



**Data & Road Safety**

# ANWB Data & Road Safety

Data-driven improvement of road safety

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# Vision Zero 2050 (EC)

## Road Safety Strategic Plan 2030

Reduce road traffic deaths and injured by 50% by 2030 compared with 2020

### Contribution of ANWB, includes Data-Driven:

- Improvement of individual driving behaviour
- Risk driven improvement of road infrastructure together with road authorities

### How?

Current proposition and developments



Ministry of Infrastructure and Water Management  
Ministry of Justice and Security  
Association of Provincial Authorities  
Association of Netherlands Municipalities  
Transport Authority Amsterdam  
Metropolitan Region Rotterdam The Hague



# Today's ANWB Drive Safe proposition

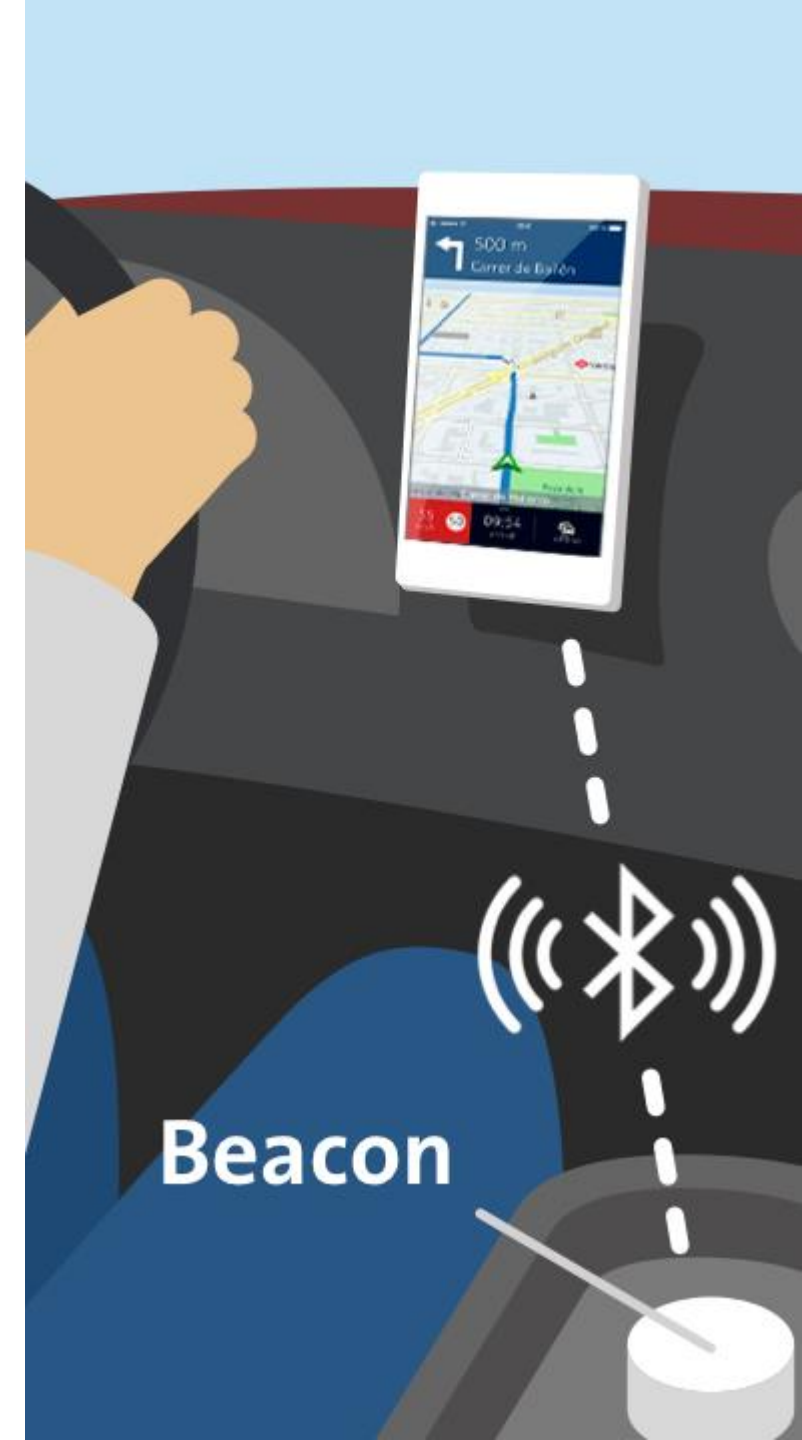
## 'Pay how you drive' car insurance

### How does it work?

- Insurance Premium is based on how you drive (introduced 2016)
- Mobile App measures driving style based on:
  - ✓ Driving speed
  - ✓ G-force
- Feedback every 10 days via mobile app

### Results

- 95% of insured is rewarded by an additional discount
- Clear positive influence on driving behaviour
- > 2 billion km of road analysed since 2016



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# Our Data Service

- Driving behaviour data collected by more than 75.000 drivers
