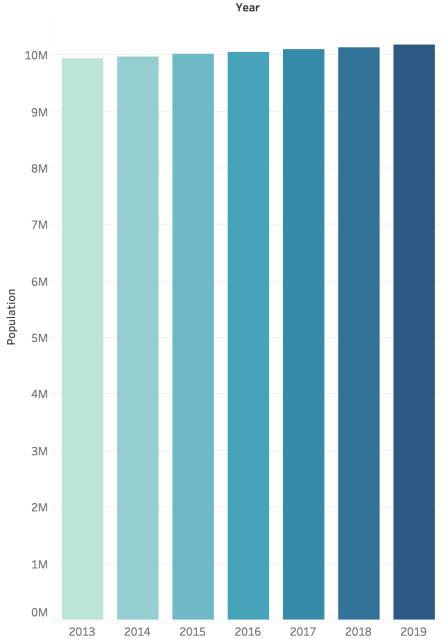
# Los Angeles county -Economic statistics & future

Presented by Shanmugavel Chandrakasu UCLA - Data Science

## Objective

- Cross sectional analysis of LA county social & economic status of the neighborhood.
- Predict the growth of real estate new building permits
- Data source: Publicly available LA county data
- Population
- Income
- Education
- Employment
- Crime
- Real Estate growth

## Population Change



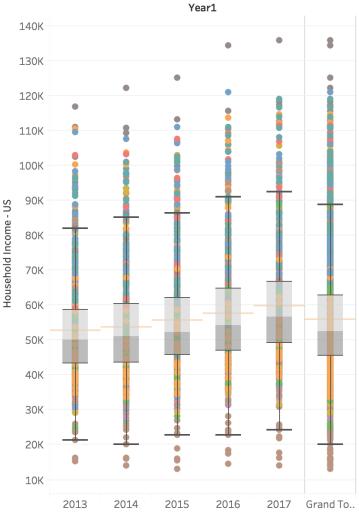
Population

9,936,900 10,177,783

Population of LA is roughly Around 10 million and growing slowly by 0.5%

Sum of Population for each Year Year. Color shows sum of Population. The view is filtered on Year Year, which has multiple members selected.

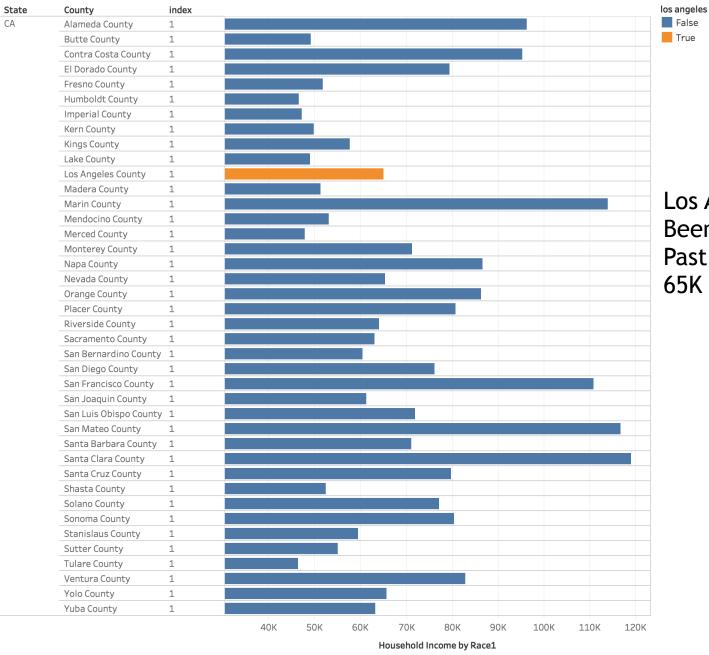
#### US - Household Income - Box Plot



Household Income by Race1 for each Year1. Color shows details about State and Measure Names. Details are shown for County. The view is filtered on State, which keeps 52 of 52 members. US Median Household income is increasing by atleast 2K at max by 3K every year.

