



PLANEAMIENTO CON PROBLEMAS RETORCIDOS

(wicked problems)

Adrian Vickery Hill
Metroplan - 22/05/14

1. PROBLEMAS RETORCIDOS **(WICKED PROBLEMS)**

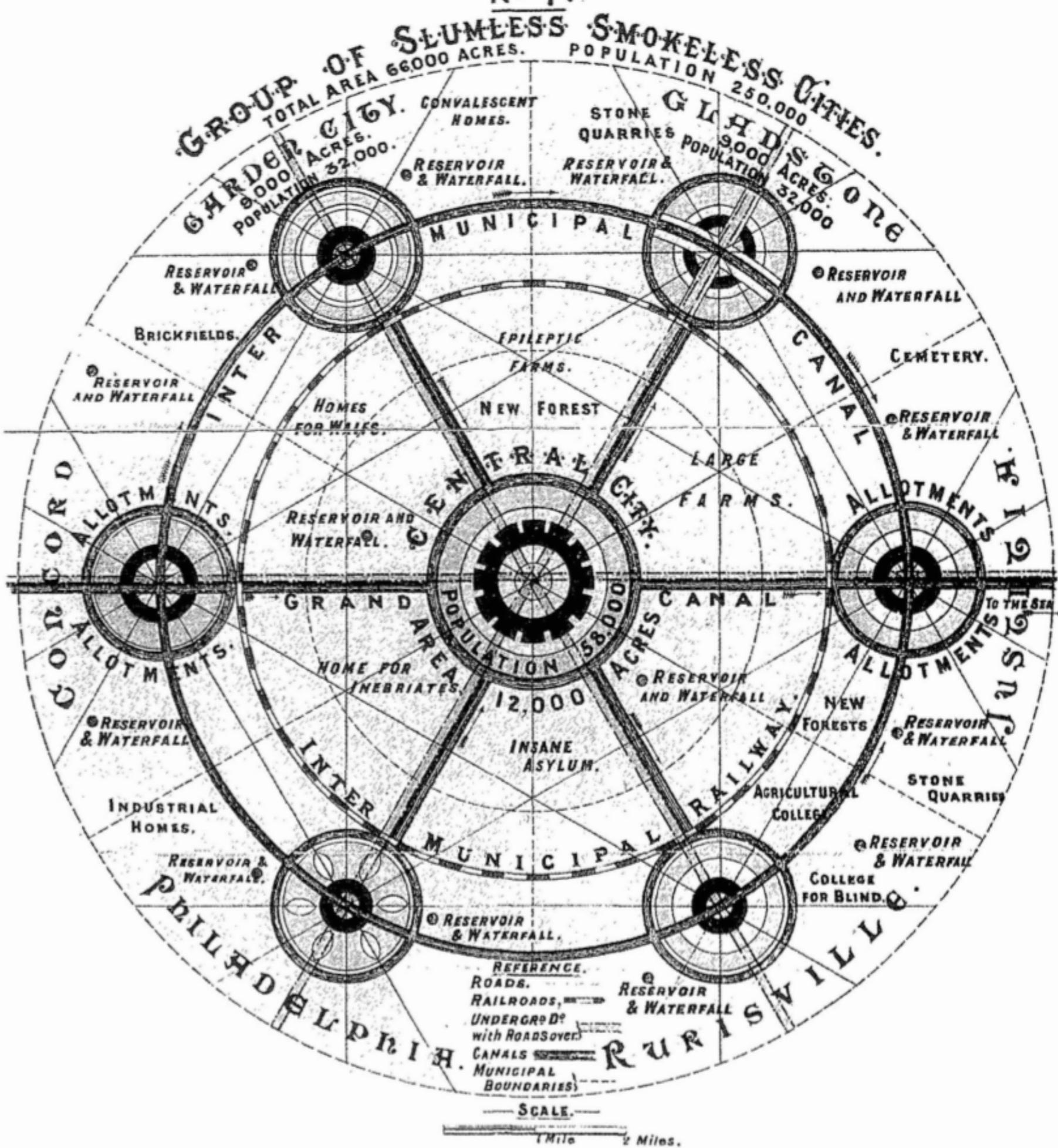
2. MANERAS DE TRABAJAR CON PROBLEMAS RETORCIDOS

3. METODOS

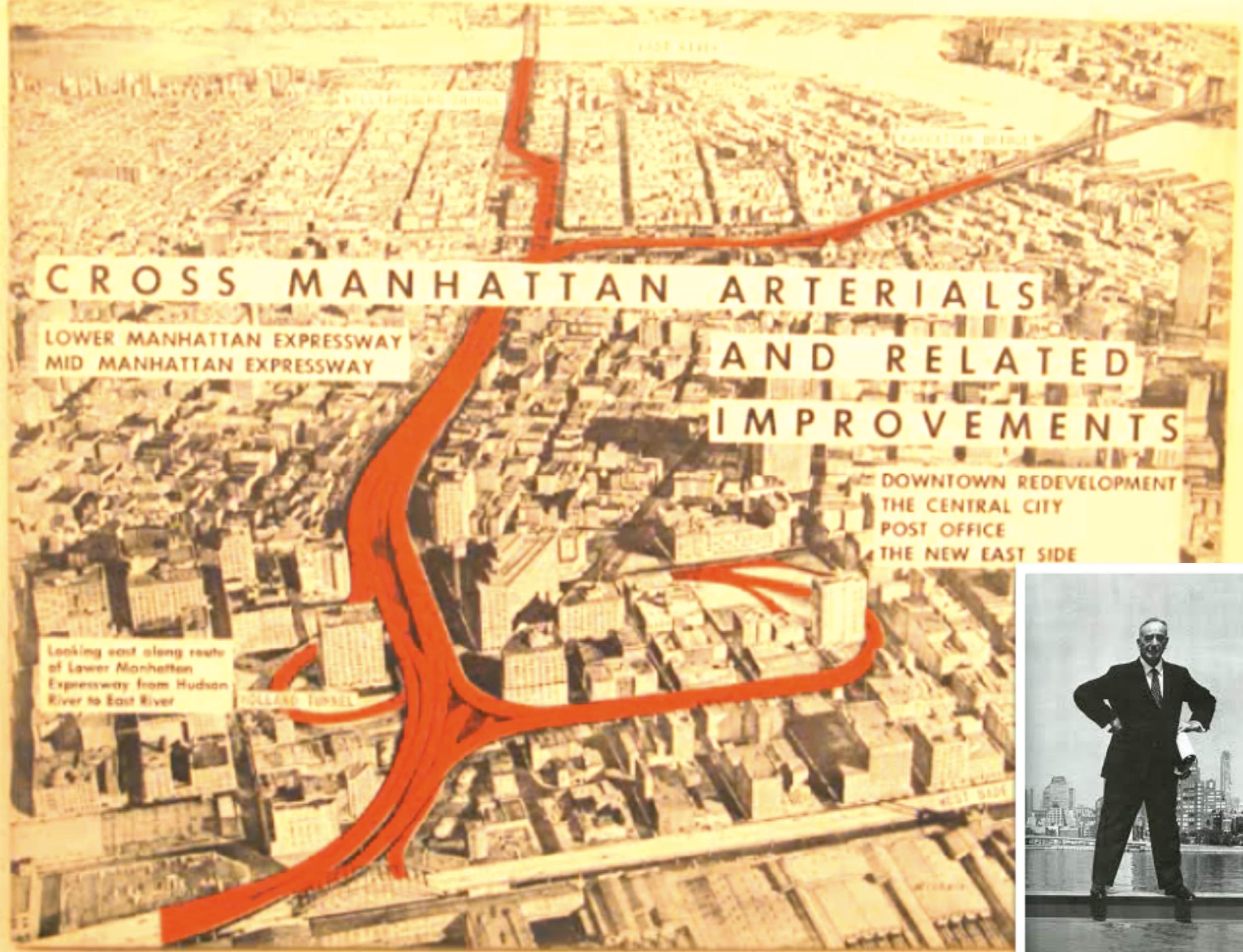
4. 7 PAUTAS

WORKSHOP / DISCUSIONES

— N° 7 —







Looking east along route
of Lower Manhattan
Expressway from Hudson
River to East River

HOLLAND TUNNEL

CROSS MANHATTAN ARTERIALS AND RELATED IMPROVEMENTS

DOWNTOWN REDEVELOPMENT
THE CENTRAL CITY
POST OFFICE
THE NEW EAST SIDE



Sistemas simples





Sistemas dinámicos

A dense tropical rainforest scene. The foreground is filled with various green plants, including large-leaved ferns and palm fronds. In the background, several tall trees with thick trunks and long, sweeping branches rise through the canopy. Sunlight filters through the leaves, creating bright highlights and deep shadows.

Sistemas dinámicos complejos

A photograph of a bus stop scene. In the foreground, a blue metal railing runs along the sidewalk. Several people are standing on the sidewalk, facing a light blue bus that is stopped at the stop. The bus has a red stripe and some text on its side that is partially visible. The background shows a yellow wall of a building.

Sistemas dinámicos complejos



Donald Rumsfeld - US Secretary of Defense, 02/2002.

<https://www.youtube.com/watch?v=GiPe1OiKQuk>

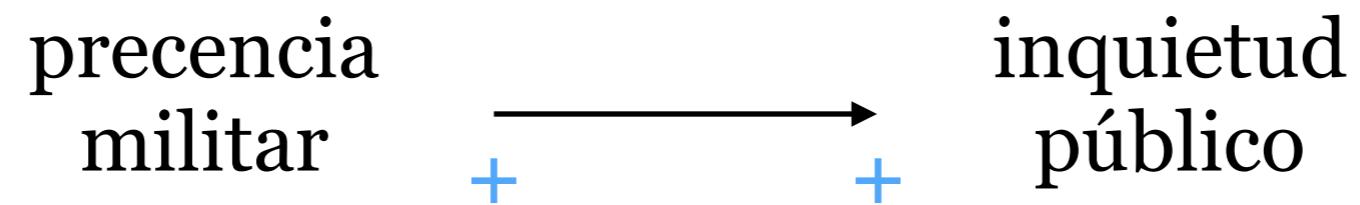
...sabemos, hay conocidos conocidos; hay cosas que sabemos que sabemos.

Sabemos también hay cosas desconocidas conocidas; es decir que sabemos que hay algunas cosas que no sabemos.

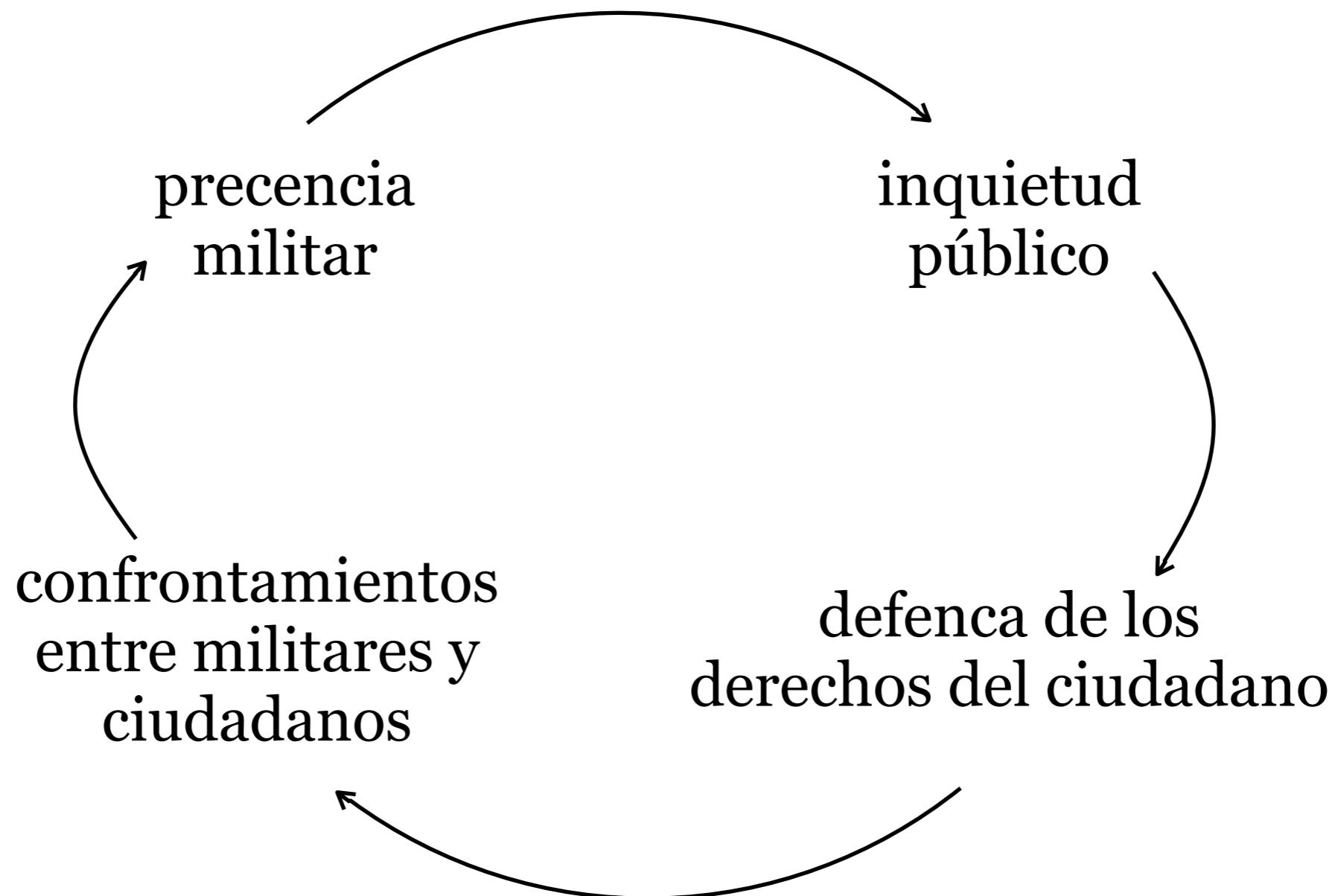
Pero también hay cosas desconocidas desconocidas, las que no sabemos que no sabemos....

Donald Rumsfeld - US Secretary of Defense, 02/2002.

feed-back



self-enforcing loops





Consecuencias imprevistas

(unintended consequences)



Consecuencias imprevistas
(unintended consequences)

Que es un 'wicked problem'?

- *El problema no esta entendido hasta la formulación de la solución.*
- *Wicked problems no tienen una regla de parada*
- *Soluciones para wicked problems no son correctos o incorrectos*
- *Cada problema es en esencia único y novedoso.*
- *Cada solución para cada problema es un 'operación de un solo tiro'*
- *Wicked problems no tienen una solución alternativo.*

El problema no esta entendido hasta la formulación de la solución.

Wicked problems no tienen una regla de parada.

*Soluciones para **wicked problems** no son
correctos o incorrectos.*

Cada problema es en esencia único y novedoso.

*Cada solución para cada problema es un
‘operación de un solo tiro’.*

Wicked problems no tienen una solución alternativo.

(Tendencia hacia la soluciones menos peor)



Pruitt Igoe, St Louis (US)



Pruitt Igoe, St Louis (US)



Pruitt-Igoe

public housing development

<https://www.youtube.com/watch?v=g7RwwkNzF68>

Pruitt Igoe, St Louis (US)



Pruitt Igoe, St Louis (US)



Rotterdam, Stationsplein

Estación de Rotterdam (NL)



Estación de Rotterdam (NL)



Estación de Rotterdam (NL)



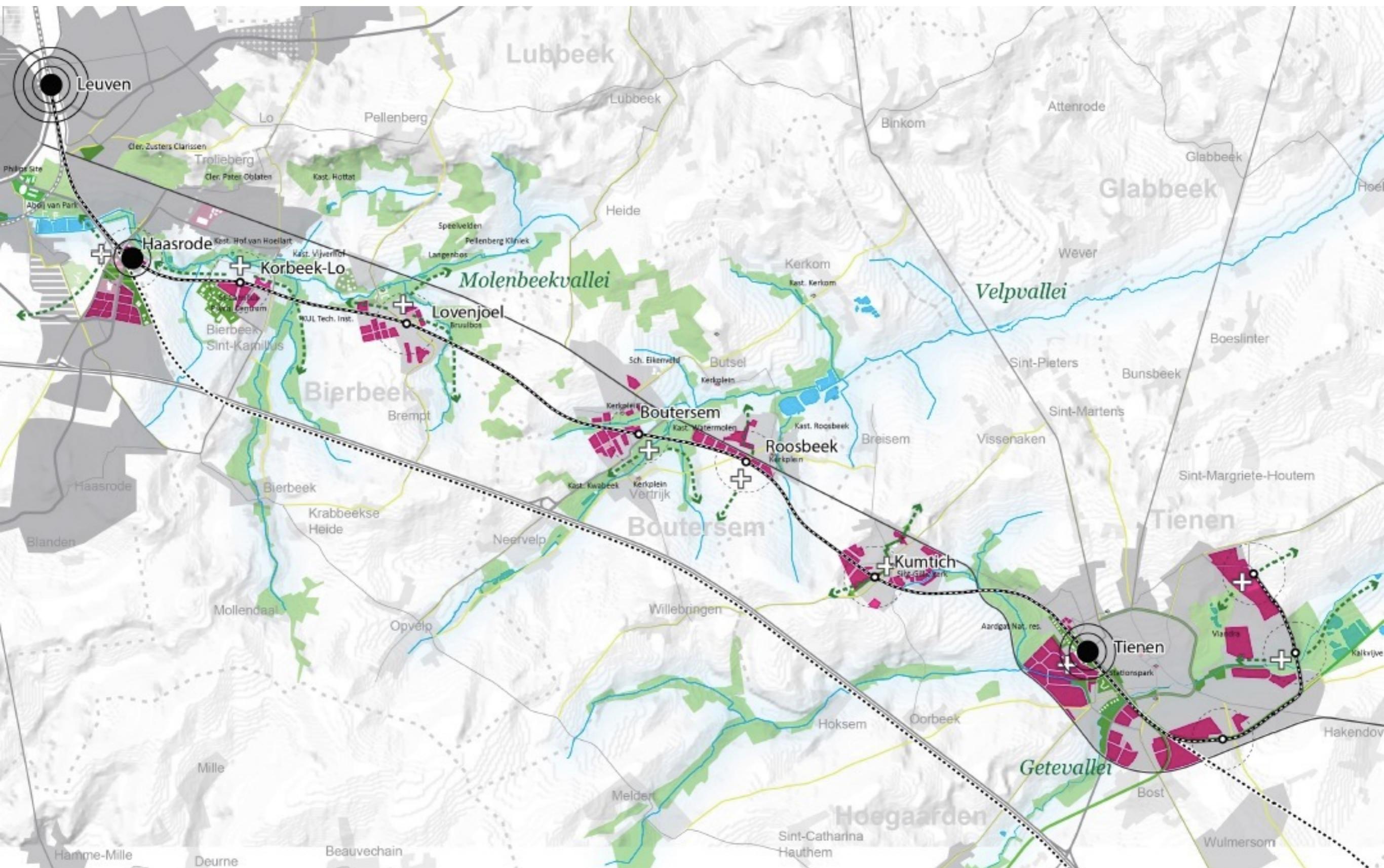
Estación de Rotterdam (NL)



Movilidad, región flamenca (BE)



Movilidad, región flamenca (BE)



