



Using statistics to inform decision making

**Rural Pact Policy Action Lab, 3.6.2026
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Agriculture and Forestry, Finland**

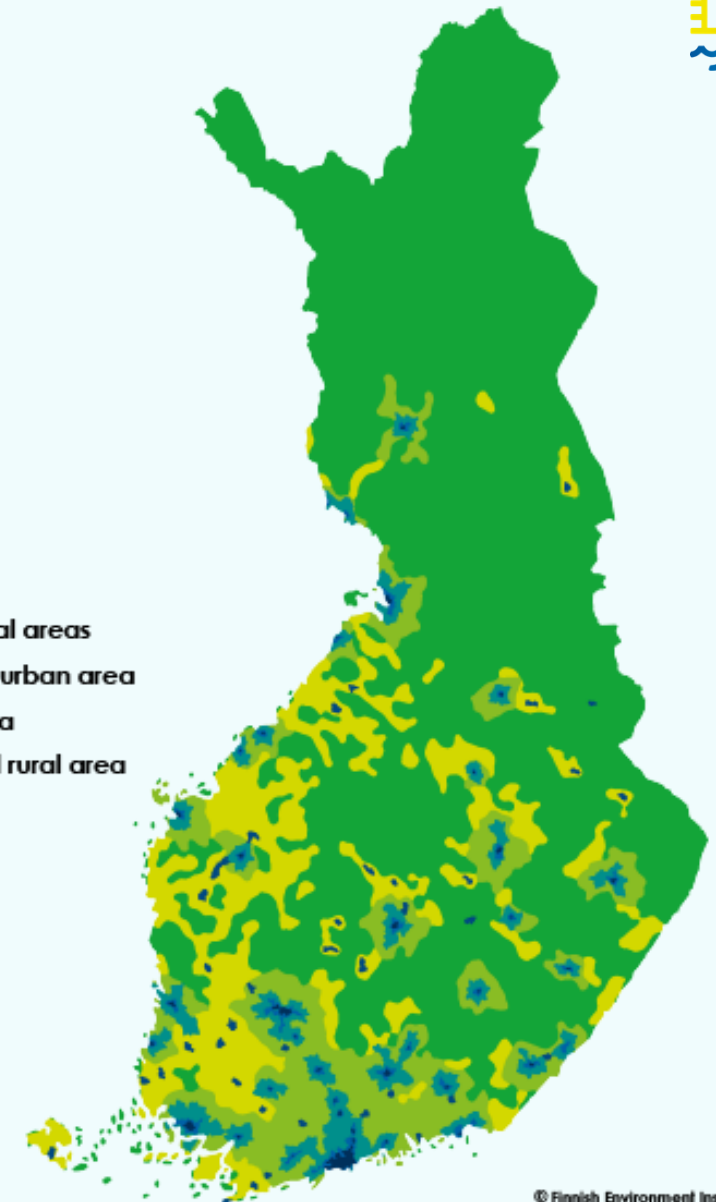
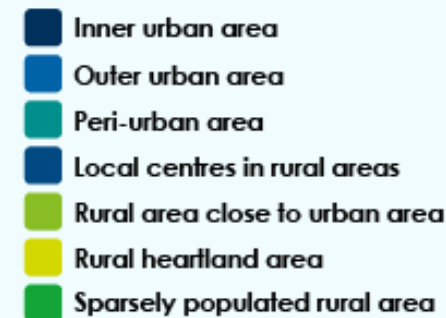
Finland – one of the most rural countries in EU

- **95 %** of the surface area is rural
- **68 %** of the surface area is sparsely populated
- 18,2 people/sq km of land area (in SPAs 2,5)
- **28 %** of the population live *permanently* in the rural areas
- **38 %** live in rural areas *part-time* (up to 2,9 Mil. people)
- **40 %** of businesses are located in rural areas
- 370 000 km long *private* road network
(tot. road network 480 000 km)



What is the Finnish Rural Context?

