

Fort Portal City Street Parking Data Analysis & Evaluation

(July 2023 – February 2024.)

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Introduction

The dataset that was used covers a period of 8 months from July 2023 – February 2024.

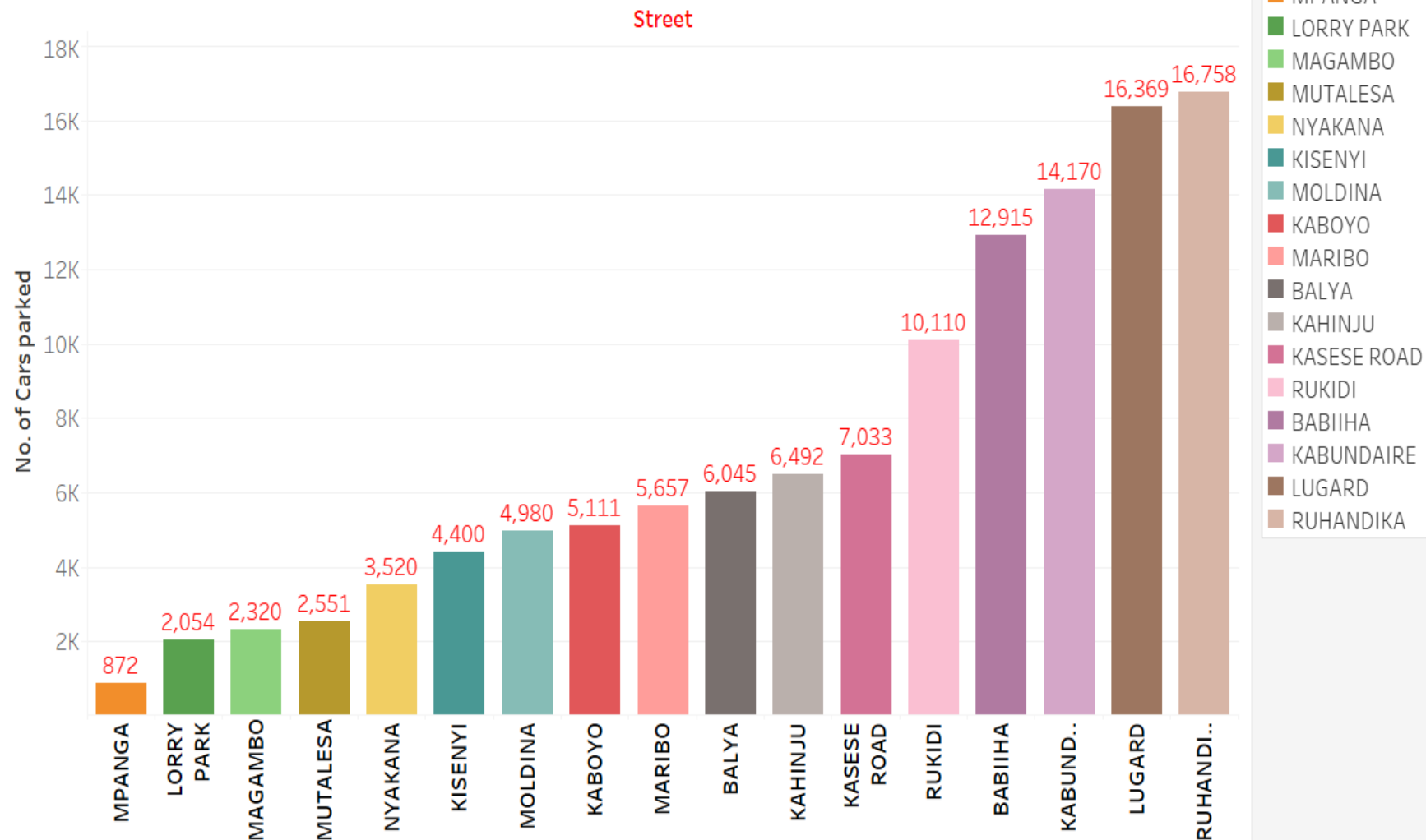
This dataset was extracted from the system that is being used to track parking and it covers the following information.

