

**Studying and Providing a Suitable Model of Multi
Attribute Decision Making Method Based on Fuzzy
Logic for Ranking Effective Factors on Allocating
Municipalities' Budget**

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Abstract. This article projects the studies and researches of executive management of Qazvin Islamic Azad University on providing an appropriate mathematical model built on the outlooks of budgeting experts. Equipping such model aims at exploring balancing the current budgeting situation. Due to extending the results taken from the above mentioned algorithm, allocating budget to other consuming areas is only possible throughout considering the general and regional characteristics and weighing every indicator. This essay first identifies the ordinary budgeting indicators in Qazvin domain introduced according to the general and regional properties in four levels, and then one of the methods of

MADM models of indicators is optimized to obtain the reliable facts out of AHP study.

Keywords: Budget, Budgeting, MADM, AHP

Introduction

Economic experts and scientists have been dealing with serious challenges with problems in the system of allotting budgeting for long. Although the organizations responsible for the parliament economic commission and the organization of management and planning were obliged to work on the process of improving the budgeting system in the late of the first decade of revolution of Iran in 2004, the initial outcomes of this movement developed after almost two decades and led ministries to regard geographical and regional properties as one of the budgeting indicators and the first steps were taken to direct budgeting by regional approach along with the country's total policies.

Expanding organizations and broadening management systems have made budgeting developed from a traditional state to modern and advanced methods; consequently, it has been progressed into the foremost programming and mathematical interactions and particularly research models in operation. Today, the means of planning and controlling is efficiently used in budgeting with several purposes

Case Description

As mentioned before, the absence of appropriate facilities and solutions will clearly damage the configuration of the society. The government is trying to pose and conduct comprehensive social fair as designing its developing plans; it seems that if the regional and strategic characteristics of the domain of absorbing consumers don't come into account, domains with high potentiality of sharing out budget still catch up with poor budgeting besides returning remarkable parts of their sources to the government's treasury and struggle with difficulties and regional problems and bountiful public requirements.

Meantime, how does this problem appear itself? Maybe, the simplest altered image reflects neglecting regional characteristics, mismatching presents priorities to supply services going with these properties and totally disregarding measuring ratios in earmarking sources to each domain. This carries out consequences to arrange the absorbing domain of credits directing the factors below:

- ✓ not attracting the whole in different projects in spite of their incompleteness within a period

- ✓ disdaining the development of projects despite of internal priorities
 - ✓ handling projects with the least priority and influence on targets and civil missions
 - ✓ affecting the methods of partaking credits from tendencies and ideas that mainly mismatched with the city
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Literature Review

1. Budget

Budget is the most obvious effect of the government in practicing authority in a country and is annually deemed as essential evidence illustrating the attitudes of the government towards political, social, cultural and economic issues of the domain for the upcoming financial year throughout estimating incomes and other sources of supplying credit. Moreover, the operational expenses are organized in a matrix of the following titles:

- The budget of government
 - ✓ ○ incomes
 - ✓ ○ expenses
- the budget of governmental companies and banks
- the budget of their institution

2. Budgeting

Budgeting is the process of allocating limited sources to unlimited needs. Within the last seventy years, the budgeting methods have been changed and will be provided in the next parts:

- The Traditional Method

Pondering incomes, costs, and controlling expenses within the area of credits approved by the government.

- The Exceeding Method

The annual budgeting is concluded based on previous decisions and partial updating to avoid dealing with time-consuming tasks of entering and making documents and integrated budgeting by considering all changes.

- The Planning Method

In this approach, the budget is regulated according to the progress that the government has previously furnished for the next financial year and has taken the necessary approvals. In fact, budget holds a determining role both in advancing the program level and the quality of completing the program.

- The Zero-Base Method

In this method, managers should be prepared to face with a big challenge called defining the 0 to 100 required budgets in any project while laying out the

document. As there are varieties of projects, it looks to be a very hard and time-taking task.

