

POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION

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Mobility hubs in Brussels

From policy visioning to implementation

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Why are we developing mobility hubs?

Good Move Plan
Brussels' SUMP



City Vision

be
good
move
be.brussels

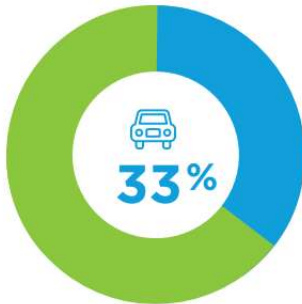


The New Drive

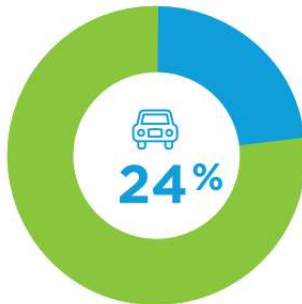


Mobility Vision

Trend scenario (2030)



good move



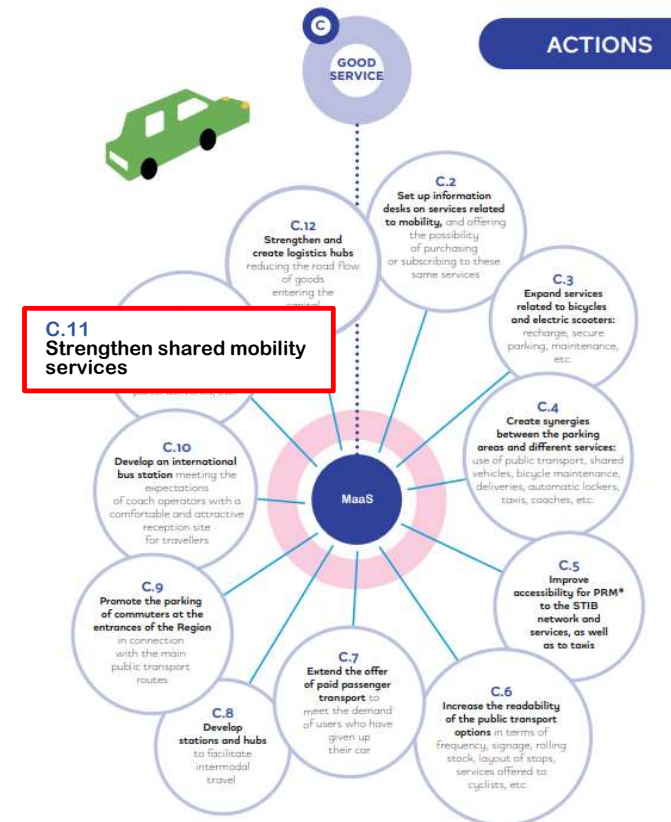
- Travel as a driver of a car
- Collective and individual travel (walking, cycling and new light modes)



The New Drive



More than a vision : 50 actions



The New Drive



How do we develop mobility hubs?

Strategic vision for the development of mobility hubs
in Brussels



Set of tools

The strategic vision for the development of mobility hubs in Brussels consists of an exploratory study of the existing knowledge on mobility hubs and policy recommendations, but at its core it's a set of tools to facilitate a strategic implementation of mobility hubs.

- Hub typology
- Service requirements per type
- Persona (rep. target groups)
- Butterfly model
- 20 case studies

→ STRATEGIC VISION



Set of tools

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- **Hub typology**
- **Service requirements per type**
- Persona (rep. target groups)
- **Butterfly model**
- 20 case studies