1. Division
2. Street name
3. Creation date and time
4. Vehicle number
5. Ticket Service (Parking Purpose)
6. Ticket Status (Payment Status)
7. Amount

Findings from the analysis

Presented in form of Visualizations

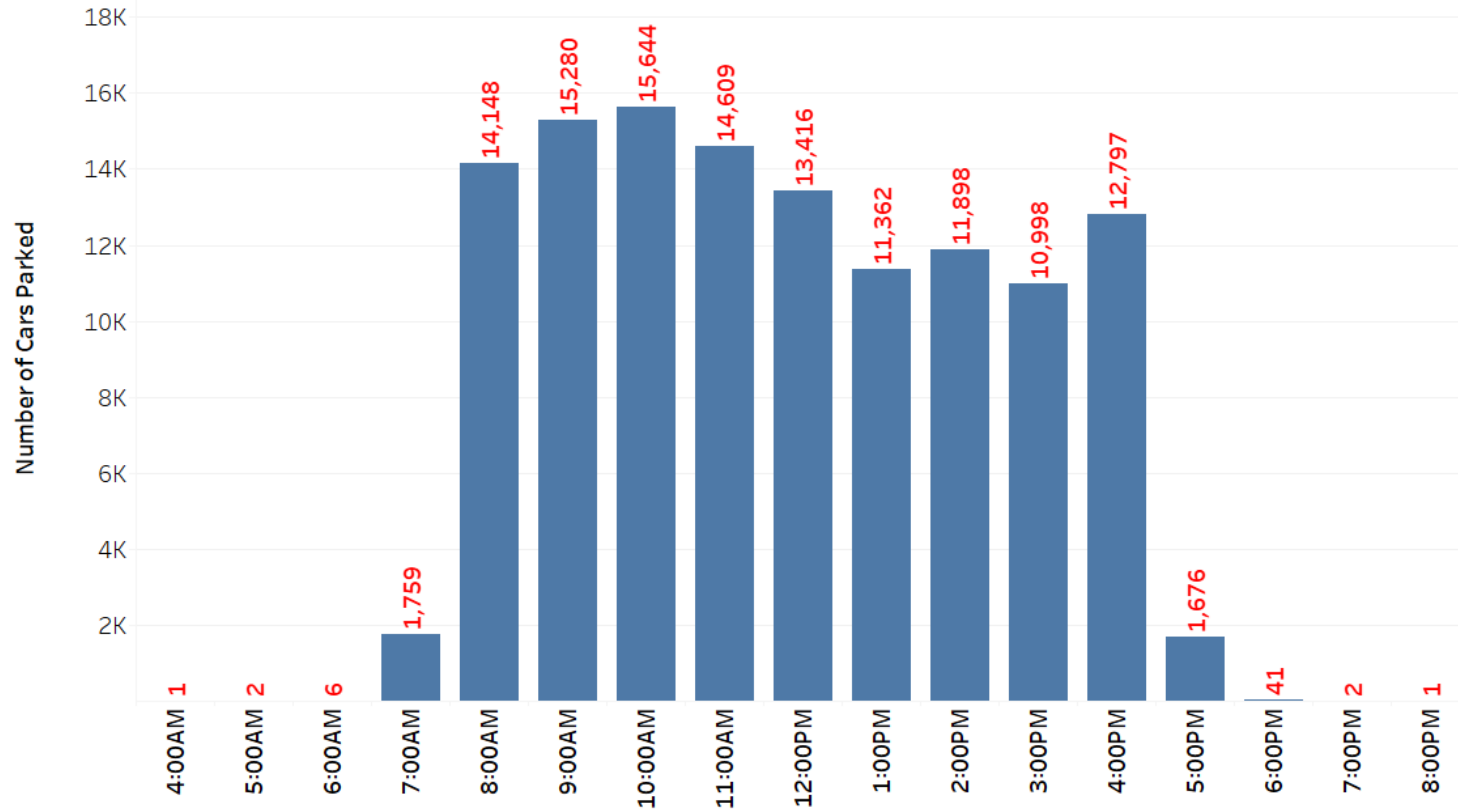
Comparison between the number of cars parked on each Street



It is self evident that Ruhandika is the street on high demand with the highest number of vehicles parked on it and Mpanga having the least number of vehicles parked. This tells that there is need to secure more parking slots along Ruhandika street.

