Campus Parking Problem

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Abstract

Cal Poly Pomona has a massive **traffic and parking problem**. This is due to the **lack of parking to student population ratio**. This parking problem can be solved by **building a new parking structure** in the free space located on the northeastern side of the campus (Figure 1), where a lot of the students enter the school from. By building the parking structure at this location, we conclude that there **will be less traffic and more convenient parking for students.**

Introduction

- Cal Poly Pomona is a commuter school
- In Fall 2022 over 27,000 students were enrolled, 16% students lived on campus while 84% lived off-campus. [1]
- There is a lack of public parking that is closer to our classes and this causes an extended period of time in which students need to show up early or wait for parking.
- The issue continues to grow each school year due to the new waves of freshmen and transfers entering the school
- The negative impacts that traffic congestion brings include students being late to class, safety hazards on the road, and pollution. [2]

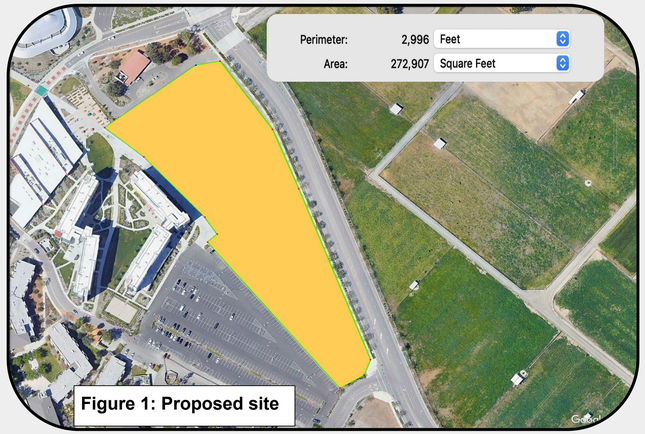

Figure 1: Proposed site

Figure 2: Potential layout of Parking Structure

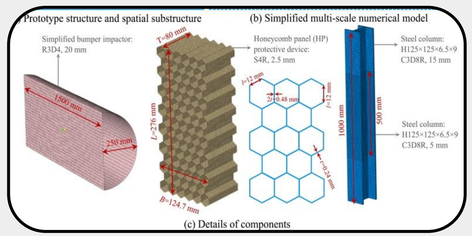

Figure 3: Honeycomb design for the structure

Solutions

A **Parking Structure**, as seen in Figure 2, leads to many different positives that solve the parking challenges on the CPP campuses. The first positive of having a **Parking Structure** is that it prevents prohibited parking; it emphasizes the importance of coordinated parking and traffic management for sustainability [3]. In addition, commuters face difficulties due to traffic congestion and the solution of a new **Parking Structure** can allow more space to be utilized, leading to fewer students stressing about traffic jams. [2] Lastly, we can add more safety and minimize the structure's vulnerability to the **Parking Structure** by using a protection mechanism based on honeycomb panel sheets, as seen in Figure 3. [4] These sheets promote environmentally friendly ways of managing the campus and innovative solutions for improving campus safety and efficiency.

Conclusion

As Cal Poly Pomona is massively a commuter school that has grown in population the past years, the current amount of available parking will become an increasingly bigger problem that affects the student body. A new parking structure located in the unutilized area next to the residence halls would address this issue as well as alleviate traffic jams. With students needing to stress less about parking, they will be able to focus more on their studies and success in their education.

References

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