- Exclusive offering to road authorities – T&C restriction
- Anonymous / aggregated data on driving behavior
- Multiple severity levels for each event
- Started early 2021; >150 road authorities access May 2022

## Non-profit service

- One-off setup costs only

## ANWB's goal is to improve road safety

not commercial exploitation of data

### Driving behaviour data



Harsh  
brake



Harsh  
cornering



Pull up  
hard



Speeding



Location  
of event



Date / time  
of event



New: distraction  
by mobile phone

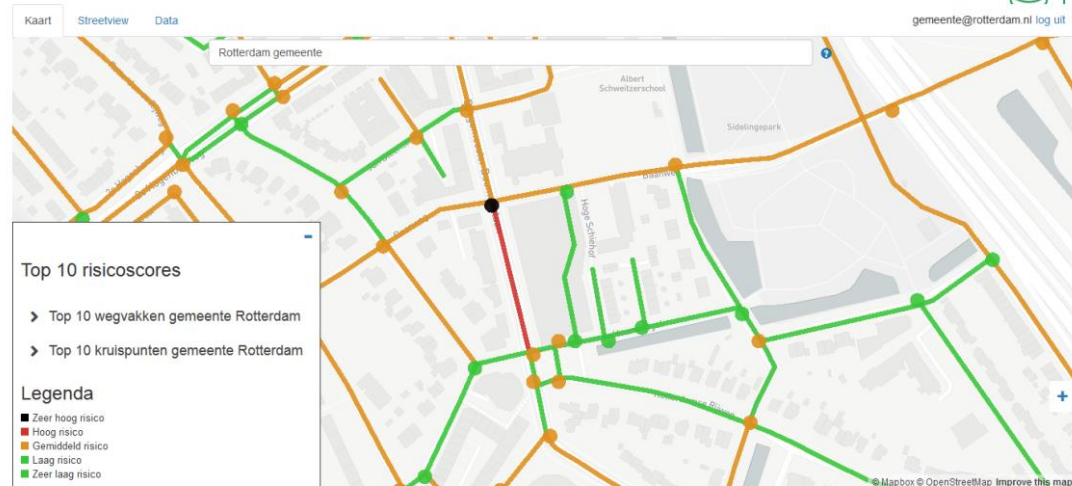


*City of Rotterdam: 'If even the safest drivers still make a massive mistake somewhere, then there may be something wrong with the road infrastructure'*



# First application 2021: road safety risk model Rotterdam

Overschie (kruispunt)  
Burgemeester Baumannlaan - Baanweg



Overschie (kruispunt)  
Burgemeester Baumannlaan - Baanweg

Aanknopingspunten vanuit model ten behoeve van oplossingsrichtingen:

Top 10 factoren:

- 1: unigarant\_n\_sum\_braking\_buffer20
- 2: straatmeubilair\_n\_buffer20
- 3: n\_fiets\_mediaan
- 4: osm\_type\_shop\_20
- 5: nearest\_gereden\_snelheid\_85
- 6: unigarant\_n\_sum\_accelerating\_buffer20
- 7: osm\_type\_amenity\_police\_20
- 8: verkeersborden\_n\_borden\_buffer20
- 9: bomen\_n\_buffer50
- 10: osm\_type\_highway\_bus\_stop\_20