- Rural is...
 - 95% of land-area
 - 26% of registered population
 - 70-90% dependency ratio (cf. 62%)
 - 35% business establishments when farms are included
 - 40% of employed are entrepreneurs (cf. 10%)
 - 68% of goods in export industry
 - 1-2% of national public procurement
 - +/-100% longer travel times to basic and essential services
 - 45-60% availability of 100 Mbit/s (cf. 81%)
 - 27-31% without post-basic education (cf. 25%)
 - 9-15% of rural workforce within agriculture
 - 5-11% share of jobs in agriculture, forestry and fishing



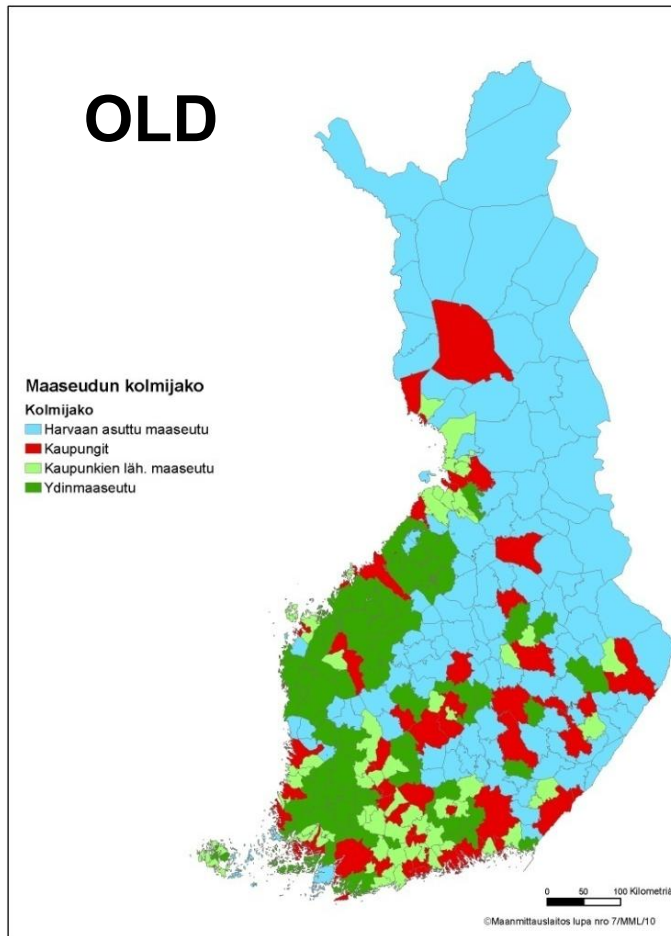
Urban-Rural spatial classification of Finland

- **The geographical information-based area classification** system has been created by the Finnish Environment Institute and the Department of Geography of the University of Oulu in cooperation with the Ministry of Employment and the Economy, the Ministry of Agriculture and Forestry and Statistics Finland.
- As a result: typology based on municipal boundaries does not work anymore
→ need for **more detailed typology based on geographical information**
- The urban–rural classification is an area delineation independent of municipal boundaries. It enables the distinction between urban and rural areas, as well as the calculation of statistics for different area categories and their combinations.

