

Implications of MaaS for public transport business models

Presented by

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Source: <https://www.intelligenttransport.com>

MaaS – a working definition(Hensher et al., 2020, p.41).

“To qualify for MaaS, the scheme or product first must offer a mobility service with the **user at the centre of the offer**; second the mobility options offered must be selected from **a multimodal portfolio** and finally, the offer must provide the **integration of transport service** starting from providing the **information** for travel, enabling a **payment option** (either at the point of use or with a pre-purchased mobility bundle) and providing the ticket for travel.”



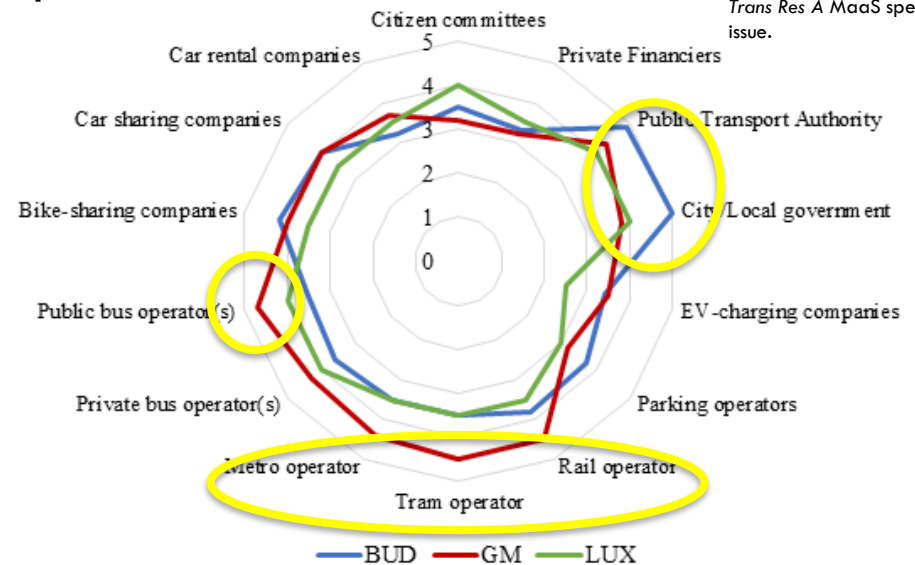
Business models

- A business model is
 - ‘a set of capabilities that is configured to enable value creation consistent with either economic or social strategic objectives’ (Seelos and Mair (2007) p.53)
 - activities of firms/businesses
 - their network of partners
 - the value created collectively
- Mobility markets complex
 - Often many businesses in market
 - Market has spatial aspects
 - Can be used as a way of achieving competitive advantage
- Business models are critically dependent on
 - Stakeholders – who they are
 - Organisational arrangements – underpinning governance