US Median Household income is Increasing by at least 2K at max by 3K every year.

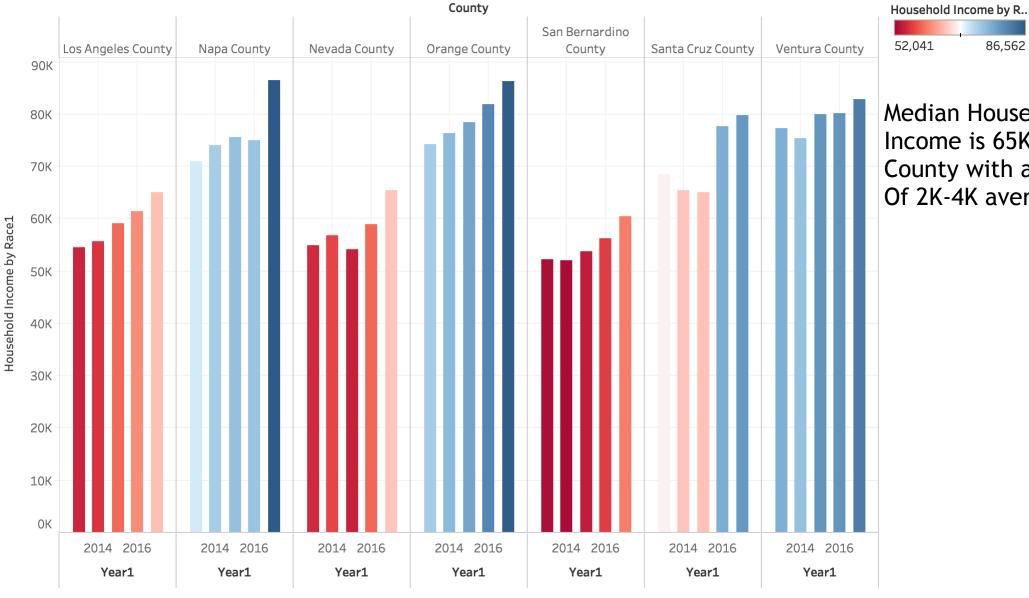
#### California Median Income - 2017



Los Angeles median income has Been increased by 10K over the Past 5 years.

65K is the median income.

#### Household Incomes in & around Los angeles

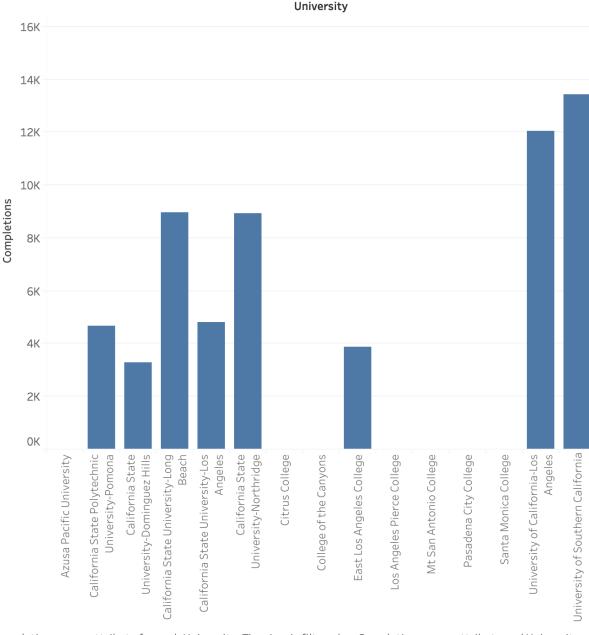


Median Household Income is 65K in LA County with an increase Of 2K-4K average.