**Analyse op basis van factoren:**

Door de ligging van het kruispunt nabij een winkelcentrum vinden er veel oversteekbewegingen plaats. Fietzers, voetgangers en autoverkeer kruisen elkaar op een 50 km/h weg. Door parkeerplaatsen, bomen en een bushalte direct naast het kruispunt is het zicht op elkaar beperkt. Verkeersdeelnemers zien elkaar laat. Hierdoor vinden er (plotselinge) rembewegingen voor het kruispunt plaats net als optrekken direct na het kruispunt. Door de rechtstand van de wegen is de naderingssnelheid bovendien hoog.

Overschie (kruispunt)  
Burgemeester Baumannlaan - Baanweg

objectieve onveiligheid



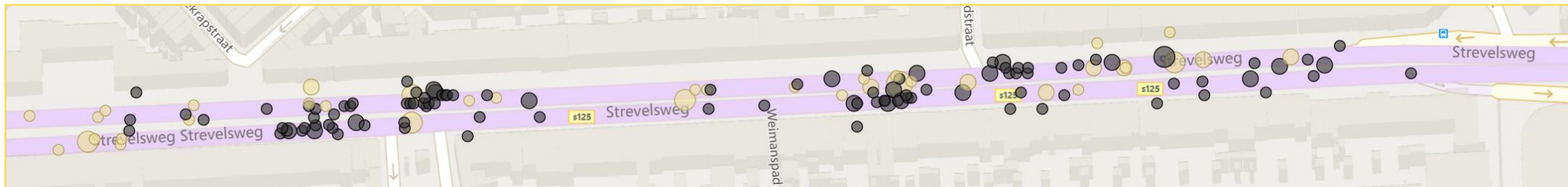
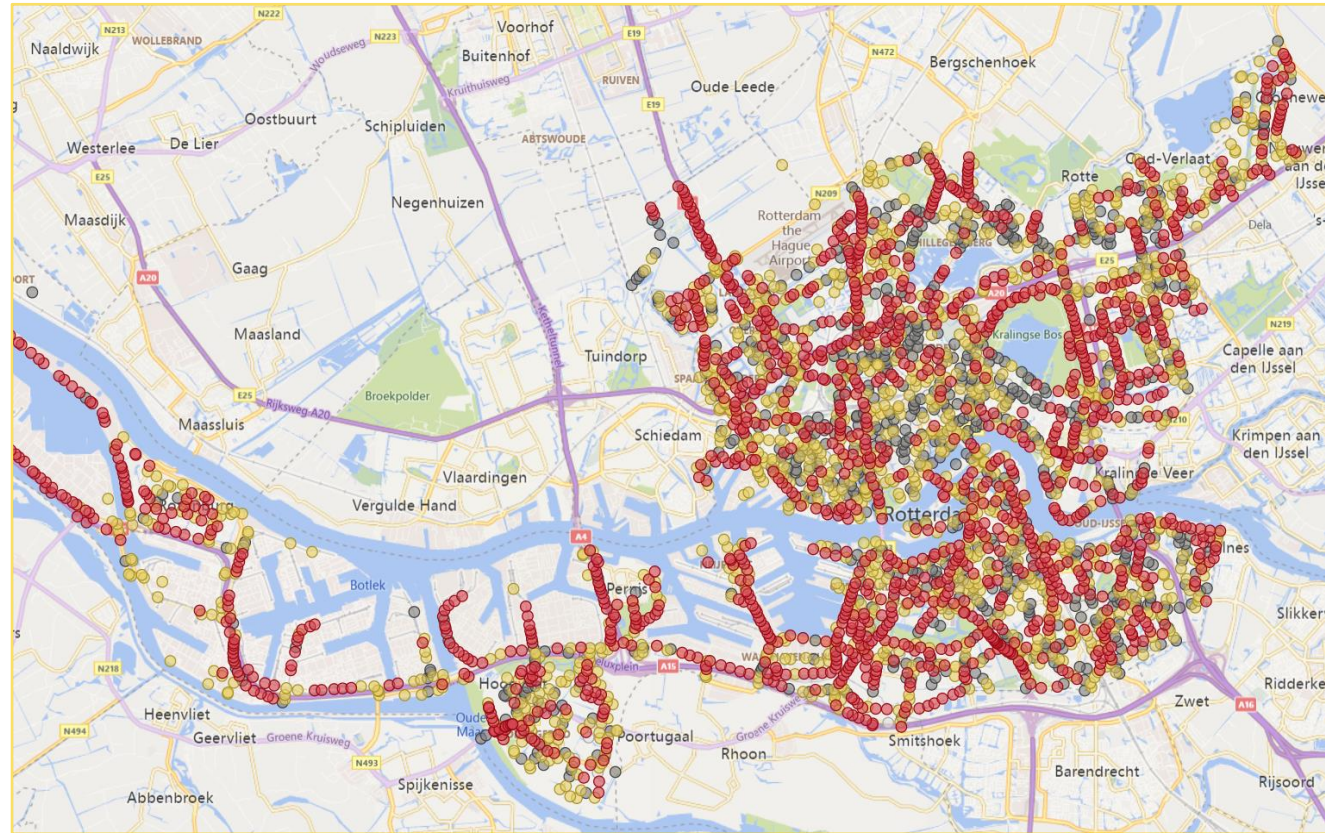
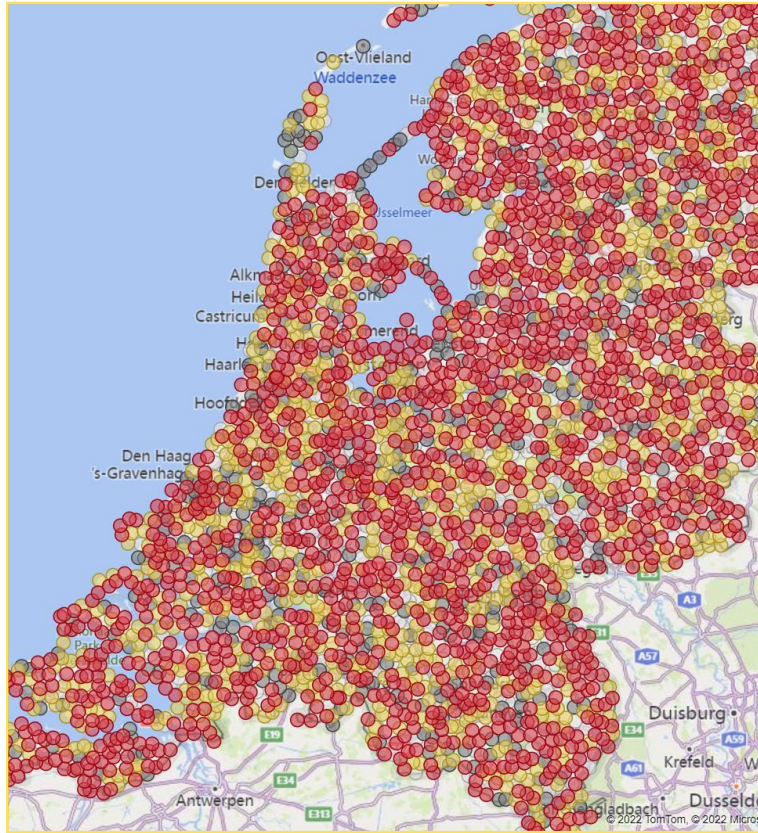
subjectieve onveiligheid





# Data visualisation tool - insights in real driving behaviour

Data subset January 2021 – March 2021



● Harsh break



● Speeding event



● Harsh cornering



○ Rapid acceleration







# Thank you for your attention

more information:

[www.anwb.nl/dataverkeersveiligheid](http://www.anwb.nl/dataverkeersveiligheid)

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