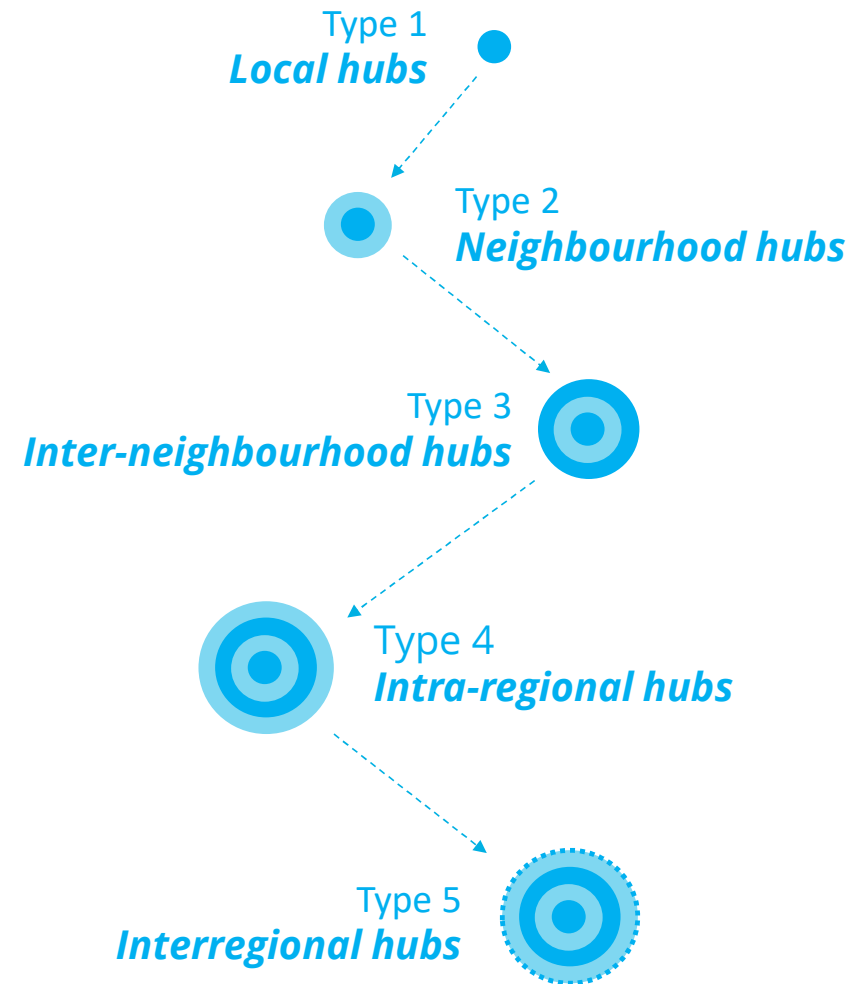
→ STRATEGIC VISION



Hub typology

5 types based on 3 variables:

- **The supply** of public transport
- **The demand** or the catchment area of the hub
- **The location** or the intersection between the PT and the bicycle network



The New Drive

Hub typology



Typename	shared and active mobility & bus stops with low frequency				
	Type 1 <i>Local hubs</i>	Type 2 <i>NBHD hubs</i>	Type 3 <i>Inter-NBHD hubs</i>	Type 4 <i>Intra-regional hubs</i>	Type 5 <i>Inter-regional hubs</i>
Public Transport (PT) Supply	No PT OR Bus stop (with low frequency)	Tram stop (1 line) OR bus stop (1 line) (with normal frequency)	BTM stop (> 1 ligne) OR metro station (1 line) (with limited use) OR train station S5-S2*	Metro stations (most of) OR train stations S1-M2* OR P&R (with limited offer)	Train stations M1-L* OR P&R (most of)
Demand Hub's catchment area	within NBHD	within the commune	between communes (along PT line)	within Brussels-Capital Region	between regions & international
Location (PT X bike) Multim. Specialisation of roads	Nothing/PT NBHD X bike NBHD	PT NBHD X bike comfort	PT comfort X bike plus	PT plus X RCI	PT plus X RCI
Number ~	<100	<100	>100	<100	+/- 10
Location description by type or non-exhaustive list of example locations	Public spaces without PT OR bus stops with low frequency	Stops with only one PT line	stops with at least two PT lines (tram, bus and/or metro) OR metro stations OR train stations S5-S2* & core of local identity and (inter)NBHD centre	Most of metro stations, small P&R, Schaarbeek Station, Jette Station, Bordet Station, Boondael Station, ...	B-North station, B-Central station, B-South station, Schuman station, Luxemburg station, Big P&R, Etterbeek station, ...



