

Online Technical Talk

Urban Road Capacity Model for Malaysia



27 Jul 2024 (Sat)



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Synopsis

Current road capacity estimation manuals have limitations, especially in urban settings, leading to reduced accuracy when adapted. This study aims to develop a model, named UrbanCap, to better characterize urban road capacity. Twenty-two sites in the Cheras-Kajang area were chosen for morning peak hour traffic data collection. Video footage captured traffic, from which speed-density and flow-density curves were derived.

The UrbanCap model, employing multiple linear regression, considers road type, carriageway, and speed limit. Results indicate varying capacities based on these factors. Comparisons with existing manuals in Malaysia, as well as the models from Australian and United Kingdom Manuals demonstrate UrbanCap's superior estimation. This underscores the necessity for a tailored manual to quantify urban road capacity in Malaysia, essential for road design and analysis.

About the Speaker



Speaker:

Prof. Ir. Dr. Khoo Hooi Ling

Prof. Ir. Dr. Khoo Hooi Ling is currently holding the Professor position in the Department of Civil Engineering of Lee Kong Chian Faculty of Engineering and Science in the Universiti Tunku Abdul Rahman (UTAR) Sungai Long Campus. She has more than 15 years of experience in the traffic engineering and transportation related studies. She obtained her Bachelor and Master degrees in Civil Engineering from the University of Malaya, and she earned her PhD degree from the National University of Singapore.

Prof. Khoo's research interest is in transportation system optimization, travel demand management, travel behaviour modelling, public transportation, and traffic safety. She is a Professional Engineer with Practicing Certificate. She has involved in many consultancy projects that relate to traffic impact assessment, traffic simulation, and township masterplan assessment. She is currently the Advisor of the Highway and Transportation Engineering Technical Division (HTETD), IEM, and a fellow member of IEM and AAET.



Moderator

Ir. Yeap Geok Ngh

This talk is organized by Women Engineers



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