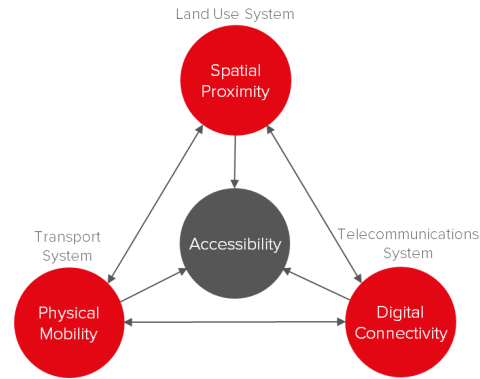


Workpackage 2 – Task 1: Systems Thinking Workshop Series



Workshop 5 – Important and Uncertain Variables

29 June 2021 – 1000-1300 CET (0900-1200 BST)

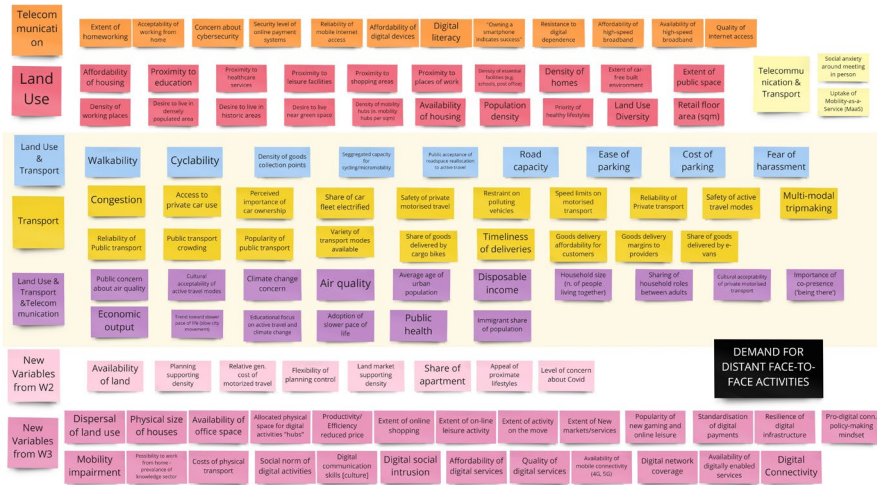
Agenda (1000-1300 CET)

1000	Introduction and scene setting
1010	Review of our variables
1025	Breakout groups round 1 – relative importance of the variables
1100	Feedback session
1130	BREAK
1145	Breakout groups round 2 – relative uncertainty of variables
1215	Feedback and final discussion
1300	Close

