**Project Overview**

Analyze and visualize PyBer ride-sharing data using Python, Pandas and Matplotlib.The analysis is based on the following points among the different city types:

* Percentage of total rides,
* Percentage of total drivers,
* Percentage of total fares,
* Average fare per ride and driver,
* Total fare by city type.

**Results**

**The percentage of total rides by city type**

[Chart, pie chart

Description automatically generated](https://user-images.githubusercontent.com/68669675/91503794-04ffdb00-e891-11ea-9f18-f50df637ddd4.png)

**The percentage of total drivers by city type**

[Chart, pie chart

Description automatically generated](https://user-images.githubusercontent.com/68669675/91503795-05987180-e891-11ea-91ea-4bc35338b4e1.png)

Urban cities drivers were by far in majority with 80.9% of the company's drivers. Surbuban and rural drivers were respectively 26.3% and 5.3% of the total drivers in 2019.  
  
**The percentage of total fares by city type**

[Chart, pie chart

Description automatically generated](https://user-images.githubusercontent.com/68669675/91503793-04ffdb00-e891-11ea-9cf2-2efd30310cd2.png)

**The average fare per ride and driver by city type**

The following bubble chart shows the relationship between the average fare price and the number of rides and drivers categorized by the different city types.

[Chart, scatter chart, bubble chart

Description automatically generated](https://user-images.githubusercontent.com/68669675/91503787-03361780-e891-11ea-89d7-d904cd21421e.png)

**The total fare by city type**

[Chart, line chart

Description automatically generated](https://user-images.githubusercontent.com/68669675/91513850-f45c5e80-e8aa-11ea-97db-8eae44a0fb3c.png)

The urban weekly total fare is around 9 and 2.25 times higher than rural and suburban

**Summary**

* Suburban drivers were only about 17% of the total drivers but accounted for more than 30% of the total fares and just above a quarter of the rides.  
  The general inclination is a high number of drivers and riders goes with medium to low fare.  
  On the scatter plot, you can see some urban cities with a low number of drivers and low average fare but a high count of rides.