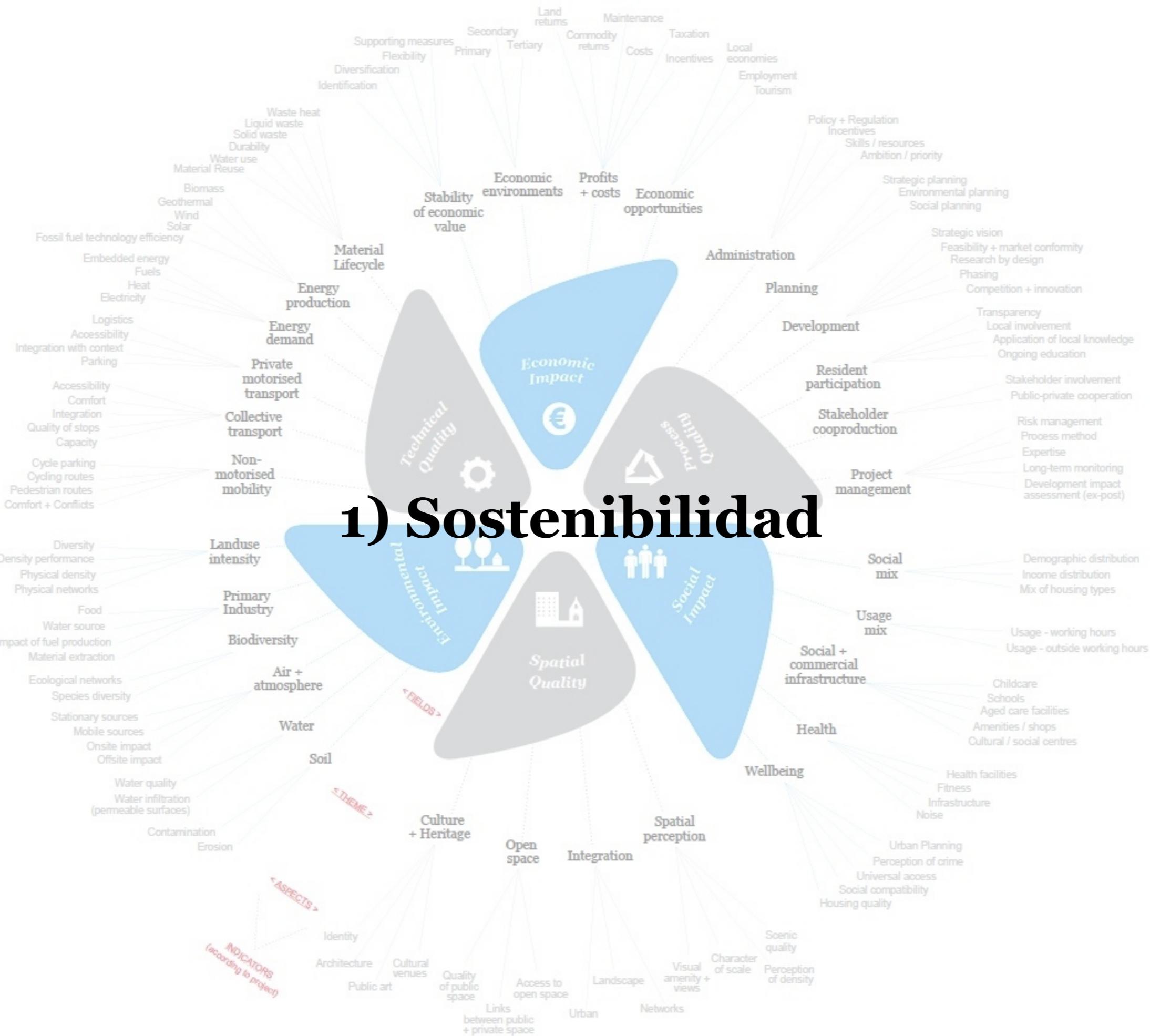
Movilidad, región flamenca (BE)

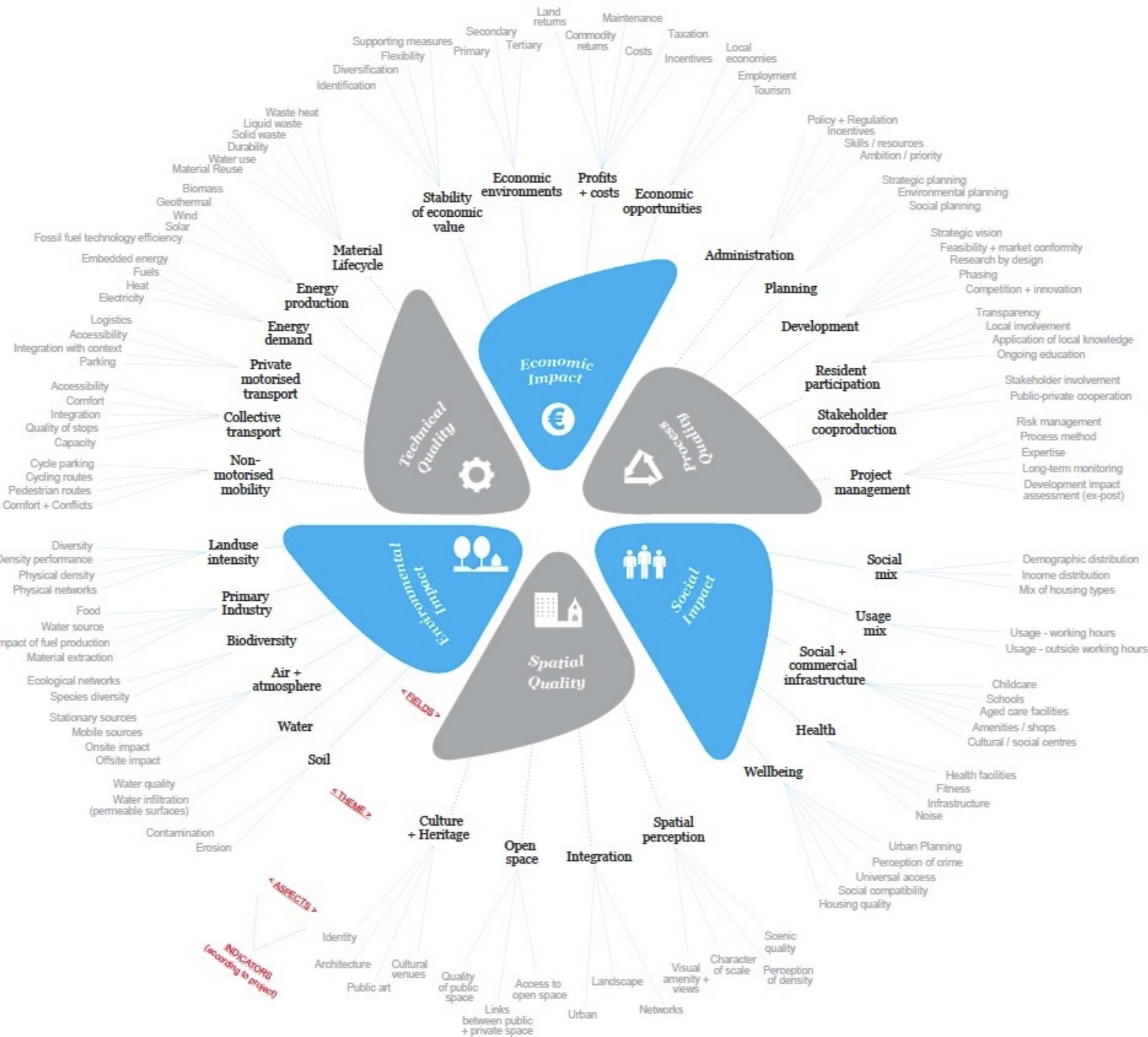
Maneras de trabajar con wicked problems

- Ideas*
- Discusiones*
- Diseño*

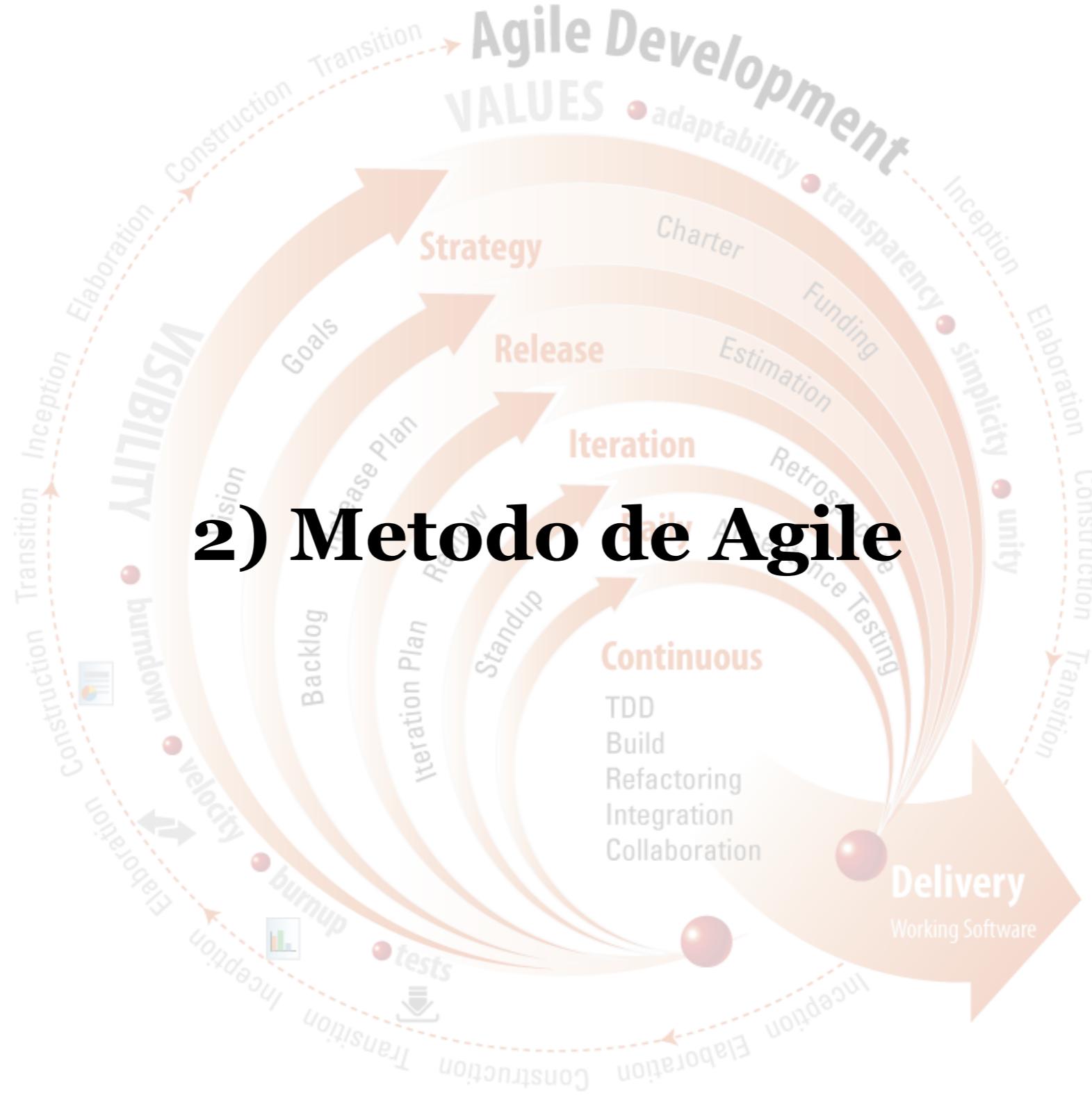
Metodos:

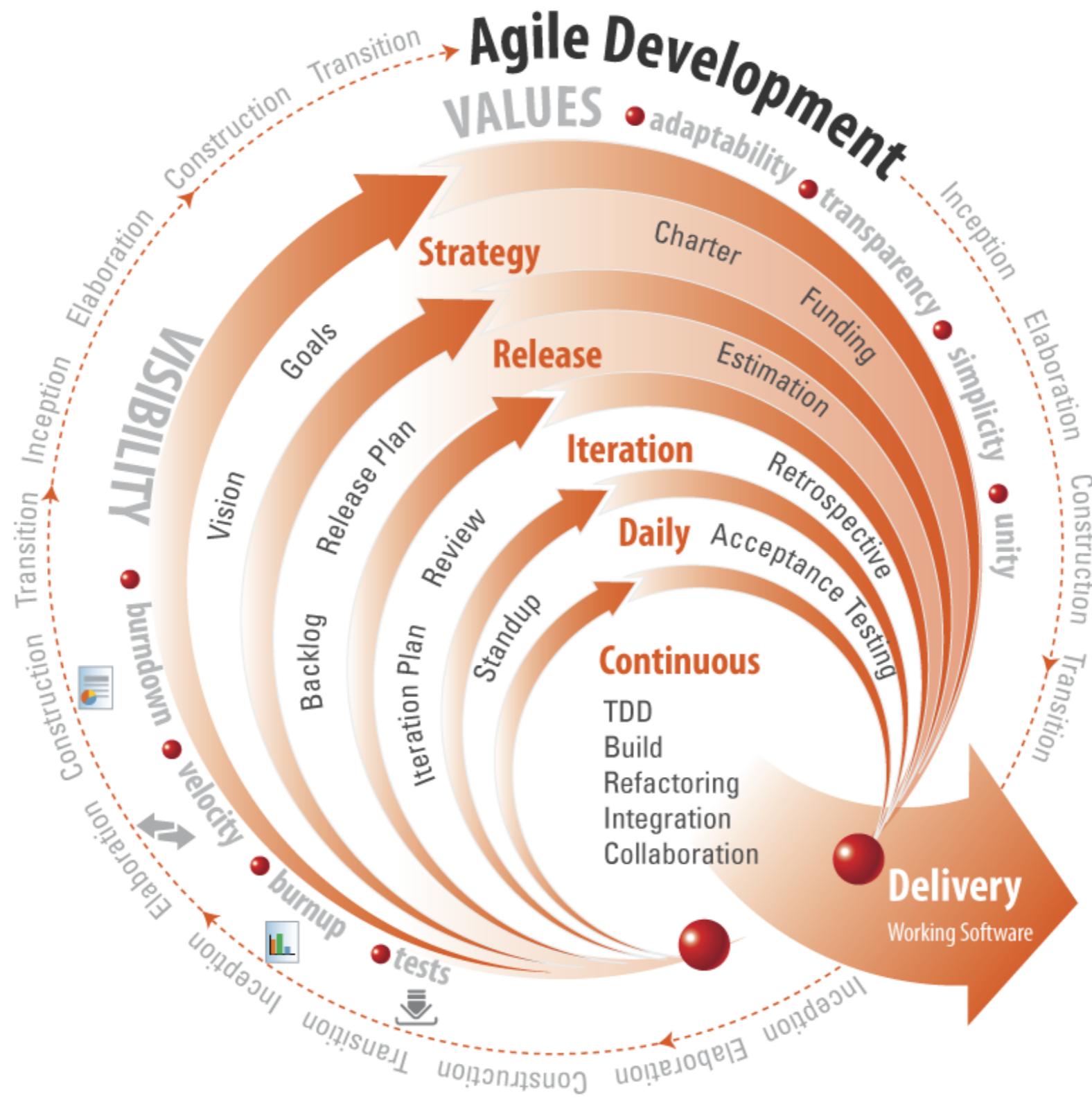
- 1) PENSAR - USS, Sostenibilidad a la escala urbana
- 2) ACTUAR - Agile metodologia
- 3) EVALUAR - Evaluacion cuantificativo / cualificativo





