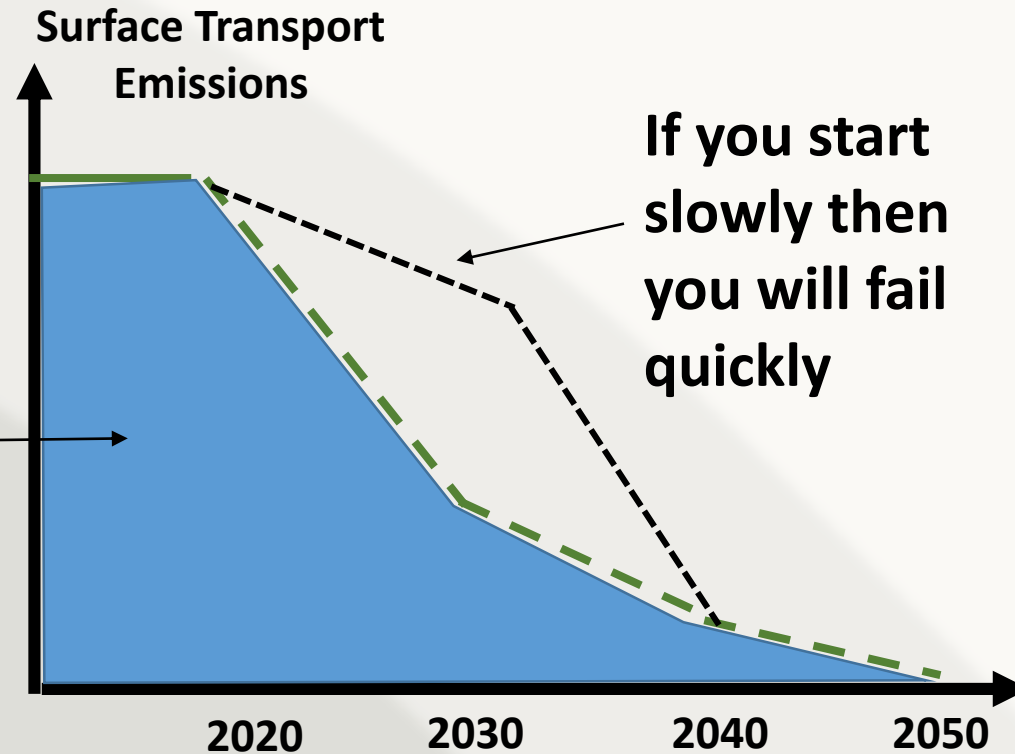# Decarbonising transport: the role of buses

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This talk

- The context: climate emergency & getting carbon ambition right

- The transport decarbonisation case for buses: pre-, mid-, and post-Covid

- Where are buses working well/less well?

- Policy recommendations & areas for action: kickstarting the bus patronage virtuous circle

The context: carbon ambition

Across England, 182 councils have now declared a CLIMATE EMERGENCY

Surface Transport Emissions

If you start slowly then you will fail quickly

2020   2030   2040   2050

It is all about the total budget – THE AREA UNDER THE CURVE

The transport decarbonisation case for buses: pre-, mid- and post-Covid

- (Subject to loading…) buses are the most space-efficient road passenger vehicle
- They can be more carbon-efficient than cars, pre- & post-electrification
- **The networks & infrastructure are here now**
- 24% of households do not have access to a car or van (41% can access 1 car or van)
- **You can't run a town or city without a bus service – so we should run a service that carries lots of people**
- Places rejecting the bus option need to state their alternative

