

# A COMPLETE APPROACH ON FAIR ACCESSIBILITY WITH IKOB

Hans Voerknecht, Een Nieuwe Kijk



Wednesday, 26 November 2025  
09:00 – 10.30

**SESSION 1C**  
A COMPLETE APPROACH ON FAIR  
ACCESSIBILITY WITH IKOB

**SPEAKERS**

Hans Voerknecht, Een Nieuwe Kijk



A paradigm shift is needed

## We are doing the wrong thing already for decades

- System mainly serves high-income earners (with a car)
- Mainly for men, much less so for women, children, elderly people
- Measures increase accessibility for those who are already well off, leaving people with a shortage (transport poverty!) behind.
- Accessibility inequality particularly high in rural, car-dependent areas

### Mobility paradigm

Network efficiency

Travel time reduction

Car centric

Time oriented

Utilitarian (maximum mobility)

### Accessibility paradigm

Travel as part of urban system

Different approach per target group

Multimodal

Integrated transport and land use measures

Sufficient accessibility for everybody

# Planning for equitable accessibility

One dimensional measure for all	Resulting imbalances for individuals
Car focused transport models	People without a car have other deployment potential (and are not evaluated well)
Time-based measures	People with low incomes have other trade-offs in terms of value-of-time
All people are modeled the same	Distributional effects for different groups in society are overlooked
Effects of dispersion of locations that 'fit' different groups	High-access locations are more expensive; both residential as work related, leaving low income groups at low-access housing and work locations
Public transit is not modeled well	PT provides good access for mainly high-income groups
Perverse financial incentives	High income groups profit more from travel allowances and tax breaks.
Perverse parking policies	Public spending on public parking spaces exceeds the income from parking regulations
Regional differences	Car dependency is largely a regional phenomenon b/c of proximity and public transit availability

► Accessibility is the amount of meaningful activities that *an individual* can reach within a budget of time, money, and effort

► Every person has different potential

- Resources (money, vehicles, subscriptions)
- Personal traits (training, courage, gender)
- Physical environment (infrastructure, green)
- Social environment (laws, peer pressure)



# Planning for equitable accessibility



## What we need is another perspective:

- Assessing possibilities for deployment for all groups in society
- For the whole “Functional Urban Area”
- For all modes, across all modes (hubs, shared mobility, park and ride)
- For different types of activities and specific needs among different groups
- Accounting for costs having different impacts for different groups
- Accounting for the spatial distribution of groups (income level; share of car possession; preferences)
- Including costs of travelling and parking and differentiating the effect of these costs to different groups