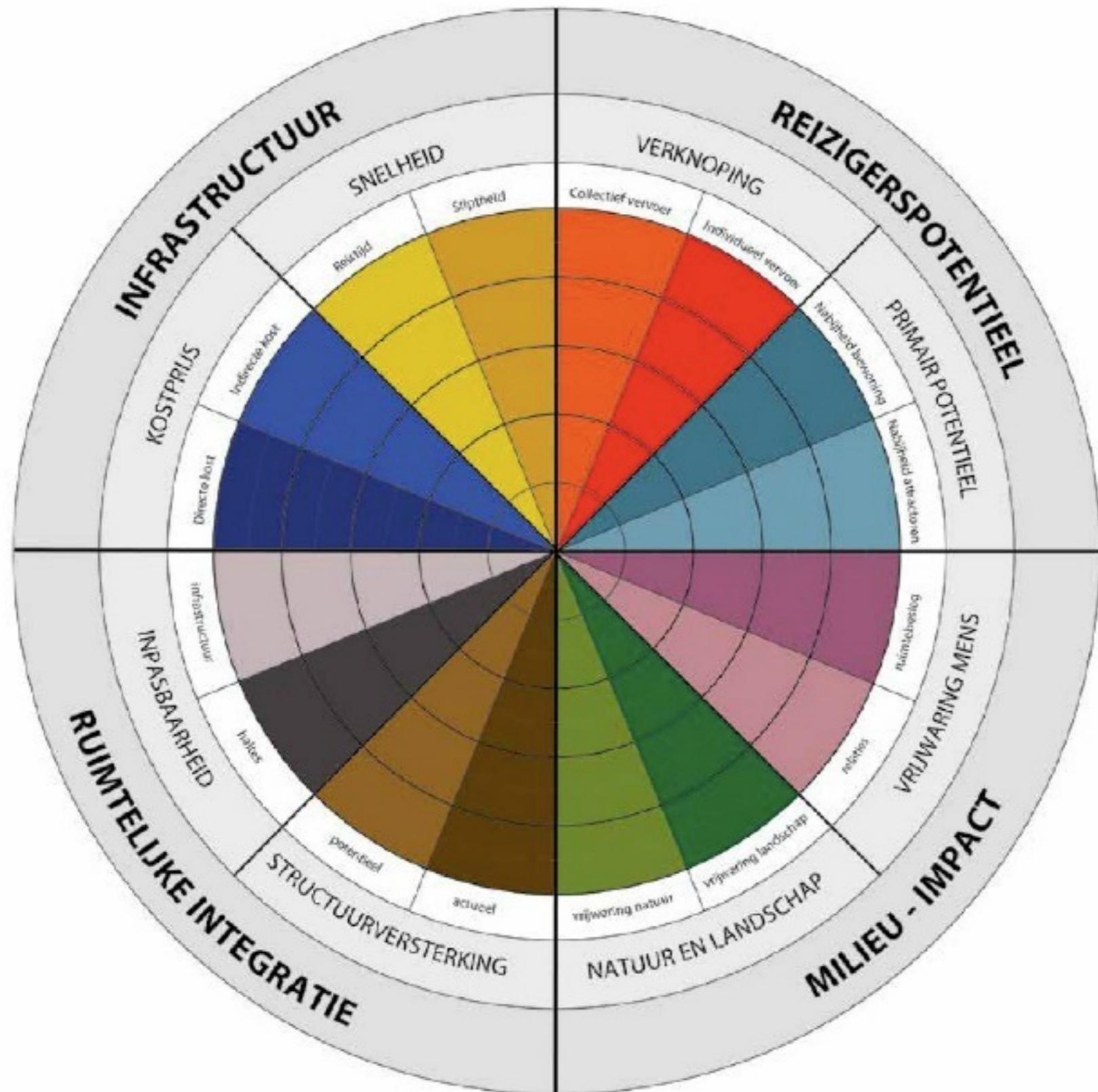
2) Método de Agile





3) Metodos de evaluación

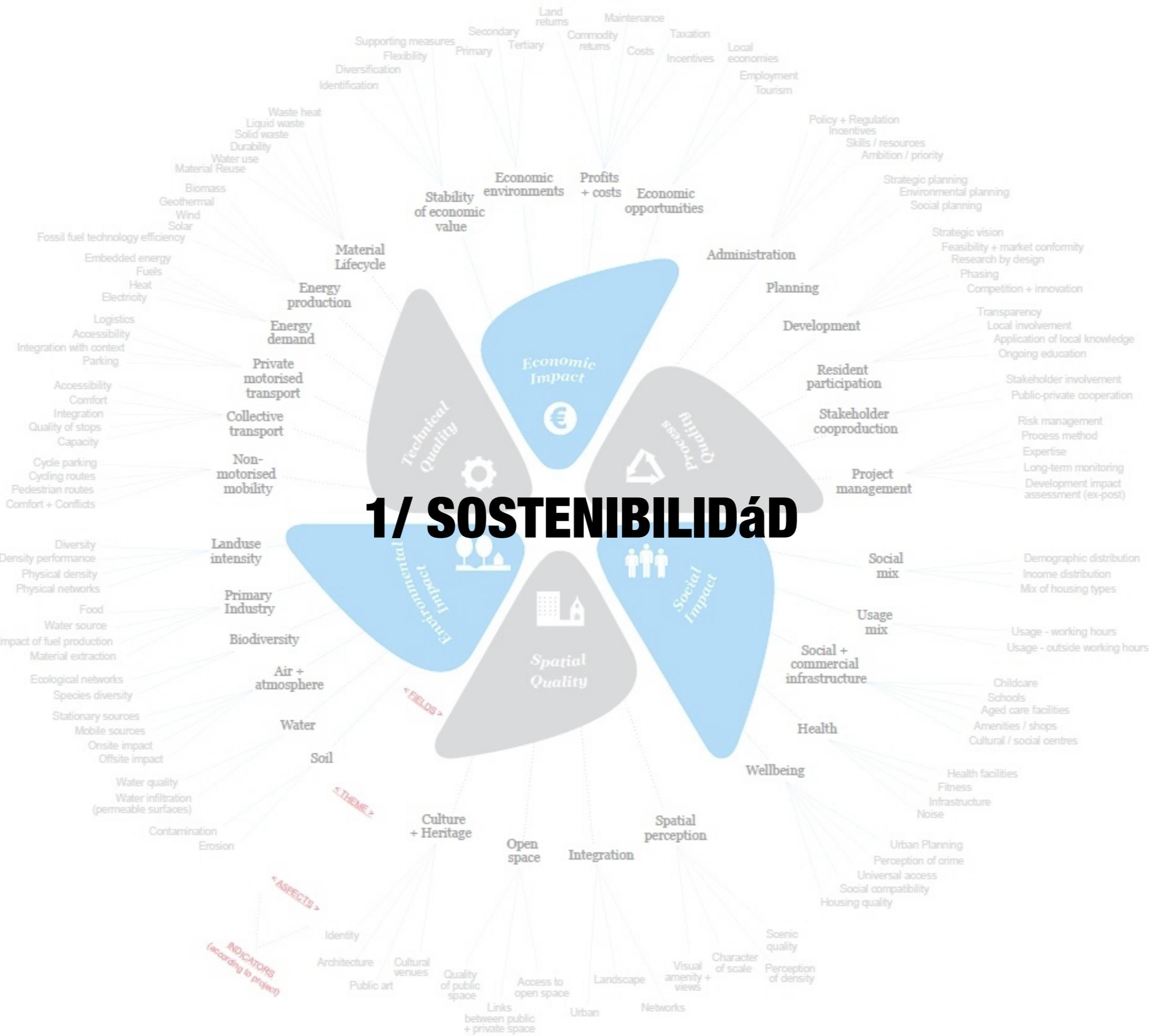


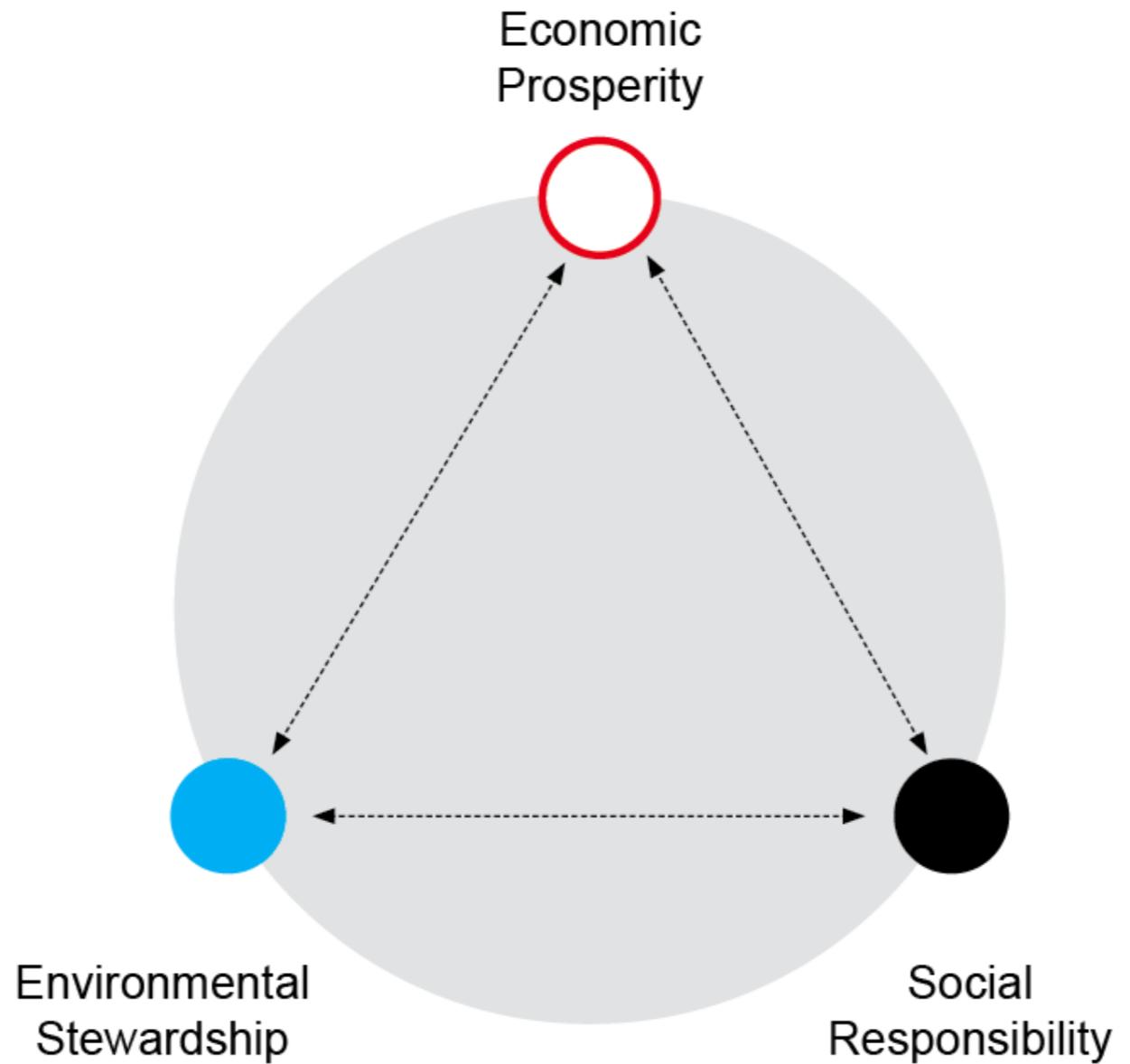


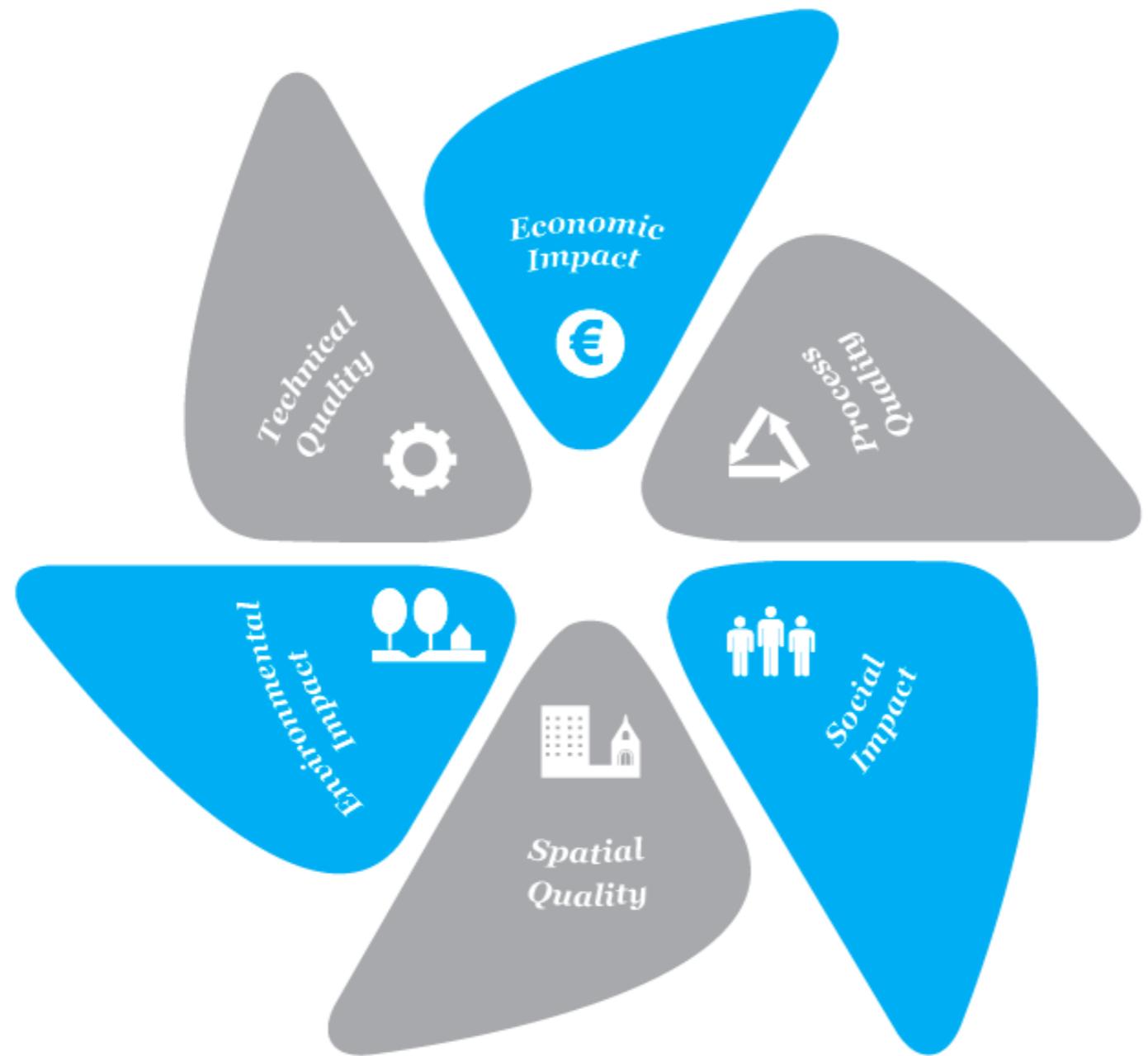
7 pautas (Vandenbroeck)

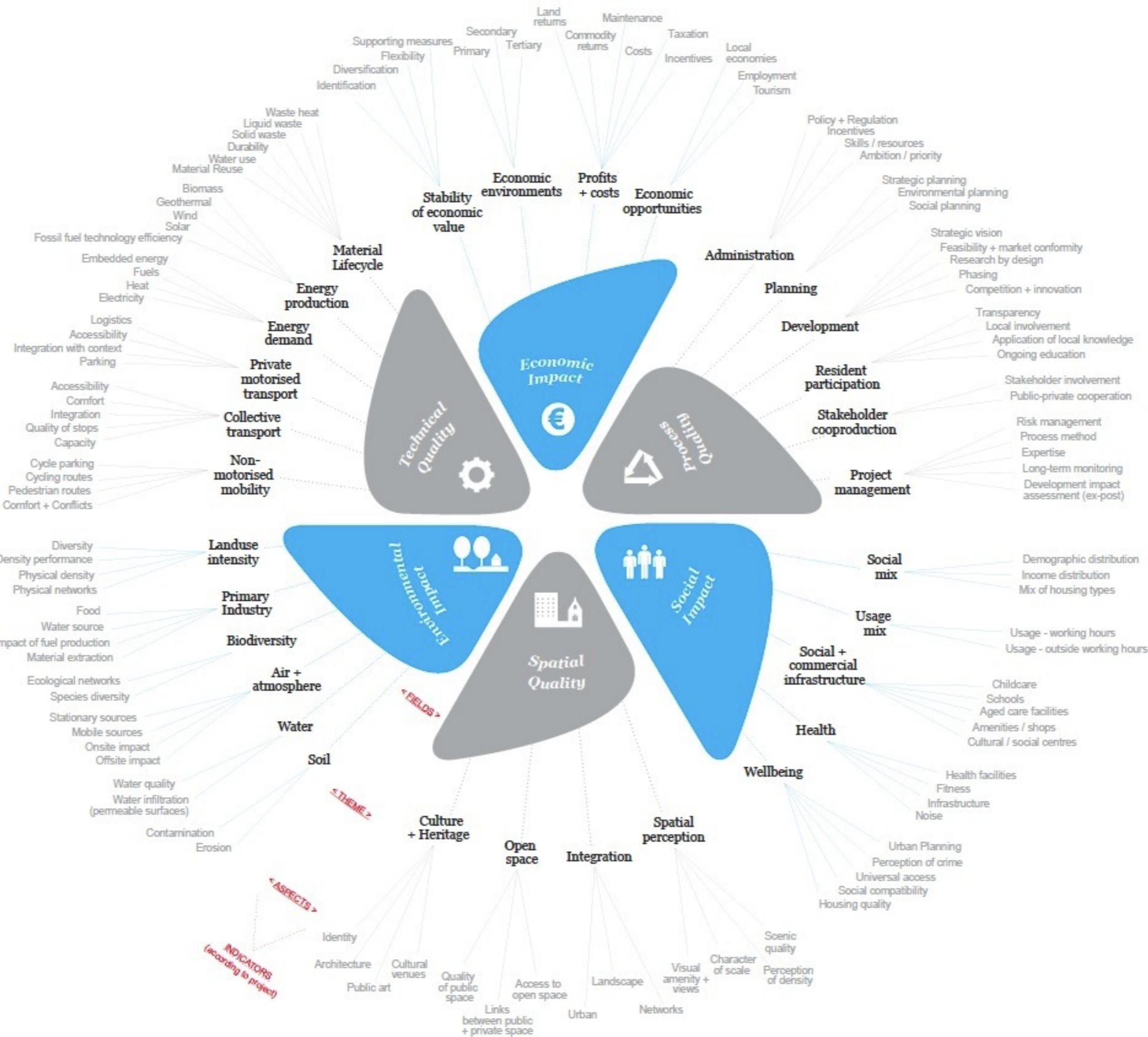
- 1) Flexibilidad y rigor
- 2) Orientacion con objetivos incrementales
- 3) Piensa en abundancia y no en escacess
- 4) Produce un vision del completo
- 5) Re-orientar problemas retorcidos en estupendos oportunidades
- 6) Crear espacio para autoorganización
- 7) Tengo paciencia con poder pero empujalo con confianza