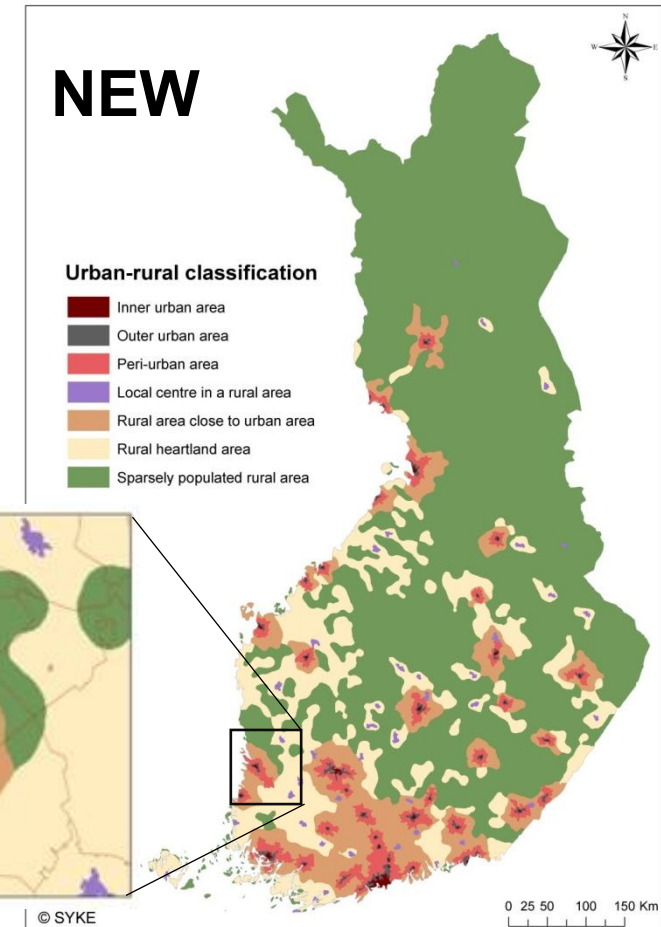
Urban-Rural spatial classification of Finland

- The classification is based, among other things, on nationwide data on **population, labour force, commuting, and buildings**, as well as on **road network and land use datasets**.
- The result is significantly more precise and versatile than a classification into urban and rural municipalities based on municipal boundaries.
- In the urban–rural classification, **urban areas** are defined as those central localities with **more than 15,000 inhabitants**. There are **34** such so-called city regions in Finland.
- Smaller central localities with **fewer than 15,000 inhabitants** are classified as **local centres** and as part of **rural areas**.
 - Other rural categories include peri-urban rural areas, core rural areas, and sparsely populated rural areas.

