URP 4273 Final Project: Where should I Live?

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Main Goal

The main goal of this project is to find the ideal zip code(s) to live in the United States by using GIS to examine physical, demographic, and socio-economic data in a spatial context.

Background

- Since everyone in our group are upperclassmen college students we will all be faced with the decision of where to move to and settle in just a couple of years.
- Profile:a recent college graduate looking to settle down and start a family in the near future
- Since most people choose where to live based on a set of criteria that they have, we chose a list of criteria based off of the fake profile we made in order to examine and analyze the data we had collected in order to narrow down our search.

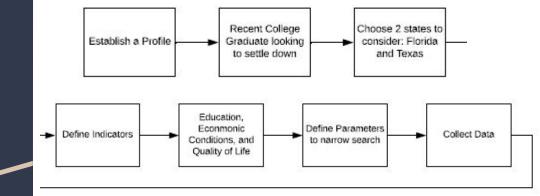
Scope and characteristics of the study area

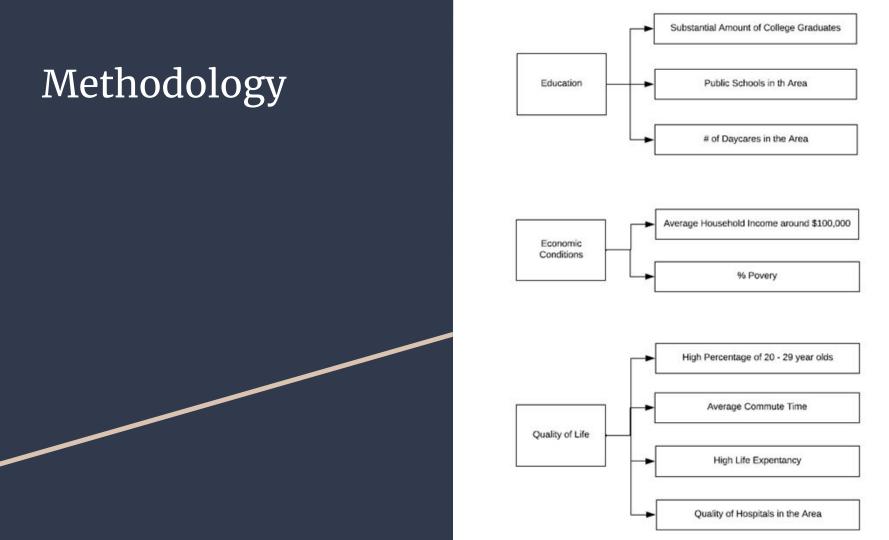
- Florida & Texas
- Third & second most populous states
- High rates of population growth
- Both just below national average for percent urban
- 4+ major metro centers
- Similar Climates
- We have also spent a lot of time in Florida

Objectives for accomplishing the main goal

- 1. Education
 - a) 50% college grads
 - b) >4 options for schools
 - c) >5 options for daycares
- 2. Economic
 - a) <15% poverty level
 - b) Mean income around 100,000
- 3. Quality of Life
 - a) >15% 20-29 year-olds
 - b) Commute times less than 25 minutes
 - c) Life expectancy >79
 - d) 1 hospital within 10 miles

Methodology





Methodology

Select zipcodes with Commute Time <25 mins by using a select by attribute.

Select zipcodes with household income > \$100,000 using a seletct by attribute

Select zipcodes where there is more than 5 daycares using select by attribute

Select zipcodes that have more than 4 schools in them using select by attribute

Select zipcodes with >50% college graduates using select by attribute

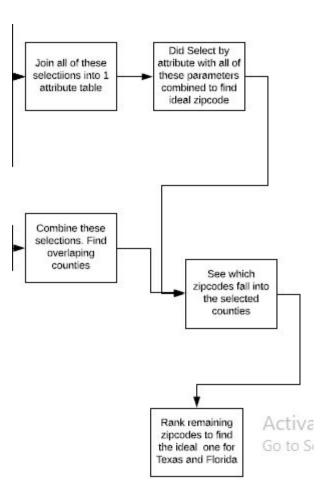
Select zipcodes within 10 miles of a hospital using a buffer around the hospital

Use select by attribute to find zipcodes with a proportion of 20-29 yo. > 15%

Select the counties with % Poverty < 15% using select by attribute

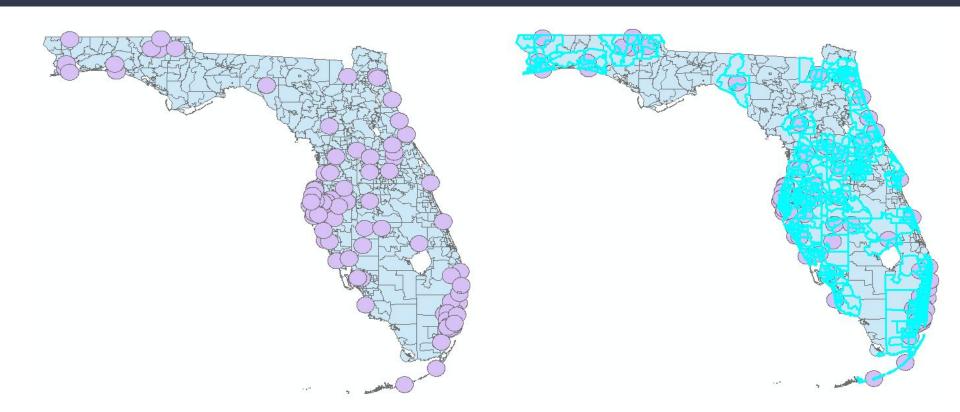
Select the counties with Life Expectany > 79 using select by attribute