- The Operational Budgeting Method

This is a new approach in devoting budget to organizations; in contrary to traditional methods of determining the way of distributing budgets and expending them, the purposes and axial projects are particularly considered in any organization. As traditional methods cannot be outfit in a matrix of a manner, it is essential to use scientific approaches like applying ways of decision making based on fuzzy logic.

Identifying and Ranking Indicators

The list and relationship of indicators have been collected here and featured without any damage and balance and practicing any of the presented MADM methods as below. It is obviously difficult to manage allotting credits only by having the following list usually dealt with people as final customers because as we know supplying attitudes of the whole society is arduous.

The indicators of level 4

- Traffic signs
- The number of intercity public transportations
- The condition of bus-stops
- Thoroughfares' lining
- Renewing public transportations
- Adjustment of public transportations with population
- Adjustment of stations with population
- The indicators of level 3
- Urban furniture
- Green space
- The condition of roads
- Collecting, land filling and recycling trash and rubbish
- Unexpected events (rain and flood)
- Public conveyance
- Trafficking the thoroughfares
- Sites for public exhibition
- Omni-buses
- Buses
- Taxis
- Condition of roads
- Number of ambulances
- Required land
- Mortuary
- The condition of machineries
- Installing fire fighting faucet (hydrant)
- Training personnel
- Strengthening constructions

- Under construction projects (civil plans)
- Implemented projects
- Directing surface waters
- Number of universities
- Number of hotels
- Saloons
- The indicators of level 2
- Urban services
- The condition of province's transportation
- Cemeteries
- Firefighting
- Reconstructive
- Population
- Urban texture
- City extent
- Municipal grade
- The potentiality of city's tourist attraction and attracting immigrants
- The condition of city's industrialization
- Civil degradation

The indicators of level1 (purpose)

Ranking priorities of effective factors on allotting the budget of municipality

So, some of the methods below are employed to be reduced and initially ranked in Phase I:

•Applying this process in the area of MADM methods like satisfactory scope considered as Conjunctive approach is one of the cut off methods.

•administering disjunctive procedure

•getting contribution from some experts' ideas to determine the primitive standard levels due to the following formula by putting some norms on top the category.

$$P=(1-Q)^{1/n}$$

In which:

n=the number of indicators

p=the expected percentage of accepted options

q=the ratio of rejected options

Since the computations done are too lengthy, they have not been recorded in this part.

The indicators of level1 (purpose)

