

Bus Transit Demand Modeling and Fare Structure Analysis of Kabul City

Authors : Ramin Mirzada, Takuya Maruyama

Abstract : Kabul is the heart of political, commercial, cultural, educational and social life in Afghanistan and the fifth fastest growing city in the world. Minimum income inclined most of Kabul residents to use public transport, especially buses, although there is no proper bus system, beside that there is no proper fare exist in Kabul city Due to wars. From 1992 to 2001 during civil wars, Kabul suffered damage and destruction of its transportation facilities including pavements, sidewalks, traffic circles, drainage systems, traffic signs and signals, trolleybuses and almost all of the public transport system (e.g. Millie bus). This research is mainly focused on Kabul city's transportation system. In this research, the data used have been gathered by Japan International Cooperation Agency (JICA) in 2008 and this data will be used to find demand and fare structure, additionally a survey was done in 2016 to find satisfaction level of Kabul residents for fare structure. Aim of this research is to observe the demand for Large Buses, compare to the actual supply from the government, analyze the current fare structure and compare it with the proposed fare (distance based fare) structure which has already been analyzed. Outcome of this research shows that the demand of Kabul city residents for the public transport (Large Buses) exceeds from the current supply, so that current public transportation (Large Buses) is not sufficient to serve public transport in Kabul city, worth to be mentioned, that in order to overcome this problem, there is no need to build new roads or exclusive way for buses. This research proposes government to change the fare from fixed fare to distance based fare, invest on public transportation and increase the number of large buses so that the current demand for public transport is met.

Keywords : transportation, planning, public transport, large buses, Kabul, Afghanistan

Conference Title : ICCEUT 2016 : International Conference on Civil Engineering and Urban Transportation

Conference Location : London, United Kingdom

Conference Dates : July 28-29, 2016