

# ANALYZING CENTRAL FLORIDA THEME PARKS ECONOMIC IMPACT

This analysis will focus on identifying and classifying venues around Orlando, Florida Theme Parks to determine location for novel potential business ventures that can fill gaps in current marketplace as well as overlay COVID-19 data to map potential effect on Oranges County economy.



# **ANALYZING** CENTRAL FLORIDA THEME PARKS **ECONOMIC IMPACT**

#### Orlando's tourism industry highlights:

- 75 million visitors
- more than \$75.2 billion in annual economic impact for Central Florida Each visitor spends on average
- \$1,000 per person, per trip Tourism supports 41% of the region's workforce at more than 463,000 jobs.



**Data Sources** 



Florida Tourist Attraction by OpenStreetMap's (OSM)



Theme Parks in Orange County, Florida



Venues by Foursquare API



**Predictive Modeling** 



Conclusions

## DATA SOURCES

Primary data sources:

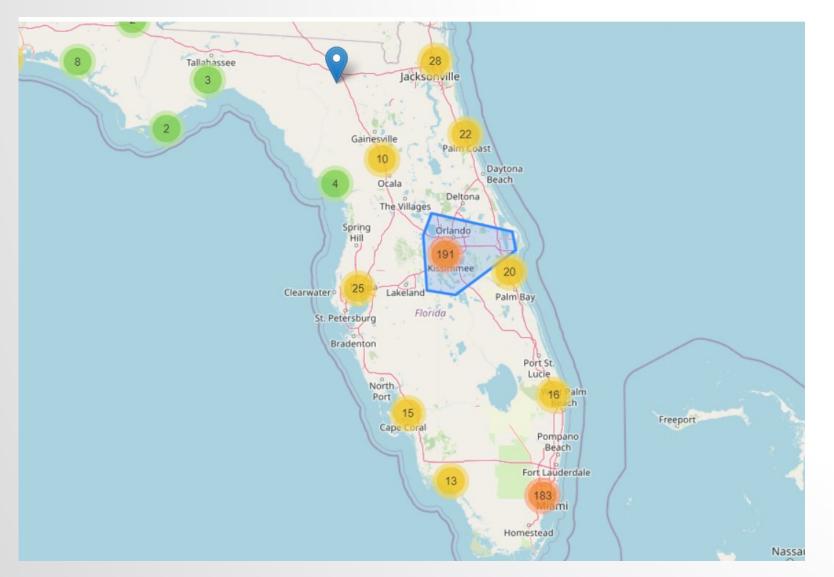
OpenStreetMaps (OSM) Tourist Attractions spatial data for North America feature layer from ESRI is updated every five minutes. In OSM features are places and things of interest to tourists, including places to see, stay and support tourists.

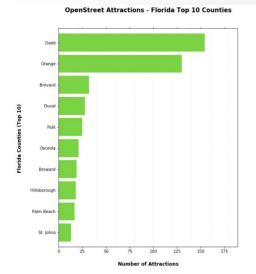
Credits to Steven Moore, Product engineer at ESRI. Use this data to extract Theme Parks geographical locations as the basis to retrieve Foursquare.

Foursquare API venues data within a mile (1600 meters) of Orlando Theme Parks in all directions

Florida COVID-19 Cases by Zip Code from the Florida Department of Health GIS Layer. Archived by the University of South Florida Libraries, Digital Heritage and Humanities Collections.

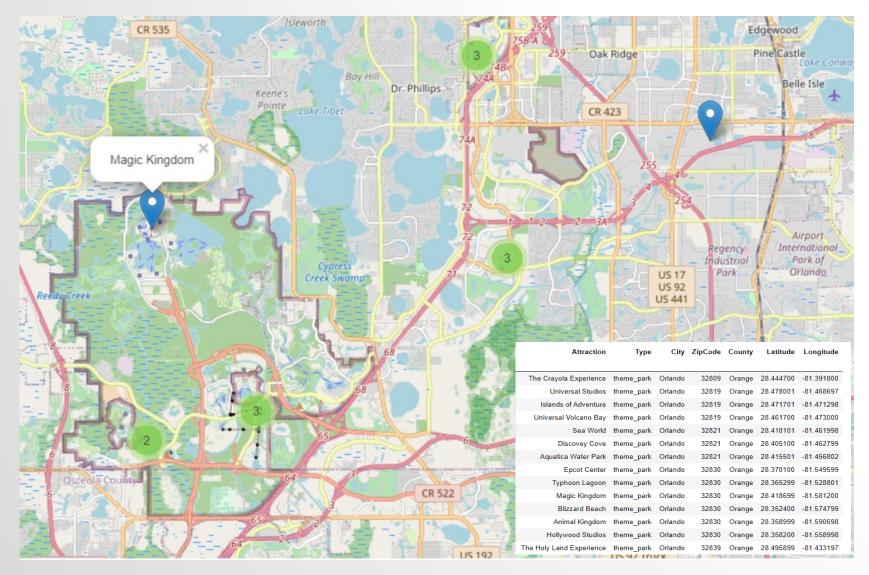
#### FLORIDA TOURIST ATTRACTIONS BY OSM

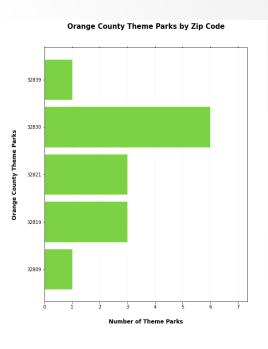




County	Attractions	%		
Dade	154	34%		
Orange	130	28%		
Brevard	32	7%		
Duval	28	6%		
Polk	25	5%		
Osceola	21	5%		
Broward	19	4%		
Hillsborough	18	4%		
Palm Beach	17	4%		
St. Johns	13	3%		
Total	457	100%		

