THE NEW SILICON VALLEY:

WHY MIAMI IS THE NEXT HOTSPOT FOR TECH

PRESENTATION

8.30.21

BACKGROUND

- The results of the COVID-19 pandemic have put a major strain on businesses due to government policies, paired with a rising income tax rate, and high cost-of-living.
- As a result many businesses are looking for alternative places to setup, or move to.
- Goal: Investigate why tech businesses are choosing to move to Miami versus staying in Silicon Valley, San Francisco Bay, CA. and why places like Miami, FL and Austin, TX are so attractive

DATA ACQUISITION AND CLEANING

- The Geodata was collected from GeoNames.Org and compared with US Postal Codes.
- Cost of living data was collected from BestPlaces.Net.
- Income Taxes and Other Taxes for SmartAsset.Net
- Occupational and Labor Statistics were collected from the U.S. Bureau of Labor.
- Business Incentives for comparing the states were from CSG.Org.
- Crime statistics for each state were sourced from government crime report website and compared with NeighborhoodScout.
- The FourSquare API was utilized with the geodata to create maps using Folium and k-means cluster data for analysis and comparison of neighboring towns in the Miami-Dade County.
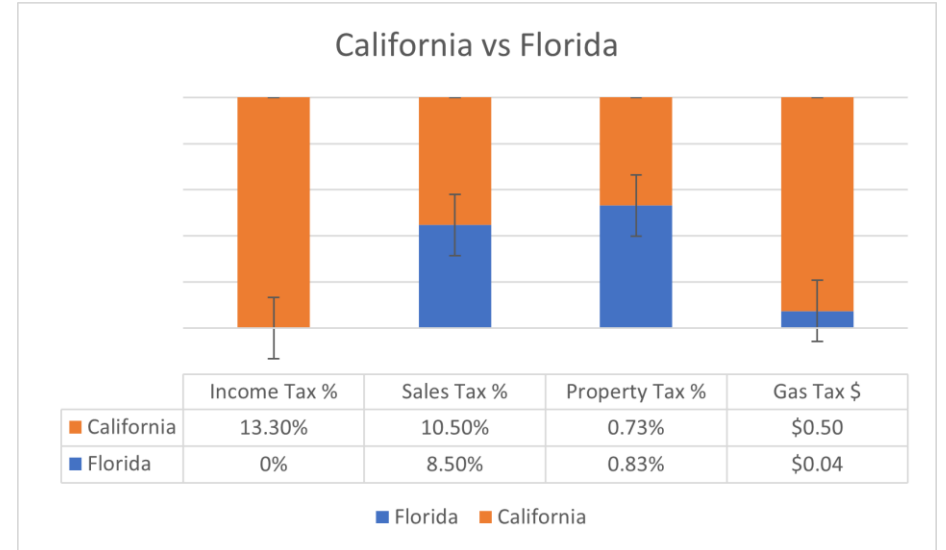
COST OF LIVING COMPARISON

- THE AVERAGE HOME IN SANTA CLARA, CA IS $1,292,200 COMPARED TO A HOUSE IN MIAMI, FL AT $329,900.
- THATS A DIFFERENCE OF OVER $962,300.

Cost of Living Indexes	Santa Clara, CA	Miami, FL	Difference
Overall Index: Homeowner, No Child care, Taxes Not Considered	250	123.1	50.8% less
Food & Groceries	115.9	107.3	7.4% less
Housing (Homeowner)	558.9	142.7	74.5% less
Median Home Cost	$1,292,200	$329,900	$962,300 (74.5% less)
Utilities	86	95.5	11.0% more
Transportation	140.5	144.5	2.8% more
Health	100.5	98.8	1.7% less
Miscellaneous	104.6	104.8	0.2% more

INCOME TAXES AND ASSOCIATED TAXES

- CALIFORNIA HAS THE HIGHEST TIER INCOME TAX RATE
- FLORIDA HAS 0% INCOME TAX
- BOTH HAVE COMPARABLE PROPERTY TAX %
- COMMUTING IN FLORIDA WILL COST 92%LESS FOR EACH GALLON.

