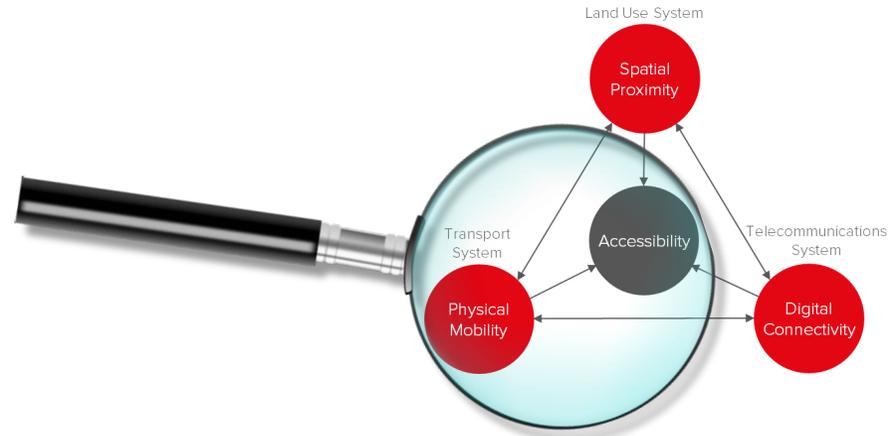


Workpackage 2 – Task 1: Systems Thinking Workshop Series



Workshop 4 - Access requiring physical mobility

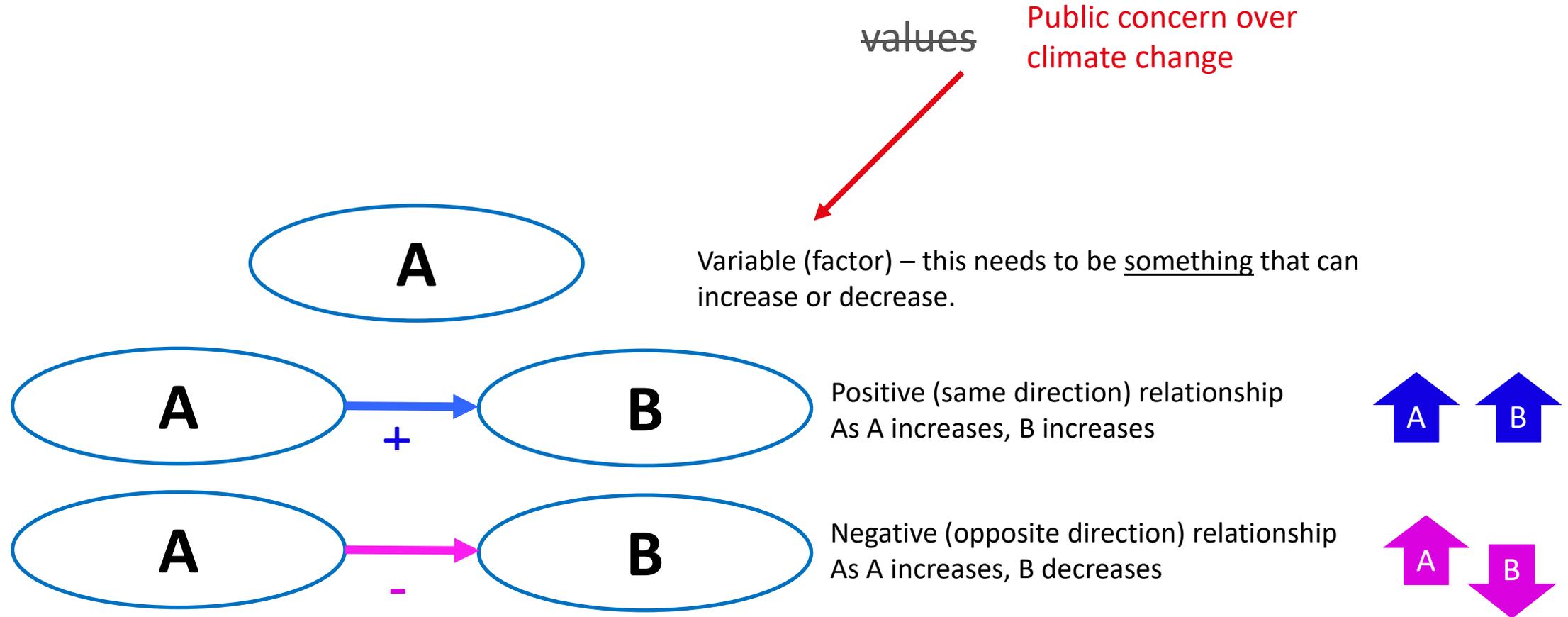
22 June 2021 – 1400-1700 CET (1300-1600 BST)