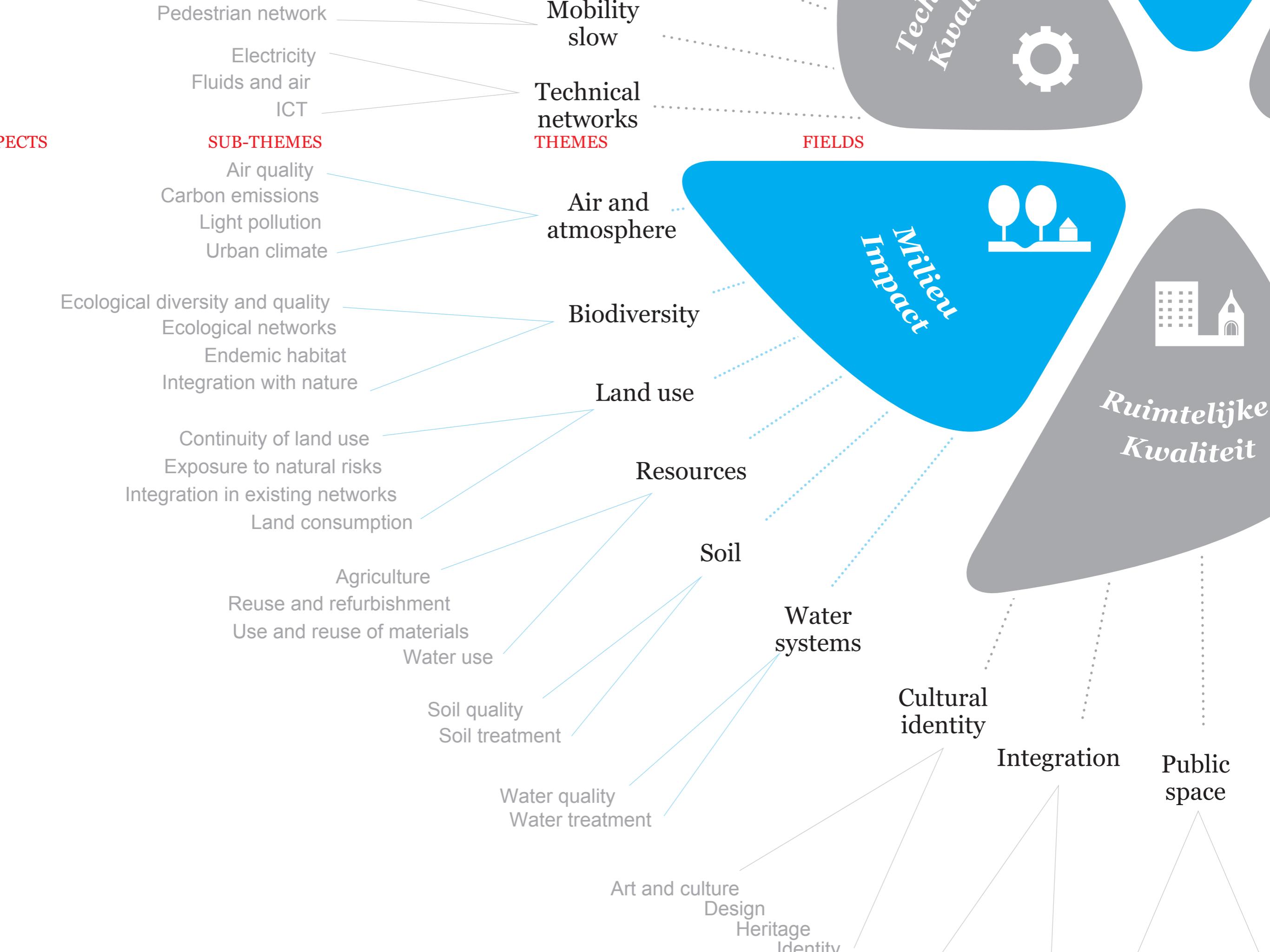
WORKSHOPS / DISCUSIONES

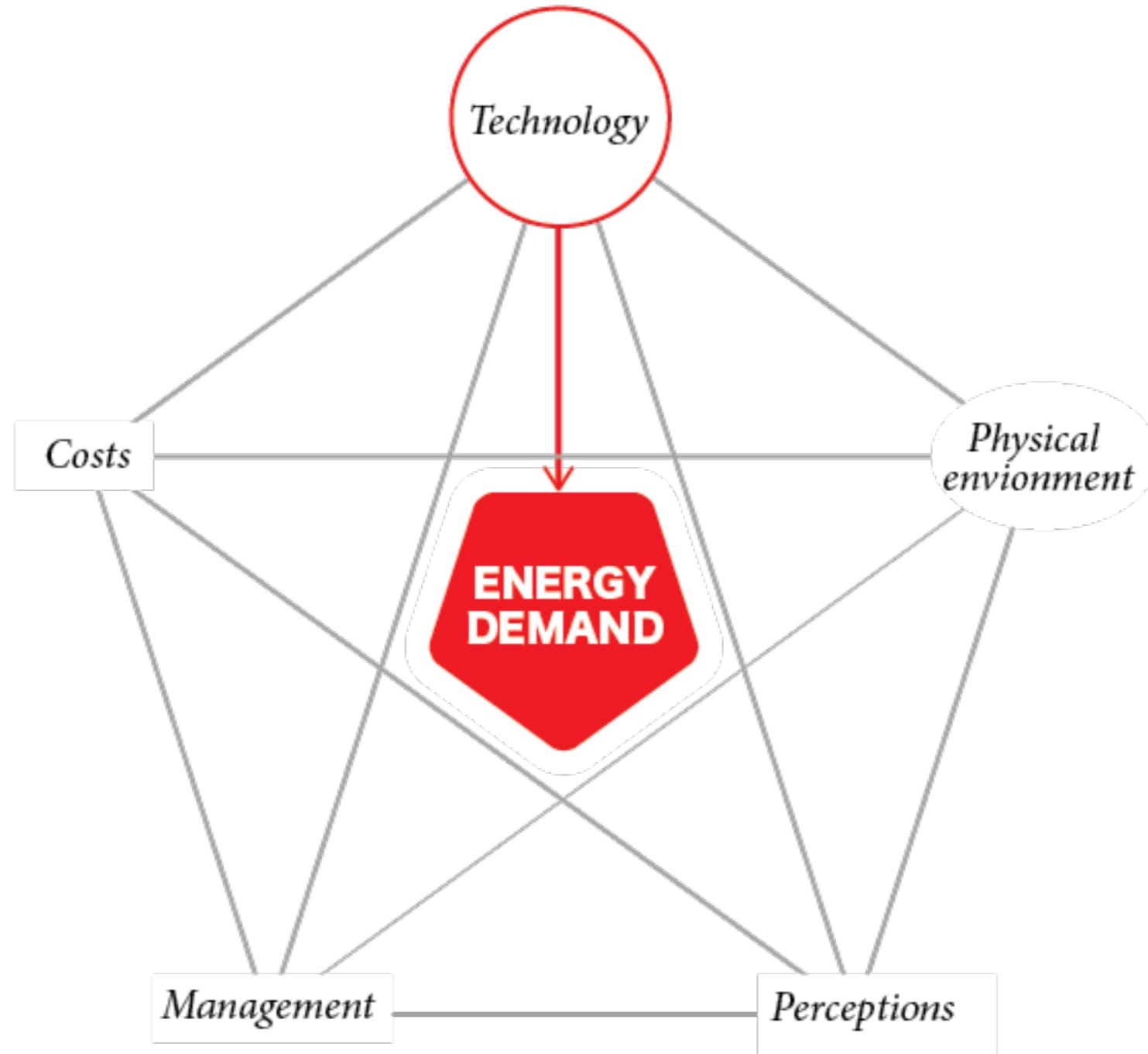


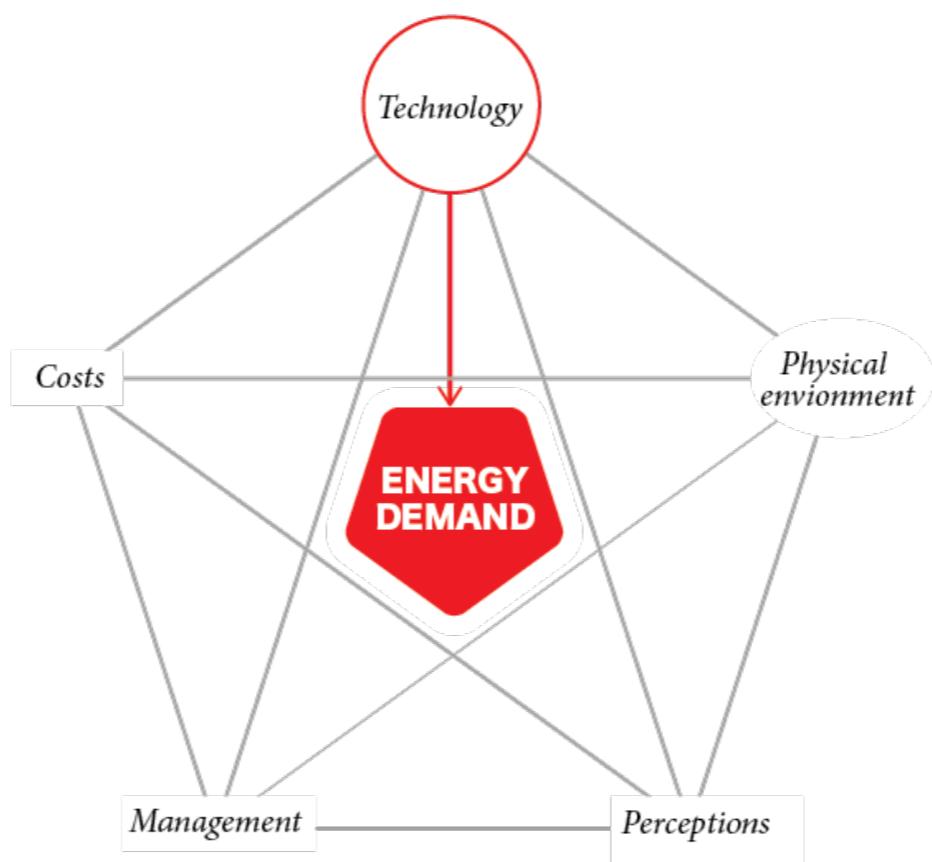


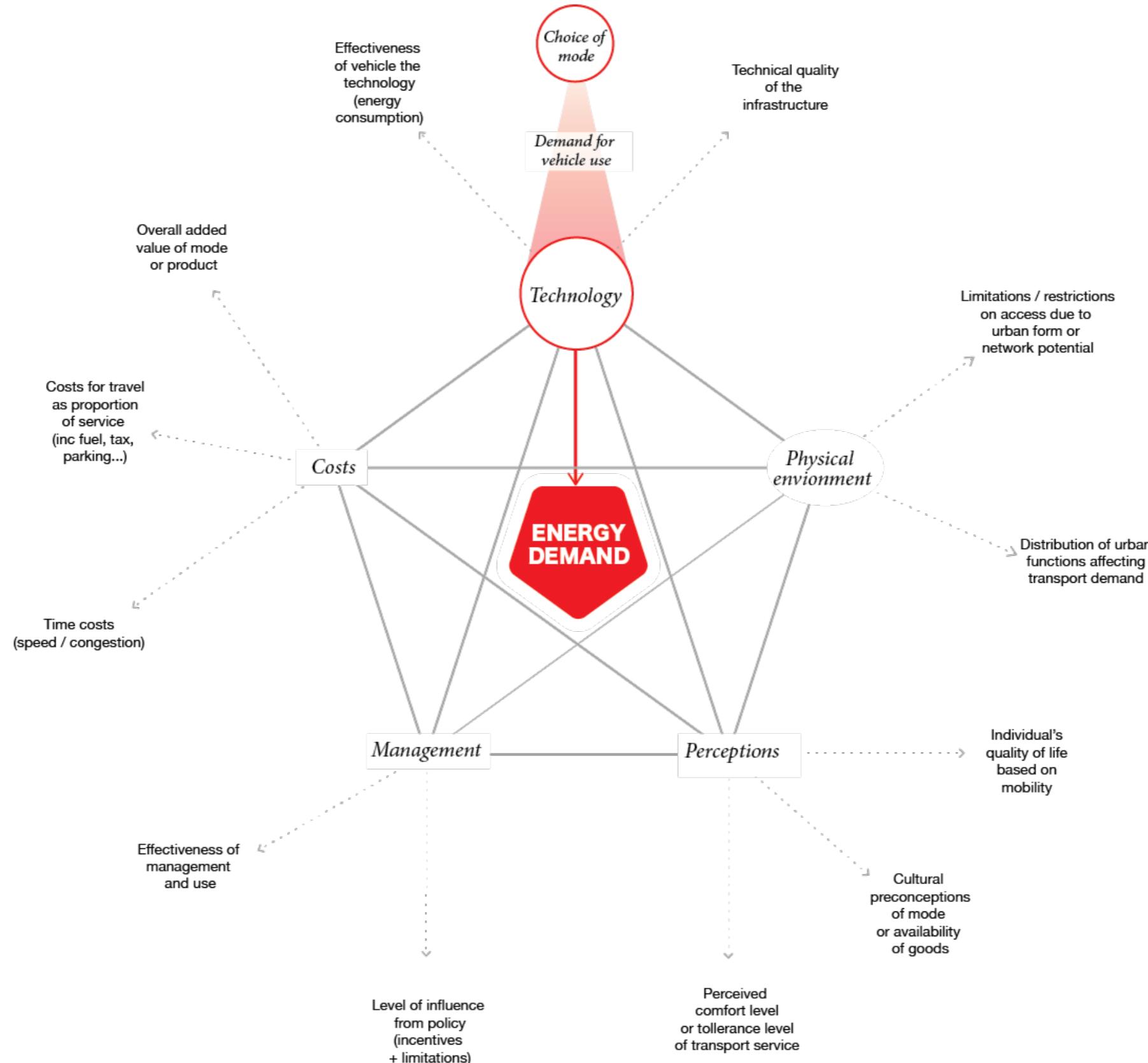


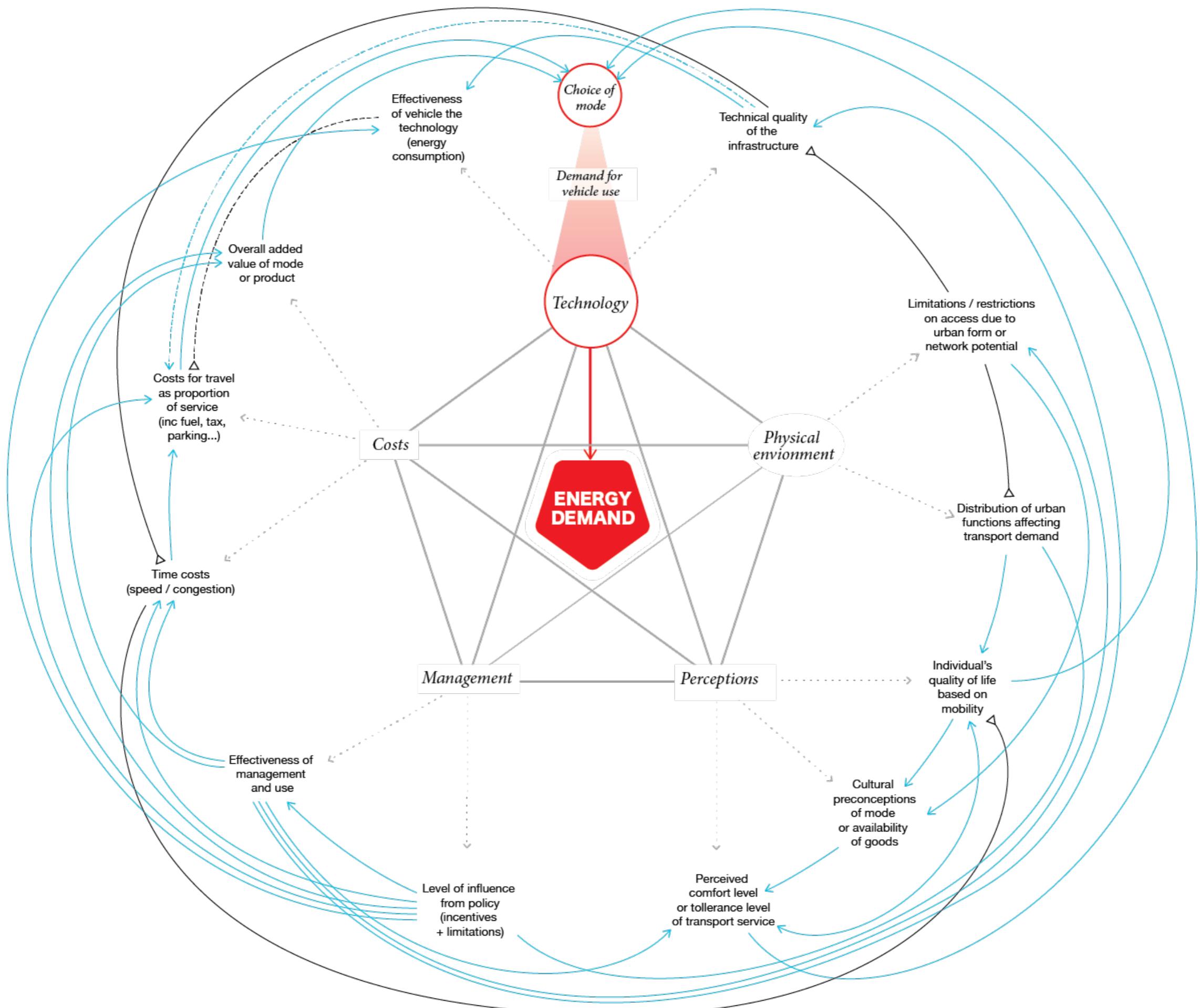


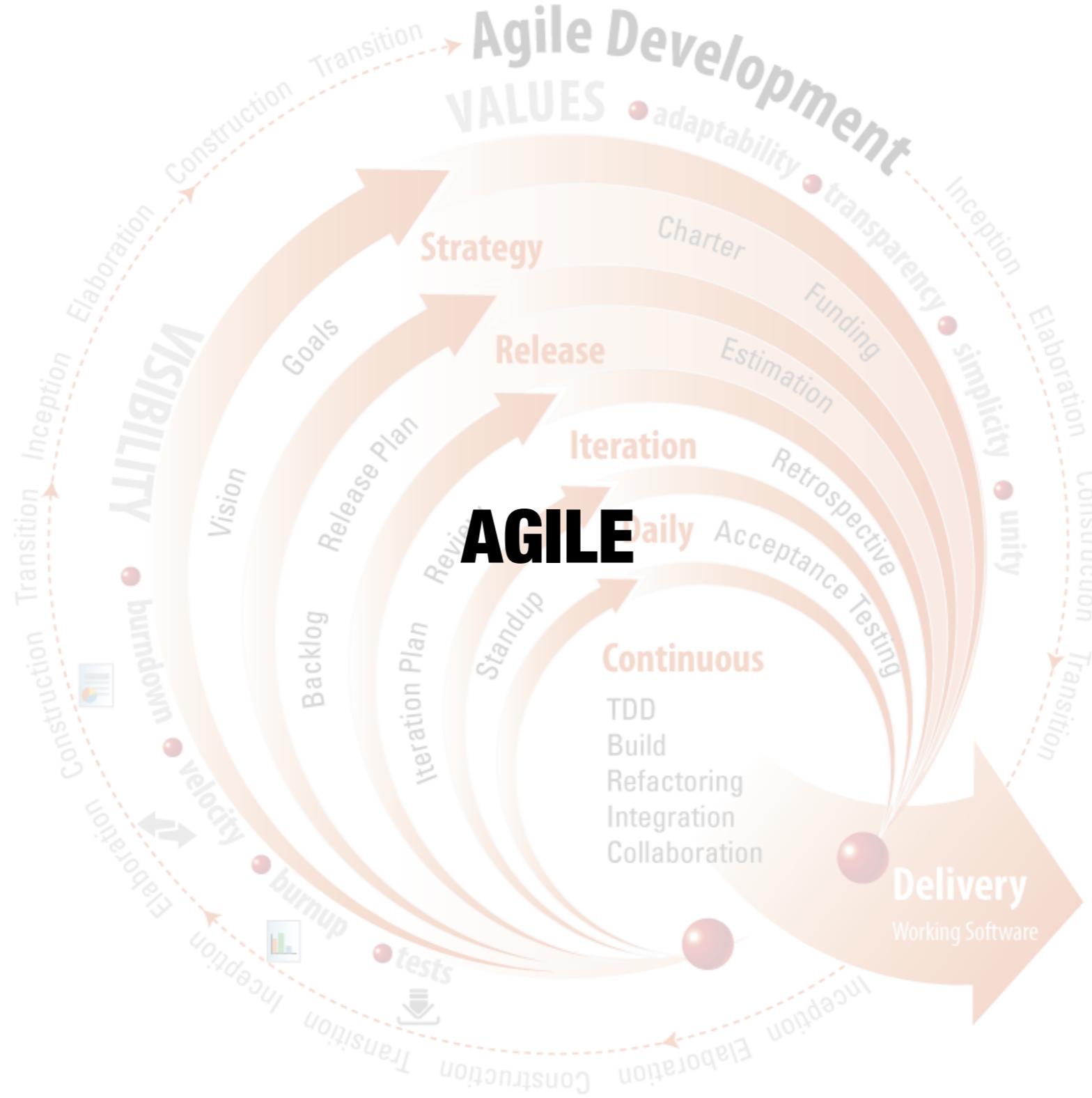


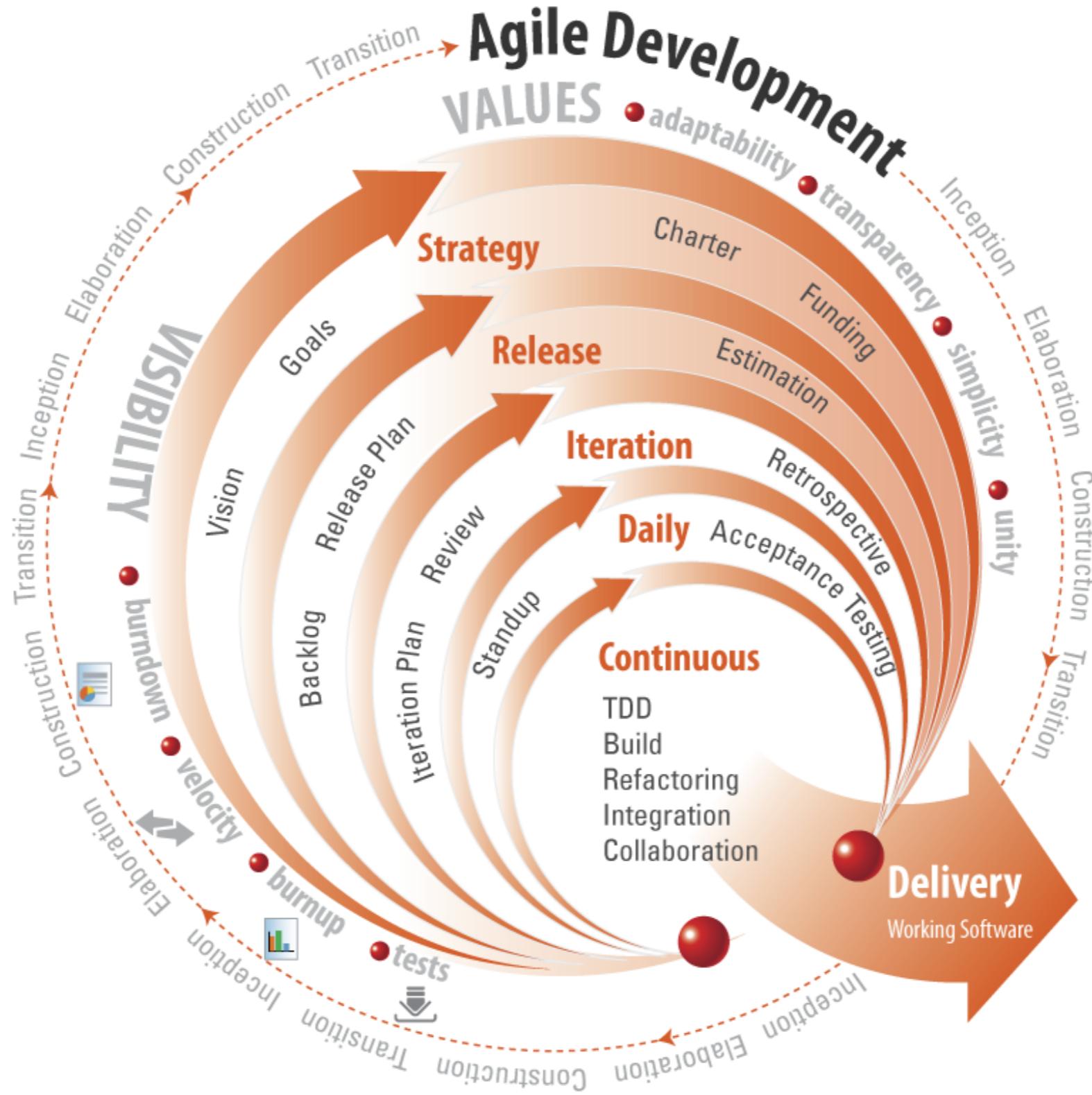


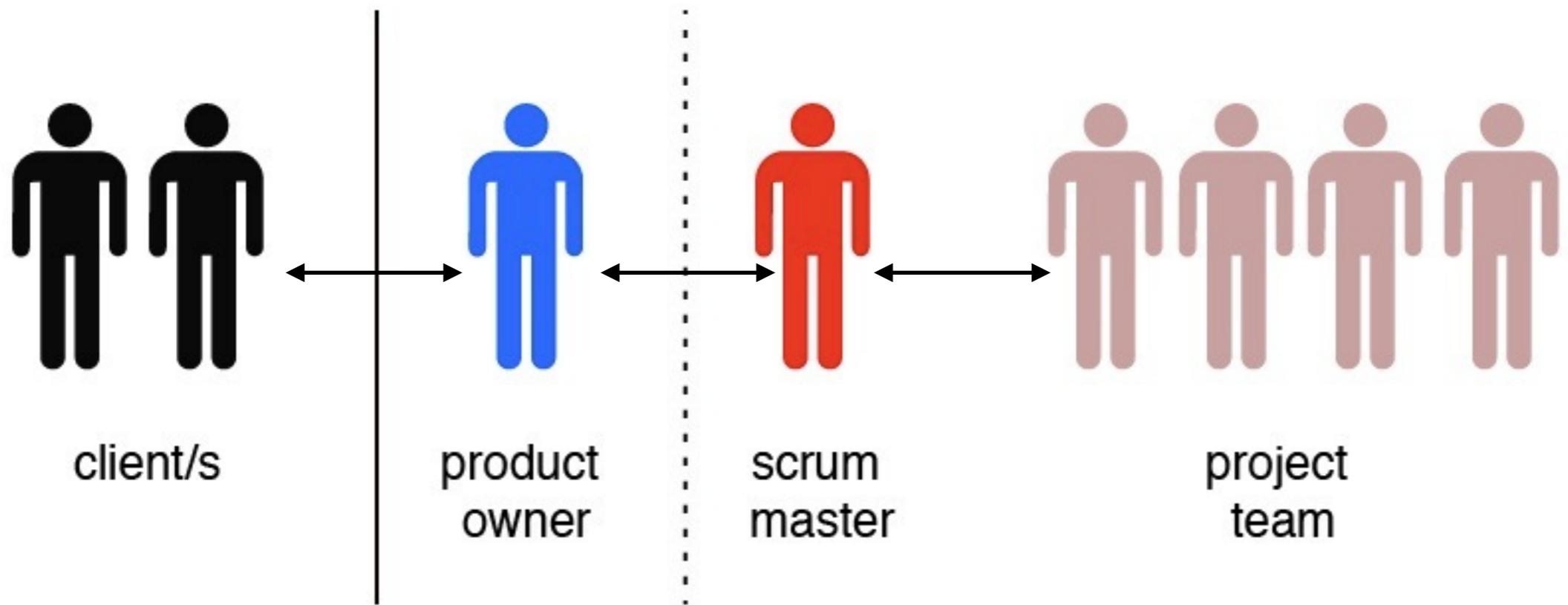












The Agile: Scrum Framework at a glance

Inputs from Executives,
Team, Stakeholders,
Customers, Users



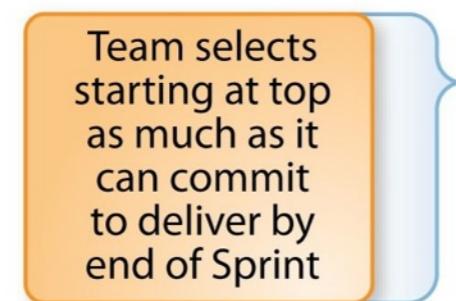
Product Owner



