

Table1. Pairwise comparison matrix, alternatives weights and consistency ratio of the data layers.

Alternatives	1	2	3	4	5	6	Weights
Geotechnical							
(1) Slope	1						0.250
(2) PGA	3	1					0.750
Consistency ratio: 0							
Structural							
(1) Density of buildings	1						0.122
(2) Age of buildings	3	1					0.320
(3) Type of buildings	4	2	1				0.558
Consistency ratio: 0.009							
Social							
(1) Employment status	1						0.0733
(2) level of education	1	1					0.1063
(3) Ratio of female population	2	1	1				0.1183
(4) Ratio of elderly population	3	2	2	1			0.1999
(5) Ratio of children	3	2	2	1	1		0.1999
(6) Population density	4	2	2	2	2	1	0.3022
Consistency ratio: 0.021							
Physical distance to needed facilities							
(1) Disaster management center	1						0.064
(2) Hospital	2	1					0.109
(3) Fire stations	2	1	1				0.126
(4) Police stations	3	2	1	1			0.202
(5) Road network	3	2	2	1	1		0.223
(6) Open spaces	4	3	3	1	1	1	0.272
Consistency ratio: 0.020							
Physical distance from dangerous facilities							
(1) High voltage electrical power transmission lines	1						0.147
(2) Gas pipelines	1	1					0.163
(3) Gasoline stations	2	2	1				0.326
(4) Danger-prone industrial establishments	3	2	1	1			0.362
Consistency ratio: 0.006							

Table2. Pairwise comparison matrix, criteria weights and consistency ratio of the data layers.

Criteria	1	2	3	4	Weights
Physical distance	1				0.150
Social	1	1			0.200
Structural	2	1	1		0.282
Geotechnical	3	2	1	1	0.368
Consistency ratio: 0.027					

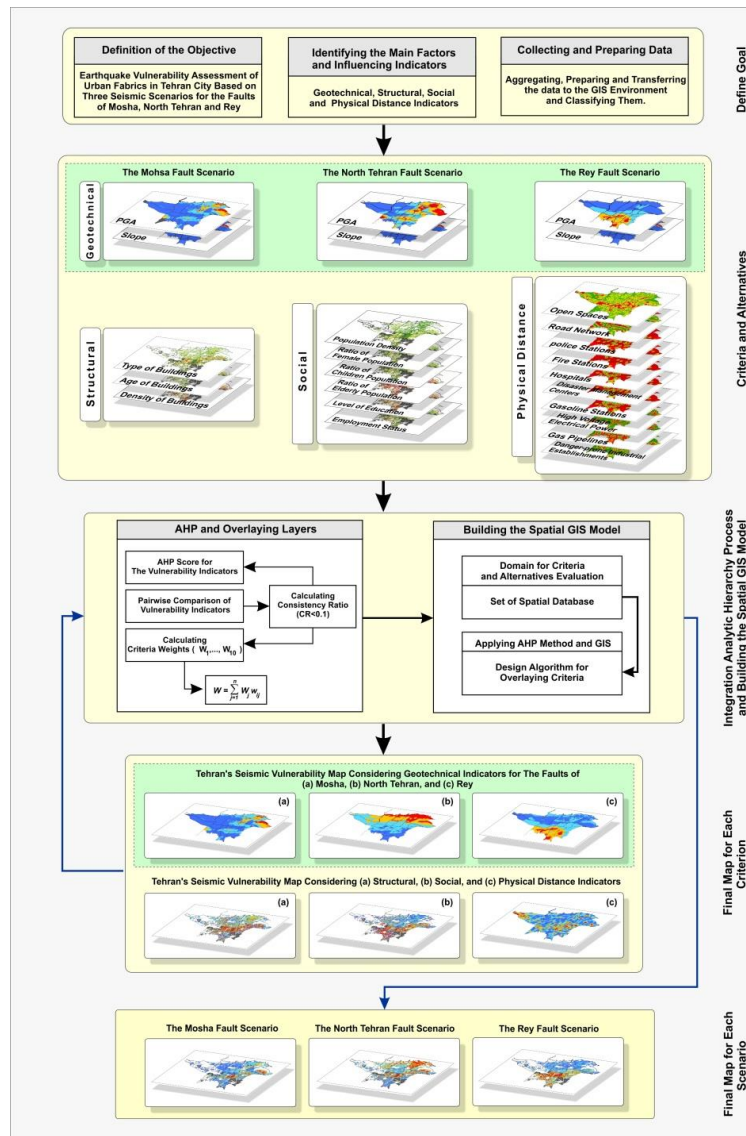


Fig.1. The process of seismic vulnerability assessment using AHP technique.