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## Reducing response burden and improving quality by new developments on online cash registers and road traffic data

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***HCSO***

# Scheme of presentation

1. Data strategy
2. Use of online cash register's data to estimate retail turnover
3. Use of road traffic data in official statistics
4. Conclusions



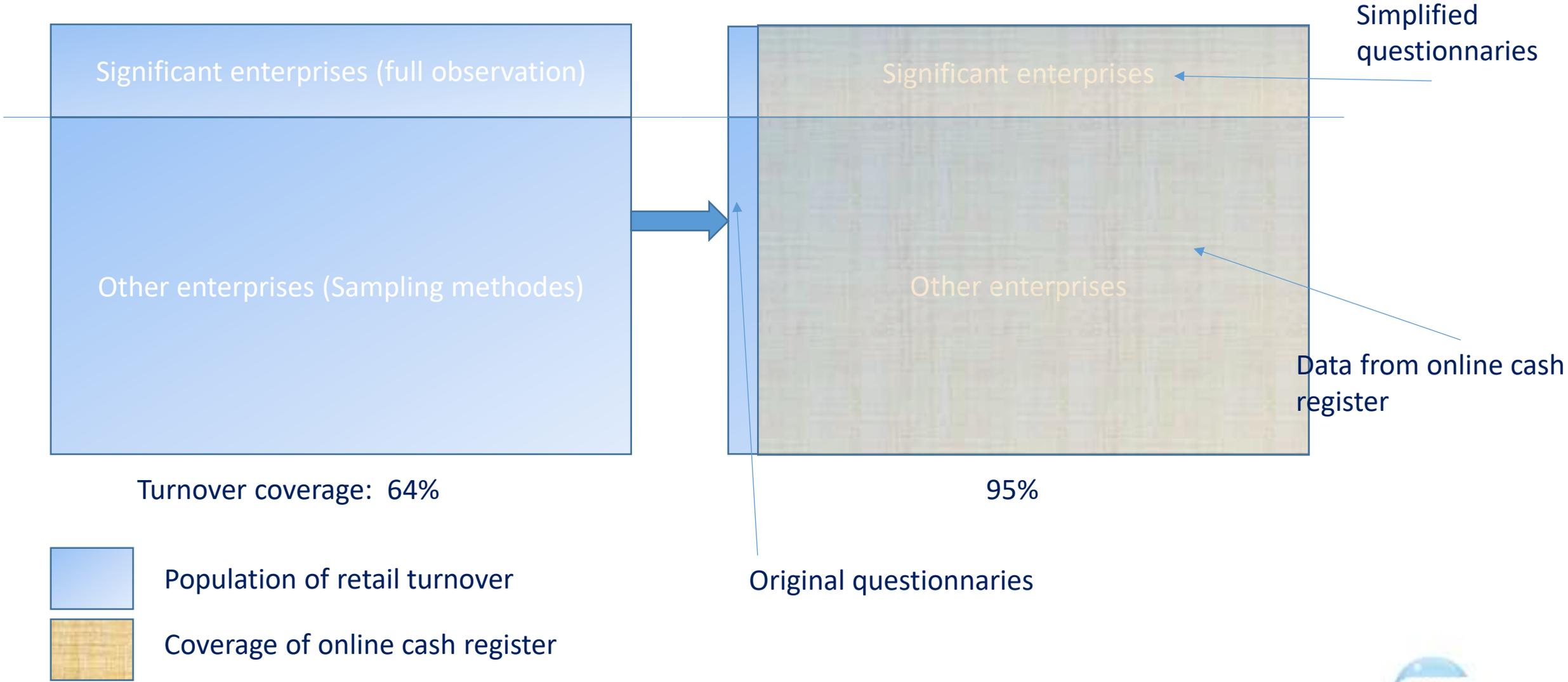
# Use of online cash register's data to estimate retail turnover

Due to a new legislation introduced in Hungary in 2014, enterprises operating cash machines involved in the online cash register system (OPGs) are obliged to send online information about their sales to the National Tax and Customs Administration (NAV). It means, that data about sales of retail stores can be accessed in real time from the NAV database.

