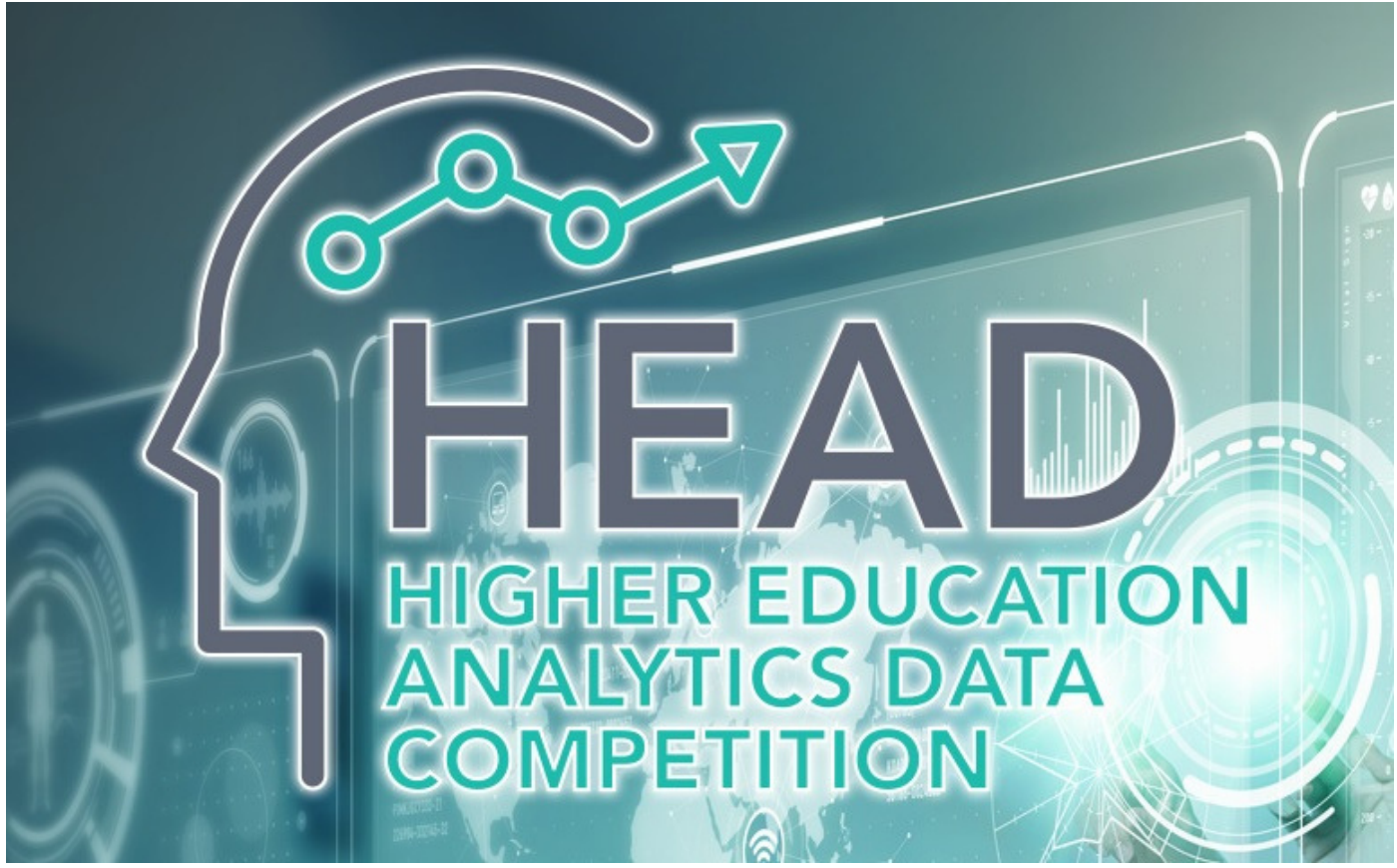


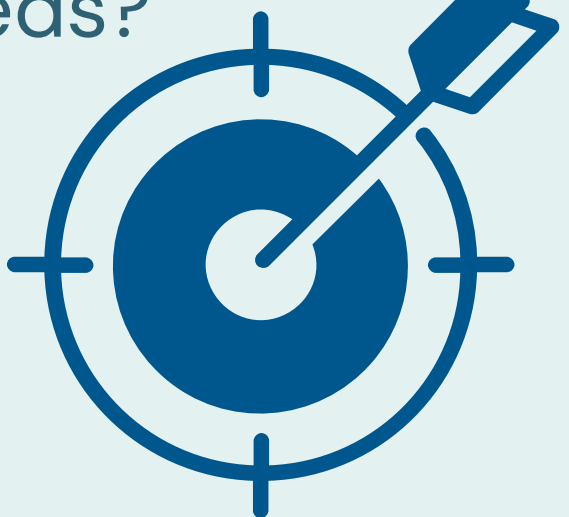


Hospital Parking- Hamilton

In the midst of a healthcare crisis caused by the pandemic, patients and visitors of the hospitals in Hamilton are faced with expensive rates at the Hamilton hospital parking lots. The patients and visitors have to pay high rates for convenience. The hospital lots throughout Hamilton, receive many complaints as a result of the pricing.

Hypothesis

- Why is it necessary to interrogate the public parking near Hamilton hospitals?
- How can the public parking prices supplement the expensive rates at hospital parking?
- How can parking technology be improved in order to satisfy customer needs?



Goals

- Implementing cost-effective parking fees.
- Improve customer experience with the lots near hospitals.
- Improving City of Hamilton Parking Passport application to accommodate needs of customers in reference to hospital parking.

Current State of Parking Near Hamilton Hospitals