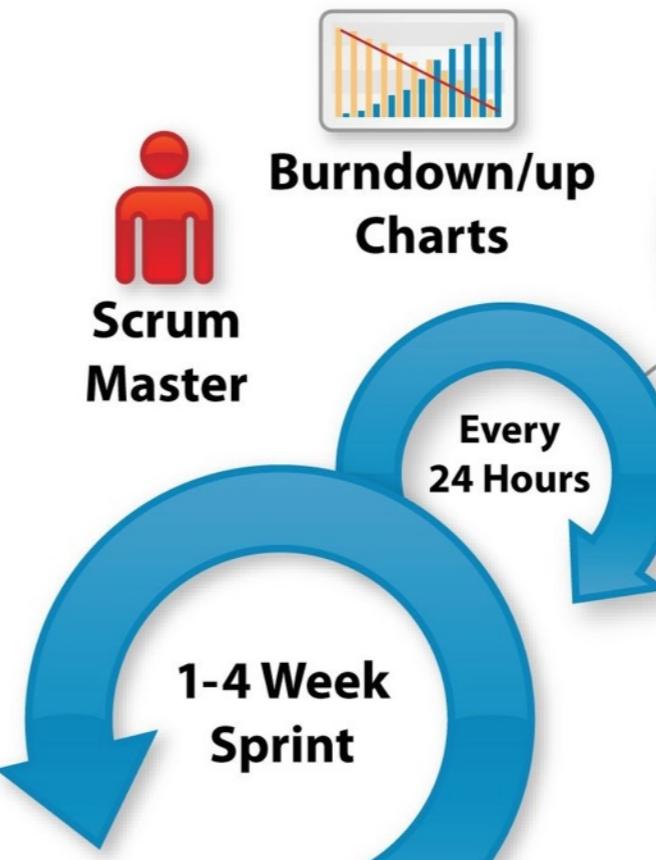
The Team



Product Backlog



Sprint Planning Meeting



Sprint end date and team deliverable do not change





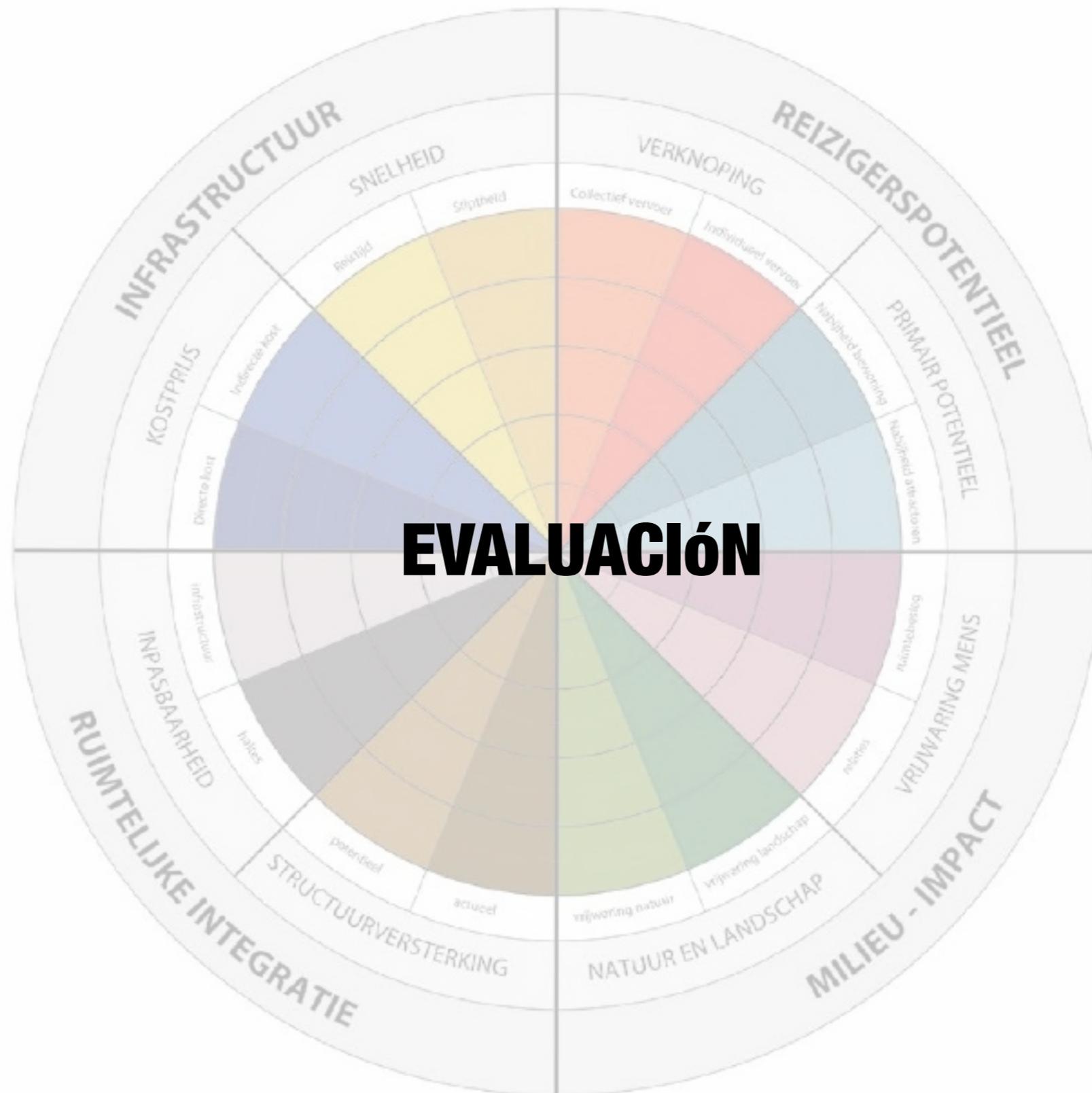
Planning meeting



Planning meeting



Daily scrum meeting



interne kwaliteiten transportsysteem

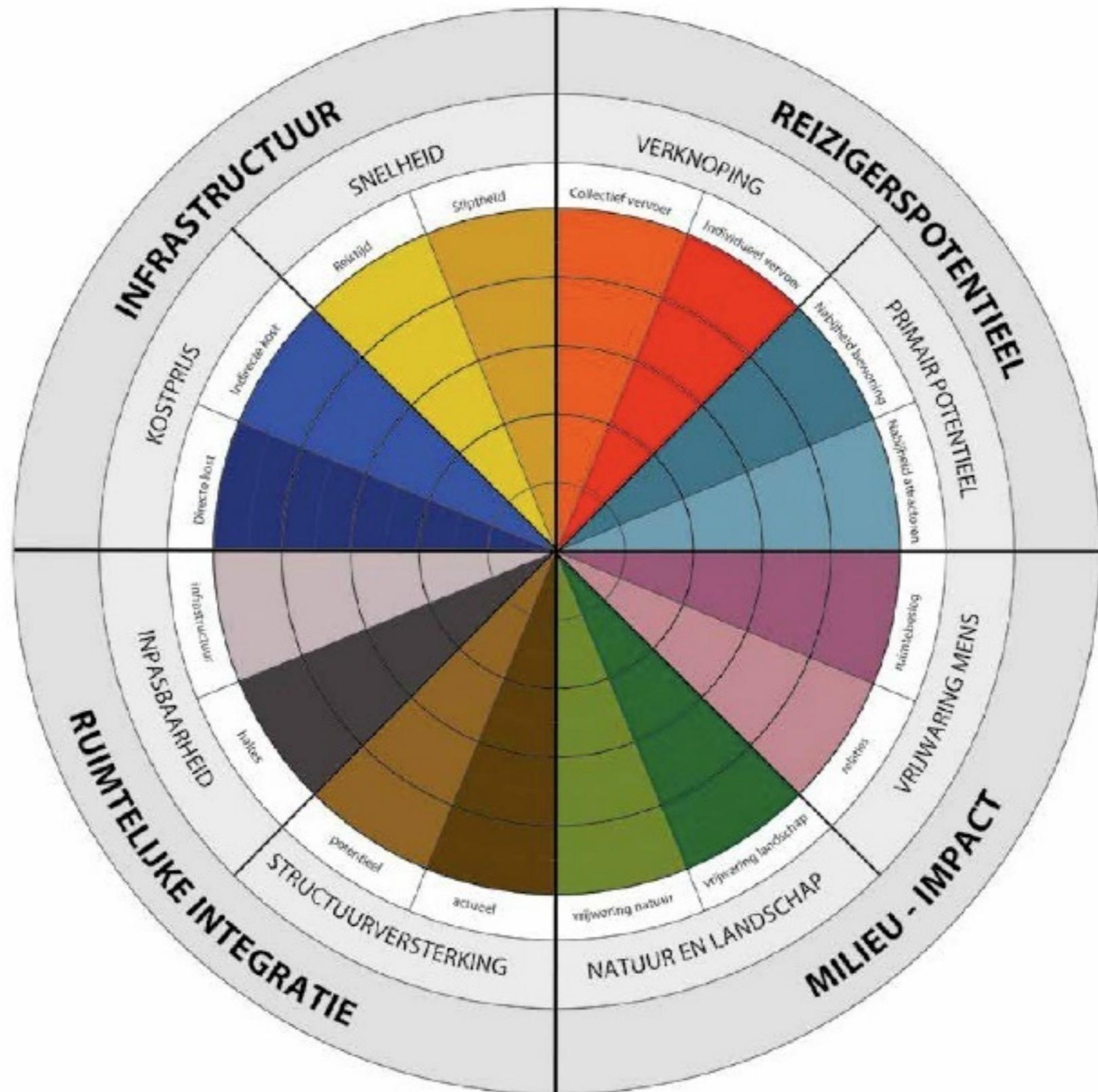
Impact op omgeving



TRAM TRACK TRACER

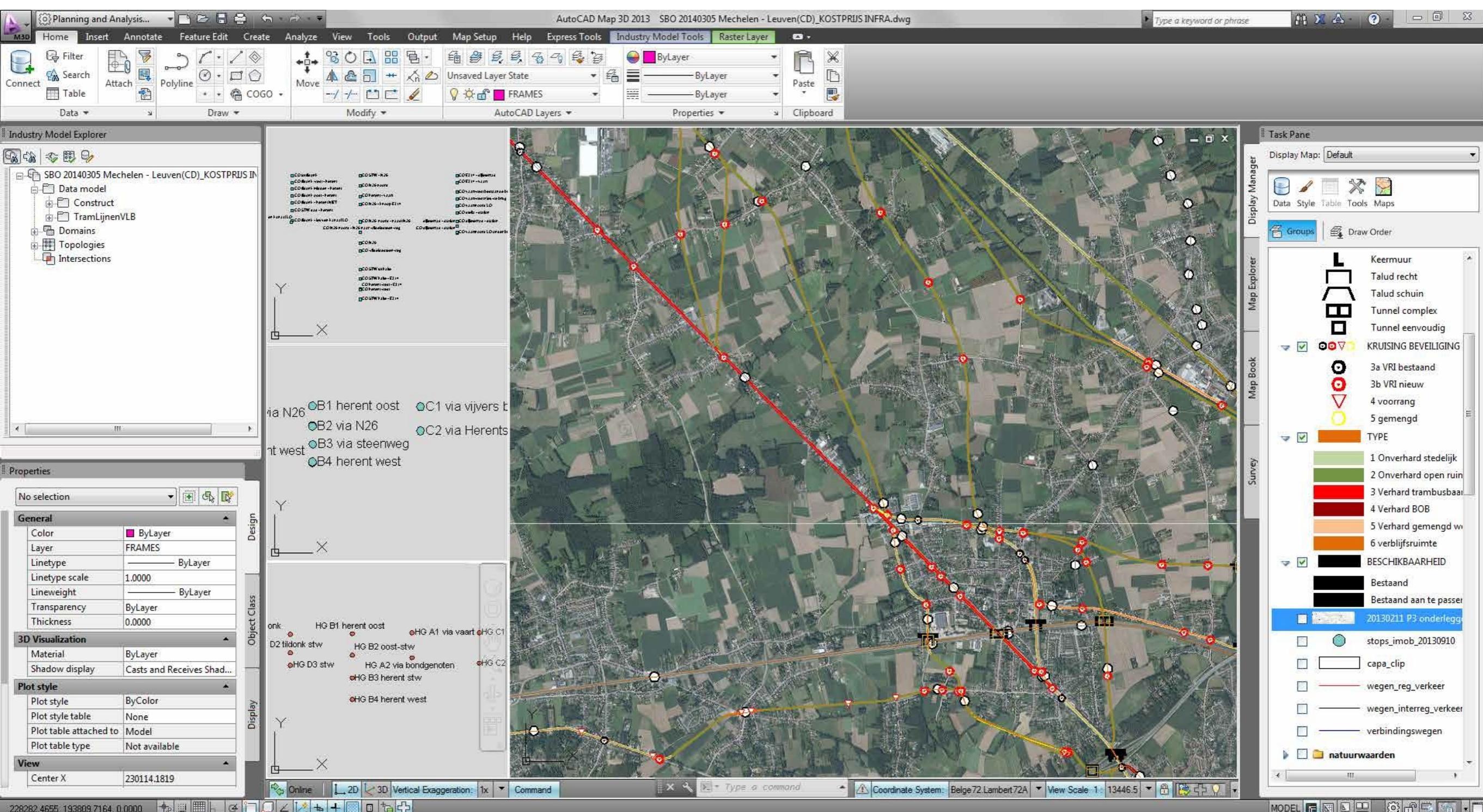
**BU
UR**

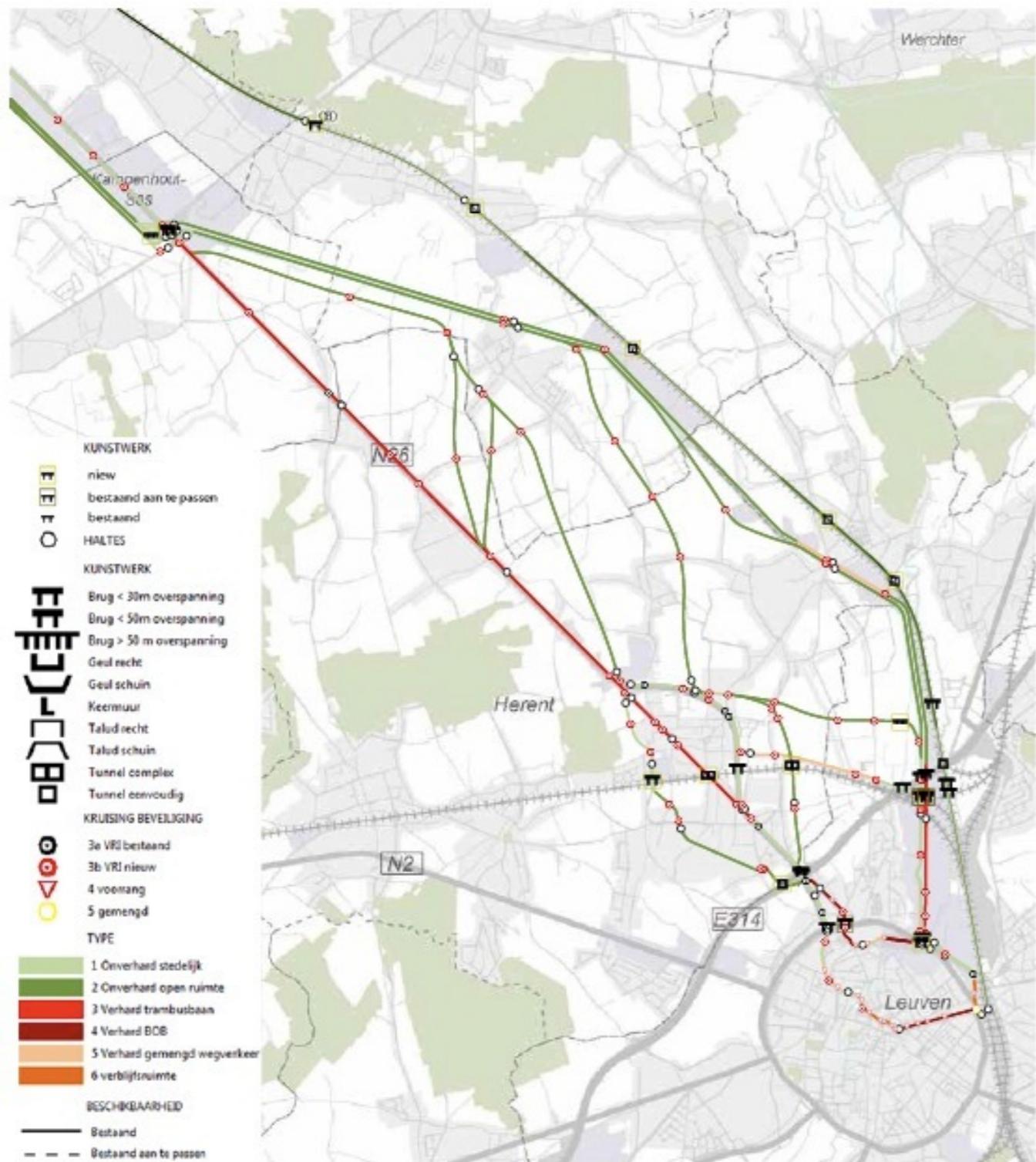
[**www.tramtracktracer.eu**](http://www.tramtracktracer.eu)



