

# THE USAGE OF GIS APPLICATIONS IN SURVEYS DEPARTMENT

Tools for planning and managing the work of interviewers



# INTRODUCTION

- ❖ In the Surveys Department, we use the GIS tool for field work. For example: visualization of the survey sample, the results of respondent and non response, and A system for locating addresses.
- ❖ The GIS can be used as a tool in different stages of the survey.
  - The sampling stage – before starting the field work.
  - During the course of interviewing
  - After the survey is completed

**The GIS system is a spatial methodological tool used to improve the quality and efficiency of the survey**

# What's in the Lecture?

- ❖ How the GIS system is used in field work
- ❖ The dilemma towards a “regional interviewer”
- ❖ Summary



# Uses of the GIS System in Field Work

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- ❖ System for locating sampled addresses
- ❖ Presentation of sampled people in defined area.
- ❖ Combining samples

# System for Locating Sampled Addresses

- ❖ Application for producing maps for interviewers before they go out to the field. The interviewers use the map to plan their daily route work.

System

Map printout

- ❖ The field supervisor looks for buildings and addresses when interviewers have problems locating them.

System

Map printout





# System for Locating Sampled Addresses

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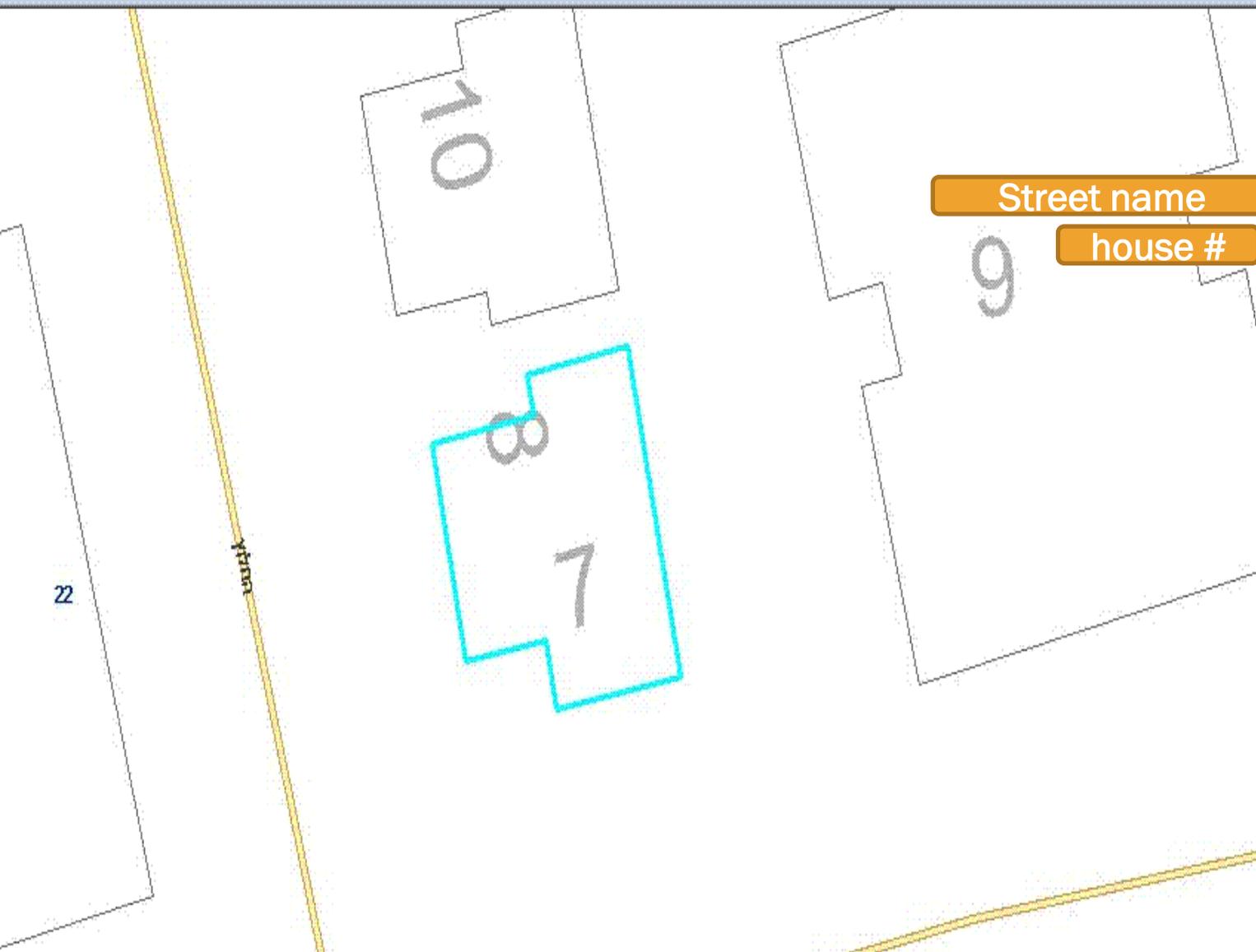
System