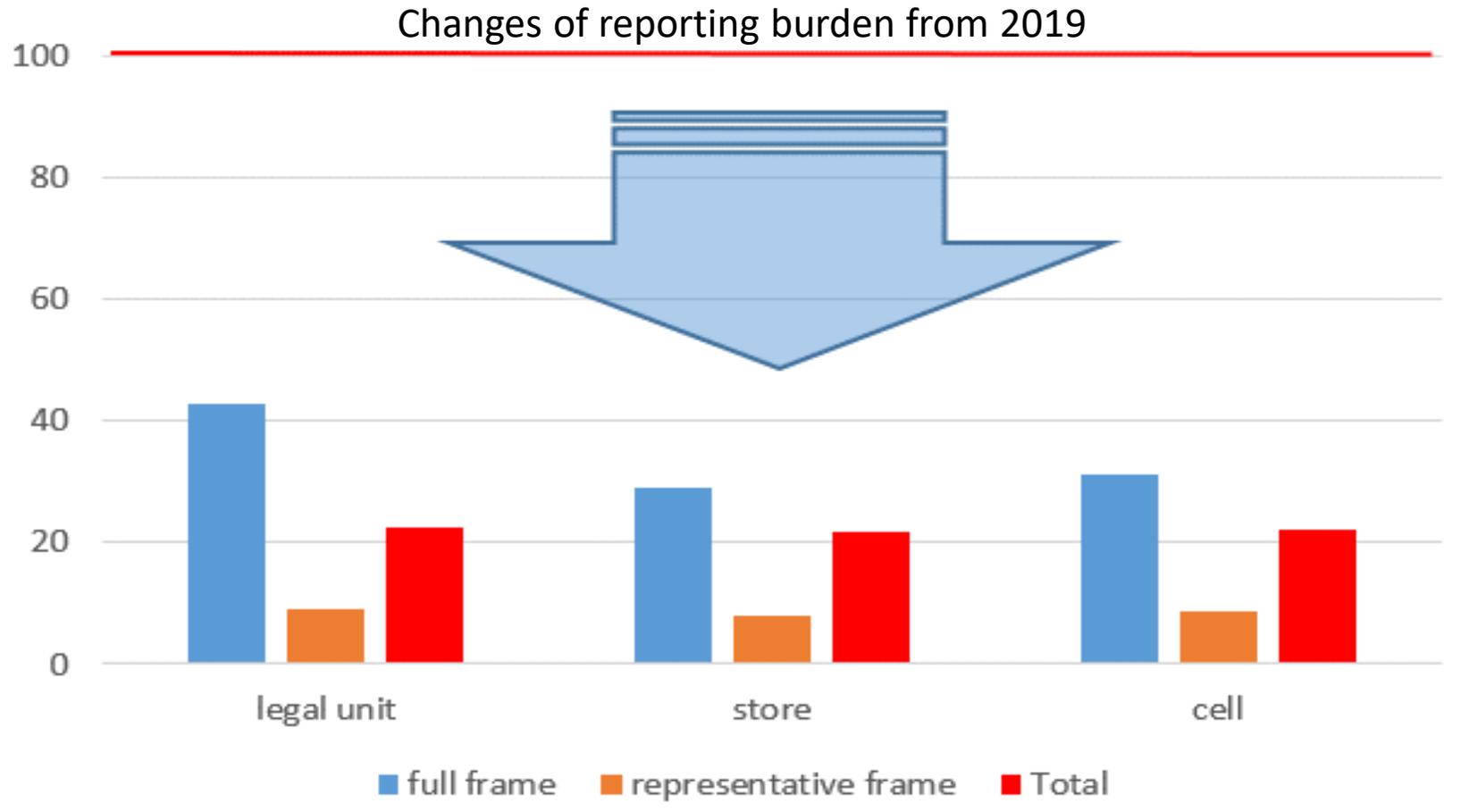
Retail turnover



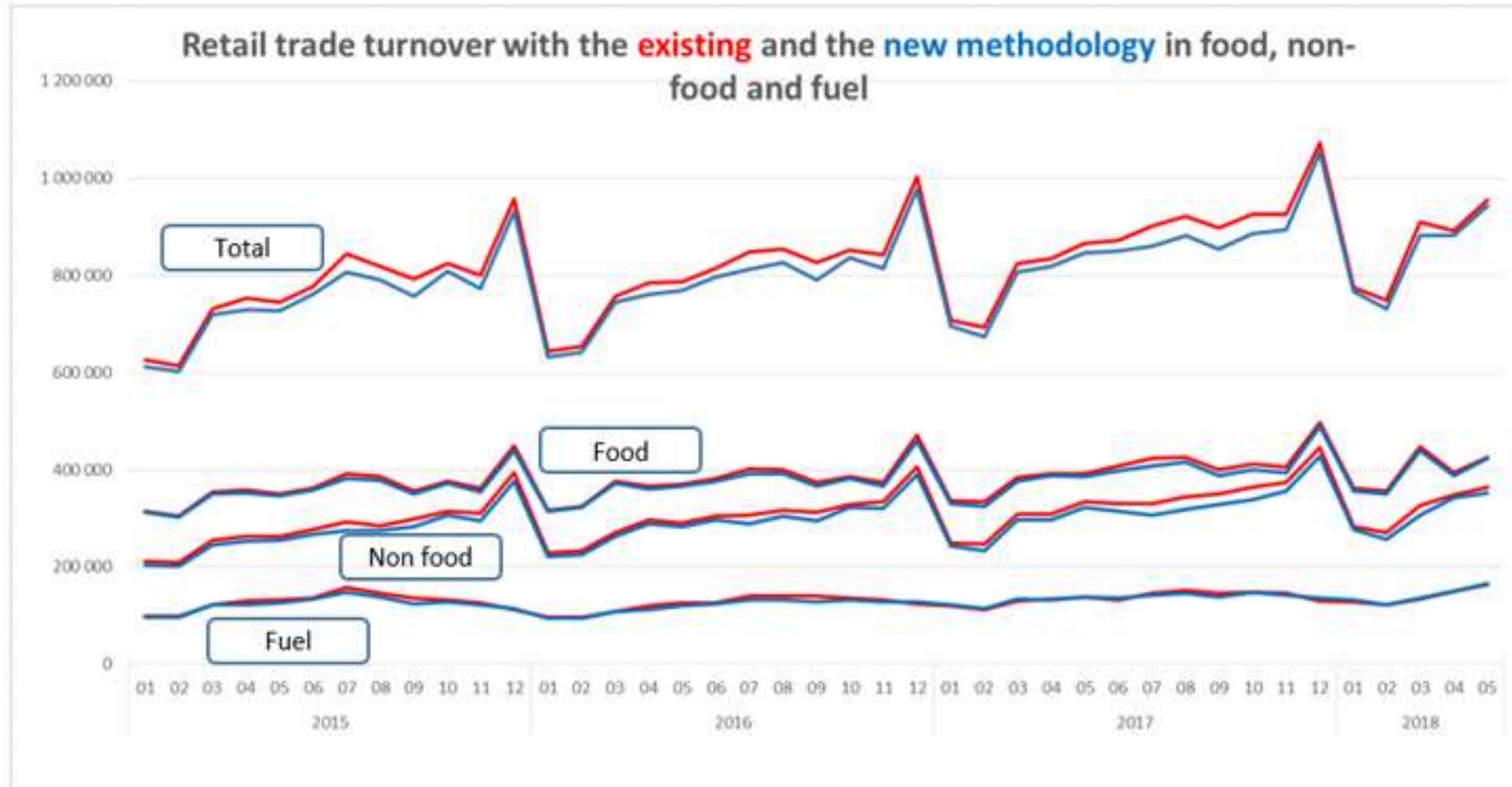
