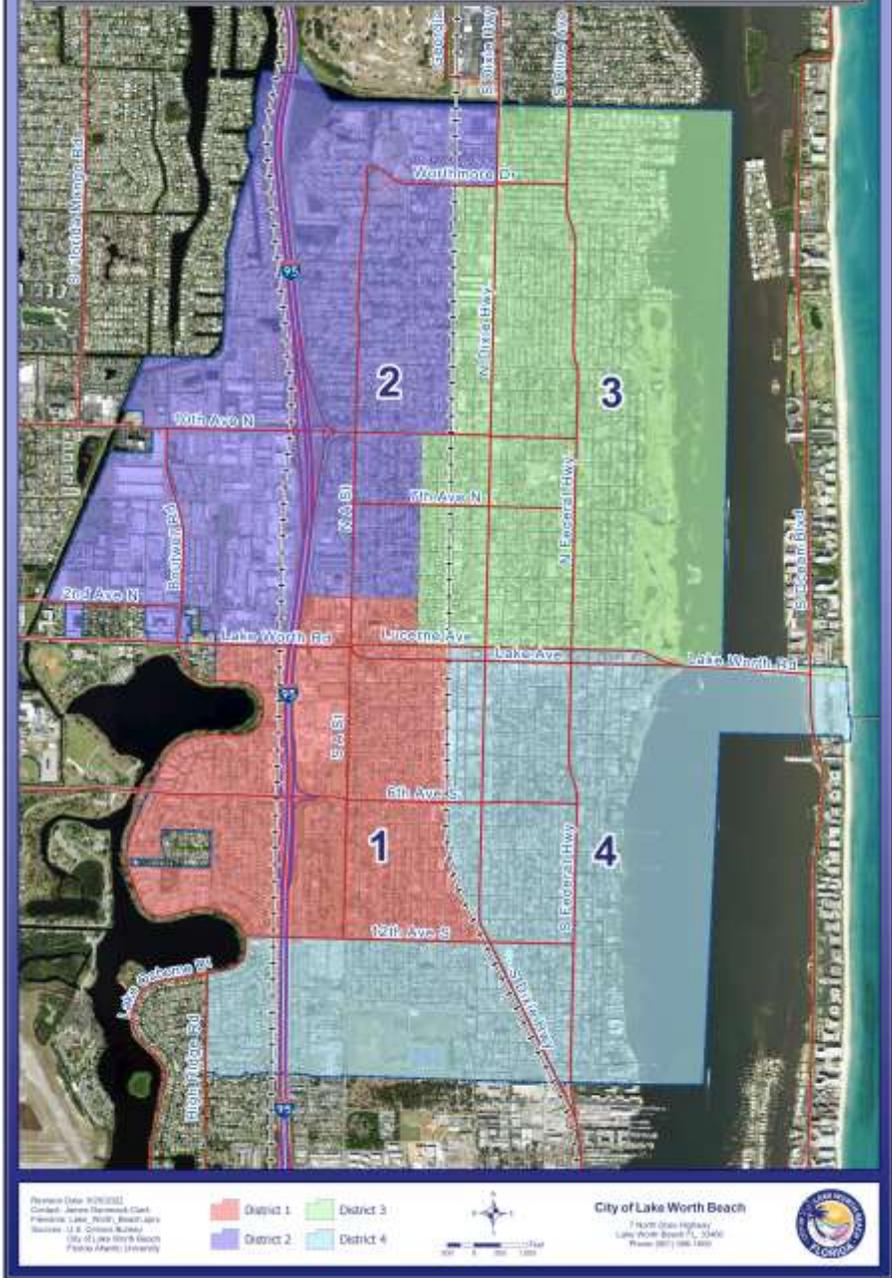
## Alternative 3

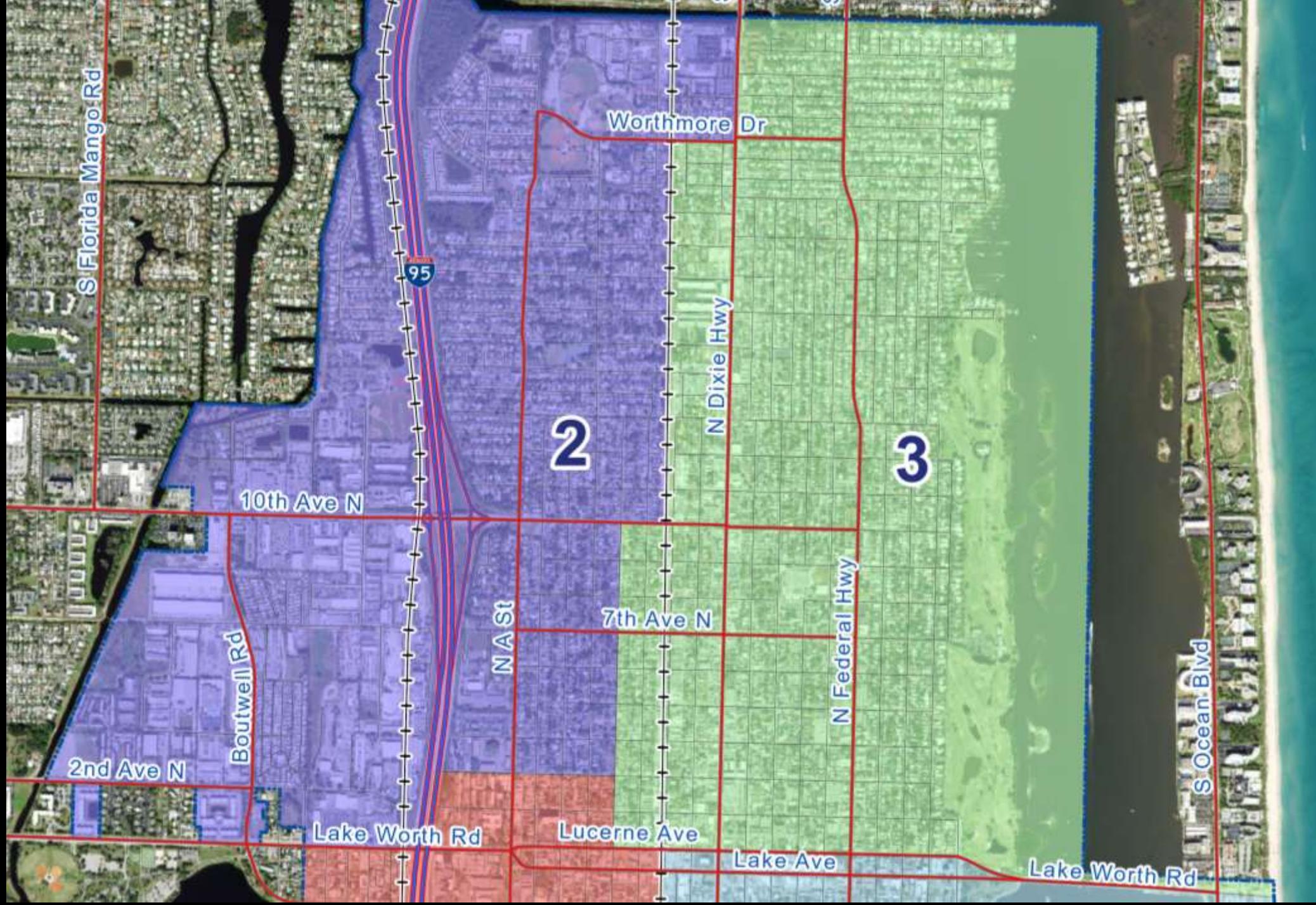
- Overall deviation is much improved under Alternative 3
  - Total deviation falls from 150.21% to 2.62%
  - Mean deviation falls from of 37.55% to 0.66% (lowest of the alternatives)
  - The spread falls from 90.65% to 1.72% (lowest of the alternatives)

Alt. 3	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	11,315	26.80	7.20%	11,436	24.77	-0.94%
District 2	10,121	23.97	-4.11%	11,606	25.13	0.53%
District 3	10,024	23.74	-5.03%	11,634	25.19	0.78%
District 4	10,759	25.48	1.94%	11,501	24.91	-0.37%
<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>18.28%</b>	<b>46,177</b>	<b>100</b>	<b>2.62%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>4.57%</b>	<b>11,544</b>	<b>25</b>	<b>0.66%</b>

## Alternative 4

- Marries the best of Alt. 1 and 3 together:
  - North-South border remains Lake Worth Rd, except where District 1 expands north to 3rd Ave N, east of I-95
  - To improve population equity between Districts 2 and 3, several jogs are introduced to their East-West border: from Dixie Hwy to the FEC railway south of Worthmore Dr, then to E St south of 10th Ave N
  - Between Districts 1 and 4, the East-West boundary moves west to the FEC Railway, and then District 4 projects west to High Ridge Rd south of 12th Ave S





