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### Urban transformation applications

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#### Abstract

In this study, urban transformation practices are discussed within the scope of renewal, arrangement and development activities of existing buildings under natural disasters and accompanying risks. The problems and deficiencies experienced in practice were examined specifically in Osmaniye city center. Urban transformation has important benefits in terms of public interest and public health. It also increases the comfort levels of city dwellers through urban planning and infrastructure improvements. Despite its many positive effects on disaster-resistant city planning and the priority of life and property safety, it is sometimes possible to encounter very bad examples as a result of incorrect or incomplete applications. When the applications carried out in Osmaniye city center were examined, it was seen that island-based large-scale transformations were more accurate in terms of time, cost and environmental order compared to partially smaller and parcel-based on-site transformations.

### 1. Introduction

Increasing population rates over the years, needs in line with today's demands, renewal of cities, meeting social and cultural needs, earthquake and natural disaster risks, economic situations, etc. Due to these factors, urban transformation practices have become a necessity rather than a desire. We see that in our country, especially in recent years, practices have been implemented without sufficient planning. Defining urban transformation as only demolishing old and outdated buildings and building new ones in their place means omitting many other parameters, which will bring about negativities in the medium and long term. For this reason, urban transformation applications are based on social, cultural, history, belief, architecture, engineering, aesthetics, safe structures, legal and financial requirements, etc. It needs to be addressed with a multi-disciplinary approach covering many areas and implemented meticulously. Urban transformation includes different application forms such as renewal, rehabilitation, regulation, protection, revitalization and redevelopment (Şişman and Kibaroğlu, 2009). Urban transformation practices, on the other hand, support sustainable development in that they include interventions to protect and develop urban values and

ensure socio-economic and socio-cultural developments (Demirkıran, 2008).

It has been observed that there are many factors that negatively affect the sustainable development expected from the urban transformation practices carried out in Turkey to date (İnam and Basarir, 2009). As a solution to the problems experienced in practice, it is of great importance to first define the legal infrastructure and the duties and powers of practitioners. The recently enacted disaster law in our country covers the procedures and principles regarding the improvement, liquidation and renewal of lands and lands where disaster risk areas and risky structures outside these areas are located, in order to create healthy and safe living environments in accordance with science and art norms and standards. The implementation phase of this law is very important because it is far from the goal of generating surplus income in areas at risk of disaster and not only in the physical sense, but also in terms of sustainable planning of the urban space (Bozdağ, et al., 2011).

### 2. Method

When the applications carried out in Osmaniye city center are examined, it is seen that island-based large-scale transformations are more accurate in terms of time, cost and environmental order, compared to partially

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smaller and parcel-based on-site transformations. In the visual in Figure 1, it is aimed to demolish a building that has completed its service life in Ümraniye district of Istanbul province and replace it with a new building within the scope of urban transformation. Just like in this example, in many of our cities, urban transformation practices are seen as negative examples where the implementation is not evaluated on a large scale, but on a parcel basis, and the application is inadequately evaluated. Because, in parcel-based on-site transformations, only a limited number of structures will be intervened and the remaining structures in a large area will continue to exist. In this case, the security risk of existing buildings, their incompatibility with new zoning plans, visual pollution, etc. It will appear as an example of incomplete application with its effects. Of course, its transformation on a parcel basis contributes to the renewal and improvement processes. However, when the residential areas are considered as a whole, it is an example of incomplete and inadequate implementation.

In general, one of the most important reasons why parcel-based conversions are widespread is the flat owners and rights holders who are included in the Civil Code, the Law on the Transformation of Areas at Disaster Risk, the Law on Condominium Ownership and related legislation and regulations, which cause difficulties in practice. Parcel-based conversions have become more common due to the factors where disputes between them are frequently encountered. However, the issue of urban transformation, which is directly related to many areas, will help expand the field of application, especially by fulfilling some legal requirements. Finally, the announcement by the Ministry of Justice that the 2/3 requirement between flat owners will be regulated as 50+1 percent and come into force will contribute to making the application easier and broader (URL\_1). In this direction, it is aimed to progress the transformation processes more quickly and effectively with the Urban Transformation Directorate, which was announced by the Ministry of Environment, Urbanization and Climate Change and published in the official gazette (URL\_2).



