Property & Garbage Tax Collection via Address Information Systems: A City Case Study Trabzon, Turkey

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1- INTRODUCTION

Local taxes play a major role in financing services and reducing disparities across geographic regions and between different kinds of municipalities and social groups. Property taxes and garbage taxes are the most yielding tax between these. So, collecting these taxes exactly is crucial for local governments.

Principal cause of this lost is unavailability of any contact with those people who do not declare their property or do not pay for these taxes.

In pilot region studies, it is also seen that, address based Geographical Information Systems (GIS) applications are used for eliminating this lost.

2- CURRENT SITUATION IN TURKEY

Property tax and garbage tax two-thirds of the municipality tax income. Property taxes are the most important source of income and play important revenue role in municipalities’ services in Turkey. In Turkey, owners are legally responsible for payment of property taxes, and occupiers of residential property are responsible for payment of garbage taxes.

In the researches, it is appearing that, 17% of properties are not pay property taxes, 23% of properties are not pay garbage taxes. The lost caused by these figures is equal to 32% of annually collected taxes.

3- ADDRESS INFORMATION SYSTEMS

Information systems are used respect to necessities in different areas. One of these areas is Address Information System (AIS) in which following querying and displaying of numbering processes are realized in urban information system applications.

- GOVERNMENT
- MUNICIPALITY
- URBAN INFORMATION SYSTEM
- ADDRESS INFORMATION SYSTEM
- ADDRESS NUMERATING SYSTEM

ADDRESS

Most of the things that human society cares about happen at addresses. Where people live, work and play. Where most economic activity takes place. Where crime happens. Where fires occur. Where goods are bought and sold. Where products are delivered. Where services are rendered. The address allows us to describe these locations in a way that other people can understand.

ADDRESS COMPONENTS

data composed of multiple qualifiers. These qualifiers are separated by different operators like:

ADDRESS STANDARD

<table>
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<tr>
<th>COMPONENTS</th>
<th>n (%)</th>
<th>c (%)</th>
<th>m (%)</th>
<th>s (%)</th>
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<tr>
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<tr>
<td>house number</td>
<td>100</td>
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</tr>
</tbody>
</table>

1. Society, Organisation
2. Company Name
3. Street Name
4. Building
5. House Number
6. City Name
7. Country Name

PRETORIA SOUTH AFRICA
TRABZON TURKEY
4- TRABZON CITY CASE STUDY

CURRENT SITUATION

There are approximately 22,323 buildings and 75,604 departments in Trabzon City. The Municipal Authority had collected approximately 3,500,000 USD for property taxes and 500,000 USD for garbage taxes in 2003. But in this year, Trabzon Municipality collected 4,500,000 USD for property taxes and 500,000 USD for garbage taxes. That is to say, the municipal authority has approximately 1,750,000 USD annual tax loss.

5- CONCLUSION

The development of information systems and the accompanying extensive databases, many of them involving desktop computers, has created a technological revolution enabling direct use of property and garbage taxes problem solving. These tax problems are often characterized as complex, dynamic, and difficult. Solving them, if solutions are possible, is a multi-step process with strong emphasis on deductive reasoning and decision making, both of which are adopted from the finance and economic disciplines. This article develops a model in order to assess how Address Information Systems may contribute to property and garbage taxes problem solving. Using the address data and address databases, it was shown that address-based information systems have the potential to contribute to property and garbage taxes problem solving.

THANKS...