

developing new residential areas close to transit stations, and also to locate new transit stations along the transit lines.

Connecting transit stations to residential areas also demand for other support facilities such as for a convenient, safe and well-designed pedestrian facility. Numerous studies have been done and continuously been improved to determine the pedestrians' Level of Services (LoS). Pedestrian Index (P-Index) rated through star rating formats can be used to evaluate the quality of pedestrian services. With the availability of free geospatial data such as Google Maps, ratings of pedestrian facilities can be made public and encourage public participatory planning approach to improve these services.

In addition, TOD which is characterised by high density and mixed-use development can also generate environmental and social issues. Energy consumption and carbon emissions within this area are expected to be relatively higher than other parts of the city. Therefore, there is a need to develop a new method in assessing potential urban development parameters that can help reduce energy consumption in development (residential) areas. The findings are important for urban planners to formulate effective policies on land use and building control to promote a sustainable environment within the cities.

Malaysia is relatively safe from earth quakes and tsunamis due to its geographical location and blessed with natural defence mechanism. However, most cities located along the coastal lines are susceptible to other natural hazards for example rising sea level, coastal flooding and possibly will be impacted by earthquakes or tsunamis in the neighbouring countries. It is important to understand the effect and impact of this disaster to enable affected areas to be better prepared in the wake of such disasters. The research on seismic micro-zonation at post-disastrous earthquake and tsunami in Banda Aceh City can be a useful input for the planners at the coastal cities in Malaysia.

The publication of this journal is made possible due to an excellent collaboration between the Malaysia Institute of Planners (MIP) and the Centre for Innovative Planning and Development (CIPD), Faculty of Built Environment, Universiti Teknologi Malaysia. It was agreed by MIP and CIPD that the theme of this Special Edition was the use of present technological know-how and tools in urban planning. It reflects our continuous efforts towards promoting sustainable urban development and strengthening the planning profession in Malaysia. CIPD has continuously encouraged their staff and researchers to carry out innovative, fundamental and ground-breaking and problem solving oriented research that lay the foundations for further research.

We wish to express our deepest gratitude to Planning Malaysia editorial board for giving valuable inputs to improve the manuscripts. Our special thanks are also to Malaysia Institute of Planners' Council for giving us the opportunity to publish the output of our research. We also extend our appreciation and thanks to all our research sponsors and data providers, which we could not possibly list all and, UTM that made

this special edition journal possible. I hope this publication will be useful for planners, urban managers and practitioners.

### **GUEST EDITORIAL BOARD (CHAIRMAN)**

**Professor Dr. Ahmad Nazri Muhamad Ludin**

Geospatial Research in Spatial Planning Unit (GRiSP)

*(Formerly known as Unit GIS dan Perancangan - UGiSP)*

Centre for Innovative Planning and Development (CiPD)

Faculty of Built Environment

UNIVERSITI TEKNOLOGI MALAYSIA.

Johor Bahru, November 2013

---