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# Measuring the Walkability of Urban Areas Case study: Streets of Sub-District 1 and 2 in 12th district of Tehran

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#### Introduction

Traditional cities all over the world, especially before the twentieth century, were built human-oriented with humanistic scales, and its streets were not just a place to pass, but a place to spend leisure, rest, shopping, gathering, etc. But with the explosive growth of cities and the focus on automobile-centric planning and the expansion of streets exclusive for cars and the marginalization of pedestrians, the humanist factor of traditional cities disappeared until the second half of the twentieth century, with humanistic urban planning emerging and the need for revival of the organic order of the traditional neighborhoods. To respond to this situation, over the past few decades, new trends and perspectives in urban planning have been proposed in the world, which is referred to as the Walkability movement. Walkability policies pursue not only physical aspects but also economic, social and cultural goals and ultimately the achievement of sustainable urban development. Promoting walkability, in addition to easy access to urban services and needs, also enables the growth of tourism and commercial activities. The sidewalks and walkways of District 12 are located in the historical heart of Tehran and have a high potential in attracting tourists. Also, due to the location of Tehran's Grand Bazaar in this area, it attracts a large number of pedestrians every day, not only for passing, but also for leisure and to satisfy their needs. The purpose of this study was to assess the desirability of sidewalks in the streets of the areas and awareness of the current state of sidewalks in the case study and compliance with existing standards, thus improving the conditions of walkability in this area and providing the necessary services and facilities. Lastly, authors will provide suggestions to improve the functions of walkability and its deficiencies.

### Methodology

This paper is cognitive in nature and practical in terms of purpose. Relevant information was obtained from written sources such as books, articles and research reports, and to update the evident information, the researchers directly observed the case study. The method of data analysis is evaluation-comparative and in order to evaluate the Walkability, inspired by previous researches on this subject, 24 incites have been determined in the form of a checklist and by field observation, each sidewalk and index would have a score of  $\Box$  (very Poor) to 5 (very good) using the Likert spectrum. In subdistrict one, 13 streets and in sub-district two, 13 main streets were evaluated. The

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bordering streets were calculated for both subs-districts. Lastly, walkability of streets of the two sub-districts were compared to each other.

#### **Results and Discussion**

According to the results, sub-district 1 is in poor condition in terms of landscape, noise pollution, shade shelter and places for interaction, stopping and sitting, and in terms of access to drinking water and toilets, the activity of shopping centers at night and urban lighting is in good condition (above 4). Sub-district 2 is also in a better position than sub-district 1 in terms of places to sit and rest, landscape and noise pollution, although it is in poor condition (less than 2.5). This area is also in a good condition (above 4) in terms of access to drinking water and toilets, night-time activities and night lighting. In general, and considering the total average, Sub-district 2 due to the existence of pedestrian axes such as 15 Khordad, Naser Khosrow, etc., which have been implemented in this area for some time with study and research projects, with an average of 3.1 ratio compare to Sub-district 1, which has busier streets and less attention to the implementation of walkability having an average of 3.06, has a better position.

#### Conclusion

12th District of Tehran is the historical-cultural and economic heart of Greater Tehran. In terms of tourism and recreational capabilities, this region is in the first place compared to other regions and is of great importance, and the economic hub of the capital and the country, namely Tehran Bazaar, is located in this region. According to what has been said, it can be clear that this area is not only important in terms of traffic and issues related to the passage of citizens, such as public transportation, etc., but also because of the large daily attraction of pedestrians in terms of issues related to streets and Walkability. Easy to access streets and safe environment for citizens in the area are the most important issues regarding the walkability in the region and the following strategies are notable concerning the subject:

More effective public participation in urban projects and focus on neighborhood development;

Rehabilitation of streets pavements and improving the safety level of walkways; Proper access to public transportation and parking spaces

**Keyword:** Walkability, Sidewalk, Walkway, Street, 12th district of Tehran.

#### References

#### **Persian References:**

- Bahraini, H. (1996) Urban Space Analysis, Third Edition, University of Tehran Press, Tehran, Iran. (in Persian)
- Collin, G. (1998) *Selected Urban Landscape*, translated by Manouchehr Tabibian, Tehran. (in Persian)
- Habibi, M. (1999) "Tourism Walkway", Journal of Fine Arts, No. 9. (in Persian)
- Hosseini, M.; Pour Soltani, H.; Salimi, M. Emadi, S. (2011) "Feasibility study of walking in urban space based on new and sustainable development models", Journal of Urban Research and Planning, 2 (4). (in Persian)

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- Izadi, S., and Nikokhoi, M., and Samavati, S. (2012) "Study of the role of quality components of the pedestrian territory in the vitality and efficiency of urban streets (Case study: Bu Ali Sina St., Hamadan)", Geographical Journal of Tourism, 1 (3), 103-118. (in Persian)
- Jacobs, J. (1961) The Death and life of Great American Cities, translated by Hamidreza Parsi, University of Tehran Press, Tehran, Iran. (in Persian)
- Lynch, K. (1374) *Image of City*, translated by Manouchehr Mazini, University of Tehran Press, Tehran, Iran. (in Persian)
- Moeini, M. (2006) "Increasing the Walkability, a step towards a more humane city", Journal of Fine Arts, 27, 5-16 (in Persian)
- Pakzad, J. (2004) Guide to urban space design in Iran, Ministry of Housing and Urban Development, Deputy of Urban Planning and Architecture, Secretariat of the Supreme Council of Urban Planning and Architecture, Tehran, Iran. (in Persian)
- Rabbani Abolfazli, G., and Rahnama, M. (2017) "Evaluation of pedestrian capability with emphasis on neo-urbanism approach in Sajjad Boulevard of Mashhad", Journal of Geography and Urban Space Development, 4 (2), 1-24. (in Persian)
- Rustaei, Sh., And Naseri, R. (2019) "Evaluation of pedestrian capability of the passages of the historical context of Maragheh", Journal of Urban Ecology Research, 10 (19), 123-134. (in Persian)
- Shabanpour, A., and Jafari, M., and Aghaeizadeh, A. (2020) "Evaluation of pedestrian capability
  of residential areas with a ranking and zoning approach. Case Study: City of Thought ", Journal
  of Geographical Land Organization of Space, 10, 17-34. (in Persian)
- Shoorcheh, M. (2020) "Urbanism and Planning for the City through the Gilles Deleuze's Philosophy", Scientific Journal of Iranian Urbanism, 3 (5), 34-53 (in Persian)

## **Latin References:**

- Moura, F., Cambra, P., Goncalves, A.B. (2017) "Measuring walkability for distinct pedestrian groups with a participatory assessment method: a case study in Lisbon." Landsc. Urban Plan.157, 282–296
- Knapskog, M., Hagen, O.H., Tennøy, A., Rynning, M.K. (2019) "Exploring ways of measuring walkability", Transportation Research Procedia 41, 264-282.
- Wang, H., Yang, Y. (2019) "Neighbourhood walkability: A review and bibliometric analysis", Elsevier, Cities 93, 43-61
- Liao, B., van den Berg, P. E. W., van Wesemael, P. J. V., & Arentze, T. A. (2020). "Empirical analysis of walkability using data from the Netherlands." Transportation Research. Part D: Transport and Environment, 85, [102390]. https://doi.org/10.1016/j.trd.2020.102390
- Fancello, G., Congiu, T., Tsoukiàs, A. (2020) "Mapping Walkability. A subjective value theory approach", Socio-Economic Planning Sciences, doi: https://doi.org/10.1016/j.seps.2020.100923



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