

# Crime Mapping in Turkey

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# INTRODUCTION

Crime mapping has long been an integral part of the crime analysis.

Although a wide variety of statistical and analytic techniques exist to examine crime problems, analysts are increasingly using GIS and mapping software to identify, explore and understand areas of crime concentration.

Computerized crime maps are used to archive, manipulate and query the crime data; to update crime patterns; to make spatial analysis and to develop crime prevention models.



Population is around 70 Million

67% of the population is expected to live in urban centers.

There are 81 administrative provinces. Each province is divided into districts, for a total of 923 districts.



The three biggest cities: Istanbul (13 million), Ankara (7 million) and İzmir (4 million).

Other important cities: Bursa, Adana, Trabzon, Malatya, Gaziantep, Erzurum, Kayseri, İzmit, Konya, Mersin, Eskişehir, Diyarbakır, Antalya and Samsun.



Istanbul is the biggest city and the is the financial, economic and cultural heart of the country with official population of 13 million.

Police, which is responsible for the security in the urban areas, is headquartered by the General Directorate of Security (located in Ankara) .

All 81 administrative provinces are independent and distinct national police departments.

Most of the Province Police have computer center and computer centers are responsible of computerized crime mapping.

However, among 81 province police departments,  
only 4 of them are actively producing crime maps:

- Istanbul
- Ankara
- Bursa
- Konya

2 more departments have recently started  
establishing GIS-based crime mapping

- Denizli
- Eskişehir

- Bursa Police Department is the first province police, which started using GIS in 1999. It was based on BEMTAP-2000 (Technological Adaptation Project of Bursa Police Department) which was previously established in the same year.

The department generates crime databases, crime maps, crime analysis, geographic profiling, car tracing-tracking with GPS and emergency plans in case of natural disasters.

- Konya Police Department is capable of making crime maps and crime databases to analyze crime. Konya Police Department is developing in GIS to use the technology more effectively.
- Ankara Police Department is also storing the crime incidents in GIS databases to visualize the crime incidents in digital maps.

- Istanbul Police Department is capable of using GIS, however they are basically concerned with the use of MOBESE (Mobile Electronic System Integration) especially to keep streets safer with 584 cameras with an aim to increase the number of cameras to 3000.
- Denizli Police Department has recently started a new project to establish background to start GIS-based crime mapping and crime analysis to prevent the crime.
- Eskişehir Police Department is also in favor of crime maps and supporting the studies based on Geographical Information Systems by supplying the necessary data.

Recently, General Directorate of Security have established a new center called 'Crime Analysis Centre' with the aim of:

- Making map-based point and regional crime analysis integrated with Geographical Information Systems.
- Data integration
- Spatial Data Analysis
- Geographic Profiling
- Crime Mapping

The center is trying to construct necessary architecture for data integration and have pilot work on making digital crime map of Turkey.

6 cities considering the whole 81 cities is really a small number. In fact, there are several reasons not being able to make use of Geographical Information Systems:

- Having inadequate information about GIS and computerized crime mapping and hence negative opinion about the use of new technologies.
- The lack of enough infrastructure about the hardware and software system.
- The lack of enough qualified personnel in the departments.

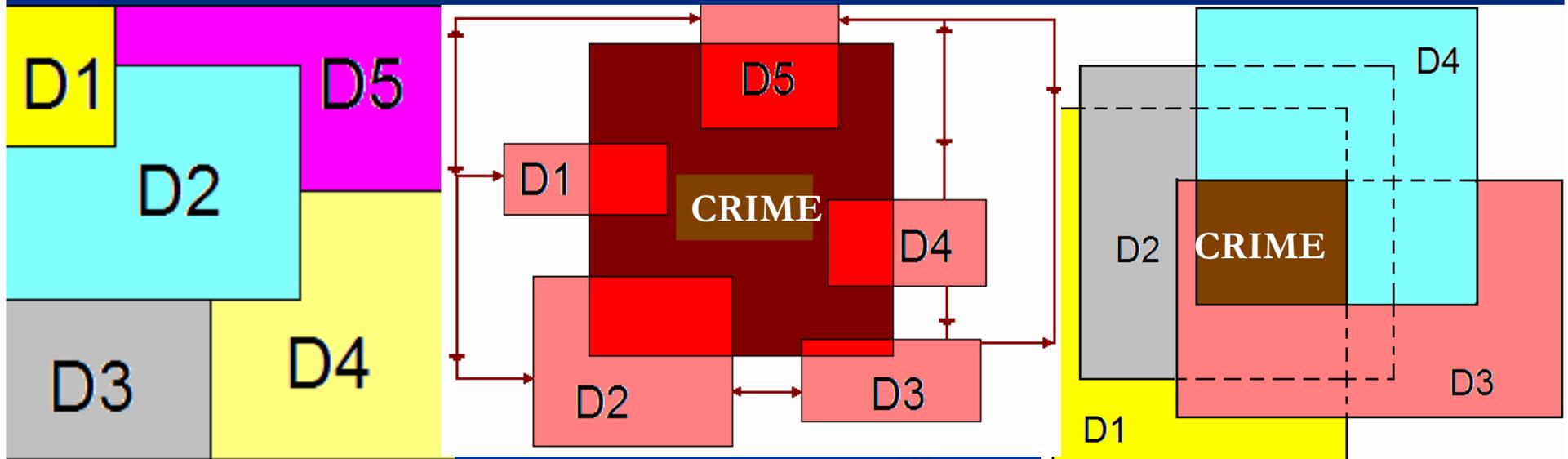
# Project of spatial analysis of crime and development of crime prediction models for crime prevention