S Florida Mango Rd

Worthmore Dr

95

2

N Dixie Hwy

3

10th Ave N

NA St

7th Ave N

N Federal Hwy

2nd Ave N

Boutwell Rd

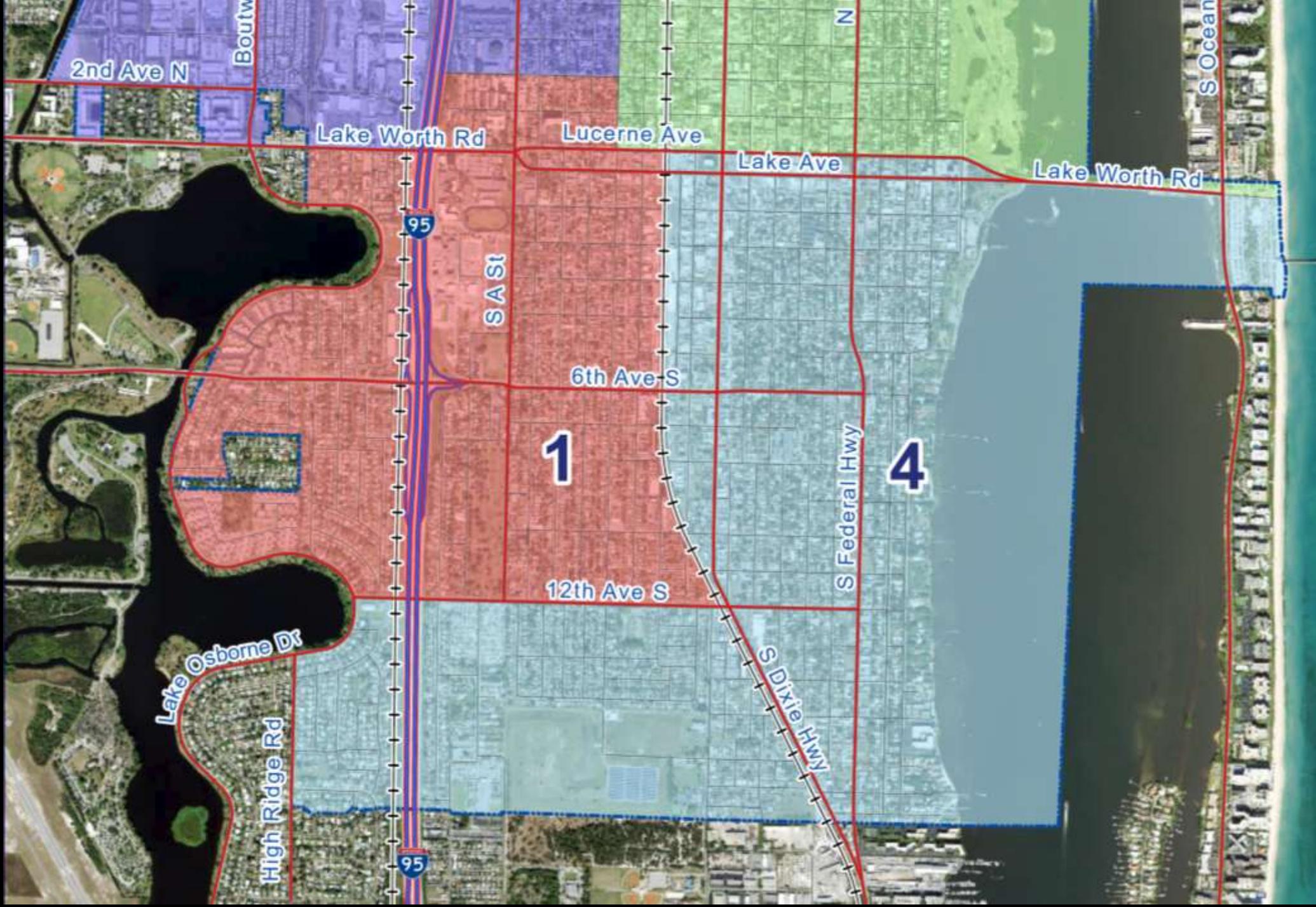
S Ocean Blvd

Lake Worth Rd

Lucerne Ave

Lake Ave

Lake Worth Rd



2nd Ave N

Boutw

Lake Worth Rd

Lucerne Ave

Lake Ave

Lake Worth Rd

S Ocean

95

S A St

6th Ave S

1

4

12th Ave S

S Federal Hwy

S Dixie Hwy

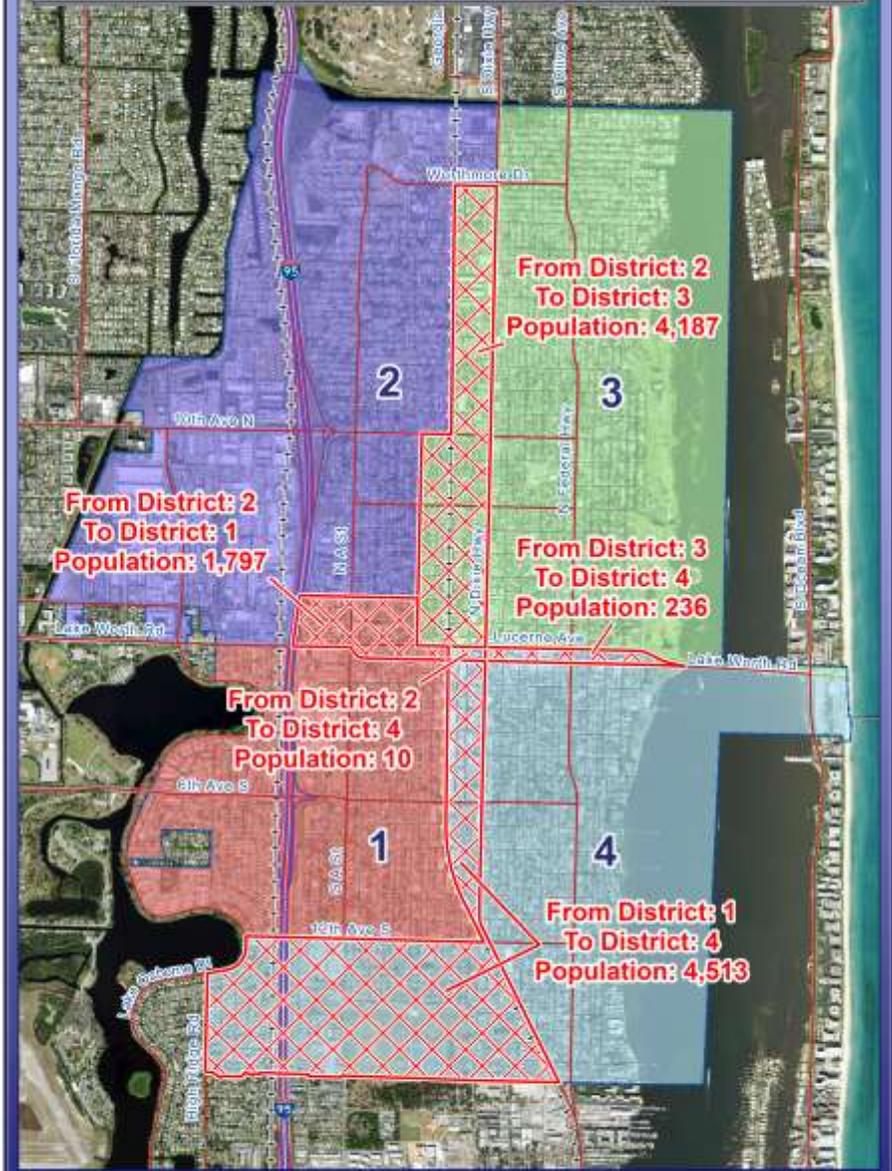
Lake Osborne Dr

High Ridge Rd

95

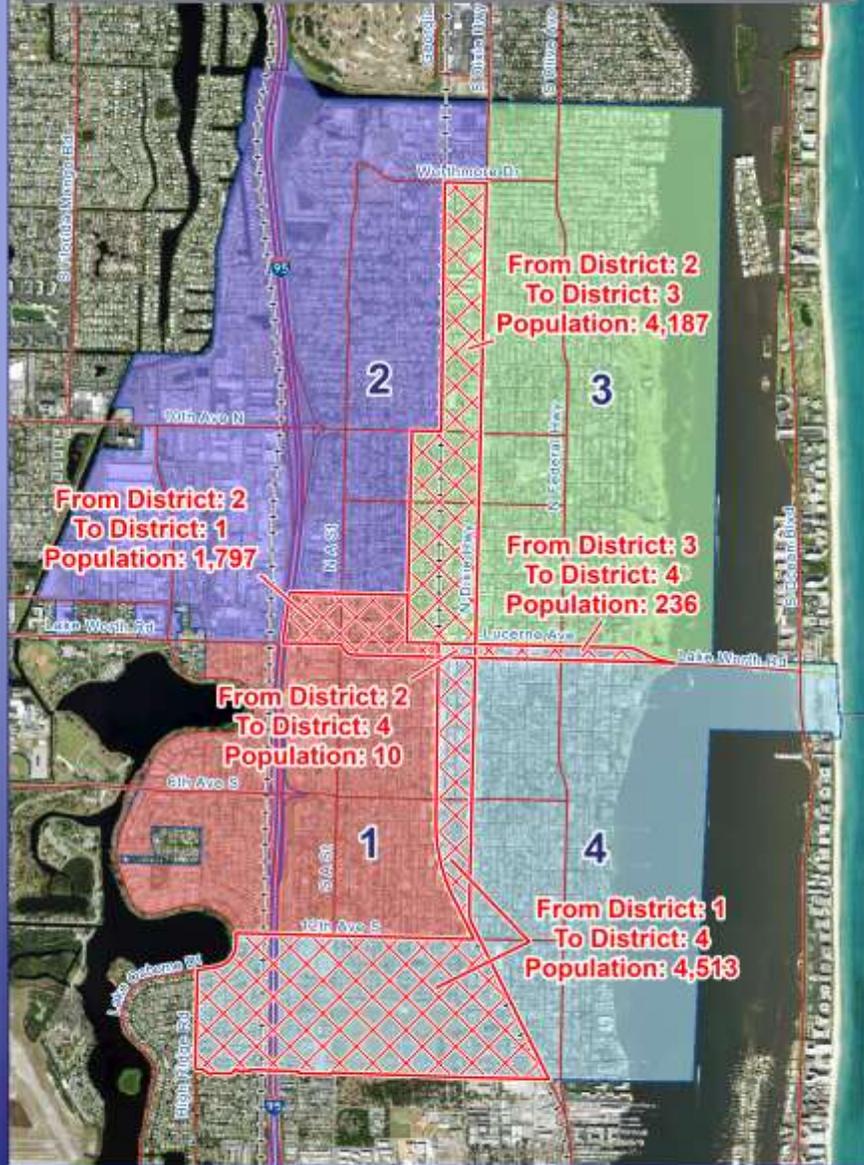
## Alternative 4

- District 1 gains:
  - 1,797 people from District 2
  - That area south of 3rd Ave N and west of E St, together with that area found to the west of the FEC Railway between Lucerne Ave and Lake Worth Rd
- District 3 gains:
  - 4,187 people from District 2
  - That area between Dixie Hwy and the FEC Railway, north of 10<sup>th</sup> Ave N and south of Worthmore Dr, together with that area between Dixie Hwy and E St, south of 10<sup>th</sup> Ave N and north of Lucerne Ave



