Simulating the urban transformation process in Haaglanden (NL)

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Agenda

- Theme of the project

- The Haaglanden project setting

- Model structure and behaviour

- Insights & lessons learned

- A rigourous evaluation of the project

- What's next?

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Theme of the project

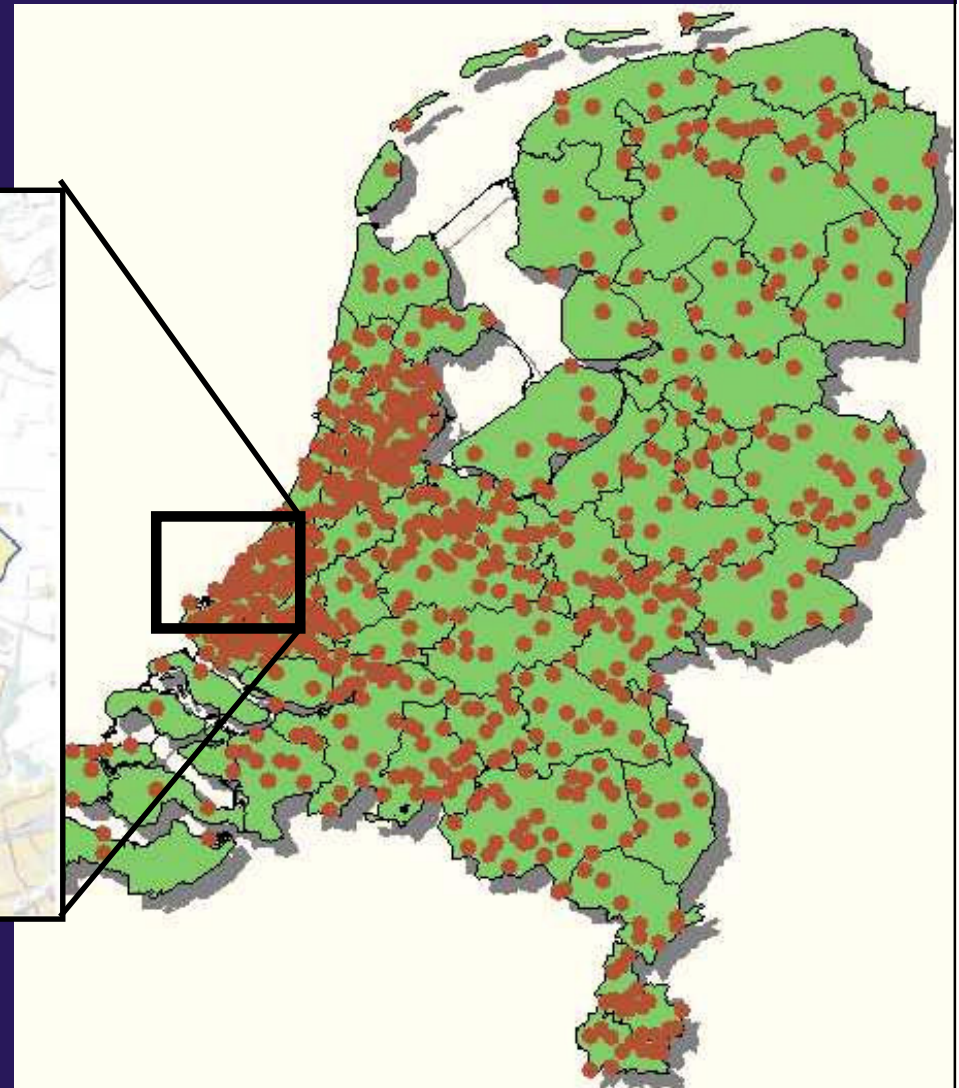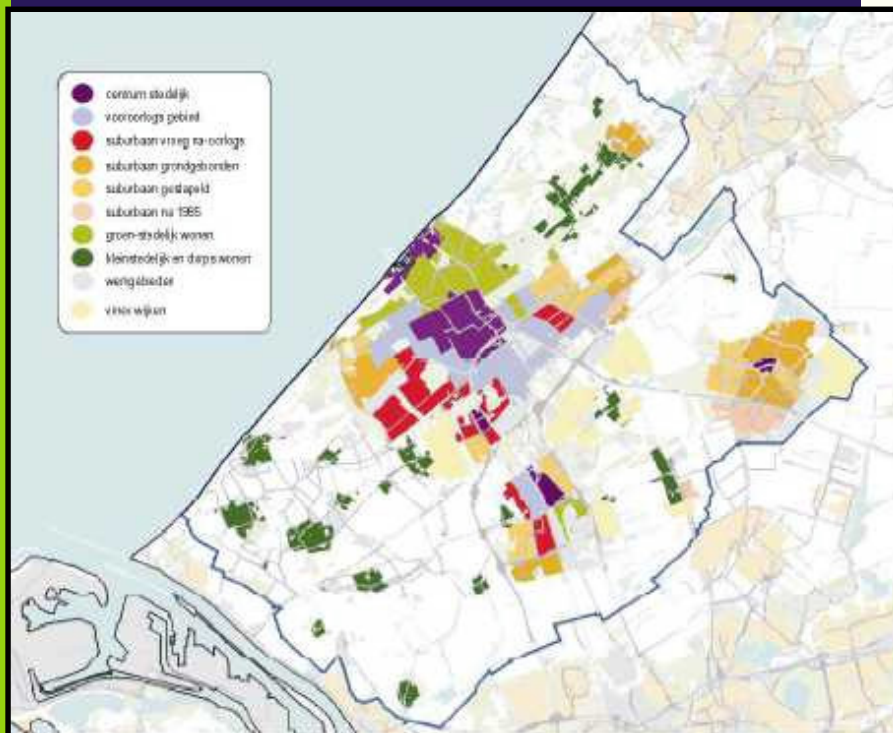Urban renewal / transformation