158
grams CO₂ per head per km
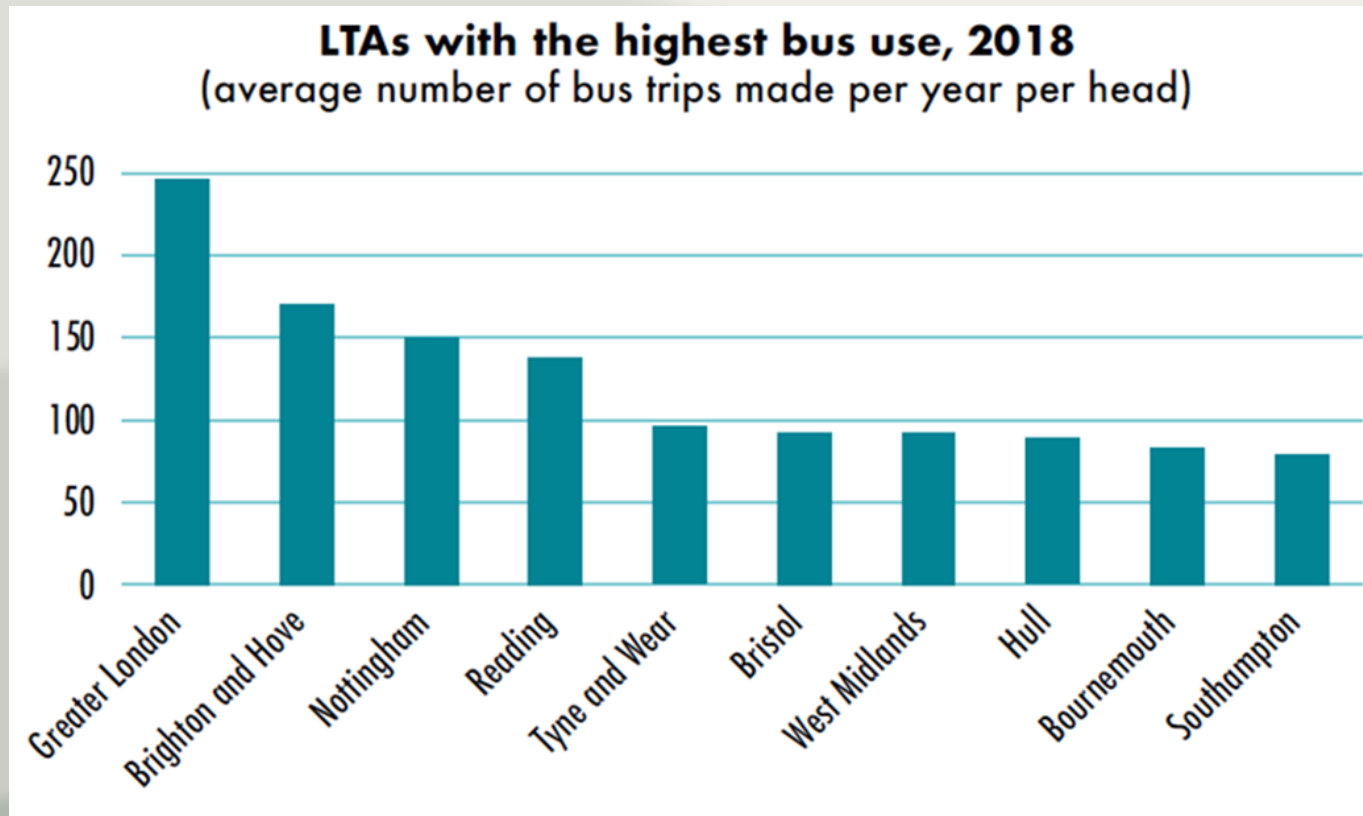Average occupancy 1.6

105
Average occupancy 12.2

53
Average occupancy 24

Where are buses working well?
Highest bus use

LTAs with the highest bus use, 2018
(average number of bus trips made per year per head)

Top 10 LTAs by bus trips per head in 2018/19		
Rank	Local transport authority	trips/hd/yr
1	Greater London	246.7
2	Brighton and Hove	171.7
3	Nottingham	149.7
4	Reading	137.6
5	Tyne and Wear ITA	98.7
6	Bristol, City of	92.3
7	West Midlands ITA	91.6
8	Kingston upon Hull, City of	89.9
9	Bournemouth	84.6
10	Southampton	81.4
	All England	**77.1**

