POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION
ANNUAL CONFERENCE 2023
LEUVEN, BELGIUM • 29-30 NOVEMBER 2023
leuven

POLIS ANNUAL CONFERENCE 2023
CITIES AND REGIONS FOR TRANSPORT INNOVATION

Real time traffic predictions

The key to future traffic management

Edwin Papjes – Groningen
Lieuwe Krol – Goudappel

Goudappel
MOBILITY MOVES US

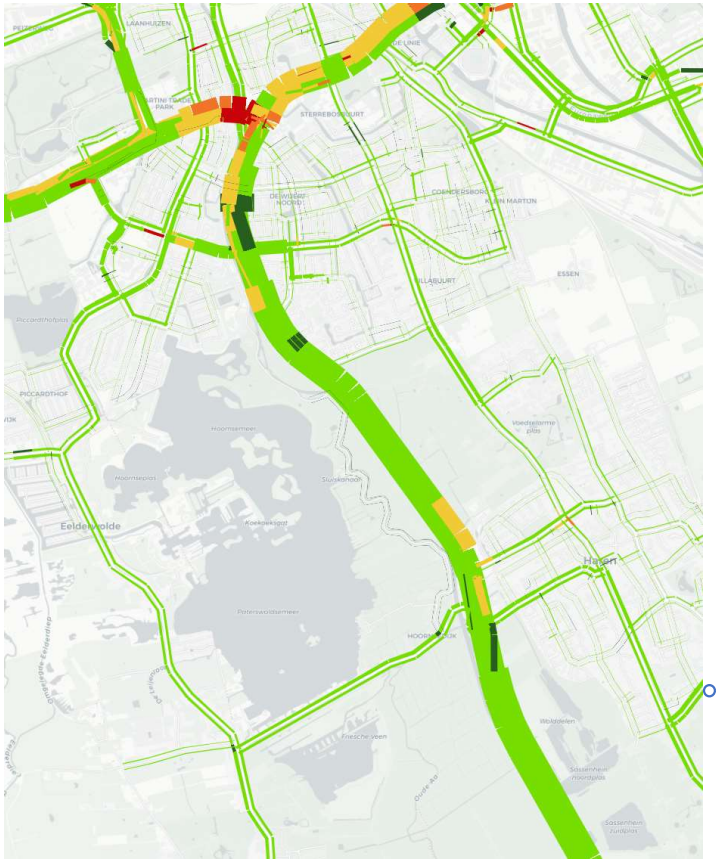
GRONINGEN BEREIKBAAR

What will happen?

How long will traffic jams become?

Do I meet policy goals?

Where is the origin of a traffic jam?



How do I minimize traffic nuisance

What will happen if I do something?

How long will it last?

Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

Pro-active traffic management

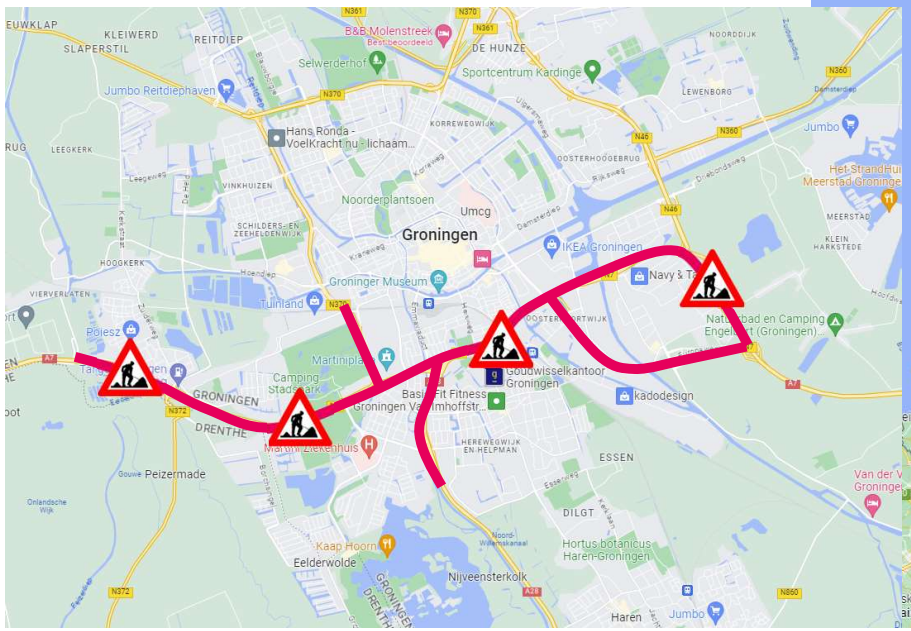
- Advantages
  - Mitigate or minimize nuisance
  - Multiple policy targets
  - Better informed choices
  - Automation

