



# The role of spatial information for planning sustainable cities

Sanne Broekhof and Ramona van Marwijk

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feitelijk verrassend

## Aim and Research Questions

To explore:

- to what extent spatial information can be used for planning sustainable cities.
- how this information could be used to support decision making.

How can we interpret geographic data into workable policy and guidelines to plan sustainable cities?

- What does spatial information tell us?
- (How) can we combine different data into univocal policy or plans?
- What conclusions may we draw and what not?

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## Methods

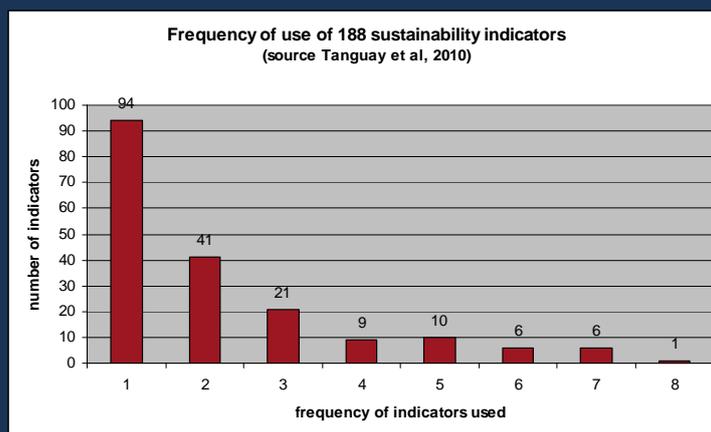
- 6 indicators for social, economic and environmental sustainability
- projected on neighbourhood scale in Apeldoorn
- cadastral, environmental, socio-economic and real estate data from:
- Kadaster, Central Bureau for Statistics (CBS), and Leefbaarometer (*liveability monitor*)

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## Sustainability Indicators



Analysis of Tanguay et al. (2010) amongst 17 studies, indicators per study varied between 10-86.

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# Apeldoorn as a Case Study



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## Percentage built surface per neighbourhood in Apeldoorn