- outdated post war housing projects
- income segregation between city and suburbs
- negative socio-economic dynamics
- ageing population, immigration, crime

Dutch urban transformation policy after 1995

•Not only physical renewal (like the 1970's), but also socio-economical

•Change the population mix in order to restore the balance within the city

• Demolish the most outdated housing, build new, better quality houses

A shift towards a more Forresterian approach?
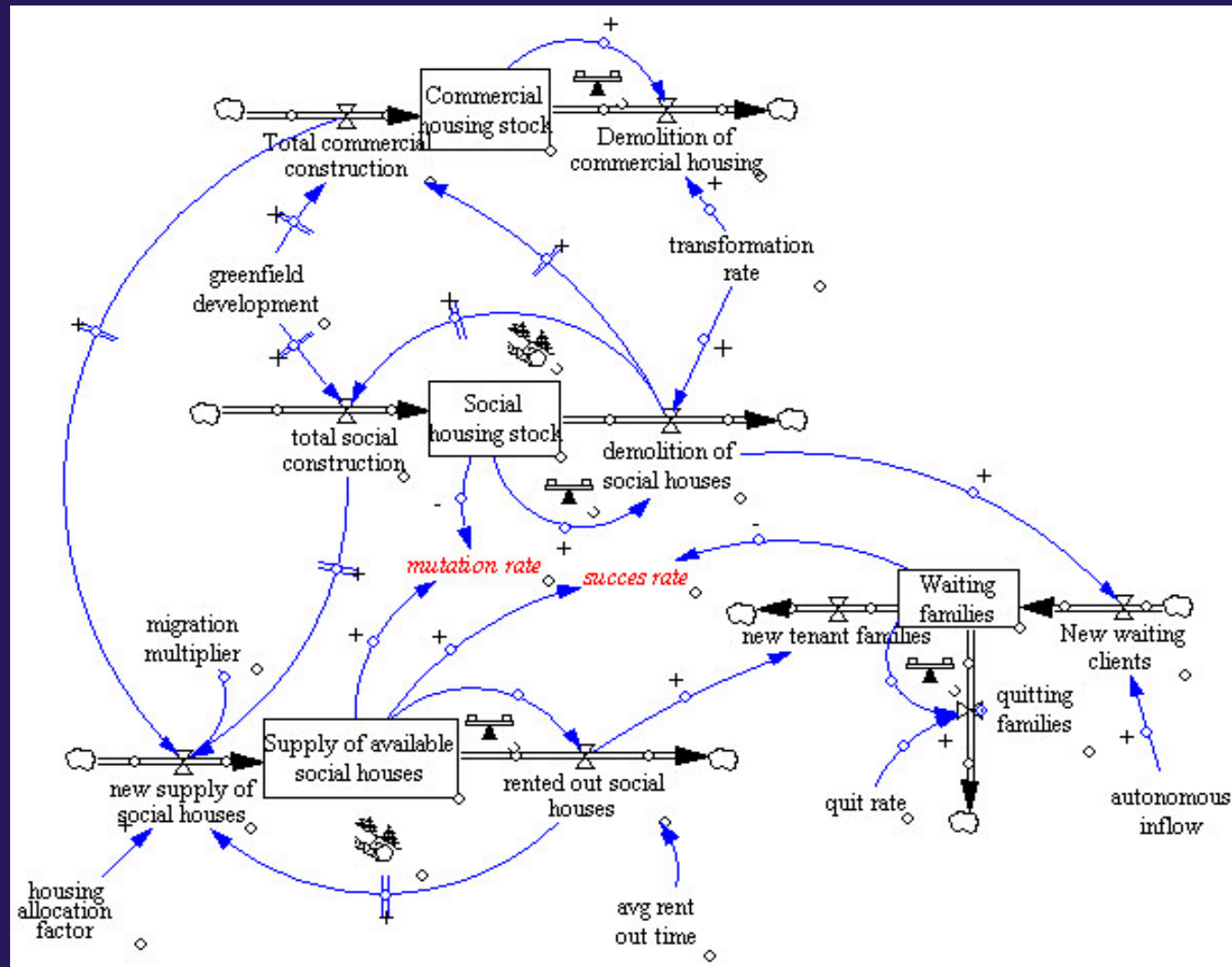
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Haaglanden