Ranking priorities of effective factors on allotting the budget of municipality

The indicators of level2

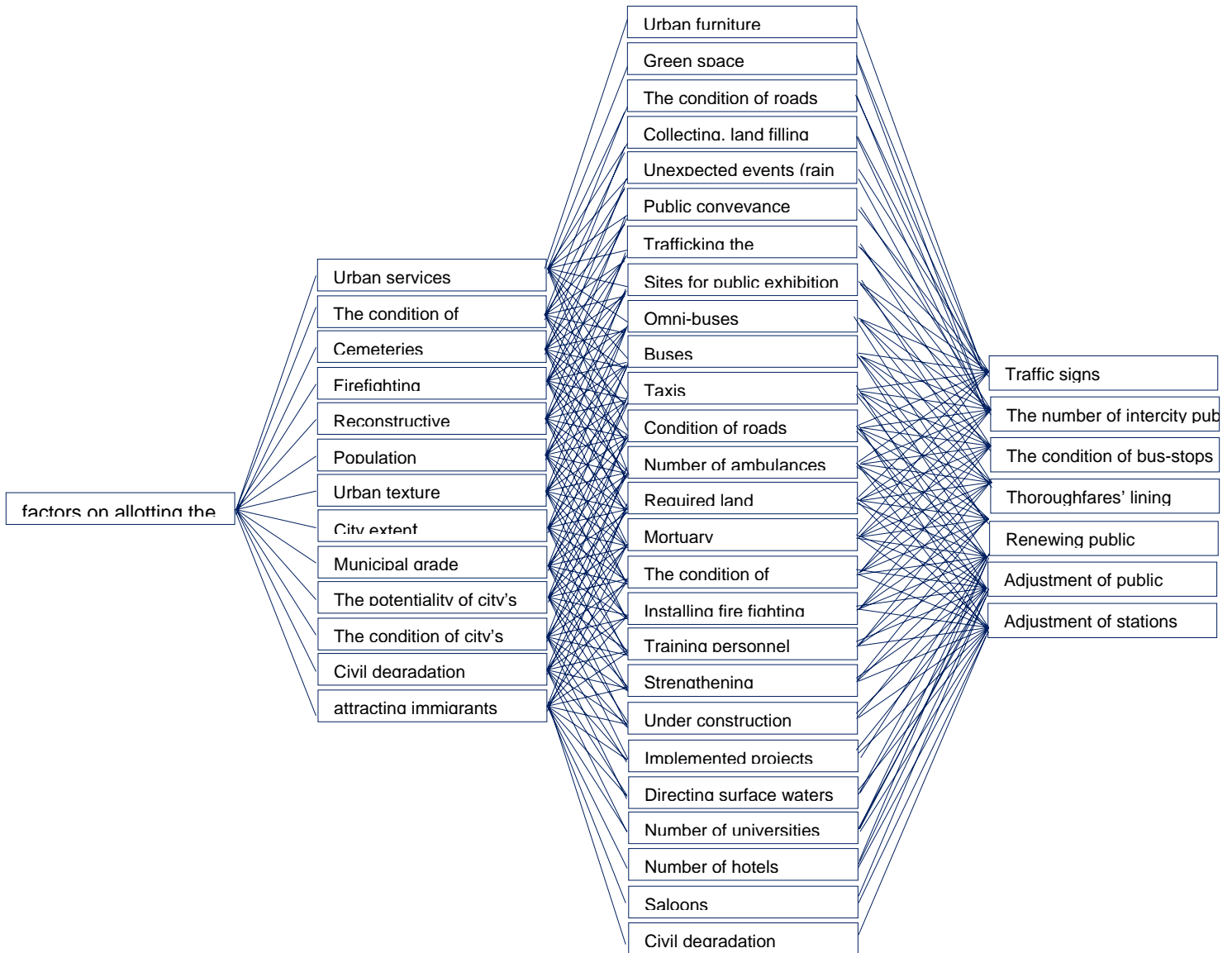
The indicators of level2

- Urban services

- The condition of province's transportation
- Cemeteries
- Firefighting
- Reconstructive
- Population
- Urban texture
- City extent
- Municipal grade
- The potentiality of city's tourist attraction
- Attracting immigrants
- The condition of city's industrialization
- Civil degradation

The indicators of level 3

- Urban furniture
- Green space
- The condition of roads
- Collecting, land filling and recycling trash and rubbish
- Unexpected events (rain and flood)
- The condition of machineries
- Installing fire fighting faucet (hydrant)
- Strengthening constructions
- Under construction projects (civil plans)
- Implemented projects
- Directing surface waters



1	2	3	4	5	6	7	8	9	10	11
Urban furniture	Green space	The condition of roads	Collecting, land filling and recycling trash and rubbish	Unexpected events	The condition of machineries	Installing fire fighting faucet	Strengthening constructions	Under construction projects	Implemented projects	Directing surface waters