National level Urban-Rural classification



Renewal of
classification
from administrative
area based to
spatial data based

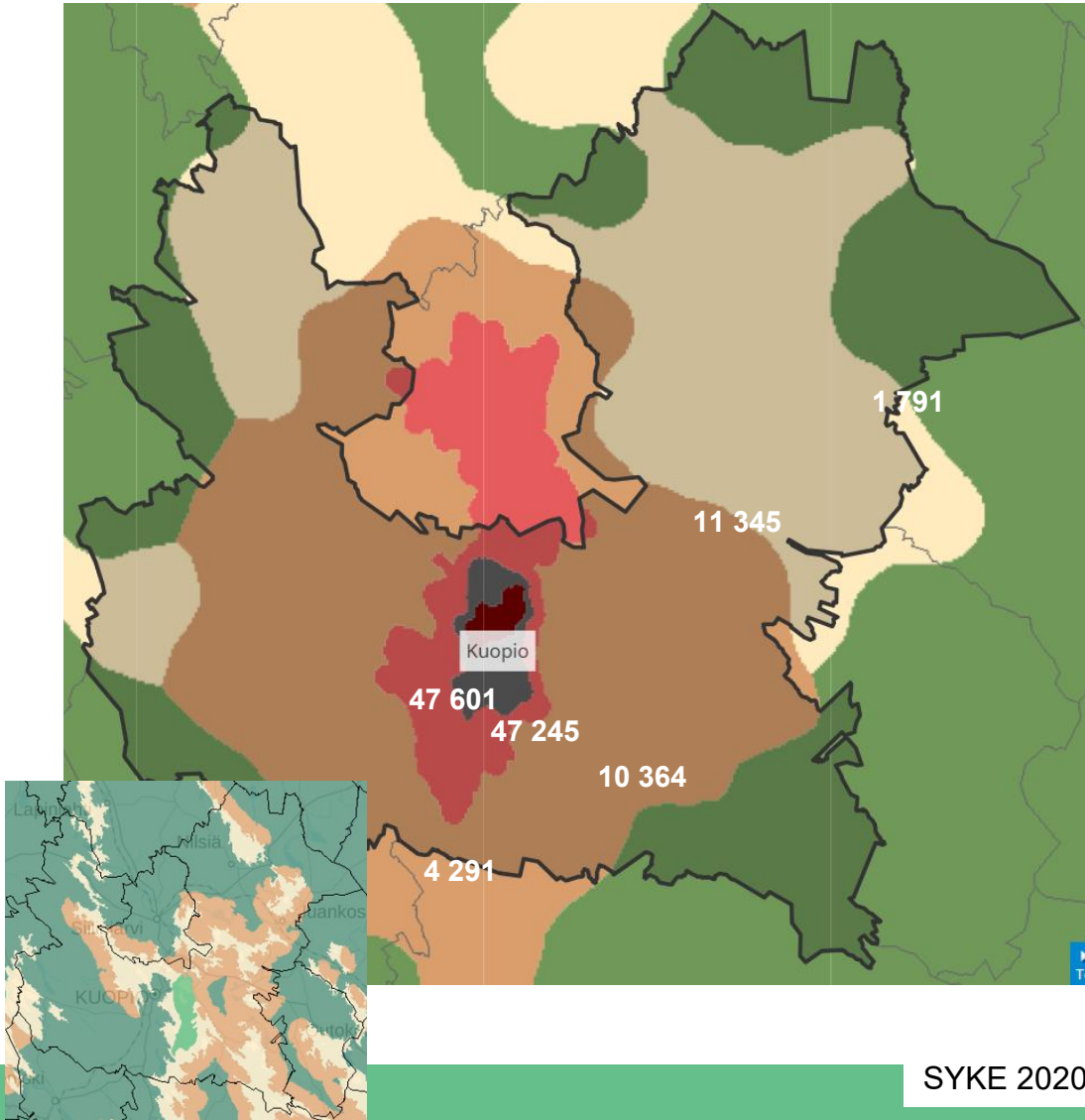


Statistics based on administrative boundaries are not suitable for policy purposes and spatial analyses because they do not represent the true regional differences in Finland

http://www.ymparisto.fi/en-US/Living_environment_and_planning/Community_structure/Information_about_the_community_structure/Urbanrural_classification



Finnish Context – municipalities



SYKE 2020

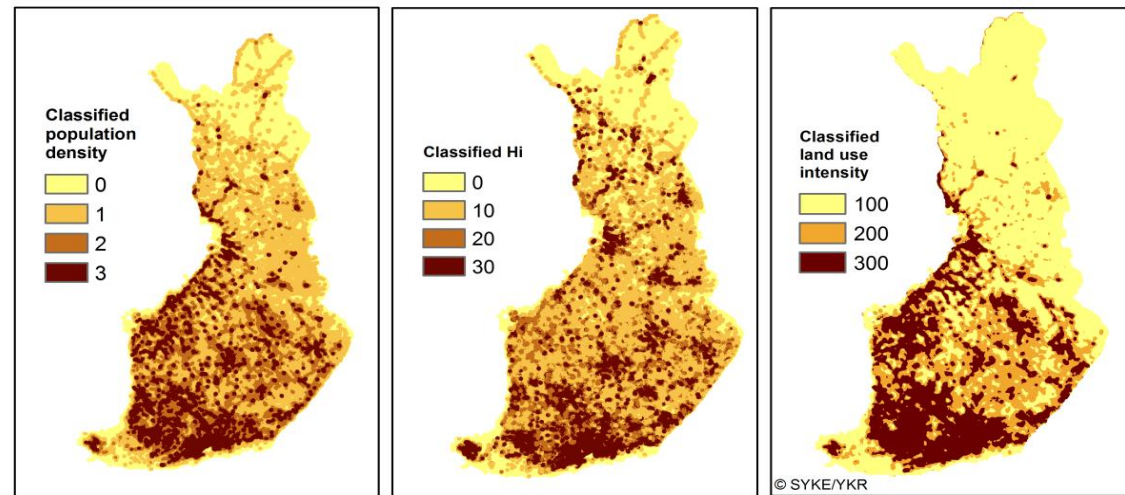
- LAU level: 308 municipalities,
 - strong self-government , local democracy, right to levy taxes, basic services (education)
 - 108 use “city” to define themselves
 - 216 (out of 293) municipal strategies without “rural” (“countryside”)
 - 232 (out of 293) municipal strategies without “village”
- < 6 000 median population size
- ~14 000 mean population size
- Municipalities large in size (km²)
 - Largest: Inari 17 333 km² (~1/4 of land area o Scotland)
 - In picture: Kuopio 4 326 km² (124 021 tot. population)
- Statistical Grouping of Municipalities into Urban, Semi-Urban and Rural not sufficient
 - Urban: Helsinki >680 000 inhabitants
 - Urban: Kaskinen <1 200 inhabitants
- LAU and NUTS level data used widely in legislative preparation.
- Need for GIS-based data Urban-Rural-Classification (SYKE 2014, 2020) and participation.

