POLICE FORCE ALLOCATION IN RURAL AREAS:

A SPATIAL INTEGRATIVE MODEL

ESRI Users Conference 2014

July 2014
yonatan.ilan@police.gov.il
The goal: efficient reallocation of police force in rural area

The mean: geographical model computing size of required police force and its patrol area
Theory and Assumptions

- Patrol car’s origin is the area where most of criminal activity occurs.

- Available resources are limited.

- Time limit exists for arrival.
Method

- 3D analysis
- Cluster detection
- Mean Centers
- Hot Spots
- Network analysis
- Determining Patrol Areas
Research Area
Cluster detection & Hot Spots Analysis
Determining Patrol Areas
Conclusions & Summary

Model outputs:

- Defined area for each police patrol car
- Number of patrol cars required
- Exceptional settlements
- Additional data

High-quality and practical tool for police chief command and decision makers
THANK YOU

FOR LISTENING!