## Partners

- Geodetic and Geographic Information Technologies, METU
- City and Regional Planning Department, METU
- Department of Sociology, METU
- Society of Psychology, Criminal Psychology
- General Directorate of Security

# Multidisciplinarity, Interdisciplinarity and Transdisciplinarity

CRIME

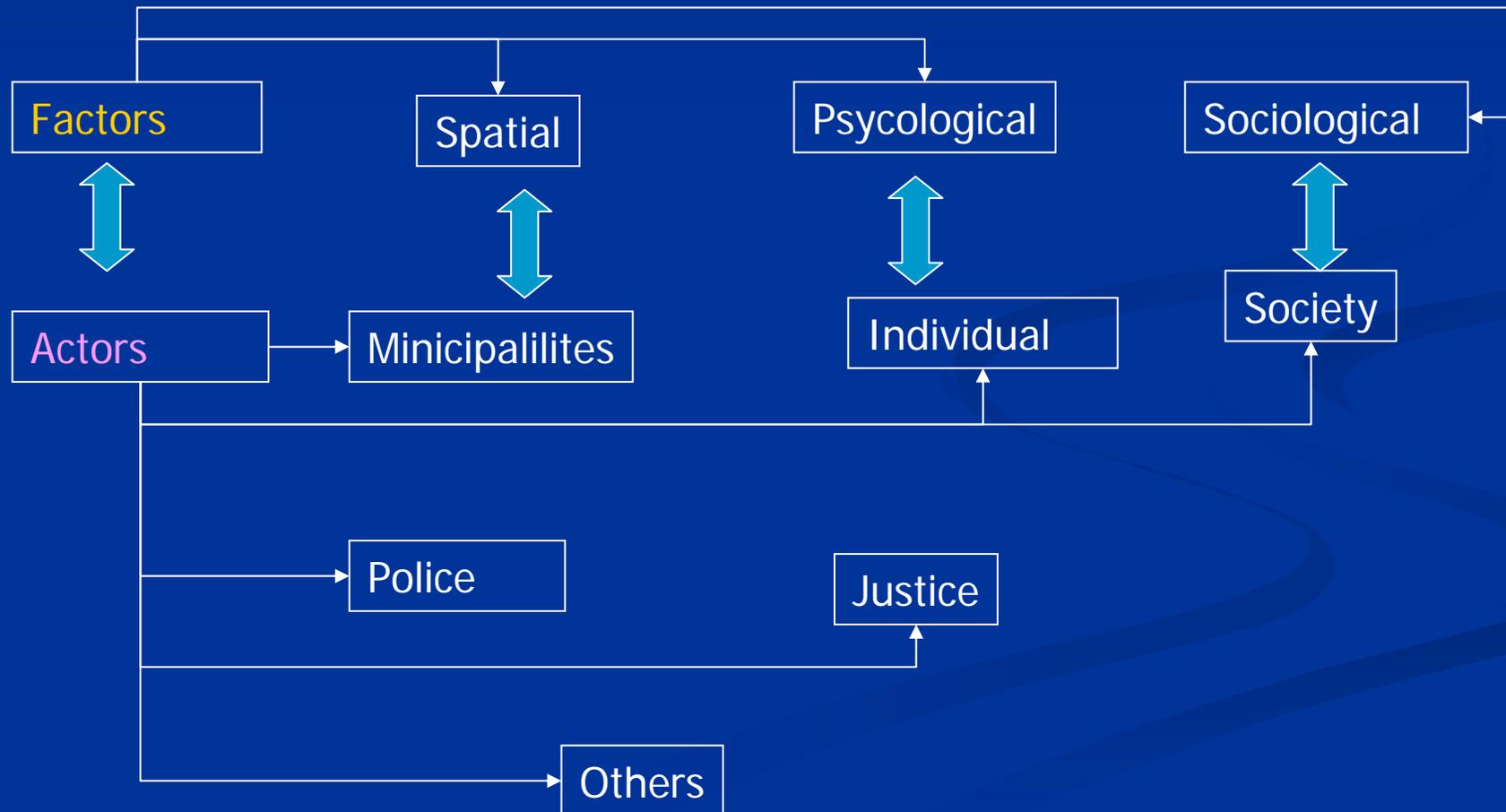


Multidisciplinarity

Interdisciplinarity

Transdisciplinarity

# Project of spatial analysis of crime and development of crime prediction models for crime prevention



# Main Challenges

- Most of the time urban areas lack in base maps, even if they have, the municipalities are not willing to share their data.
- There is almost no collaboration between the institutes even within the institution for sharing data and information.
- Hence every institution supposed to collect their own data leading to inefficient use of resources
- Sustainability of the personnel
- Very few and generally no collaboration between research institutes and universities.
- No census geography
- State statistical institute does not provide demographic data in neighborhood level.
- No national crime survey, leading to dependence on police records

Thanks  
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