86,562

The plot of sum of Household Income by Race1 (actual & forecast) for Year1 broken down by County. Color shows sum of Household Income by Race1 (actual & forecast). The data is filtered on State, which keeps CA. The view is filtered on County, which keeps 7 of 667 members. Median Household income is 65K in LA county with an increase of 2k - 4K avg. (5% approx)

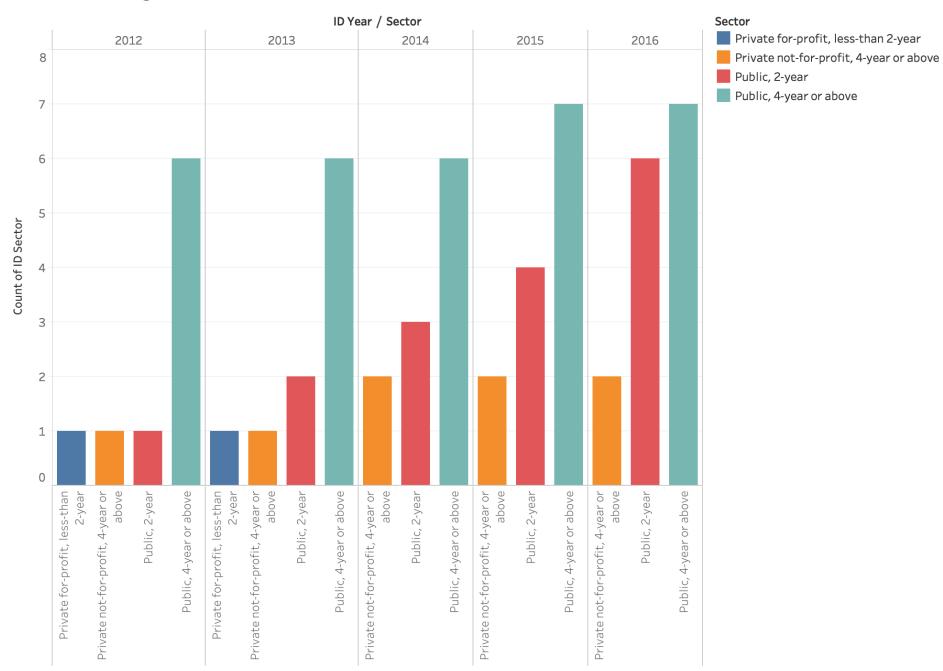
#### Universities in Los Angeles - 2013



University of southern California awards the Most number of degrees in The year. In 2017, It is 16K.

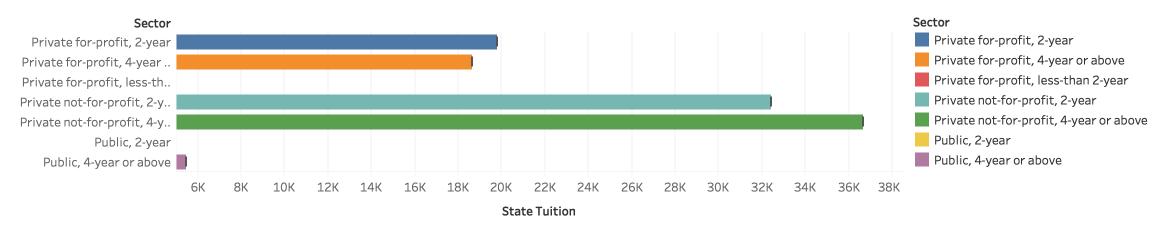
Completions as an attribute for each University. The view is filtered on Completions as an attribute and University. The Completions as an attribute filter keeps non-Null values only. The University filter excludes Long Beach City College, Loyola Marymount University and United Education Institute-Huntington Park Campus.

### Universities degree awarded



Count of ID Sector for each Sector broken down by ID Year. Color shows details about Sector.