Service requirements per type

SERVICE REQUIREMENTS	TYPES				
	Type 1 Local hubs	Type 2 NBHD hubs	Type 3 Inter-NBHD hubs	Type 4 Regional hubs	Type 5 Interregional hubs

MOBILITY INFRASTRUCTURE

bicycle parking	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
drop zone for micro shared modes	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
analogue information relating to public transport, shared modes, etc. -> reference to app/website	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
station-based shared bicycles (villo)	NICE TO HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
real-time digital info about public transport on site	NICE TO HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
sheltered bicycle parking		NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE
secured/monitored bicycle parking			NICE TO HAVE	MUST HAVE	MUST HAVE
bicycle pump & toolkit			NICE TO HAVE	MUST HAVE	MUST HAVE
charging infrastructure for bicycles		NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE
taxi stop(s)			NICE TO HAVE	MUST HAVE	MUST HAVE
K+R (only at trainstations)				NICE TO HAVE	MUST HAVE
bicycle repair				NICE TO HAVE	MUST HAVE
neighbourhood bicycle parking for subscribers	NICE TO HAVE	MUST HAVE	MUST HAVE	NICE TO HAVE	NICE TO HAVE
space for shared cars (incl. charging infrastructure) (only in case of existing parking spaces)	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE
parking space(s) for disabled users (only in case of existing parking spaces)		NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE
charging infrastructure for cars (only in case of P+R)				MUST HAVE	MUST HAVE

FACILITATING INFRASTRUCTUUR

information about activities/services in the area	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
garbagebins	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
unsheltered seating area	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
sheltered seating area		MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
ticket machine		NICE TO HAVE	MUST HAVE	MUST HAVE	MUST HAVE
postal service (can be combined with indoor waiting area)	NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE	MUST HAVE
luggage lockers			NICE TO HAVE	MUST HAVE	MUST HAVE
vending machine			NICE TO HAVE	MUST HAVE	MUST HAVE
staffed eating facilities (restaurants, food-to-go, kiosk, ...)			NICE TO HAVE	MUST HAVE	MUST HAVE
charging facilities for electronics (phone, scooter, etc.)			NICE TO HAVE	MUST HAVE	MUST HAVE
ATM machine			NICE TO HAVE	MUST HAVE	MUST HAVE
AED			NICE TO HAVE	NICE TO HAVE	MUST HAVE
sanitary facilities				NICE TO HAVE	MUST HAVE
workplace				NICE TO HAVE	MUST HAVE
staffed ticketing				NICE TO HAVE	NICE TO HAVE
lending point for pushchairs			NICE TO HAVE	NICE TO HAVE	NICE TO HAVE
wifi				NICE TO HAVE	NICE TO HAVE
drinking water facilities				NICE TO HAVE	NICE TO HAVE

SERVICE REQUIREMENTS	TYPES				
	Type 1 Local hubs	Type 2 NBHD hubs	Type 3 Inter-NBHD hubs	Type 4 Regional hubs	Type 5 Interregional hubs

READABILITY

good readability (spatial design)	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
good recognisability (branding)	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
external signage (to and from the hub)	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
internal signage (in the hub)	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE

