

THL Open Data & Challenges

#Hel3Dev, Oct 15, Helsinki



NATIONAL INSTITUTE FOR HEALTH AND WELFARE, FINLAND



THL in a nutshell



THL WORKS TO PROTECT AND PROMOTE POPULATION HEALTH AND WELL-BEING

Our goal is to ensure that people in Finland live good lives in a fair and equitable welfare society that is sustainable and renewable. We will particularly look after the interests of those who find it difficult to make their voices heard.

SCIENTIFIC RESEARCH AND THE BEST AVAILABLE DATA ARE THE CORNERSTONES OF OUR EXPERTISE

Our work forms a coherent whole of high-quality research, development, evaluation, monitoring, guidance and official duties. We also provide with high quality the special government services entrusted to us. We must follow our time and we must be tolerant and independent so as not to lose our credibility.

WE ARE MOTIVED BECAUSE OUR WORK IS MEANINGFUL

We are committed to building a THL that supports high-level expert work and is an inspiring workplace for all.

WE WORK WITH OUR PARTNERS AND THROUGH THEM

Our partners include decision-makers, researchers, and experts in social and health care whether they work in the public sector or in research institutes, NGOs or businesses.

As a Finnish government agency THL is strongly international in all its work.

WE VALUE USER SATISFACTION WITH OUR PRODUCTS

We work to process our expertise into effective information products and services in collaboration with our clients.

EFFECTIVE TOPICAL HELPFUL



NATIONAL INSTITUTE FOR HEALTH AND WELFARE, FINLAND

THL Open Data

- Fineli Food Composition Database
- The Regional Health and Well-being Study (Alueellinen terveysterveys- ja hyvinvointitutkimus ATH)
- National infectious disease register

- + Lots of other open data to be freely utilised:
www.thl.fi/avoindata
www.thl.fi/opensdata

Fineli Food Composition Database

- We hope that open access to Fineli improves Finnish software developers' possibilities to create health applications specifically designed for Finnish consumers. Food composition data can be used in lifestyle guidance and health promotion, for example. Health applications for tracking health have become very popular in recent years.

The Fineli data packages

- Basic package 1: The same content as on the Fineli website, i.e. 3700 food items and 55 nutrient factors
- Basic package 2: 3700 food items and 68 nutrient factors
- Ingredients: 1200 basic ingredients and 20 nutrient factors
- Ingredients for food industry: 1200 basic ingredients and 40 nutrients suitable for the food industry

The Regional Health and Well-being Study ATH

- ATH results are available in Sotkanet Databank. Data are available by five different regional levels as well as by gender, age group and educational level. There are 20 indicators that cover issues such as population well-being, health, functioning, work ability, lifestyles and risk factors as well as service needs and use. The results are based on surveys carried out in 2012–2012 using a random sample from the Finnish population.
- Sotkanet contains data on population welfare and health from all Finnish municipalities: more than 2000 indicators, time series, breakdowns by gender & age etc. All Sotkanet data are available as open data.

National infectious disease register

- The Infectious Diseases Register statistics contain up-to-date information about the incidence of various infectious diseases over time and region. The statistics include data on 77 infectious diseases or microbes, divided into 12 groups. Caseload and incidence data are available for each infectious disease by time periods (year/month), region (whole country/hospital district), 5-year age groups, and gender.
- Data are available through www interface where data for each disease are given in separate data cubes. The overview data cube includes all infectious diseases (caseload and incidence by year/month and region). The Infectious Diseases Register open data file format is available in a zip package: data content description in datapackage.json and open data files (UTF8 encoded data, separated by comma) in Finnish and Swedish.
- Open data from the Infectious Diseases Register are also available through the Sotkanet Databank.

THL challenges you!

- An application that, for example, enables users to compare their physical activity, dietary habits and other lifestyles to find the best alternatives or the best ways to proceed. Even game-like applications are possible. The focus is on the visual design.
- An application for decision-makers in municipalities or regions that could calculate, for example, the costs and savings/benefits of building cycling lanes, taking into account public health gains and reduction in traffic, etc.
- An application that enables users to compare the performance of different municipalities using indicators of one's choosing. The application could enable users to identify similar municipalities, and it could make the decision-making process easier and help to generate synergy gains in solving identified problems.
- An application visualising data from the Infectious Diseases Register at regional level (hospital district/municipality) on map and as epidemic curves.