Where are buses working well?
Most growth in bus use 2010-18

LTAs with the highest growth in bus use 2010-18
(increase in bus trips made per year per head)
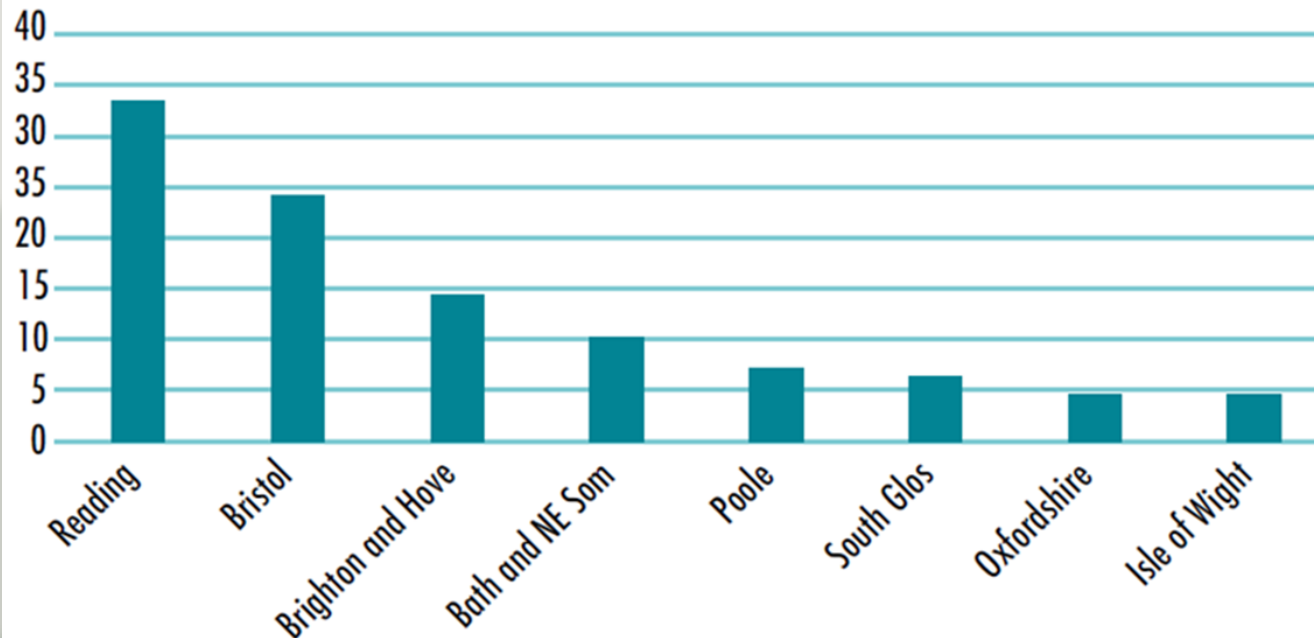
Top 10 LTAs by growth in bus trips/hd/yr		Increase 2010-18	2018 total
1	Reading	33.4	137.6
2	Bristol, City of	24.4	92.3
3	Brighton and Hove	14.8	171.7
4	Bath & NE Somerset	10.6	76.8
5	Poole	7.6	64.7
6	South Gloucestershire	6.6	32.9
7	Oxfordshire	5.0	60.9
8	Isle of Wight	4.8	56.7
9	West Berkshire	4.4	20.1
10	Southampton	4.2	81.4

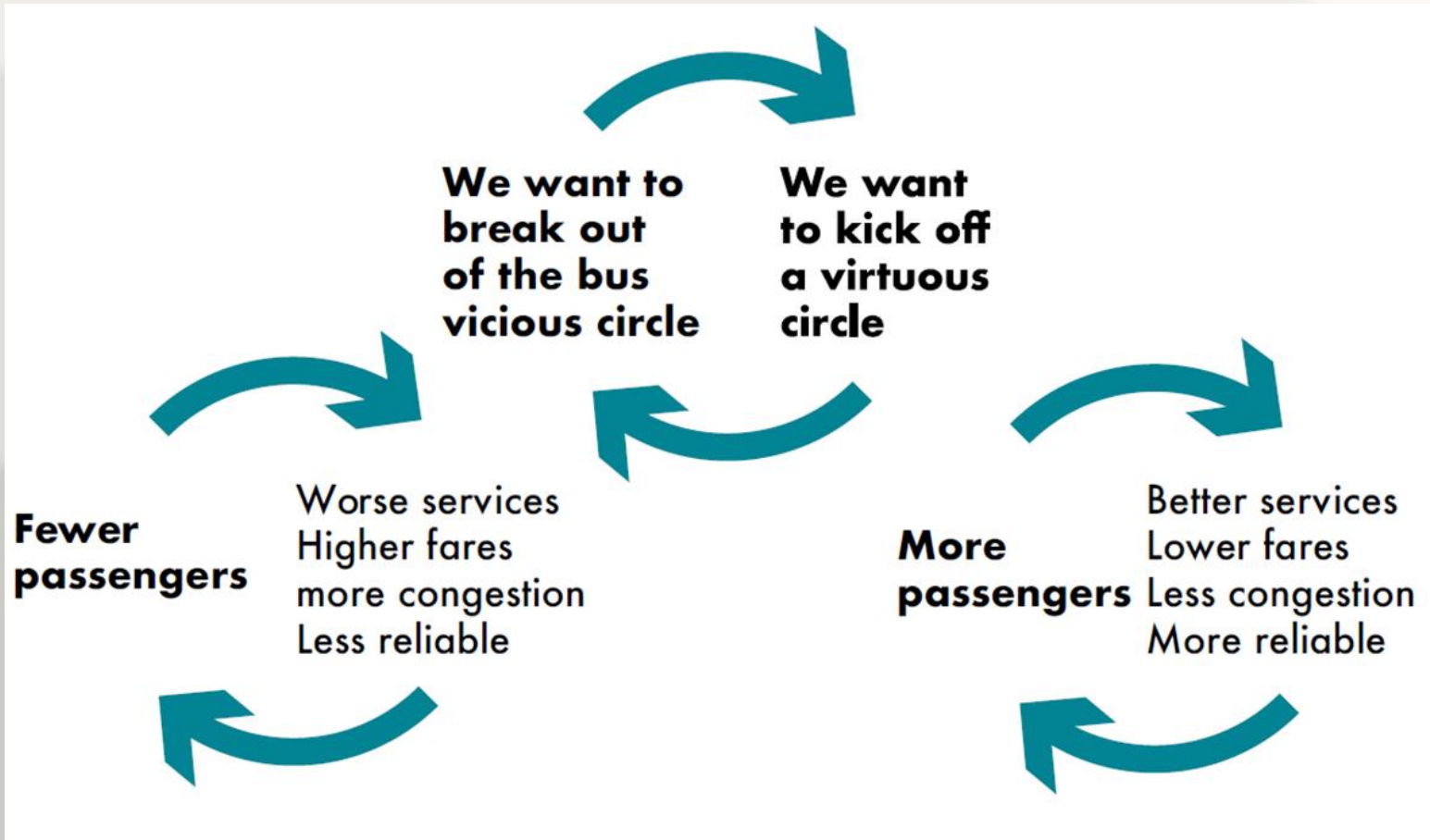# Where are buses not working so well?

