

ANALYSIS OF UNDERGROUND PEDESTRIANS IN CENTRAL CITY AREAS***Shodmonov Sayidbek Abduvayitovich****Andijan Mechanical Engineering Institute, assistant**E-mail: sshodmonov1989@gmail.com Phone: +998993217989.****Roziyev Bunyod Istam o'g'li****Student of Andijan Mechanical Engineering Institute**E-mail: bunyodruziyev606@gmail.com Tel.: +998995755737***Annotation**

Underground pedestrian systems (YOPT) have been introduced in many cities around the world, providing alternative walking options for pedestrians. These systems have been found to significantly improve the comfort and convenience of urban life in terms of transportation, economic activity and social activity, as they are seen to be used throughout the day by a large number of pedestrians for various purposes. YOPT has continuously improved over the past 30 years. However, as a relatively new form of infantry systems, the use of YOPT is largely unexplored. In this study, surveys were conducted on pedestrian travel behavior related to the use of YOPT in Shanghai.

Keywords:

underground, pedestrian, motor transport, opportunity, stairs, comfort, integration, system, complex, design, elevators, metro In recent years, the number of vehicles on the highways has increased dramatically, the observed traffic jams, the problems faced by drivers and pedestrians have placed certain tasks on the managers of the sector.

First of all, special attention is being paid to the construction of safe and smooth roads, the construction of road crossings in accordance with the demand, and the sharp reduction of the number of accidents recorded on the roads. In this regard, underground pedestrian crossings are being built on busy streets in urban and regional centers [1].

Qualitative and quantitative data were collected and analyzed by citizens on city streets. The study shows that YOPT users are diverse in terms of gender, age, education level, employment status and occupation, and personal characteristics. Procurement and employment were the two main reasons respondents used YOPT. Metro and shopping are two important factors related to the use of YOPT. These factors provide a functional basis for YOPT, and YOPT in turn creates catalytic and synergistic relationships that enhance the functioning of these factors [2].

The most important and distinct element of the urban environment is usually considered as the identity of the city due to the buildings and intensive services concentrated in the city center. Thus, maintaining integrated pedestrian spaces in metropolitan city centers is essential and permanent, but difficult to achieve, especially where surface road resources are crowded with vehicles for efficiency. As a compensation of urban pedestrian systems, street level, underground pedestrian systems and underground pedestrian crossing systems not only expand the area for pedestrians, provide a safer and more comfortable walking environment, but also save land resources for more compact and sustainable urban construction [3].



Photo 1. Pedestrian underpass

This paper provides a first step towards standardizing our view of underground pedestrian systems in the context of walkable cities. It combines research on walkable cities and examines how pedestrian networks can be achieved with urban pedestrian systems to show how well integrated underground pedestrian networks can be [4]. Influencing Factors of Underground Pedestrian Systems Pedestrian network including underground pedestrian system for integrated planning management. Pedestrian flow within underground pedestrian spaces can be organized and channeled if the interior environment can provide an object-oriented and usable space. Orientation devices improve the accessibility and mobility of pedestrians, and clear and consistent directional signs provide a good way to help them orient themselves [5].

The study focuses on how to create a barrier-free information environment with guidance and information signage on the following aspects: the balance between signage and advertising; easy-to-find information panel; data selection; clear signs; duration of characters; consistency of location names; provide additional information in advance; use information center information update, location measures; for those who are visually impaired; wheelchair users; and disaster prevention. Indoor accessibility is a very basic design component for organizing these spaces as well as



pedestrians [6].

1. Picture Modern underground pedestrian walkways

The experience, for outsiders - for example, for tourists - is mainly based on what they can do from the system, not only aspects of form and functionality, but also with respect to the psychological aspects of perception. Applying this theory to the underground pedestrian environment,

the research design focused on how pedestrians' behavior is perceived, and what perceptions promote or hinder. Pedestrian organization also contributes to the understanding of familiar pedestrian interactions within the environment with and without pedestrian organization in underground pedestrian systems [7].

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Underground pedestrian systems integrate with their urban environment as entrances and exits that visually interface with the city at street level. These above-ground and underground spaces are easily perceived as completely separate from one another. It showed that the entrance and exit to the underground are external and internal pedestrian areas, as well as transitions as above and below grade. The process can make people feel that there is a big difference, for example, often negative, visual and psychological transitions from inside to outside, from light to dark, from open to limited, from familiar to unknown, clear gaps in underground spaces. The quality transition area is very important to reduce this difference. An interface can provide a single option for installation [9].

It creates a spatial well-being, containing two opposite phenomena, with opposite characteristics - internal and external - in one space. They also suggested that although medial space has a profound effect on pedestrians, the concept of logical space orientation is unfortunately lacking for the research literature on how effective transitions between underground and ground-level spaces are created. pedestrian networks were lacking. Underground pedestrian systems related to the entrance and exit of systems as part of the built environment objects of the above issues related to access to the pedestrian environment for underground systems. When it comes to building walkable cities, research has been done [8]. Conducted with a focus on underground pedestrian areas but including interfaces with underground pedestrian areas at street level. The demand for a more walkable city presents future opportunities for underground pedestrian construction [10].

In conclusion, it is possible to better integrate underground pedestrian systems into the pedestrian network, create a more walkable city, and solve the vital issues of integrating the underground pedestrian system. Underground pedestrian systems and how they relate to the city's wider pedestrian network. The built environment has been identified as a key factor in promoting more walkable cities, and improvements towards the development of a possible underground pedestrian system are made through land use patterns, transport system and urban design factors. In the article, the influencing factors of the natural and built environment are also identified in the development of underground pedestrian systems [11].

The next phase of research focuses on the decisive influence of these influencing factors, collecting data for case studies, and from detailed data on land use patterns, transport systems and urban design, ultimately producing general principles of centralized urban land. conditions are created for walking on underground pedestrian systems.

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