

UDC 711.4:725

**ORGANIZATION OF A NETWORK OF MAHALLA CENTERS IN THE CITY OF  
SAMARKAND**

**M.K. Yuldasheva**

Scientific Supervisor: Associate Professor,  
Department of Architecture

**Gulshan Gafurova**

Master's Student (1st Year): Specialty 0730101 – Architecture  
of Buildings and Structures,  
Samarkand State University  
of Architecture and Civil Engineering (SamSACE)

<https://doi.org/10.5281/zenodo.20540422>

**Abstract**

This article examines the features of designing mahalla centers based on the analysis of domestic and international experience. The principles of forming public spaces, functional zoning, and architectural-planning solutions applied in the cities of Uzbekistan are studied. The main directions for improving the design of mahalla centers under modern urbanization conditions are identified.

**Keywords:** mahalla center, urban planning, public space, architectural design, functional zoning, urbanization, cultural heritage, Samarkand.

The modern development of cities in Uzbekistan is accompanied by active urbanization processes, population growth, and the transformation of the urban environment. Under these conditions, special importance is attached to improving the system of public spaces and local service centers for residents. The relevance of this research is determined by the need to develop scientifically grounded principles for organizing a network of mahalla centers within the urban structure of Samarkand, taking into account its historical characteristics, contemporary urban planning requirements, and the prospects for sustainable urban development. Samarkand is one of the oldest cities in the world and possesses a unique historical and urban structure. The formation of its urban environment was influenced by natural and climatic conditions, the trade routes of the Great Silk Road, national traditions, and religious factors. The historical part of the city is characterized by a complex system of residential quarters—mahallas—each of which had its own internal organization, public spaces, and service facilities. One of the most important elements of the social and urban structure of Uzbek cities is the mahalla, a historically established form of territorial community that plays a significant role in the social, cultural, and public life of the population.

Traditionally, the mahalla developed as a local territorial community united by kinship, professional, or ethnic ties. Its internal structure included residential houses, a mosque, a teahouse, craft workshops, small commercial facilities, and public spaces. The streets of the mahalla were characterized by compactness, winding layouts, and orientation toward pedestrian movement. Such a structure ensured a favorable microclimate, a high level of social interaction, and efficient land use. In the context of the intensive development of Samarkand, there is a

growing need to establish an effective network of mahalla centers that can provide comfortable living conditions for residents, support public functions, and preserve the traditional urban identity of the city.



*Historical Mahalla*



*Modern Mahalla*

Modern processes of urban environment modernization require a new approach to the organization of the network of mahalla centers. Based on the analysis of mahallas, it can be noted that a modern mahalla center should provide conditions for community interaction among residents, supplementary education, leisure activities, the organization of public events, and the provision of social services to the population. In the historic center of Samarkand, the mahalla structure played an important role in shaping the urban fabric. Mahallas ensured the sustainability of the urban environment, formed local centers of public activity, and created conditions for preserving cultural traditions. The most important elements of spatial organization included inner courtyards, small public squares, community buildings, and a network of narrow streets.

During the Soviet period, the city's development was accompanied by the formation of new residential districts and microdistricts based on the principles of standardized industrial construction. Despite significant changes in the urban structure, the mahalla system retained its social importance. In contemporary conditions, there is an ongoing process of integrating traditional mahalla principles into modern urban planning practice.



*"The Structure of the Mahalla and Its Role in Residential Development"*

**Modern Samarkand** is a major historical and tourist center of Uzbekistan, characterized by rapid population growth, the development of transport infrastructure, and the expansion of urban territories. These processes have a significant impact on the system of public spaces and local service centers for the population. Today, mahalla centers perform a wide range of functions.