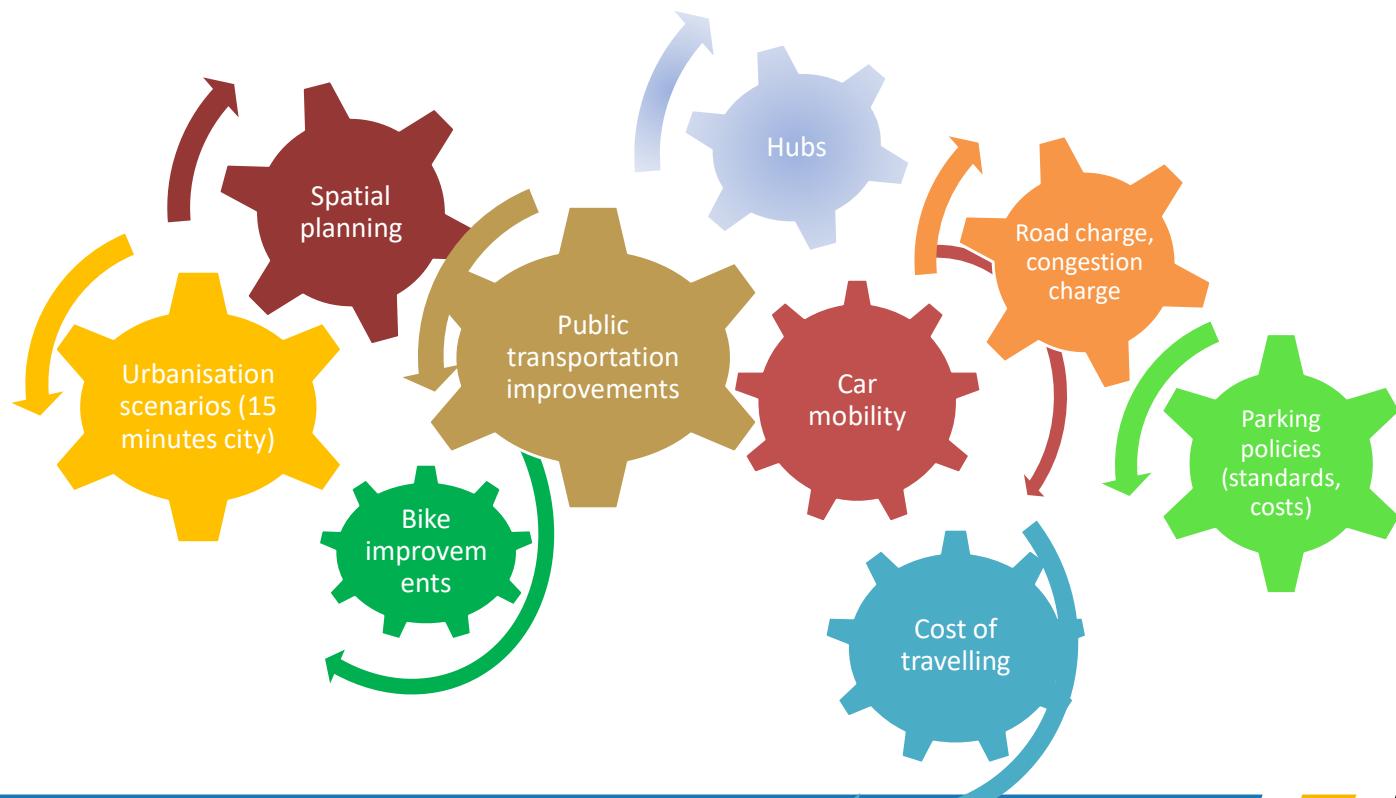
## Assessment on system level



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## Assessment on system level: policy packaging



## IKOB: Assessment of all kinds of effects



### IKOB takes care of

- Accessibility of businesses, institutions, schools, shops, healthcare facilities for residents
- Assessing accessibility inequality
- Assessing the risk of transport poverty
- Assessing distributional effects of measures (looking at the “tails” of the distribution, rather than averages or the (utilitarian based) maximum gain for the society as a whole)
- Assessing car dependency (also creating an index for it)
- Assessing the competition value for accessibility of jobs, care, schools

# An IKOB- dashboard for entering and changing measures and settings

IKOB configuratie

Project Gegeneraliseerde Reistijd Berekenen Waarde van tijd Verdeling Over Groepen Ketens Geavanceerd

Dagsorten

Ochtendspits  Restdag  Avondspits

OV kosten

Starttarief: 109.0 Eurocent

Variabele kosten: 19.0 Eurocent/km

Bestaat er een apart OV-kostenbestand?

Er is een apart OV-kostenbestand

Is er een maximum OV-prijs (price cap)?

pricecap

Wat is de pricecap in Euros: 9999.0

Kosten auto fossiele brandstof

variabele kosten: 22.0 Eurocent/km

Kilometerheffing: 0.0 Eurocent/km

Kosten elektrische auto

variabele kosten: 5.0 Eurocent/km

Kilometerheffing: 4.0 Eurocent/km

Parkeerzoektijden bestand: C:/Users/HansVoerknecht/OneDrive - Een nieuwe kijk/IKOB/IKOB11/SEGS/Parkeerzoektijd.csv