Agenda (1400-1700 CET)

- 1400 Introduction and scene setting
- 1415 Review of our variables
- 1430 Breakout groups round 1 - creating Causal Loop Diagrams centred upon physical mobility
- 1520 Break**
- 1540 Quickfire feedback from groups
- 1555 Breakout groups round 2 – Causal Loop Diagrams review and revision
- 1625 Reflections and discussion
- 1655 Next steps
- 1700 Close

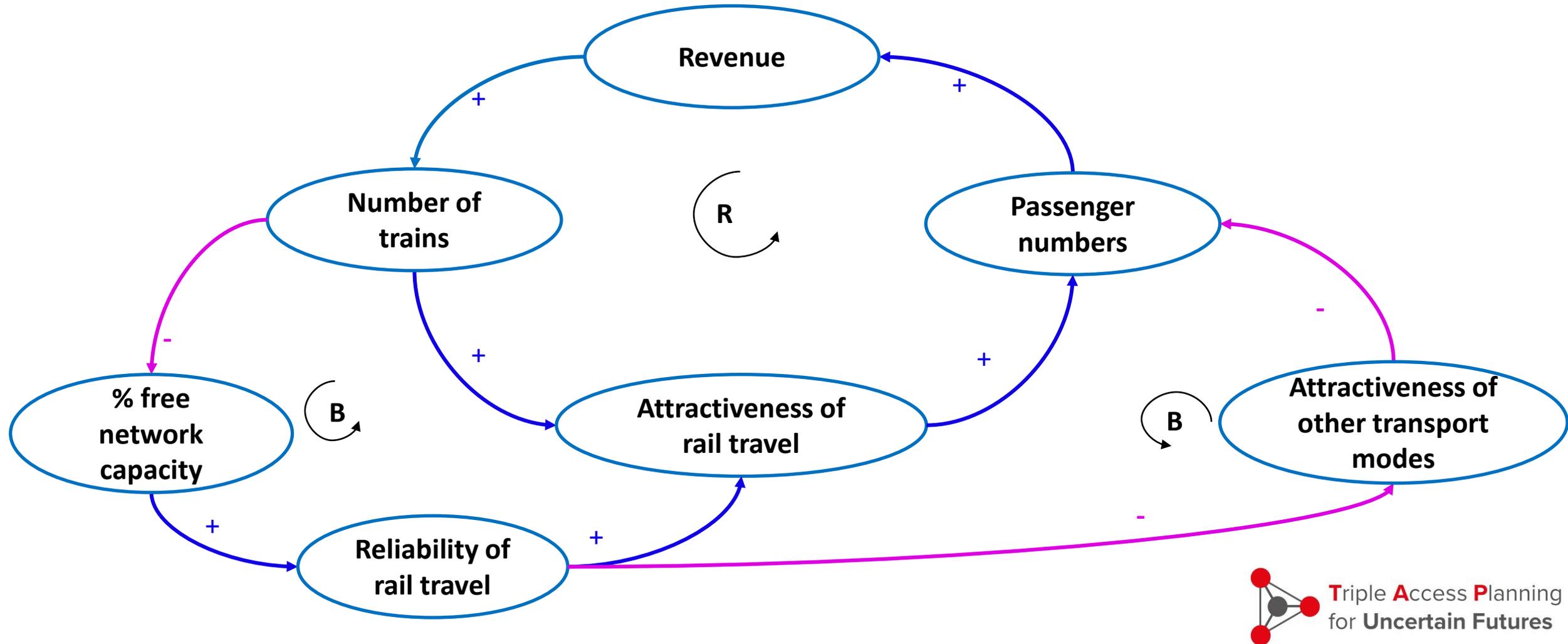
Introduction and scene setting

1400-1415



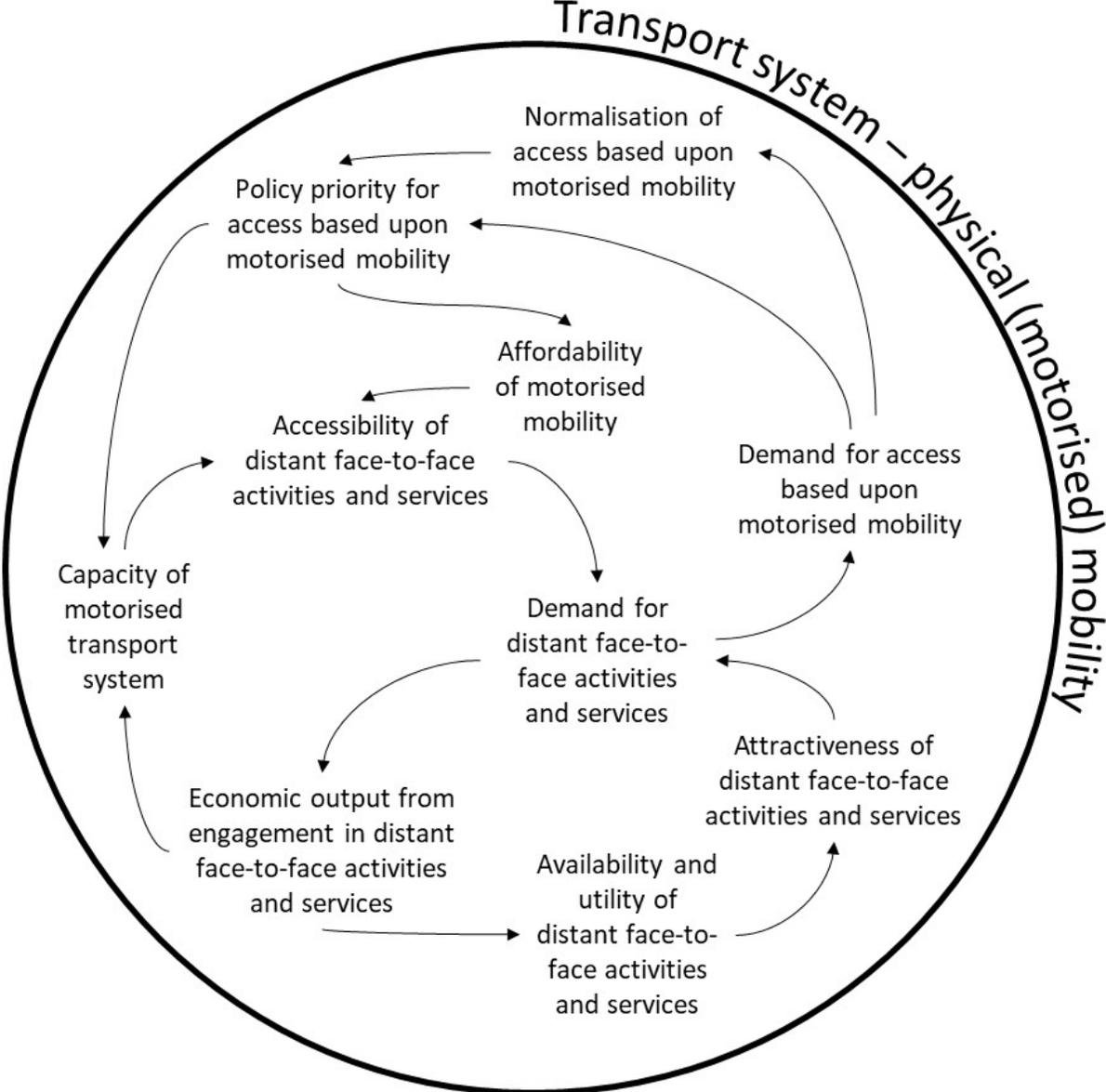
A simple example of a causal loop diagram

What Drives Revenue for a Rail Company?