	1	2	3	4	5	6	7	8	9	10	11	W1
1	1.000	6.000	8.000	0.167	0.333	3.000	0.143	4.000	6.000	4.000	3.000	0.116
2	0.167	1.000	0.200	7.000	0.200	0.250	4.000	0.250	5.000	7.000	5.000	0.096
3	0.125	5.000	1.000	5.000	0.125	4.000	0.250	2.000	4.000	6.000	7.000	0.108
4	6.000	0.143	0.200	1.000	6.000	6.000	4.000	0.167	7.000	4.000	5.000	0.129
5	3.000	5.000	8.000	0.167	1.000	0.167	0.125	7.000	0.200	6.000	0.111	0.105
6	0.333	4.000	0.250	0.167	6.000	1.000	9.000	3.000	5.000	0.250	0.143	0.100
7	7.000	0.250	4.000	0.250	8.000	0.111	1.000	6.000	1.000	3.000	6.000	0.124
8	0.250	4.000	0.500	6.000	0.143	0.333	0.167	1.000	7.000	6.000	0.500	0.080
9	0.167	0.200	0.250	0.143	5.000	0.200	1.000	0.143	1.000	8.000	4.000	0.050
10	0.250	0.143	0.167	0.250	0.167	4.000	0.333	0.167	0.125	1.000	0.250	0.023
11	0.333	0.200	0.143	0.200	9.000	7.000	0.167	2.000	0.250	4.000	1.000	0.070

1	2	3	4	5	6	7	8	9	10	11
Urban services	The condition of province's transportation	Cemeteries	Firefighting	Reconstructive	Population	Urban texture	City extent	Municipal grade	The potentiality of city's tourist attraction and attracting immigrants	Civil degradation

Urban Furniture

	1	2	3	4	5	6	7	8	9	10	11	W(2-1)
1	1.000	9.000	7.000	3.000	5.000	7.000	0.14	4.000	5.00	0.25	3.000	0.15
2	1.000	1.000	0.143	0.200	5.000	8.000	2.00	0.333	6.00	7.00	5.000	0.10
3	0.500	7.000	1.000	0.333	0.125	3.000	5.00	2.000	4.00	0.16	0.111	0.08
4	6.000	5.000	3.000	1.000	0.143	6.000	4.00	0.167	7.00	4.00	7.000	0.14
5	3.000	0.200	8.000	7.000	1.000	0.167	0.12	7.000	0.20	4.00	0.111	0.11
6	0.143	0.125	0.333	0.167	6.000	1.000	0.14	3.000	0.16	0.25	0.143	0.03
7	7.000	0.500	0.200	0.250	8.000	7.000	1.00	0.500	1.00	3.00	6.000	0.11
8	0.250	3.000	0.500	6.000	0.143	0.333	2.00	1.000	0.33	6.00	0.500	0.06
9	0.200	0.167	0.250	0.143	5.000	6.000	1.00	3.000	1.00	0.12	5.000	0.06
10	4.000	0.143	6.000	0.250	0.250	4.000	0.33	0.167	8.00	1.00	0.250	0.08
11	0.333	0.200	9.000	0.143	9.000	7.000	0.16	2.000	0.20	4.00	1.000	0.10

GREEN SPACE

	1	2	3	4	5	6	7	8	9	10	11	w(2-2)
1	1.000	7.000	7.000	3.000	6.000	7.000	4.000	4.000	5.000	0.250	0.143	0.156
2	0.143	1.000	0.143	0.200	7.000	0.200	4.000	0.111	6.000	7.000	4.000	0.082
3	0.143	7.000	1.000	0.333	0.125	3.000	0.250	2.000	4.000	0.167	5.000	0.074
4	0.333	5.000	3.000	1.000	0.143	0.333	3.000	7.000	5.000	4.000	6.000	0.112
5	0.167	0.143	8.000	7.000	1.000	0.167	6.000	7.000	0.200	0.143	0.125	0.121
6	0.143	5.000	0.333	3.000	6.000	1.000	0.143	3.000	0.167	0.250	0.143	0.064
7	0.250	0.250	4.000	0.333	0.167	7.000	1.000	0.500	1.000	3.000	6.000	0.076
8	0.250	9.000	0.500	0.143	0.143	0.333	2.000	1.000	0.333	6.000	0.500	0.063
9	0.200	0.167	0.250	0.200	5.000	6.000	1.000	3.000	1.000	0.125	5.000	0.069
10	4.000	0.143	6.000	0.250	7.000	4.000	0.333	0.167	8.000	1.000	0.250	0.101
11	7.000	0.250	0.200	0.167	8.000	7.000	0.167	2.000	0.200	4.000	1.000	0.100