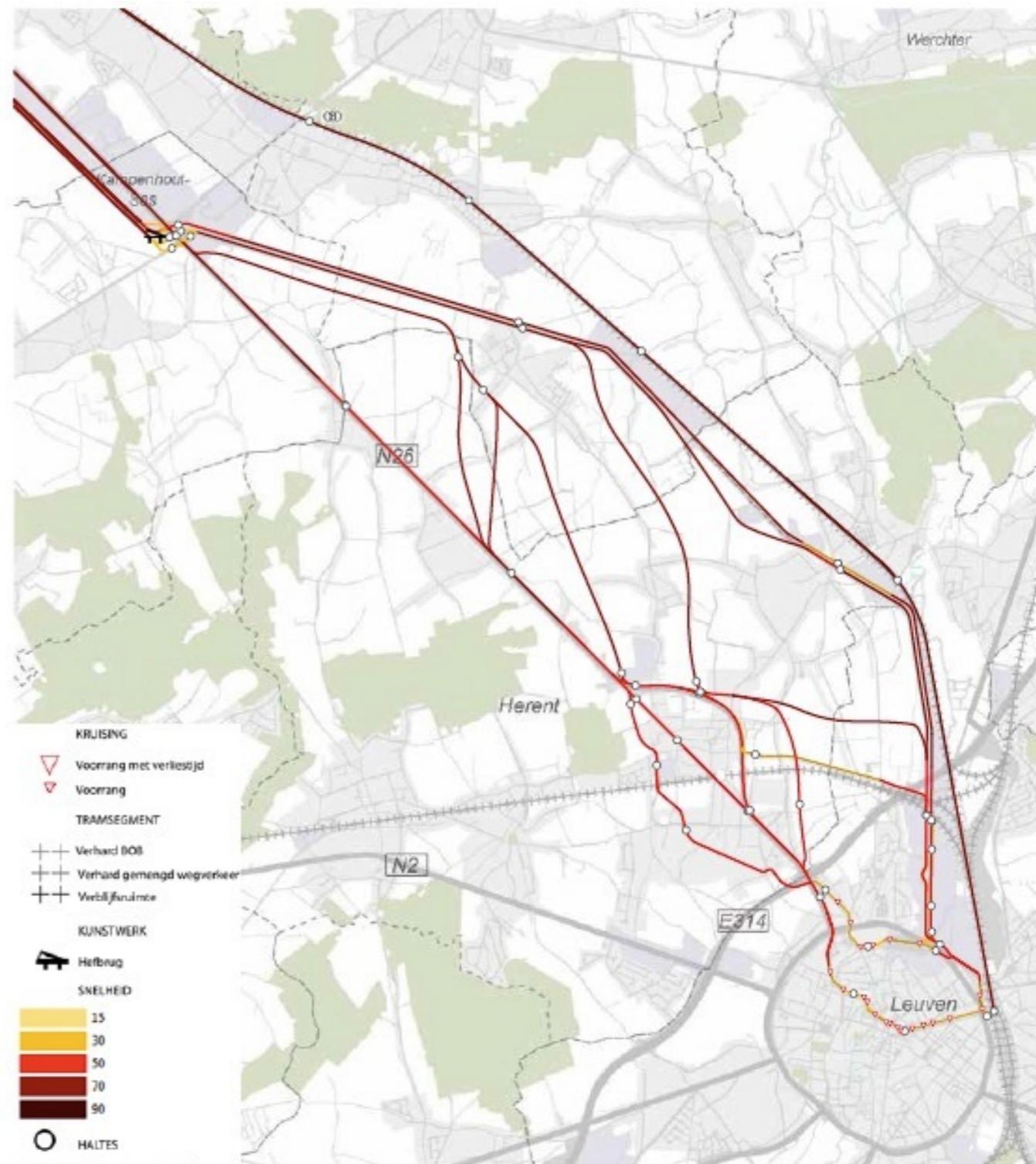
*interne kwaliteiten
transportsysteem*

impact op omgeving

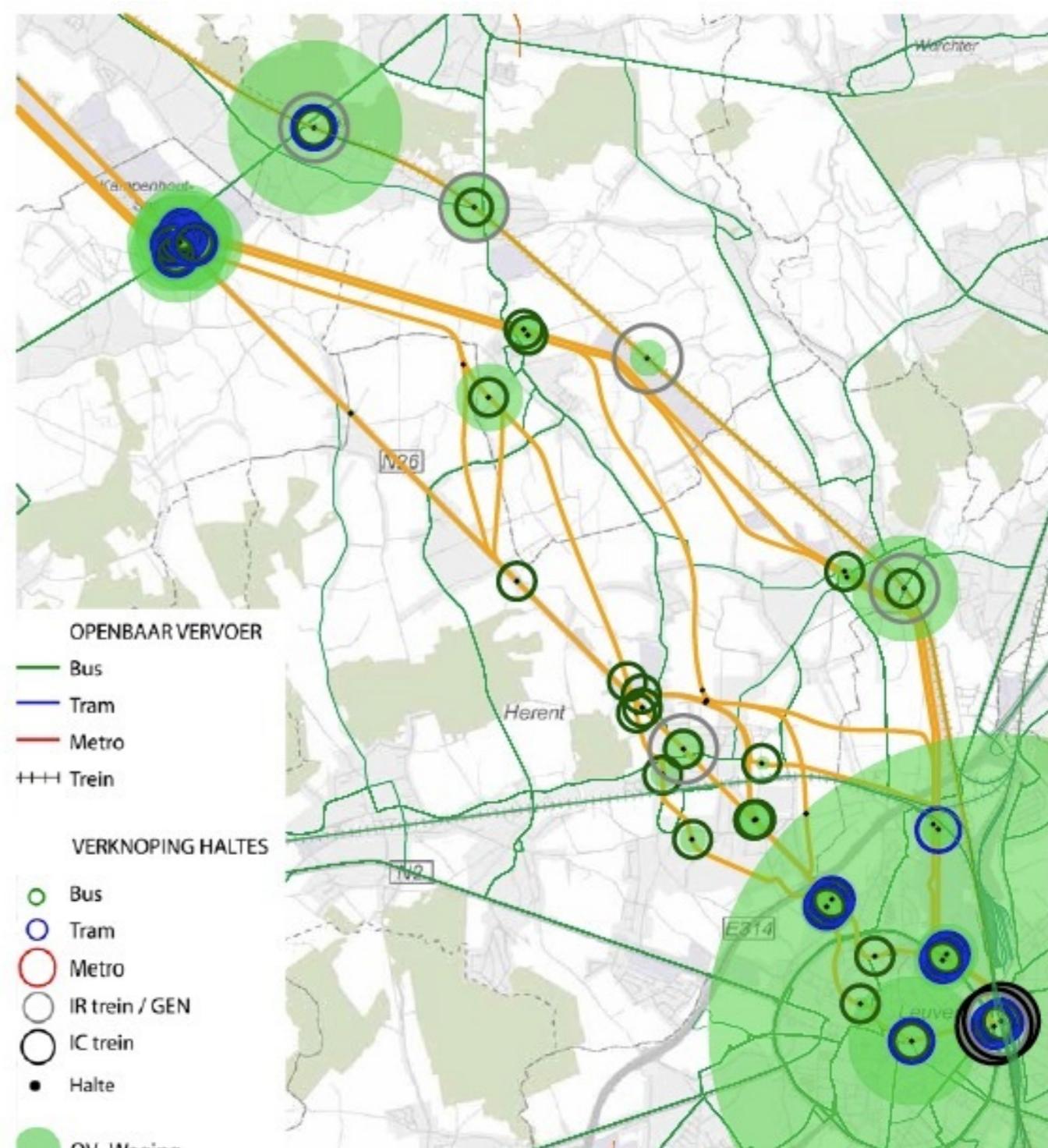
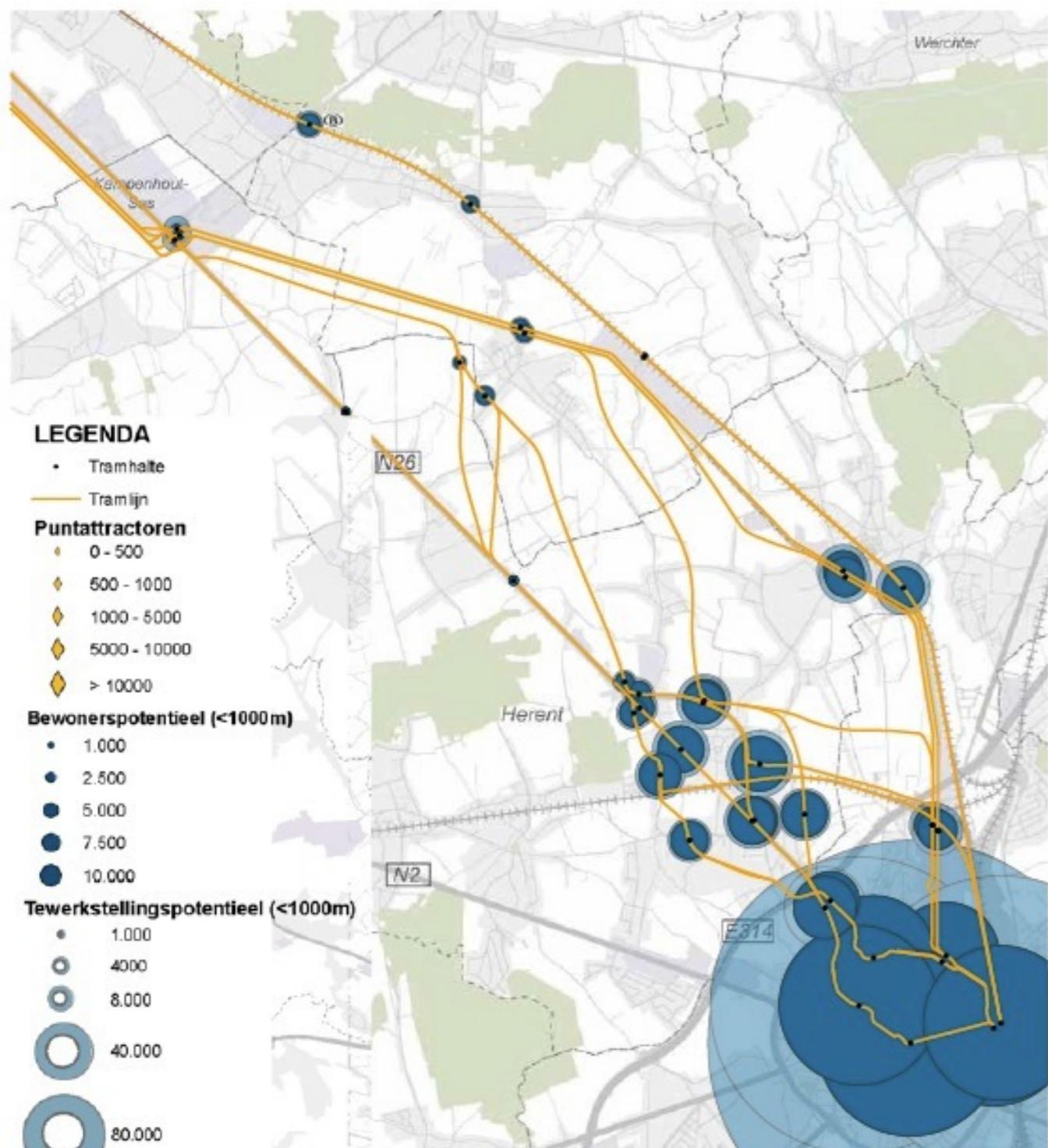


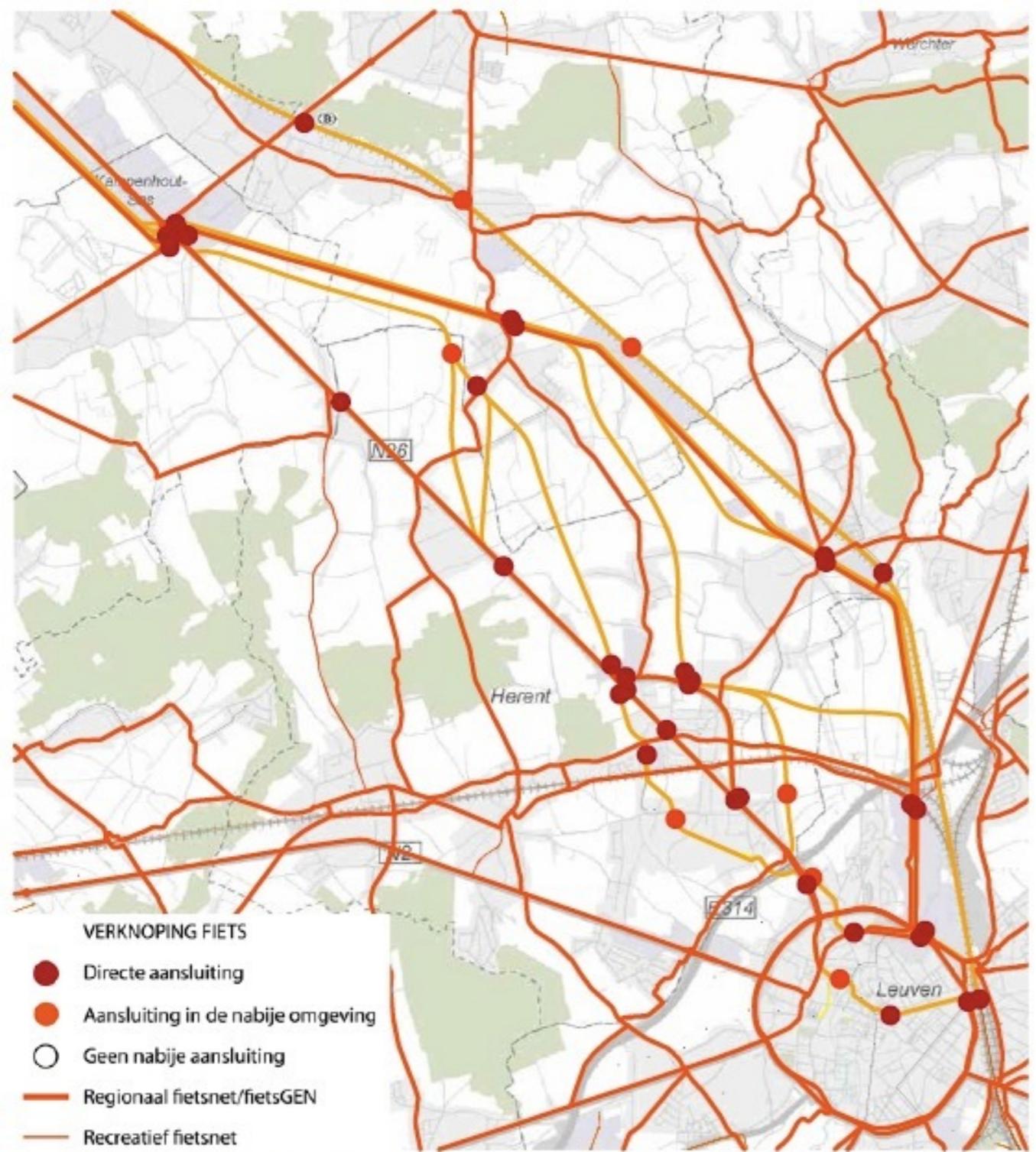


kostprijs infrastructuur: direct - indirect

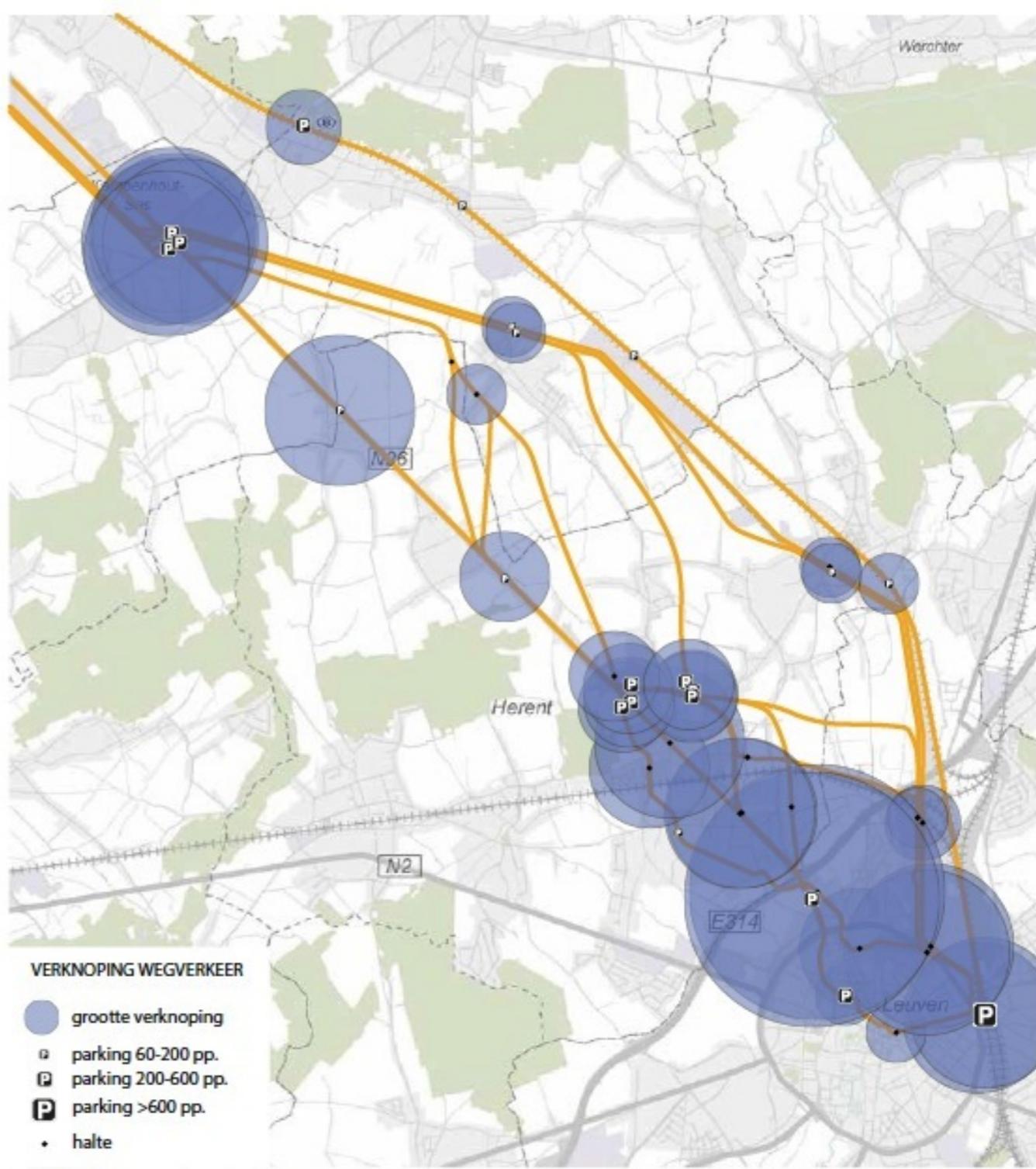


snellheid (reistijd - stipheid)



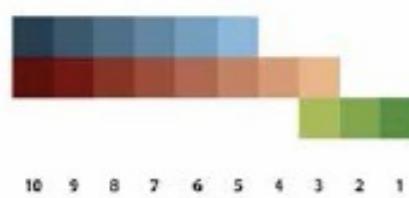


verknoping fietsnetwerk



verknoping wegverkeer

structuurversterking



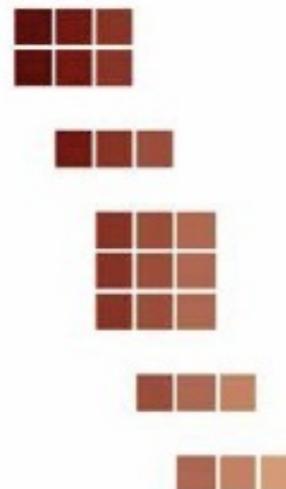
KWETSBARE OPEN RUIJTE

- VEN-gebieden
- IVON-gebieden
- Habitatrichtlijnen
- Vogelrichtlijnen
- Natuurreservaten
- Risicozones overstromingen
- Biologisch (waardevolle) en zeer waardevolle gebieden
- Ankerplaatsen



