



Department
for Transport

Mobility Data:

The 15 Minute Neighbourhood: Mobility Data enhancing the passenger experience

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Open Transport - Our Vision

Improve passenger journeys
through the use of high-quality
data

Enable open and accurate
bus data, improving
compliance and data sharing
processes across the
industry

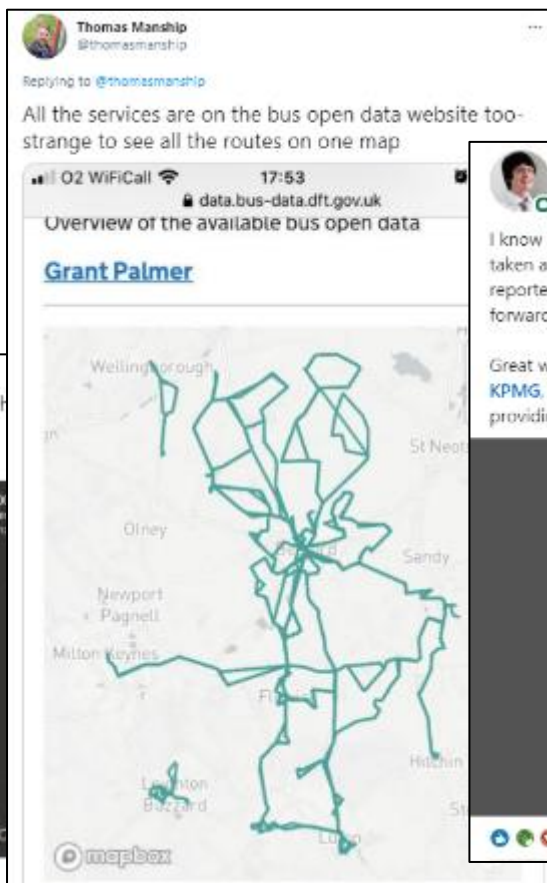
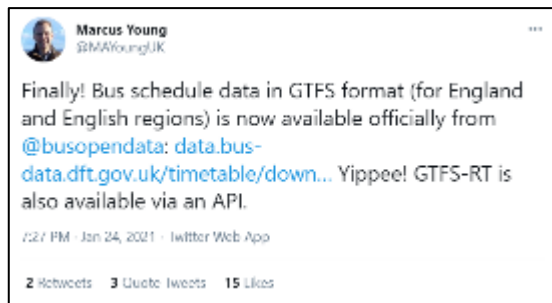
Set the foundations for
integrated open transit
initiatives and future
data/ticketing integrations



The Mobility Data Service, the implementing service for the Open Buses programme, will digitally transform bus services.

High quality open data will help passengers plan journeys, find best value tickets and get real time service updates wherever part of England they are in.

Journey Planning Apps: Enhancing our Communities



Sustainable Transport

1. Bus Rail integration
2. Walking, cycling and micromobility
3. Inclusive transport and accessibility
4. Mode shift and public/active/shared transport
5. Low traffic/15 Minute Neighbourhoods
6. Mobility as a Service



Journey Planning apps enhancing the passenger experience

“When TfL made its data available, there was an opportunity to design and develop a comprehensive transport app, starting in the world’s most historic and iconic public transport city”. Citymapper

1. Public transport systems are inherently complex, with journeys often involving multiple legs and modes.
2. We need to reduce the cognitive complexity for people – mobility data and journey planning apps are the glue that knit together public, active and shared travel helping people choose sustainable transport modes.
3. 2011 Zhan Guo, an urban planner, analysed 20,000 trips on the London Underground and found that the map had between 2-3 times more influence on decisions as the actual travel time did.
4. Route simplification can be significantly aided by maps – the TfL map has influenced maps around the world – but it can also prevent us from taking the fastest or shortest journey, hence the need for the London walking map,



Journey planning apps enhancing the passenger experience

We need to make journeys feel faster, cleaner and quicker for passengers, particularly on public transport and maximise the quality of travel time as much as minimising quantity! How can tech, data and apps affect the passenger experience?

1. Waiting drags – a minute of waiting felt like three minutes of travelling in a review of 17 studies
2. Walking feels long – time spent walking feels twice as long as using other transport modes
3. Clean train, shorter trip – a trial on Dutch train carriages showed that travel time is perceived as shorter when the train is clean.
4. Pastimes pass time – stimuli like music, entertainment and advertising seem to pass time more quickly.