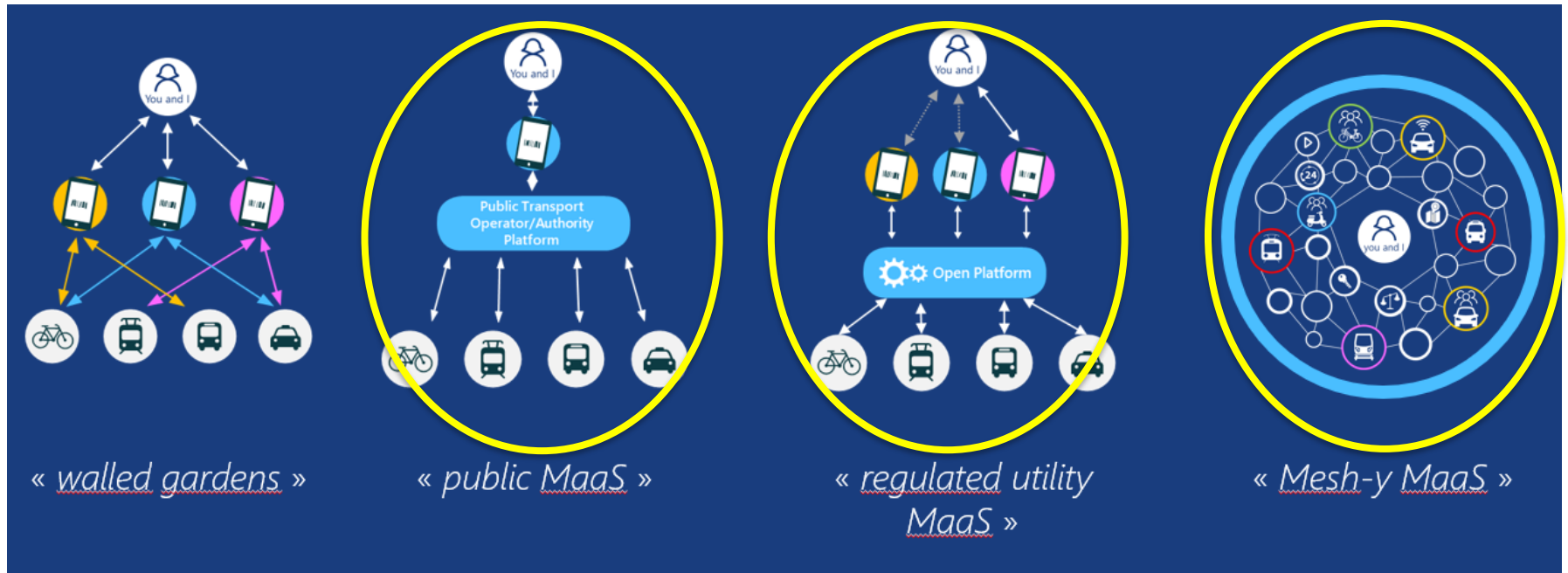
The stakeholders

- Operator
- Public Authority
- Regulator, usually by State/National Government
- Aggregator/Integrator/Broker
- Platform provider
- Customer
- Other service providers (as possible conjoint activity)
- The MaaS Champion



Source: Polydoropoulou et al (2020). Prototype business models for Mobility-as-a-Service. *Trans Res A MaaS special issue*.

Governance arrangements



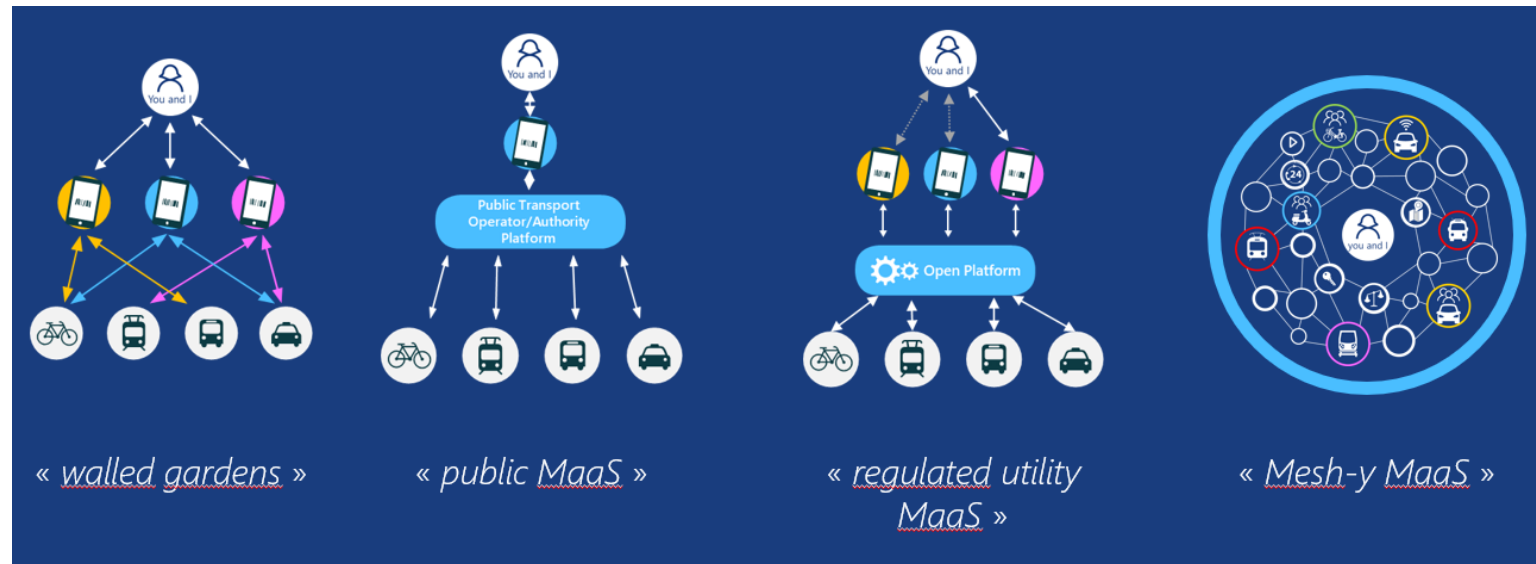
ITF (2020): MaaS models. Adapted from UITP.(2019), *Mobility as a Service*, https://www.uitp.org/sites/default/files/cck-focus-papers-files/Report_MaaS_final.pdf