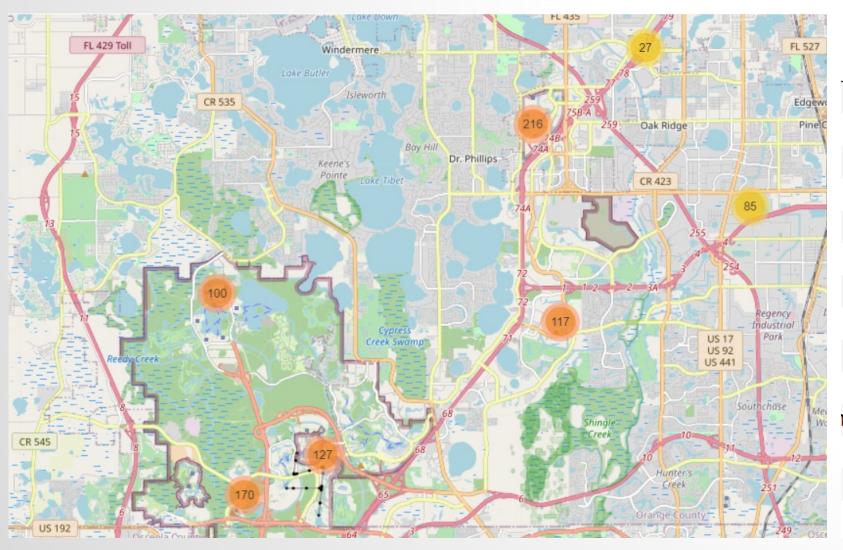
#### ORANGE COUNTY THEME PARKS





Zip Code	Theme Park	%
32830	6	43%
32821	3	21%
32819	3	21%
32839	1	7%
32809	1	7%
Total	14	100%

### FOURSQUARE VENUES

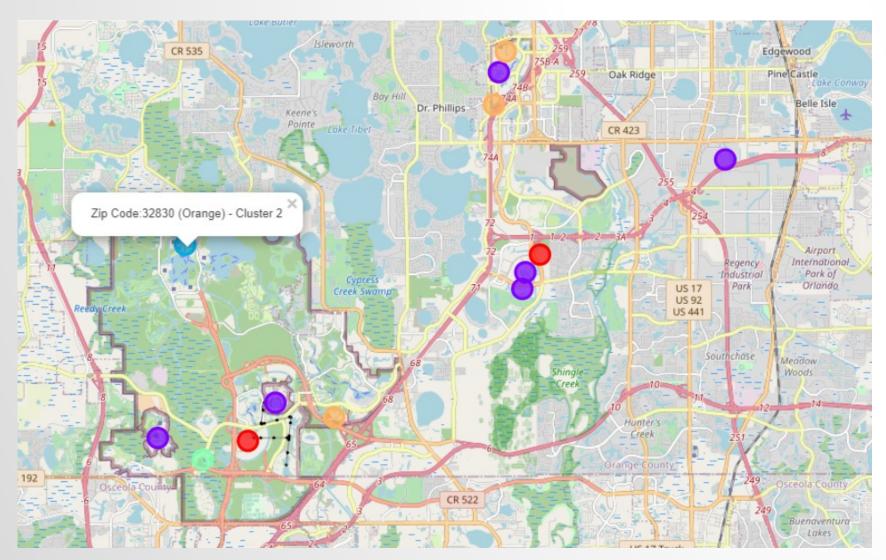


		VenueName
ThemePark	ZipCode	
Animal Kingdom	32830	56
Aquatica Water Park	32821	24
Blizzard Beach	32830	20
Discovey Cove	32821	30
Epcot Center	32830	100
Hollywood Studios	32830	94
Islands of Adventure	32819	100
Magic Kingdom	32830	100
Sea World	32821	63
The Crayola Experience	32809	85
The Holy Land Experience	32839	27
Typhoon Lagoon	32830	27
Universal Studios	32819	64
Universal Volcano Bay	32819	52