Journey planning apps enhancing the passenger experience

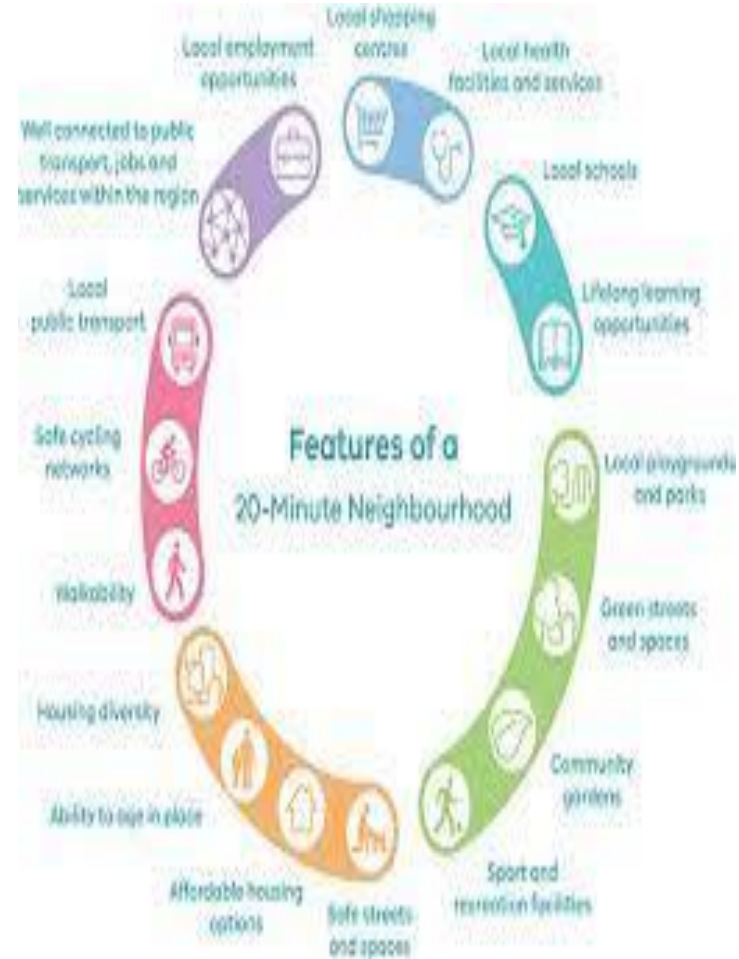
We need to make journeys feel faster and quicker for passengers, particularly on public transport and maximise the quality of travel time as much as minimising quantity!

1. Return journeys feel 22% faster than outward journeys.
2. The next evolution will be in multimodal journeys and navigation of interchanges – how far away are we, are there any delays, when does the next leg of the journey depart and try to turn a wait into a walk.
3. Disruptions information would benefit from including information about the cause of the delay.
4. Disruptions can be positive – during TfL strike action, 1 in 20 commuters updated their travel patterns on a long term basis.



The 15 Minute City/Neighbourhood.

- The idea: Transforming cities into a network of urban villages where everything you need is just a 15 minute walk or cycle ride.
- People spend 1-2 days in city districts and 4-5 days in their neighbourhood or urban village.
- Brings with it then a need to rethink the purpose of city centres and the creation of urban villages
- Urban villages might create a reputation for being particularly good at something to encourage visitors
- City centres provide facilities or districts that can't be provided in an urban village.



The 15 Minute City/Neighbourhood.

- The '15-minute' city is an iteration of the idea of 'neighbourhood units' developed by American planner Clarence Perry during the 1920s.
- The theory of 'new urbanism', an urban planning and design concept promoting walkable cities gained popularity in the US in the 1980s.
- Similar versions of 'urban cells' or 30- and 20-minute neighbourhoods have also emerged across the globe in the past decade.
- The aim is to make essential amenities, different housing types and more green spaces available within a 15-minute walking or cycling distance. Some cities like Paris and New York, which are relatively more mature with regard to this concept, have launched participatory budgets to promote local engagement as a part of their city transformation strategy.
- Cities that focus on new urbanism and flexible concepts, such as Bogota, Seattle and Milan, are prioritising investment in walking and cycling infrastructure. [15-Minute City | Deloitte Global](#)



The 15 Minute Neighbourhood.

It's based upon the principles of:

- Proximity (structures and people)
- Diversity
- Ubiquity
- Density



The 15 Minute Neighbourhood.

And with it, it brings increased opportunities for:

- Recreation
- Interaction
- Collaboration
- Exercise
- Entrepreneurship

How long does it take you to walk or cycle to essential amenities such as parks and shops? We asked 5,000 people living in major European cities:



The 15 Minute Neighbourhood.