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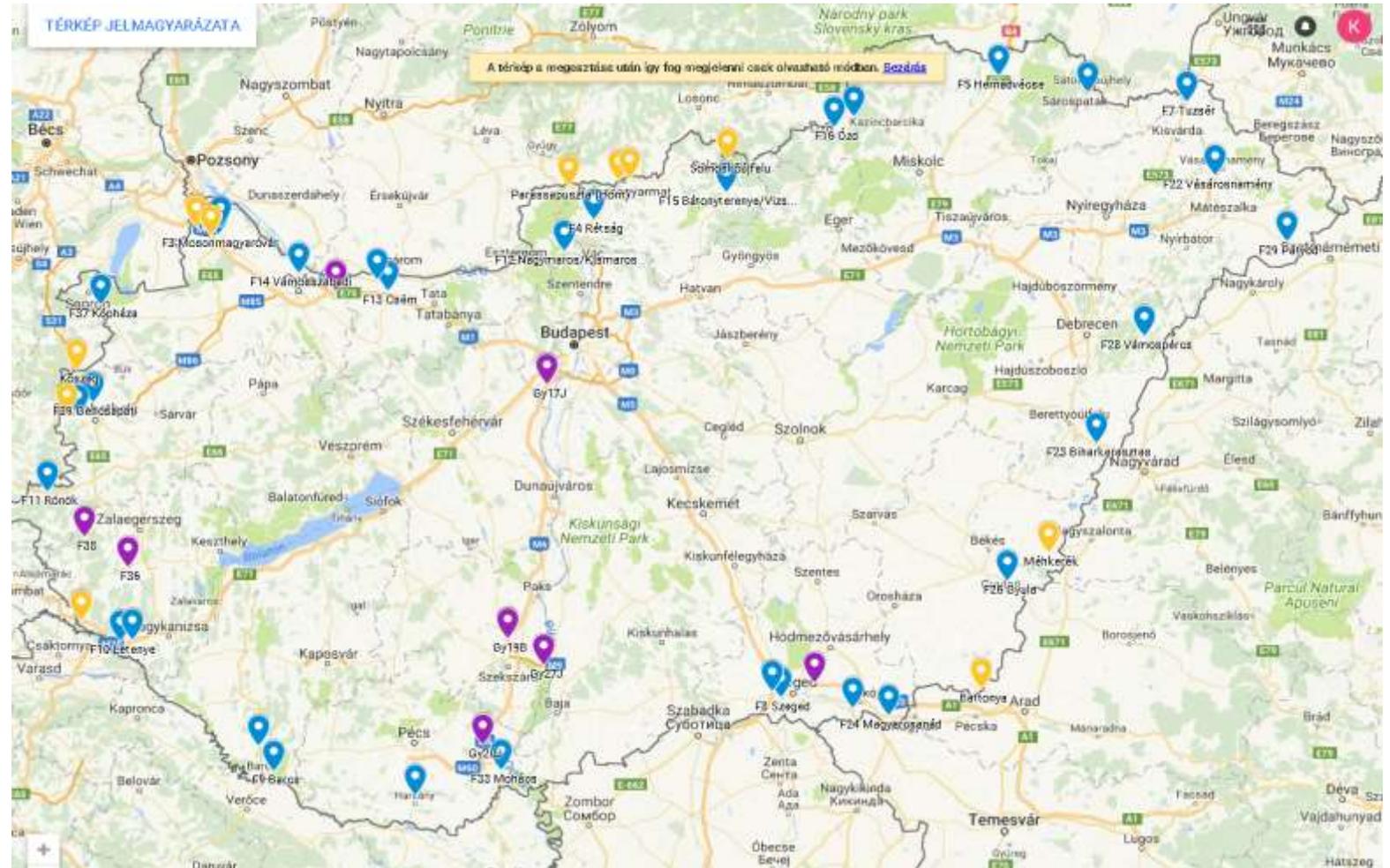