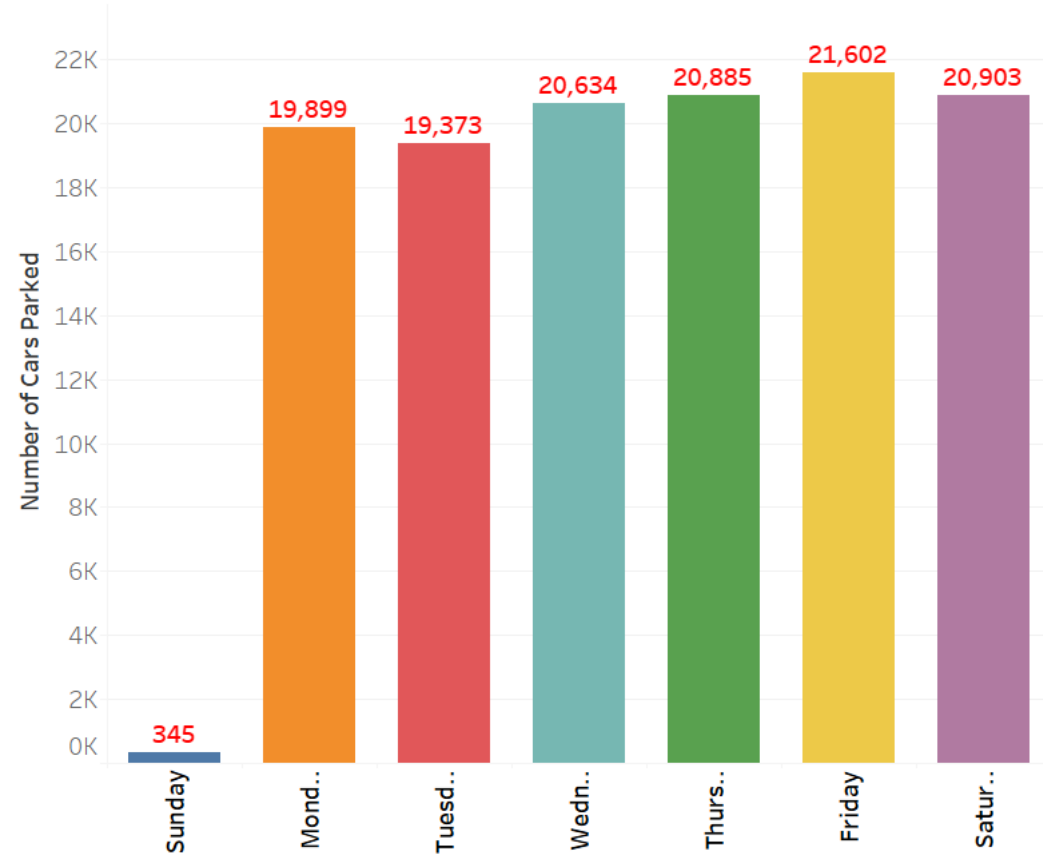
This can be achieved by demarcating parking slots and making it a one-way traffic route.

General Parking changes per hour of the day



Generally, there is a big number of vehicles parking along most of the streets during the morning hours. It goes on reducing in the afternoon and later on increases during the evening hours. However, there are parkings recorded in the extreme morning and evening hours where there are no parkings expected to be charged according to the Fort portal city council street parking rule. (Before 8am and after 5pm)

