

# EXPLORE BUSINESS OPPORTUNITY IN FRISCO CITY, TEXAS, USA.

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## 1. INTRODUCTION

Frisco is a city in Collin and Denton counties in Texas, USA. It is part of the Dallas -Fort Worth metroplex and is approximately 25 miles away from major airports. As per the data this city is one of the fastest growing and serves as living community for many professionals who works in Dallas metro area and home to variety of sporting venues. The Dallas cowboys a major American Football league moved their headquarters to Frisco in 2016. This city also home for hockey, soccer, baseball franchises with world class stadiums like Dr.Pepper ball park, Toyota stadium. This city named as 'No 1 place to live in America' by Money magazine in 2018. Since this city is growing rapidly and near to one of major metro cities, this project will help to stake holders to explore this city for new business opportunities.

## 2. Business Problem

Explore the city for new business opportunity, evaluate an ideal neighborhood location and feasibility to open business in Frisco, Texas by analyzing the data from available sources.

## 3. Data

### 3.1. Data sources available for city and community data

- <http://money.com/money/5387468/best-places-to-live-2018-methodology/>
- <http://money.com/money/collection/2018-best-places-to-live/>
- [https://en.wikipedia.org/wiki/Frisco%2C\\_Texas](https://en.wikipedia.org/wiki/Frisco%2C_Texas)
- <https://datausa.io/profile/geo/frisco-tx/#about>
- <https://friscotexas.gov/>
- <https://friscotexas.gov/176/GIS-Data-Download>

- <https://www.friscotexas.gov/DocumentCenter/View/1446/HOA-Directory-PDF?bidId=>
- <https://www.friscotexas.gov/1454/Population>
- <http://www.friscohomesforsale.com/subdivisions-map.php>
- <http://www.city-data.com/city/Frisco-Texas.html>
- <https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names>

### **3.2. Python Libraries**

- Geopy Library to get location coordinates.
- Folium for city and community Maps visualization
- Pandas for data process & storage
- Scikit-Learn for machine learning algorithms
- Matplotlib for data charts
- Numpy for scientific computing.

