Silicon Beach Venue Scan

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2019

Los Angeles

Introduction

Where and in what kind of commercial venues in the Beach Cities of Los Angeles should investors place their bets?

Introduction

Los Angeles is the cultural, financial, and commercial center of Southern California L.A. is the most populous city in California with 88 cities in Los Angeles County, California. Each city having a mayor and a city council. It's total area is 502.76 sq mi (1,302.15 km2) while its total Land area is 468.74 sq mi (1,214.03 km2). Its 2018 total population estimate was 3,990,456.

The sprawling metropolitan area presents both challenges and opportunities. The newly minted Silicon Beach is a sub section of this large landmass consisting of 11 "beach cities". Analyzing and understanding the large geospatial landmass presents a unique challenge with the opportunity equally unique reward.

Answering the "where" in Los Angeles can result in positive investment returns as demographic and commercial profiles shift over time.

Introduction – Market trend

Trend

Billions in venture capital funding have poured into Los Angeles at an unprecedented rate since 2013

Billions pour into LA as it gears up to be the next Silicon Valley

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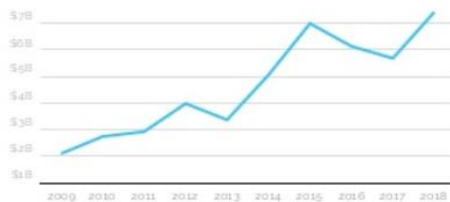
Ronald Grover, special to CNBC.com

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Los Angeles, California.
Getty Images

When Snapchat parent company Snap went public in a $3.4 billion IPO offering in March, it proved yet again what a growing number of venture capitalists have been betting on for months: Los Angeles, the land of Hollywood movie stars and sunkissed beaches, had become a launching pad for start-ups after decades of being a poor relation to Silicon Valley.

Implication

Talent from Silicon Valley and around the world has begun to migrate to the Los Angeles area

Unlike San Francisco, Los Angeles spans a significantly larger land area with less geographic urban centralization

LOS ANGELES VENTURE CAPITAL
FUNDING RAISED IN L.A. & O.C.   **$6.4B in 2018**

SOURCE: PWC MONEYTREE REPORT

COMPANIES FUNDED (2017) **376**
EXITS (2016) **80**

RECENT EXITS / IPO
beats. by dr. dre — Acquired by Apple ($3B)
ring — Acquired by Amazon ($1B)
DOLLARSHAVECLUB — Acquired by Unilever ($1B)
snapchat — IPO ($24B)

MASSIVE LOCAL ECONOMY
Los Angeles has a trillion dollar economy; its the 3rd largest GDP in the world after Tokyo & New York.

TOKYO	1	$1.89T
NEW YORK CITY	2	$1.72T
LOS ANGELES	3	$1.04T
LONDON	4	$880B
PARIS	5	$850B

SOURCE: BUREAU OF ECONOMIC ANALYSIS, EUROSTAT, TOUKEI

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Data Description

Data Description

To paint a picture of the Beach cities three data sources were used:

1. Population data from the Chief Executive Office of Los Angeles County

2.   Resident income and age data from https://datausa.io

3. The Foursquare API for locating venues and their types in each city

Data Description – Proxy identities

A proxy identity for the 11 cities comprising Silicon Beach can be compiled using population, resident age and income

| Silicon Beach			
City	Population	Median Age	Average Income
1 Culver City	39,283	41	$ 86,997
2 El Segundo	16,853	39	$ 92,942
3 Hawthorne	87,854	33	$ 47,636
4 Hermosa Beach	19,708	40	$ 124,849
5 Inglewood	110,598	35	$ 46,389
6 Manhattan Beach	35,924	44	$ 148,899
7 Marina del Rey	8,866	39	$ 101,860
8 Redondo Beach	67,908	40	$ 104,548
9 Santa Monica	92,306	41	$ 86,084
10 Torrance	146,758	42	$ 85,070
11 Venice Beach	40,885	35	$ 67,647

Methodology

Methodology

Where should investors look to establish new venues?