Parking changes per day of the Week

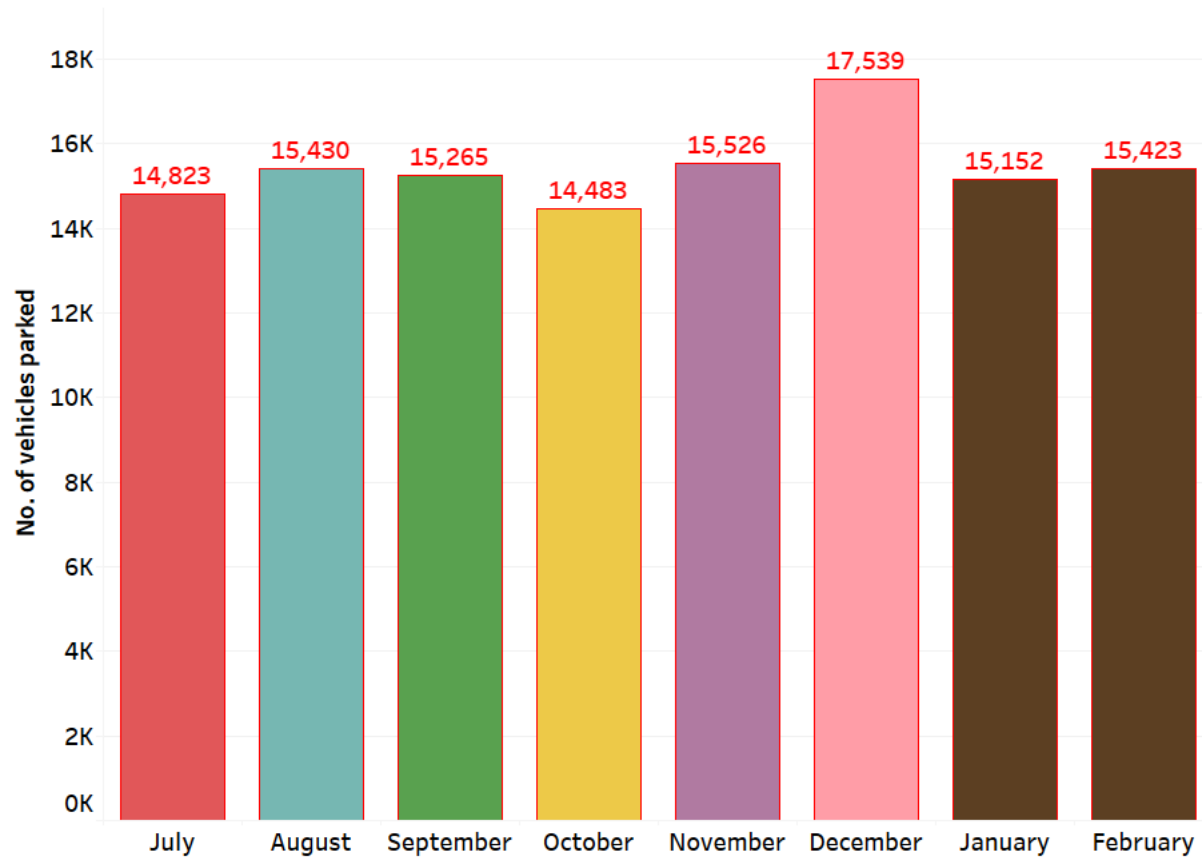


There is a small change in the number of vehicles being parked each day of the week with Fridays having the highest number of vehicles recorded / parked. Sunday has the least number of vehicles.

However, according to the city's rule, Sundays are not supposed to be charged. There is need to find out why 345 vehicles were recorded/charged.

Could there be stakeholders taking advantage of people's ignorance about the street parking rules?.