Critical aspects of the business model in the MaaS ecosystem

- Understanding costs and perception of costs
 - Differences in cost structures
 - The need to estimate demand
 - Sustainability aims only possible by moving to greater collective transport use....moving from low marginal to high marginal cost modes
- Understanding the customer perspective
 - Platform
 - Payment method
 - Service design
- Understanding the supplier perspective
 - Partnership and co-operation
 - Business community preferences
 - Mode agnostic contracts
 - Organisational arrangements

Understanding the competing objectives of stakeholders

- Who are the new market players?
- Establishing the MaaS aggregator/integrator/broker role
- How do organisational arrangements impact on the aggregator role and the role of the public transport operator?



Subsidies and the MaaS ecosystem

- MaaS a mixture of subsidised and market provided modes
- The need for adjustment of the public transport operator's business model depends on the degree of penetration of MaaS
- Existing subsidy models
 - Franchising
 - Competitive tendering
 - Direct subsidy
 - No subsidy
- Free public transport models



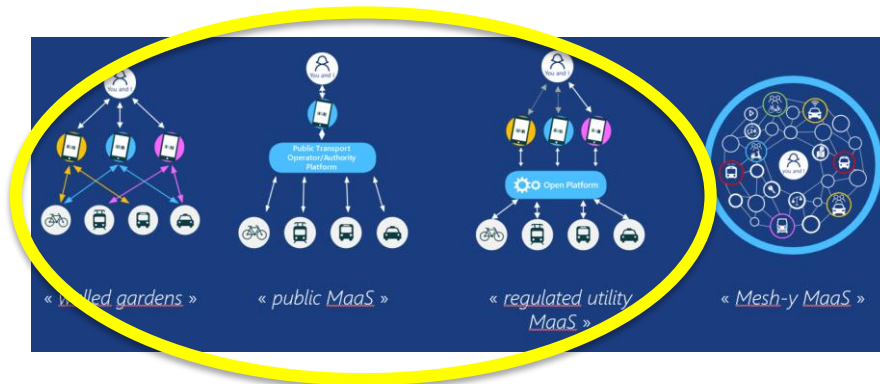
Source: <https://sswm.info>

Implications of Public Transport Subsidy for Society

- Supply side subsidies
 - Network subsidies by and large replaced by subsidies provided more competitively
 - Cross subsidy and democratic implications
 - Distributional impacts and concerns
- Demand side subsidies
 - Concessional fares
 - Incentive Payment per passenger
 - Person centred payments
- Supply side or demand side subsidies?

Subsidy options for public transport operators in the different MaaS organisational arrangements - 1

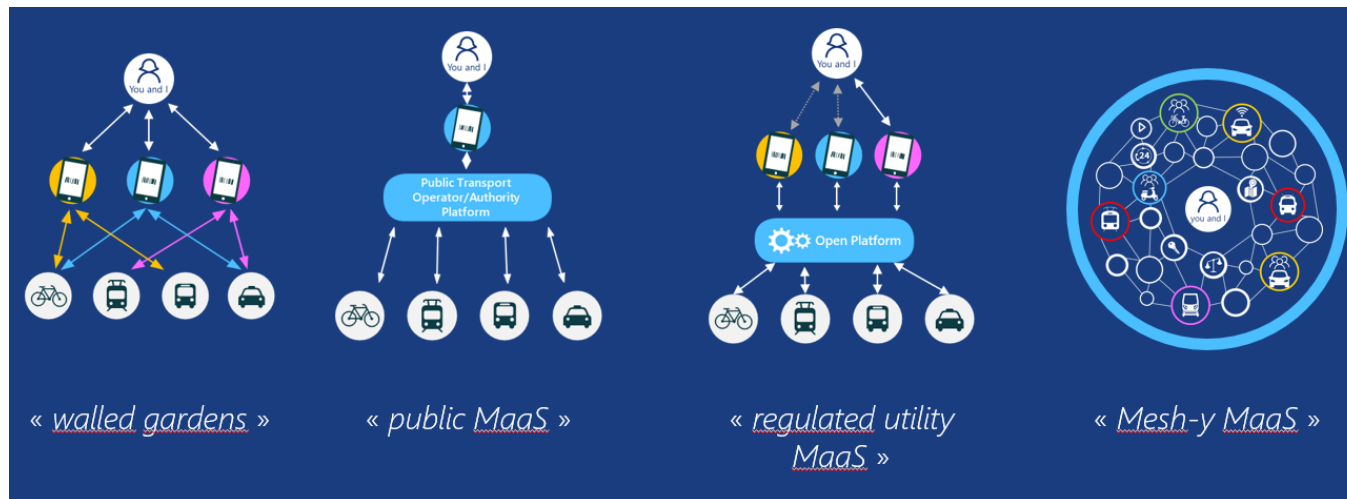
- Depends whether MaaS remains niche or becomes scaled up
- MaaS remaining niche



