



## Urban Structure and Transport – Melbourne case study

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### *Abstract*

*Studies about relationship between urban form and travel are generally at household level. Australian Bureau of Statistics (ABS) and Victorian Integrated Survey of Travel and Activity (VISTA) data at statistical local area (SLA) level for Melbourne, Australia were used to estimate greenhouse gas emissions from personal transport. An integrated model which consists of three sub-models (car ownership, vehicle km travel, mode share) has been proposed in this paper. The model suggests that population density, distance from central business district (CBD) and dwelling types are influencing factors for urban structure measurement and can be used for estimating energy consumption and greenhouse gas emissions. It was found that the model developed is not complex enough for considering the relationship between urban form and personal travel.*

**Key Words:** Urban structure, Land use, Transport