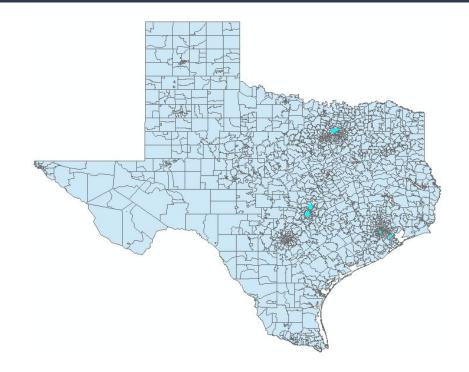


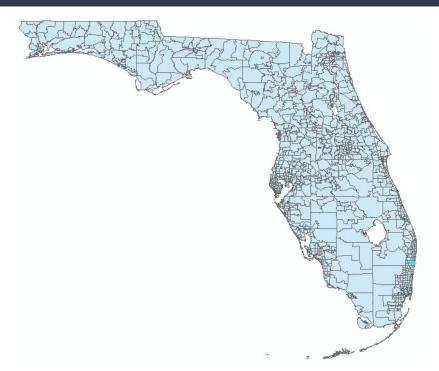
Zip Code Analysis

Parameter	Zip Codes Remaining	% Eliminated		
Commute Time < 25 min	1406	48%		
Income > \$100,000	212	92%		
Number of Daycares > 5	1045	41%		
Percent 20-29 Years Old > 15	646	76%		
Number of Schools > 4	1243	54%		
Percent Bachelor's Degree > 50	1001	63%		
Hospital within 10 Mile Buffer	1788	34%		

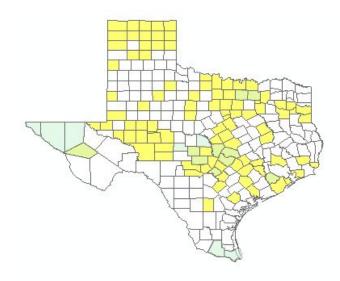


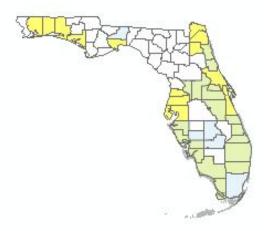
Zip	Zip Code Criteria										
	FID	Shape	STATE_NAME	City	Zip_Code	Pct Bachelor's	Commute Time	INC_AVERAG	DayCare Count	Percent 20-29 Years	Schools Count
	525	Polygon	Texas	Carrollton	75010	.765340	24.7	106572	18	15.3883	12
	536	Polygon	Texas	Coppell	75019	.856045	23.1	159228	33	16.0456	17
	1295	Polygon	Texas	Round Rock	78681	.759938	24.9	118030	29	15.8029	13
	1408	Polygon	Texas	Austin	78746	.928922	19.2	151247	14	15.1878	9
	1731	Polygon	Texas	Bellaire	77005	.868187	18.4	143884	10	16.1702	5
	1824	Polygon	Texas	Houston	77062	.805965	23.5	111104	12	15.1451	5
	2544	Polygon	Florida	Boca Raton	33431	.734124	19.3	121219	14	15.7216	25

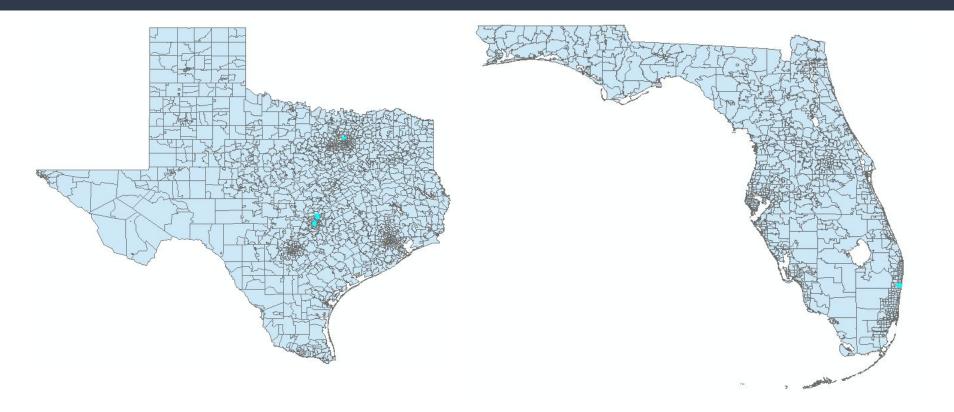




Parameter	Counties Remaining	% Eliminated
Percent Poverty < 15%	134	58%
Life Expectancy > 79	40	88%







Final Results

Zip Code Criteria selection

Γ	FID	Shape	STATE_NAME	City	Zip_Code	PCT_Bachelor's	Commute Time	INC_AVERAG	DayCare Count	Percent 20-29 Years	Schools Count
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Austin, Texas



Boca Raton, Florida

Works Cited

- <u>https://www.fgdl.org/metadataexplorer/explorer.jsp</u>
- <u>https://schoolsdata2-tea-texas.opendata.arcgis.com/</u>
- <u>https://www.fgdl.org/metadataexplorer/explorer.jsp</u>
- <u>https://www.fgdl.org/metadataexplorer/explorer.jsp</u>
- <u>http://ghdx.healthdata.org/record/united-states-life-e</u> xpectancy-and-age-specific-mortality-risk-county-19 80-2014
- <u>http://hub.arcgis.com/datasets/fedmaps::hospitals/g</u>
 <u>eoservice</u>
- <u>http://hub.arcgis.com/datasets/geoplatform::day-car</u>
 <u>e-centers</u>