Draft 0 of our python group

Section 1. group information

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The project we choose : Path 1 Bike traffic

Section 2. Description of the dataset

We consider this dataset has 5 variables : Day, High temp , Low temp , Precipitation and Bridge

(1) ***Day***

We find that in Monday, Saturday and Sunday, the average bike amount is larger than in other day,which means more people may go out at

these three days. This make sense since at weekends many people do not need to work and want to go out and ride a bike to have fun. Also, some people live in different places during weekday (working/ study time) and weekends, so they need to ride the bike through the bridge in Monday and weekends to transfer themselves into these two places, , we will discuss detail in further draft.

(2) High Temp

The highest temperature in one day is 96.1˚F . It may affect people's tendency to go out. From this chart we learn that when the highest temperature is higher, people tend to be more willing to go out and take a bike , we will discuss detail in further draft.

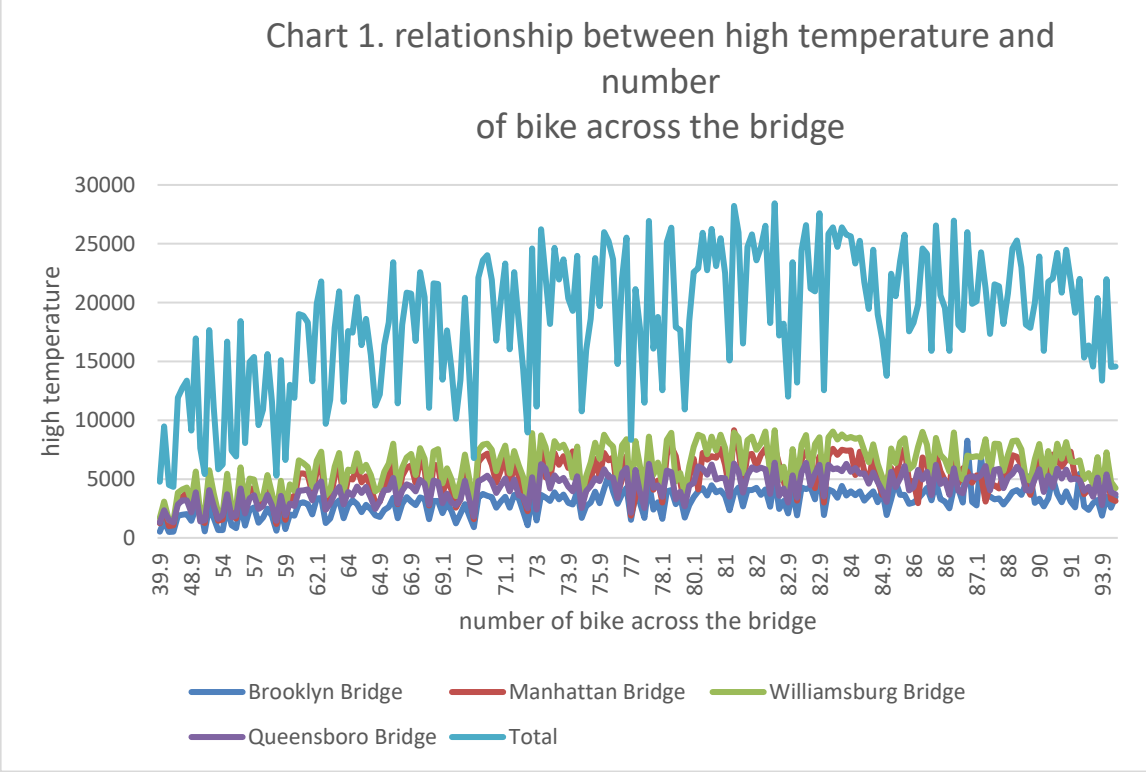


Chart 1 relationship between high temp and number of transport across the bridge

(3)Low Temp

The lowest temperature in one day in 26.1˚F. It may affect people's tendency to go out. From this chart 2 we learn that when the lowest temperature is higher, people tend to be more willing to take a bike , we will discuss detail in further draft.

By combing high temp and low temp, we may use average temp or temp difference in further draft, but average temp and temp difference can be calculated from low and high temp so I do not list them as variables in draft0 now.