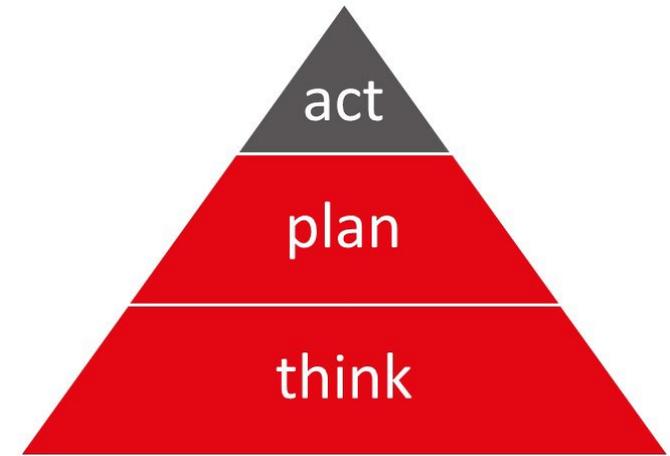
Indicative sub-system Causal Loop Diagram for TAS

Physical mobility



Why?

- The **urban system is complex** and to plan for urban mobility means we must first have a **better mental model of the system** we are seeking to support and shape
- Systems thinking helps us focus our later attention on **getting better at being approximately right** instead of precisely wrong
- Systems thinking helps us identify the variables we consider to be most important to triple access as a basis for **creating plausible triple access scenarios for the future**
- Our better mental model of the urban system of access helps us **better identify and judge candidate interventions** to shape a better urban future



Where we finished workshop 1

miro WP2_Workshop1_final board

Identifying key variables relevant to the focal question(s) or issue(s) (11:45 - 12:20)

Group 3
Kiron (UWE), Thomas Calvert, Aljaž Plevnik, Maha Attia, Tony Svensson, Wouter van Mierlo, Stephen Cragg

Triple Access Planning for Uncertain Futures

Land-use system: spatial proximity & active travel

- AP: density
- AP: mix of uses
- AP: public spaces
- AP: TOD
- AP: residential public generators
- AP: commercial generators
- AP: public spaces
- AP: TOD
- AP: residential public generators
- AP: commercial generators
- AP: public spaces
- AP: TOD

Transport system: physical (motorised) mobility

- AP: infrastructure for active modes
- AP: parking management
- AP: reducing speeds
- SC Travel Cost
- AP: political support for TDM planning
- AP: parking management
- SC Travel Time
- SC Reliability
- AP: PT supply
- SC Mode Availability
- SC Reliability
- AP: PT supply
- AP: political support for TDM planning

Telecommunication system: digital connectivity

- AP: home delivery business sector
- SC Travel Information
- Tony: Mobility as-a-service
- Tony: Air mobility (drones etc)
- M.A.: Digitalisation of official systems (Online data sharing)
- AP: home delivery business sector
- SC Travel Information
- Tony: Mobility as-a-service
- Tony: Air mobility (drones etc)
- M.A.: Digitalisation of official systems (Online data sharing)