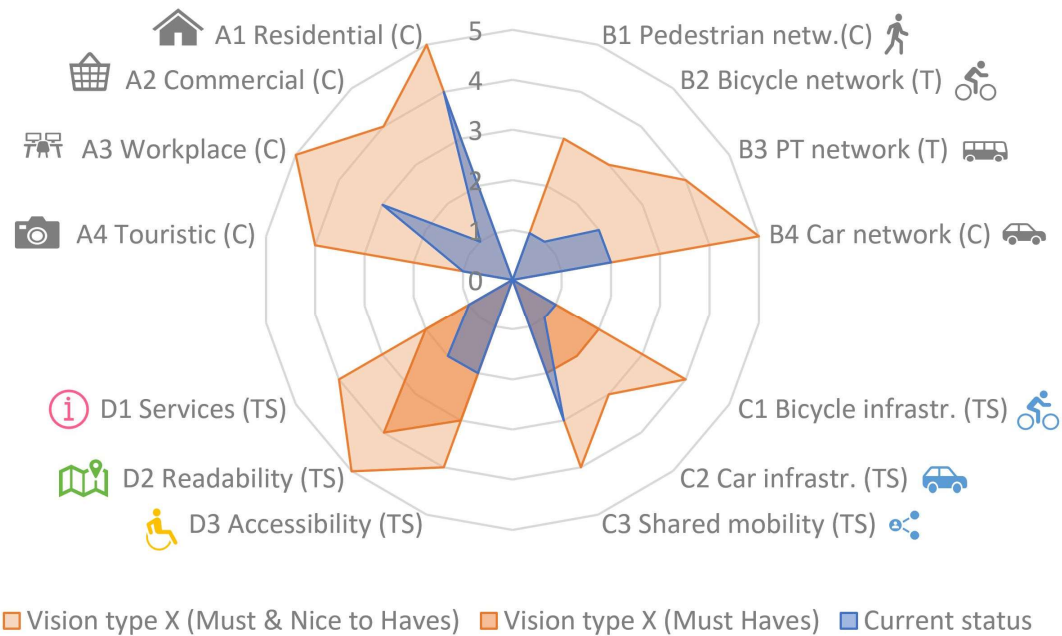
ACCESSIBILITY

adequate lighting	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
obstacle-free	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
tactile aids	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
good cycling accessibility	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE	MUST HAVE
auditory aids	NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE	MUST HAVE
wheelchair accessibility (assisted)	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE
wheelchair accessibility (unassisted)	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE
integrally accessible (spatial design) = when all of the above is present	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	MUST HAVE	MUST HAVE
safety (drugs, nuisance, ...)	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE	NICE TO HAVE

- These differ according to the hubtype
- Important to ensure there is a level of minimum service provided