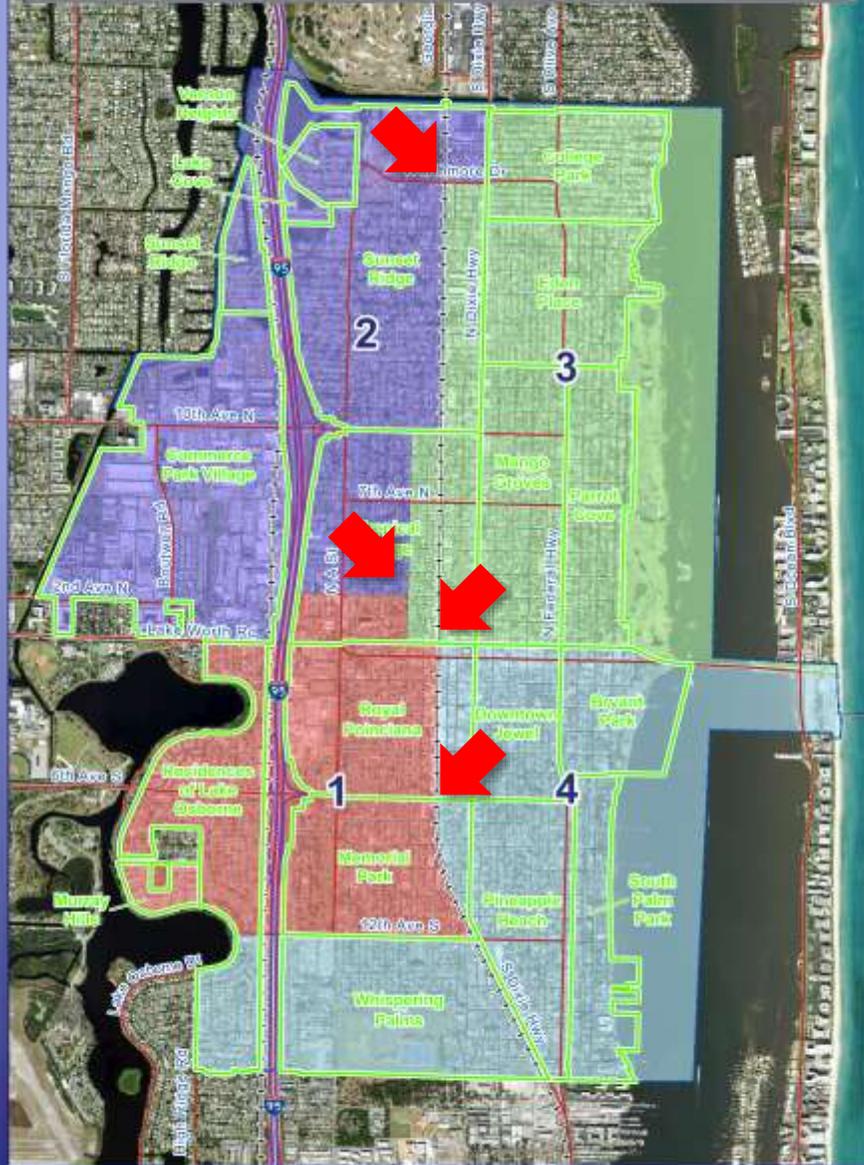
## Alternative 4

- District 4 gains:
  - 4,513 people from District 1
  - That area between Dixie Hwy and the FEC Railway, and that part of the city found to the east of Dixie Hwy and south of 12<sup>th</sup> Ave S
  - 10 people from District 2
  - That area found between Lucerne Ave and Lake Worth Rd, and between Dixie Hwy and the FEC Railway
  - 236 people from District 3
  - That area found between Lucerne Ave and Lake Worth Rd, and east of the FEC Railway



## Alternative 4

- Four neighborhoods are split:
  - Sunset Ridge, Tropical Ridge, Royal Poinciana, and Memorial Park





## Alternative 4

- Overall deviation is much improved under Alternative 4
  - Total deviation falls from 150.21% to 7.91%
  - Mean deviation falls from of 37.55% to 1.98%
  - The spread falls from 90.65% to 6.10%

Alt. 4	2020 Population	% of City	Deviation From Average	2024 Population Projection	% of City	Deviation From Average
District 1	11,637	27.56	10.25%	11,877	25.72	2.88%
District 2	9,687	22.94	-8.22%	11,172	24.19	-3.22%
District 3	10,177	24.11	-3.58%	11,668	25.27	1.07%
District 4	10,718	25.39	1.55%	11,460	24.82	-0.73%
<b>Total</b>	<b>42,219</b>	<b>100</b>	<b>23.60%</b>	<b>46,177</b>	<b>100</b>	<b>7.91%</b>
<b>Average</b>	<b>10,555</b>	<b>25</b>	<b>5.90%</b>	<b>11,544</b>	<b>25</b>	<b>1.98%</b>



