Using spatial resource planning in geo-economics and sustainable development of the city

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Introduction

SRP (Spatial resource planning) used in the infrastructure. This type of planning is operational for management of the facility and asset of the equipments to manage devices and their integrity such as PIMS (pipeline integrity management system).the terminology of SRP is to manage from detail data of an element in the infrastructure within a data model which is as sophisticated as the real world. There are a lot of computer applications that helps engineers to manage the infrastructure like telecom, water pipe, sewerage and other urban facilities. This paper describes the way to use the SRP term for managing a city geopolitically and geo-economically.

Urban management

The main structure of urban management is the triangle of budget, tax and the urban executive plans which is driven by the municipality. In this triangle the municipality gets tax form the citizens to arrange the budget for urban development plans to make the city a better place for their own. These plans for better services, better land usage allocation, better health care system, better environment and so on. The upgrade of the services in the urban region ranks the cities priorities for investment the people to live and makes products of different kinds to make money. In the other hand municipality as a local government helps the governments to initiate a lot of jobs and a sustainable development of and investment.

The engine of this cycle is tax , the main question is the way and amount of the tax which should pay by citizens , the geopolitical and geo-economical concepts using in a computer Geospatial analysis can helps government to get fair tax from the citizen , the citizenship is a location base term , for instance a citizen of Tehran shows the citizen lives in Tehran ,Iranian capital and in the world map anybody can allocate his place and it makes the population for the macro point of view for a geo-politician.

Using SRP helps geo-politician to have the macro data and information of geospatial from detail to macro, it means they are using the integrated data from detail in the macro so they can have better prospect of their analysis to help the politics.

When we have a citizen in Tehran and we want to get tax as municipality for triangle of the management there are different ways to get tax .1- to get a constant tax form his income for the municipality .2- to get tax from his usage of facility 3- the both way

How SRP can help the urban management

The main question is how to get tax form the usage of facilities which is very important in getting a fair tax from citizens, but this is very hard to say who uses which facilities.

To answer this question the SRP can help.

In the SRP computer applications you have the very detail urban maps which are contains of all urban facilities and infrastructure in the context of the urban environment, and this could help to calculate a citizen tax , in a very simplified instance lets put the distance of a facility to a citizen home as the cost of the facility usage , by this term, existence of a park near of a citizen houses shows more advantages for the citizen and he should pay more tax than the one who is far from the park facilities. but the socio concepts and range of the population age and gender will effect of their facility usage of this park as well.

Data and application model, for cybernetic application

In SRP we can use computer aided system engineering to makes E&R models for Geospatial applications ,to calculate the cost of all Urban facility affected to the citizen life and calculate the fair tax.
Trough this model we can manage the facility advantages and disadvantages base on the customs and culture of the people in an urban district (socio –economic map).
Overlaying the socio-economic layers with facilities map and infrastructure shows the exact advantage of facility for a district and distance trough aerial and pedestrian can become the main cost of the facility to calculate value of the advantage and disadvantages in the specific urban districts by using a model. The best model to calculate this costs is cybernetic model , the cybernetic model for calculation is very closely depend on the observation and data , more information form the values in the socio –economic and other layer causes more accuracy of the calculations.

Calculation
Managing a matrix of the parameters which are effective on the cost of the facilities is the first steps. The most effective parameters in the hole city will draw a matrix , these parameters can be increase or decrease by observation of land cost , the land cost (parcel cost) in area is related to these parameters , and also the parameters related to the socio –economic of the region , in this step the observations of parcel cost of specific locations of the citizens evaluate the cost of the facilities and these observations as samples used to estimate other citizen location cost trough aerial and pedestrian distance.

Planning
Reversing the concepts of the tax calculation lets planners manage the distribution of urban facilities, the location based tax management concepts using SRP is the way for reallocation of the urban facilities and land use in new plans and urban reconstruction meanwhile this will help to guaranty the strategic urban plans. Imagine with the force of tax the business building can only manage in the areas that has already is prepared as business area (which has normal tax), otherwise the investors should pay huge taxes and according to lower benefit they naturally preferred to build in the prepared area for their requirements and economic plans.

Conclusion
The urban of today's world need different concepts for management for better development , base of the new concepts all the planners are trying to innovate new methods to change cities to best places for life of the citizens.

The budget, tax and plans are all related together which can be manage within SRP computer applications.
The SRP computer applications manage the urban data from detail to the top for urban mangers by different models such as cybernetic.
The cybernetic model are high dependent on the observations and can calculate cost of the facility usage of the citizens and lets the urban managers use it as a measuring scale for tax, and in a reverse following this method the parameters of the method can also show the affects of the urban managers decision as a urban spatial decision support system and simulate the plans.
The location based tax is the way to guaranty reallocation of the urban facilities and causes the reconstruction of the city goes trough the strategic plan of the city.
This process within the simulation of the computer aided system engineering helps economically local governments develop the countries in the macro point of view.