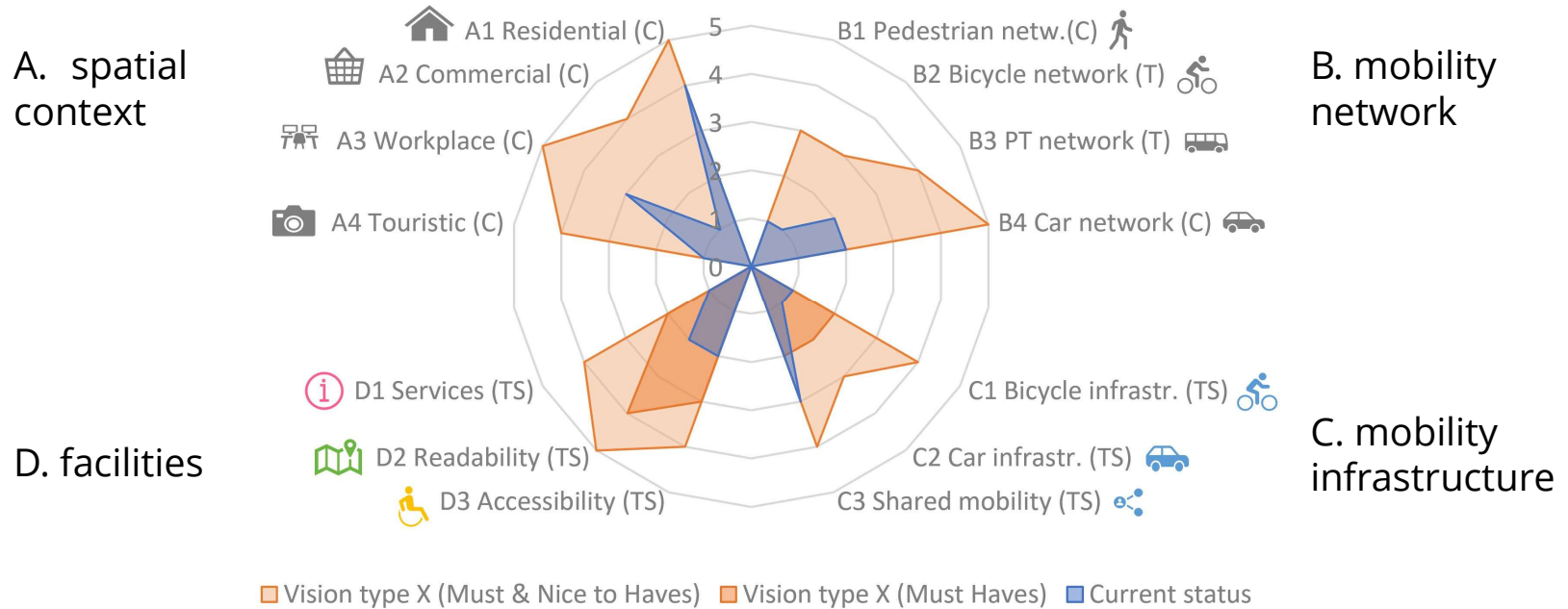


Butterfly model





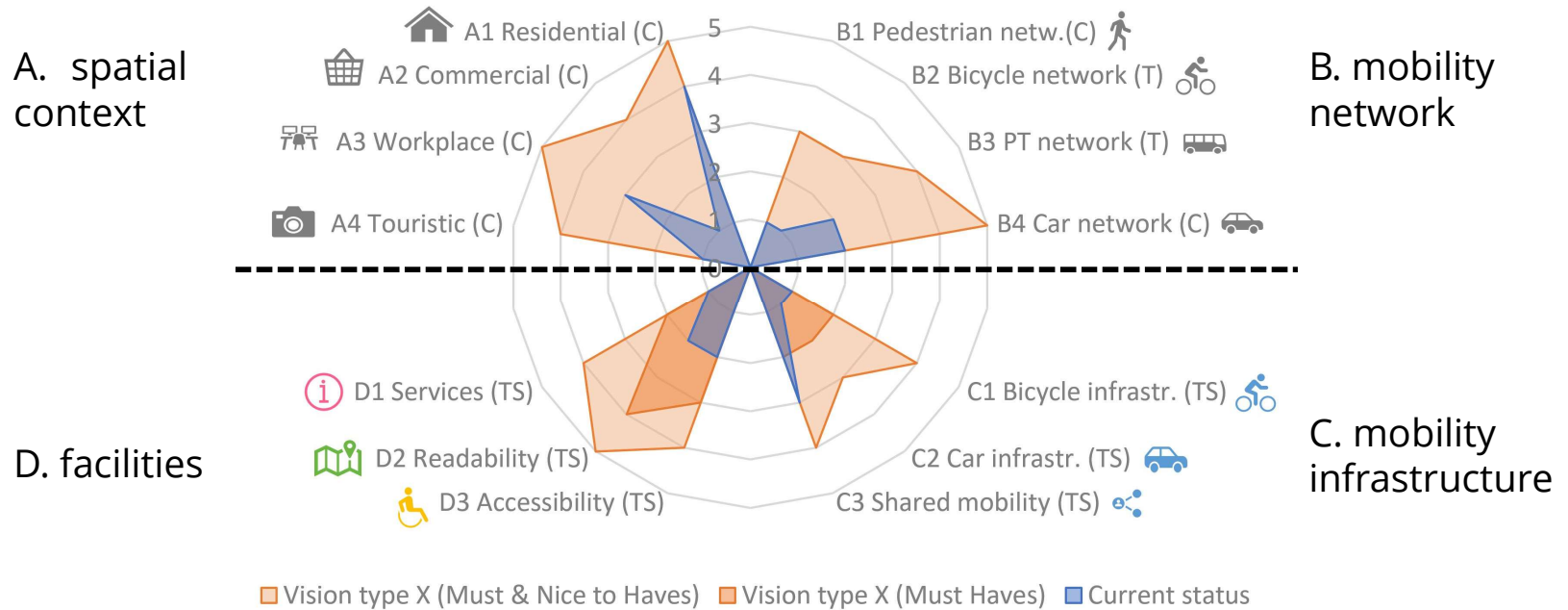
Butterfly model





Butterfly model

CONTEXT AROUND THE HUB

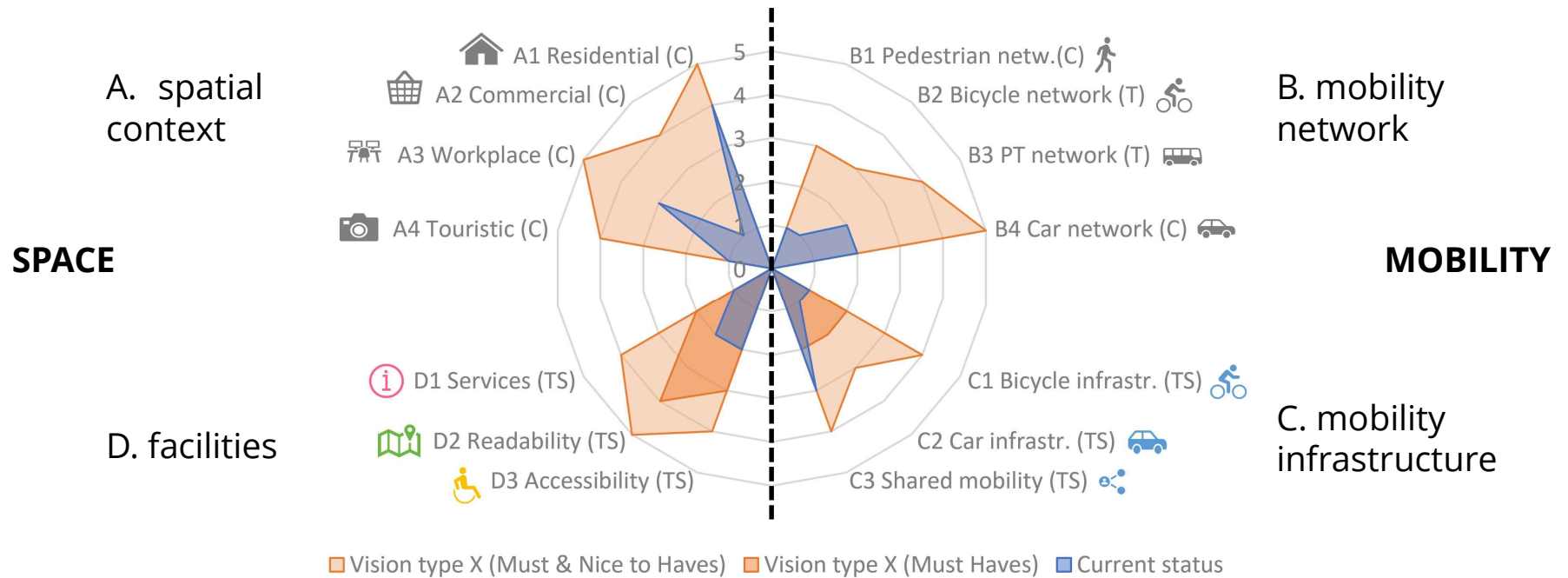


INFRASTRUCTURE IN THE HUB

The New Drive