Visualize

Different municipalities

Something completely different

Cost benefit

Amaze us

Similarities

Trends

Link with other datasources

Gamify

Compare

Map

You challenge THL!

- What you tried to do but you could not?
- Why was that:
 - Gaps
 - Formats
 - APIs
 - Documentation
 - Difficult domain
 - Too boring data
- Which dataset we should open next?

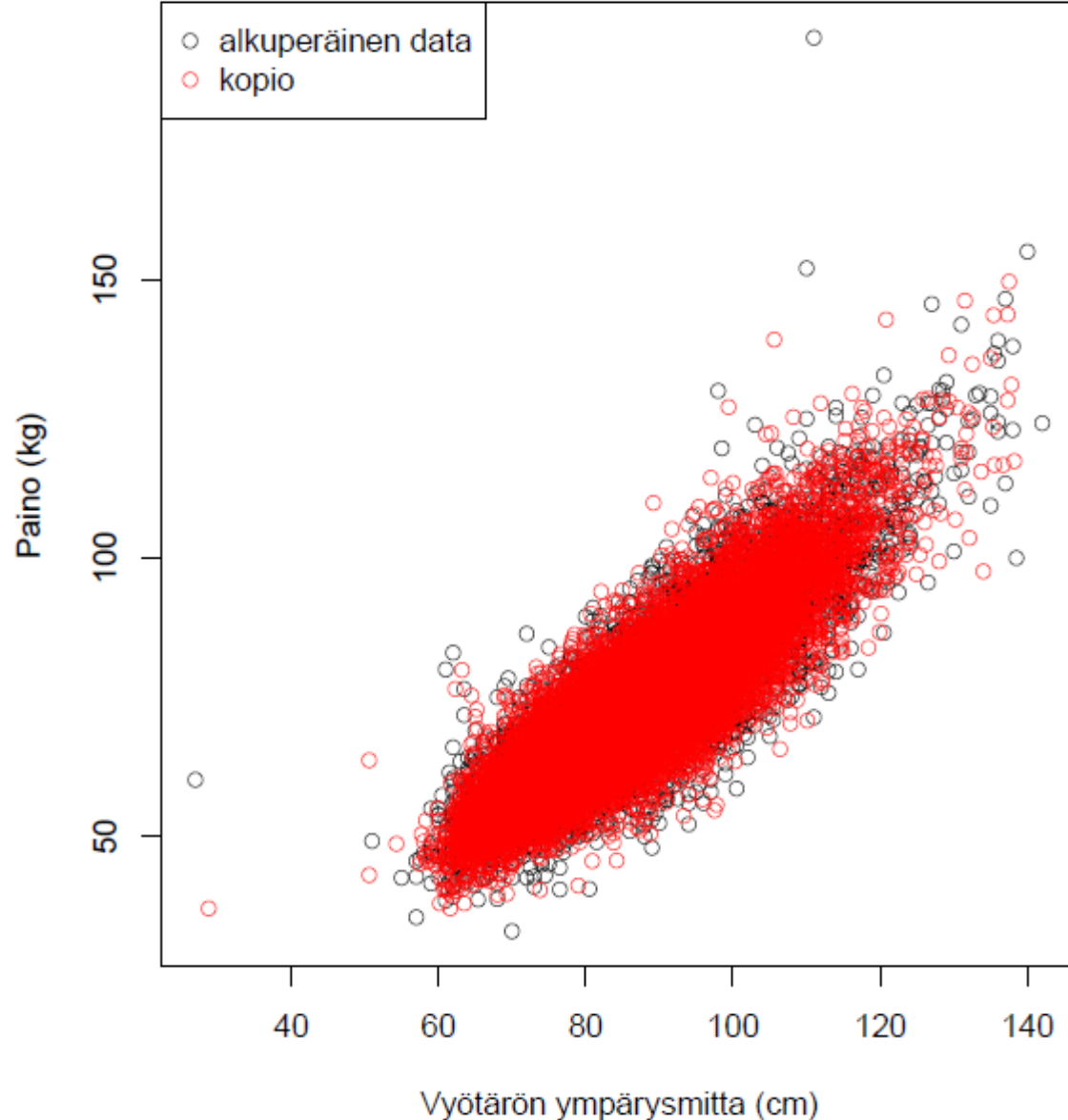
-> Feedback welcome!

