

Population density Grid map from 1856

The production of grid statistics at Statistics Sweden

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Background

- Based on register data covering the whole population
- Produced as a commercial product on commission only
- Since ~1990
- As a "small area" product
- Within the "Market Profiles System" (MPS) – a group of small area products
- Turnover last year: ~350 000 EUR

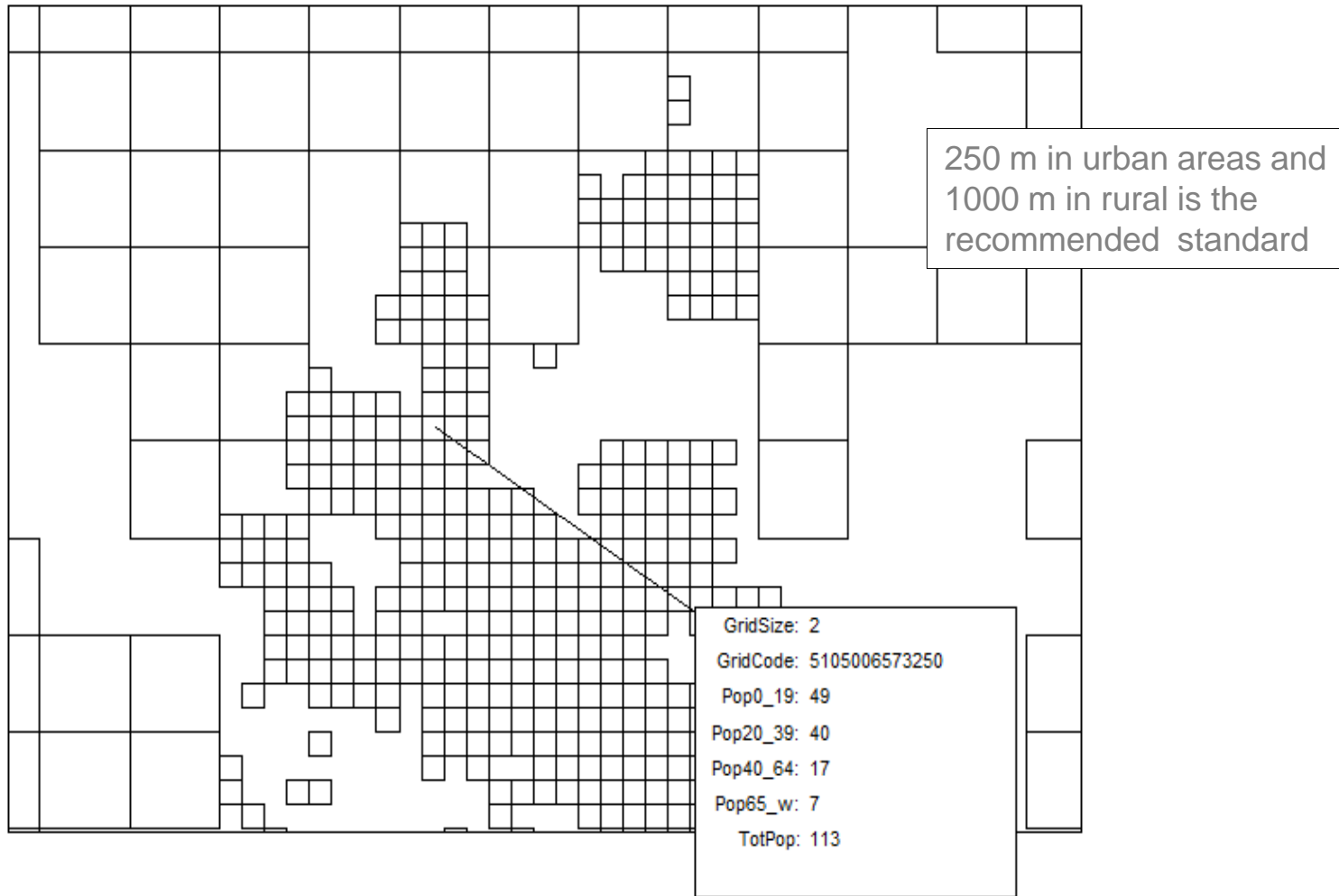


Example:

Production of a grid map with information on population by age covering the whole country



Typical grid map produced by Statistics Sweden



The statistical data

GridSize	GridCode	Pop0_19	Pop20_39	Pop40_64	Pop65_w	TotPop
1	3170006585000	3	0	3	0	6
1	3170006599000	0	3	6	3	12
1	3170006600000	5	9	4	4	22
1	3180006588000	0	0	4	3	7
1	3180006589000	0	0	3	3	6
2	3180006600000	27	17	30	12	86
2	3180006601500	4	6	6	3	19
2	3187506602000	0	3	3	3	9
2	3485006641250	45	24	32	18	119
2	3490006641250	19	51	51	92	213

Source 1: The Population register

Parish

Real estate name

Age

Forsamling	Fastbet	Personnr	Kon	Fodelseland	Alderslut	AlderSlutD
011401	ANTUNA 2:1	192613015070	1	SVERIGE	16	30772
011804	HEDEN 2:1	193203356002	2	SVERIGE	78	28782
188001	MELONEN 4	193204001029	2	SVERIGE	32	28735
188001	MELONEN 6	193718041555	2	SVERIGE	22	27024
051301	KAJAN 7	196508568733	1	SVERIGE	45	16562
051401	SKEDVI 2:11	194607746453	1	SVERIGE	64	23649
051401	SKEDVI 2:11	195013299361	2	SPANIEN	43	21988
012201	ANTUNA 2:1	194805126695	1	SVERIGE	8	22939

Source 2: The Geography Database

Parish Real estate name Coordinates Urban area code (0000 = rural)

Forsamling	Fastbet	Xkoord	Ykoord	Tatort
011401	ANTUNA 2:1	6918811	619720	7688
228301	TEGELBRUKET 6	7005877	616941	7660
106002	HOLJE 2:246	6236100	471816	2720
011804	HEDEN 2:1	6394488	698073	0000
051401	SKEDVI 2:11	6259331	444381	2956
252301	HAKKAS 35:6	7436106	787874	0000
012006	BJÖRNÖ 1:481	6570581	700694	0106

And more...