#### Universities fees - 2016



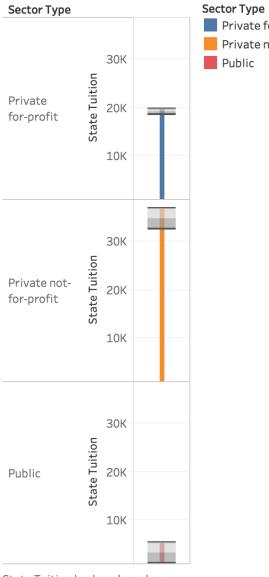
State Tuition for each Sector. Color shows details about Sector.

Private 4 year degree course - state tuition fee is is 32K per year (affordable)

### Sector wise Fees Structure

Private for-profit Private not-for-profit

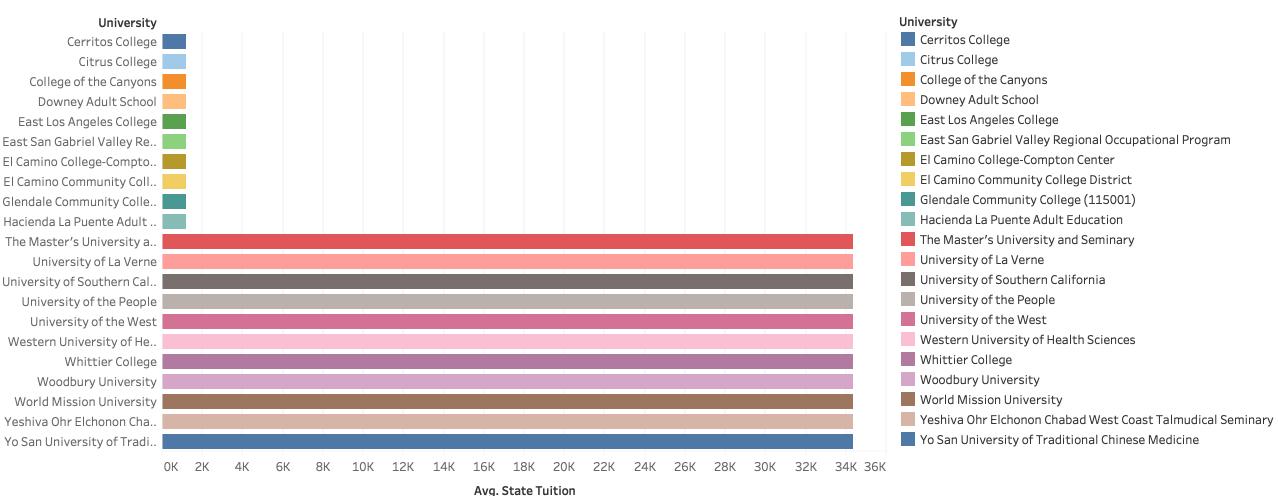
Public



Private fees structure on the rise

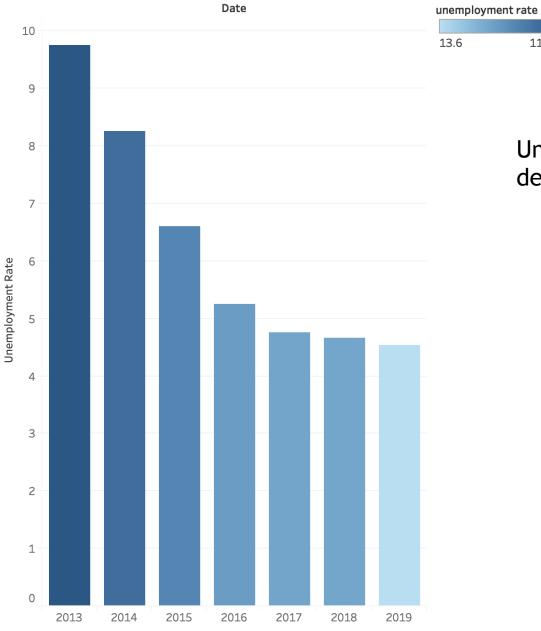
State Tuition broken down by Sector Type on page 2016. Color shows details about Sector Type. Private fees structure is on the rise.

