



Department  
for Transport

# Estimating active travel levels in England

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# Monitoring active travel before COVID

Pre-COVID, the UK Department for Transport (DfT) published [annual statistics on walking and cycling in England](#) each August.

The key sources are two nationally representative surveys:

- [National Travel Survey](#): national picture based on household surveys and travel diaries allowing comparison to other modes of transport
- [Active Lives Survey](#): Web survey with large sample size allowing understanding of cycling and walking levels at lower geographies

But neither can be adapted to produce local, real-time data at present

## Cycling Factsheet: 2019

### Summary [NTS]



### Gender [NTS]



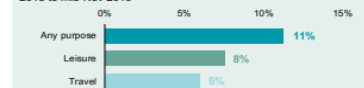
### Trends [NTS]



**Trip:** A one-way course of travel with a single main purpose. A "cycling trip" is one where the greatest part was cycled.  
**Stage:** Trips consist of one or more stages. A new stage is defined when there is a change in the mode of transport.

### Purpose [ALS]

Proportion of adults cycling, by purpose and minutes per day, mid-Nov 2018 to mid-Nov 2019



Just over one in ten adults cycled at least once a week. More adults cycled for leisure than for travel. This is similar to previous years.

**Leisure:** For the pleasure or value of the activity  
**Travel:** Getting from A to B **Any:** Leisure or Travel

### Usual time spent per day [ALS]

Proportion of adults cycling, by purpose, mid-Nov 2018 to mid-Nov 2019



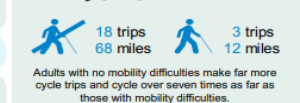
When adults cycled for over 2 hours, they were far more likely to be cycling for leisure rather than travel.

**Sources:** NTS: National Travel Survey 2019 (any cycling on the public highway)  
ALS: Active Lives Survey 2018-2019 (aged 16+ only, any cycling)

### Car access [NTS]



### Mobility [NTS]



### Travel purpose [NTS]

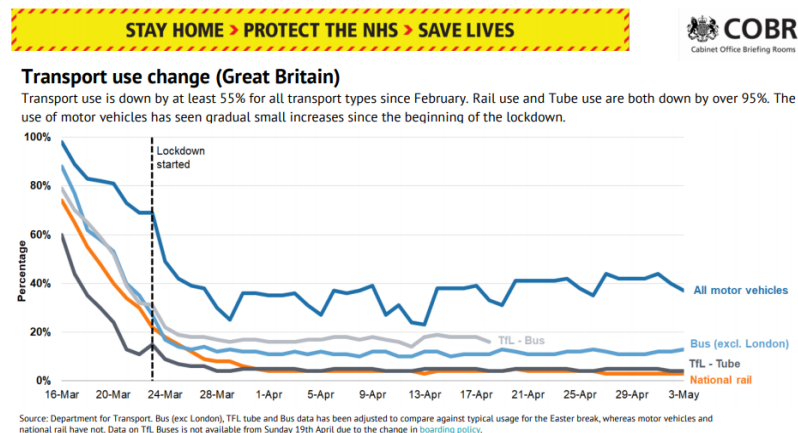


**Leisure purposes:** Visit friends at home and elsewhere, entertainment, sport, holiday and day trip.

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# Covid and the shift to near real time mobility data

The pandemic presented a need to shift to near real time mobility data to understand changes in how people were travelling – the team had to work at pace to find a solution



Separately, DfT funded many active travel infrastructure changes and published the Prime Minister's vision for walking and cycling 'Gear Change' in 2020 to help more people to walk and cycle. As a result, the need for good quality, timely data continued to grow!

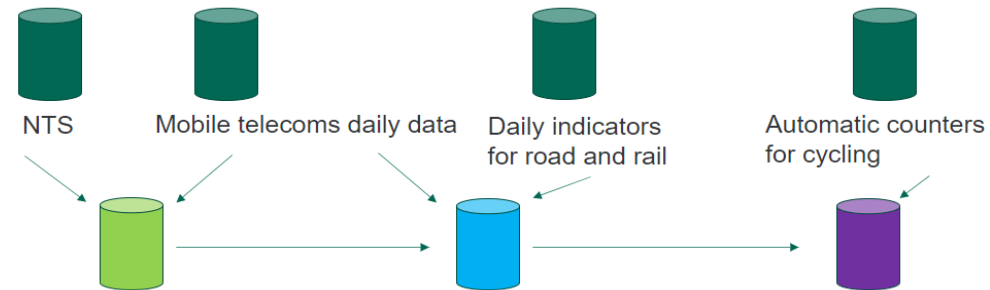
# Estimating cycling – options considered