They serve as administrative units of local self-government bodies, venues for community meetings, cultural events, and social support services. At the same time, many existing mahalla centers do not meet modern requirements for urban environmental quality and require reconstruction or functional reorganization. One of the main problems is the uneven distribution of mahalla centers throughout the city. In the historical part of Samarkand, a high density of traditional residential development and an established system of public spaces have been preserved. In newly developed districts, there is a shortage of local community centers, insufficient recreational areas, and weak integration of social facilities into the residential environment. The development of transport infrastructure also affects the organization of the urban environment. Studies of the contemporary development of Samarkand's road network indicate that increasing motorization is leading to changes in the structure of public spaces and placing additional pressure on the city's historical districts. Another important challenge is the preservation of historical and cultural heritage during the modernization of the urban environment. The historic mahallas of Samarkand represent a unique element of the city's cultural landscape and require a special approach to reconstruction and development. Issues related to preserving the traditional residential environment and integrating modern functions into the historical urban fabric have become particularly relevant. A modern mahalla center should be developed as an integrated public space that includes administrative facilities, cultural and educational zones, recreational areas, sports grounds, green spaces, and leisure facilities. Such an approach contributes to increasing social activity among residents and creating a comfortable urban environment. The formation of an effective network of mahalla centers should be based on a comprehensive urban planning approach that takes into account the historical, social, functional, and environmental characteristics of the city. One of the key principles is territorial accessibility. A mahalla center should be located within walking distance for residents of the area it serves. An optimal distance to public service centers encourages the active use of public spaces and reduces transportation demand. Particular attention should be paid to the architectural and aesthetic appearance of mahalla centers. Architectural solutions should reflect national traditions, consider the historical context, and respond to the climatic conditions of the region. The use of traditional architectural elements of Samarkand contributes to the formation of a unique urban identity. Under contemporary conditions, the implementation of sustainable development principles has become an important direction for future planning. The prospective development of the network of mahalla centers in Samarkand is closely linked to the modernization of the urban environment, the growth of tourism, and the need to improve the quality of life of the population, including the enhancement of surrounding public areas. In newly developed urban districts, it is necessary to establish a modern network of community centers focused on providing comprehensive services to residents. Particular importance is attached to the creation of green public spaces, children's playgrounds, recreational zones, and sports infrastructure.

Contemporary trends in urban development also involve the active integration of digital technologies into the systems of management and public service provision, contributing to the efficiency, accessibility, and sustainability of mahalla centers.



*The Mahalla is a unique community structure and an integral part of Uzbekistan's cultural identity.*

### **Conclusion**

The organization of a network of mahalla centers in the city of Samarkand is an important direction for improving the urban environment and enhancing the quality of life of the population. The mahalla, as a traditional form of community organization, remains relevant in modern conditions and serves as an important element of the city's social infrastructure.

The study has shown that the effective organization of a network of mahalla centers should be based on the principles of territorial accessibility, functional diversity, integration into the system of public spaces, and the preservation of historical and cultural heritage. Of particular importance is the adaptation of traditional principles of mahalla organization to contemporary urban planning requirements.

Modern mahalla centers should be regarded as multifunctional public spaces that provide administrative, cultural, educational, and recreational functions.

### **Literature**

1. Kamilova M., Mukhamadiev N. *Architectural Principles of Reconstruction of the Historical Residential Environment of the City of Samarkand*. – International Journal of Academic Research in Business, Arts and Science, 2021.
2. Shchipacheva E., Shaumarov S., Rashidov D. *The Mahalla Center of the Future in Uzbekistan: A Space for All Generations*. – Transport Bulletin, 2025.
3. Filanova T.V. *The Local Centers in City Structure, Specificity of Formation and Features of Functioning*. – Urban Construction and Architecture, 2012.
4. Qalandarov B.A. *Stages of Development of the Road Network in Samarkand City*. – Tadqiqotlar, 2026.
5. Sultanova D.N. *The Role of Large-Panel System Construction in the Urban Development of Samarkand*. – Architecture, Construction, Transport, 2024.
6. Tajibaev J. *Identifying Historical Centers of Cities and Developing Design Code Rules for Them*. – Journal of Architectural Design, 2022.
7. Khudoyberdiyev K.S. *Development of Methods for Restoration and Revitalization of the Historic Center of Samarkand City*. – Journal of Multidisciplinary Sciences and Innovations, 2025.
8. Mahamov B. *Features of Landscape Architecture of the Canal Banks in the Historical European Part of Samarkand*. – Shokh Library Journal, 2025.
9. *A New Housing Group for Sub-Residential Area in Samarkand: A Morphological Comparison*. – Cities Journal, 2002.
10. Ahmedov M.Q. *History of Architecture of Central Asia*. – Tashkent: Uzbekistan, 1995.