Data Acquisition and Use for good urban access in a period of Social Distancing

José Viegas
Professor of Transportation, University of Lisbon (retired)
Researcher and Consultant
josemviegas@gmail.com

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“Analysis of mobility behaviour using data during and after the COVID-19 confinement”
Social Distancing is here to stay, but...

• Social Distancing (+ mask) is only measure proved to be effective
  • Wide scale availability of cure or vaccine still months away
  • Immunity levels still very low, risk of rebound(s) is real

• In many countries, distancing rules relaxed for Public Transport. Why?
  • No alternative for many workers, in industry and retail
  • Impossible to increase supply quickly

• Besides official rules, FEAR OF CONTAGION will be a big element in reduction of usage of Public Transport
  • Most people with an alternative (i.e. private car) will prefer it → big risk of traffic gridlock as economy opens
Solutions for efficient access

- Adaptation requires **quick measures** from demand & from supply side
- Demand:
  - Tele-activity (work, medical appointments, meetings, bureaucracy, ...)
    - Digital access (now proved to be possible and efficient at scale)
    - Significant reductions of car traffic, especially at peak hour
- Supply
  - Bicycles
    - Shared or owned, requiring wide, connected, safe network of dedicated lanes
      - Procurement difficulties for quick increase of shared fleets
    - Contagion possible through bike handle, easily avoided with small disinfectant spray
  - Carpooling
    - So far never able to scale, but great potential for those escaping (or left unserved by) PT
      - New business models needed for stronger adhesion
    - No CapEx required
    - Effective contribution to reduce congestion
    - Low risk of contagion if only 1+1 pax on board, with masks

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Data as the scaffold for these processes

- Sophisticated, coordinated activities in a new mix require strong data support
- Three main data sources
  - Public sensors for flows, stocks and performances
  - Individual devices (smartphones) for location, displacement, contacts
  - Sensors (smartphones or other) on professional services vehicles (pax & goods)
- Sensitive issues: Privacy regarding individuals and Commercial Value regarding operators
  - Individual authorisation necessary
    - Many people have granted such authorisations by default or for use of transport services (PT, Uber and similar, shared bikes)
  - Some operators resisting sharing their data (e.g. Uber in L.A.)
    - Authority may force data sharing by operators as condition to access market
- The key question is not “who has access to my data” but “What use is made of my data”
Analysing mobility behaviour, improving access and mobility quality

• Joint use of data from multiple sources can provide (among others)
  • Very smart analysis of situations of poor performance, individually and collectively
  • Detection of
    • Harmful roaming by ride-hailing operators → smart charging possible
    • Users in “lose-lose” situations → Individual advice messages for those people

• Less private car use & better access with bespoke mobility planning services
  • “Mobility assistant”
    • Looks radical, but so did teleworking by 50%+ of the work force 3 months ago
      • Many people would probably accept it willingly

• Resilience: Survive the crisis and come out stronger for the next one
Thank you for your attention

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