- Akin to status quo
- Mode agnostic mobility contract

Subsidy options for public transport operators in the different MaaS organisational arrangements - 2

– MaaS scaled up

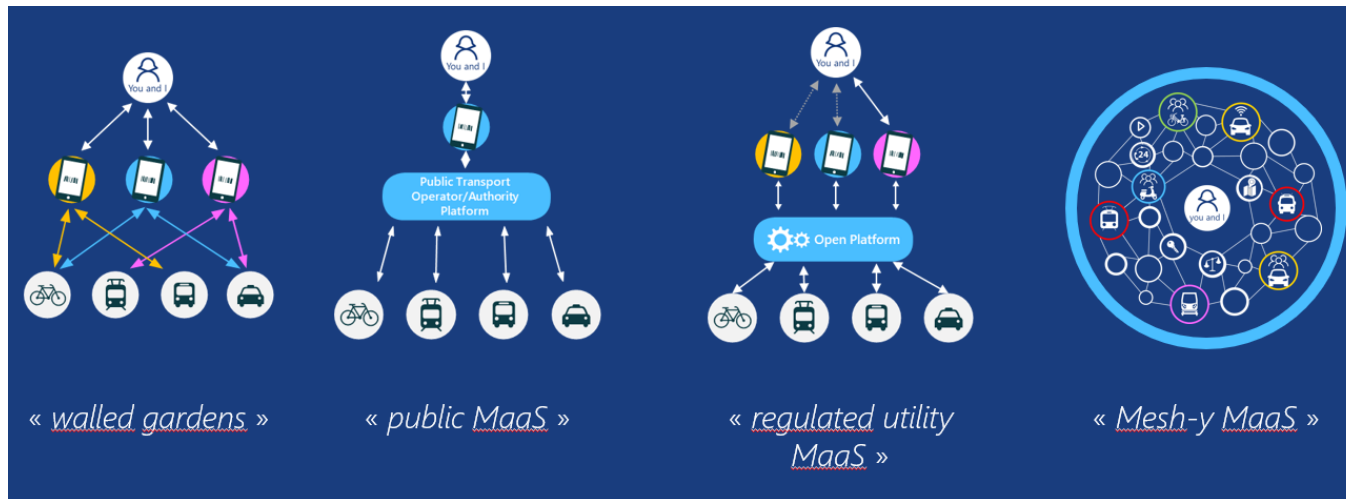


Walled garden

- Status quo would work
- Risk is lack of incentive for aggregators to scale up
- Constraint of difficulty of rewarding good behaviour

Subsidy options for public transport operators in the different MaaS organisational arrangements - 2

