**Pyber Analysis**

**Overview**

In this analysis, we are using our knowledge of Python and Pandas to create a summary DataFrame of the ride-sharing data by city type. In this PyBer analysis, we focused on three city types (Rural, Urban and Suburban) and will create a summary of the DataFrame by city type and a multiple line chart of total fares for each city type. By the end of the analysis, we should be able to conclude from our data, which city has the highest ride sharing data and be able to recommend to the CEO how to address the disparities among the city types.

**Results**

In the first deliverable, we created a PyBer summary DataFrame so as to see the differences between the three city types. In this analysis, we can deduce that Urban city type had the most rides at 1625 total rides, there were 2,405 total drivers in the city and $39,854 total fares for that city. Rural city had the least number of rides, drivers and total fares. Rural had 125 total rides, only 78 drivers and $4,327.93 total fares. Suburban had 625 total rides, 490 total drivers and $19,356.33 total fares.

Table

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The average price per ride in Rural cities is $34.62, Suburban cities $30.97 and Urban cities $24.53. The disparity between these three cities is very large and this could be due to the city type and the population in each city. This could also be that majority of the population in the rural city had other modes of transportation compared to Urban, therefore, their need for ride-share is very small. A comparison will be New York vs. Rhode Island. Considering the population of New York and the fact that a lot of people in New York do not drive due to traffic and alternate modes of transport, it is safe to say the amount of ride sharing in New York will be much greater than a very small state like Rhode Island, whose residents will not utilize ridesharing as much as New York or other metropolitan cities. If we look at the chart, we’ll also see that price per fare in rural is higher than suburban and Urban, Urban cities had the cheapest fare. This is the case because there are a lot of ride shares in urban and suburban cities, therefore the market in those cities will be competitive. However, due to the limited amount of ride share in Rural areas, the market will not be as competitive, and the drivers can charge more as fewer people utilize their services.

**Summary:**

We can conclude from our analysis that Urban cities are more lucrative than Suburban and Rural cities. As previously mentioned, the disparities between these cities could be population, location, and other means of transportation, such as owning a vehicle. Based on the results, I would recommend that since people in Rural areas do not utilize ride share as often, prices in these areas can be increased as people will only utilize ride share in these areas when necessary and will pay any amount charged. Due to the competitive market in urban areas, the ride shares can charge per mile and penalize people that are late to arrive after their requested ride arrived at the location. We can also dispatch some of the drivers in the Urban and Suburban cities to Rural cities, depending on their location as the drivers in Rural cities($55.49 average fare per driver) seem to earn more compared to Urban cities($16.57 average fare per driver).

**Chart, line chart

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