Options we considered:

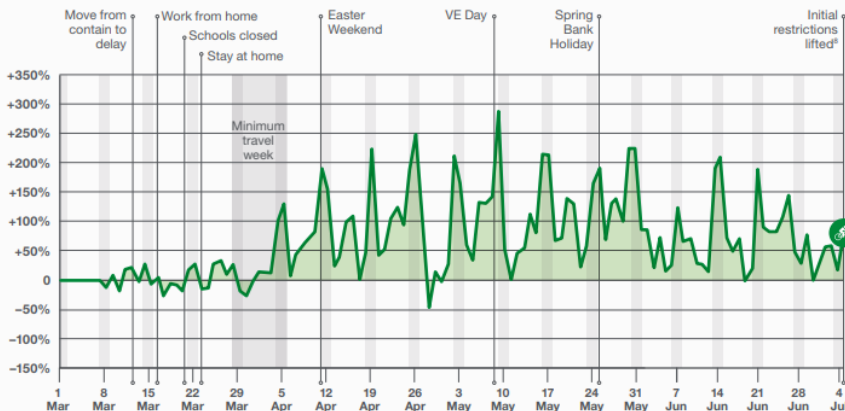
- Camera tech using AI to count cyclists
  - Automated traffic and cycling counters
  - Activity/membership based apps – difficult to distinguish between the user base increasing and actual increases in cycling
  - Local authority own sources of data / Transport for London cycling data – data availability across areas varies greatly
  - Mobile telecoms / Mobility or journey planning apps – **the preferred option**
  - Bike share schemes
- All sources gave a clear picture of increased cycling levels and differences in trends (i.e weekdays vs. weekends, warm vs. wet days),
- But no solution was perfect when considering things such as national coverage, timeliness, sampling.

# Estimating cycling during COVID-19

Cycling levels are currently estimated by combining mobile telecoms data with observed usage of other transport modes and National Travel Survey results. This results in a daily estimate of cycling levels **compared to March 2020**, currently published weekly.



**Figure 3**  
Percentage change in estimated cycling trips from 1 March 2020 to 4 July 2020 when initial restrictions lifted<sup>7</sup>



# Estimating cycling - Limitations

- It's necessarily complicated to derive by looking at total transport usage and then splitting out by individual modes – lots of possibility for uncertainty to creep in
  - e.g. Walking estimate was a residual of a residual so not fit for purpose
- Approach cannot provide a local split of cycling
- No weather/seasonal adjustment included, just clear caveats
- Not designed to detect small changes, but to give a sense of scale of change
- Data is compared to a baseline of March 2020 - not considered a typical month for cycling

	Percentage
<b>Date<sup>1</sup></b> (weekends and bank holidays in grey)	<b>Cycling<sup>10,11</sup></b>
04/05/2021	64%
05/05/2021	104%
06/05/2021	114%
07/05/2021	106%
08/05/2021	62%
09/05/2021	146%
10/05/2021	78%
11/05/2021	83%
12/05/2021	112%
13/05/2021	92%
14/05/2021	101%
15/05/2021	94%
16/05/2021	107%
17/05/2021	80%
18/05/2021	79%
19/05/2021	96%
20/05/2021	87%
21/05/2021	60%
22/05/2021	114%
23/05/2021	96%

# Estimating cycling: Next steps

We're building a new data pipeline to expand on the work over the last year.

Will include:

- Traffic and cycle count data, e.g. data derived from our existing [road traffic statistics](#) counter network
- Camera data
- Local authority data

With the capacity to add more data as active travel continues to grow

Combining data sources provides greater national coverage whilst maintaining the great increases in data timeliness we have gained in the last year



# Estimating cycling: Next steps

- Analyse the data - produce a new monthly cycling series following methodology used for other modes of transport to consider changes in average traffic flows
- Establish a new baseline for data comparison
- Look at seasonal/weather adjustments to allow us to say when changes are above and beyond those expected from a 'sunny summers day'
- Consider how walking might be estimated
- Continue to improve and build as data quality and access grows





# Questions



What are others doing to measure active travel levels at a national and local level?



Are there lessons others have learned that could help us?



Any suggestions or ideas for the future?