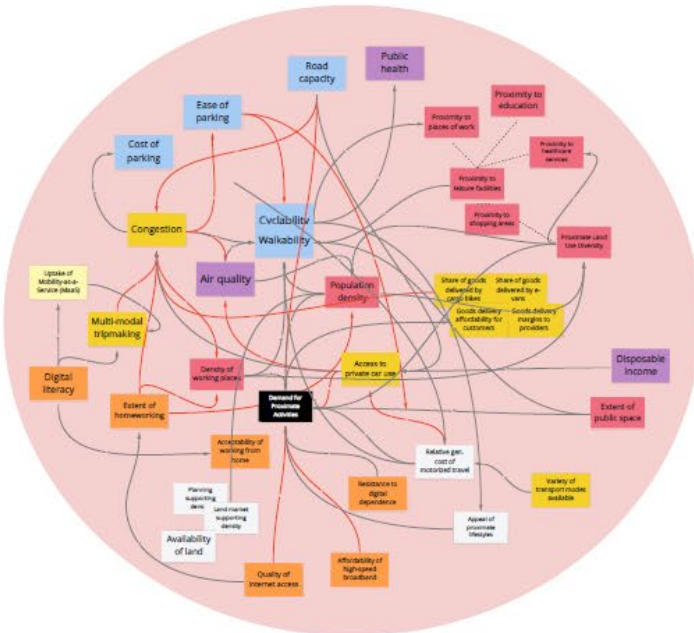
Introduction and scene setting

1000-1010

What we produced in workshops 1-4



- 124 variables
- Nine Causal Loop Diagrams



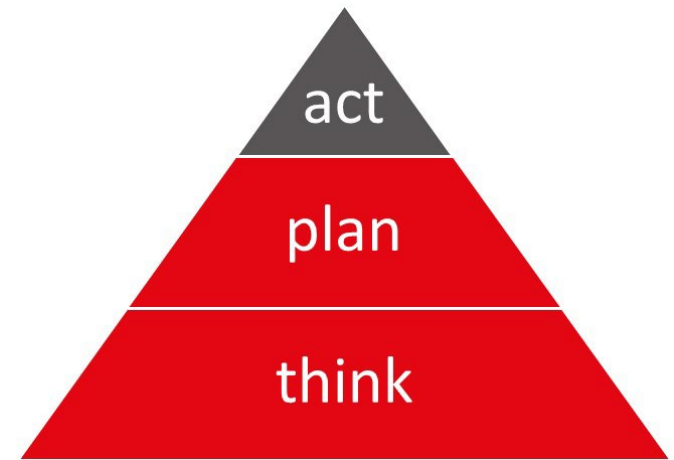
Where we are heading

1

- Three merged Causal Loop Diagrams
 - *Demand for proximate activities*
 - *Demand for digital activities*
 - *Demand for distant face-to-face activities*
- A combined TAS Causal Loop Diagram

2

- Identifying the variables most important and uncertain in relation to **demand for access in a post-COVID more digitalised world**
- A set of plausible Triple Access future scenarios **for a timescale of 2040**