As the province begins to loosen restrictions, one important change that is occurring is the rescheduling of postponed surgeries. As a result, hospitals will start to have an influx of patients and visitors who will be using the hospital parking lots and garages. However, one thing that has remained the same is the high rates within the hospital lots. The user experience is negatively affected by the expensive pricing. Furthermore, the analysis of data reveals that patients and visitors opt to park in the more expensive hospital lots because of the limited options and significant distance the public lots are from the hospitals, as highlight in Figure 3.

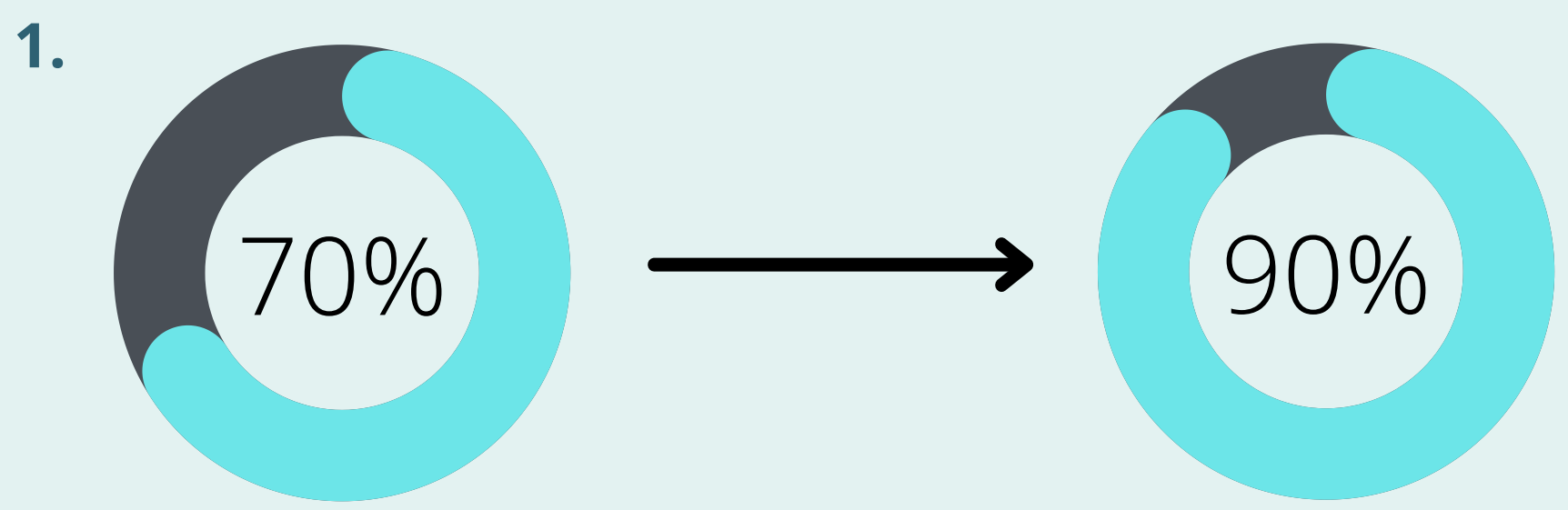


Figure 1: Ontario's Chief Medical Officer initiated a Directive where 70% of the surgeries will be scheduled and will be ramped up to 90% surgical capacity by the end of April 2022. (Angular, 2022). This data identifies that cheaper substitutes to hospital parking will be necessary in the coming months and subsequent years.