VERSTEDELIJKING

- tewerkstelling/centrumfuncties +
 - Regionale steden
 - Brussel 19 gemeenten
- tewerkstelling/centrumfuncties +
 - Vilvoorde
- tewerkstelling/centrumfuncties +
 - Vlaamse Rand rond Brussel
 - Rand regionale stad
 - Kleine steden
- tewerkstelling/centrumfuncties +
 - Hoofddorpen
- tewerkstelling/centrumfuncties +
 - Kernen



CENTRUMFUNCTIES (pro memorie)

BEDRIJVIGHEDEN

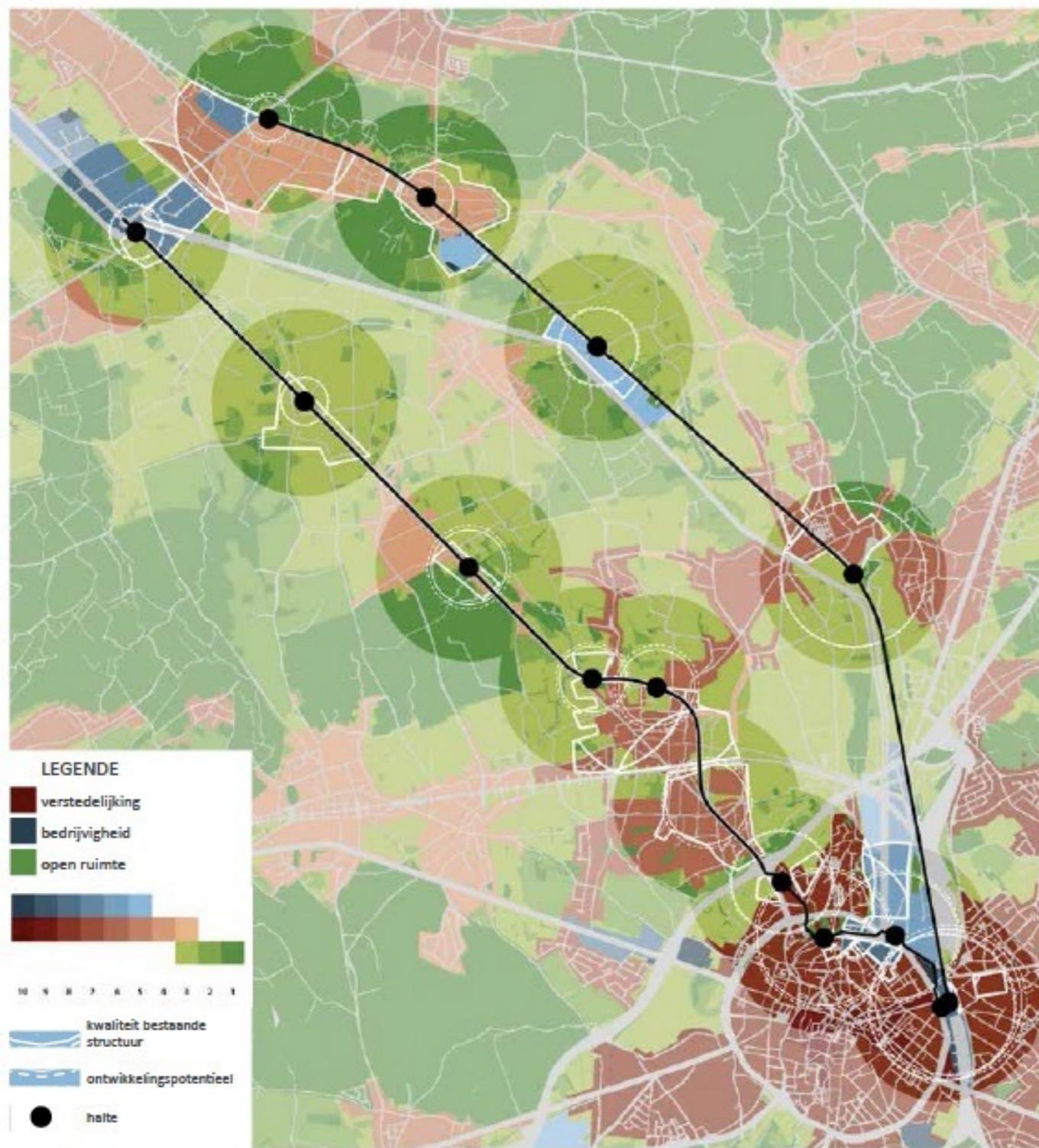
- Bedrijven



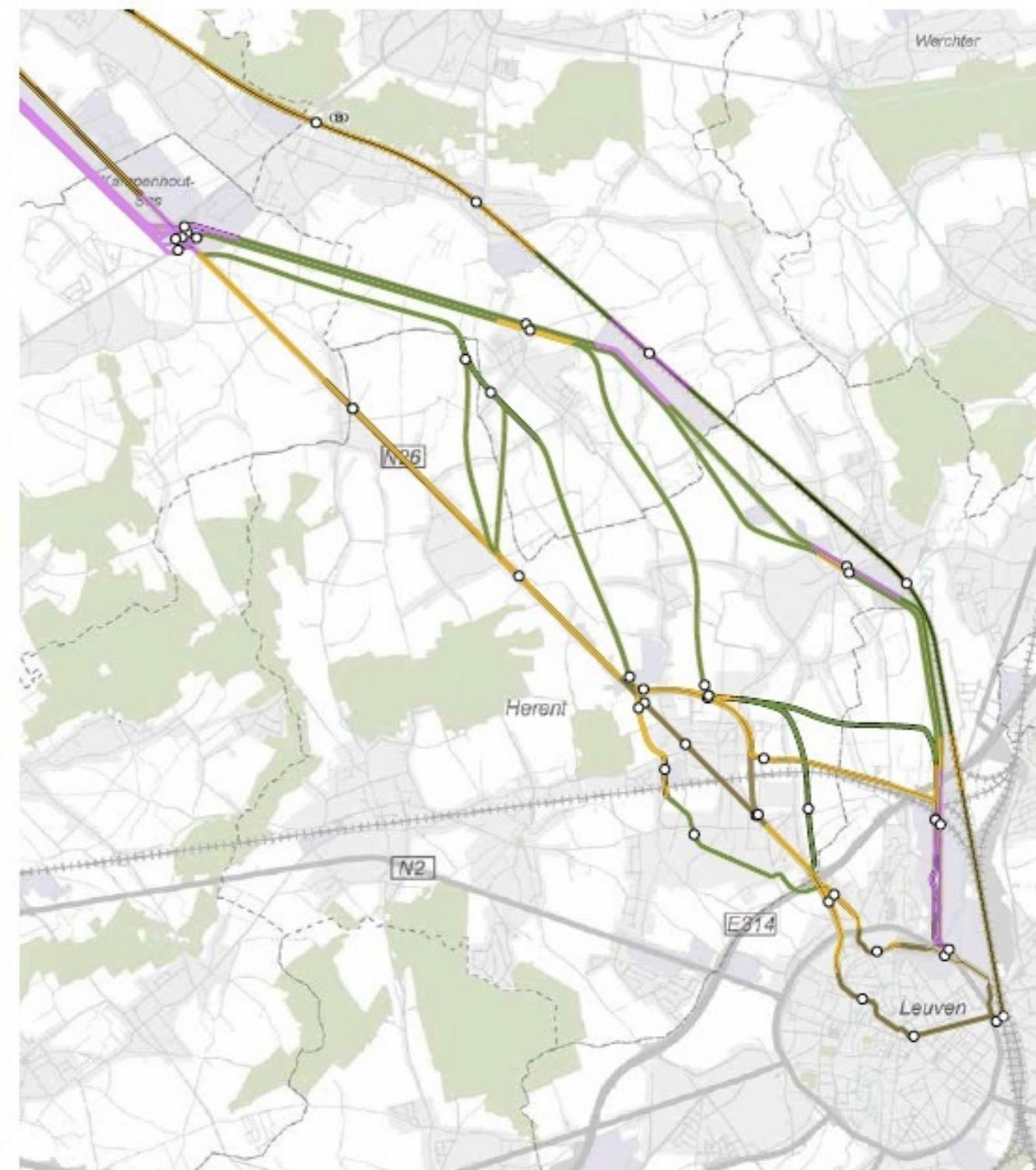
KWETSBARE OPEN RUIJTE

- Relictzones
- Biologisch (zeer-, minder- en) waardevolle gebieden
- Uitbebouwing
- Biologisch minder (en) waardevolle gebieden

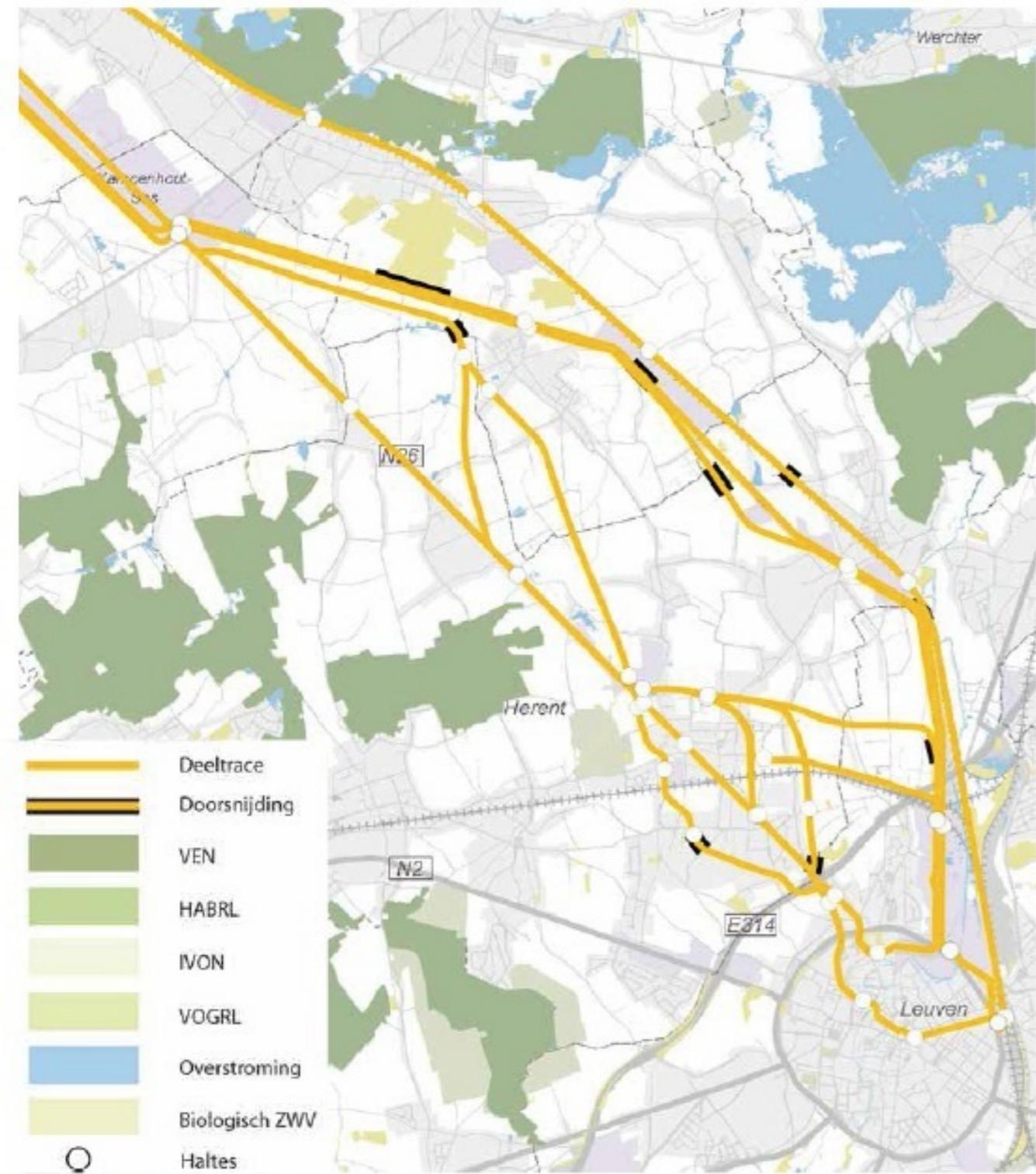




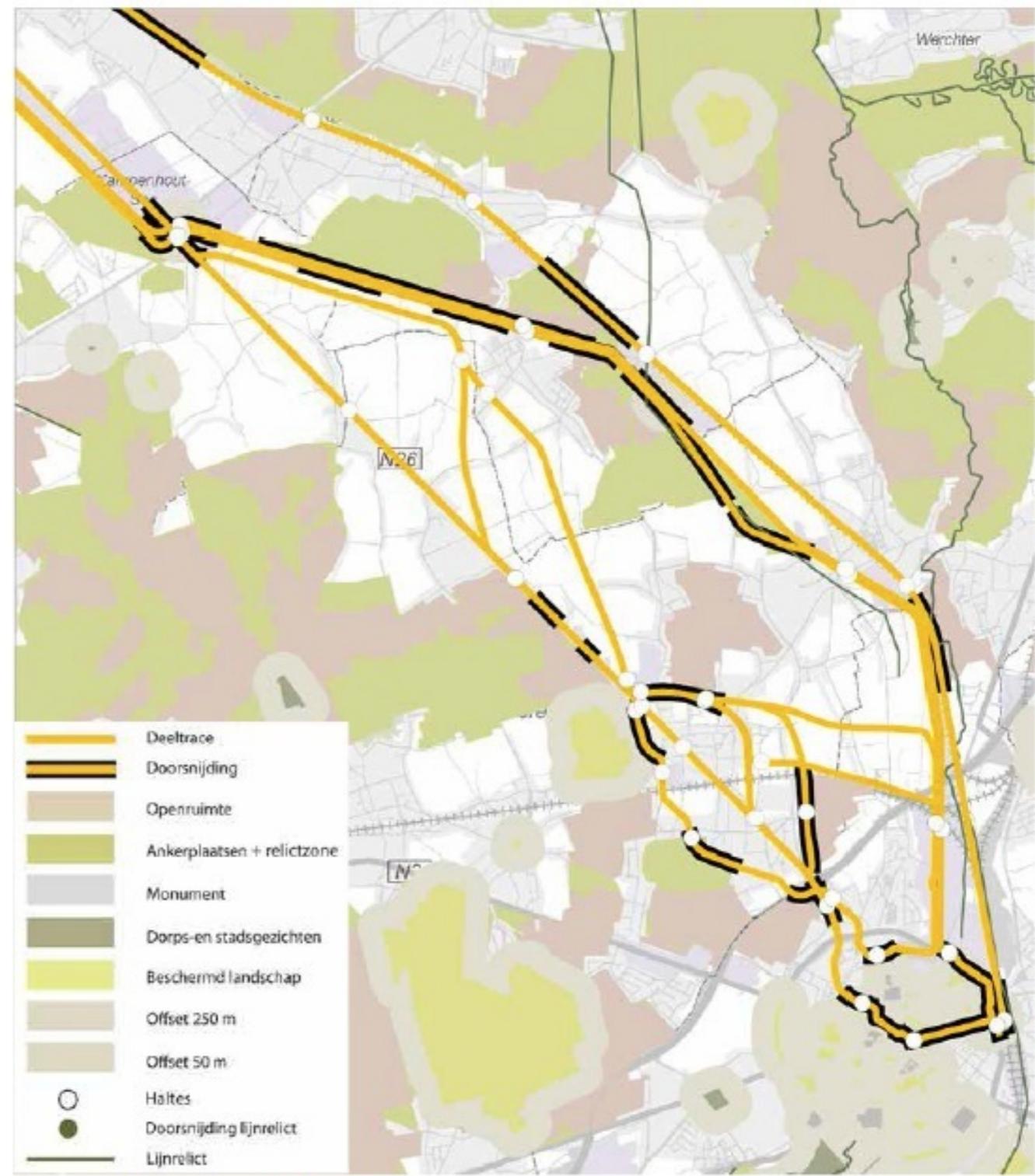
structuurversterking



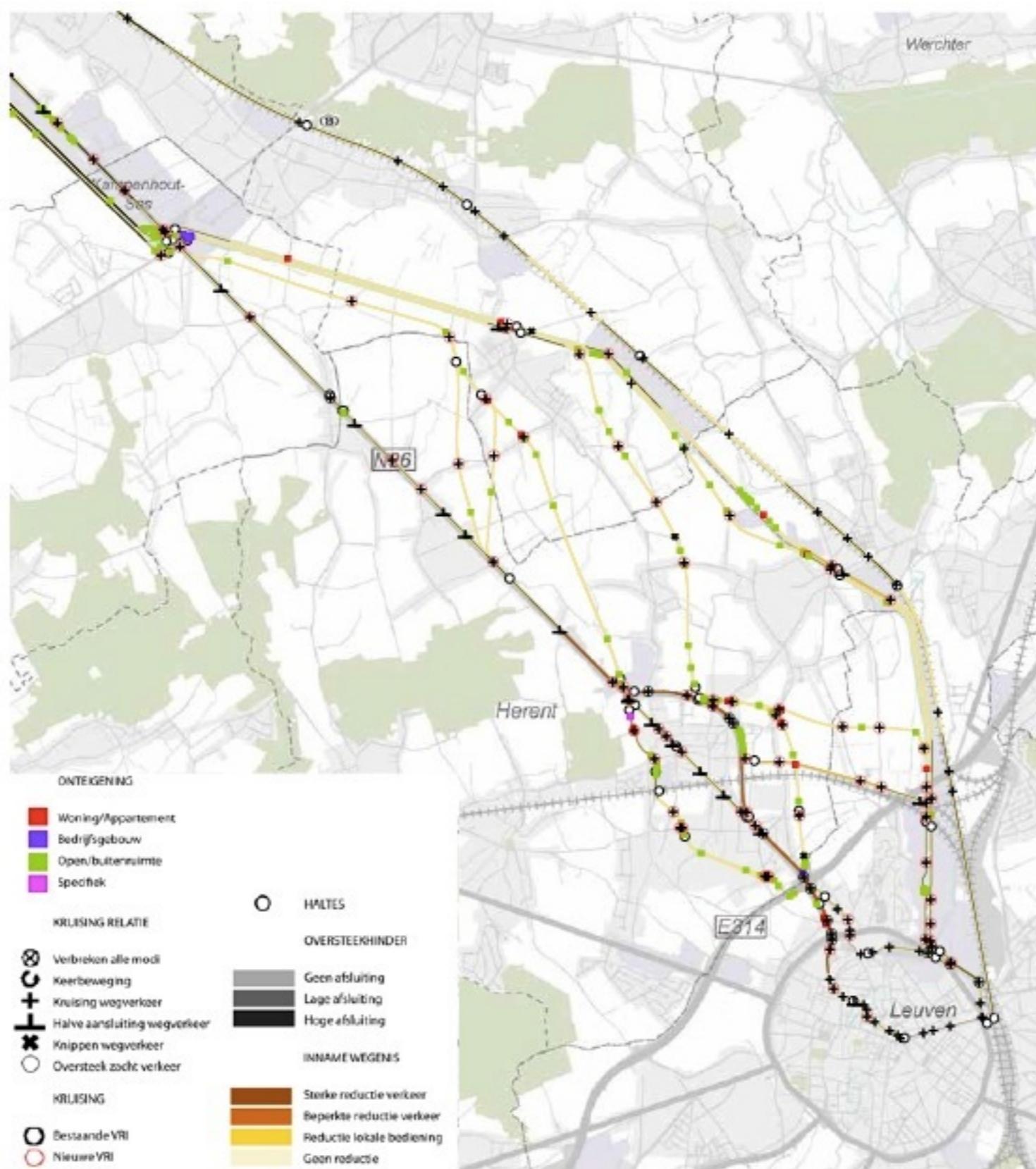
inpasbaarheid (infrastructuur - haltes)