## Summary

- All of the alternatives dramatically improve population equity
  - Alt 1 splits the fewest number of number of neighborhoods
  - Alt 2 attempts to maintain the existing 4 quadrants configuration
  - Alt 3 is the most balanced of the options presented
  - Alt 4 marries the best of aspects of Alt's 1 and 3 together

Configuration	Impacted Population	Split Neighborhoods	Total Deviation	Mean Deviation	Spread
Existing Districts	N/A	3	150.21	37.55	90.65
Alternative 1	9,892	3	7.44	1.86	4.96
Alternative 2	10,073	8	11.27	2.82	8.28
Alternative 3	10,360	7	2.62	0.66	1.72
Alternative 4	10,743	4	7.91	1.98	6.10



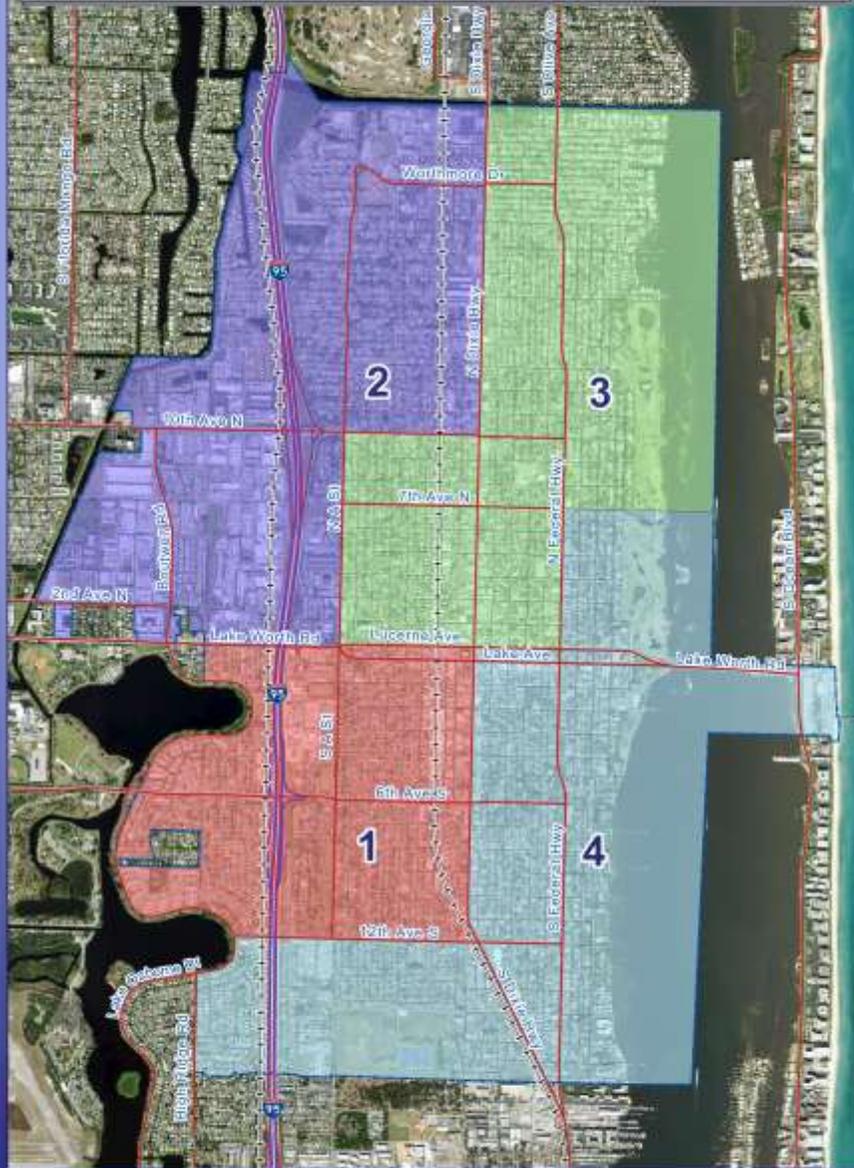
**FLORIDA ATLANTIC UNIVERSITY**

**Questions?**

**City of Lake Worth Beach Redistricting Alternatives**

# City of Lake Worth Beach

## Alternative Districts: Option 1



Revision Date: 10/2022  
Contact: James Hammond, Clerk  
Planning: Lake Worth Beach, 3094  
Revised: U.S. Census Bureau  
100 W. Lake Worth Beach  
P.O. Box 1000, Lake Worth