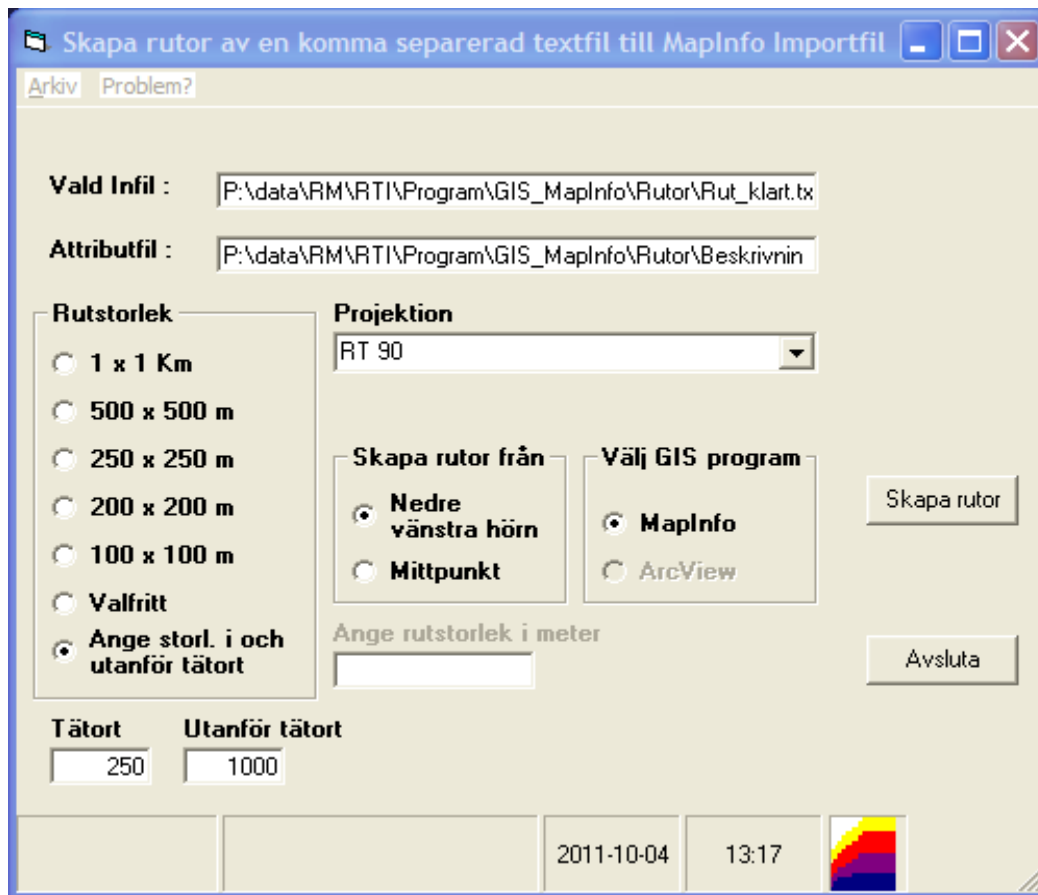
Tool 1: MS SQL Script generating the statistical data

```
select
GridSize= case when tatort = '0000' then 1 else 2 end,
GridCode = case when tatort = '0000'
then Convert(char(6), (Ykoord/1000)*1000) + Convert(char(7), (Xkoord/1000)*1000)
else Convert(char(6), (Ykoord/250)*250) + Convert(char(7), (Xkoord/250)*250) end ,
Pop0_19 = sum(case when alderslut between 0 and 19 then 1 else 0 end),
Pop20_39 = sum(case when alderslut between 20 and 39 then 1 else 0 end),
Pop40_64 = sum(case when alderslut between 40 and 64 then 1 else 0 end),
Pop65_w = sum(case when alderslut >= 65 then 1 else 0 end),
TotPop = count(*)
into GridStat
from rtb2010..rtb a JOIN geobas2011..fastighet_SweRef b
ON a.forsamling = b.forsamling and a.fastbet = b.fastbet
group by
case when tatort = '0000' then 1 else 2 end ,
case when tatort = '0000'
then Convert(char(6), (Ykoord/1000)*1000) + Convert(char(7), (Xkoord/1000)*1000)
else Convert(char(6), (Ykoord/250)*250) + Convert(char(7), (Xkoord/250)*250) end
```