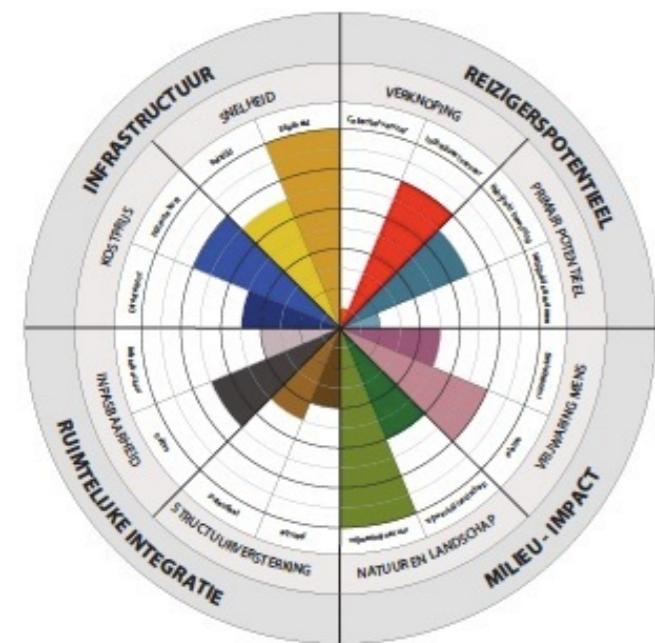
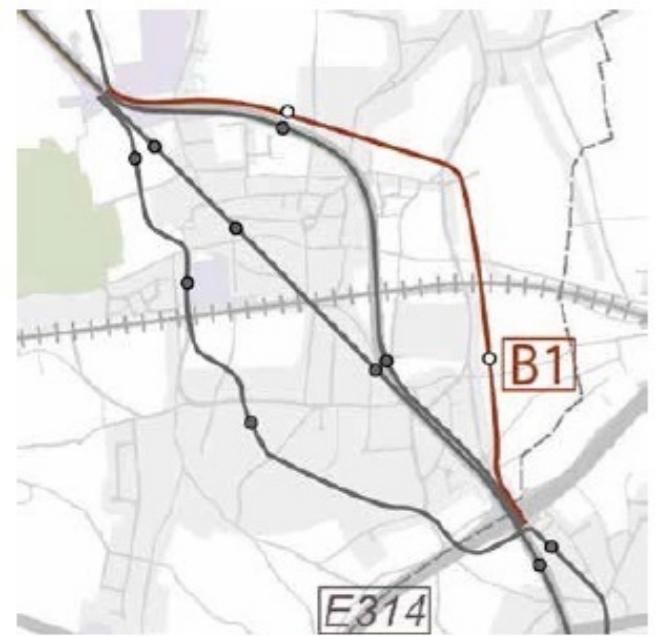
doorsnijding en versnippering natuur



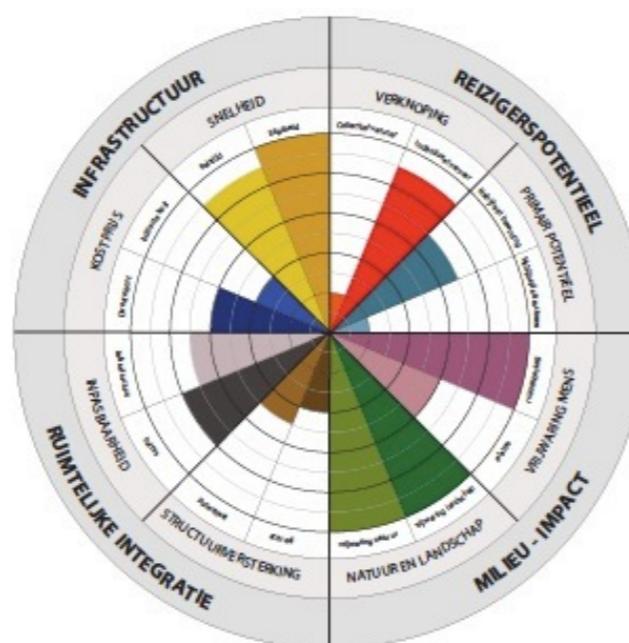
doorsnijding landschap



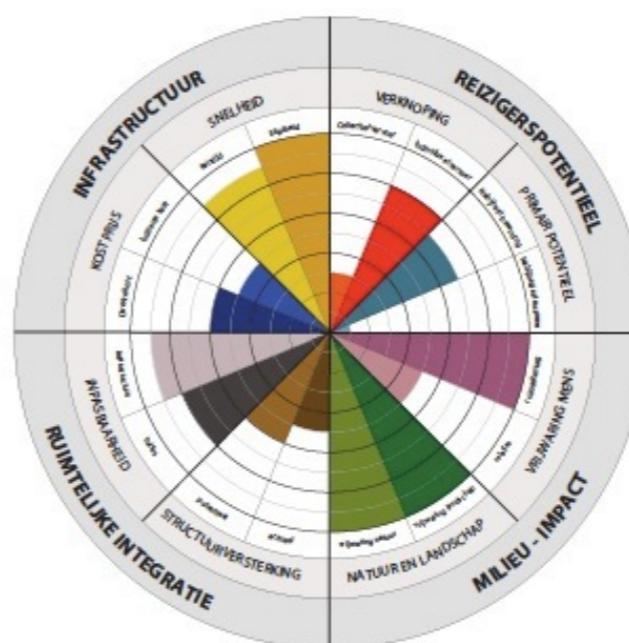
beperking hinder mens (ruimtebeslag - relaties)



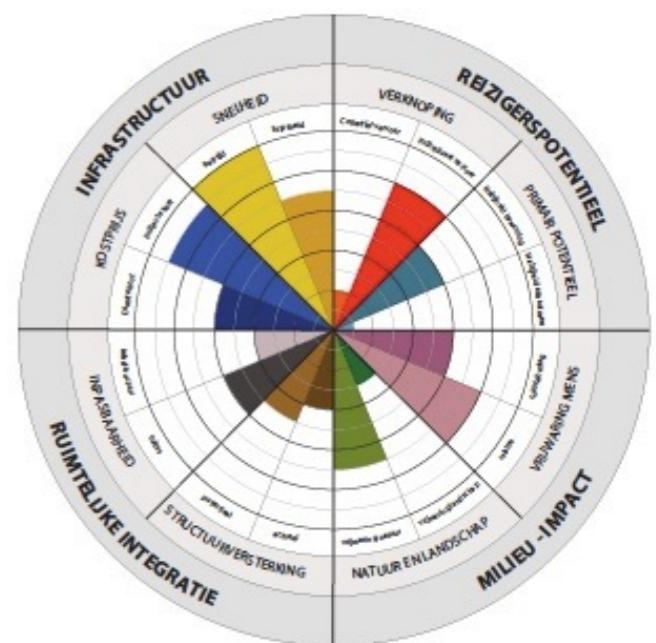
B1: Herent oost



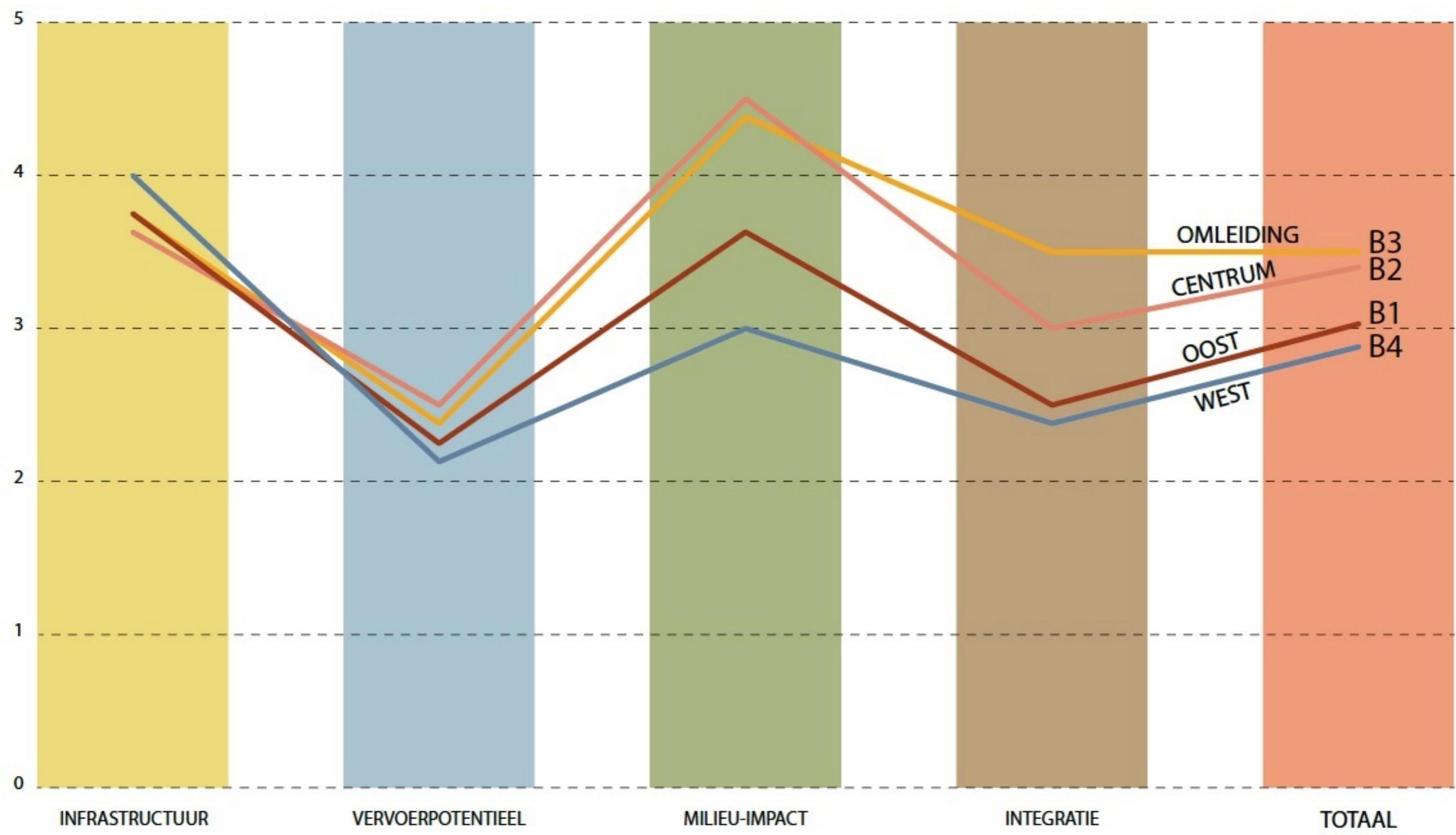
B2: via N26

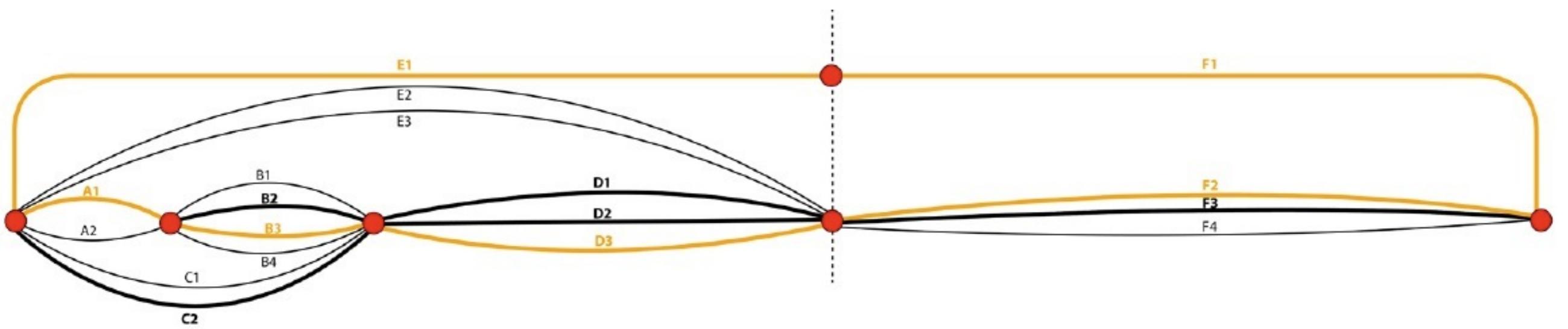


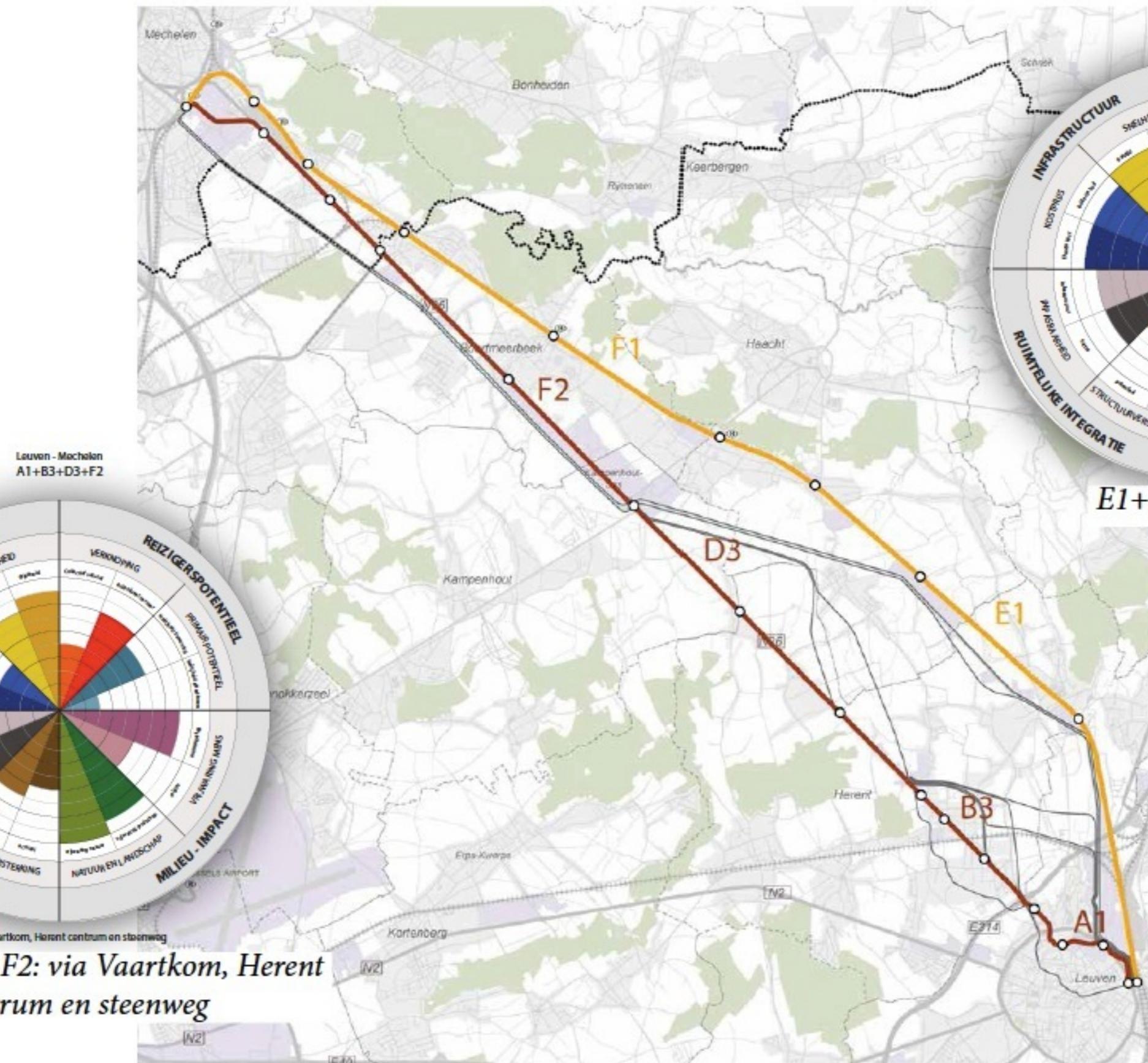
B3: via Herent centrum

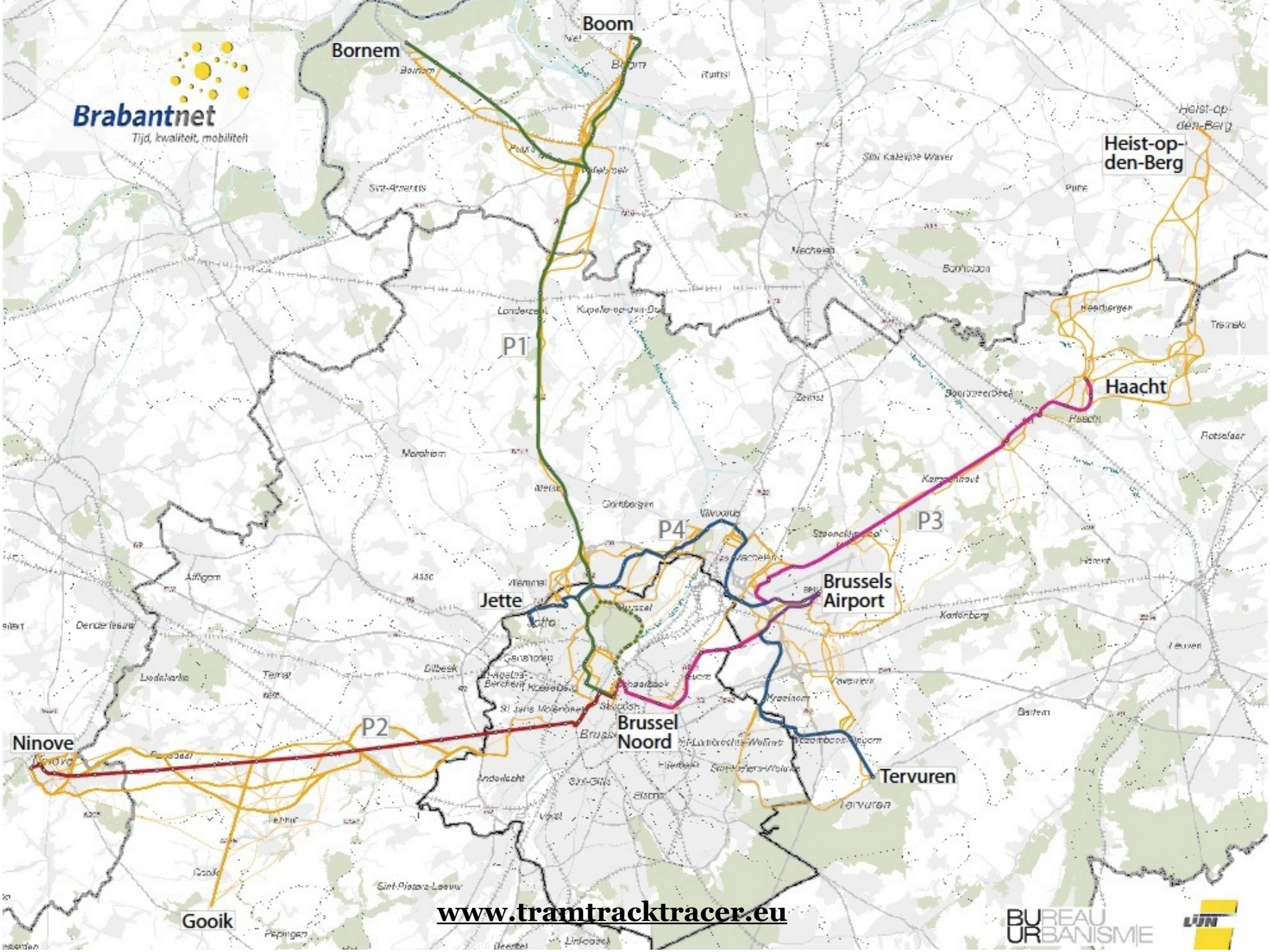


B4: Herent west









*Gracias
Obrigado
Thank you!*

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