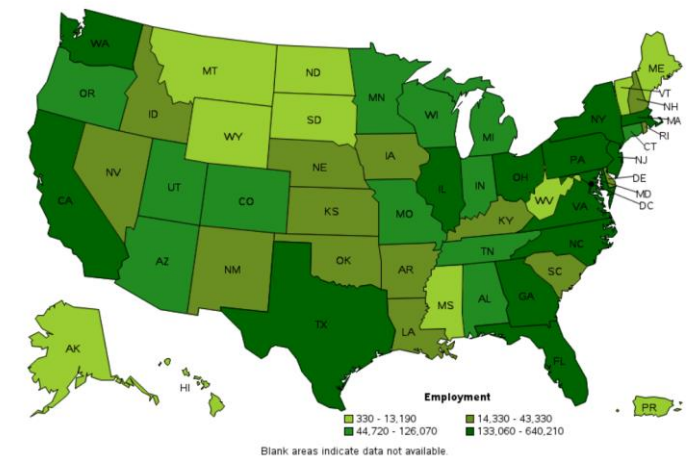### California vs Florida

	Income Tax %	Sales Tax %	Property Tax %	Gas Tax $
California	13.30%	10.50%	0.73%	$0.50
Florida	0%	8.50%	0.83%	$0.04

Florida California

OCCUPATIONAL AND LABOR STATISTICS

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California	640,210	38.96	1.18	$ 56.16	$ 116,820
Texas	396,060	32.73	0.99	$ 45.04	$ 93,690
New York	265,840	30.59	0.93	$ 49.65	$ 103,280
Florida	220,900	26.17	0.79	$ 39.81	$ 82,810
Virginia	218,360	59.00	1.79	$ 51.50	$ 107,130

- ANNUAL MEAN WAGE: CA $116,820 AND FL $82,810

- FLORIDA OFFERS COMPETITIVE SALARY FOR COMPUTER AND MATHEMATICAL OCCUPATIONS LIKE CALIFORNIA

- CA EMPLOYMENT IS AT 640,210 COMPARED TO FL AT 220,900

- FLORIDA IS PRIMED FOR THE BIGGEST GROWTH AS THE DEMAND EXCEEDS AVAILABILITY OF TALENT

Employment of computer and mathematical occupations, by state, May 2020

Employment	
330 - 13,190	14,330 - 43,330
44,720 - 126,070	133,060 - 640,210

Blank areas indicate data not available.

BUSINESS INCENTIVES

- **Florida** offers "The New Florida" initiative focusing on the development of Science, Technology, Engineering, and Mathematics (STEM) related fields.
- The government is actively working with business and education departments to fund projects and research and to expand their economy.
- "A true and holistic transformation will also involve the areas of medicine and health care, finance, insurance, professional services, education and the arts, which are the foundation of a modern society" – [apps.csg.org]

- **California** offers the "Small Business Loan Guarantee Program"

CRIME REPORT STATISTICS

SANTA CLARA VIOLENT CRIMES   POPULATION: 130,365

	MURDER	RAPE	ROBBERY	ASSAULT
Report Total	0	35	76	110
Rate per 1,000	0.00	0.27	0.58	0.84

MIAMI VIOLENT CRIMES   POPULATION: 467,963

	MURDER	RAPE	ROBBERY	ASSAULT
Report Total	43	155	773	1,913
Rate per 1,000	0.09	0.33	1.65	4.09

UNITED STATES VIOLENT CRIMES   POPULATION: 328,239,523

	MURDER	RAPE	ROBBERY	ASSAULT
Report Total	16,425	139,815	267,988	821,182
Rate per 1,000	0.05	0.43	0.82	2.50

UNITED STATES VIOLENT CRIMES   POPULATION: 328,239,523

	MURDER	RAPE	ROBBERY	ASSAULT
Report Total	16,425	139,815	267,988	821,182
Rate per 1,000	0.05	0.43	0.82	2.50

COMPARISON:

- POPULATION: SANTA CLARA 130,365 / MIAMI 467,963

- CRIME: SIMILAR FOR POPULATION SIZE

- SAFE RATING: SANTA CLARA 6 / MIAMI 9 (3%)