**Figure 1:** Urban Transformation Application Demolition Study (URL\_3)

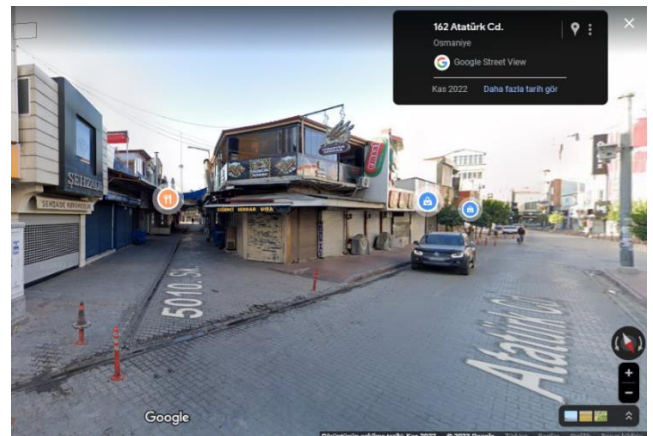
Figure 2 shows the current status of a large-scale area in 2022, specifically in Kocaeli Province, which has completely entered the urban transformation area and is ongoing. It is seen that urban transformation practices are still continuing in the province of Kocaeli, which was exposed to great destruction and damage in the 1999

Gölcük earthquake. Here, island-based large-scale transformations, which have more effective and accurate results compared to parcel-based on-site transformation, and the social, cultural, infrastructural opportunities, economic, spiritual etc. of settlements located in a wide area. Considering its effects, it seems to be a more accurate example of transformation. Based on this example, earthquake, flood, landslide etc. It is understood that cities that have experienced such situations before have implemented urban transformation practices more widely with these bitter experiences. In this regard, an urban transformation planning should be made specifically for Osmaniye province, which is among the 11 provinces affected by the last February 6 Kahramanmaraş earthquakes, and combined with post-disaster urban planning and transformation practices. Because in this way, taking permanent and correct steps in planning the future of the city will be an effective approach.



**Figure 2:** Island Based Transformation in Kocaeli Province (URL\_4).

The workplaces, called Shoemakers' Bazaar, which is one of the old settlements in the Central district of Osmaniye province, and also houses various tradesmen's shops, were put into transformation and restoration in line with urban planning and city silhouette in 2022. The necessary infrastructure and project work was completed and it was declared as an application area in the last period of 2022. The areas called Envar-ül Hamit (Great Mosque) and Hamamlar Street, which are located very close to this area and are of historical nature, were considered as a whole and work was started in this context (Figure 3).



**Figure 3:** Area Declared for Urban Transformation in Osmaniye Province (URL\_5)

Figure 4 shows the details of the development plan published by the Osmaniye Municipality Zoning and Urbanization Directorate in the area where transformation and restoration was declared. The fact that the workplaces, which are currently adjacent and have a maximum of 2 floors, are given as adjacent but 5-storey in the new zoning plan, raises questions about whether it is suitable for the historical, social and cultural spirit of this area. When it comes to urban transformation, the idea of simply demolishing the old building and building a new, multi-storey one in its place is generally not suitable for the needs of the region, as it brings with it some problems.

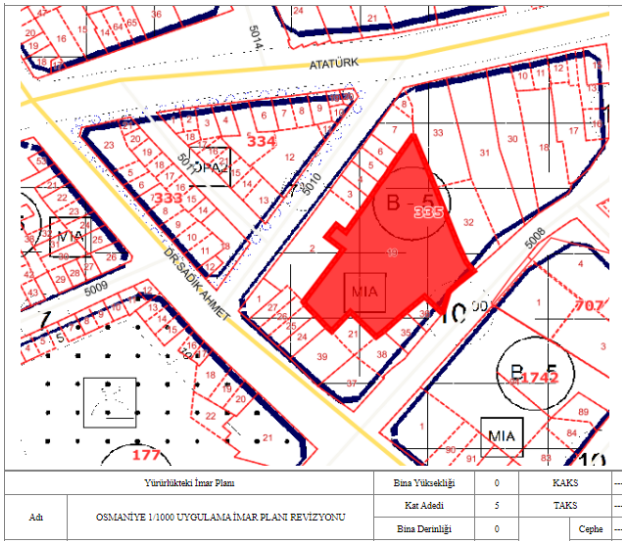


Figure 4: Current Development Plan of the Urban Transformation Area (URL\_6)