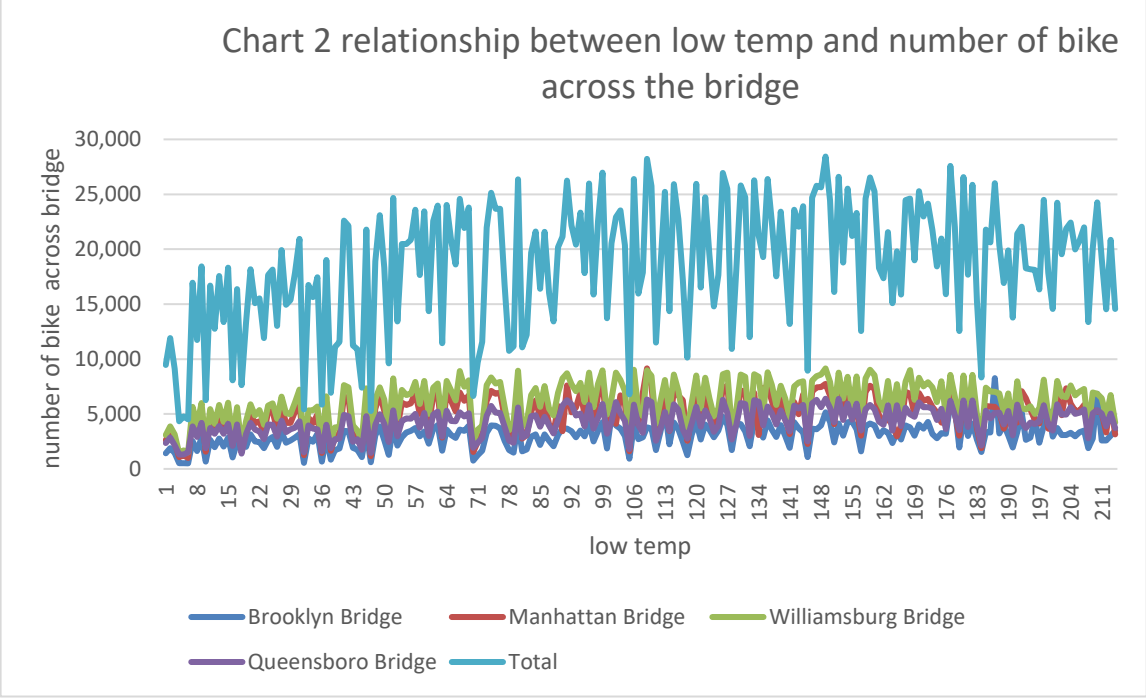


Chart 2 relationship between low temp and number of transport across the bridge

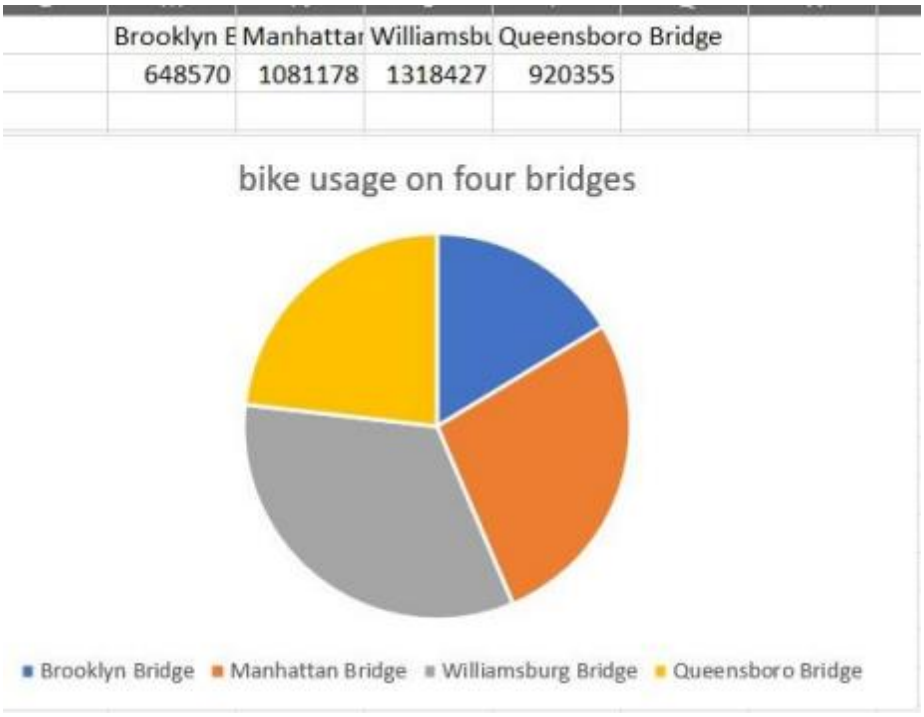
(4) Precipitation

Precipitation is raindrop height (in inch). It may affect people's tendency to go out. When I try to find relationship now, I find the range of precipitation can be related to different kinds of bike across amount, but in

rainy days people should be less willing to face the rain and take a bike outside, so we will discuss the detail in further draft.

(5) Bridge

The bridge between Brooklyn Bridge, Manhattan Bridge, Williamsburg Bridge, and Queensboro Bridge visual that helps describe. Different bridge may need different calculating model.



This picture compares the number of people who use bridges, we can find that the Williamsburg bridge has the most overall traffic across it.

The overall traffic across 4 bridges shows some regular pattern. We thought it was because of people's choice to ride a bike on weekdays or weekend