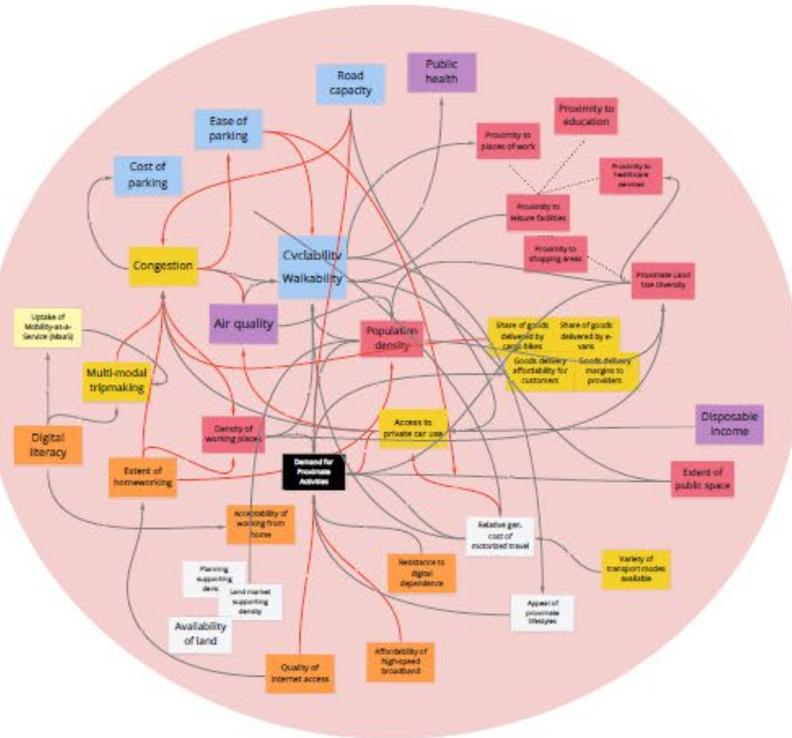
What factors affect demand for access in a post-COVID more digitalised world?