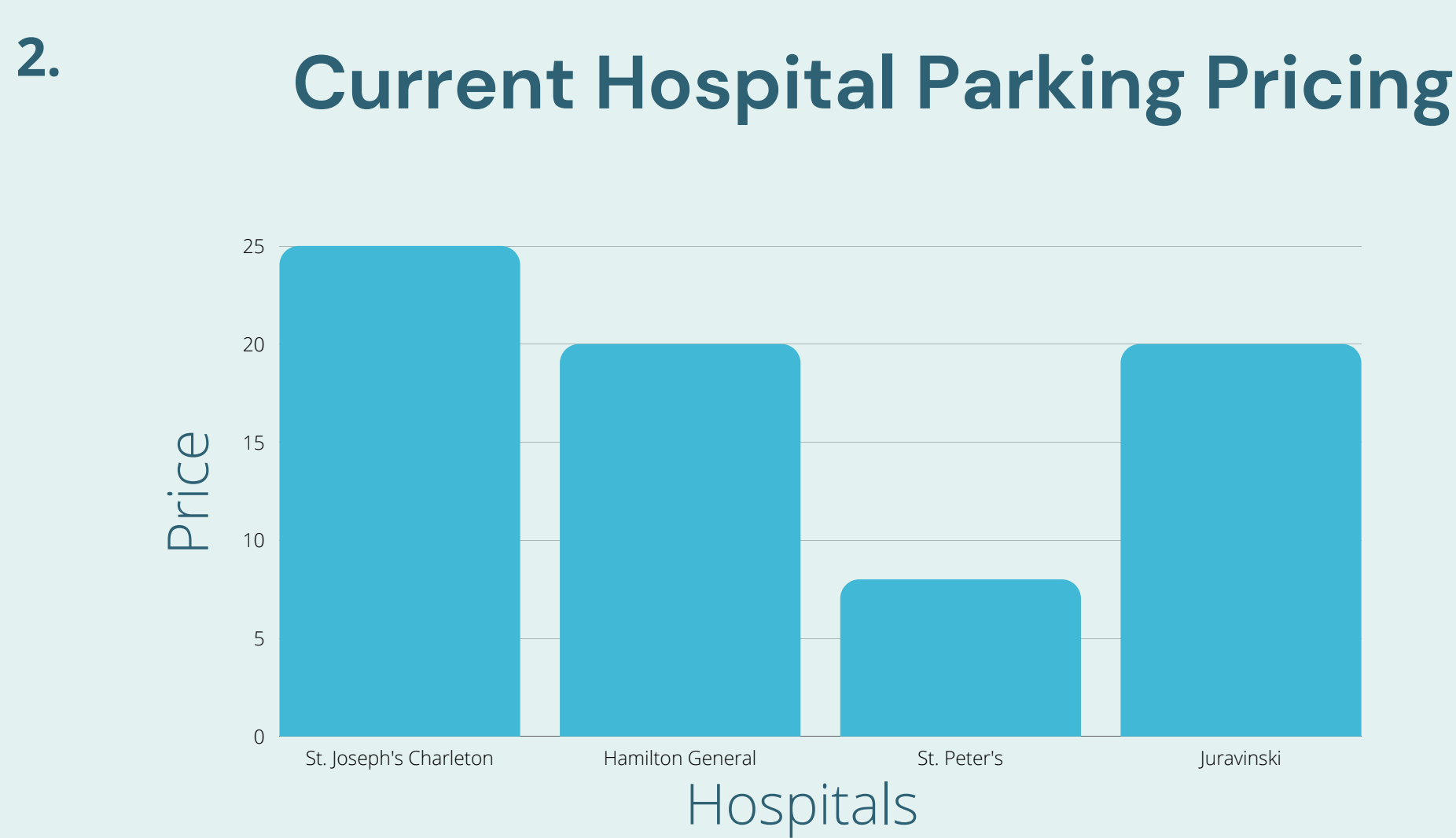


Figure 2: The pricing at hospital lots range from \$8-\$20 for the daily maximums. (Hamilton Health Sciences, 2019). The options for pricing is very high when comparing to the prices allocated to the public lots near the hospitals.

