### The recovery of NLGIS

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## Outline

- Background
- Q Goal
- Approach
- 4 Demonstration
- 5 Outlook
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# Meaning and purpose of GIS

- Geographic Information System
- Purpose
  - capture, store & manage data
  - analyze data
  - present data







## Dutch GIS: Past, Present, Future

Kaartgis / NLGIS

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- HISGIS.NL (extremely detailed, but not temporal)
- NLGIS-2 (detailed and temporal)







### Goal

- To disclose the Historical Database of Dutch Municipalities (HDNG)
- To plot data from HDNG and other sources on NLGIS' maps
- For a period of five years







# Components

- Maps server (API)
- Data server (API)
- Tools to combine maps, data and draw maps
  - basic mapping: website
  - advanced mapping: R & Python







# Sustainability

- Modular approach: separating maps and data
- Use of main stream open source software
  - D3, Leaflet, MongoDB, Python, R
  - Used by major companies (e.g. Google, New York Times)







### Audience

### Dual approach:

- No experience with GIS (website)
  - Compare regional differences in a phenomenon
  - Compare changes over time
- Advanced users (familiar with Python, R)
  - Retrieve data from HDNG
  - Map other datasets
  - Map outcomes of (advanced) analyses
  - Integration with Wikipedia







### R - Demo

#### **Features**

- Functions: nlgget, nlgmap
- Main packages: jsonlite, rgdal, leafletR
- Use cases:
  - NLGIS meets CEDAR
  - NLGIS meets New York Library Map Wrapper







## Website - Demo

#### **Features**

- HDNG data selection
- Information box
- Colours







# Summary and perspectives

#### Outlook

- Consilidate current development (until December 1st)
- Allow for upload of maps (integration with CLIO-INFRA)