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Setting of the project

- Econometric model produced wrong prognosis

- Two client organisations in high conflict setting
  - SGH: Regional authorities Haaglanden
  - SVH: Association of (private) housing corporations

- Clients' central question:
  - How do new development and transformation affect the social housing market?
  - Which policies are effective and which policies are not?

- A messy problem:
  - different views on how things work
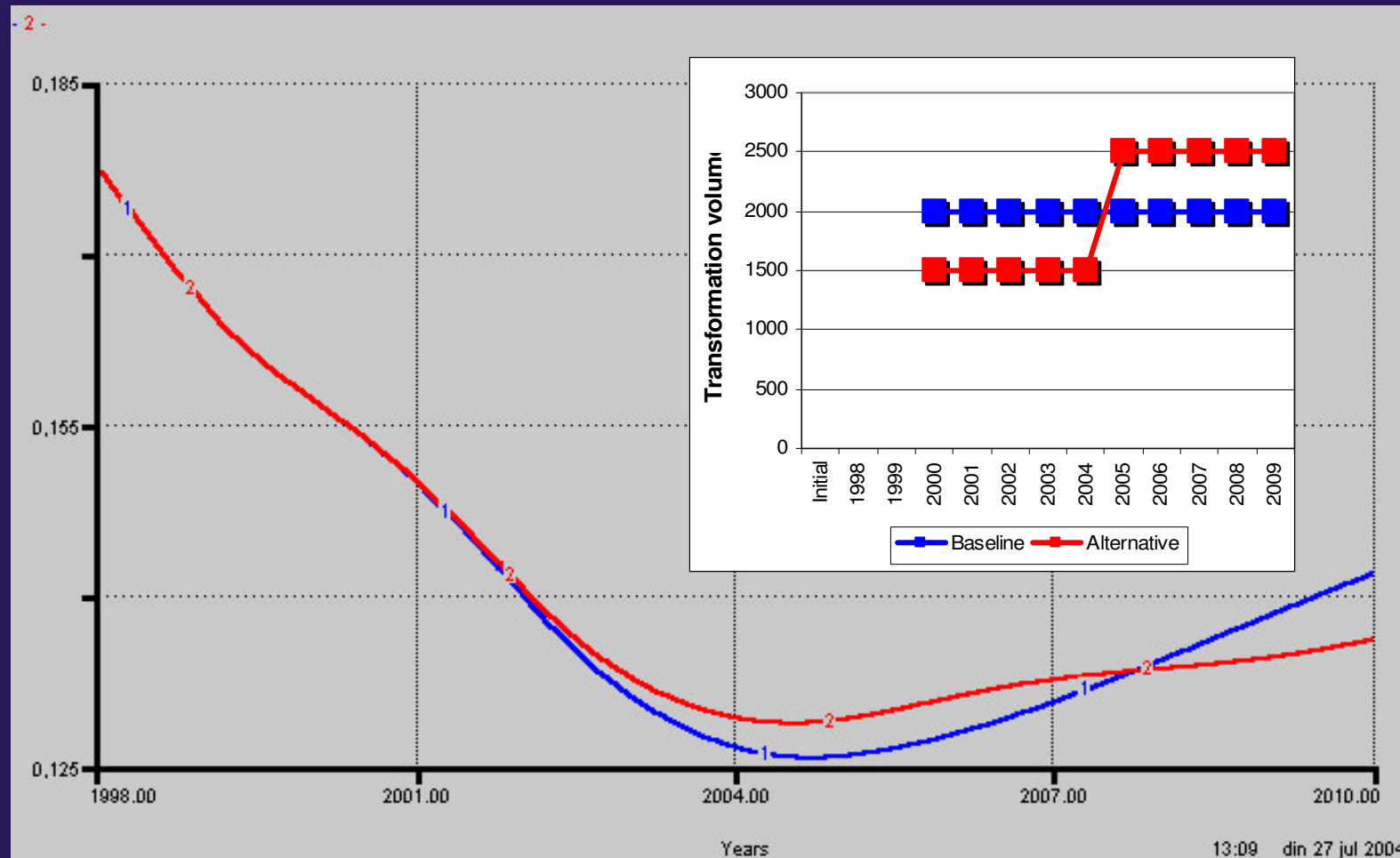 - different views on how policies affect the market

