ABSTRACT

Globally, the spread of gated communities (GC) has prompted researchers to examine its causes and consequences. This phenomenon has been widely discussed as a majority residential form all across the world, but those studies focus primarily on non-technical issues such as inequality and segregation, leaving out technical considerations such as the urban transit (PT) system. This is also essential because accessibility-focused PT planning is key to establishing a sustainable urban transport system. As a public good, PT should be universally accessible, and enhancing its service coverage entails minimizing the distance between people and the system. Meanwhile, there is an indication that GC design results in increased travel distances — especially for its residents. Taking Bogor Municipality as a case study, this study utilized GIS (Geographic Information System) methods and spatial data to analyze the impact of GC on PT system. The quantitative evidence indicates that GC has a fairly strong negative correlation with PT service coverage *(r (66) = -.611 to -.631, p < .001)*. This means PT service coverage tends to be low in areas with a high GC ratio and vice versa. Furthermore, there is an early indicator that the increase in GC ratio will likely reduce the PT services coverage in that area *(Beta = -.48, t(67) = -5.17, p = .000)*. Based on the findings, possible solutions to mitigate the impact are discussed to develop suggestive materials for city planning.

Keywords: Accessibility, Gated Community, Geographical Information System, Public Transportation, Service Coverage