– MaaS scaled up

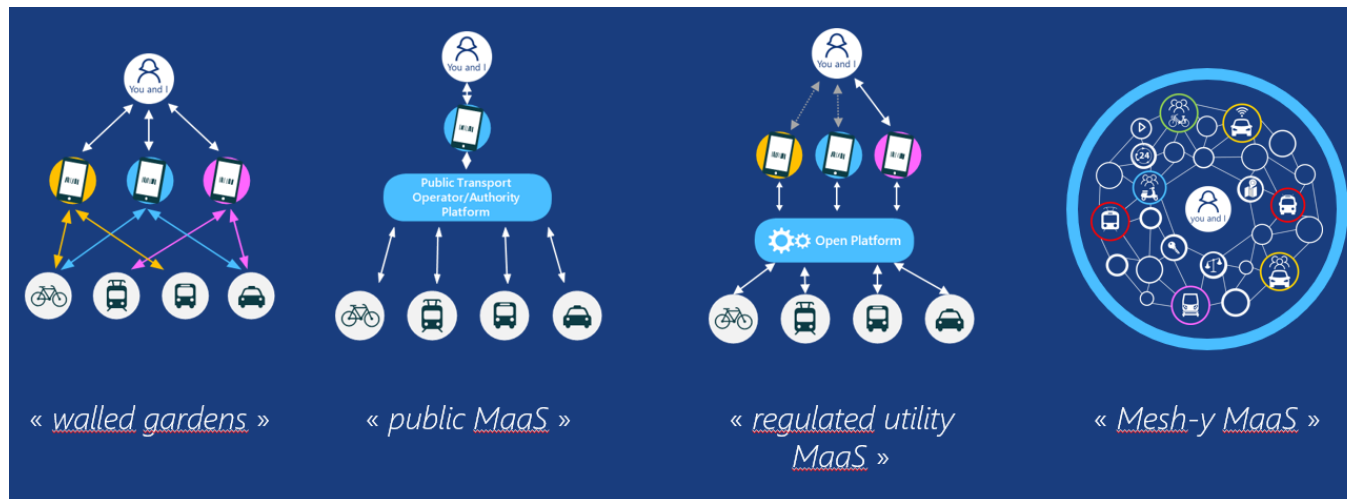


Public MaaS. All aspects of walled garden here too, but if aggregator a public authority, could choose to provide bulk discounts.

Risk of lower competition leading to less innovation and lack of trust leading to slowness in opening APIs.

Subsidy options for public transport operators in the different MaaS organisational arrangements - 2

– MaaS scaled up



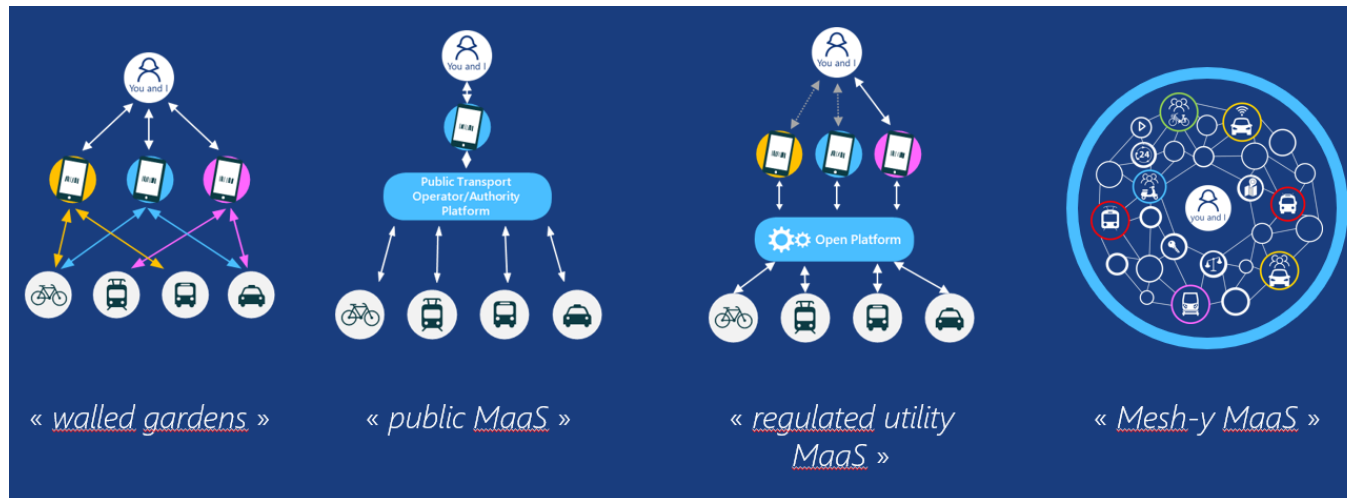
Regulated utility MaaS

Presence of competition encourages innovation. As with public MaaS, opportunity to introduce bulk discounts.

Potential problem is fare redistribution and risk of regulatory capture. APIs need to be shared

Subsidy options for public transport operators in the different MaaS organisational arrangements - 2