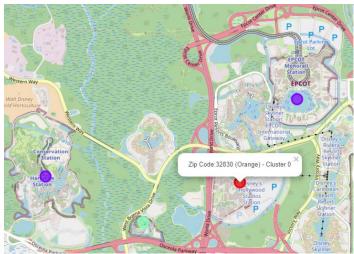
#### FOURSQUARE VENUES

ThemePark	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
Animal Kingdom	Theme Park Ride / Attraction	Gift Shop	African Restaurant	Cocktail Bar	Theater	Coffee Shop	Theme Park	Asian Restaurant	Lounge	Snack Place
Aquatica Water Park	Water Park	Gift Shop	Aquarium	Theme Park Ride / Attraction	Exhibit	American Restaurant	BBQ Joint	Zoo	Arcade	English Restaurant
Blizzard Beach	Theme Park Ride / Attraction	Gift Shop	Pool	American Restaurant	Bar	Water Park	Spa	Trail	Hot Dog Joint	Scenic Lookout
Discovey Cove	Theme Park Ride / Attraction	Water Park	Theme Park	Exhibit	Stadium	Café	General Entertainment	Building	Diner	Market
Epcot Center	Theme Park Ride / Attraction	Gift Shop	Food Stand	Souvenir Shop	Wine Shop	Mexican Restaurant	Cocktail Bar	Snack Place	Ice Cream Shop	Italian Restaurant
Hollywood Studios	Theme Park Ride / Attraction	Gift Shop	Snack Place	American Restaurant	Souvenir Shop	Theme Restaurant	Clothing Store	Ice Cream Shop	Theme Park	Lounge
Islands of Adventure	Theme Park Ride / Attraction	Gift Shop	Theme Park	American Restaurant	Performing Arts Venue	Candy Store	Bar	Playground	Trail	Greek Restaurant
Magic Kingdom	Theme Park Ride / Attraction	Gift Shop	Snack Place	Ice Cream Shop	American Restaurant	Train Station	Theme Park	Public Bathroom	Tourist Information Center	Candy Store
Sea World	Theme Park Ride / Attraction	Aquarium	Gift Shop	Exhibit	Theme Park	American Restaurant	Stadium	Theater	Zoo	BBQ Joint
The Crayola Experience	Clothing Store	Accessories Store	Shoe Store	Cosmetics Shop	Toy / Game Store	Department Store	Kids Store	Sandwich Place	Ice Cream Shop	Lingerie Store
The Holy Land Experience	Furniture / Home Store	Cosmetics Shop	Department Store	Gym / Fitness Center	Intersection	Pharmacy	Pet Store	Optical Shop	Music Store	Museum
Typhoon Lagoon	Theme Park Ride / Attraction	Water Park	American Restaurant	Restaurant	Bar	Fast Food Restaurant	Coffee Shop	Ice Cream Shop	River	Souvenir Shop
Universal Studios	Theme Park Ride / Attraction	Bar	Gift Shop	Ice Cream Shop	American Restaurant	Theme Park	Theme Restaurant	Music Venue	Public Art	Souvenir Shop
Universal Volcano Bay	Hotel	Hotel Pool	Theme Park Ride / Attraction	Water Park	Resort	Coffee Shop	Ice Cream Shop	Gift Shop	Cafeteria	Brazilian Restaurant

### CLUSTERING (K-MEAN) CLASSIFICATION



Clustering (K-Mean)
Classification algorithm was implemented to partition
Foursquare dataset into five (5) distinct non-overlapping subgroups or clusters where each point belongs only one group (Theme Park).



### CLUSTER #2

Name	Latitude	Longitude	Cluster Labels	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
The Crayola Experience	28.444700	-81.391800	1	Clothing Store	Accessories Store	Shoe Store	Cosmetics Shop	Toy / Game Store	Department Store	Kids Store	Sandwich Place	Ice Cream Shop	Lingerie Store
Islands of Adventure	28.471701	-81.471298	1	Theme Park Ride / Attraction	Gift Shop	Theme Park	American Restaurant	Performing Arts Venue	Candy Store	Bar	Playground	Trail	Greek Restaurant
Sea World	28.410101	-81.461998	1	Theme Park Ride / Attraction	Aquarium	Gift Shop	Exhibit	Theme Park	American Restaurant	Stadium	Theater	Zoo	BBQ Joint
Discovey Cove	28.405100	-81.462799	1	Theme Park Ride / Attraction	Water Park	Theme Park	Exhibit	Stadium	Café	General Entertainment	Building	Diner	Market
Epcot Center	28.370100	-81.549599	1	Theme Park Ride / Attraction	Gift Shop	Food Stand	Souvenir Shop	Wine Shop	Mexican Restaurant	Cocktail Bar	Snack Place	Ice Cream Shop	Italian Restaurant
Animal Kingdom	28.358999	-81.590698	1	Theme Park Ride / Attraction	Gift Shop	African Restaurant	Cocktail Bar	Theater	Coffee Shop	Theme Park	Asian Restaurant	Lounge	Snack Place

## CONCLUSIONS

Orange county – and central Florida in general– relies and benefits from the millions of tourist the area attracts every year seeking to enjoy the thrill of the rides, the photo opportunities with characters that kids and adults watch in famous movies and TV shows, dream to be a princess, a king, a magician, etc. There is an overabundance of gift shops, restaurants and clothes and shoes stores.

There may be an opportunity to start small coffee, snacks, and ice cream shops which - according to the Foursquare data retrieved and analyzed - have a less prominent place among the top 10 most common venues categories.