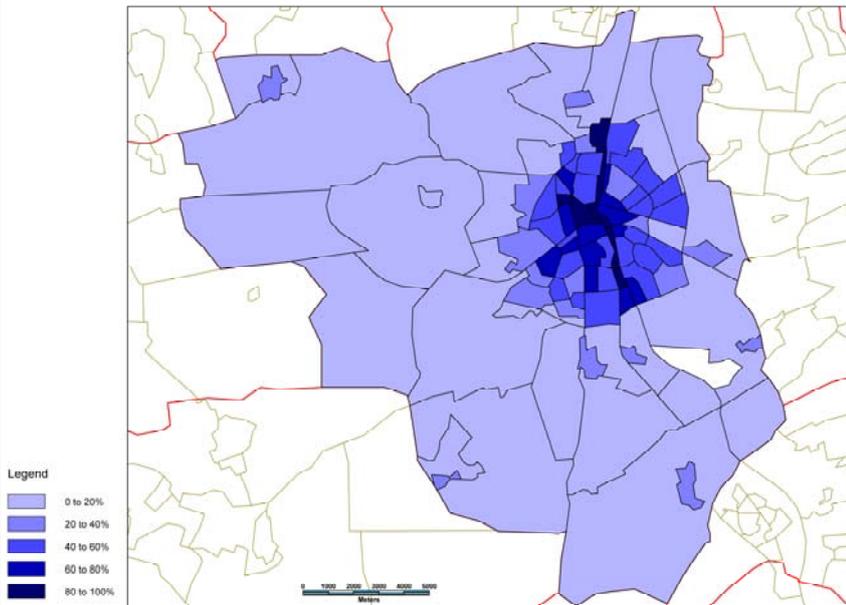
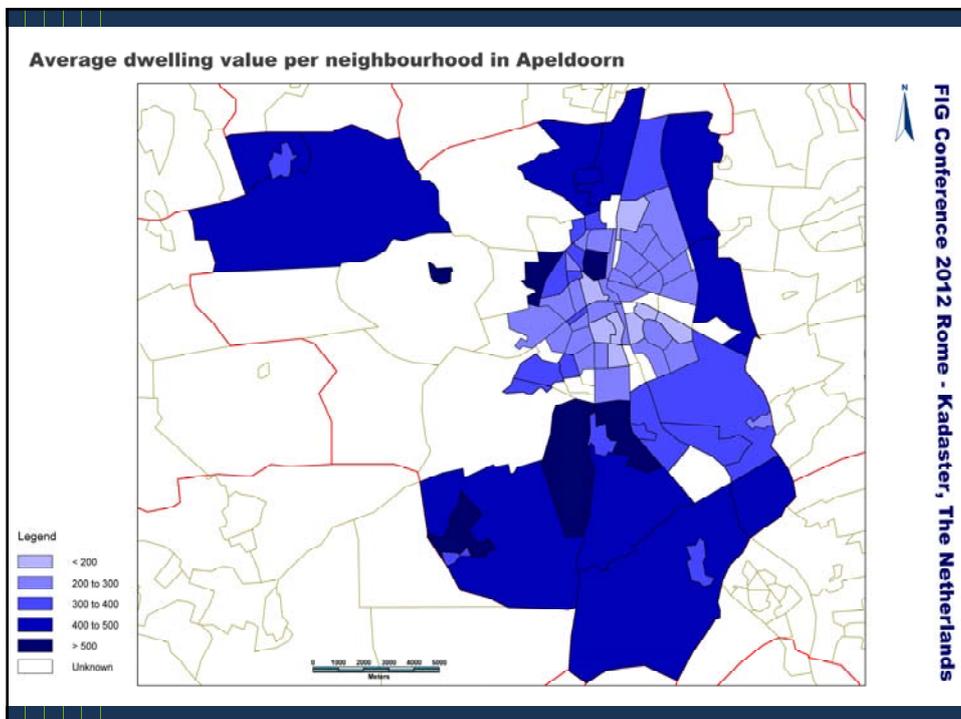
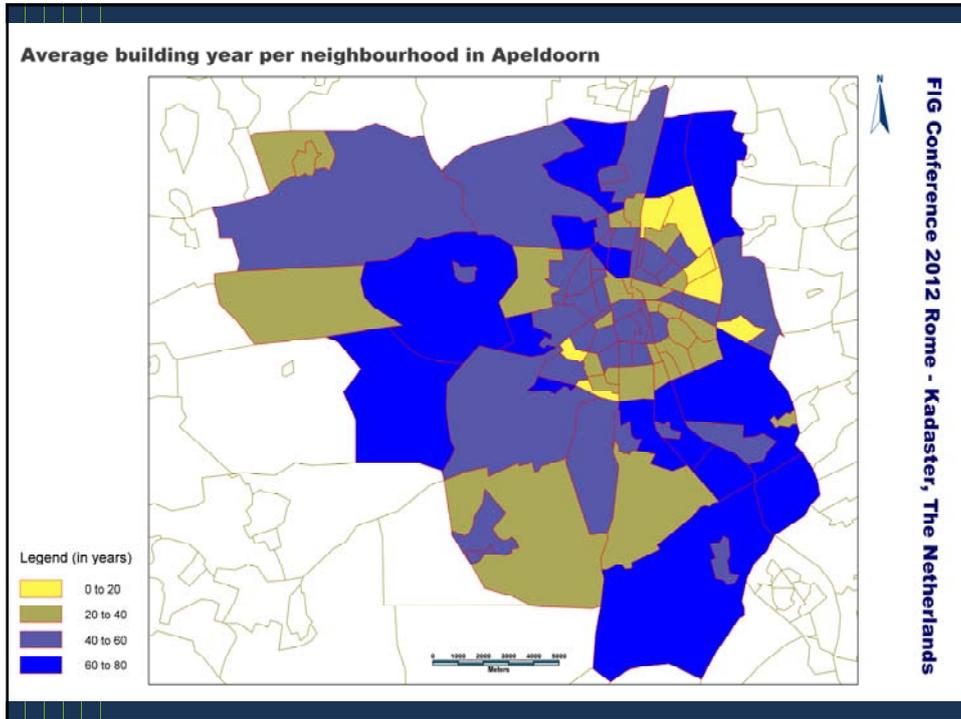
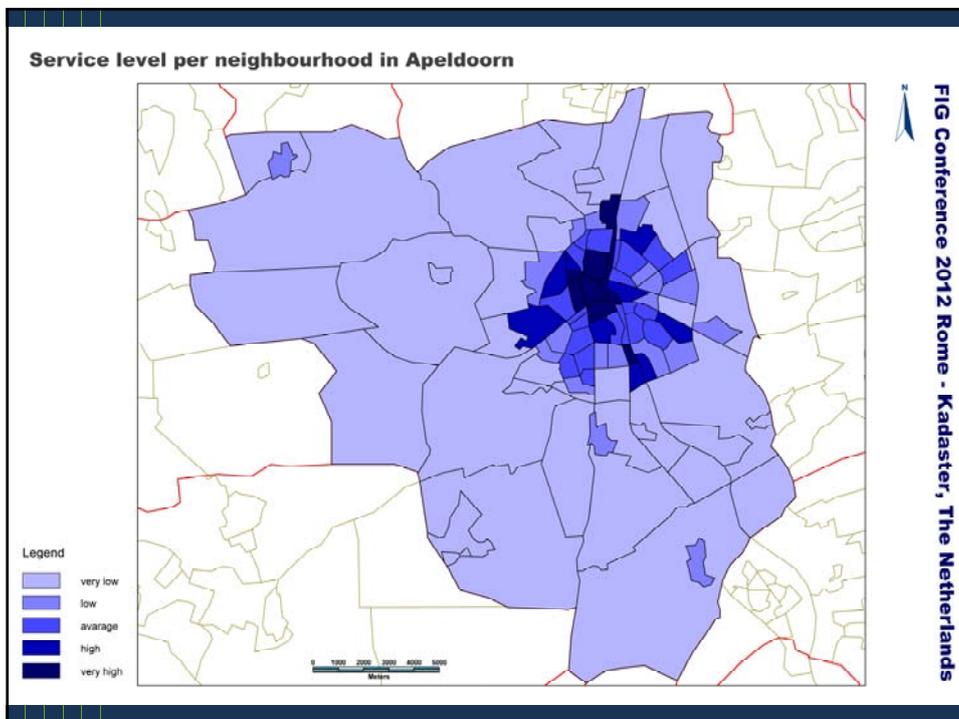
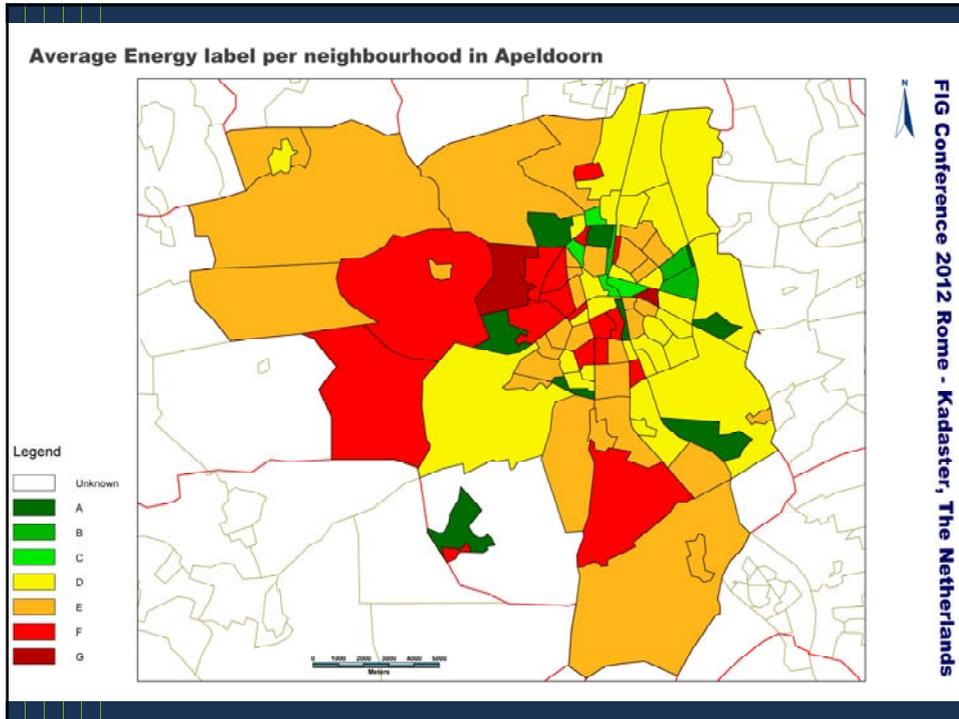
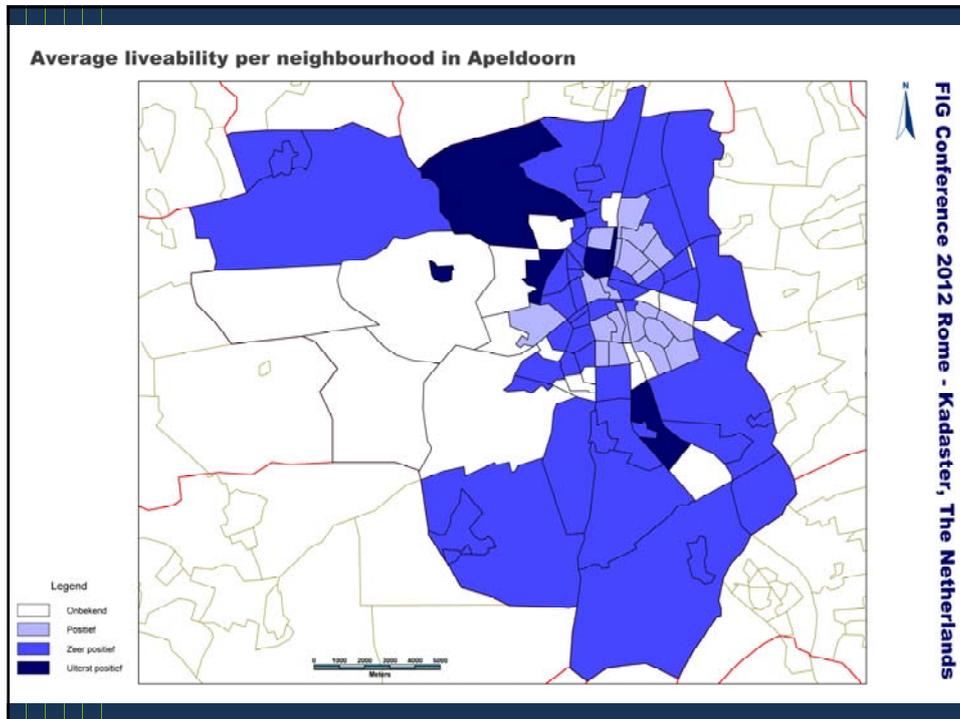


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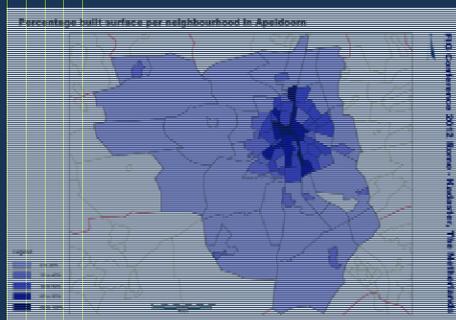






Can we combine different data?

Maps can be very similar or completely opposite



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## Conclusions

- Planning & policy sustainable cities a challenge.
- Scores per neighbourhood cannot be added
- Spatial context & clear vision on sustainability > to translate indicators into policy and plans.
- Careful interpretation essential
- Knowledge on geographical data crucial.