THE CONDITION OF ROADS

	1	2	3	4	5	6	7	8	9	10	11	w(2-3)
1	1.000	0.500	6.000	7.000	0.200	6.000	0.111	6.000	7.000	4.000	0.143	0.130
2	2.000	1.000	0.143	0.167	6.000	0.143	0.200	0.143	0.125	7.000	4.000	0.056
3	0.167	7.000	1.000	0.333	0.125	0.500	0.250	0.500	1.000	3.000	6.000	0.061
4	0.143	6.000	3.000	1.000	0.143	7.000	3.000	0.250	5.000	4.000	6.000	0.114
5	5.000	0.167	8.000	7.000	1.000	7.000	6.000	4.000	0.333	6.000	0.500	0.170
6	0.167	7.000	2.000	0.143	0.143	1.000	0.143	3.000	0.167	0.250	0.143	0.050
7	9.000	5.000	4.000	0.333	0.167	7.000	1.000	0.500	1.000	3.000	6.000	0.135
8	0.167	7.000	2.000	4.000	0.250	0.333	2.000	1.000	0.333	6.000	0.500	0.079
9	0.143	8.000	1.000	0.200	3.000	6.000	1.000	3.000	1.000	0.125	9.000	0.106
10	0.250	0.143	0.333	0.250	0.167	4.000	0.333	0.167	8.000	1.000	2.000	0.048
11	7.000	0.250	0.167	0.167	2.000	7.000	0.167	2.000	0.111	0.500	1.000	0.078

COLLECTING, LAND FILLING AND RECYCLING TRASH AND RUBBISH

	1	2	3	4	5	6	7	8	9	10	11	w(2-4)
1	1.000	5.000	7.000	9.000	3.000	0.250	5.000	4.000	6.000	4.000	6.000	0.175
2	0.200	1.000	0.500	0.200	3.000	6.000	0.200	0.143	0.125	7.000	0.125	0.051
3	0.143	2.000	1.000	0.333	0.125	0.500	7.000	6.000	4.000	0.333	4.000	0.090
4	0.111	5.000	3.000	1.000	0.143	7.000	3.000	0.250	5.000	4.000	5.000	0.108
5	0.333	0.333	8.000	7.000	1.000	9.000	6.000	4.000	0.333	6.000	0.333	0.154
6	4.000	0.167	2.000	0.143	0.111	1.000	0.143	5.000	0.167	0.250	0.167	0.052
7	0.200	5.000	0.143	0.333	0.167	7.000	1.000	0.500	1.000	3.000	1.000	0.063
8	0.250	7.000	0.167	4.000	0.250	0.200	2.000	1.000	4.000	6.000	0.500	0.081
9	0.167	8.000	0.250	0.200	3.000	6.000	1.000	0.250	1.000	0.200	0.500	0.069
10	0.250	0.143	3.000	0.250	0.167	4.000	0.333	0.167	5.000	1.000	2.000	0.051
11	0.167	8.000	0.250	0.200	3.000	6.000	1.000	2.000	2.000	0.500	1.000	0.080

UNEXPECTED EVENTS (RAIN AND FLOOD)

