Faculty of Engineering  
Summer Research Program 2021-2022

Project Title: Pedestrian traffic in Melbourne in response to COVID-19

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Objective

Explore the components of pedestrian traffic and how they changed over the two years since COVID-19 reached Australia.

Project Details

COVID-19 has had a profound impact on the amount and ways that people travel. Stay-at-home orders, fear of infection on public transport and restrictions on travel distance have combined to disproportionately impact the City of Melbourne, which has struggled to recover economically even when travel restrictions are eased. The City of Melbourne has a system of pedestrian activity counters that track the number of pedestrians in locations across the city on an hour-by-hour basis, providing a rich source of data on how activity in the city has changed in response to COVID-19. A preliminary study using this data showed that locations associated with commuters (e.g. near train stations) felt greater impacts than locations associated with recreation and residents (e.g. in Docklands), and that weekends recover more quickly than weekdays.

In this project, the student will analyse the City of Melbourne data to further uncover temporal and spatial patterns and extend the study through the end of 2021.

Prerequisites

Students must have completed CIV2282. Student must have access to a computer that can download and open large datasets.

Skills in managing large datasets and using GIS are preferred.