Output: The statistical data

GridSize	GridCode	Pop0_19	Pop20_39	Pop40_64	Pop65_w	TotPop
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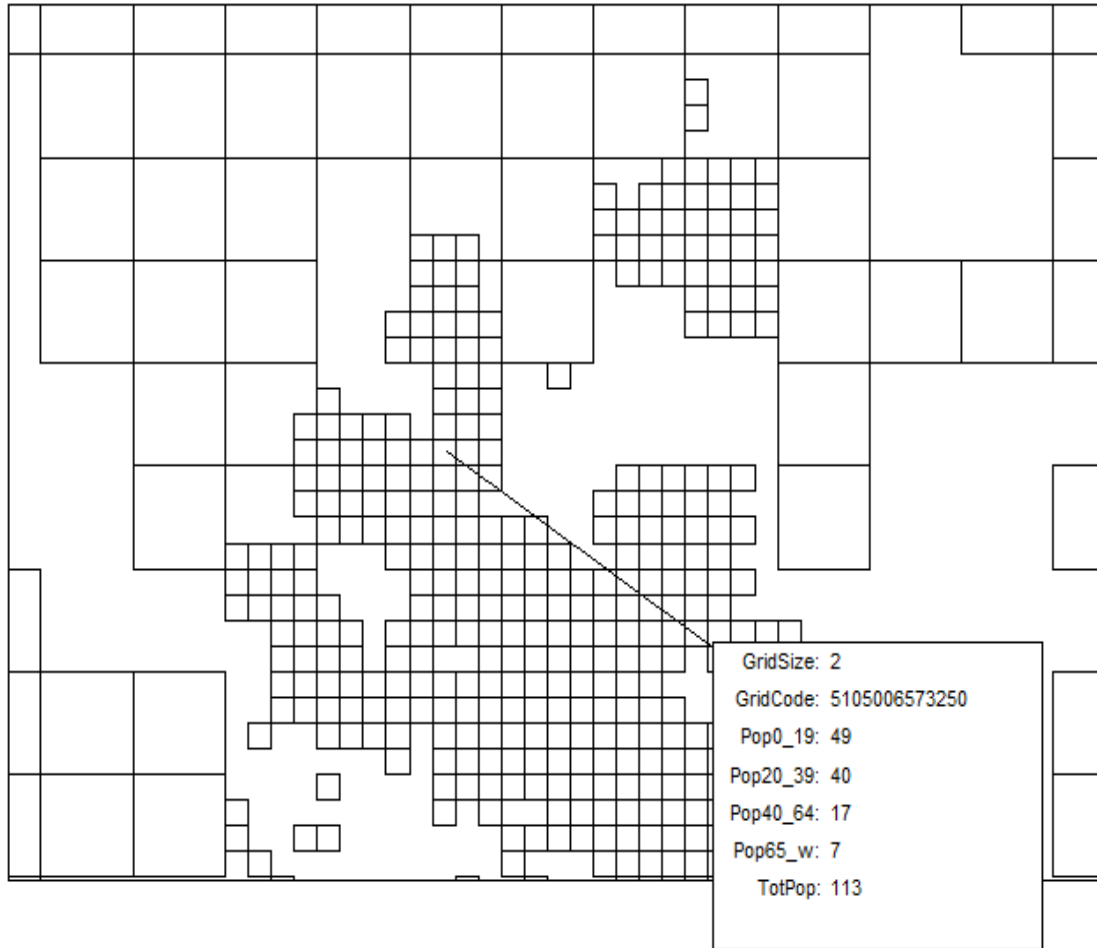
Tool 2: Application creating the digital grids



From the GridSize and GridCode information in the statistical table. Statistical data is included



Result: The grid map with data

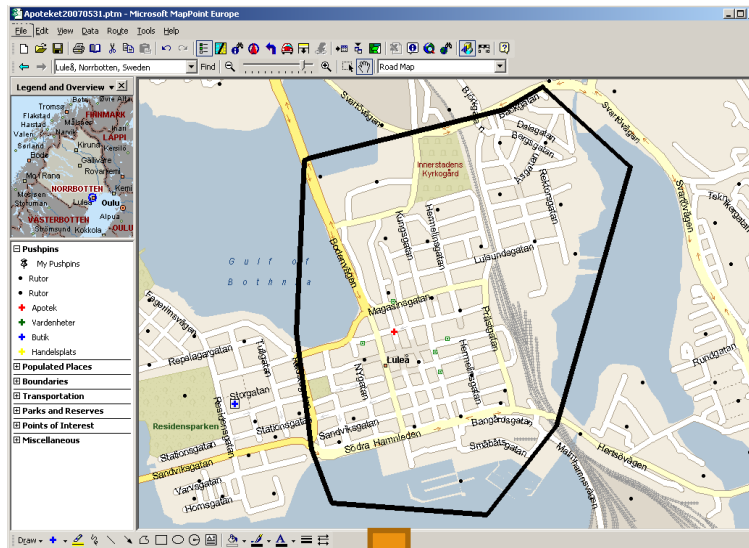


ArcGis Shape or
MapInfo .TAB format.
Projections Swedish
RT90 or Sweref 99 TM





Implemented in the "Data from the Map" application



or delivered as files in ArcGis or MapInfo format.

