An Analytical Hierarchy Process (AHP) Approach to Quantifying Perceptions of Livability

M.V. Hart¹, T.M. Adams², and M. Doherty³

Livability, from a stakeholder’s perspective, is both subjective and multifaceted making it difficult to define –and hence measure. Livability is also contextual, differing from city to city, and neighborhood to neighborhood, and urban, suburbanized or rural settings. Framing livability from a values perspective is an approach that allows for a customization of livability strategies for a given community. This presentation reviews a methodology used to capture a communities’ values and the rankings of those values.

The methodology used is the Analytical Hierarchy Process (AHP), a problem-solving technique for organizing and analyzing complex, multi-criteria and multi-stakeholder decisions based on quantifiable and unquantifiable variables. By using relative rankings among pairs of livability criteria, this approach forces decisions among criteria and produces a representation of stakeholders’ judgments and values. Prioritized and weighted livability values are the metrics for evaluating effective public and private policy strategies. This decision-making technique has been applied to many fields.

This technique will be applied to a case study in Memphis, TN in neighborhoods bordering areas of high freight activity, areas that may have different notions of livability than those found in literature.

This topic would be of interest to planners looking at alternate ways to integrate complex results of a perceptions study into the mix of transportation infrastructure improvements for a given corridor.

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¹ National Center for Freight & Infrastructure Research & Education, Department of Civil and Environmental Engineering, University of Wisconsin-Madison, 1415 Engineering Drive, Room 2205, Madison, WI, 53706, PH. (608) 262-6639; FAX (608) 263-2512; email: mhart@engr.wisc.edu
² National Center for Freight & Infrastructure Research & Education, Department of Civil and Environmental Engineering, University of Wisconsin-Madison, 1415 Engineering Drive Room 2205, Madison, WI, 53706, PH (608) 263-3175; FAX (608) 263-2512; email: adams@engr.wisc.edu
³ National Center for Freight & Infrastructure Research & Education, Department of Civil and Environmental Engineering, University of Wisconsin-Madison, 1415 Engineering Drive Room 2205 Madison, WI, 53706, PH (773) 315-9503; FAX (608) 263-2512 email: doherty3@wisc.edu

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