

The potential transportation effects of transformation of traditional markets into modern malls: a case study of Mall Dinoyo City in Indonesia

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The relationship between land use and transportation is well established. Commercial land uses can generate variable amount of traffic depending on its type and scale. For the past few decades it has been a trend in the western world to gradually upgrade the traditional markets to modern malls. Indonesia and some other Asian countries are following this trend and have recently taken steps for transformation of the shopping centres in the major cities. While the transformation is useful in lifting the image of the city and making it comparable with other major cities of the world, overlooking of local contexts and impacts of the development may lead to transportation issues.

In some cities, such as Malang in Indonesia, it seems the transformation is taking place at a rapid pace without consideration for the consequences on the traffic and parking on the surrounding road network. More than 27 shopping centres in Malang have been identified for upgradation in the next few years. Out of which, two are complete, including the Dinoyo traditional market. In this paper we will study the development of this market and identify the transportation and associated issues. The main objectives of this paper are to investigate whether there were any limitations in the planning and development of the Mall Dinoyo City through the upgradation of Dinoyo traditional market, and identify the potential transportation effects of the transformation.

This study will look into the context of transformation of traditional markets in Malang. The history of Dinoyo traditional market will be studied covering issues like types of shops, characteristics of the shoppers, and amount of traffic generated by it

in the past. The historical traffic data will be obtained from secondary sources. The policies behind the transformation of traditional markets in Malang will be critically reviewed in regards to the purposes of the transformation, laws underlying the transformation and to find out whether adequate considerations were given to transportation effects of the change in the intensity of the land uses.

The literature review for the study will look into different aspects of the relationships between commercial land use and transportation. It will particularly cover research on the impacts of upgradation of traditional markets around the world and identify the lessons which could be learnt from these examples. The ideal locations for a shopping mall of the scale of Mall Dinoyo City and transportation facilities ideally required for it will be identified. These information and lessons learnt from similar developments will be applied to the analysis of Mall Dinoyo City. The mall will be investigated in regards to the number of shops, types of shops and activities, access and exit points, and parking facilities. The surrounding environment will be studied as well, covering issues like land uses in the vicinity of the mall, road network, and traffic volume on the roads leading to the mall. The road hierarchy surrounding the mall will be identified. The public transport servicing the mall will be studied in regards to types of services, location of stops, and frequency of services. The information for the analysis will be collected from secondary sources and through observation.

The historical context of the market, critical review of the planning of upgradation 27 shopping centres in Malang, and case study of the transformation of Dinoyo traditional market into Mall Dinoyo City will enable us to identify the limitations of the planning process and identify the potential transportation issues. This study is likely to find that the policies adopted for upgradations of so many markets in short span of time are not based on adequate research. We believe that this case study will be able to identify some important issues which merit consideration while adopting policies like these. As one of the first markets under the scheme, the study of Mall Dinoyo City provides the opportunity for the planners in Malang to consider additional issues during the upgradation of rest of the 27 markets, which have been earmarked for development. The study will also recommend how a detailed study can be carried out to obtain comprehensive information on the issues identified in the study that will

help taking well-informed decisions. The issues raised in this paper are likely to be useful in the development of similar markets not only in Malang, but in other cities as well.