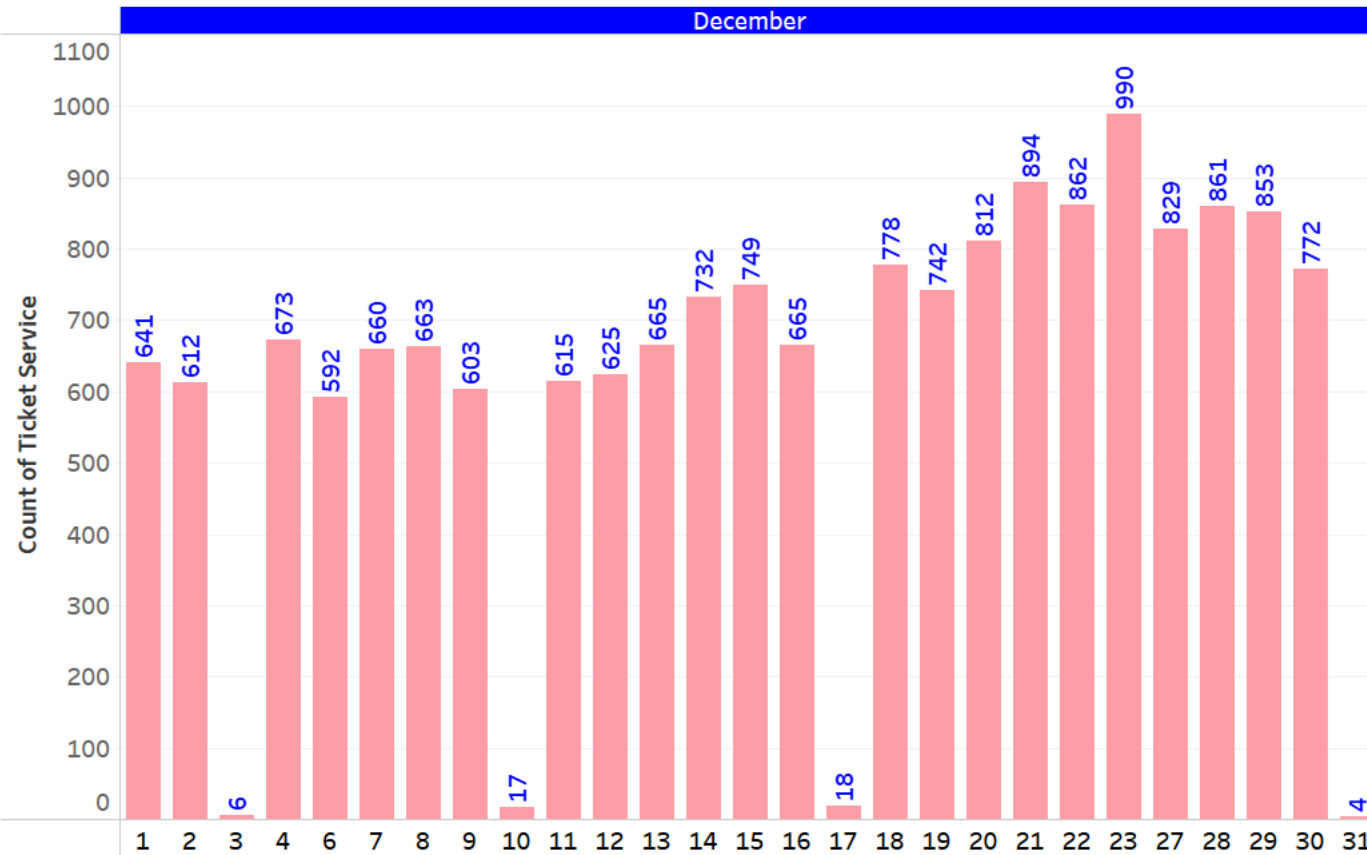
Parking changes per Month



This chart shows the number of vehicles parked per month. It is seen that the month of October and December has the least and highest number of vehicles recorded/parked respectively and there is need to find out why.

Is it because of it being a rainy season during October and hence disturbing the street parking agents?. Is it because December is a month with many holidays and hence many people come to park around the streets while doing their shopping?.

Parking changes per day in the month of December 2021



There was need to dig deep into the month of December to find out the parkings recorded each day since December showed the highest parkings.

In this chart , there are 4 days/dates (6th, 17th, and 4th) where very few, less than 20 vehicles were recorded each day. Also, there are 3 days (24th, 25th, 26th) where no vehicle was recorded. Is it because all the street parking agents are Christians are they were in for the Christmas holiday?

General gaps identified and recommendations

General gaps identified

1. The general data has a number of outliers or anomalies or an expected data. For example, parkings registered on sundays, beyond and before the time i.e. Before 8am and after 6pm and unknown streets e.g. K13 and kitumba.
2. Inability to tell how long and which car type has been parked on a certain parking slot along the street and tell which street is congested or not congested.
3. Inability to make follow ups on defaulters since there is no contacts information tracked or registered.
4. Inadequate payment status tracking i.e. Receipt, invoice and defaulter.
5. Limited awareness about the street parking .
6. Inability to identify and truck private parking spaces.

Recommendations

1. Together with the revenue Team, formulate areas of focus , redesign and standardize the data collection forms or tool.
2. Integration or use sensors to capture real time information about the Vehicle type being parked and demarcation of the parking slots. This will make it easy to differentiate between Loading & Offloading and normal parking.
3. Utilizing police cameras to track defaulters number plates in real time and also adding a provision for capturing the contact details of each person who parks on the street.
4. Adoption or integration of Automatic or Electronic payment methods. This will reduce on the cash burden to the attendant and eliminates the payments made outside the stipulated time and days.
5. Creating awareness campaigns about the rules and regulations of street parking and its over all benefits

END