Sum variable of three variables representing rural heartland and sparsely populated rural area

Variable 1 + Variable 2 + Variable 3 = Sum variable

Herfindahl's index

$$H_i = \sum_{s=1}^{S_i} X_i^2$$



The three classified variables (above) are merged together to create a single classified variable, which maintains the information of the separate variables (on the right). In this sum variable, units describe the class of population density, tens the class of Herfindahl index and hundreds the class of land use intensity. By classifying this variable according to the **criteria**, Finland is divided into two classes: areas that meet the criteria of Rural heartland and Sparsely populated rural areas.

Criteria:

Class is rural heartland area:

If population density criterion is in the upper quartile (75 %).

Or

Population density criterion is between median value and upper quartile and land use intensity criterion is in the upper quartile.

Or

Population density and land use intensity criteria are both between median value and upper quartile and economic diversity criterion is in the lower quartile (most diverse 25 %).

Or

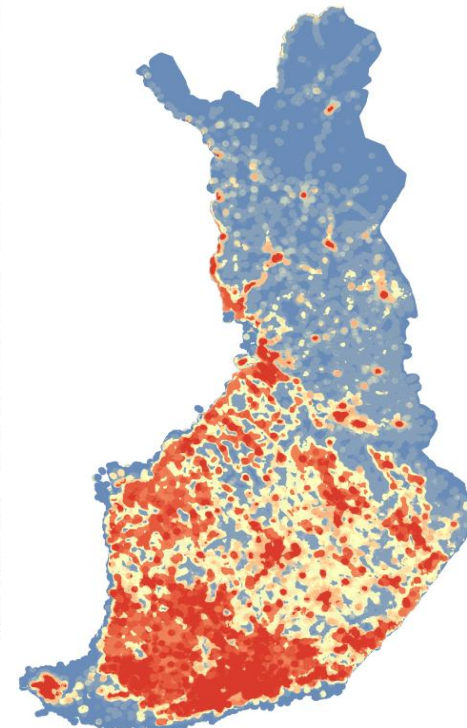
Population density is below median value but land use intensity criterion is in the upper quartile and economic diversity criterion in the lower quartile.

Class is sparsely populated rural area:

If it does not meet the criteria of rural heartland areas.