Add more comments here

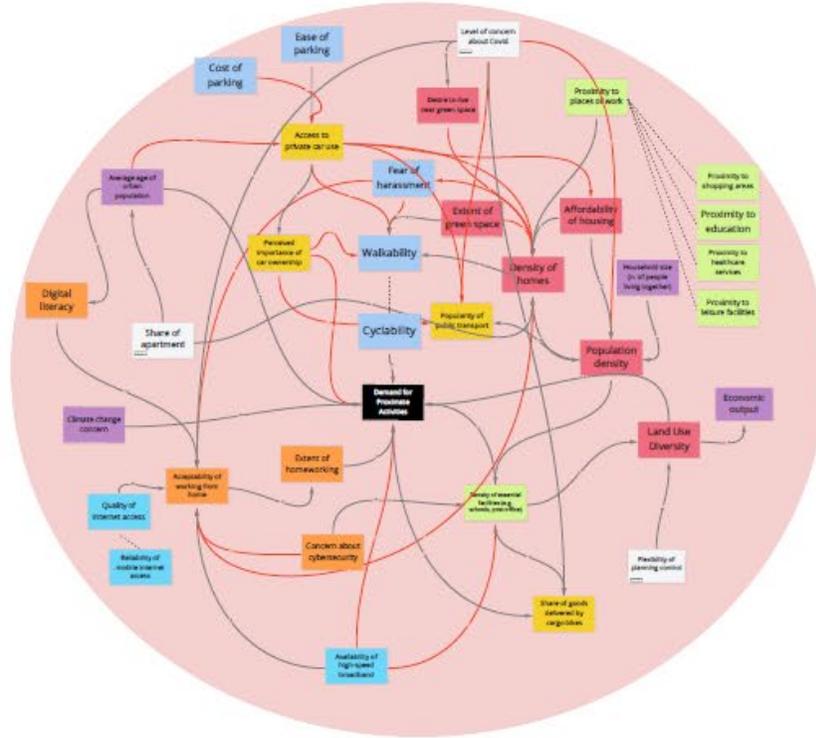
59%

Where we finished workshop 2

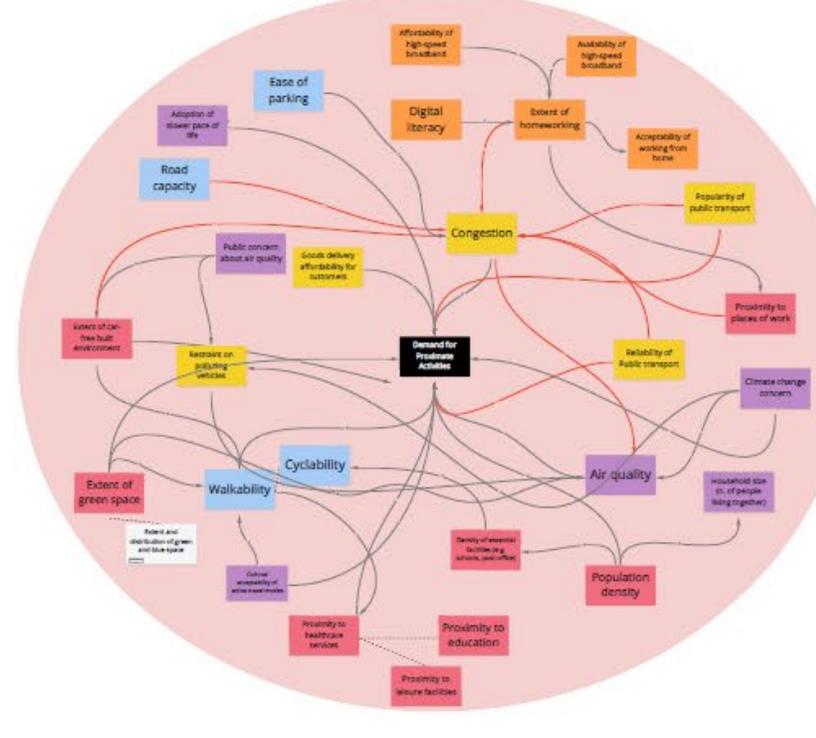
Group 1



Group 2



Group 3



What factors affect demand for spatial proximity <<in urban areas>>in a post-COVID more digitalised world?

Our focal question

What factors affect demand for access
in a post-COVID more digitalised world?

Demand for distant face-to-face activities

Our starting point

Terms of engagement

- Be active not passive (this is a **workshop!**) – ensure your views are captured
- Listening (not just hearing) is important as well as talking
- Keep an open mind and beware of unconscious biases
- Do challenge but in a constructive manner
- **Allow yourself to be facilitated**
- **Highlight ambiguity but don't seek perfection**
- Please respect the Chatham House Rule
- Have fun

Review of our variables
1415-1430

Telecommunication

Extent of homeworking, Acceptability of working from home, Concern about cybersecurity, Security level of online payment systems, Reliability of mobile internet access, Affordability of digital devices, Digital literacy, "Owning a smartphone indicates success", Resistance to digital dependence, Affordability of high-speed broadband, Availability of high-speed broadband, Quality of internet access

Land Use

Affordability of housing, Proximity to education, Proximity to healthcare services, Proximity to leisure facilities, Proximity to shopping areas, Proximity to places of work, Density of essential facilities (e.g. schools, post office), Density of homes, Extent of car-free built environment, Extent of public space, Density of working places, Desire to live in densely populated area, Desire to live in historic areas, Desire to live near green space, Density of mobility hubs (n. mobility hubs per sqm), Availability of housing, Population density, Priority of healthy lifestyles, Land Use Diversity, Retail floor area (sqm)

Telecommunication & Transport

Social anxiety around meeting in person, Uptake of Mobility-as-a-Service (MaaS)

Land Use & Transport

Walkability, Cyclability, Density of goods collection points, Segregated capacity for cycling/micromobility, Public acceptance of roadspace reallocation to active travel, Road capacity, Ease of parking, Cost of parking, Fear of harassment

Transport

Congestion, Access to private car use, Perceived importance of car ownership, Share of car fleet electrified, Safety of private motorised travel, Restraint on polluting vehicles, Speed limits on motorised transport, Reliability of Private transport, Safety of active travel modes, Multi-modal tripmaking, Reliability of Public transport, Public transport crowding, Popularity of public transport, Variety of transport modes available, Share of goods delivered by cargo bikes, Timeliness of deliveries, Goods delivery affordability for customers, Goods delivery margins to providers, Share of goods delivered by e-vans

