Effects of Adverse Weather on Surface Transportation Mobility

Dr. Paul Hanley¹ & Joe Olson²

Abstract

Snow, rain, fog and extreme temperature all can have tremendous effects travel mobility. This report analyzes how adverse weather conditions impact the mobility of travelers using surface based transportation modes. Survey data from travelers across the state of Iowa containing trip logs for 12 months were analyzed. Environment, such as rural or urban, was considered in the investigation as well as type of mode. Trips were then correlated with weather data for the same 12 months using GIS and SPSS analysis. The full results of the analysis will be completed in May of 2011.

Key words: adverse weather – transportation mobility – travel patterns

¹ Director, Transportation Policy Research Program / Associate Professor, Urban and Regional Planning, Department of Civil & Environmental Engineering, Public Policy Center University of Iowa 218 South Quadrangle Iowa City, IA 52242-1192, Tel: 319-335-8137, Fax: 319-335-6801, Email: paul-hanley@uiowa.edu
² Undergraduate Student, The University of Iowa, Civil Engineering, ITS-ENTERPRISE INFRASTRUCTURE University of Iowa 400 North Hall Iowa City, IA 52242-1192, Tel: 319-335-1357, Email: joseph-olson@uiowa.edu