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

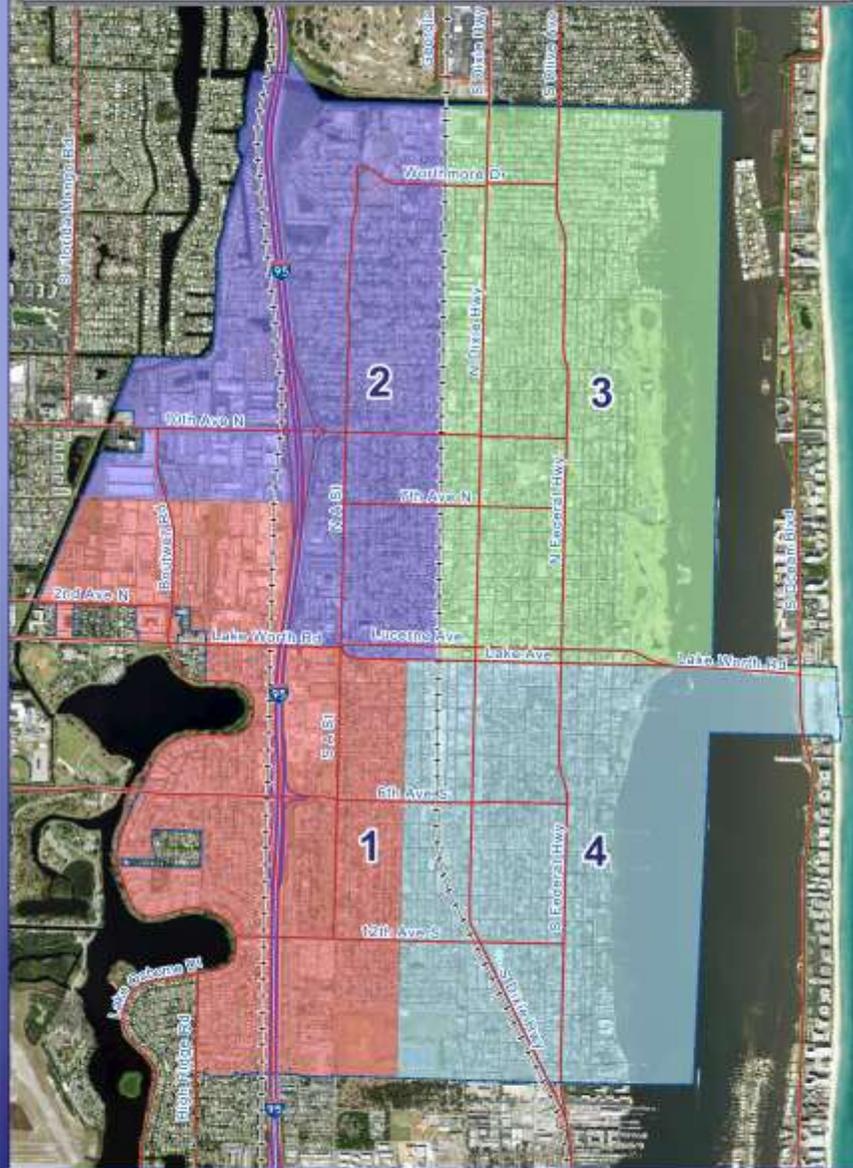


City of Lake Worth Beach  
7 North State Highway  
Lake Worth Beach, FL 33460  
Phone: (561) 986-1800



# City of Lake Worth Beach

## Alternative Districts: Option 2



Revision Date: 10/2022  
Contact: James Hammond, Clerk  
Planning: Lake Worth Beach, 3094  
Revised: U.S. Census Bureau  
100 W. Lake Worth Beach  
P.O. Box 1000, Lake Worth