### **3.3. Four square Api**

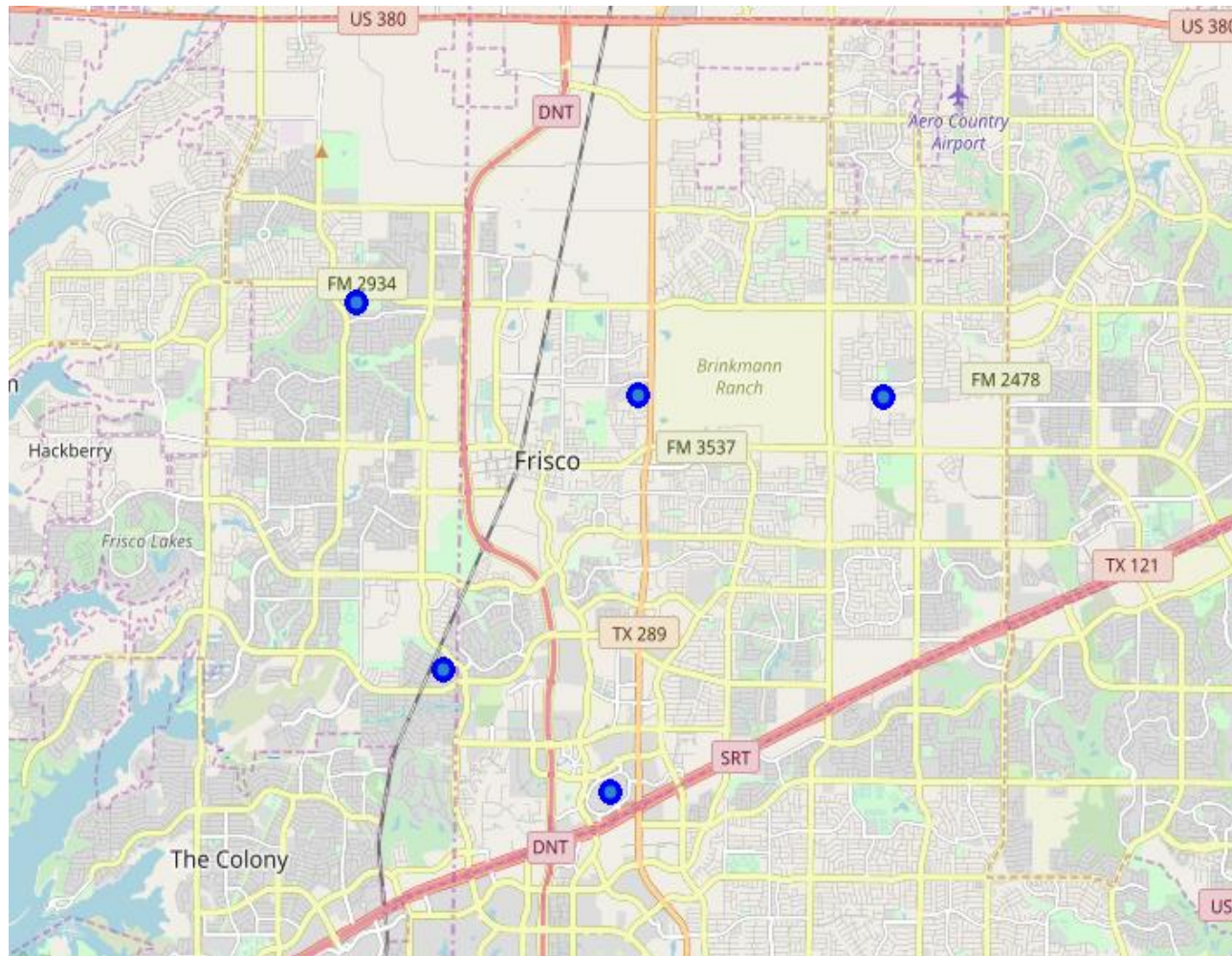
- Four square Api for location data.

### 3.4. Data acquisition.

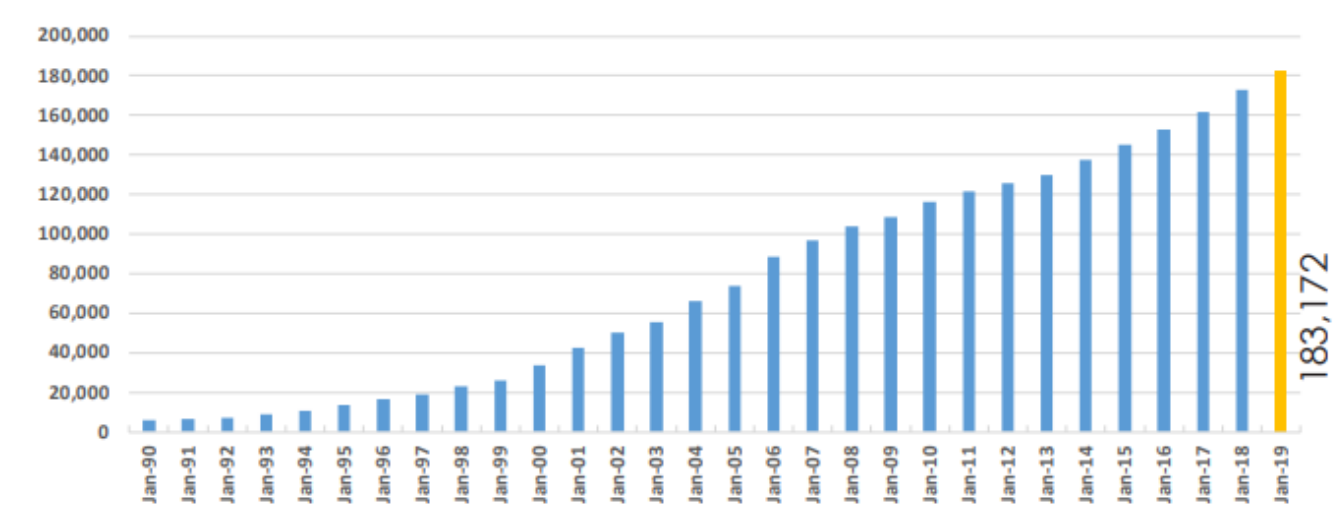
Frisco Sub divisions and its coordinates data