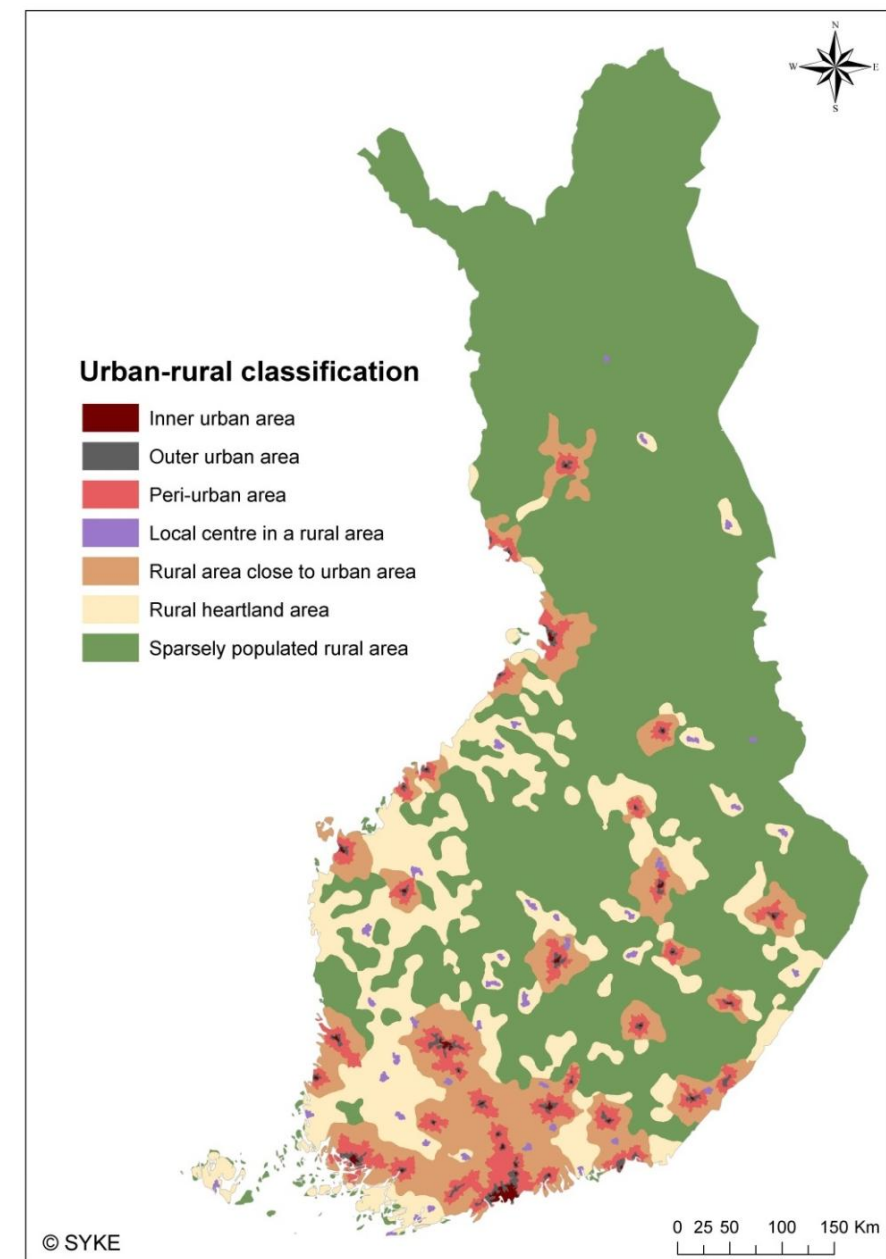
Single classified variable

- 100
- 101
- 110
- 111
- 112
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- 332
- 333



Seven regional classes

- **Inner urban area**
A compact and densely built area with continuous development.
- **Outer urban area**
A dense urban area extending from the boundary of the inner urban area to the outer edge of the continuous built area.
- **Peri-urban area**
A part of the intermediate zone between urban and rural, which is directly linked to an urban area.
- **Local centres in rural areas**
Population centres located outside urban areas, small towns and large parish villages.
- **Rural areas close to urban areas**
Areas with a rural character that are functionally connected and close to urban areas.
- **Rural heartland areas**
Rural areas with intensive land use, with a relatively dense population and a diverse economic structure at the local level.
- **Sparsely populated rural areas**
Sparsely populated areas with dispersed small settlements that are located at a distance from each other. Most of the land areas are forested.