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

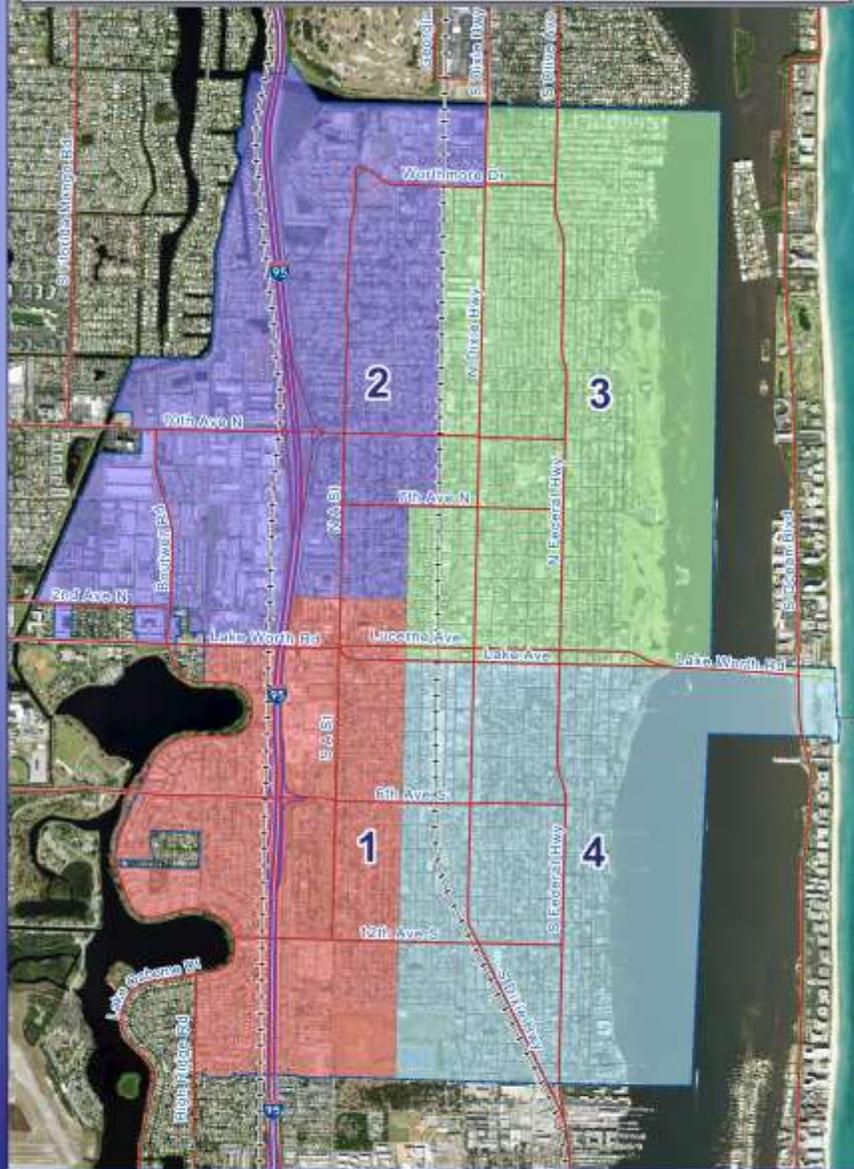


City of Lake Worth Beach  
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Lake Worth Beach, FL 33460  
Phone: (561) 986-1800



# City of Lake Worth Beach

## Alternative Districts: Option 3



Revision Date: 10/2022  
Contact: James Hammond, Clerk  
Planning: Lake Worth Beach, 3094  
Revised: U.S. Census Bureau  
100 W. Lake Worth Beach  
P.O. Box 1000

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

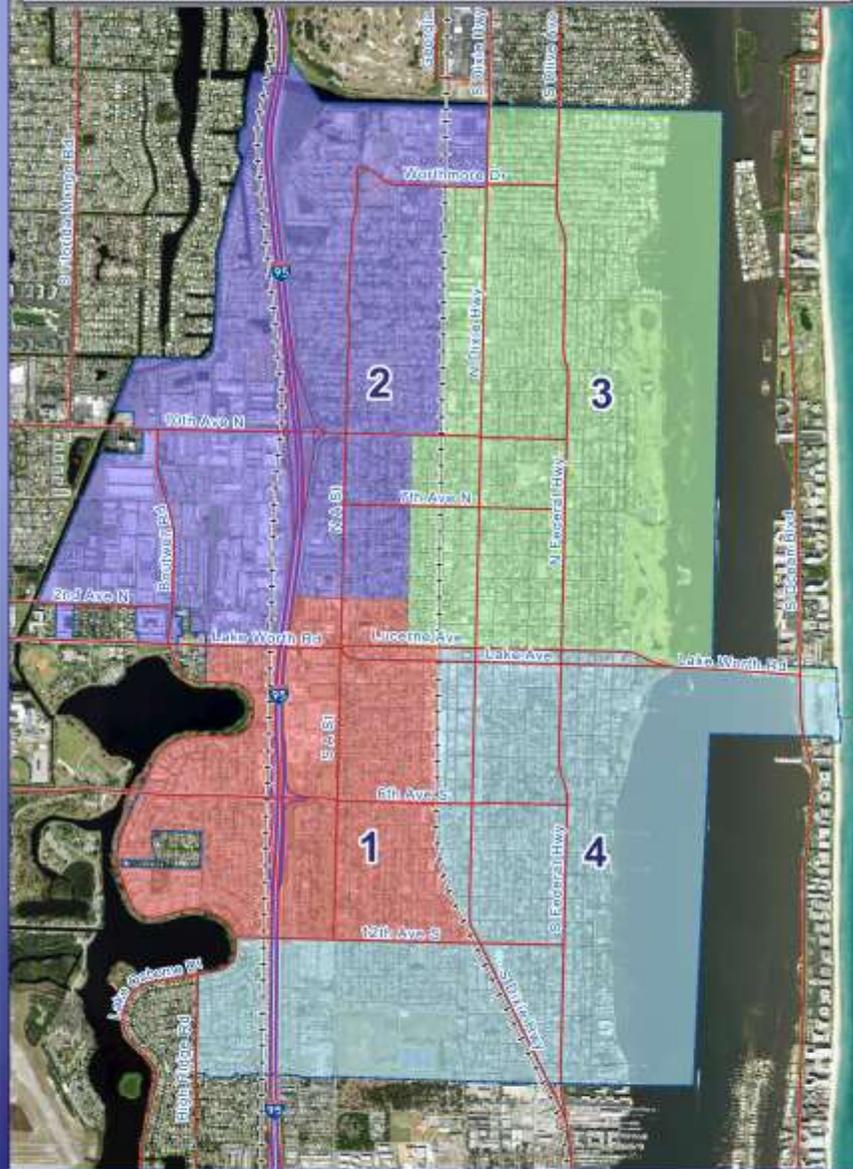


City of Lake Worth Beach  
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Lake Worth Beach, FL 33460  
Phone: (561) 986-1800



# City of Lake Worth Beach

## Alternative Districts: Option 4



Revision Date: 10/2022  
Contact: James Hammond, Clerk  
Planning: Lake Worth Beach, 3094  
Revised: U.S. Census Bureau  
100 W. Lake Worth Beach  
P.O. Box 1000

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



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