|   | Subdivision | Latitude  | Longitude  |
|---|-------------|-----------|------------|
| 0 | Central     | 33.160718 | -96.805832 |
| 1 | Northwest   | 33.175181 | -96.861353 |
| 2 | Southwest   | 33.099333 | -96.811109 |
| 3 | Southeast   | 33.118218 | -96.844041 |
| 4 | Northeast   | 33.160676 | -96.757176 |

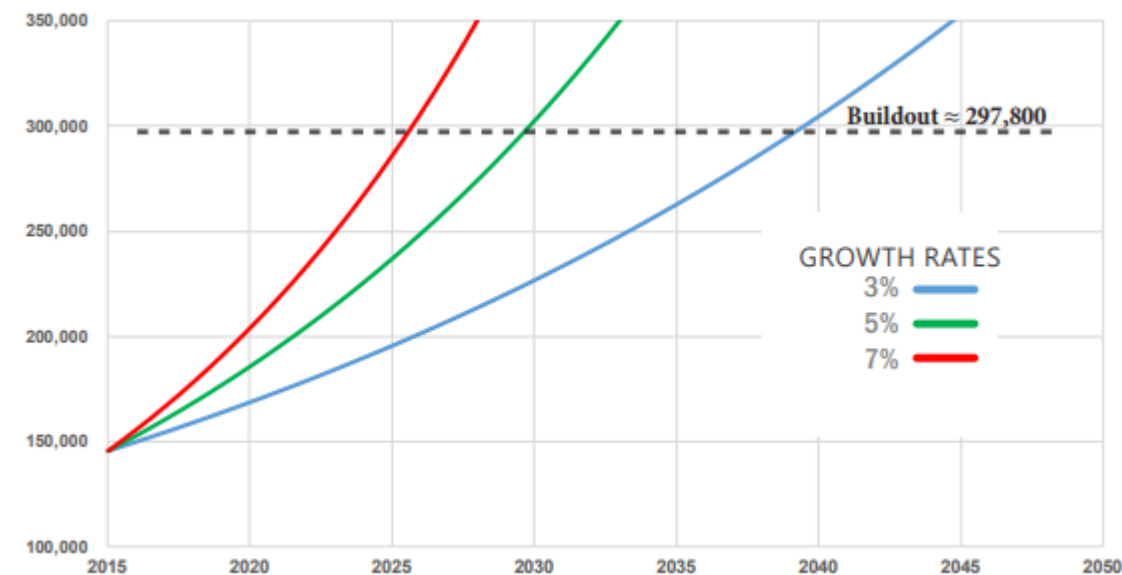
Frisco Subdivisions in folium map.