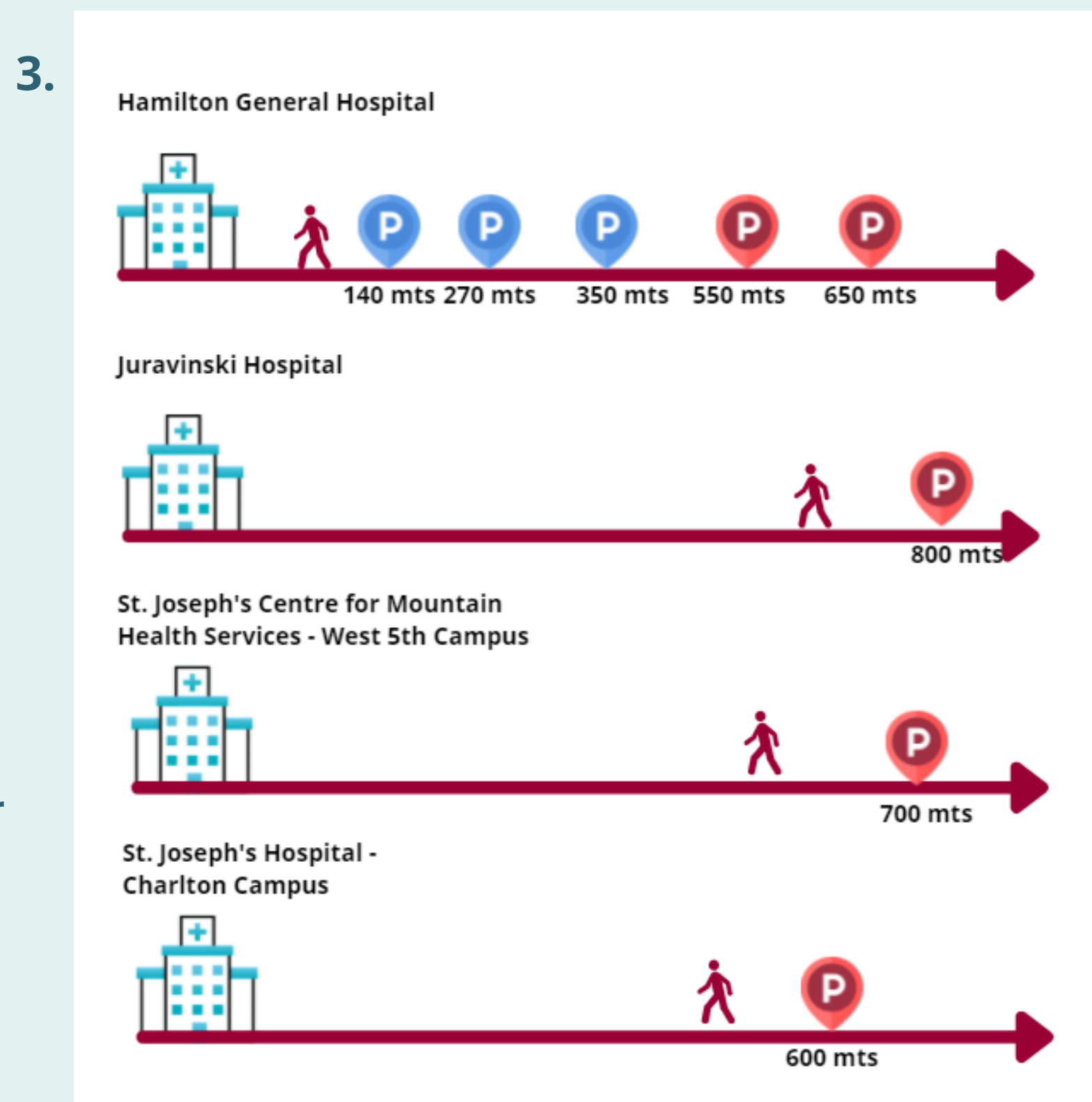


Figure 3 highlights the distance from public lots near the hospitals and the number of lots available. The cut-off for the lots were 800 meters as any lots past that point would be a long walk to the hospital. This model demonstrates that there is a lack of convenience because of the distance of the lots. The daily maximums for these lots range from \$1-\$12, which is a better price, however the user experience is stifled by the inconvenient location. (Note: Public lots near Hamilton General Hospital were the main focus: 40313: 255 East Ave. N, 40320: 346 Barton St. E, 40338: 294 Victoria Ave. N)