Each neighbourhood should fulfil the functions of:

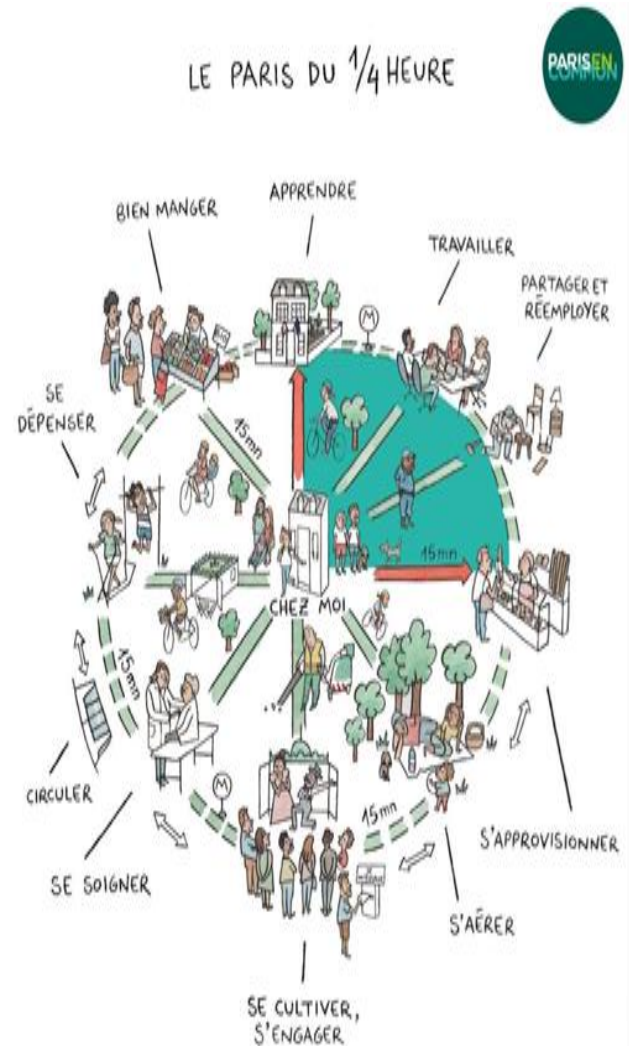
- Living
- Working
- Supplying
- Caring
- Learning
- Enjoying



Case Studies

- PARIS: Mayor Anne Hidalgo has already invested in making the city more walkable and safer to cycle in.
- Buoyed by her re-election, the next phase of Hidalgo's 'Paris en Commun' reforms could include:
 1. the introduction of more neighbourhood co-working spaces
 2. a further increase in active travel infrastructure at the expense of road space for cars
 3. more office space in the suburbs
 4. a greater use of multifunctional spaces.

[How '15-minute cities' will change the way we socialise - BBC Worklife](#)



Case Studies

- MILAN: It's early days, but mayor Giuseppe Sala has committed the city to a green revolution by converting 35km (22 miles) of streets to encourage safer cycling and walking. There is also provision for a low traffic neighbourhood, pedestrianised school streets and lower speed limits.
- MELBOURNE: Launched in January two and a half years ago, Melbourne's 20-minute neighbourhood trials focused on active travel and improved public transport to create healthier communities in three city suburbs. Following successful completion of the trials, the 20-minute model is now embedded in Melbourne's planning strategy.



Case Studies

- OTTAWA: City authorities want to transform Ottawa into the most liveable mid-sized city in North America by creating a community of 15-minute neighbourhoods which will incorporate integrated residential hubs with a wider spread of amenities and retail, improved public transport and an expanded role for active travel.
- UTRECHT: The new Merwede district involves the construction of 6,000 new homes linked to new schools, health centres, shops and businesses by a network of pedestrian and cycle routes. The amenities will be constructed and open by the time the first residents move in.
- PORTLAND: The Oregon city aims to extend 20-minute neighbourhoods to allow 90% of its residents to easily walk or cycle to meet all basic, daily, non-work needs by 2030.



The role of mobility data

- What is the role of digital and data in driving social change and improving the lives of citizens and realising the vision?
- With Mobility as a Service still in its infancy worldwide, we are taking a guidance-based approach through a code of practice to support MaaS platforms as they emerge and mitigate any unintended consequences.
- Mobility as a Service solutions are vital to encouraging people to change their travel and transport behaviours, support the creation of concepts such as the 15 minute neighbourhood and low traffic neighbourhoods.
- Journey planning apps help citizens opt for active travel such as cycling, walking and micromobility or public transport for longer journeys and reducing the reliance on car.