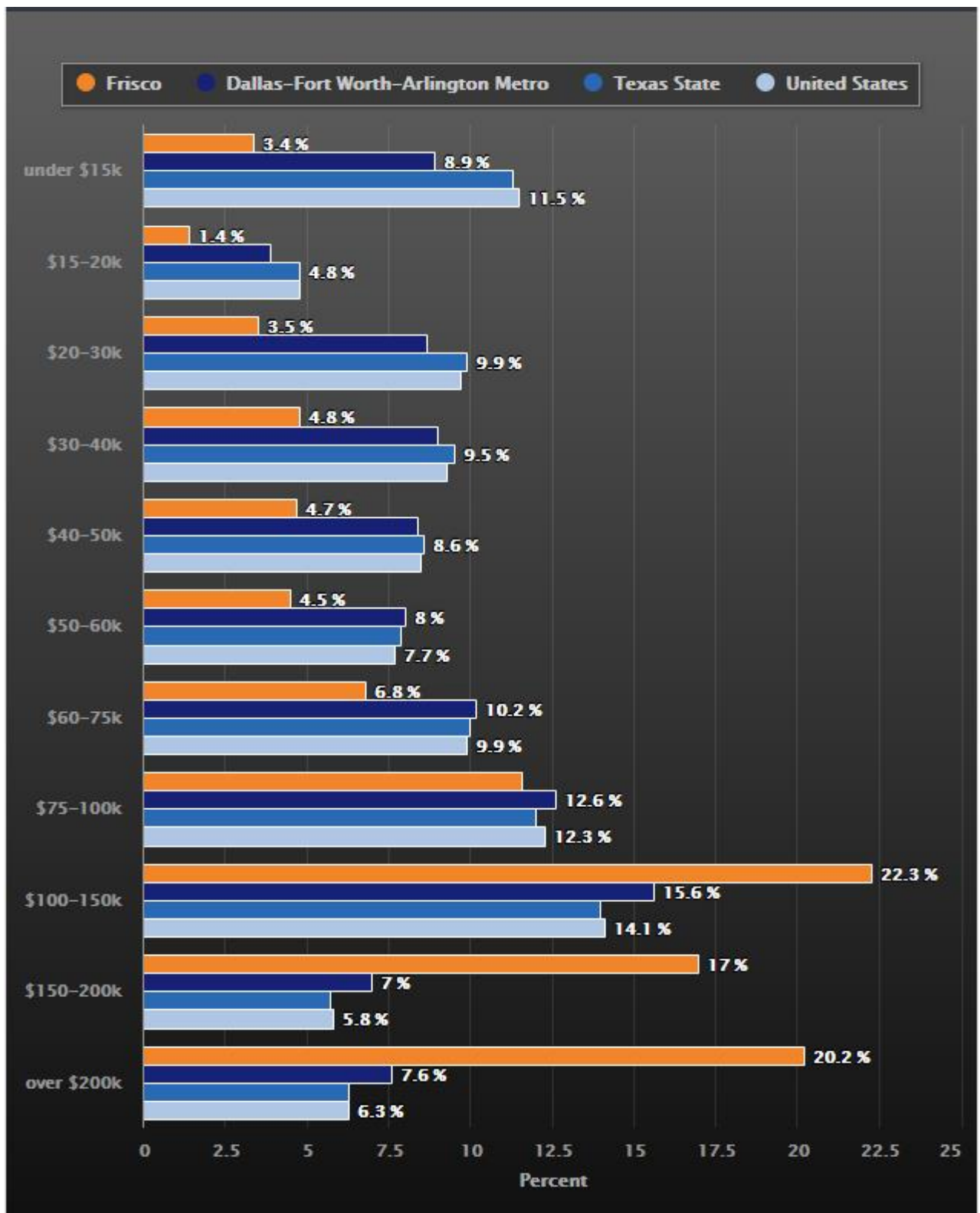
Frisco population



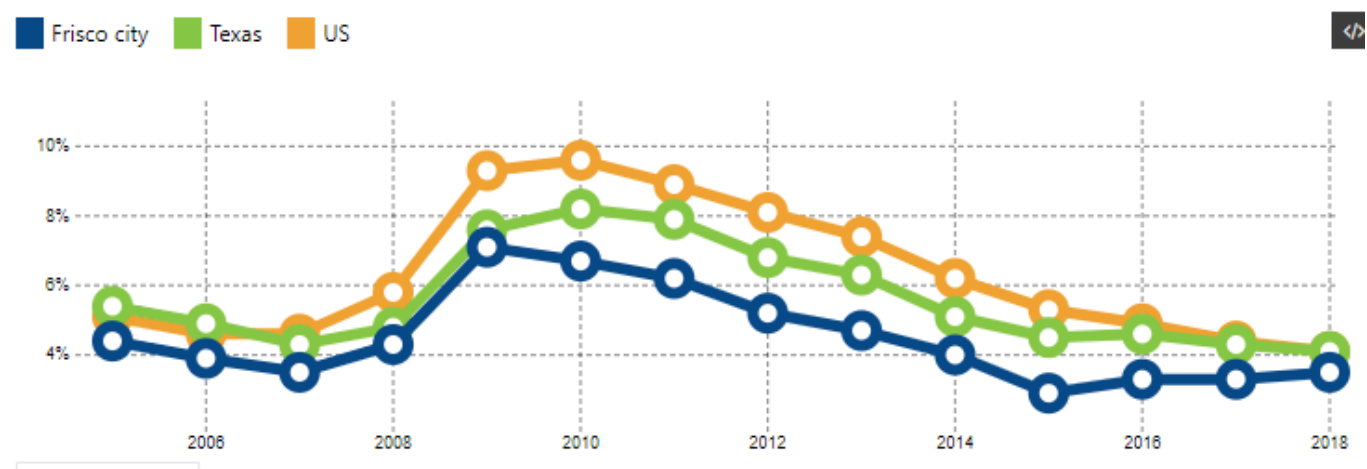
Projected Growth



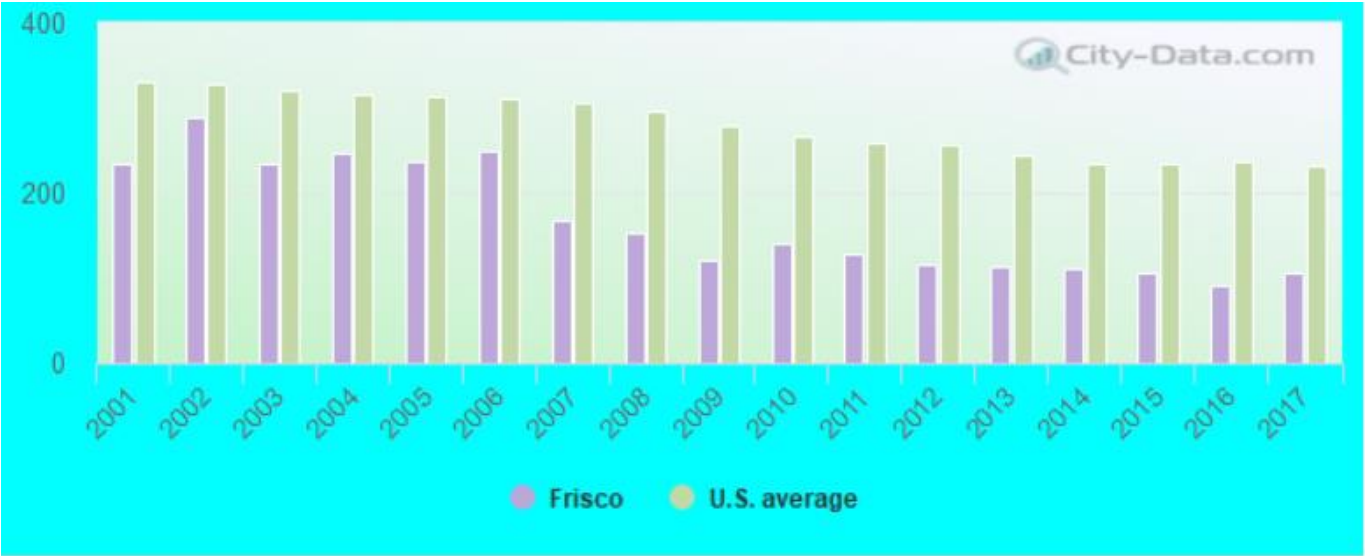
Frisco income by population in comparison with Dallas metroplex, state and national average.



Frisco unemployment rate compare to state and national data.



Frisco Crime rate





## Incentives offering by Frisco to open business

### Available Incentives

**Economic Incentives offered by the Frisco EDC are negotiated on a case-by-case basis subject to the qualifications, conditions and requirements to be fully described within an Agreement and subject to the approval of the Frisco Economic Development Corporation, Board of Directors.**

- **FREPORT EXEMPTIONS**

Companies in Collin and Denton Counties that ship certain products in and out of the State of Texas within 175 days can realize substantial savings in taxes with this exemption.

