

Table 1) influential criteria and sub-criteria in brownfields' assessment and prioritization

Influential characteristics classification	Criteria	Sub-criteria
Physical	Particles size (gradation)	Small scale: < 1 ha Medium scale: 1-5ha Large scale:>5ha
	Land condition/function	Without function: abandoned With industrial-workshop function Industrial-manufactory Industrial-workshop
	Previous land-use	High way and freeway-type 1 artery Collector and distributor- type 2 artery
	Access	Local and neighborhood
	Condition of the mass in the block	With worn and destructed buildings With worn but efficient buildings
Economic	Ownership	Private Public Governmental-military Endowment
Environmental	Zones contaminated to soil and water pollution	Various soil and water pollutants Visual and environmental pollution Environmental pollution
National plans	Fields position to the plan's zoning	Housing Protection At center Adjacent to center Far from center
	Fields position to the suggested spots in the plan	Not crossing the fields Crossing a small part of the fields Crossing a huge part of the fields
	Fields position to the suggested passages in the plan	

Table 2) the average distance of the brownfields from the zoning, suggested centers and passages in Mashhad development plan 2006

District	Plan's zoning	Suggested centers in the plan	Suggested passages in the plan
1	150	530	180
2	240	670	120
3	190	450	160
4	310	520	130
5	230	610	150
6	380	540	110
7	250	390	120
8	170	460	140
9	210	610	270
10	190	570	160
11	210	410	180
12	280	590	220
Samen	0	0	0

MC-MDS for ArcGIS

Data table/layer:

Calculation results

Calculate SAW evaluation score to: attribute field

Calculate TOPSIS evaluation score to: attribute field

Criteria and parameter definition for calculation

Use	Attribute field	Problem	Importance
<input checked="" type="checkbox"/>	Kochak_Meghyas	max	0.38
<input checked="" type="checkbox"/>	Motevaset_Meghyas	max	0.07
<input checked="" type="checkbox"/>	Bozorg_Meghyas	max	0.124
<input checked="" type="checkbox"/>	Matrouke	max	0.177
<input checked="" type="checkbox"/>	Sanati_Kargahi	max	0.53

Base data check

Total rows (alternative options) in data table/layer: units

Total selected rows (alternative options) in data table/layer: units

The sum of entered weights:

Figure 5) indicators' weighting process in multi-criteria spatial support system in ARC GIS 10.3

Table 3) the results of the multi-criteria spatial supporting system for setting Mashhad's districts priorities for the brownfields' redevelopment in 2009

District	SAW	TOPSIS	Priority	Redevelopment priority
1	2.012	0.221	11	Eleventh
2	6.065	0.198	7	Seventh
3	10.23	0.312	5	Fifth
4	8.03	0.222	6	Sixth
5	5.029	0.354	8	Eighth
6	12.09	0.413	4	Fourth
7	13.08	0.558	2	Second
8	2.096	0.103	10	Tenth
9	3.089	0.156	9	Ninth
10	11.02	0.446	3	Third
11	2.055	0.121	12	Twelfth
12	14.02	0.522	1	First
Samen	2.035	0.012	13	Last