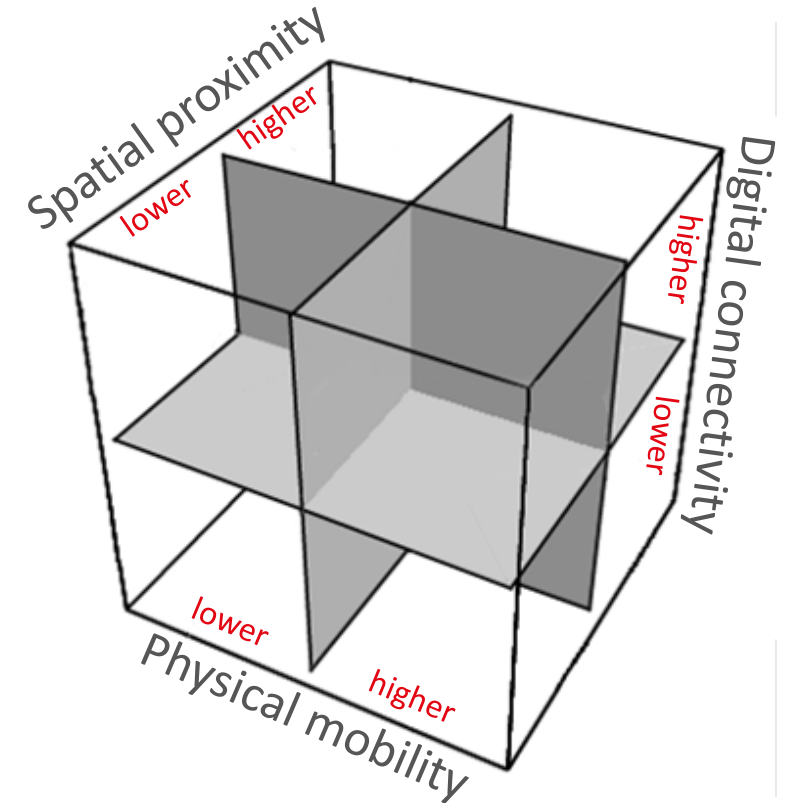
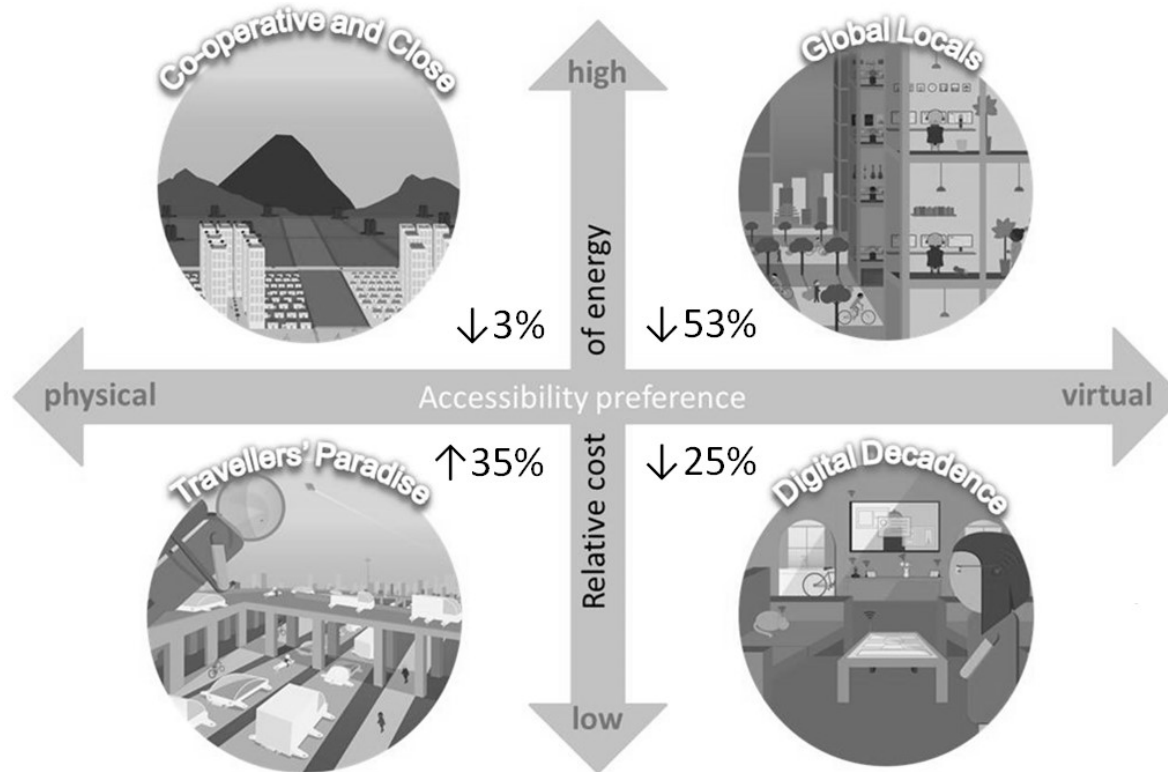


Where we are heading

a scenario can be considered an:

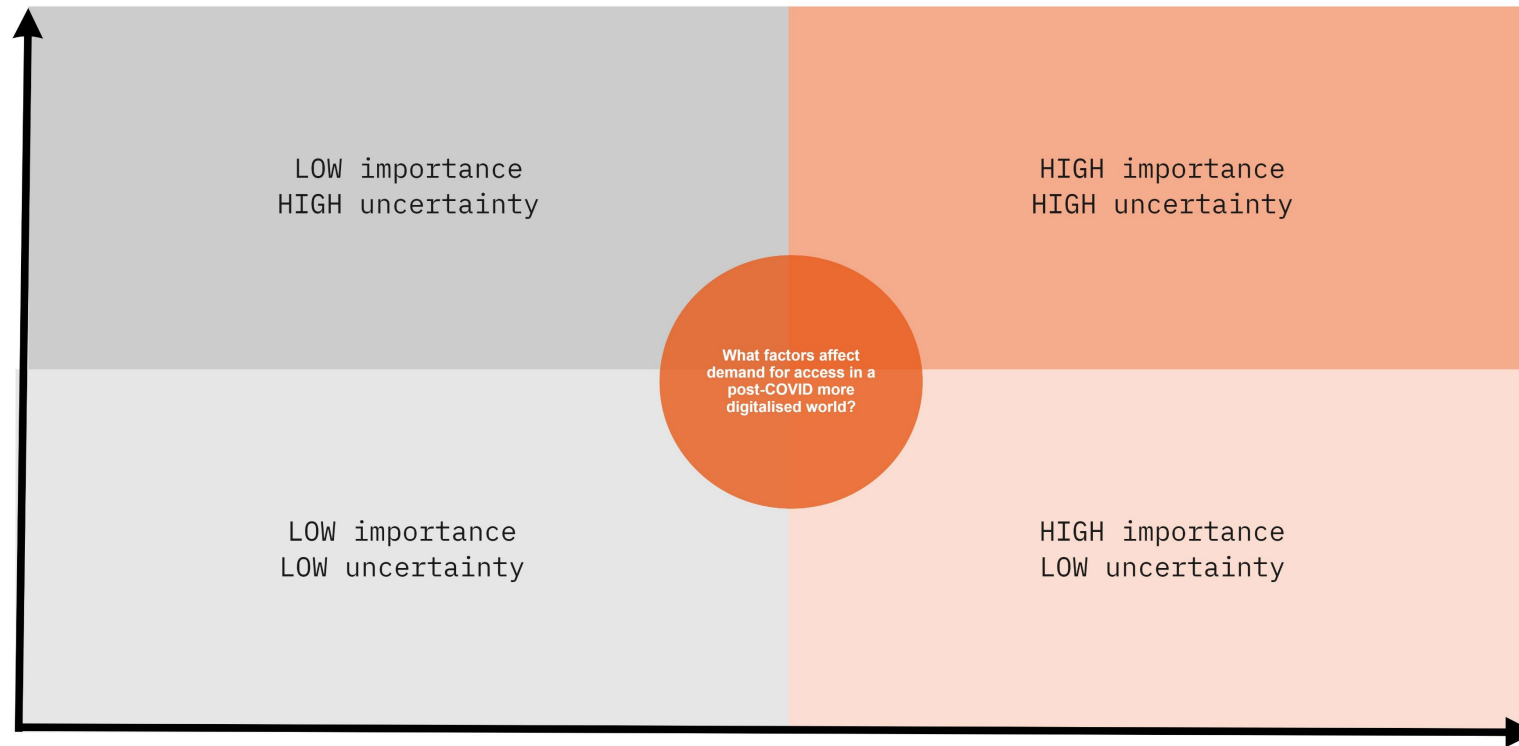
“intelligible description of a possible situation in the future based on a complex network of influence factors”

(Gausemeier et al., 1998: 115)



The purpose of today's workshop

- Identifying the variables most important and uncertain in relation to demand for access in a post-COVID more digitalised world