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Methodology – Python Folium

The Python folium library enables the visualization of the geographic details of Silicon Beach and the spatial relationship between cities
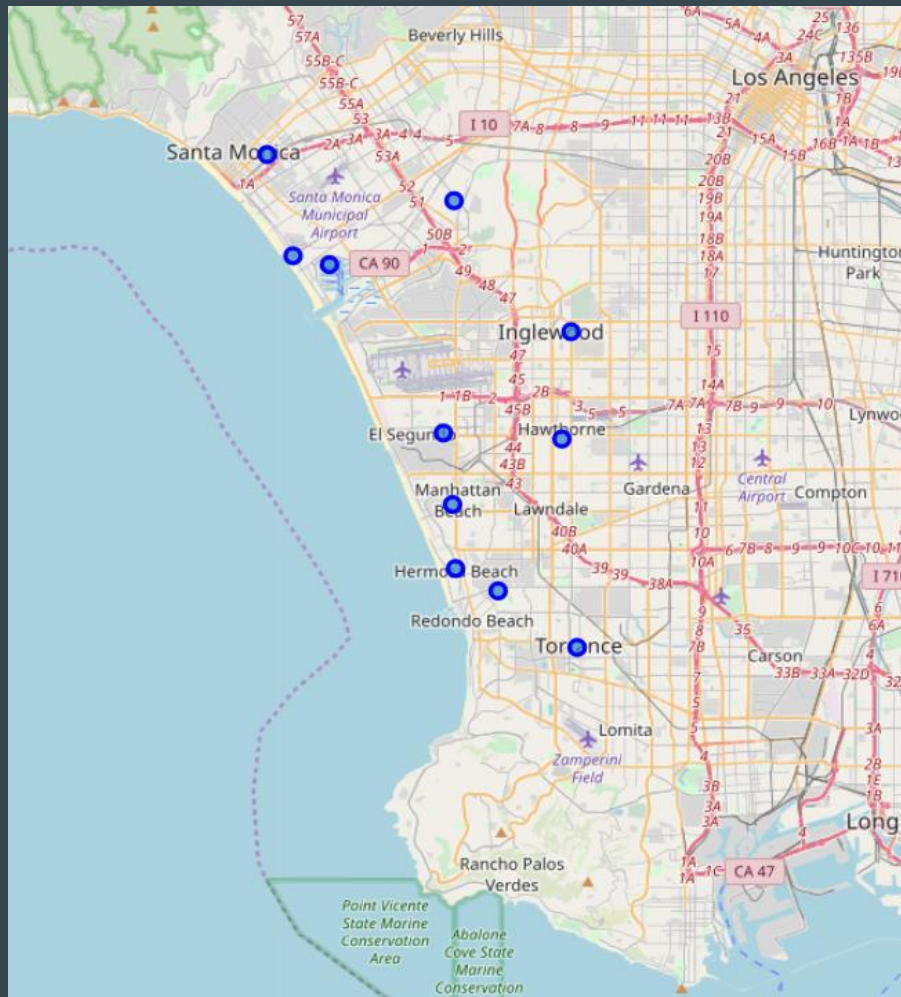
Methodology – Venue Scan

- The foursquare API was used to explore the cities with a limit of 100 venue within a 3 mile radius of each city

