

Faculty of Engineering

Summer Research Program 2024-2025

Project Title: Assessing perceived safety of public transport stations based on access to stations: An integrated Crime Prevention Through Environmental Design (CPTED) approach

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Objective : The objective of this study is to evaluate the walking accessibility to and from public transport (PT) stations and its impact on perceived personal safety. This study will integrate Crime Prevention Through Environmental Design (CPTED) with Gender Impact Assessment tools, which will provide a better understanding of the impact of walking accessibility on PT use and perceived personal safety through a gendered lens. This project aims to contribute to design PT spaces from a gendered perspective and to future proof access to PT modes from a personal safety perspective. The findings from this research will be submitted to a peer-reviewed journal and a full paper will be also submitted to the 46th Australasian Transport Research Forum Conference (ATRF), 2025.

Project Details: According to the Victoria Walks, public transport users in metropolitan Melbourne daily spend an average of 28 minutes walking to and from public transport (PT), plus six minutes walking for other purposes. This is enough to meet the recommended 30 minutes daily exercise for adults. Nevertheless, choosing transit over other modes depends much on the ease of access to and from stations as well as park and ride locations. This study will investigate the walking accessibility to and from PT stations/stops and its impact on perceived personal safety. The project will integrate CPTED tool and Gender Impact assessment tools. The stations/stops will be selected based on the frequency of station use (least used – most used) in the inner, middle and outer Melbourne region. The student assistant in this project is responsible for performing the station audit and assist in data analysis. The preliminary research approach and project timeline is briefly shown in the following diagram:

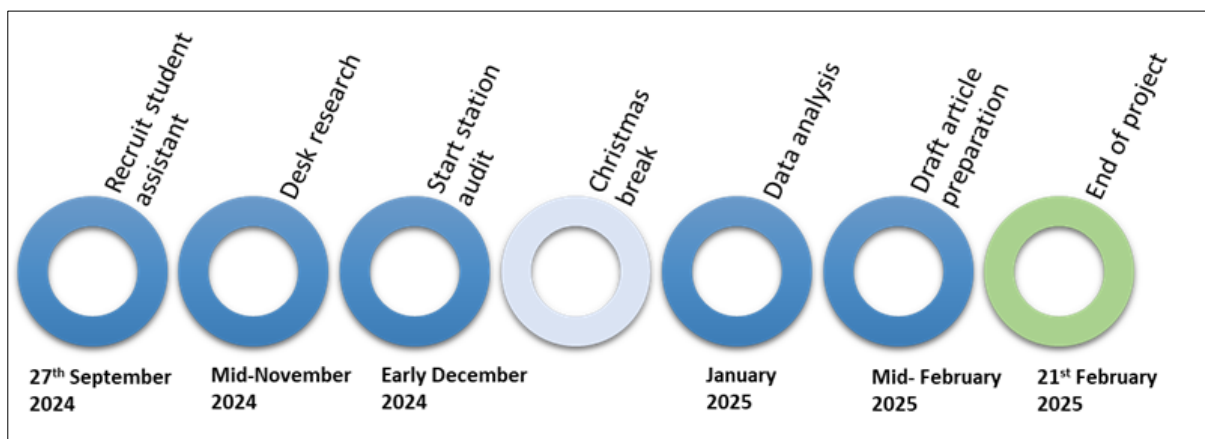


Figure: Preliminary research approach and timeline

Prerequisites: Experience in literature and practice review, familiarity with statistical software and GIS software is a plus.