	1	2	3	4	5	6	7	8	9	10	11	w(2-5)
1	1.000	5.000	8.000	7.000	3.000	6.000	5.000	4.000	6.000	7.000	6.000	0.196
2	0.200	1.000	0.333	0.125	0.500	7.000	6.000	4.000	0.333	4.000	0.125	0.082
3	0.125	3.000	1.000	0.333	0.143	7.000	3.000	0.250	5.000	4.000	5.000	0.090
4	0.143	8.000	3.000	1.000	9.000	6.000	4.000	0.333	6.000	0.333	5.000	0.138
5	0.333	2.000	7.000	0.111	1.000	9.000	5.000	0.167	0.250	0.167	0.333	0.096
6	0.167	0.143	0.143	0.167	0.111	1.000	0.500	1.000	3.000	1.000	0.167	0.022
7	0.200	0.167	0.333	0.250	0.200	2.000	1.000	0.500	1.000	3.000	5.000	0.040
8	0.250	0.250	4.000	3.000	6.000	1.000	2.000	1.000	4.000	6.000	4.000	0.095
9	0.167	3.000	0.200	0.167	4.000	0.333	1.000	0.250	1.000	0.200	0.500	0.034
10	0.143	0.250	0.250	3.000	6.000	1.000	0.333	0.167	5.000	1.000	0.250	0.052
11	0.167	8.000	0.200	0.200	3.000	6.000	0.200	0.250	2.000	4.000	1.000	0.076

THE CONDITION OF MACHINERIES

	1	2	3	4	5	6	7	8	9	10	11	w(2-6)
1	1.000	5.000	9.000	4.000	9.000	6.000	7.000	4.000	6.000	5.000	2.000	0.195
2	0.200	1.000	0.333	0.125	0.500	7.000	4.000	4.000	0.333	0.250	0.125	0.066
3	0.111	3.000	1.000	0.333	0.143	7.000	4.000	0.250	5.000	0.333	5.000	0.087
4	0.250	8.000	3.000	1.000	3.000	6.000	0.333	0.333	6.000	0.167	5.000	0.106
5	0.111	2.000	7.000	0.333	1.000	1.000	0.167	0.167	0.250	1.000	0.333	0.048
6	0.167	0.143	0.143	0.167	1.000	1.000	7.000	1.000	3.000	0.500	7.000	0.072
7	0.143	0.250	0.250	3.000	6.000	0.143	1.000	0.500	1.000	3.000	5.000	0.060
8	0.250	0.250	4.000	3.000	6.000	1.000	2.000	1.000	4.000	6.000	0.200	0.084
9	0.167	3.000	0.200	0.167	4.000	0.333	1.000	0.250	1.000	0.200	3.000	0.041
10	0.200	4.000	3.000	6.000	1.000	2.000	0.333	0.167	5.000	1.000	4.000	0.091
11	0.500	8.000	0.200	0.200	3.000	0.143	0.200	5.000	0.333	0.250	1.000	0.063

INSTALLING FIRE FIGHTING FAUCET (HYDRANT)

	1	2	3	4	5	6	7	8	9	10	11	w(2-7)
1	1.000	4.000	8.000	4.000	5.000	1.000	7.000	5.000	5.000	7.000	5.000	0.174
2	0.250	1.000	3.000	4.000	0.200	0.250	5.000	6.000	0.333	8.000	0.143	0.096
3	0.125	0.333	1.000	0.333	3.000	7.000	2.000	5.000	0.250	1.000	0.200	0.069
4	0.250	0.250	3.000	1.000	7.000	6.000	0.333	0.333	6.000	0.250	2.000	0.081
5	0.200	5.000	0.333	0.143	1.000	8.000	6.000	7.000	0.250	4.000	0.333	0.112
6	1.000	4.000	0.143	0.167	0.125	1.000	5.000	1.000	3.000	5.000	1.000	0.070
7	0.143	0.200	0.500	3.000	0.167	0.200	1.000	4.000	1.000	3.000	7.000	0.064
8	0.200	0.167	0.200	3.000	0.143	1.000	0.250	1.000	4.000	6.000	6.000	0.062
9	0.200	3.000	4.000	0.167	4.000	0.333	1.000	0.250	1.000	0.200	0.200	0.048
10	0.143	0.125	1.000	4.000	0.250	0.200	0.333	0.167	5.000	1.000	0.250	0.041
11	0.200	7.000	5.000	0.500	3.000	1.000	0.143	0.167	5.000	4.000	1.000	0.083