- The scan returned 226 total venues with 120 unique venue categories

|	City	City Latitude	City Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Culver City	34.005820	-118.396781	Lindberg Park	34.003238	-118.398011	Playground
1	Culver City	34.005820	-118.396781	Ralphs	34.002368	-118.393548	Supermarket
2	Culver City	34.005820	-118.396781	Pizza Hut	34.002809	-118.393751	Pizza Place
3	Culver City	34.005820	-118.396781	Redbox	34.002558	-118.393167	Video Store
4	Culver City	34.005820	-118.396781	The Spot Cafe & Lounge	34.009331	-118.398429	Coffee Shop
5	Culver City	34.005820	-118.396781	Denny's	34.003629	-118.393315	Diner
6	Culver City	34.005820	-118.396781	Woodshop Studios	34.005708	-118.393419	Film Studio
7	Culver City	34.005820	-118.396781	Coombs Park	34.008639	-118.400031	Park
8	Culver City	34.005820	-118.396781	Raintree Cleaners	34.002818	-118.393503	Dry Cleaner
9	Culver City	34.005820	-118.396781	The No. 1 Currywurst Truck of Los Angeles	34.007730	-118.391969	Food Truck
10	El Segundo	33.917145	-118.401554	Yellow Brick Road Doggie Playcare & Gym	33.916564	-118.400132	Pet Store
11	El Segundo	33.917145	-118.401554	Grateful Dogs Clubhouse	33.918022	-118.398334	Pet Store
12	El Segundo	33.917145	-118.401554	R6 Distillery	33.916528	-118.405822	Distillery
13	El Segundo	33.917145	-118.401554	El Segundo Animal Hospital	33.919209	-118.404653	Pet Store
14	El Segundo	33.917145	-118.401554	McDonald's	33.915868	-118.396384	Fast Food Restaurant
15	El Segundo	33.917145	-118.401554	Intrepid Athletics	33.918565	-118.401354	Gym
16	El Segundo	33.917145	-118.401554	Crossfit Rising Wave	33.918462	-118.401209	Gym
17	El Segundo	33.917145	-118.401554	ONEHOPE Wine	33.918588	-118.401736	Office
18	El Segundo	33.917145	-118.401554	El Segundo DinDinAGoGo	33.918328	-118.403435	Food Truck
19	El Segundo	33.917145	-118.401554	Chevron Park	33.915467	-118.399067	Athletics & Sports
20	El Segundo	33.917145	-118.401554	Chevron Fitness center	33.915818	-118.396670	Gym / Fitness Center
21	Hawthorne	33.914775	-118.348083	Tacos Mexico	33.916662	-118.349048	Taco Place
22	Hawthorne	33.914775	-118.348083	Systems Training Center	33.913871	-118.352290	Martial Arts Dojo
23	Hawthorne	33.914775	-118.348083	Continental Gourmet Market - Hawthorne	33.914933	-118.344192	Latin American Restaurant
24	Hawthorne	33.914775	-118.348083	Bangkok Grill	33.914941	-118.352006	Thai Restaurant
25	Hawthorne	33.914775	-118.348083	Superior Grocers	33.917602	-118.351620	Market
26	Hawthorne	33.914775	-118.348083	Dollar Tree	33.913837	-118.353326	Discount Store
27	Hawthorne	33.914775	-118.348083	Domino's Pizza	33.916737	-118.349853	Pizza Place
28	Hawthorne	33.914775	-118.348083	Starbucks	33.916610	-118.352196	Coffee Shop
29	Hawthorne	33.914775	-118.348083	GNC	33.917102	-118.351676	Supplement Shop
30	Hawthorne	33.914775	-118.348083	99 Cents Only Stores	33.914137	-118.352905	Discount Store

Methodology –Venue Counts

The top 3 cities with the highest venue counts were:

1. Hermosa Beach
2. Venice Beach
3. Manhattan Beach

The bottom 3 cities with the lowest venue count were:

1. Torrance
2. Culver City
3. Inglewood
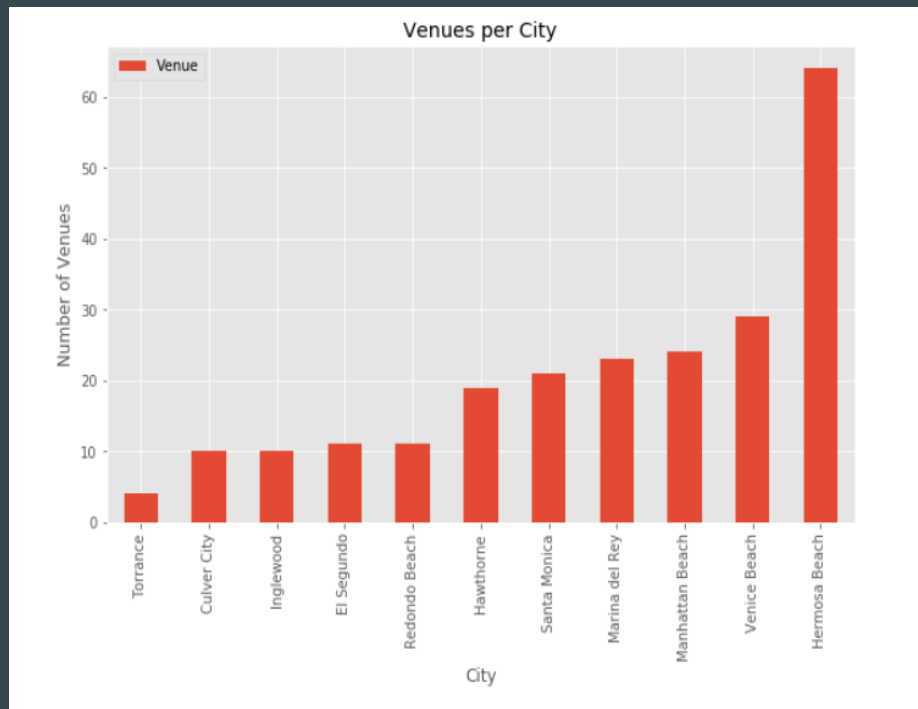
Methodology – 10 Most Common Venues

Parsing and transforming the data enables the creation of a table depicting the top 10 most common venues per city

