

## **Enabling the Physical Elements of a Pedestrian Friendly District around a Rail Station for Supporting Transit Oriented Development**

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**Abstract :** Rail-station area development that is based on the concept of TOD (Transit Oriented Development) is principally oriented to pedestrian accessibility for daily mobility. The aim of this research is elaborating how far the existing physical elements of a rail-station district could facilitate pedestrian mobility and establish a pedestrian friendly district toward implementation of a TOD concept. This research was conducted through some steps: (i) mapping the rail-station area pedestrian sidewalk and pedestrian network as well as activity nodes and transit nodes, (ii) assessing the level of pedestrian sidewalk connectivity joining trip origin and destination. The research area coverage in this case is limited to walking distance of the rail station (around 500 meters or 10-15 minutes walking). The findings of this research on the current condition of the street and pedestrian sidewalk network and connectivity, show good preference for the foot modal share (more than 50%) is achieved. Nevertheless, it depends on the distance from the trip origin to destination.

**Keywords :** accessibility of daily mobility, pedestrian-friendly district, rail-station district, transit oriented development

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