4. Price Comparison Between Private vs. Public

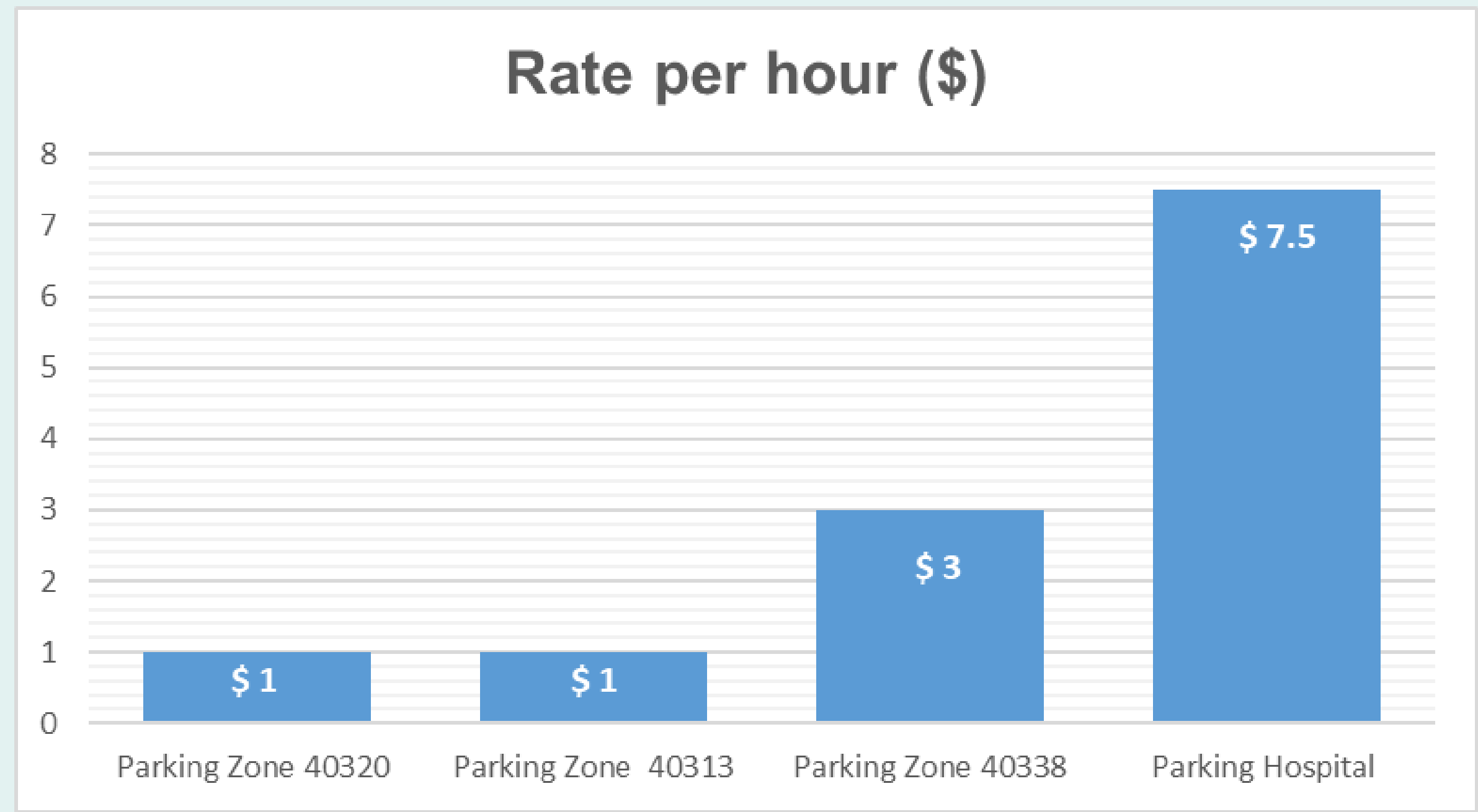


Figure 4: The comparison between the prices of the public and private lots displays the significant difference in the prices per hour. The public lot ranges from \$1-\$3 per hour versus the \$7.50/hour rate at the hospital parking lot. The hospital rate is approximately 7 times more than the public rates. (Note: Hospital parking rate is \$3.75/hour which was multiplied by 2, in order to get \$7.50/hour.)