	City	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	Culver City	Film Studio	Coffee Shop	Video Store	Diner	Playground	Pizza Place	Food Truck	Park	Supermarket	Dry Cleaner
1	El Segundo	Pet Store	Gym	Athletics & Sports	Food Truck	Fast Food Restaurant	Gym / Fitness Center	Office	Distillery	Dog Run	Dive Bar
2	Hawthorne	Fast Food Restaurant	Mobile Phone Shop	Convenience Store	Discount Store	Coffee Shop	Taco Place	Mexican Restaurant	Martial Arts Dojo	Market	Supplement Shop
3	Hermosa Beach	Coffee Shop	Grocery Store	Yoga Studio	Sushi Restaurant	American Restaurant	Cajun / Creole Restaurant	Gym / Fitness Center	Juice Bar	Massage Studio	Mexican Restaurant
4	Inglewood	Cajun / Creole Restaurant	Food Truck	Convenience Store	Restaurant	Smoke Shop	Southern / Soul Food Restaurant	Food Court	Stadium	Steakhouse	Music Venue
5	Manhattan Beach	Hotel	Sports Bar	Bank	Coffee Shop	Gastropub	Seafood Restaurant	Shipping Store	Mobile Phone Shop	Rental Car Location	Big Box Store
6	Marina del Rey	Beach	American Restaurant	Hotel	Seafood Restaurant	Boat or Ferry	Bike Rental / Bike Share	Pool	Resort	Restaurant	New American Restaurant
7	Redondo Beach	Grocery Store	Shop & Service	Discount Store	Japanese Restaurant	Chinese Restaurant	Pizza Place	Gym	Park	Dog Run	Bakery
8	Santa Monica	Rental Car Location	Accessories Store	Auto Dealership	Skate Park	New American Restaurant	Donut Shop	Park	Performing Arts Venue	Bar	Supermarket
9	Torrance	Recreation Center	Pool	Convenience Store	Ski Area	Film Studio	Dessert Shop	Diner	Discount Store	Distillery	Dive Bar
10	Venice Beach	American Restaurant	Poke Place	Coffee Shop	Yoga Studio	Dessert Shop	Sandwich Place	Canal	Chinese Restaurant	Plaza	Playground

Methodology - How should Beach Cities be grouped?

The K-means elbow method was used to determine the optimal k for the k means cluster value

The elbow method found the optimal k to be 3 based on city venue count and average income
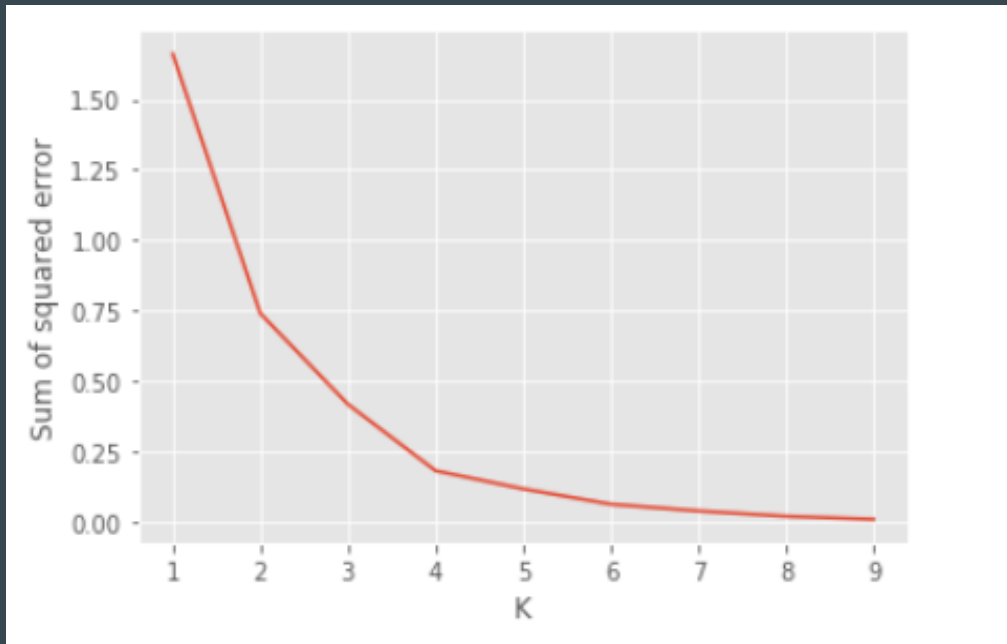
Methodology – Scaler & Clustering