# Use of road traffic data in official statistics

- The widespread use of vehicle traffic cameras in recent years has made it possible for the HCSO to improve the quality of target population estimates of tourism data collections by using traffic monitoring camera data from two national organizations namely, the National Toll Payment Services PLC (NTPS) and the Hungarian National Police Headquarters.
- We use the target population of tourism data for
  - Tourism's export-import data,
  - the balance of payments statistics,
  - the purpose and organization of trips as well as length of stay or the characteristics of travellers and structure of their expenditures.
  - the Tourism Satellite Accounts (TSA).

# Use of road traffic data in official statistics

**Location of the traffic monitoring cameras involved in the development of the methodology in the HCSO**



*Legend: Blue: Cameras near the borders; data used already before 2018; Yellow: Cameras near the borders - data used from 2018; Purple: Cameras farther from the borders*

# Use of road traffic data in official statistics

Until 2008

From 2008

From 2018

From 2019

**Borders**

Monitored by Border Guards



Borders within Schengen-zone (AT, SL, SK)  
manual border traffic counting

Borders outside Schengen zone (RO, HR, UKR, SRB)  
Monitored by Hungarian National Police Headquarters

Borders within Schengen-zone (AT, SL, SK)  
Camera data

Borders outside Schengen zone (RO, HR, UKR, SRB)  
Monitored by Hungarian National Police Headquarters

+



 Fully observed

 Sampling methodes

# Use of road traffic data in official statistics

- From 2019 not only the cars' country of origin but the vehicles' coded licenses are also available for HCSO. These changes mean new possibilities and new challenges in the methodology of our estimations.
- We also use in our estimation process the license plate data for determining the total number of border crossing passengers and also for certain typical subcategories of the population (transit, daily commuters, etc.), which can be used for a more accurate estimation of the nationality distribution. The results can be used in statistical data production on Hungarian tourism.

# Conclusion

- By using alternative data sources, it is possible to reduce the administrative burden on enterprises and to increase the accuracy of official statistics.
- Taking advantage of these new data sources, we can further increase the relevance of official statistics, interlinking such types of statistical domains, which have been separate until now (spatial retail data), or the information was only available at higher time horizons (number and frequency of commuting), or did not exist until now (consumption of households links to the place of purchase instead of address of households).
- For the effective use of new data sources, we need data strategy not only at Member States level, but also at EU levels.

Pericles: „The key is not to predict the future, but to prepare for it.”



Thank you for your attention!

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