- **TAX INCREMENT FINANCING**

This economic development tool has been used to finance public improvements and enhance infrastructure in defined areas.

- **HALF CENT SALES TAX**

Many cities in Texas, including Frisco, have been using this economic development tool to improve infrastructure and attract new developments to encourage growth.

- **RETAIL INCENTIVES**

Retail is a critical amenity to quality of life in Frisco, economic development infrastructure incentives may be available to attract retail projects that have a regional draw.

- **ENTERPRISE PROSPECT**

A variety of incentives are available to companies locating or expanding within any designated Enterprise Zone in our area.

- **TEXAS ENTERPRISE FUND**

A fund awarded by the State of Texas to companies demonstrating large growth. [Click for details.](#)

- **TRAINING**

Area and State grants are available to assist companies with their training needs.

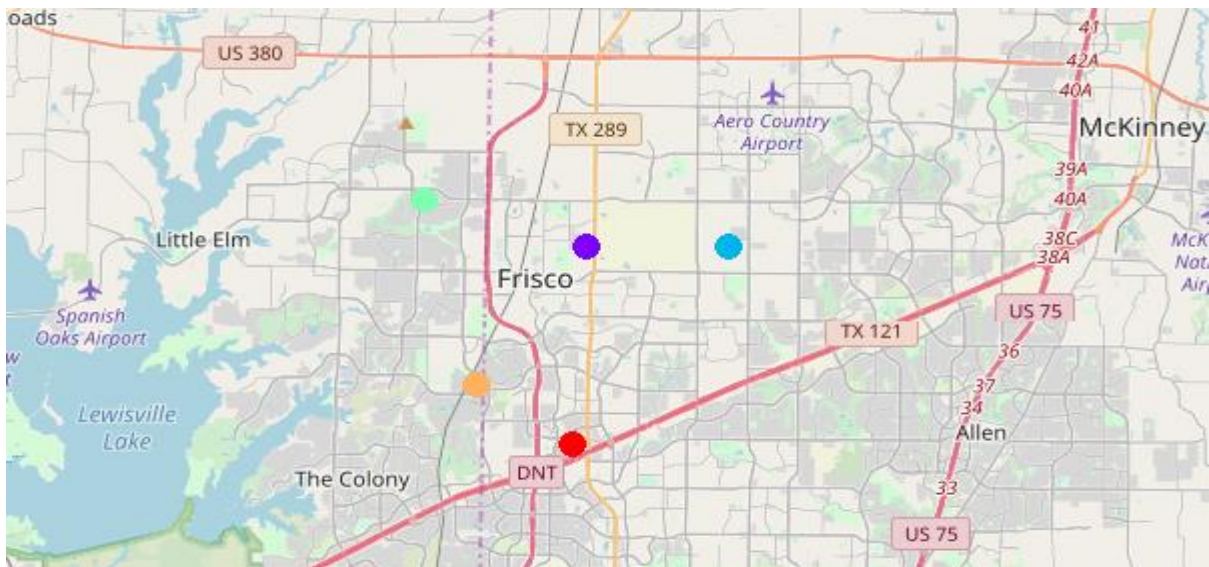
## 4. Data Analysis

Methodology: Utilized K means machine learning algorithm and to cluster the data.

