



D4 : DEFINITION OF INDICATORS TO MEASURE THE EFFICIENCY OF FIELD WORK

The Goal: To improve efficiency & effectiveness of the field operation

1. An interviewer will work on more than one survey
2. The multi survey work load enable more efficient enumeration area (EA) that will be closer to the interviewers' house



The expected outcome

- Due to responsibility for a limited EA, the interviewer will be more familiar with the field and the population, thus resulting in more accurate and efficient work
- Due to reducing travel time and road the interviewers' work will be more effective

The parameters to measure effectiveness and efficiency:

Short Term parameters:

- Increase in the number of sampled unit per interviewer (yearly work load)
- Increase in the full questionnaire per day

Long term parameters:

- Reduction in travel costs
- Reduction in the number of interviewers working in each district

Number of questionnaires per work day

Currently, a interviewer collects an average of 1.7 questionnaires per day.

Specifically, for each survey:

- Labor Force Survey – 2.5 questionnaires per day**
- Social Survey – 1.5 questionnaires per day**
- Longitudinal Survey – 1.3 questionnaires per day**
- Household Expenditures Survey – an estimated 1 questionnaire per day**

Goals for increasing the number of questionnaires collected per day:

In the first stage:

An interviewer will collect an average of
3 questionnaires per day

In the second stage:

4 questionnaires average per day

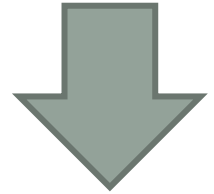
Travel costs payment

Travel cost include 2 components:

- Payment for KM - total intercity kilometers
- Payment for travel time:

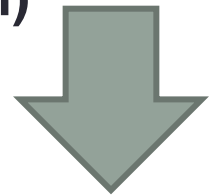
Calculation of travel costs for 2015

- In 2015, interviewers' intercity travel totaled 1,091,808 Km.
- An interviewer is paid 1.4 NIS for each Km



In 2015, the Survey Department paid about 1.5 million NIS for intercity kilometers!

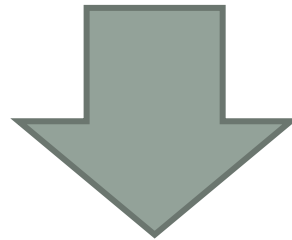
- 50 Km travel are compensated as 45 minutes (estimation)
 - $1,091,808\text{Km}/50\text{Km}=21,900$
 - $21,900*45/60=16,500$ hours



In 2015, the Survey Department paid an estimated 600,000 NIS for travel time!

Goals for reducing travel costs:

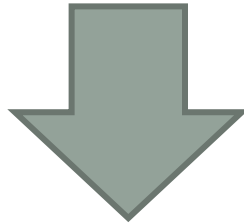
**Total payments for 2015 for intercity travel
were about 2.1 NIS million**