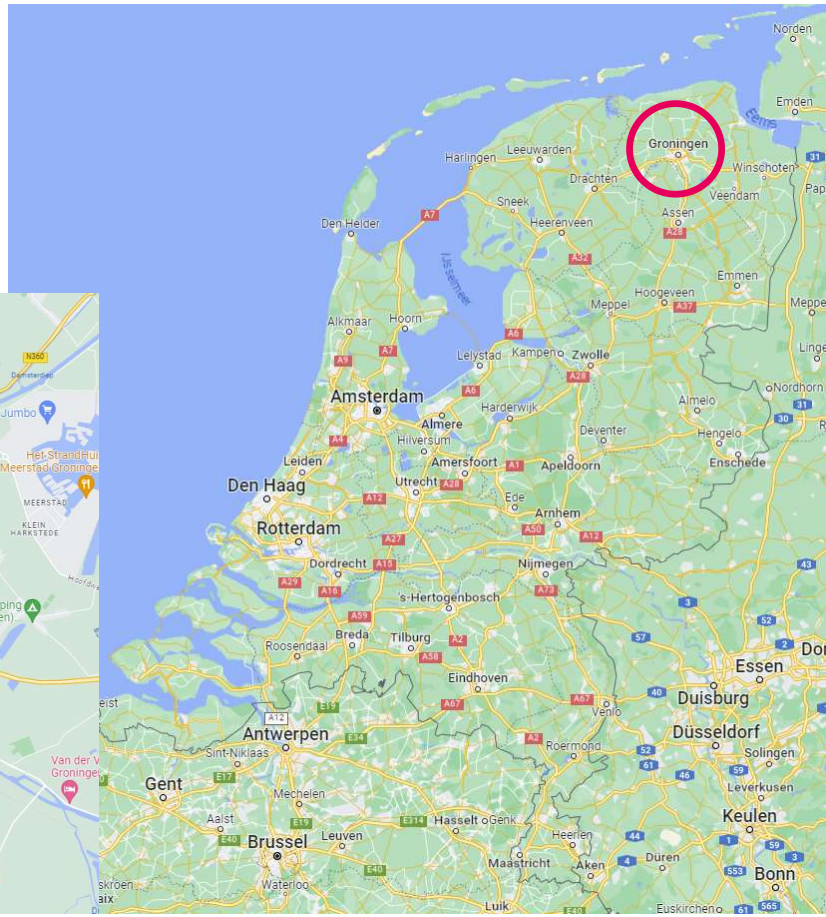
Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

Use case Groningen, the Netherlands

- Reconstruction of highways A7 and A28
- Major road works between 2017 and 2024





Goals of Groningen

Minimize traffic disruptions, maximize liveability

- Insight in current, multi modal, traffic state (COP)
- Insight in traffic state 30 minutes ahead (car and PT)
- Ability to use this for both operational and tactical traffic management

Goudappel
MOBILITY MOVES US

GRO NINGEN BEREIK BAAR

Context: digital governance of the public space

- Nationwide investments in digital governance to improve the usage of public space
- Goals:
  - Multimodal traffic management
  - Optimal use of public space
  - Pro-active management

Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

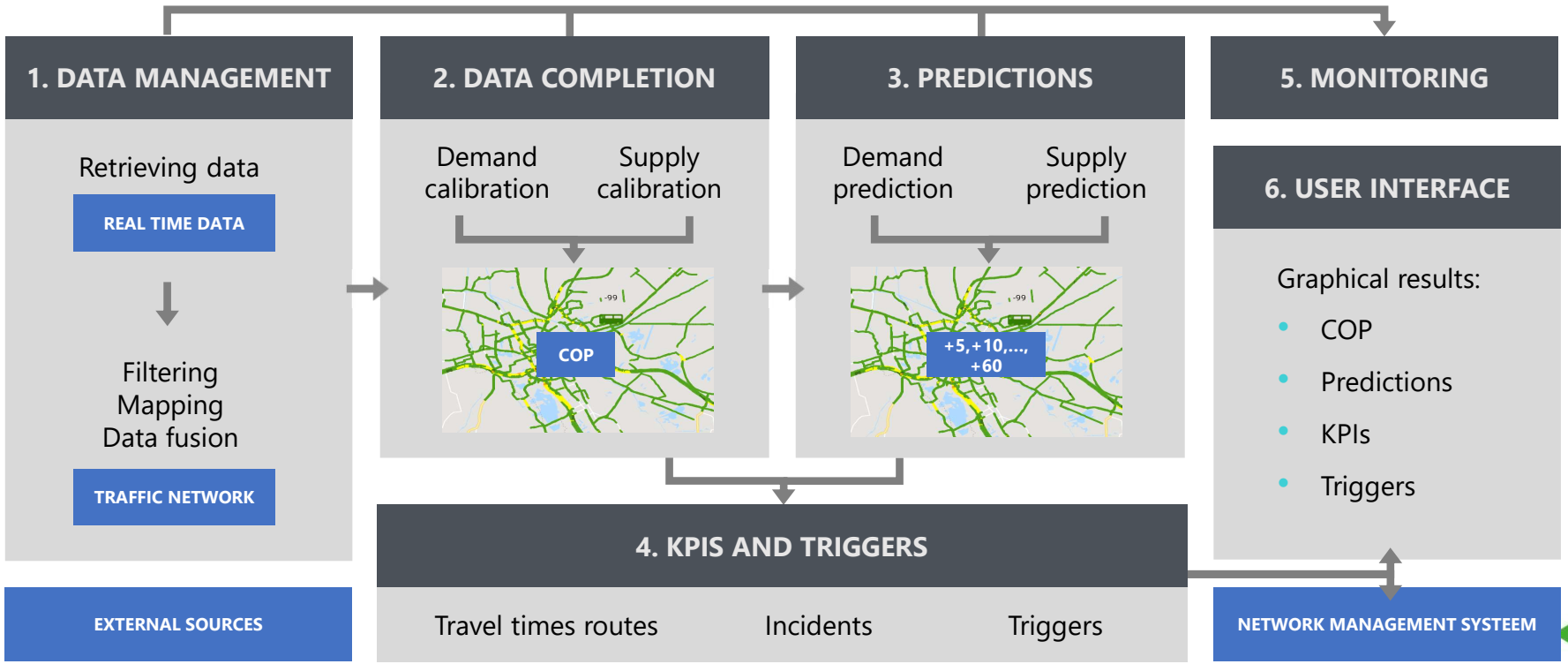
Behind the scenes: technical implementation