5. Utilization of Public Lots 2020-2021

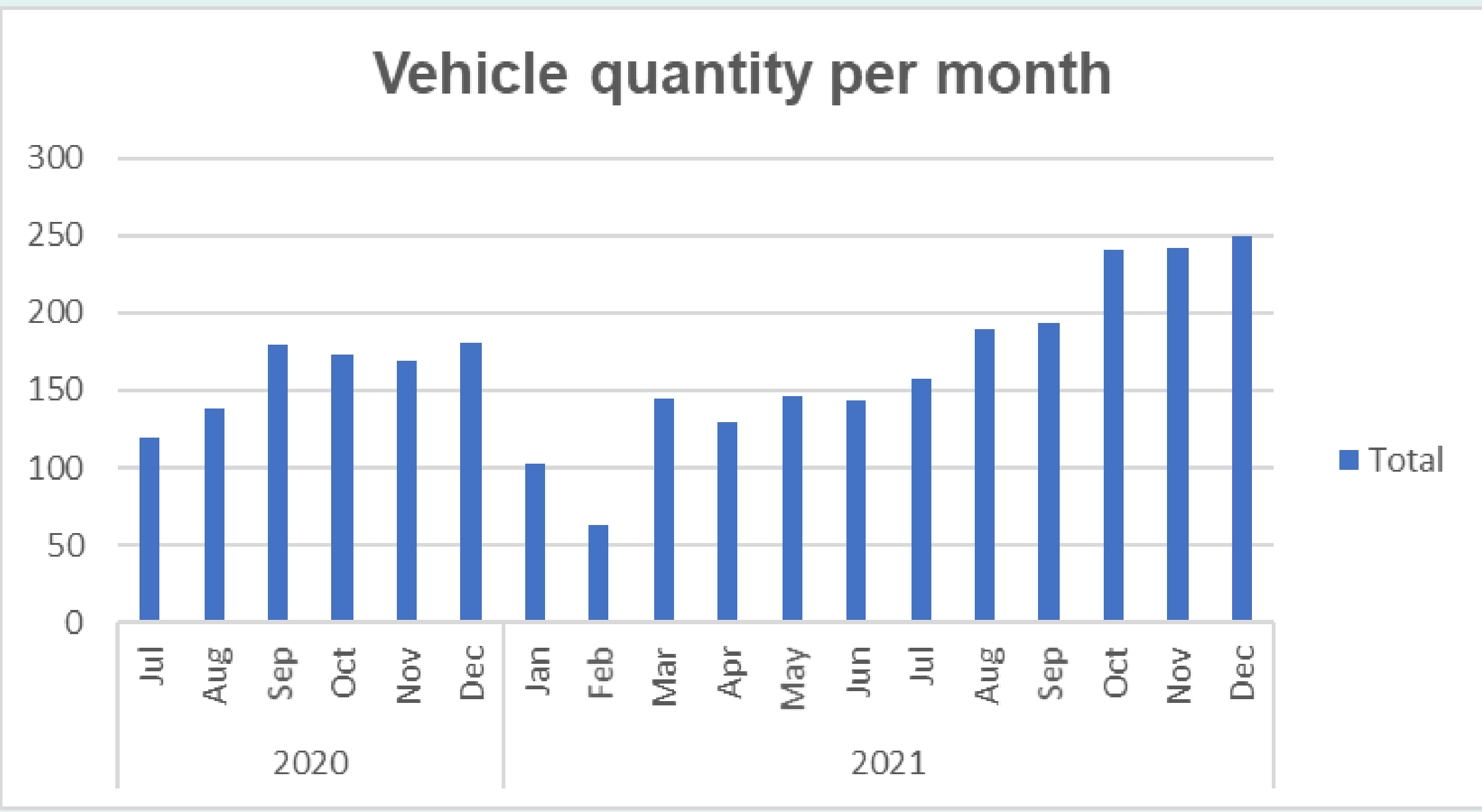


Figure 5 refers to the three public parking lots near the Hamilton General Hospital. The graph displays the quantity of vehicles each month from July 2020-December 2021. The graph highlights the amount of vehicles decreased in 2020 in these particular lots. Since COVID-19 was still rampant, the restrictions implemented by the province which limited visitors, there was less utilization of the public lots. However, as vaccine rollout began in the month of March, the parking lot usage begins to increase. One thing to note, the rise in parking lot usage is not significantly high which demonstrates that people are choosing to park elsewhere.