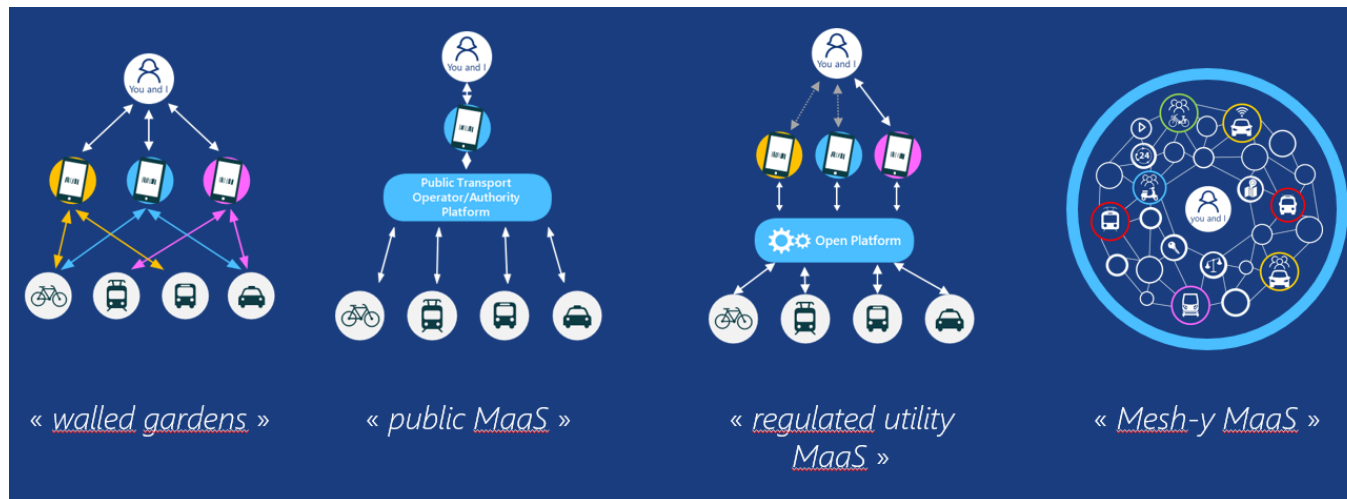
– MaaS scaled up



Mesh-y-MaaS breaks boundaries and would require demand side subsidies. Provides opportunity to link subsidy to behaviour change

Subsidy options for public transport operators in the different MaaS organisational arrangements - 2

– MaaS scaled up



– Other subsidy options if MaaS becomes ubiquitous

- IPP
- PCP

How much MaaS must there be for it to be scaled up?

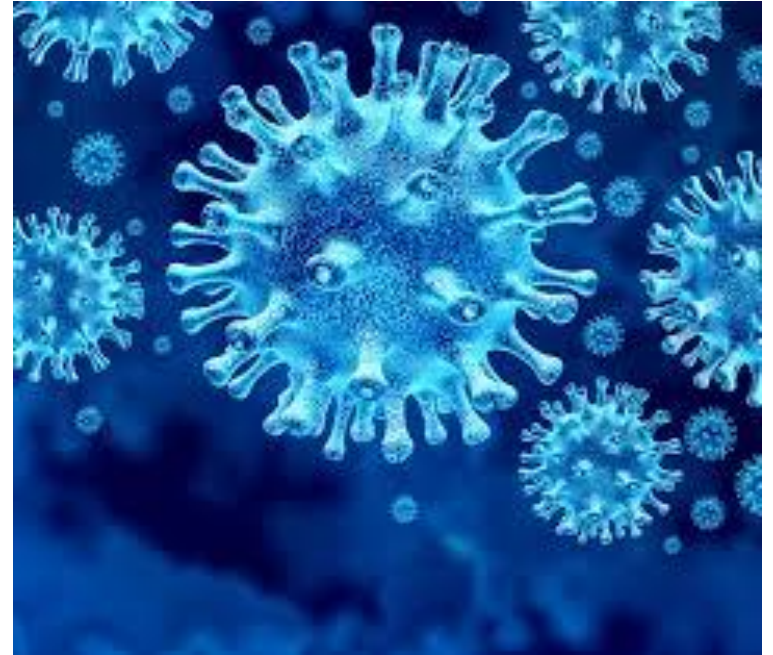
- Spatial, quantity and mobility provider dimensions
- What should the thresholds be?
 - Spatial: a labour market?
 - Quantity: more than 50%?
 - Mobility provider: all mobility providers supplying through at least one aggregator?
- Temporal – how long might scaling up take?
- What does this mean for transition?
- How much of scaling up will be context specific?

Critical discussion by Roundtable needed here

Implications of the Pandemic

- Implications for public transport operators
- Implications for MaaS business models
- Implications of autonomous vehicles
- Is MaaS in crisis?

Critical discussion by the Roundtable needed here



Source: <https://www.tricitymed.org/news/>

Questions and Discussion

- Thank you for listening
- Questions and discussion

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