### Universities - Top 10 and Bottom 10 - Average State tution fees



Average of State Tuition for each University. Color shows details about University. The data is filtered on Index, which keeps 21 members. University of Southern California is one of those having the highest fees

### Unemployment Rate

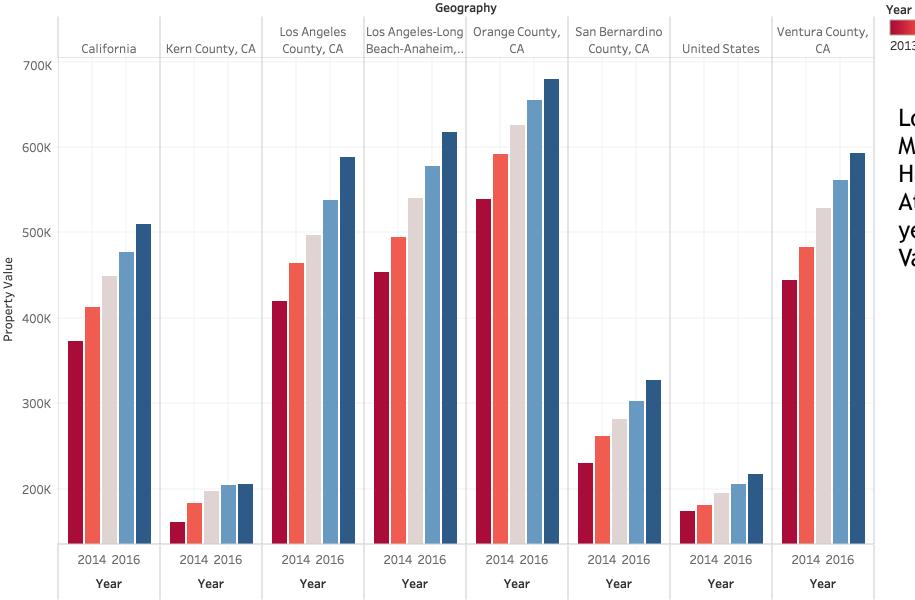


Unemployment rate is gradually decreasing.

117.1

Average of unemployment rate for each Date Year. Color shows sum of unemployment rate. The view is filtered on Date Year, which keeps 7 of 30 members.

#### Property value in Los Angeles & around



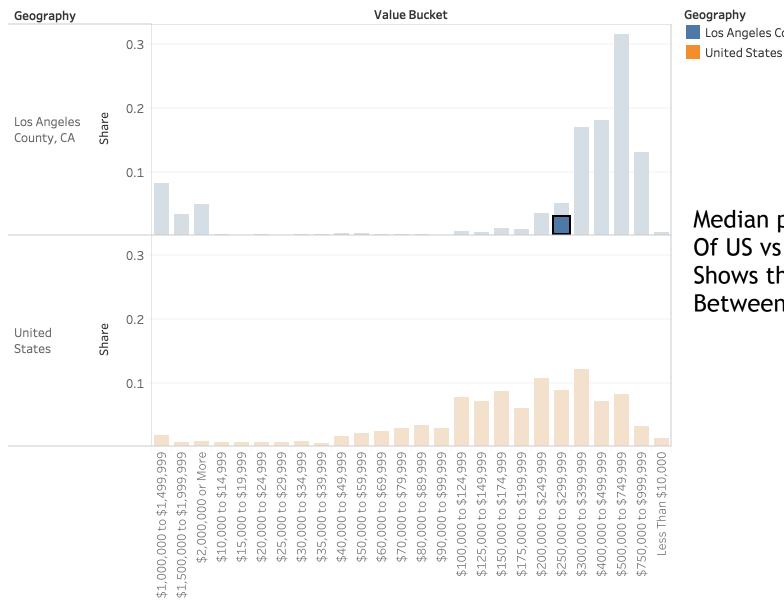


Los Angeles county Median property value Has been on the rise At least by 40K every year. Median property Value is 588K.