STRENGTHENING CONSTRUCTIONS

	1	2	3	4	5	6	7	8	9	10	11	w(2-8)
1	1.000	8.000	9.000	3.000	0.200	0.300	7.000	9.000	0.250	1.000	4.000	0.161
2	0.125	1.000	5.000	6.000	9.000	0.250	0.200	0.200	4.000	8.000	6.000	0.118
3	0.111	0.200	1.000	5.000	4.000	7.000	2.000	5.000	0.250	1.000	2.000	0.097
4	0.333	0.167	0.200	1.000	7.000	4.000	0.333	0.333	6.000	0.250	5.000	0.071
5	5.000	0.111	0.250	0.143	1.000	9.000	2.000	7.000	0.250	8.000	9.000	0.135
6	3.333	4.000	0.143	0.250	0.111	1.000	5.000	4.000	0.200	5.000	0.200	0.083
7	0.143	5.000	0.500	3.000	0.500	0.200	1.000	4.000	1.000	3.000	0.333	0.063
8	0.111	5.000	0.200	3.000	0.143	0.250	0.250	1.000	4.000	6.000	6.000	0.076
9	4.000	0.250	4.000	0.167	4.000	5.000	1.000	0.250	1.000	0.200	0.200	0.074
10	1.000	0.125	1.000	4.000	0.125	0.200	0.333	0.167	5.000	1.000	0.250	0.045
11	0.250	0.167	0.500	0.200	0.111	5.000	3.000	0.167	5.000	4.000	1.000	0.059

UNDER CONSTRUCTION PROJECTS (CIVIL PLANS)

	1	2	3	4	5	6	7	8	9	10	11	w(2-9)
1	1.000	8.000	9.000	3.000	3.000	8.000	0.200	9.000	6.000	3.000	1.000	0.174
2	0.125	1.000	5.000	0.111	0.111	0.250	0.200	5.000	0.200	8.000	6.000	0.077
3	0.111	0.200	1.000	0.200	2.000	0.500	0.250	6.000	3.000	0.200	0.111	0.043
4	0.333	9.000	5.000	1.000	7.000	4.000	0.333	0.333	0.333	3.000	5.000	0.113
5	0.333	9.000	0.500	0.143	1.000	9.000	8.000	9.000	7.000	6.000	7.000	0.186
6	0.125	4.000	2.000	0.250	0.111	1.000	5.000	4.000	4.000	7.000	0.167	0.088
7	5.000	5.000	4.000	3.000	0.125	0.200	1.000	4.000	4.000	4.000	2.000	0.114
8	0.111	0.200	0.167	3.000	0.111	0.250	0.250	1.000	4.000	4.000	0.250	0.039
9	0.167	5.000	0.333	3.000	0.143	0.250	0.250	0.250	1.000	0.200	4.000	0.051
10	0.333	0.125	5.000	0.333	0.167	0.143	0.250	0.250	5.000	1.000	4.000	0.052
11	1.000	0.167	9.000	0.200	0.143	6.000	0.500	4.000	0.250	0.250	1.000	0.084

IMPLEMENTED PROJECTS

	1	2	3	4	5	6	7	8	9	10	11	w(2-10)
1	1.000	3.000	4.000	2.000	9.000	6.000	0.200	1.000	7.000	9.000	9.000	0.148
2	0.333	1.000	3.000	0.200	1.000	5.000	6.000	0.250	3.000	5.000	4.000	0.094
3	0.250	0.333	1.000	0.250	2.000	6.000	5.000	0.167	0.333	2.000	4.000	0.072
4	0.500	5.000	4.000	1.000	0.111	0.250	1.000	8.000	7.000	0.167	0.200	0.093
5	0.111	1.000	0.500	9.000	1.000	7.000	2.000	9.000	4.000	8.000	7.000	0.159
6	0.167	0.200	0.167	4.000	0.143	1.000	0.200	5.000	0.250	0.143	6.000	0.060
7	5.000	0.167	0.200	1.000	0.500	5.000	1.000	2.000	0.250	5.000	1.000	0.073
8	1.000	4.000	6.000	0.125	0.111	0.200	0.500	1.000	4.000	0.250	0.250	0.061
9	0.143	0.333	3.000	0.143	0.250	4.000	4.000	0.250	1.000	4.000	0.250	0.059
10	0.111	0.200	0.500	6.000	0.125	7.000	0.200	4.000	0.250	1.000	0.200	0.073
11	0.111	0.250	0.250	5.000	0.143	0.167	1.000	4.000	4.000	5.000	1.000	0.066

