Journal of Transportation Engineering

VOLUME 135 / NUMBER 6  JUNE 2009

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Valuing Travel Attributes of Rural Feeder Service to Bus Stop: Comparison of Different Logit Model Specifications

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A stated choice experimentation is carried out to capture the responses of rural commuters for feeder service to a bus stop. The data are analyzed for calculating users' willingness-to-pay (WTP) values using different model specifications such as multinomial logit model, nested logit model, covariance heterogeneity nested logit model, and random parameter logit model. Random parameter logit models are developed assuming constrained triangular distribution of random parameters. A comparison of WTP values obtained from different models indicates the importance of model specification in the estimation of WTP values. It is suggested that the selection of the model should be based on the rationality of model specification and its goodness of fit for a given dataset. The paper also documents experience and findings on WTP values for rural trip makers in a developing country context.

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History: Submitted 28 July 2006; accepted 20 January 2009; published 15 May 2009

ASCE SUBJECT HEADINGS
Rural areas, Buses, Public transportation, Developing countries

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