## **Abstract**

## "Basic data for forecasting small areas"

<u>Background:</u> In Sweden there are two types of local government bodies, the municipality (kommun) as the local unit and the county council (landsting) as the regional unit.

At the local level, the whole area of Sweden is divided into 290 municipalities, each with an elected assembly or council. The population of an average Swedish municipality is around 15 000. Populations vary widely, however. From less than 3 000 in tiny Bjurholm to more than 700 000 in Stockholm. Municipalities are responsible for a broad range of facilities and services: housing, roads, water supply and wastewater processing, schools, public assistance, elder care, child care etc. They also charge for various services. As a result, municipalities have a fair amount of latitude in deciding what services they should offer. However, they are legally obliged to provide certain basic services.

The 20 county councils in Sweden are responsible for overseeing tasks that cannot be handled at the local level by municipalities but require coordination across a larger region, most notably health care.

Municipalities as well as county councils are entitled to levy income taxes on individuals to cover their costs.

Many responsibilities and services that a municipality must handle are, of course, much dependent on the size of the population. The changes and composition of the population of the municipality is of utmost importance. Population forecasts of high quality are therefore the best tool for the planning of all tasks and ambitions of the municipality including child care and health care services for the elderly.

Available statistics supplemented by substantive knowledge make up the platform for assumptions, as well as the reliability of the forecasts. The population development of various kinds of residential districts must be analysed. The particular statistical material for the single municipality may involve difficulties. Basic information materials for a larger common areas with common experiences are needed in order to obtain acceptable quality.

The results of a Development Project, which aims at giving an overall base of material for the whole country and which can be easily up-dated, is shown below. The project was at large initiated by KSP (Föreningen för kommunal statistik och planering), a society for working planners of municipalities, statisticians and analysers. The major part of the project has been finalized by the Swedish Association of Local Authorities (SALA). The Association act as employers' organisations for Sweden's 290 local authorities. They defend and promote the interests of their members, for example by working to strengthen local self-government and the development local democracy. Their activities are largely financed by membership fees.

This presentation begins with an overview about various methods for making small area population forecasts. Then it is analysed how risks for out-migration, age-distribution of in-migration and housing density varies for different residential district. After this the actual work process is described, which means to find classes which are demographically similar. By cluster analysis we have arrived at a division of classes. The division is defined by class of housing, tenure, year of construction, size of the town where the building is situated and also the taxation value. Also, the annually up-dated material will be described and how it can be used in the progress of forecasts for smaller areas within municipalities. Finally shortly about the smoothening model that is used to present the data.