

Economic Analysis of a New Road Infrastructure Project – A Case Study of West Bengal

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Abstract

The economic analysis of any infrastructure project indicates the seriousness of the project in terms of social need—the benefits, that society will reap from the project, if the project is implemented. In a developing country, like India, it is very important to evaluate the project in terms of economic benefits properly to prioritize the funds allocation and to reduce the opportunity cost. The prime objective of this analysis is to analyze the return of the investment to the society, which is measured in economic prices to capture the real impact on the society. The fundamental purpose of this paper is to show, how professional economists are evaluating highway infrastructure projects and discuss the key determining factors for that evaluation. This is typically a branch of mainstream economics, that is, Transport Economics, which is an assimilation of basic theories of economics and civil engineering. Good highway engineering is the key determinant factor of the economic benefits that the society will get from the project. For the simplicity of this paper, the use of engineering analysis and terminologies, of transport, pavement (roads) design and highway designing have been minimized intentionally. The whole analysis has been done with the help of The World Bank's Highway Development and Management Tool (HDM-4), which is developed by University of Birmingham and Transport Research Laboratory (TRL), United Kingdom and it is accepted by more than 130 countries all over the world including Government of India. This paper tries to capture the benefits of road users in terms of road user cost, which is a summation of vehicle operating cost, value to travel time and accidental cost over a specified time period. This paper is a part of economic analysis report of Kona Expressway (NH-117) which has been selected to be upgraded to four lanes configured elevated corridor as a segmental box type structure from Second Hooghly Bridge to NH-6. The sole purpose of this paper is only to share the knowledge and not for any commercial purpose.

Key words: infrastructure project, Kona Expressway, transport economics, highway designing.