- RATING IS OUT OF 100 (100 BEING SAFEST) NEIGHBORHOODSCOUT.COM

TAKEAWAY: LIVE OUTSIDE THE CITY COMMUTE TO WORK

NEIGHBORHOOD CLUSTERING

- MIAMI, FL DATA WAS COLLECTED USING THE FOURSQUARE API

```
miami_venues.groupby('Neighborhood').count()
```

Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Hialeah	94	94	94	94	94	94
Homestead	36	36	36	36	36	36
Miami	1745	1745	1745	1745	1745	1745
Miami Beach	171	171	171	171	171	171
North Miami Beach	50	50	50	50	50	50
Opa Locka	46	46	46	46	46	46

K-MEANS GROUPING

- MIAMI VENUES WERE COLLECTED USING THE FOURSQUARE API AND GEODATA COLLECTED.
- THIS RETURNED (2142, 7) RESULTS
- NEXT, THE DATASET WAS GROUPEDBY "NEIGHBORHOOD" AND CONSOLIDATED INTO A DATAFRAME OF 256 UNIQUE CATEGORIES.

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Hialeah	Trail	Business Service	Park	Fast Food Restaurant	Gym / Fitness Center	Pizza Place	Bakery	Sandwich Place	Café	Ice Cream Shop
1	Homestead	Trail	Business Service	Gym / Fitness Center	ATM	Perfume Shop	Park	Paper / Office Supplies Store	Outdoors & Recreation	Other Repair Shop	Other Nightlife
2	Miami	Trail	Gym / Fitness Center	Business Service	Fast Food Restaurant	Hotel	Seafood Restaurant	Pizza Place	Grocery Store	Café	Latin American Restaurant
3	Miami Beach	Hotel	Café	Beach	Pizza Place	Italian Restaurant	Park	Trail	Mediterranean Restaurant	Mexican Restaurant	Cuban Restaurant
4	North Miami Beach	Restaurant	Gym	Ice Cream Shop	Grocery Store	Fast Food Restaurant	Building	Smoothie Shop	Health & Beauty Service	Supplement Shop	Harbor / Marina

MOST COMMON VENUES

- CLUSTER 1 CONTAINS MOSTLY RESTAURANTS AND CONVENIENCE STORES.

- CLUSTER 2 HAS GYMS AND OTHER OUTDOOR RELATED ACTIVITIES.

- CLUSTER 3 HAS A VARIETY OF FITNESS, OUTDOOR, AND CITY-LIFE ACTIVITIES.

- CLUSTER 4 HAS RESTAURANTS AND SMALL SHOPS.

- CLUSTER 5 HAS HOTELS, CAFES AND BEACH REAL-ESTATE TO EXPLORE.

CONCLUSION

BUSINESS IS GOOD

Florida is the clear winner with a lower population, a STEM focused business initiative, and competitive wages for the Computer Mathematical Occupations field.

TAXES

Lower taxes and no income tax means your dollar will go further, and business growth can remain in Florida which is good for their economy.

WEATHER AND ENVIRONMENT

If you do not you do not mind the rain and humidity, then Florida will satisfy you. With outdoor activities, gyms, nightlife, and a beautiful coastline.

SAFETY

It is recommended to live in a smaller town/area on the outskirts of Miami and make a commute to work.

FUTURE DIRECTIONS

- There will be a huge shift of movement out of California in the next few years.
- Paired with continued government overreach, high taxes, and rising unemployment in major cities (North Western/North Eastern U.S.) states like Florida will see an influx into the midwest and south east.
- We could possibly end up seeing a major shift in locations of technical institutes and funding, as research and talent moves elsewhere.
- Even with remote working conditions due to COVID-19 will subside, as things eventually reopen and people try to live their lives normally.
- The prospects of a lower-cost of living, relaxed atmostphere, and less government restrictions will setup certain states for expansion in the STEM fields and the states who don't adapt will fall behind.
- Additional data that would be beneificial to see with the analysis would be to supplement the transportation and census data for compare and contrast over the next 5 to 10 years.

THANK YOU

Goose0x

github.com/Goose0x