



GEOGRAPHICAL INFORMATION SYSTEM FOR TOWN-PLANNING LANDMARKS TOURISTIC USING AND PRESERVING (Sistemul Informațional Geografic al punctelor de reper turistice ale orașului – folosirea lui în scop turistic și de conservare)

Lecturer Ph.D. Blinkova O.

V.N. Karazin Kharkiv National University

Lecturer Ph.D. Pavlenko A.

V.N. Karazin Kharkiv National University

Rezumat

Centrul orașului reprezintă de obicei imaginea și unicitatea acestuia printre alte orașe dintr-o țară sau printre orașele lumii. Fiecare oraș are propriile puncte de reper; în Ucraina majoritatea sunt moștenire sovietică. De exemplu, în Kharkiv există regiunea Ordzhonykydzevskij care a fost formată în anii 20-30 ai sec. XX. Cel mai interesant lucru este că există câteva districte centrale între strada numită Pace și Bulevardul Frunze.

Districtele au început să fie construite în 1930 urmând a fi un mic oraș “Noul Kharkiv”. Acest oraș socialist ar fi trebuit să fie locul în care ar fi locuit muncitorii noii fabrici de tractoare Kharkiv. Conform proiectului toate casele din district trebuiau să fie interconectate prin pasaje construite din beton și sticlă la nivelul celui de-al doilea etaj (nu s-a realizat din lipsa banilor). Apartamentele din “paradisul socialist” nu aveau bucătării echipate, toți locuitorii “Noului Kharkiv” (număr estimat la 50.000 oameni) urmând să mănânce în cadrul unor unități publice de alimentație – așa numitele “bucătării-fabrici”.

Cuvinte cheie

- Sistem Informațional Geografic;
- Punct de reper;
- Planificarea orașului;
- Oraș.

Abstract

The center of the city usually forms its image and uniqueness among the other cities of a country, and possibly among the cities of the whole world. Every city has its own landmarks; in Ukraine big part of them are of Soviet heritage. For example, in Kharkiv there is the Ordzhonykydzevskij region that was formed in the years 20-30s of XX century. The most interesting thing is that there are several central districts between the side-street called “Peace” and boulevard of Frunze.

The districts started to be built in 1930 as a so-called socialistic small town-satellite “New Kharkiv”. This socialistic town should have been a place for workers of recently built Kharkiv tractor factory to live in. According to the project all the houses in the districts should have been connected by transitions, which were planned to be built from the reinforced concrete and glass at the level of the second floor (it was not realized because of lack of money). Apartments in the “socialistic paradise” should not have had the specially equipped kitchens: all the inhabitants of “New Kharkiv” (planned number of about 50 thousand people) were to be fully served by establishments of public food consumption - so called “factory-kitchens”.

Keywords

- Geographical Information System;
- Landmark;
- Town-planning;
- City.

Town-planning features of “socialistic paradise” include absolutely symmetry: longitudinal and transversal axis divides it by four fully identical parts. Besides, all living buildings are located not along the streets, as it was usually built that time, but perpendicular to the main transport highways: to the “Peace” street and the “Second five-year” street. Such kind of placement of living buildings should provide the most favorable illumination, maximum defense from the noise, and green surrounding of the buildings.

In order to develop the information system, that could reflect the state of this cultural landmark, the Geographical Information System (G.I.S.) MapInfo Professional was used, developed by MapInfo Company (www.mapinfo.com). Data to develop the electronic map were collected with GPS-receiver Garmin ETrex Legend.

Created electronic map of socialistic town-satellite “New Kharkiv” could serve as a model of the territory (Figure 1). It gives to people, who make decisions, full and reliable information about the state of this valuable monument of the Soviet period in the history of Ukraine. The developed map can be changed very quickly and easily, reflecting the real state of the studied object. To the map we can also add additional thematic information. The created electronic map can be used as a basis to develop the “G.I.S. for town-planning landmarks and monuments” – complex software which could serve as a database of city architectural and town-planning touristic recourses. This G.I.S. also allows to control the state of landmarks and monuments, saving the elements of the world cultural heritage.



