Open City Data

for

researchers, journalists, associations, data nerds, humanists, civil servants, business developers, tourists, traders, neighbourhood activists, historians, futurists, statisticians, geniuses, artificial intelligence citizens, software developers, event organizers, hands-on makers, traffic planners, entrepreneurs, coders, curious people

for all of us

hri.fi
Helsinki Region Infoshare is the most diverse open data service in Finland and one of the international leaders in the field.

Launched in 2011

Open data service of the cities of Helsinki, Espoo, Vantaa and Kauniainen. The service provides data regarding the cities of the Helsinki Metropolitan Area and Helsinki region as open data for anyone to use freely.

HRI helps data owners and supports data users.
OPEN DATA
IN A NUTSHELL

Open data is:

Public data
Openly licensed
Machine-readable
Free of charge
The open event APIs of the cities can be used freely in e.g. event calendars, web services and mobile applications.

The city bike system in the Helsinki metropolitan area has been a huge success. Opening the bike station data for everyone quickly led to the creation of a host of city bike applications.
UNLIMITED PURPOSES OF USE

For example, Helsinki’s and Espoo’s 3D city models are available as open data for everyone to use. We are only taking the first steps in making use of the world’s finest city models.

Source: City of Helsinki 3D experts
DATA FROM ALL AREAS OF LIFE

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Number of data sets as of May 2019
CONSTRUCTED ENVIRONMENT

Data

- 3D city models of Helsinki and Espoo
- Buildings of Helsinki, Espoo and Vantaa
- Plot reserve in the Helsinki Metropolitan Area per block
- Register of public areas in the City of Helsinki
- Started and completed housing in the Helsinki region

...and a lot more, check hri.fi

Applications

- Helsinki Energy and Climate Atlas is a tool based on the 3D city data model. The Atlas offers information about the energy consumption and solar energy potential of buildings.

- The SiirtoSitto mobile application tells the user about upcoming street cleanings and reminds the user of parking restrictions coming into effect. Author: TwentyHexagons.

- Age of buildings in the Helsinki Metropolitan Area is Topi Tjukanov's visualisation. The map shows the average age of buildings in the Helsinki Metropolitan Area by 250 m x 250 m hexagons.

Data:

- 3D models of Helsinki
- Helsinki street cleaning plans
- Buildings of Helsinki, Espoo and Vantaa
CULTURE AND RECREATION

Cities' open event APIs
Concerts of Helsinki Philharmonic Orchestra 1882-
Helmet libraries' catalogue
Helsinki Zoo visitor count

...and a lot more, check hri.fi

Data

Cities’ open event APIs
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Applications

The Eventmore mobile application, created by iQ Payments Ltd, can be used to search events in the cities based on, for example, locations, time, category or theme.

Data: Linked Events Helsinki API

The Outdoor Exercise Map contains information about the condition of outdoor exercise facilities in Helsinki, Espoo and Vantaa. The service includes the skiing tracks, ice-skating fields and beaches in the cities.

Data: Helsinki metropolitan area Service Map APIs, HSL Journey Planner API

Finna Street searches images from Finna based on the location provided by the user's browser. Finna contains more than a million photographs from Finnish museums, libraries and archives.

Data: Collections of Helsinki City Museum
ECONOMY AND TAXATION

difference in income city's acquisitions gini coefficient balance household incomes budgets investments income expenditure economic indicator operating expenses acquisitions of fixed assets profit and loss accounts municipally owned companies personnel costs tax revenue company tax income level

Data

- Budget data
- Construction projects of Helsinki
- Dwelling-unit incomes
- Investments by the city of Vantaa
- Procurements of Helsinki, Espoo, Vantaa and Kauniainen

...and a lot more, check hri.fi

Applications

The Procurements of municipalities web service is Hahmota Oy’s dashboard of the procurements of Helsinki, Espoo and Kauniainen.

Data: Procurements of Kauniainen, Espoo and Helsinki

The visualisation of income levels in Helsinki shows the income level factors of housing areas in Helsinki both on the map and as time series.


Handata is Sofokus Oy’s search engine for the municipalities’ acquisitions and tendered procurements.

Data: Procurements of Helsinki, Espoo, Vantaa and Kauniainen
EDUCATION

- Application results for upper secondary schools
- Comparison of early childhood education and care between the six largest cities
- Number of students in Helsinki by school
- School admission areas
- Statistical Yearbooks of Helsinki

...and a lot more, check hri.fi

Data

Applications

The Helsinki school history register includes information about the schools of Helsinki since the foundation of the city in 1550.

Data: School history database of Helsinki

On the Helsinki Metropolitan Area Service Map you can find all the public municipal services, such as schools, day-care centres and health stations in the Helsinki metropolitan area.