What has been done before using THL data?

- Yle: Comparison of Finnish municipalities in terms of public services for the elderly: Thematic maps based on Sotkanet data and Google base maps (http://yle.fi/uutiset/nain_vanhukset_heivattiin_hoitopaikasta_toiseen_katso_kuntasi_tilanne/6676749)
- Yle Vanhusvahti: Comparison of Finnish municipalities in terms of public services for the elderly: municipality profiles based on Sotkanet data
(http://yle.fi/uutiset/ylen_vanhusvahti_avattu_katso_missa_jamassa_oman_kuntasi_vanhuspalvelut_ovat/7853653#etusivu)
- Apps4Finland 2013: various projects.

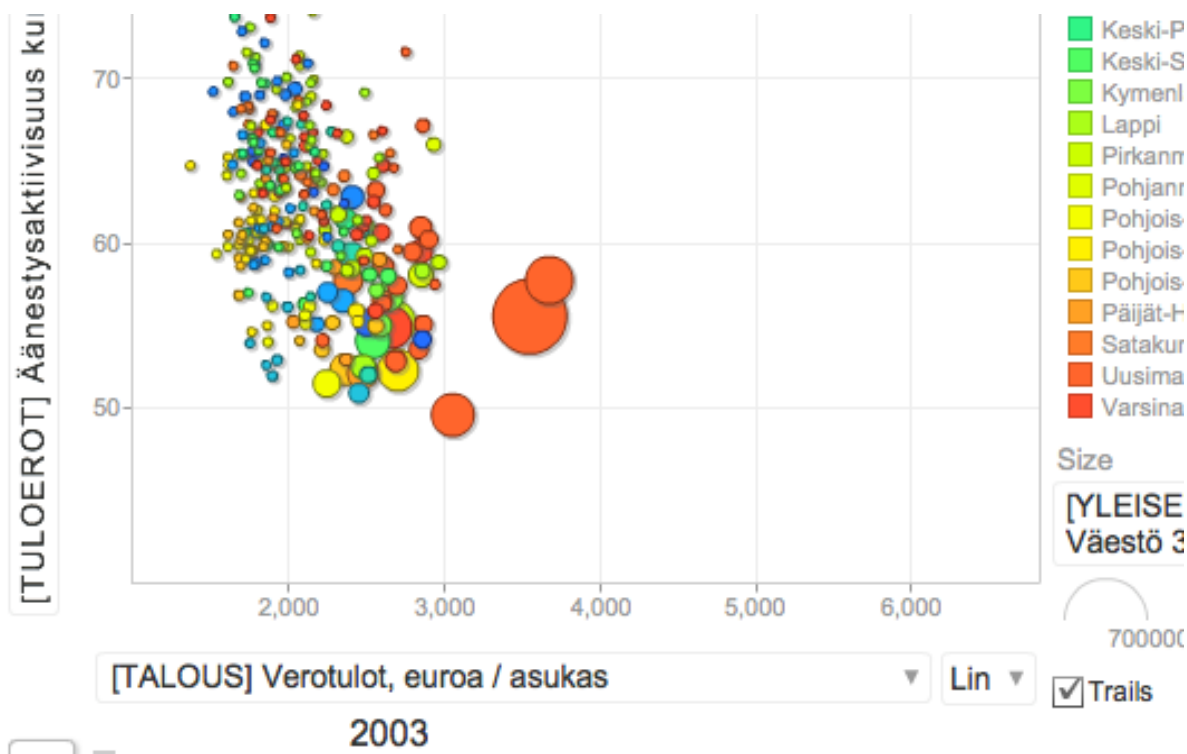
ReplicaX (Apps4Finland 2013)

- R code method to produce replica data of health and other data which cannot be published in original format due to data security restrictions.



Sotkanet data visualisation tool (Apps4Finland 2013)

- <http://www.apps4finland.fi/kilpailutyto/alueellinen-hyvinvointi/>



www.thl.fi/avoindata (FI)
www.thl.fi/opendata (EN)

- All THL's open data with detailed information
- Information about API's
- Challenges
- Contact info