GIS-method:

focal analysis 250x250 m grids
overlay and classification

Data:

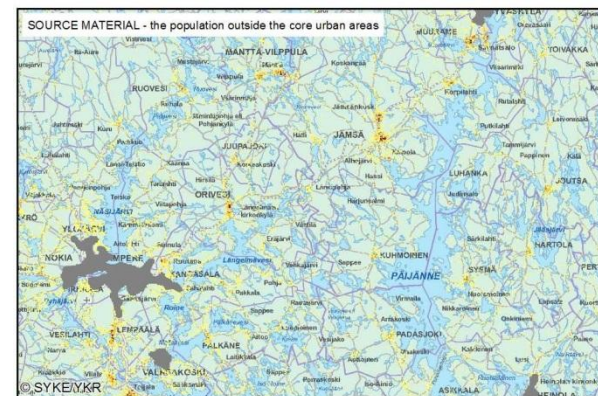
Population
Standard industrial classification of
workforce (Statistics Finland, TOL
2008)
Corine land-cover
Commuting, Potential accessibility,
Area density of buildings

Based on the data, variables
describing
the amount, density, efficiency,
accessibility, intensity, versatility and
orientation of the areas have been
calculated

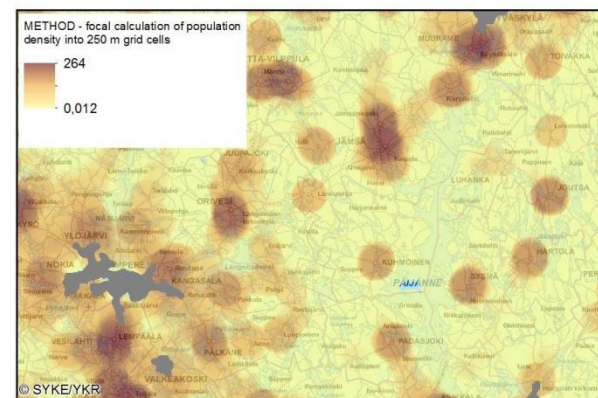
**Final classification is then created
by combining multiple classified
variables together according to
certain criteria**

*Example variable 1: population
density*

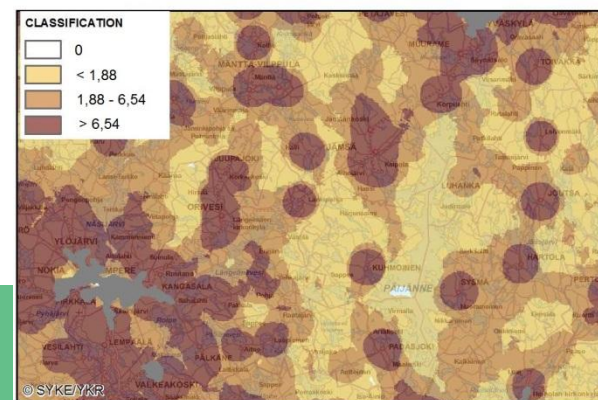
Population outside
inner and outer
urban areas in
250x250 m grids



Focal analysis to
calculate a
continuous
population density
surface



Classification
according to
statistical
distribution



Example variable 2: Land use intensity

First Corine 2006 Land Cover data (Finnish version of 25 m raster) is aggregated into 250 m grids and then each land use class is weighted according to how intense its land use is measured by human impact (see table extract below).