Map printout

- ❖ The field supervisor looks for buildings and addresses when interviewers have problems locating them.

System

Map printout



חיפוש

יישוב, רחוב ומספר בית  
יישוב ושכונה  
יישוב ומנה

חפש נסקר

Street name

החלוץ

רחוב

house #

8

מספר בית

- 5
- 6
- 7
- 8

חפש

החלף שכבות/מקרא

- שכבות
- נסקרים
- נסקרים חברתי
- מנת חברתי
- רב



# Presentation of People Sampled in define areas

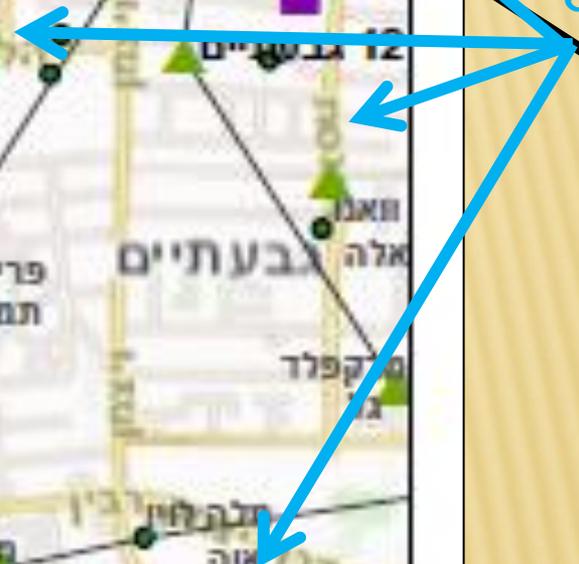
- ❖ Presentation of non respondent, without considering the borders of the locality.
- ❖ The map shows non respondent that require special treatment (e.g., a Russian speaker can be responsible for interviewing Russian-speakers in the district, or a specialist can handle people who refuse to participate).



REFUSAL ■  
RUSSIAN ■

Givataim

Tel Aviv



# Analysis of the Results of Interviewing at the End of the Survey

- ❖ Presenting the reasons to non response at the end of the survey: Social Survey.
- ❖ The data presented in the map are at the level of workload and individual interviewer