Land Use & Transport & Telecommunication

Public concern about air quality, Cultural acceptability of active travel modes, Climate change concern, Air quality, Average age of urban population, Disposable income, Household size (n. of people living together), Sharing of household roles between adults, Cultural acceptability of private motorised transport, Importance of co-presence ('being there'), Economic output, Trend toward slower pace of life (slow city movement), Educational focus on active travel and climate change, Adoption of slower pace of life, Public health, Immigrant share of population

New Variables from W2

Availability of land, Planning supporting density, Relative gen. cost of motorized travel, Flexibility of planning control, Land market supporting density, Share of apartment, Appeal of proximate lifestyles, Level of concern about Covid

DEMAND FOR DISTANT FACE-TO-FACE ACTIVITIES

New Variables from W3

Dispersal of land use, Physical size of houses, Availability of office space, Allocated physical space for digital activities "hubs", Productivity/Efficiency reduced price, Extent of online shopping, Extent of on-line leisure activity, Extent of activity on the move, Extent of New markets/services, Popularity of new gaming and online leisure, Standardisation of digital payments, Resilience of digital infrastructure, Pro-digital conn. policy-making mindset, Mobility impairment, Possibility to work from home - prevalence of knowledge sector, Costs of physical transport, Social norm of digital activities, Digital communication skills [culture], Digital social intrusion, Affordability of digital services, Quality of digital services, Availability of mobile connectivity (4G, 5G), Digital network coverage, Availability of digitally enabled services, Digital Connectivity

Breakout groups round 1 - creating Causal Loop Diagrams
centred upon physical mobility
1430-1520

Building the diagrams

- Three breakout groups with two facilitators
- The facilitators will 'hold the pen' in Miro
- Don't think too much (ironically!) – approximate not perfect
- Each breakout groups starts with the same variables
- Take turns to add a variable, and consider what other variables it links to and how (+/-/?)
- If 'missing' variables come to mind add them in chat when you like – remember something that goes up or down and is unambiguous
- Prioritise 'important' variables (considering what makes them of interest)
- You have 50 minutes

This is it! Good luck!!

Break
1520-1540

Quickfire feedback from groups
1540-1555

Looking for inspiration from the other groups

- Each group in turn displays their draft Causal Loop Diagram on screen
- Others to make notes at their desks as they look at the diagram (while someone from that group offers overview commentary)
- 5 minutes only for each group

Breakout groups round 2 –
Causal Loop Diagrams review and revision
1555-1625

Review and revision

- If you've done well in round 1, keep working hard please!
- Incorporate any inspiration drawn from the other two groups
 - this may lead to groups' Causal Loop Diagrams converging more (but this is not the objective)
- Bring remaining variables into the Diagram if appropriate
- Consider new connections if appropriate
- Move variables within the diagram (their connections will follow)
- Consider the wider set of variables from Workshops 1-3 (if you have time!)
 - Go into the Miro Board yourselves to do this and move a variable 'onto the board' if you think its relevant – but let your facilitator build it into the diagram

Reflections and discussion
1625-1655

How did we do, what did we find?

- We will display the three revised Diagrams while we have this discussion
- Were most of the variables from Workshops 1-3 used (and why or why not)?
- Were the connections obvious to make and judge?
- Did you spot any reinforcing or balancing loops?
- Did your Diagram feel as though it reflected PESTLE dimensions?
- How did this exercise compare to that for spatial proximity?
- What do you think of the systems thinking we've done together and what it might lead to?

Next steps and close
1655-1700

Just before we finish...

Thank you!

- We will share the three Diagrams with you and invite your comments
- The intention is to create a combined version of the three Diagrams
- Workshop 5: 'System of systems'
 - 29 June **1000-1300 CET**