Foursquare Api used to get existing venues and venue categories in Frisco.

|   | Community     | 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 | AUTUMN PARK   | Fast Food Restaurant  | Bank                  | Yoga Studio           | Intersection          | Optical Shop          | Nail Salon            | Salon / Barbershop        | Café                   | Mexican Restaurant     | Pharmacy               |
| 1 | AVONDALE      | Park                  | Yoga Studio           | Cosmetics Shop        | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center   | Furniture / Home Store | Fast Food Restaurant   |
| 2 | BELLA CASA    | Clothing Store        | Toy / Game Store      | Lingerie Store        | Shoe Store            | Candy Store           | Cosmetics Shop        | Department Store          | Furniture / Home Store | Pizza Place            | Accessories Store      |
| 3 | BELMONT WOODS | Park                  | Yoga Studio           | Cosmetics Shop        | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center   | Furniture / Home Store | Fast Food Restaurant   |
| 4 | BRETTON WOODS | Park                  | Yoga Studio           | Cosmetics Shop        | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center   | Furniture / Home Store | Fast Food Restaurant   |

Data sliced in to 5 clusters to analyze data for each sub division in Frisco.





## 5. Results

Business exists with most popular in communities for each sub divisionSou

‘Southwest’ sub division data.

| Community  | 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 |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|------------------------|
| BELLA CASA | Clothing Store        | Toy / Game Store      | Lingerie Store        | Shoe Store            | Candy Store           | Cosmetics Shop        | Department Store      | Furniture / Home Store | Pizza Place           | Accessories Store      |
| CANALS AT  | Clothing              | Toy / Game            | Lingerie              |                       | Candy                 | Cosmetics             | Department            | Furniture /            | Pizza                 | Accessories            |

‘Southeast’ sub division data with available venues.

|    | Community        | 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 |
|----|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| 93 | AUTUMN PARK      | Fast Food Restaurant  | Bank                  | Yoga Studio           | Intersection          | Optical Shop          | Nail Salon            | Salon / Barbershop    | Café                  | Mexican Restaurant    | Pharmacy               |
| 94 | CECILE PLACE Ph1 | Fast Food Restaurant  | Bank                  | Yoga Studio           | Intersection          | Optical Shop          | Nail Salon            | Salon / Barbershop    | Café                  | Mexican Restaurant    | Pharmacy               |

‘Central’ sub division data.

|     | Community           | 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 |
|-----|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|------------------------|
| 136 | CHAPEL CREEK        | Café                  | Yoga Studio           | Cosmetics Shop        | Japanese Restaurant   | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center  | Furniture / Home Store |
| 137 | CHRISTIE AND WESTER | Café                  | Yoga Studio           | Cosmetics Shop        | Japanese Restaurant   | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center  | Furniture / Home Store |

‘Northeast’ sub division data.

|    | Community     | 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 |
|----|---------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|------------------------|------------------------|
| 24 | AVONDALE      | Park                  | Yoga Studio           | Cosmetics Shop        | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center  | Furniture / Home Store | Fast Food Restaurant   |
| 25 | BELMONT WOODS | Park                  | Yoga Studio           | Cosmetics Shop        | Italian Restaurant    | Intersection          | Indian Restaurant     | Indian Chinese Restaurant | Gym / Fitness Center  | Furniture / Home Store | Fast Food Restaurant   |

‘Northwest’ sub division data.

|   | Community        | 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 | CHRISTIE ESTATES | Arts & Entertainment  | Music Venue           | Burger Joint          | Café                  | Park                  | Yoga Studio           | Department Store      | Italian Restaurant    | Intersection          | Indian Restaurant      |
| 1 | CHRISTIE RANCH   | Arts & Entertainment  | Music Venue           | Burger Joint          | Café                  | Park                  | Yoga Studio           | Department Store      | Italian Restaurant    | Intersection          | Indian Restaurant      |

## 6. Evaluate Results

Each sub division exists with more than 20 neighborhood communities, but most are existing with stores, parks, cafes and restaurants businesses. One sub division only exists with entertainment venue. No sub division exists with any sports entertainment venues as per the available venue data.

## 7. Conclusion

Frisco exists with business like cafe, shopping, Restaurants, Banks in each sub divisions but not exists with any sports entrainment business. As per the data Frisco holding low unemployment rate and median individual income is higher than national average, Good opportunity for opening sports bar/sports entertainment business between southeast, central, southwest sub-divisions since these subdivisions surrounded with sports facilities like Toyota stadium, Dallas cowboys training facility, Ice skating arena.