Year vs. Property Value broken down by Geography. Color shows details about Year.

The Los Angeles county Median property value has been on the rise atleast by 40K every year. Median property value is 588K.

#### Property value share

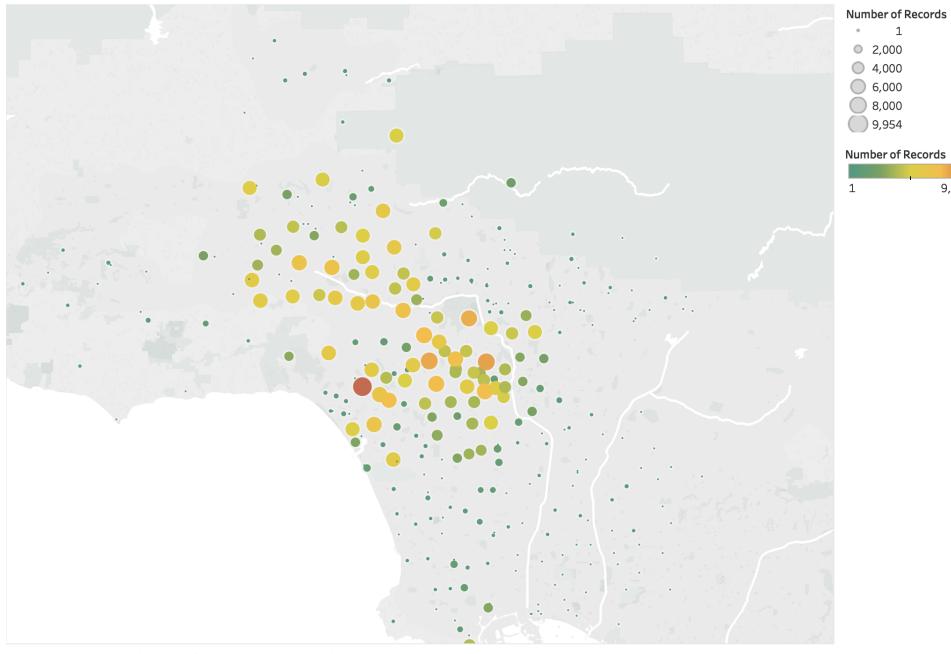


Median property value of share Of US vs Los Angeles county Shows that 31% of Home ranges Between 500K to 749K range.

Los Angeles County, CA

Sum of Share for each Value Bucket broken down by Geography. Color shows details about Geography. Property value of share of US vs Los angeles shows that 31% of Home ranges between 500k to 749K range.