- Data collection
- Data enrichment
- Common operational picture
- Predictions up to 60 minutes

Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

Model setup

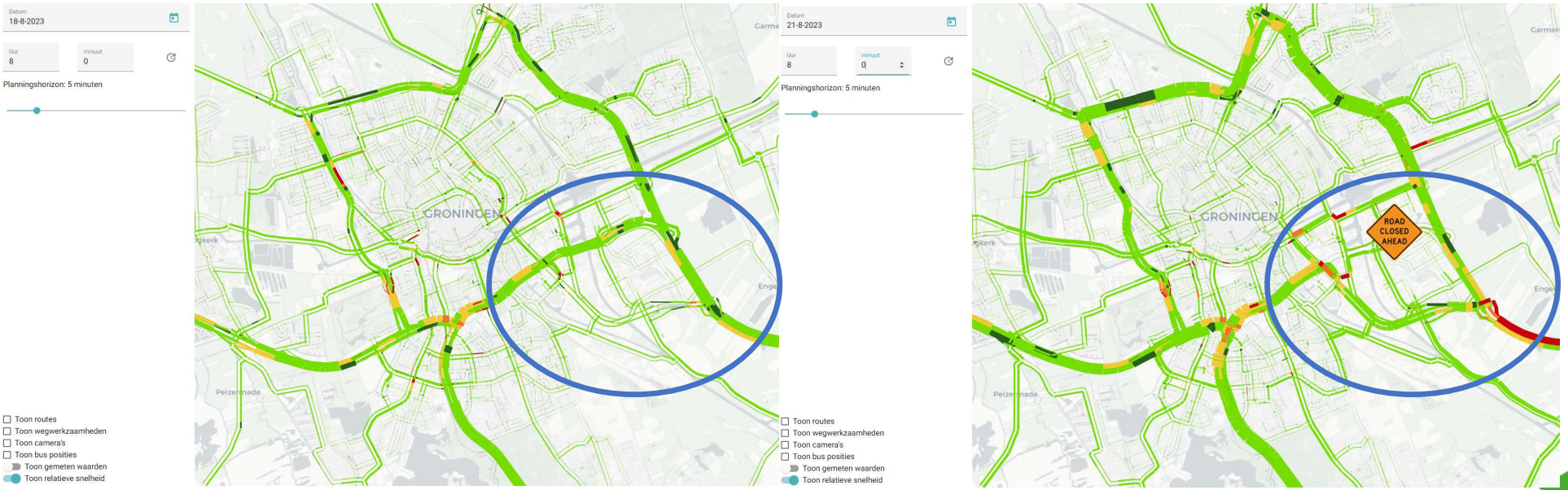


Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

Multimodal Traffic Prediction System

- Example of a road closure



Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

POLIS ANNUAL CONFERENCE 2023
CITIES AND REGIONS FOR TRANSPORT INNOVATION

Thank you for your attention!

Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR

POLIS ANNUAL CONFERENCE 2023
CITIES AND REGIONS FOR TRANSPORT INNOVATION

leuven

For information:

Edwin Papjes: edwin.papjes@groningen.nl
Lieuwe Krol: lkrol@goudappel.nl

@POLISnetwork POLIS Network polis.network @polisvideo

Goudappel
MOBILITY MOVES US

GRONINGEN BEREIKBAAR