Data: Helsinki metropolitan area Service Map APIs

HelMet Pocket library is a mobile application for library customers in the Helsinki Metropolitan Region. In the Pocket library, the user can renew loans, search materials and receive reading recommendations.

Data: Helmet-libraries' catalog
ENVIRONMENT AND NATURE

valuable environments waste management nature trails environmental protection greenhouse gases solar radiant energy waste amount parks noise report nitric oxide nature data system air quality inland waters wind power questionnaire energy water management heat loss lighting air pollution environment report environment permit

Data

Amount of solar radiant energy on the roofs in the Helsinki Metropolitan Area
Annual statistics for the waste management in the Helsinki Metropolitan Area
Answers to Helsinki’s and Vantaa’s environment attitude survey
Energy consumption in the Capital Region
Helsinki’s nature information system

...and a lot more, check hrifi

Applications

The greenery areas of Helsinki application estimates the greenery areas in terms of accessibility and location in relation to the population density. Authors: Petteri Pesonen, Pilvi Nummi, Aino Keitaanniemi.

Data: Register of public areas in the City of Helsinki

Road traffic noise levels is Cloud’N’Sci Ltd’s visualisation, which shows the noise zones as comprehensible heat maps.

Data: Traffic noise zones in Helsinki metropolitan area

Kattohukka (~roof loss) is a service produced by Helsinki Region Environmental Services Authority (HSY) by which it is possible to scrutinise the heat loss through the roofs of buildings in Helsinki.

Data: Thermographic map of Helsinki, Orthophotograph of Helsinki region 2017, Buildings in Helsinki
Data

**Births and deaths in Helsinki 1811-1998**

**City of Vantaa’s service accessibility survey 2018**

Comparisons of **elderly care**, **social assistance** and **social welfare for the disabled** between the six largest cities in Finland

Helsinki: **Health care**

...and a lot more, check [hri.fi](http://hri.fi)

**Applications**

**Toimeentulotuen menot kasvavat voimakkaasti**

<table>
<thead>
<tr>
<th>City</th>
<th>2008-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helsinki</td>
<td>279</td>
</tr>
<tr>
<td>Vantaa</td>
<td>254</td>
</tr>
<tr>
<td>Espoo</td>
<td>191</td>
</tr>
<tr>
<td>Tampere</td>
<td>185</td>
</tr>
<tr>
<td>Turku</td>
<td>136</td>
</tr>
</tbody>
</table>

**Kuuden suurimman kaupungin vanhusten sosiaali- ja terveyspalvelujen ja kustannusten vertailu vuonna 2017**

**Social assistance expenditure is increasing heavily** is an article by newspaper Helsingin Sanomat and the visualisation of the social assistance expenditure in the six largest cities in Finland.

**Comparison of elderly care between the six largest cities** report makes a comparison between the population, performance, personnel and costs of the cities.

Ilkka Pirttimaa’s **BlindSquare** is an augmented reality application, which helps the visually impaired navigate in the city environment.

**Data:** Comparison of social assistance between the six largest cities

**Data:** Comparison of elderly care between the six largest cities

**Data:** Helsinki metropolitan area Service Map APIs, HSL Journey Planner API
HOUSING

buildings  housing prices  number of rooms  average size of dwellings  purpose of use  housing production  type of dwelling  completed dwellings  rental dwellings  number of persons  dwelling density

Data

Dwelling households in Espoo  Dwelling inspection requests in Helsinki  Housing production in the Helsinki Metropolitan Area  Statistical yearbook of Helsinki: Housing  Statistical Yearbook of Vantaa  Vantaa’s Future Survey

…and a lot more, check hri.fi

Applications

The [Helsinkians’ best places of residence](https://example.com) visualisation by Lauri Vanhala shows which parts of the city have the best public transport for the commute in the morning and the restaurant visits in the night.

Data: HSL Journey Planner API, Address list of Helsinki

Salla Multimäki has made the [Water supply of dwellings 1900](https://example.com) visualisation. In 1900, an own tap was luxury even in the inner city.

Data: Living conditions of workers in Helsinki in 1900

Newspaper Helsingin Sanomat’s counter tells if you are living in a tighter space than your neighbour.

Data: Population grid of Helsinki metropolitan area
JOBS AND INDUSTRIES

open jobs labour business activities work stoppages employment exchange city's personnel division classification unemployed unemployment rate

Data

Employed work force in the Helsinki region by age and gender

Food establishments in Helsinki under food control supervision by the Food Safety Department

Job API for City of Vantaa vacancies.

Resource reservation system for City of Espoo and Helsinki

Telephone survey data of Helsinki-based companies from 2016 and 2018

...and a lot more, check hri.fi

Applications

Flextila is a service constructed by Joustotoimisto Oy. The service makes it possible to utilise underutilised spaces. It can be used by both the owners of the spaces and those in need of a space.