Review of our variables 1010-1025

Walkability & Cyclability (9, 7, 23)	Congestion (8, 14, 15)	Homeworking (8, 17, 21)	Digital literacy (7, 13, 2)	Availability & quality & affordability of internet access (7, 13, 3)	Proximity to interested areas (6, 9, 5)	Goods delivery affordability for customers (6, 5, 4)	Access to private car use (6, 13, 13)	Uptake of Mobility-as-a-Service (MaaS) (5, 7, 8)	Climate change concern & related measures (5, 6, 4)	Extent of online activities (4, 7, 11)	
Road capacity (4, 7, 0)	Reliability & popularity of Public transport (4, 6, 12)	Population density (4, 8, 8)	Household size (n. of people living together) (4, 3, 1)	Ease & cost of parking (4, 8, 1)	Concern about cybersecurity (4, 4, 3)	Air quality (4, 8, 7)	Affordability of housing (3, 5, 1)	Timeliness of deliveries (3, 3, 1)	Appeal of proximate lifestyles (3, 2, 4)	Resistance to digital dependence (3, 2, 1)	
Perceived importance of car ownership (3, 5, 3)	Importance of co-presence ('being there') (3, 5, 1)	Economic output (3, 2, 8)	Disposable income (3, 3, 0)	Density of homes (3, 5, 7)	Affordability of digital devices (3, 4, 0)						
Standardisation of digital payments	Resilience of digital infrastructure	Extent of New markets/services	Social norm of digital activities	Digital network coverage	Security level of online payment systems	Land Use Diversity	Physical size of houses	Density of working places	Density of essential facilities (e.g. schools, post office)	Extent of green space	Availability of housing
Dispersal of land use	Flexibility of planning control	Public health	Fear of harassment	Cultural acceptability of active travel modes	Desire to live near green space	Social anxiety around meeting in person	Public transport crowding	Share of car fleet electrified	Speed limits on motorised transport	Share of goods delivered by e-vans & e-cargobikes (2, 4, 5)	Density of goods collection points
Multi-modal tripmaking	Relative gen. cost of motorized travel	Mobility impairment									
Willingness to socialize face-to-face	Priority of work-life balance	Need for variety / changed milieu	Multi-modal lifestyle - flexible choice for a given journey	Discretionary leisure travel	Extent of activity on the move	Trend toward slower pace of life (slow city movement)	Level of concern about Covid	Public concern about air quality	Possibility to work from home - prevalence of knowledge sector	Land market supporting density	Dispersal of families
Availability of office space	Planning supporting density	Extent and distribution of green and blue space	Availability of land	Share of apartment	Proximate Land Use Diversity	Allocated physical space for digital activities "hubs"	Retail floor area (sqm)	Extent of public space	Productivity/ Efficiency reduced price	Economic output/productivity (concentration of)	Productivity/ Efficiency reduced price
Level of automation of the labour market	Pro-digital conn. policy-making mindset	Popularity of new gaming and online leisure	Availability of digitally enabled services	Affordability of digital services	Digital social intrusion	Digital communication skills [culture]	Demand for digital services	Availability of high speed infrastructure	Quality of digital services	Availability of mobile connectivity (4G, 5G)	Digital Connectivity
Costs of physical transport	Extent of car-free built environment	Safety of private motorised travel	Safety of active travel modes	Mobility system effects	Generalized cost of motorized mobility	Extent of distant goods transport	Demand on transport infrastructure	Demand for active travel	Variety of transport modes available	Goods delivery margins to providers	

Breakout groups round 1 – relative importance of the variables

1025-1100

Relative importance

- You have been allocated 10 variables
- Please **optionally** add ONE 'wildcard' variable each
- All participants to use Miro to position variables along importance axis
- Please use full extent of axis (you're not judging uncertainty yet)
- Bear in mind **future importance** (in 2040) – the **relative influence** of this variable on future urban access
- You have about 30 minutes

Feedback session
1100-1130

Break
1130-1145

Breakout groups round 2 – relative uncertainty of variables
1145-1215

Relative uncertainty

- Review **briefly** the relative importance
- All participants to use Miro to position variables along uncertainty axis – **don't move importance axis position unless well-reasoned**
- Please use full extent of axis
- Review and discuss relative uncertainty and reposition as appropriate
- You have about 30 minutes
- **We aim to identify the four most important-uncertain variables from your group**

Feedback and final discussion
1215-1300

Reflecting upon the exercise and looking forwards

- How did you find the exercise?
- Have we identified 12 most important and uncertain variables that 'make sense'?
- Any concerns, any suggestions?
- Any sense about which might be the most important and uncertain variables of the 12?
- What do you make of the position we have arrived at now we are at the end of the workshop series?

Just before we finish...

- We will now work on developing plausible triple access scenarios as well as refining a combined representation of the causal loop diagrams
- We will be back in touch

Thank you!

Close
1300