Figure 5 shows the pre-earthquake images of the 133-year-old historical Grand Mosque and Baths Street, which are located within the transformation and restoration areas. Again, in this area, work was started in the last period of 2022, with the necessary infrastructure works and the part declared as an urban transformation area as a whole. However, in the February 6 Kahramanmaraş earthquakes that occurred at the beginning of 2023, both the Grand Mosque and many workplaces in the area called Shoemakers' Bazaar were severely damaged. Therefore, urban transformation and restoration practices remain unclear until now.

While the necessary arrangements in historical buildings are being considered in coordination with the region declared as an urban transformation area before the earthquake, in accordance with the transformation area, if the restoration of the damaged historical buildings is necessary after the earthquake, it would be a better decision to take a new planning step, including demolition works (Figure 6).



Figure 6: Damage Image After the February 6 Earthquakes (URL\_8)

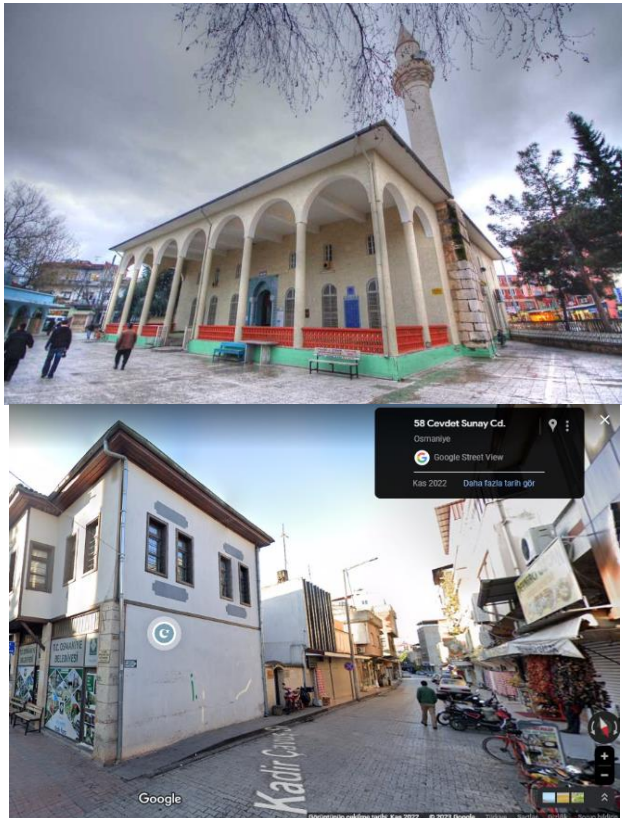


Figure 5: View of the Great Mosque and Baths Street (URL\_7)

### 3. Conclusion

Urban transformation practices, examples of which are frequently encountered in the world and in Turkey, are aimed at meeting human life and demands effectively, and positive and negative examples are frequently encountered. Although there are many difficulties in urban transformation applications that involve many disciplines, it is possible to carry out transformation applications based on human health and life safety, taking into account all kinds of disaster risks, especially throughout our country. In fact, taking the necessary precautions with some restrictions and prohibitions, which seem simple but of which we still encounter bad

examples in practice, will make very positive contributions. Stream bed of the urban transformation area, landslide and earthquake zone, etc. transformation areas located in risky areas such as:

- Despite the insistence of the local people, it should be completed elsewhere with security-first steps,
- Building structures that will provide uniform use services by imposing floor restrictions in areas with earthquake risk, preventing the design of lower floors as workplaces and upper floors as residences, which are examined under the discipline of civil engineering and causing soft floor irregularities,
- Again, limiting or prohibiting closed projections that increase the square meters of building usage on the ground floor and upper floors,
- Encouraging and supporting island-based large-scale transformations rather than parcel-based transformations,
- To pave the way for more convenient and faster implementation of the disputes that have lasted for many years and led to disagreements between flat owners by taking legal steps,

etc. If the situations are taken into consideration, it will have great effects on public health and development.

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