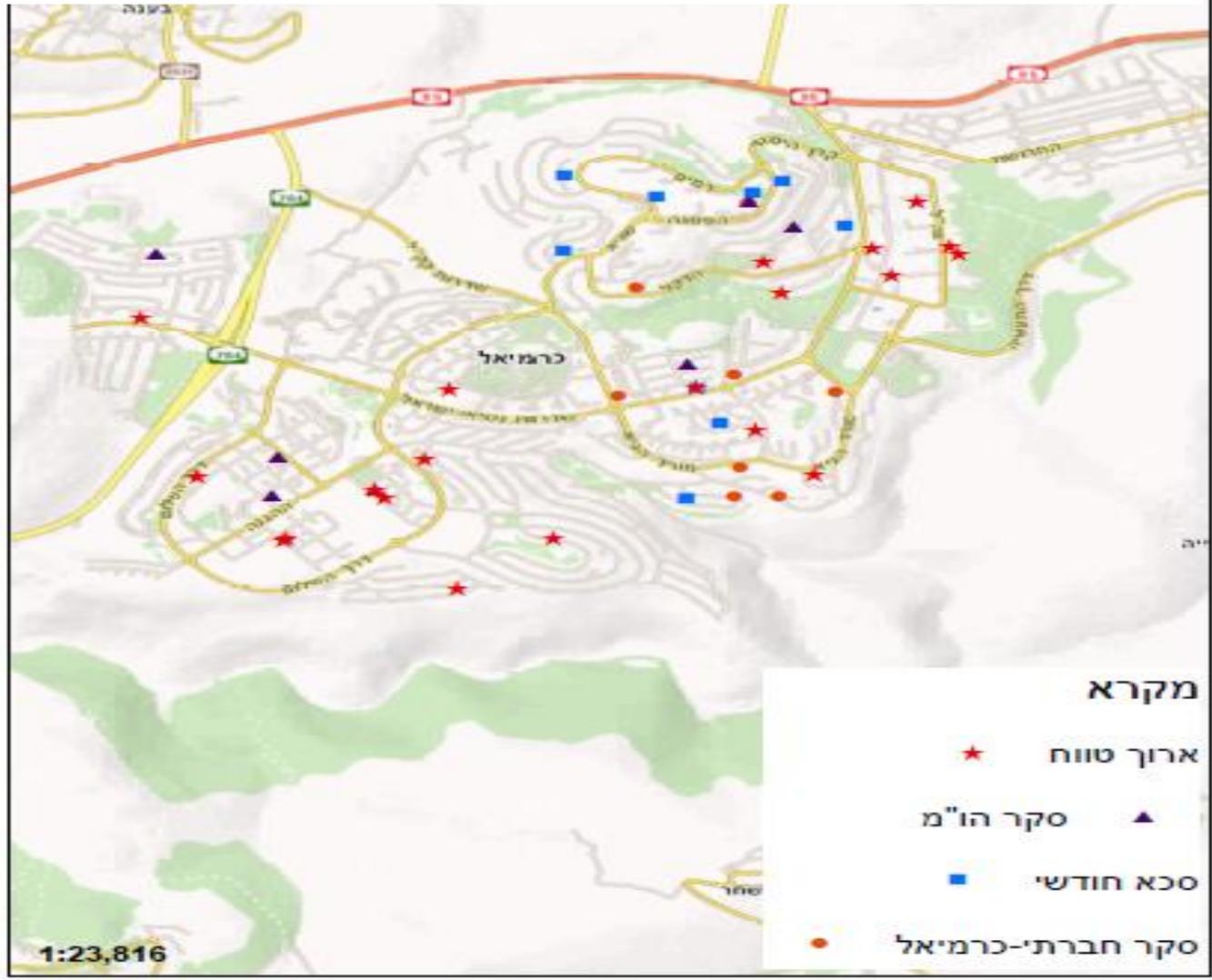
# The Goal: Combining Samples

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- ❖ Presentation of the individuals / households in the samples of the core surveys: Labour Force Survey, Household Expenditure Survey, Social Survey, and Longitudinal Survey on a map, by expected month for interview.
- ❖ Considering the idea of a regional interviewer who conducts interviews in distant localities and works on several surveys simultaneously.
- ❖ The Goal – to maximize efficiency and economize on work hours of interviewers.

ש לב סקרי סכ"א חודשי, ארוך טווח, הו"מ לחודש 2/ 2015

# 4 surveys 1 Locality





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# The Dilemma

“Regional interviewer”

# Differences Between Surveys

	Duration of investigation	Length of interview	Workload	paper / laptop
<b>Labour Force</b>	Two weeks	15 minutes	10 per week	Lap top
<b>Household Expenditure</b>	Three weeks Minimum 6 visits over 15 days of dairy filling in	Vary by stage of interviewing	12 per month	paper
<b>Social</b>	Three months	45 minutes	30 per month	Lap top
<b>Longitudinal</b>	One month Flexibility of 1 month	1 hour +	25 per month	Lap top

# Differences in the Work Processes for Each Survey

- ❖ Supervisors work by survey, and not in several surveys (exceptions: Jerusalem)
- ❖ Interviewers work by survey, and not in several surveys (exceptions: interviewer in Eilat, and Jerusalem)
- ❖ Different Computerized system for each survey

# SUMMARY

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- ❖ The display on the maps is different from the tabular display in the supervisor's management, and allows for better management of the field work.
- ❖ Continued development of designated GIS applications for surveys to enhance the efficiency of the interviewers' work, with emphasis on the ongoing management of the survey and on-line updates of data on non-response.
- ❖ Building an infrastructure for dealing with the above-mentioned dilemmas – regional interviewers