Data: Resource reservation system for Espoo and Helsinki

Where should I start a café? is Faris Alsuhail’s visualisation of how geographic data can be utilised in deciding the location for a company.

Data: Walking and bicycling travel time matrix for Helsinki Metropolitan Area metro and train stations, Food establishments in Helsinki under food control supervision by the Food Safety Department, Nice city centre for visitors -survey results & City of Helsinki road map

Firmoja.fi is a new kind of company search, which combines the company’s basic data from several open data sources.

Data: Procurements of the City of Kauniainen, Espoo, Vantaa and Helsinki
LOCAL GOVERNMENT

Electoral districts in the Helsinki metropolitan area
Information about Finland in many languages
Information systems registers of Helsinki and Vantaa
Metadata of HRI datasets
Open decision API of Helsinki

Data:
- Electoral districts in the Helsinki metropolitan area
- Information about Finland in many languages
- Information systems registers of Helsinki and Vantaa
- Metadata of HRI datasets
- Open decision API of Helsinki

Applications:

In the Decisions web service, you can browse Helsinki’s decisions according to topics, areas and descriptors.

Data: Open decision API of Helsinki

Using the Helsinki application, you can send feedback and development ideas to the City.

Data: The issue reporting API of Helsinki

Helsinki Channel mobile is an open source code application through which you can, for example, watch all City Council meetings since 2011.

Data: Helsinki Channel open data

...and a lot more, check hri.fi
**MAPS**

orthophotos  aerial photos  nature routes  traffic lanes  nomenclature  base map  city plan building prohibitions  property maps  false-colour images  laser scanning data  up-to-date detailed plans  3D-models  guide maps  statistical zoning  postal code areas  geological destinations  street cleaning plans  Minecraft city model  surface models  area divisions  neighbourhoods

**Data**

- 3D city models of Helsinki and Espoo
- Combined detailed plan map of Helsinki
- Helsinki metropolitan areas in districts
- Helsinki metropolitan postal code areas
- Historical orthophotographs

...and a lot more, check [hri.fi](http://hri.fi)

**Applications**

**Helsinki 1943 3D** is a 3D picture of Helsinki in 1943, created by Antti Ahola. It combines a historic orthophoto and the modern-day 3D city model of Helsinki.

Data: [Orthophotograph of Helsinki 1945](http://example.com), [3D models of Helsinki](http://example.com)

Newspaper Helsingin Sanomat's web article [Pasila grows sky-high](http://example.com) visualises future Helsinki using the Unreal game engine and Helsinki's 3D city model.

Data: [3D models of Helsinki](http://example.com)

In the Espoo City Home Street Portal you can browse a map with information about buildings, land use planning and traffic in your own neighbourhood.

Data: [Helsinki metropolitan area Service Map APIs](http://example.com)
POPULATION

population estimates age gender nationality language foreigners population immigration fertility rate mortality marriages population data grid single person households household-dwelling units population changes mother tongue migration families with children birth rate labour force

Data

- Average size of households in the Helsinki region
- Families in Espoo by family type 1.1.1999
- Population and foreign people in Helsinki by place of birth, age and district in 2004
- Population grid of Helsinki metropolitan area
- Population projections

...and a lot more, check hri.fi

Applications

- The Helsinki Region is aging rapidly is YLE News’ article and visualisation of the age structure in the Metropolitan area.
  
  Data: Helsinki region statistics API

- Migration to Helsinki by province and region 1917-2016 is a visualisation of Finland's centenary. The visualisation describes the enormous migration of the last century.
  
  Data: Migration in Helsinki by province 1911-1994

- The 3D visualisation of the population data grid is Faris Alsuhail’s three dimensional visualisation of the distribution of the population of Helsinki into different housing areas.
  
  Data: Population grid of Helsinki metropolitan area
TRAFFIC AND TOURISM

Centreline network of traffic routes in Vantaa
Helsinki and Tallinn nature trails
Number of cyclists in Helsinki, Espoo and Vantaa
Parking spot usage API of Helsinki
Parking violations in Helsinki
Snow plow locations in Helsinki and Vantaa
Tourist traffic stops and parking places in Helsinki

...and a lot more, check hri.fi

Data

Applications

Tencent’s WeChat MyHelsinki Mini Program makes Helsinki info available to almost one billion WeChat users. The application includes information about sights, services, events and mobility in the City.

Data: Linked Events Helsinki API, MyHelsinki Open API

Helsinki Traffic Forecast makes forecasts about the traffic volumes in the Helsinki region. It is based on open data published by the City of Helsinki and the National Land Survey of Finland. Author: Kristian Polso / Vaiste Productions Oy.

Data: Traffic volumes in Helsinki

Maas Global Ltd’s Whim is a Mobility as a Service (MaaS) application, which can be used to gain access to public transport, city bikes, taxis and rental cars.

Data: HSL Journey planner API
Utilise freely!

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