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Assessing the current implementation of transit oriented development concept in malaysia: Case study of MRT Putrajaya line

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Abstract

In the past years, the concept of Transit-Oriented Development has been adopted in cities and countries including Malaysia and Singapore. The integration of land use and public transport stations through Transit Oriented Development (TOD) as part of urban and cities strategy is highly acclaimed in promoting sustainable development concept in cities development. To understand the performance of TODs implementation in Klang Valley, this study has selected eleven stations in of Mass Rapid Transit (MRT) Putrajaya Line as case studies. This paper aims to evaluate the current implementation of TODs in Malaysia, benchmarked against the TOD land use composition and percentage from Singapore's model. The findings show that Raja Uda, Ampang Park and Persiaran KLCC stations show significant performance. However, Bandar Malaysia North station displayed poor result with the lowest percentage of residential and commercial components. All stations did not achieve the ideal TOD value for residential land use and eight out of eleven stations recorded higher than the ideal TOD value for roads. However, highest number of stations achieved the ideal TOD value for mixed-use and commercial land uses. These results would help policymakers to improve the current implementation of TODs in Malaysia. © 2021 Malaysian Institute Of Planners. All rights reserved.

Author Keywords

Ideal TOD; Land use composition; Percentage; Transit-oriented development

References

- Belzer, D., Autler, G.
Countering sprawl with transit-oriented development
(2002) *Issues in Science and Technology*, 19 (1), pp. 51-58.
- Calthorpe, A.
(1992) *Transit-oriented development design guidelines*,
(Resolutio R-280480). San Diego: Planning Department. City of San Diego
- Cervero, R.
(1998) *The transit metropolis: A global inquiry*,
Washington DC: Island Press
- Chin, H. C., Fong, K. W.
Issues in transportation planning-the Singapore experience
(2006) *Advances in City Transport: Case Studies*, 127.
- Curien, R.
Singapore, a model for (sustainable?) urban development in China. An overview of 20 years of Sino-Singaporean cooperation
(2017) *China Perspectives*, 2017, pp. 25-35.
(2017/1)

- De Vos, J., Van Acker, V., Witlox, F.
The influence of attitudes on transit-oriented development: An explorative analysis
(2014) *Transport Policy*,
- Dittmar, H., Poticha, S.
Defining transit-oriented development: The new regional building block
(2004), *The New Transit Town: Best Practices Transit-Oriented Development*
- Freilich, R. H.
The land-use implications of transit-oriented development: Controlling the demand side of transportation congestion and urban sprawl
(1998) *Urb. Law*, 30, p. 547.
- Iamtrakul, P., Zhang, J.
Measuring pedestrians' satisfaction of urban environment under transit-oriented development (TOD): A case study of Bangkok Metropolitan, Thailand
(2014) *Lowland Technology International*, 16 (2), pp. 125-134.
- Joshi, R., Joseph, Y., Patel, K., Darji, V.
(2017) *Transit-oriented development: Lessons from international experiences*,
- Lim, J. L., Ponrahono, Z.
Service Catchment of Mass Rapid Transit (Mrt) Feeder Bus: A Preliminary Study of T461 Route Taman Kajang Utama
(2019) *PLANNING MALAYSIA Journal of the Malaysian Institute of Planner*, 17 (2).
- Newman, P., Kenworthy, J.
(1999) *Sustainability and cities: Overcoming automobile dependence*,
Washington, DC: Island press
- Niu, S., Hu, A., Shen, Z., Lau, S. S. Y., Gan, X.
Study on land use characteristics of rail transit TOD sites in new towns-taking Singapore as an example
(2019) *Journal of Asian Architecture and Building Engineering*, 18 (1), pp. 16-27.
- Patnala, P. K., Parida, M., Chalumuri, R. S.
A decision framework for defining Transit-Oriented Development in an Indian city
(2020) *Asian Transport Studies*, 6, p. 100021.
- Pongprasert, P., Kubota, H.
TOD residents' attitudes toward walking to transit station: A case study of transit-oriented developments (TODs) in Bangkok, Thailand
(2019) *Journal of modern transportation*, 27 (1), pp. 39-51.
- Schwaab, J., Thielmann, S.
Policy guidelines for road transport pricing: A practical step-by-step approach
(2002) *United Nations Economic and Social Commission for Asia and the Pacific & Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)*, 12 (6), pp. 525-536.
- Wey, W.
(2015) *Smart growth and transit-oriented development planning in site selection for a new metro transit station in Taipei, Taiwan*,
Habitat International

- Wood, D., Brooks, A.
(2009) *Fostering Equitable and Sustainable Transit-Oriented Development*,
Overview of Briefing Papers, Boston University
- Yusoff, I., Ng, B. K., Azizan, S. A.
**Towards sustainable transport policy framework: A rail-based transit system in
Klang Valley, Malaysia**
(2021) *PloS one*, 16 (3), p. e0248519.
- Zhou, Q., Dai, D.
**The evaluation of transit-oriented development of metro station areas using node
place index in Shenzhen China**
(2017) *inaugural World Transport Convention*,
Beijing, China

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