DIRECTING SURFACE WATERS

	1	2	3	4	5	6	7	8	9	10	11	w(2-11)
1	1.000	3.000	7.000	4.000	8.000	2.000	7.000	6.000	5.000	7.000	7.000	0.186
2	0.333	1.000	6.000	5.000	0.167	5.000	7.000	0.111	6.000	0.143	0.250	0.117
3	0.143	0.167	1.000	0.200	4.000	0.125	6.000	5.000	4.000	0.333	0.167	0.072
4	0.250	0.200	5.000	1.000	7.000	6.000	0.333	5.000	3.000	0.250	4.000	0.103
5	0.125	6.000	0.250	0.143	1.000	7.000	6.000	4.000	0.333	6.000	0.020	0.103
6	0.500	0.200	8.000	0.167	0.143	1.000	0.143	3.000	0.167	0.250	6.000	0.069
7	0.143	0.143	0.167	3.000	0.167	7.000	1.000	1.000	1.000	3.000	2.000	0.062
8	0.167	9.000	0.200	0.200	0.250	0.333	1.000	1.000	0.250	6.000	1.000	0.058
9	0.200	0.167	0.250	0.333	3.000	6.000	1.000	4.000	1.000	0.125	0.125	0.054
10	0.143	7.000	3.000	4.000	0.167	4.000	0.333	0.167	8.000	1.000	2.000	0.099
11	0.143	4.000	6.000	0.250	50.000	0.167	0.500	1.000	8.000	0.500	1.000	0.196

Then:

w(2-3)	w(2-4)	w(2-5)	w(2-6)	w(2-7)	w(2-8)	w(2-9)	w(2-10)	w(2-11)	w(1)	W(2)*W(1)
0.130	0.175	0.196	0.195	0.174	0.161	0.174	0.148	0.186	0.116	0.169
0.056	0.051	0.082	0.066	0.096	0.118	0.077	0.094	0.117	0.096	0.083
0.061	0.090	0.090	0.087	0.069	0.097	0.043	0.072	0.072	0.108	0.078
0.114	0.108	0.138	0.106	0.081	0.071	0.113	0.093	0.103	0.129	0.110
0.170	0.154	0.096	0.048	0.112	0.135	0.186	0.159	0.103	0.105	0.123
0.050	0.052	0.022	0.072	0.070	0.083	0.088	0.060	0.069	* 0.100	= 0.058
0.135	0.063	0.040	0.060	0.064	0.063	0.114	0.073	0.062	0.124	0.078
0.079	0.081	0.095	0.084	0.062	0.076	0.039	0.061	0.058	0.080	0.072
0.106	0.069	0.034	0.041	0.048	0.074	0.051	0.059	0.054	0.050	0.062
0.048	0.051	0.052	0.091	0.041	0.045	0.052	0.073	0.099	0.023	0.066
0.078	0.080	0.076	0.063	0.083	0.059	0.084	0.066	0.196	0.070	0.089

Urban services	0.169
The condition of province's transportation	0.083
Cemeteries	0.078
Firefighting	0.11
Reconstructive	0.123
Population	0.058
Urban texture	0.078
City extent	0.072
Municipal grade	0.062
The potentiality of city's tourist attraction and attracting immigrants	0.066
Civil degradation	0.089

As observed above, the priorities classified as first urban services, next civil services and last firefighting services to be allocated for budget in the hierarchal analyzing method.

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