Figure 1. Electronic map of of socialistic town-satellite “New Kharkiv” (developed with MapInfo Professional)

During the project there was created a methodology of developing the GIS of city town-planning and architectural landmarks. It has 9 stages.

1. Determination of the district which includes the town-planning and architectural landmarks, on the basis of books, booklets and other literary sources.
2. Finding the paper maps of this districts and their scanning.
3. Co-ordinate alignment of the scanned map.
4. Evaluation of the states of the object, that are parts of the monument or landmark, using the following scale:

Mark	State
1	Satisfactory
2	Unsatisfactory
3	Emergency
4	Destroyed

5. Development of a thematic map according this scale (Figure 2).
6. Creation of a surface on the base of indexes of state evaluation (Figure 3).
7. Calculation of an integral evaluation of the state of a monument or landmark.
8. Conclusion concerning ability of use of an object for touristic aims.
9. Defining of the primary activities for renewal, restoration and saving of monument or landmark.

As a result of the evaluation there was found that the integral estimation of the state of “New Kharkiv” is 1,21. So this object of Soviet heritage is in rather good condition and can be used for excursions, walks, and studies of features of architecture of 30th XX century.

But, taking into consideration Fig. 2 and 3 it can be seen that the Eastern and Central part of “New Kharkiv” are in unsatisfactory state: there are different defects of facades, unsatisfactory state of communications, and destruction of some buildings. In addition, habitants that live in the buildings were changed the architectural image of this unique monument of town-planning by building ground floors of different sorts of annexes.

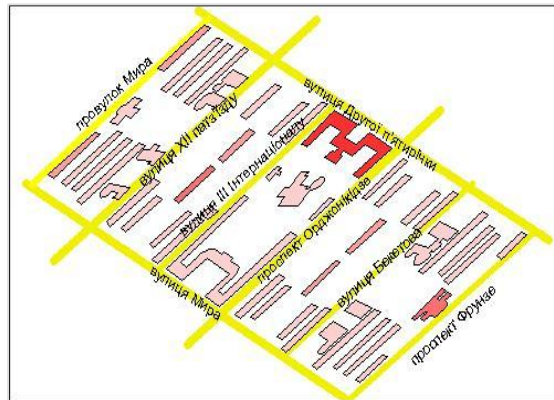


Figure 2. Thematic map shows states of buildings (pink - objects in satisfactory state, red - objects in emergency, deep red - destroyed)

To save this monument, foremost, it is necessary to conduct repair works and restore unsatisfactory and destroyed objects, and to stop changing of architectural image of objects by prohibition of conduct of extraneous building.

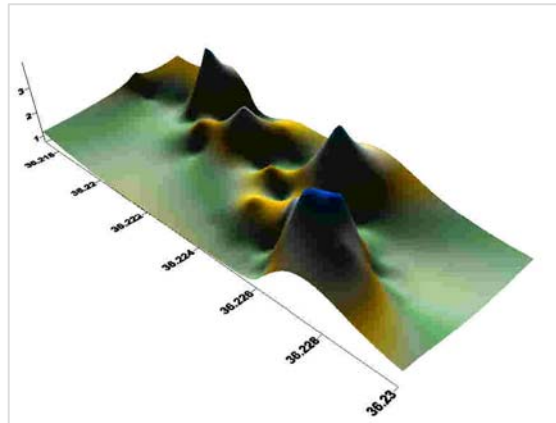


Figure 3. A surface built on the base of indexes of state evaluation (the highest spots correspond to destroyed objects and to objects in emergency)

Forming of specialized GIS creates pre-conditions for development of tourism in this district. During the project there was created a touristic route, which includes viewing of the most interesting objects of this monument of town-planning. In these conditions, interest for landmarks of Soviet period in Ukraine may be very high in the nearest future, such kind of monuments reflecting utopian thoughts of society in the years 20–30s of XX century, will be objects of a great interest.

Developing of GIS of the landmark can also help supervisory authorities to stop illegal economic activities on its territory.

Thus, new IT, in particular GIS and GPS, can be used for preserving both economic use of monuments and landmarks of town-planning.