

## An Outline of The Talk

- The Idea of Social Distance: Working From Home, Avoiding Crowds, Avoiding Public Transport
- Constructing the Hypothetical City
- Locking It Down
- Enabling the Locked Down City to Respond to Artificial Constraints
- Exploring the Space of Possibilities: Breaking Symmetry
- Next Steps: Making It All More Realistic

Impact of COVID-19 on transport and spatial development: an international perspective -

## The Idea of Social Distance: Working From Home, Avoiding Crowds, Avoiding Public Transport

- The massive changes in location and movement due to the need to keep people separate social distancing keep way from others by 2 metres.
- People work at home, avoid crowded places like city centres, public transport; increase in car use and active travel such as walking.
- The demand for out of town living leading to sprawl and a reversion to the locational patterns of the mid 20<sup>th</sup> century

Impact of COVID-19 on transport and spatial development: an international perspective



Measures of Mobility During 2020:

From Apple for UK (a) and London (b), and From Google for UK (c) and London (d)

We will begin by building a hypothetical city and explore what happens when we lock down – why can't we do this with a real city – well we ourselves are locked down and we don't collect such data very well anyway

Impact of COVID-19 on transport and spatial development: an international perspective





Impact of COVID-19 on transport and spatial development: an international perspective



a) Origin Locations b) Polycentric Destination Locations c) Destination Locations for Those Still Working at Original Workplaces, and d) Absolute Differences Between Origins and New Sliced Destinations  $\psi|0_i - D_i|$ 