Corine 2006 classes (25m)	Weight
Continuous urban fabric	10
Discontinuous urban fabric	9
Industrial or commercial units	10
Road and rail networks and associated land	10
Port areas	10
Airports	10
Mineral extraction sites	9
Dump sites	9
Construction sites	9
Green urban areas	6
Sport and leisure facilities	6
Non-irrigated arable land	4
Pastures	3
Forests, beaches, dunes, and sand plains	1
Transitional woodland/shrub	2
Marshes, peatbogs	1
Water	1



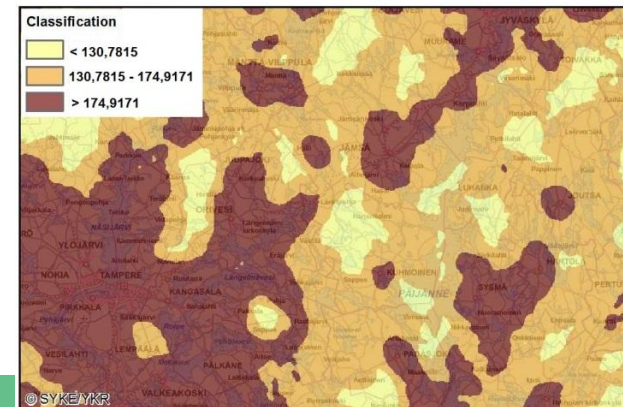
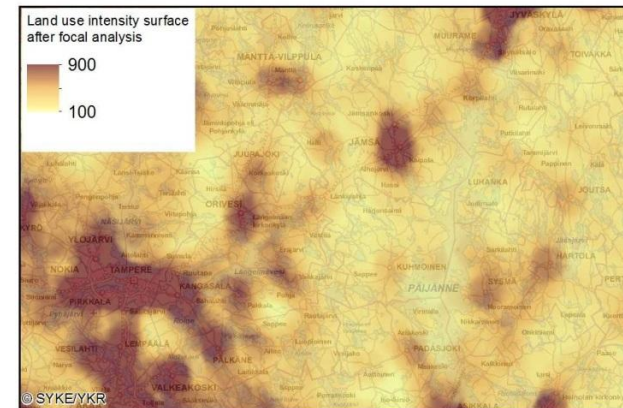
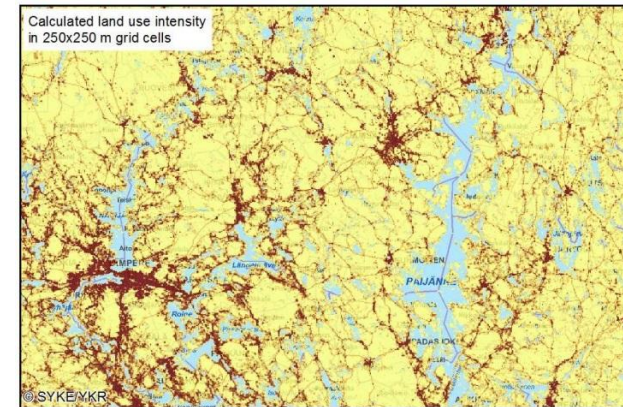
Each weighted class is summed to get the total intensity into 250 m grids



Focal analysis to calculate a continuous land use intensity surface



Classification according to statistical distribution



Classification is used in...

- Surveys, studies
- Allocation of EU Rural funding (EAFRD and CAP)
 - Used to define the eligible rural area in CAP funding
 - Used as criterion for the Leader group's area of operation
- National Rural policy documents
 - Such as Rural Policy Report and its statistics
- Allocation of national village shop support
- Rural Impact Assessment / Rural proofing
- Land use development overview by The Ministry of the Environment
- At the Ministry of Transport and Communications and at Traficom: in transport system monitoring and in the National Travel Survey
- Situation and development picture for regional development (ERDF)

More information:

WWW:

http://www.ymparisto.fi/en-US/Living_environment_and_planning/Community_structure/Information_about_the_community_structure/Urbanrural_classification

Statistics Finland (2008). Standard Industrial Classification (TOL2008):

http://tilastokeskus.fi/meta/luokitukset/toimiala/001-2008/index_en.html



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