**The goal is to reduce by 20%, i.e., by about
400,000 NIS**

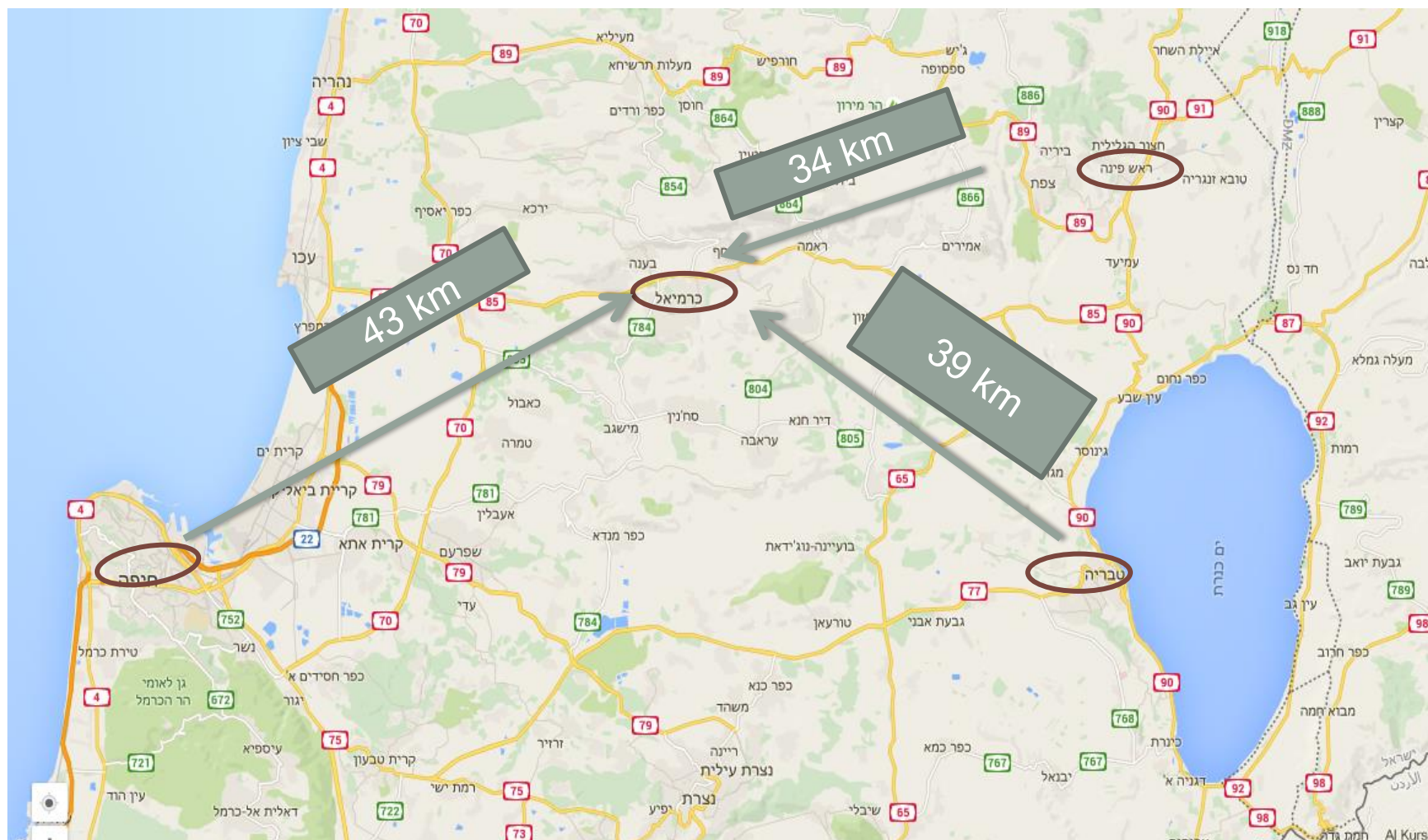
Number of interviewers

In 2015, 218 field interviewers worked on the four core surveys.



The goal is to reduce the number of interviewers by 20%.

Karmiel: Study Case



Simulation - Story

3 interviewers worked on

3 different surveys

on the same night

in the same street

in the city of Karmiel.

Each interviewer collected one questionnaire.

SIMULATION OF PAYMENT

From	To	Distance (one way) in KM	Travel time in MIN
Tiberias	Karmiel	39	50
Rosh Pina		34	30
Haifa		43	45
TOTAL (Round Trip)		232	4.5 H

Simulation - payment

We paid:

Travel distance: $232_{\text{KM}} * 1.4_{\text{NIS}} = 325_{\text{NIS}}$

Travel time: $4.5_{\text{H}} * 40_{\text{NIS}} = 180_{\text{NIS}}$ for travel time

Total of 505_{NIS}

If one interviewer is sent to Karmiel on the same night with a workload that combines the **3 surveys** into **one** workload:

Max payment is NIS 180.

Total Cost Reduction of NIS 325

In 2015, for the four large surveys in Karmiel:

- **12 interviewers worked**
- **There were 174 intercity trips to Karmiel (one way)**
- **Cost of the intercity kilometers: 13,500 NIS**
- **Cost of travel time: 7,200 NIS**

Total payment 21,700 NIS

Using the new allocation into EAs:

- An interviewer's yearly workload will be 270–330 interviewees
- In Karmiel alone, there were 259 interviewees
- One interviewer lives in Karmiel
- If the interviewer who lives in Karmiel would be assigned to the 259 interviewees from the four core surveys, we would save about:

21,700 NIS just on surveying the city of Karmiel