

A User-Side Analysis of the Public-Private Partnership: The Case of the New Bundang Subway Line in South Korea

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Abstract : The purpose of this study is to examine citizen satisfaction and competitiveness of a Public Private Partnership project. The study focuses on PPP in the transport sector and investigates the New Bundang Subway Line (NBL) in South Korea as the object of a case study. Most PPP studies are dominated by the study of public and private sector interests, which are classified in to three major areas comprising of policy, finance, and management. This study will explore the user perspective by assessing customer satisfaction upon NBL cost and service quality, also the competitiveness of NBL compared to other alternative transport modes which serve the Jeongja - Gangnam trip or vice versa. The regular Bundang Subway Line, New Bundang Subway Line, bus and private vehicle are selected as the alternative transport modes. The study analysed customer satisfaction of NBL and citizen's preference of alternative transport modes based on a survey in Bundang district, South Korea. Respondents were residents and employees who live or work in Bundang city, and were divided into the following areas Pangyo, Jeongjae - Sunae, Migeun - Ori - Jukjeon, and Imae - Yatap - Songnam. The survey was conducted in January 2015 for two weeks, and 753 responses were gathered. By applying the Hedonic Utility approach, the factors which affect the frequency of using NBL were found to be overall customer satisfaction, convenience of access, and the socio economic demographic of the individual. In addition, by applying the Analytic Hierarchy Process (AHP) method, criteria factors influencing the decision to select alternative transport modes were identified. Those factors, along with the author judgement of alternative transport modes, and their associated criteria and sub-criteria produced a priority list of user preferences regarding their alternative transport mode options. The study found that overall the regular Bundang Subway Line (BL), which was built and operated under a conventional procurement method was selected as the most preferable transport mode due to its cost competitiveness. However, on the sub-criteria level analysis, the NBL has competitiveness on service quality, particularly on journey time. By conducting a sensitivity analysis, the NBL can become the first choice of transport by increasing the NBL's degree of weight associated with cost by 0,05. This means the NBL would need to reduce either it's fare cost or transfer fee, or combine those two cost components to reduce the total of the current cost by 25%. In addition, the competitiveness of NBL also could be obtained by increasing NBL convenience through escalating access convenience such as constructing an additional station or providing more access modes. Although these convenience improvements would require a few extra minutes of journey time, the user found this to be acceptable. The findings and policy suggestions can contribute to the next phase of NBL development, showing that consideration should be given to the citizen's voice. The case study results also contribute to the literature of PPP projects specifically from a user side perspective.

Keywords : public private partnership, customer satisfaction, public transport, new Bundang subway line

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