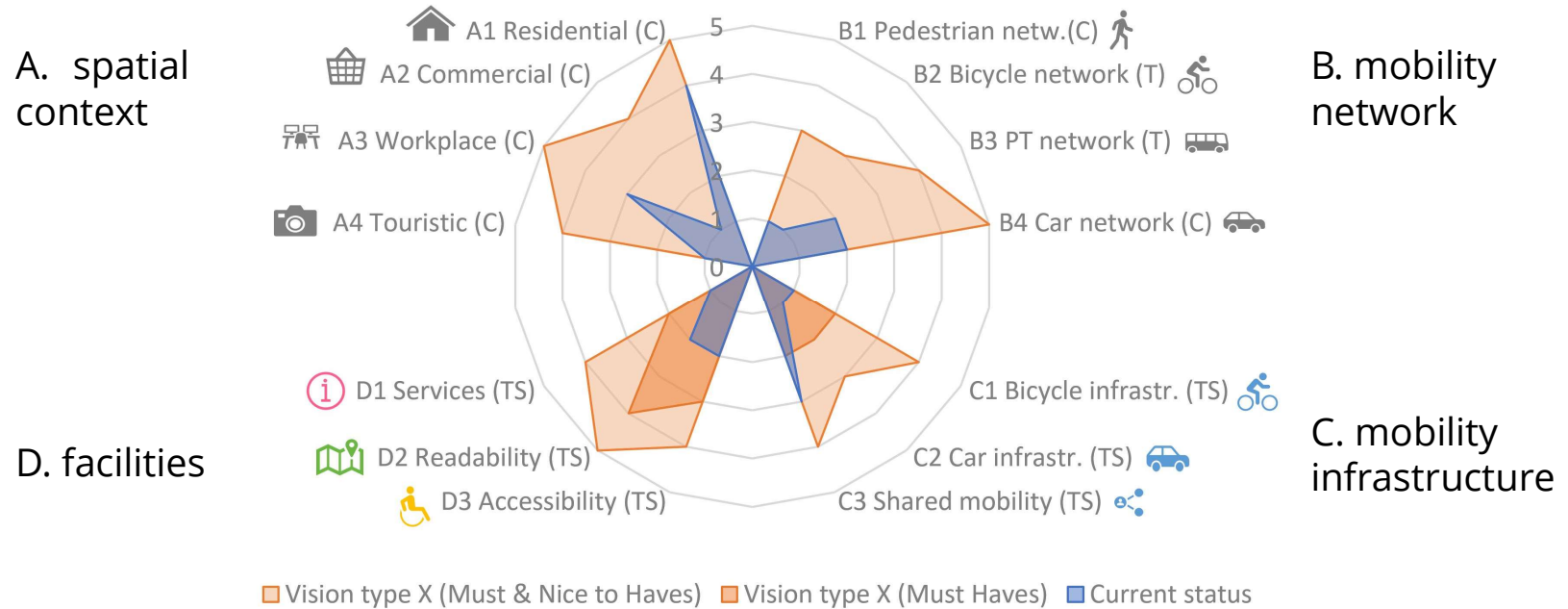


Butterfly model



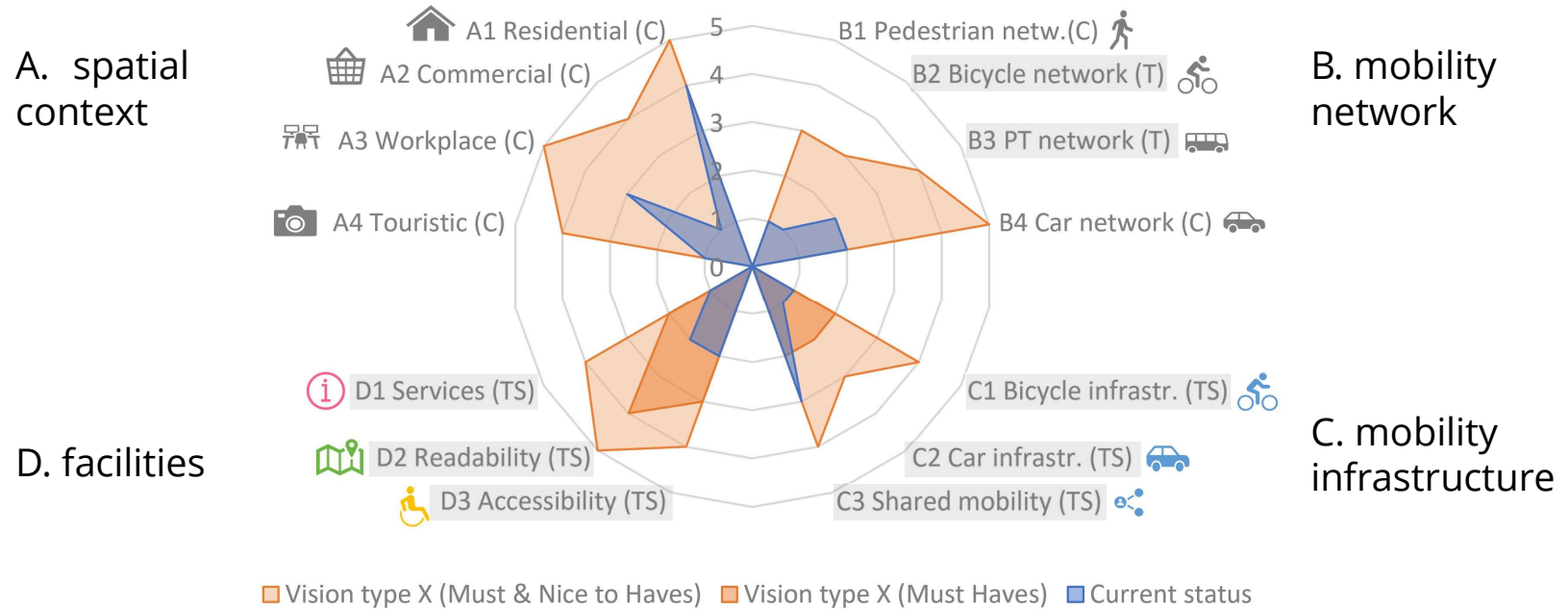


Butterfly model





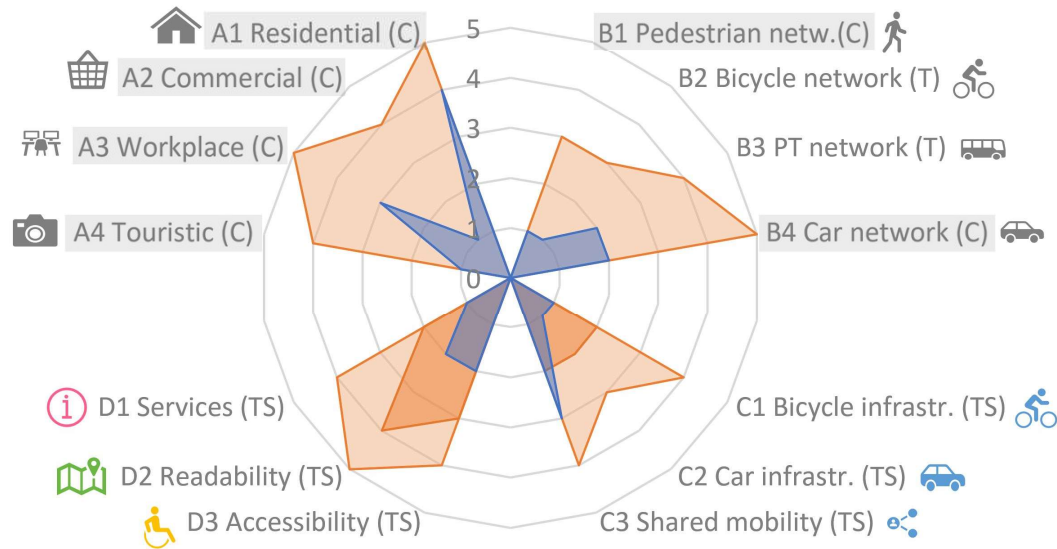
Butterfly model





Butterfly model

A. spatial context



B. mobility network

C. mobility infrastructure