The values were scaled using a MinMax Scaler
to achieve optimal clustering distribution

	Population	Median Age	Average Income	Venue Number	cluster
0	146758.0	41.0	0.377339	0.000000	0.0
1	110598.0	34.0	0.000000	0.064516	1.0
2	92306.0	40.0	0.387231	0.274194	0.0
3	87854.0	33.0	0.012165	0.306452	1.0
4	67908.0	40.0	0.567350	0.064516	0.0
5	40885.0	35.0	0.207375	0.403226	1.0
6	39283.0	40.0	0.396137	0.080645	0.0
7	35924.0	43.0	1.000000	0.354839	2.0
8	19708.0	39.0	0.765389	1.000000	2.0
9	16853.0	38.0	0.454131	0.112903	0.0
10	8866.0	39.0	0.541128	0.258065	0.0
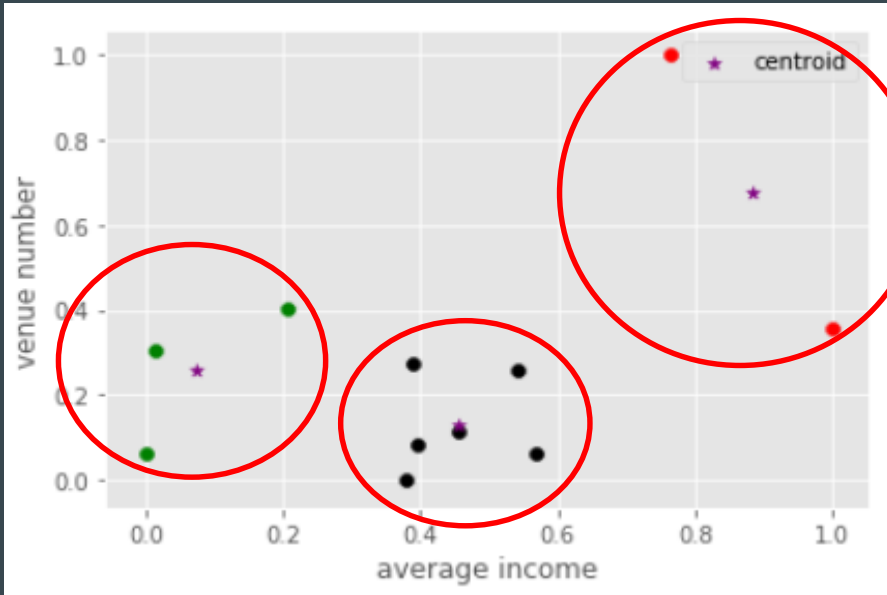
By plotting the clusters we can observe observe 3 distinct and relatively clear groupings