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The modelling process

- Group model building approach
  - Conceptual phase: what is the problem?
  - Modelling phase: data collection, validation, sensitivity
  - Simulation phase: test policy options
  - Follow-up phase: spread the news

- The big issue between the clients:
  - Transformation volume related to green field development
  - SGH (baseline) : Don't relate them, keep on moving as agreed
  - SVH (alternative) : Relate them in order to keep a stable success rate.

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Basic model structure

The two competing policy options

Insights & lessons learned

- Project group insights gained
    - insight in high level structure of problem
    - impact of delays before market effect materialises
    - short term effect versus adverse long term effect
    - strong leverage: green field construction & migration multipliers
    - weak leverage: housing allocation system
    - do not slow down transformation when green field construction is low
    - several white spots in existing data collection found

- Problem has been "de-messed"
    - consensus reached on system structure and feedback loops
    - consensus reached on effect of policy options
    - debate is now on preferences, not on structure and dynamics
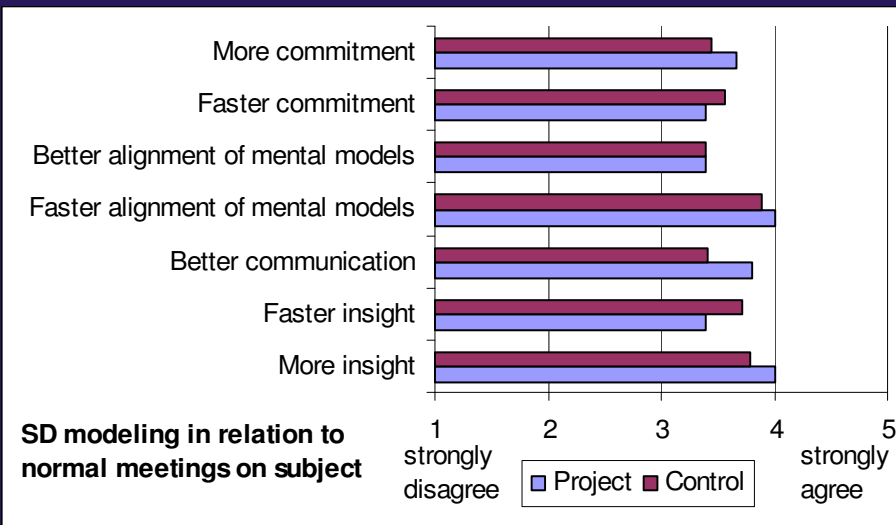
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Measuring impact of the project

Project group participated in full GMB project (35 hrs in 1 yr)

Control group attended presentation + flightsim (1.5hr 1day)

General evaluation (post)

SD modeling + simulating useful?

SD modeling in relation to normal meetings on subject

| | 1 strongly disagree | 2 | 3 | 4 | 5 strongly agree |

More commitment
Faster commitment
Better alignment of mental models
Faster alignment of mental models
Better communication
Faster insight
More insight

■ Project ■ Control

Ajzen evaluation (pre+post)

Attitude, norm, control: framework for GMB evaluation

Did project impact perception of policy options? **Yes!**

Attitude, norm affected, more so for project group

… to be continued

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What's next?

- Hopefully many interesting SD projects in the Dutch housing & urban planning field

- Test whether projects influence policy makers' attitude towards options (with Etiënne)

- Report in SDR and (e.g.) Housing Studies on contents, process and effects.

- Write a good PhD thesis on the findings

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