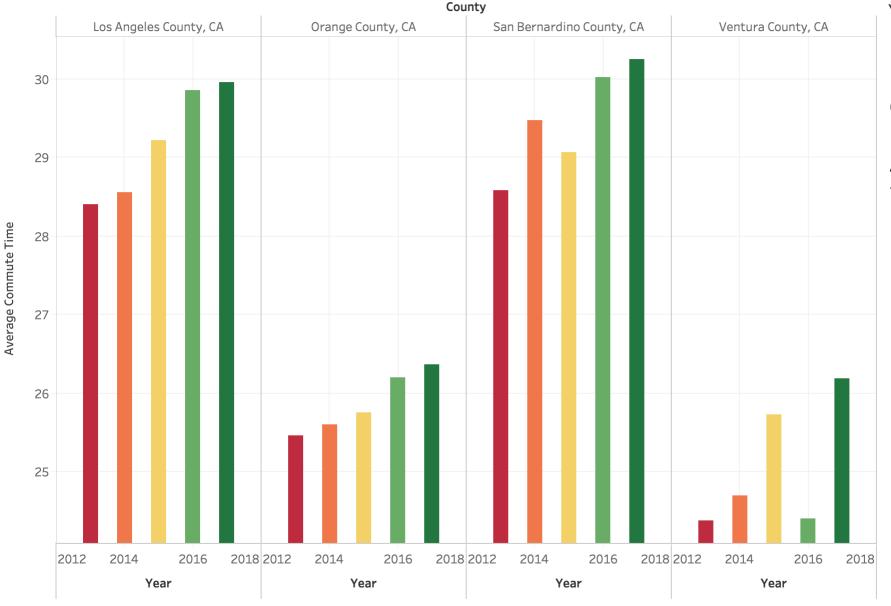
### Active Business



9,954

Map based on Longitude (generated) and Latitude (generated). Color shows sum of Number of Records. Size shows sum of Number of Records. Details are shown for zip 1. The view is filtered on zip 1, which has multiple members selected.

#### Commute time





Commute time in Los Angeles is average Around 30 minutes & the trend shows to Increase.

Year vs. Average Commute Time broken down by County. Color shows details about Year. The data is filtered on State and County - Split 1. The State filter keeps CA. The County - Split 1 filter keeps Los Angeles County, Orange County, San Bernardino County and Ventura County. Commute time in Los angeles is average around 30 minutes and the trend shows to increase.

#### Crime Types In LA over years - 2017 Crime Types In LA over years - 2018 **Crime Code Description Number of Records Crime Code Description** 11,586 19,368 19,368 19,088 18,785 18,086 18,062 18K 18K 17,007 16K 15,410 16K 15,280 14,805 14,722 14K 14K 12,948 12,794 12,598 12,395 12,169 Number of Records Number of Records 12K 12K 8K Amount of Grand theft in Auto is increasing 6К 6K 4K 4K 2K 2K 0K 0K BATTERY BURGLA.. BURGLAR INTIMATE THEFT OF THEFT VANDALI.. VEHICLE -

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Sum of Number of Records for each Crime Code Description. Color shows sum of Number of Records. The data is filtered on count of Number of Records, which ranges from 11,155 to 20,521. The view is filtered on Date Occurred Year, which excludes 2010, 2011, 2012 and 2019.

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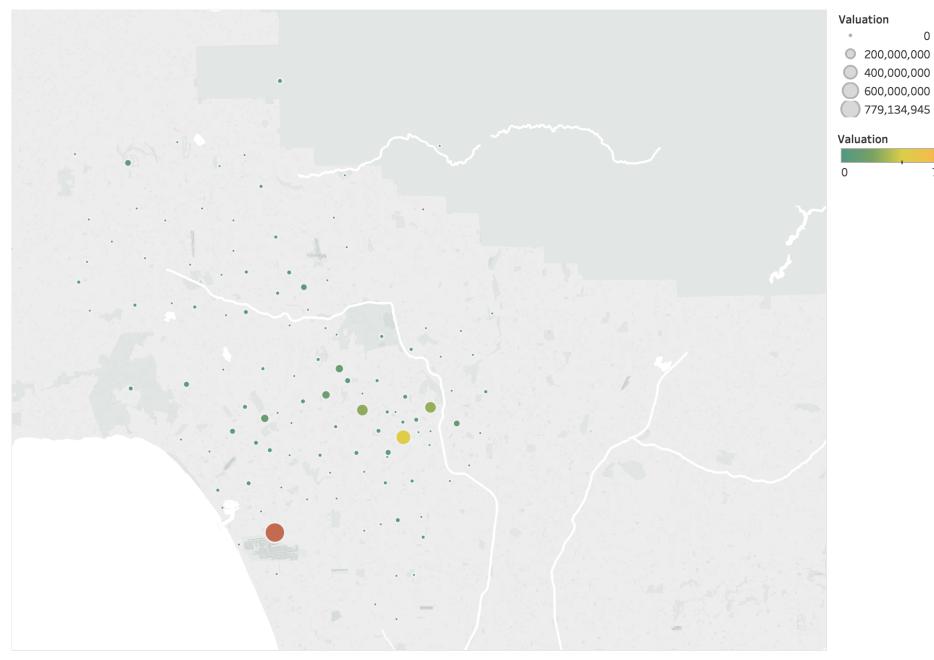
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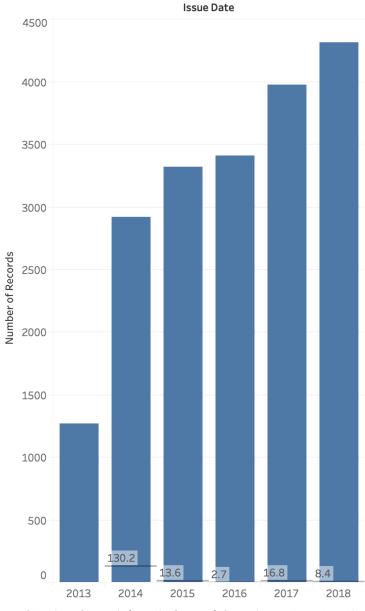
## New Building Permits Map



