

***Extraction Indexes of Urban Distressed Structure  
(The Case Study: Western Area Decade Texture of Jahrom City)***

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**Extended Abstract**

**Introduction**

Distressed structures is one of the fourth types of urban distressed structures that because of physical distress, non appropriate ridden availability, services facility and existence of vulnerable urban infrastructure, has a less locational, environmental and economical value. Facilities and resources limitation of the urban renovation and rehabilitation matter, before every proceed need identification of regions distress rate and priority setting for every action and investment, in related with distressed structure of each city. Western areas of Jahrom City, those are among the oldest and main zones of this city that nowadays, oldness, nonresistant building materials and poorness of residents, day to day caused of more distress of physical structure. Generally, a set of various processes caused to outbreak of decadency, Weakness and inefficiency of these structures, and can not mention only one or more little factor for that.

**Methodology**

Rate identification of western areas of Jahrom City decadency via standard indexes with general and traditional methods is impossible because of the extent of region. In this research, study and extract the urban distressed structure indexes in the western area of Jahrom by using the weighting to concerned indexes and overlay of the layers in the (GIS) system are mentioned. Used data is collected from field surveys, land use map, municipality's experts and engineers' comments. After determined distress rate of region, by geographical information system and

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based on each of the indexes, and shown in respective tables, each of the indexes weighted by using concerned experts comment. Finally, all related layers to each of the indexes, overlaid in mentioned system. The questions that, this research seek to answer, are determining the general decadency status of studied area according to all the standard indicators of distressed structure identification. Also, which one of these indicators has a most influence on being distressed of studied structure area?

### **Results and Discussion**

Results showed that (order): permeability index, small treat and physical strength are most effective important factors on distress severity of studied region. Considering the total data, during the overlying operations, approximately 93.18 percent of study regions, having moderate to high distressed. Influenced by each of these indicators, In terms of small treat 65.16, permeability 60.09 and physical strength 53.57 percent of total studied area, have a high and severe distress. In this region, 78.1 percent of building's materials are brick and iron, clay and mud and impermanence buildings.

### **Conclusion**

Since the high impermeably, is the main problem of this area's structure, and Pedestrian and vehicle traffic encountered to problem, preparing the plans (with attracting the participation of residents) for passages structure reform, can be a great help to fluency of this structures residents commuting flow. In terms of physical strength, just 8.7 percent of this region's structure has a low distress. whereas, danger of debris collapsing is very high in buildings, it's inevitable matter that seriously deal with construction to forced on use the durable materials including concretely, metallic and etc, that cause to more resistance of buildings and reduces this dangers, during earthquake, rain, wind and so on. In relation with small treat structures, can largely reduce the level of distress in these structures with granting privileges persuasive like buy the small treat buildings by municipality with appropriate Prices and determine the requirements land use for them, specific discount in grant construction justification and reconstruction of these distressed structures type. In the total of this 12 hectare area, about 30 percent of it, in accordance with 5 articles was approved by commission. Since according to obtained information the area has a high distress, studding the results of this research revealed that much structure of this area in terms of distress almost has similar conditions to approved areas which are not mentioned in it and demands the necessity of revision and change in the approved area. By improving the physical and social quality of housing, In addition to better services to current residents of these structures, we can return these main inhabitants of these valuable structures, that are main identities of old structure, to their original places. In this regard, ought to, with structure recognition, on the one hand have identified deficiencies and on the other hand with potential recognition, provide area for revive, investment attracting and presence of people.

**Keywords:** *Index, Distressed Structure, GIS, Jahrom City, Western Area.*