Smart Cities and 15 minute cities

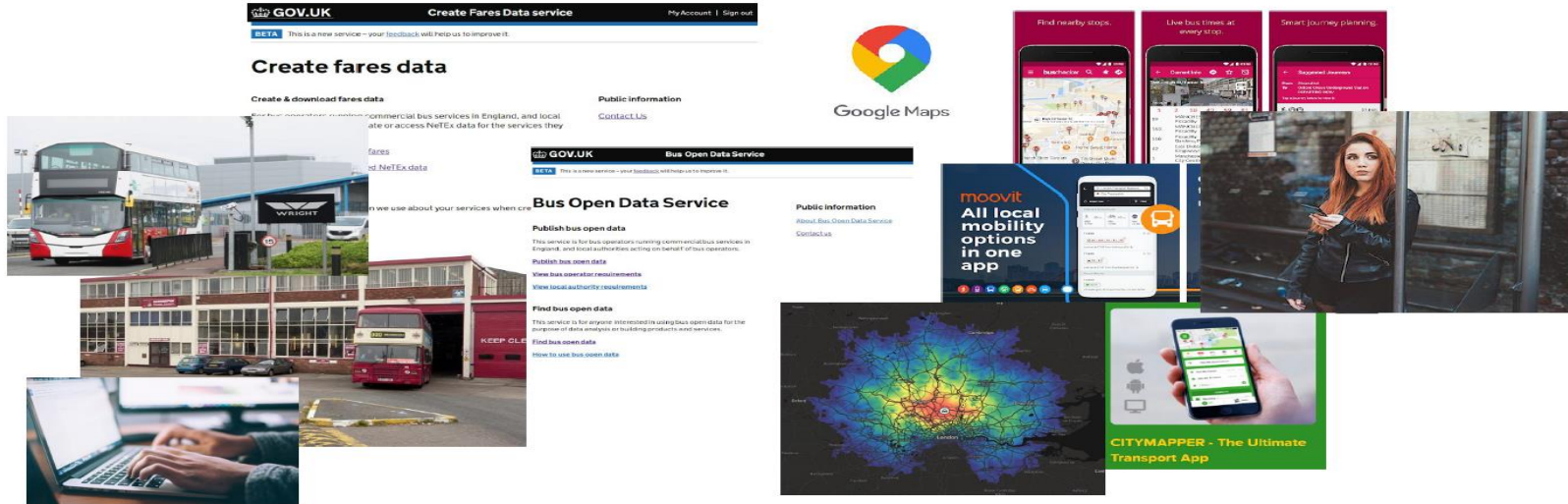
Smart city projects can help to improve citizens' quality of life by providing a range of benefits.

- making services more convenient to use, by reducing traffic congestion using intelligent transport systems
- increasing public safety, with smart streetlights
- reducing disruption caused by maintenance, by using digital mapping and reporting to coordinate roadworks across utility providers, reducing traffic disruption
- supporting public participation in local decision making, by using QR codes on planning notices that can be scanned with a smartphone to view additional information.



QUESTION: How else do you think we can support the creation of 15 minute neighbourhoods using mobility data?

Go to **www.menti.com** and use the code **2413 8617** to share your responses!



LINKS AND RESOURCES

[RTPI | 15 Minute Cities/20 Minute Neighbourhoods](#)

[Charlton Neighbourhood Forum: Now it's your chance to have your say on the idea – The Charlton Champion](#)

[LSE Secures £175m for Green and Social Projects | TWInFM](#)

<https://www.smarttransport.org.uk/insight-and-policy/latest-insight-and-policy/what-is-a-15-minute-neighbourhood>

[Future proofing our cities with the 15 minute concept - Arup](#)

[What is an Ecovillage - Discover Innovative Eco Communities garden-villages.pdf \(policyexchange.org.uk\)](#)

[Ecovillages - Global Ecovillage Network](#)

[portugal – Ecovillage Worldwide \(eco-villages.eu\)](#)

[5 Most Green & Eco Housing in the UK 2020 — Green Square](#)

[Singapore Aims to be the World's Greenest City \(nationalgeographic.com\)](#)

[What is a 15-minute neighbourhood? | Healthy streets \(smarttransport.org.uk\)](#)

[Rising to the Climate Challenge - BDP.com](#)

[15-Minute City | Deloitte Global](#)



Questions



Twitter: @busopendata
Visit: <https://data.bus-data.dft.gov.uk/>