Methodology

The 3 distinct clusters can be visualized through the python folium map

Cluster 0
1.   Hawthorne
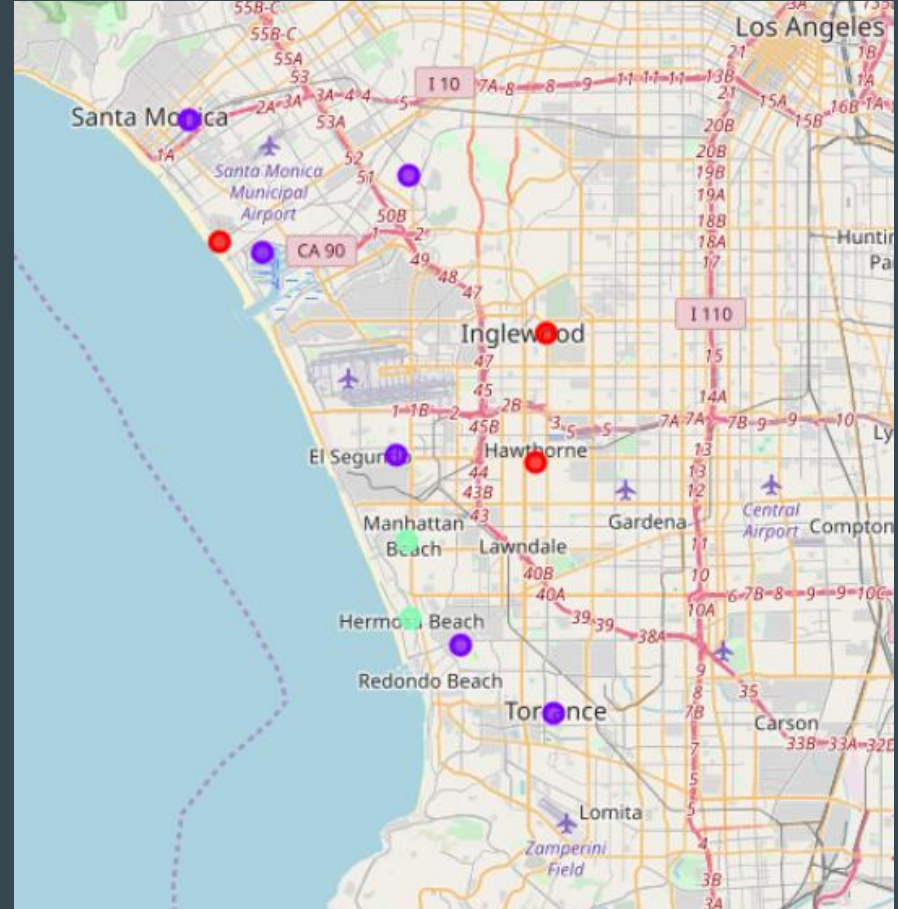2.   Inglewood
3.   Venice Beach

Cluster 1
1.   Culver City
2.   El Segundo
3.   Marina del Rey
4.   Redondo Beach
5.   Santa Monica
6.   Torrance

Cluster 2
1.   Hermosa Beach
2.   Manhattan Beach

Results

Results

Comparing cities in the context of their clusters we find cluster 1 as the "sweet spot" having a strong potential for venue development given its:

- Relatively high average income
- Reasonable average age
- and low current venue count

Torrance with its high population, high income and low venue number is the top pick for a location to establish a new venue followed by Redondo beach

Cluster 0

	City	Population	Median Age	Average Income	Venue Number
1	Inglewood	110,598	35	$ 46,389	8
2	Venice Beach	40,885	35	$ 67,647	29
3	Hawthorne	87,854	33	$ 47,636	23

Cluster 1

	City	Population	Median Age	Average Income	Venue Number
1	Culver City	39,283	41	$ 86,997	9
2	El Segundo	16,853	39	$ 92,942	11
3	Marina del Rey	8,866	39	$ 101,860	20
4	Redondo Beach	67,908	40	$ 104,548	8
5	Santa Monica	92,306	41	$ 86,084	21
6	Torrance	146,758	42	$ 85,070	4

Cluster 2

	City	Population	Median Age	Average Income	Venue Number
1	Manhattan Beach	35,924	44	$ 148,899	26
2	Hermosa Beach	19,708	40	$ 124,849	66

Discussion

Discussion

Pending a deeper dive analysis venues outside of the top 10 most common for either of the top two cities, Torrance or Redondo beach present good starting points for filling a market need while increasing the probability of a positive return on investment

Most Common	Torrance	Redondo Beach
1st	Recreation Center	Grocery Store
2nd	Pool	Shop & Service
3rd	Convenience Store	Discount Store
4th	Ski Equipment	Japanese Restaurant
5th	Film Studio	Chinese Restaurant
6th	Dessert Shop	Pizza Place
7th	Diner	Gym
8th	Discount Store	Park
9th	Distillery	Dog Run
10th	Dive Bar	Bakery

Conclusion

Conclusion

As new investment dollars flow into Southern California, Los Angeles is poised to undergo unprecedented change.

This change presents significant opportunity. It is important to begin understanding the current geographic landscape, commercial venues and demographics.

By anticipating the likely change and identifying unfilled needs, savvy investors may capture significant returns through well identified investments.