Variabele kosten geen auto

Deelauto (bezit geen auto, wel rijbewijs): 0.33 Euro/km

Taxi (bezit geen rijbewijs): 2.4 Euro/km

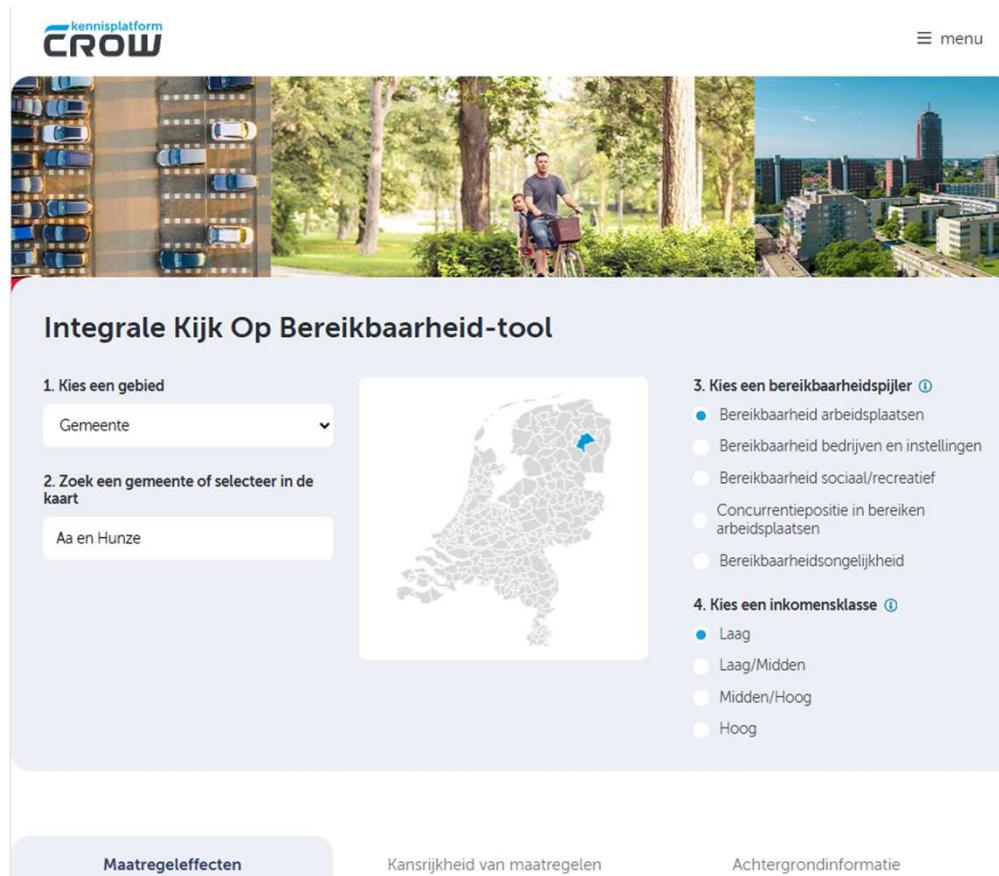
Tijd kosten geen auto

Deelauto (bezit geen auto, wel rijbewijs): 0.05 Euro/Minuut

Taxi (bezit geen rijbewijs): 0.4 Euro/Minuut

Laden ...  Nieuw  Opslaan ...

# An IKOB-based tool to help municipalities to get a grip on fair accessibility



**Integrale Kijk Op Bereikbaarheid-tool**

1. Kies een gebied

Gemeente

2. Zoek een gemeente of selecteer in de kaart

Aa en Hunze

3. Kies een bereikbaarheidspijler ⓘ

- Bereikbaarheid arbeidsplaatsen
- Bereikbaarheid bedrijven en instellingen
- Bereikbaarheid sociaal/recreatief
- Concurrentiepositie in bereiken arbeidsplaatsen
- Bereikbaarheidsongelijkheid

4. Kies een inkomensklasse ⓘ

- Laag
- Laag/Midden
- Midden/Hoog
- Hoog

Maatregeleffecten

Kansrijkheid van maatregelen

Achtergrondinformatie



**Thank you for  
your attention!**

**For more information:**

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