779M

Map based on Longitude (generated) and Latitude (generated). Color shows sum of Valuation. Size shows sum of Valuation. Details are shown for Zip Code. The data is filtered on Issue Date Year, which keeps 2019.

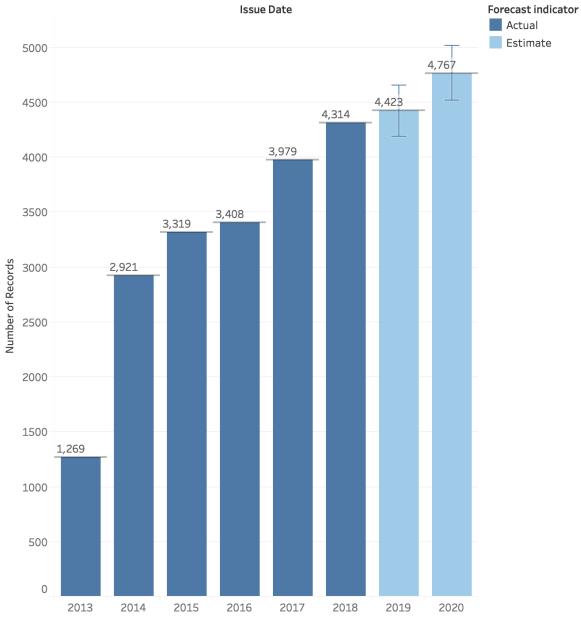
#### New Building Permit Percentage Change



New Buildings permit increases By 8-16% per year over the last years

Sum of Number of Records (actual & forecast) for each Issue Date Year. The data is filtered on Permit Type and Permit Sub-Type. The Permit Type filter keeps Bldg-New. The Permit Sub-Type filter keeps 1 or 2 Family Dwelling and Apartment. The view is filtered on Issue Date Year, which keeps 6 members.

#### New Buildings Permit Forecast



Sum of Number of Records (actual & forecast) for each Issue Date Year. Color shows details about Forecast indicator. The data is filtered on Permit Type and Permit Sub-Type. The Permit Type filter keeps Bldg-New. The Permit Sub-Type filter keeps 1 or 2 Family Dwelling and Apartment.

## To think about LA

- Population growth is slowly increasing.
- Household income is increasing by 10K over the past 5 years.
- No. of students graduated out of the schools are on the rise.
- Private fee structures are on the rise.
- Unemployment rate is on the decrease.
- Median property value is around 500 to 749K.
- Commute time to work in around LA on average is 30 minutes(min)
- The top crime in LA county is Grand Theft Auto and it is on the rise.
- New Building permit in LA county is on the rise.
- There is an imbalance on the way based on this data.