

## **IC-Team #22010**

### **Abstract:**

The object of this project is to use the Veo e-scooter route data and campus sidewalk digital maps provided by DOT to identify the top three areas that are most traversed by Veo e-scooter users and find out any special patterns e-scooter routes happening on UMD campus.

After analyzing the data via ArcGIS, we found out the top three infractions areas located as follow:

- Bridge to Varsity – Brendan Iribe/Wind Tunnel Building – William E. Kirwan Hall
- Geology building – HomeBake Library/ Teaching Center
- Right routes of the Mckeldin Mall

From the heat map, it also shows that Veo e-scooter seems to mainly ride in the same areas in September and November. Most of the routes are concentrated around academic buildings or residential buildings while there's still a big part of people rode the Veo e-scooter near the Stadium. Those top areas with most infractions also shows that the sidewalks are on the slope and with heavy traffics or they located on the shortcuts to campus. On the other hand, if we look at the total count of the infractions compared these two months, the infractions count actually decreased a lot from September to November. We conclude that it might because the weather was cold in November and it had Thanksgiving holidays when most of the students and staff were not on campus.