**Islamic Azad University-Ahar Branch**

**Geographic Space**

**An Approved Scientific, Research-based Quarterly**

***Saeed Amanpour*[1]**
***Mortaza Nemati*[2]**
***Hadi Alizadeh*[3]**

# Assessment and Priority Surveying of Urban Transport Sustainability Indicators Using Fuzzy Logic (Case in Ahvaz)

Date received: 21 February 2013 Date accepted: 12 November 2013

## Abstract

The research methodology is "descriptive - analytic" and we used Delphi method to assess and priority survey the urban transport sustainable indicator in Ahvaz. To achieve these objectives, indicators of sustainable urban transport in three dimensions: economic sustainability, social dynamics and environmental sustainability with 30 variables were categorized and selected, and for this indicators assessment and priority surveying, we used the opinions of 30 experts in three part: university professors, eight Ahvaz urban region municipality and urban Transport organization authorities. For analyzing the achievied data, we weighted them by Triangular fuzzy numbers, and analyzed in fuzzy logarithmic least squares (FLLS). The research results showed that,

1 - Assistant Professor of Geography and Urban Planning in Shahid Chamran University of Ahvaz.
2 - Assistant Professor of Geography and Urban Planning in Shahid Chamran University of Ahvaz.
3 - M.A. student of Geography and Urban Planning in Shahid Chamran University of Ahvaz.

[ Downloaded from geographical-space.iau-ahar.ac.ir on 2026-10-30 ]

economic sustainability indicators in three parts by the weight of at least 0.447 mean weights 0.578 and a maximum weight of 0.689 fuzzy weight, More weight of indicators of sustainable transport infrastructure in the city of Ahvaz is the main priority. In the part of research variables, infrastructure facilities variable and resources for electronic communications on economic stability indicators, support safety and security in the social sustainability indicator and finally the reduction of air and water pollutants in environmental sustainability indicators have the highest weights.

**Keyword:** Sustainability, Urban Transport, Fuzzy Models, Ahwaz.

[ Downloaded from geographical-space.iau-ahar.ac.ir on 2026-10-30 ]