Bottom 10 LTAs bus trips/hd/yr 2018		
Rank	Local authority	trips/hd/yr
80	East Riding of Yorkshire	16.9
81	Wokingham	16.9
82	Bracknell Forest	14.8
83	Shropshire	14.0
84	Central Bedfordshire	13.7
85	Somerset	11.3
86	Herefordshire, County of	10.7
87	Cheshire East	9.8
88	Rutland	9.4
89	Windsor and Maidenhead	9.3

Bottom 10 LTAs decline in bus trips/hd/yr 2010-18			
		De-crease	2018 total
80	West Midlands ITA	-16.9	91.6
81	Tyne and Wear ITA	-18.9	98.7
82	Blackpool	-19.1	63.6
83	South Yorkshire ITA	-19.4	65.1
84	Leicester	-20.5	74.6
85	Stoke-on-Trent	-21.1	36.3
86	Darlington	-21.3	53.6
87	Middlesbrough	-22.7	52.8
88	Warrington	-28.6	26.6
89	Greater London	-34.8	246.7

Policy recommendations

We want to break out of the bus vicious circle

We want to kick off a virtuous circle

Fewer passengers

Worse services
Higher fares
more congestion
Less reliable

More passengers

Better services
Lower fares
Less congestion
More reliable

AREAS FOR ACTION

1. Service reliability
2. Relative cost
3. Passenger experience

Areas for action

Service reliability

- Punctuality (excess waiting time for frequent service) key to instil confidence among users & near-market potential users
- Top 3 causes of late running: traffic congestion, slow boarding, roadworks. Operators & LHAs MUST WORK TOGETHER

Passenger experience

- The whole journey approach, door to door incl. information
- Appeal to near-market potential users, incl. former bus users

Relative cost

- Cost of bus use: fares & patronage chicken & egg
- Cost of motoring: parking, WPL, congestion charges

Conclusion

- Local authorities have different start points, but everywhere needs to act

- If your carbon ambition is to be in line with the Paris accord then it will mean radical change (and therefore difficult)

- Action needs to start now

- The role of buses: a key tool in the toolkit, available now, complicated by corona...

- Partnership: operators + LAs + citizens

- 'Horses for courses': each place to select what works for it from menu of measures

West Yorkshire Combined Authority Emissions Reduction Pathway

Transport

- Reducing private car travel by 21% through shifting demand to public, shared and active travel e.g. walking and cycling
- Increasing travel by walking by 78%
- Increasing travel by bike by 2,000%
- Increasing travel by bus by 39%
- Increasing travel by rail by 53%