6. Method for Parking Payment

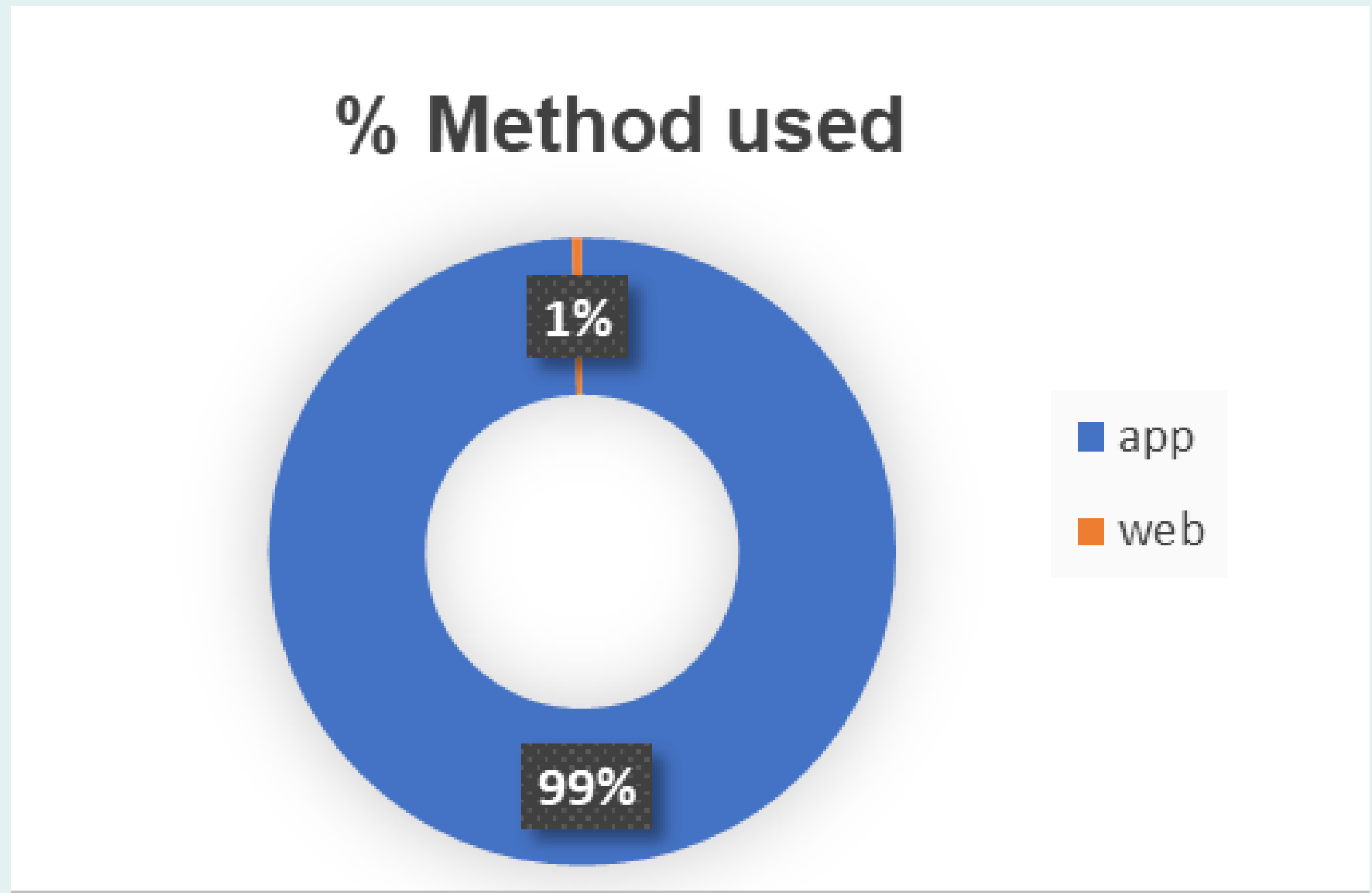
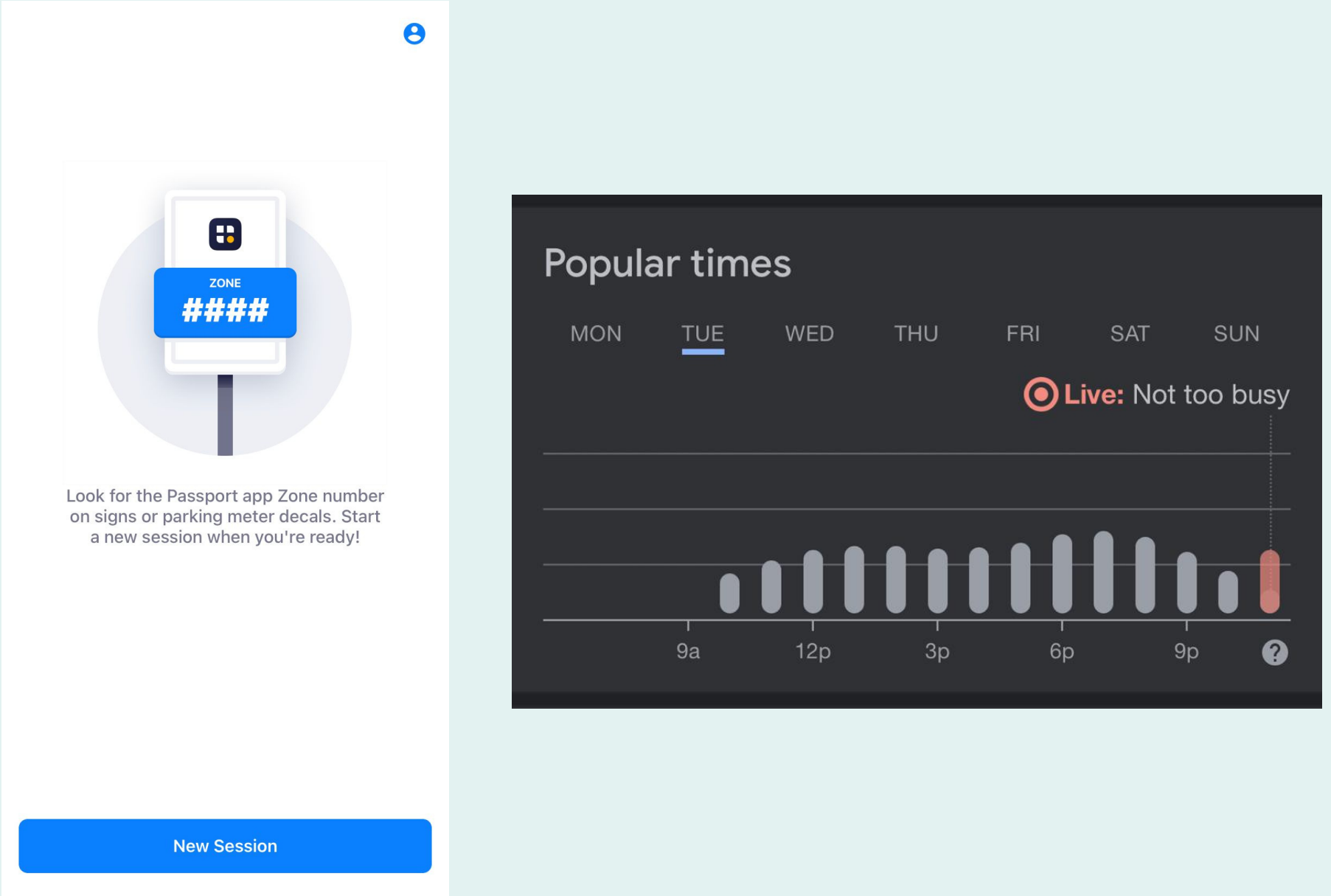


Figure 6 displays the payment methods utilized by the people parking in the public lots. App refers to the Passport Parking application from the city of Hamilton and web refers to the website where payment can be completed. As demonstrated by the data, majority of people parking prefer to use the app over the website. Therefore, improving the application which most users are used to would allow for the betterment of customer experience and convenience within the public lots.

Recommendations

Implementations to improve the current state:

- Allocation of premium slots.
- Improve Passport app.
- Implementation of smart parking devices and displays.



Next Steps (Future State)

Monitoring and tracking of the implementation

- Regular app or website updates.
- Maintenance checks for sensors/ devices.
- Monitoring of parking lots.



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- <https://datacompetition.mohawkcollege.ca/2022-data-links/>
- Municipal Parking Lots | Open Hamilton
- Municipal Car Parks (arcgis.com)
- <https://www.hamilton.ca/city-initiatives/online-services-tools-apps/parking-payment-app>