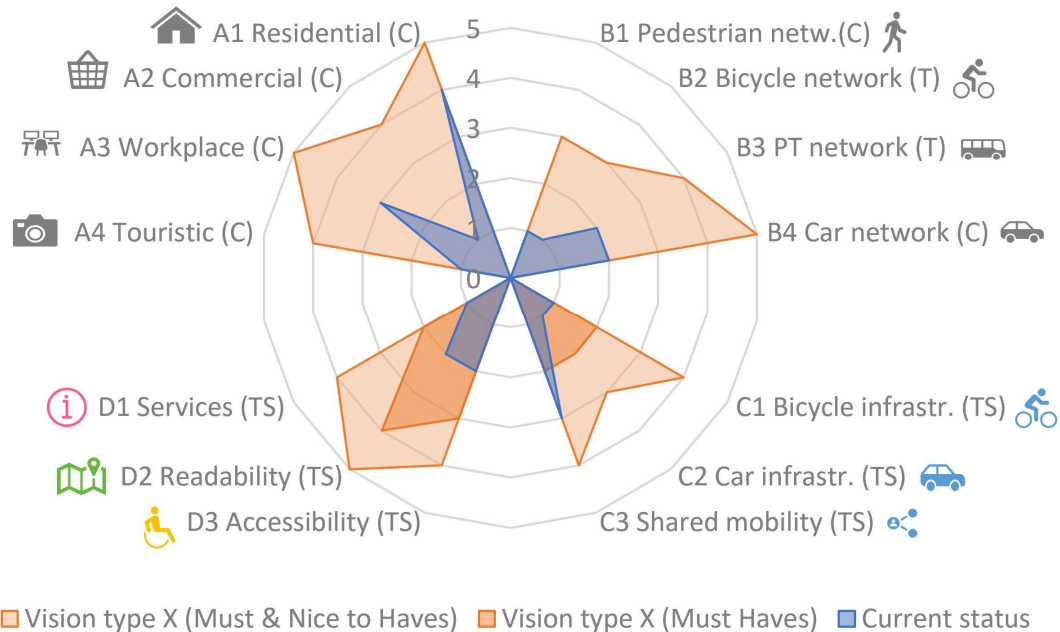
D. facilities

Legend:
 - Light orange: Vision type X (Must & Nice to Haves)
 - Dark orange: Vision type X (Must Haves)
 - Blue: Current status



Butterfly model

- Initial **inventarisation** of a case
- Compare **different cases**
- Compare the **different visions** for each type
- Compare **the current situation** of a case **with the vision** based on the type (= **quick win identifier**)





**Thank you for
your attention!**



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