Covid-19

Local authority travel and transport data

Weekly digest

TRANSPORT TECHNOLOGY FORUM

Week Commencing **20th July 2020**

Introduction

Since the imposition of travel restrictions designed to help dramatically reduce the spread of Covid-19, the Transport Technology Forum has led the collation of transport data from local authorities into information used to understand changes in travel behaviour.

Authorities from cities, towns and counties across England are sharing urban traffic control and automated traffic counter data from the roadside, as well as information on cycling and car parks. Industry has also supplied video analytics and floating vehicle data patterns. This sits alongside data the Department receives about rail and air, public transport, freight and maritime to summarise how, where and when people and goods are moving around the country.

The Transport Technology Forum is now able to publish outcomes from this data set for interested parties, not least those bodies who went above and beyond the call to share their data with us.

About the Forum

This document has been prepared by the Transport Technology Forum as part of its remit to drive more effective and efficient management of existing and new road networks, as a key national opportunity before, during and after the current Covid-19 emergency.

Road transport will remain a key pillar of how people and goods move across the nation, not just on strategic roads. Improving road travel through technology is a core aim of the Forum.

The Forum promotes a collaborative culture to open up the opportunity and address the caution which has historically impeded efficiency and innovation.

About this Report

The report provides an ongoing snapshot of travel, summarising weekly, daily and hourly changes based on information shared by:

- Traffic – 29 data providers, geographically covering approximately 107 local authority districts.
- Cycling – 16 data providers, geographically covering approximately 84 local authority districts including nationwide canal and river paths.

This provides an overview of how public behaviour is changing as a result of restrictions being eased, whether travel habits are returning to normal or what new patterns are being experienced. Local Authorities can benefit by being able to compare what is happening in their areas with the national picture, allowing local and national comparisons to be drawn.

Highlights summary

The following provides a high-level summary of the key findings within the data:

Traffic Flow

- Traffic for the week commencing 13th July saw a further increase in flows of approximately 2 percentage points compared to the previous week, bringing the overall traffic count average for the week to a reduction of 15.8% compared to the baseline (first week in February 2020).
- Following the reopening of pubs, restaurants, hairdressers and other services on Saturday 4th of July, hourly traffic volumes continue to show a return to near pre-lockdown levels between the peaks and in the PM (Figure 4).
- Traffic volumes on Monday the 13th July were only 13.5% reduced from the baseline, unusual as weekends to date have previously shown the largest increase in traffic volumes each week.
- Analysis of vehicle classification data (where available) shows that bus and coach volumes returned to levels below that of cars during the w/c 13th July.
- HGV/LGV volumes for week commencing 13th July continue to perform at or above baseline levels.

Cycling

- Cycling flows week commencing 13th July were 84% increased on baseline levels, showing a continued week on week increase in cycling volumes since 29th June.
- The week commencing 13th July experienced an overall increase in average cycling volumes of 24 percentage points in comparison to the previous week. This was largely driven by cycling levels on Wednesday, Thursday, Friday and Saturday.
- This week as cycling returned to a trend of both weekend and weekday cycling levels on average showing an increase compared to the previous week (Figure 6). However, cycling levels are significantly reduced compared to the lockdown period of May.
- Figure 8 shows that there was no significant change in the profile of hourly cycling volumes week commencing 13th July compared to other lockdown weeks. In general, this showed low AM peak volumes with significant increases between the peaks and during the PM peak.

Figure 1 – Key Traffic Flow Dashboard Measures

Overall Daily Traffic Flow Change Compared to Baseline (01-07 Feb 2020)

Week	1. Monday	2. Tuesday	3. Wednesday	4. Thursday	5. Friday	6. Saturday	7. Sunday	Total
13/07/2020	-13.50%	-15.63%	-18.42%	-16.52%	-15.04%	-15.75%	-18.48%	**-15.79%**
06/07/2020	-20.47%	-16.38%	-18.22%	-19.96%	-18.65%	-17.11%	-15.75%	**-17.96%**
29/06/2020	-26.95%	-22.51%	-20.59%	-21.74%	-18.25%	-21.55%	-16.64%	**-21.11%**
22/06/2020	-25.05%	-24.28%	-19.67%	-23.30%	-22.47%	-26.00%	-24.02%	**-23.47%**
15/06/2020	-28.08%	-31.25%	-29.93%	-34.53%	-28.63%	-25.08%	-24.34%	**-29.35%**
08/06/2020	-30.55%	-28.67%	-32.72%	-34.88%	-34.91%	-33.25%	-31.26%	**-32.47%**
01/06/2020	-28.43%	-28.25%	-32.05%	-34.22%	-30.47%	-36.84%	-34.66%	**-32.00%**
Total	**-29.06%**	**-28.19%**	**-28.31%**	**-28.99%**	**-29.12%**	**-29.30%**	**-29.15%**	**-28.84%**

Figure 1: Key dashboard figures showing change in average daily traffic volumes compared to the baseline (first week of February 2020)

Figure 2 – Key Cycling Dashboard Measures

Overall Daily Cycling Change Compared to Baseline (01-07 Feb 2020)

Week	1. Monday	2. Tuesday	3. Wednesday	4. Thursday	5. Friday	6. Saturday	7. Sunday	Total
13/07/2020	53.75%	48.20%	35.02%	53.03%	83.46%	139.23%	110.71%	**84.28%**
06/07/2020	70.73%	52.95%	-7.86%	8.57%	50.59%	122.10%	165.88%	**60.00%**
29/06/2020	23.40%	12.64%	38.89%	43.90%	19.19%	71.81%	134.45%	**43.80%**
22/06/2020	70.83%	94.29%	64.91%	62.87%	61.67%	25.93%	116.07%	**63.16%**
15/06/2020	73.55%	56.36%	29.49%	-24.55%	16.49%	155.61%	140.48%	**50.71%**
08/06/2020	104.44%	133.33%	22.73%	18.87%	2.44%	177.78%	200.00%	**85.29%**
01/06/2020	81.90%	88.21%	-7.08%	47.30%	47.23%	70.27%	205.71%	**65.45%**
Total	**14.29%**	**13.01%**	**1.07%**	**5.13%**	**13.30%**	**58.99%**	**80.00%**	**20.27%**

Figure 2: Key dashboard figures showing change in average daily cycle volumes compared to the baseline (first week of February 2020)

Figure 3 – Daily average traffic flow change from baseline

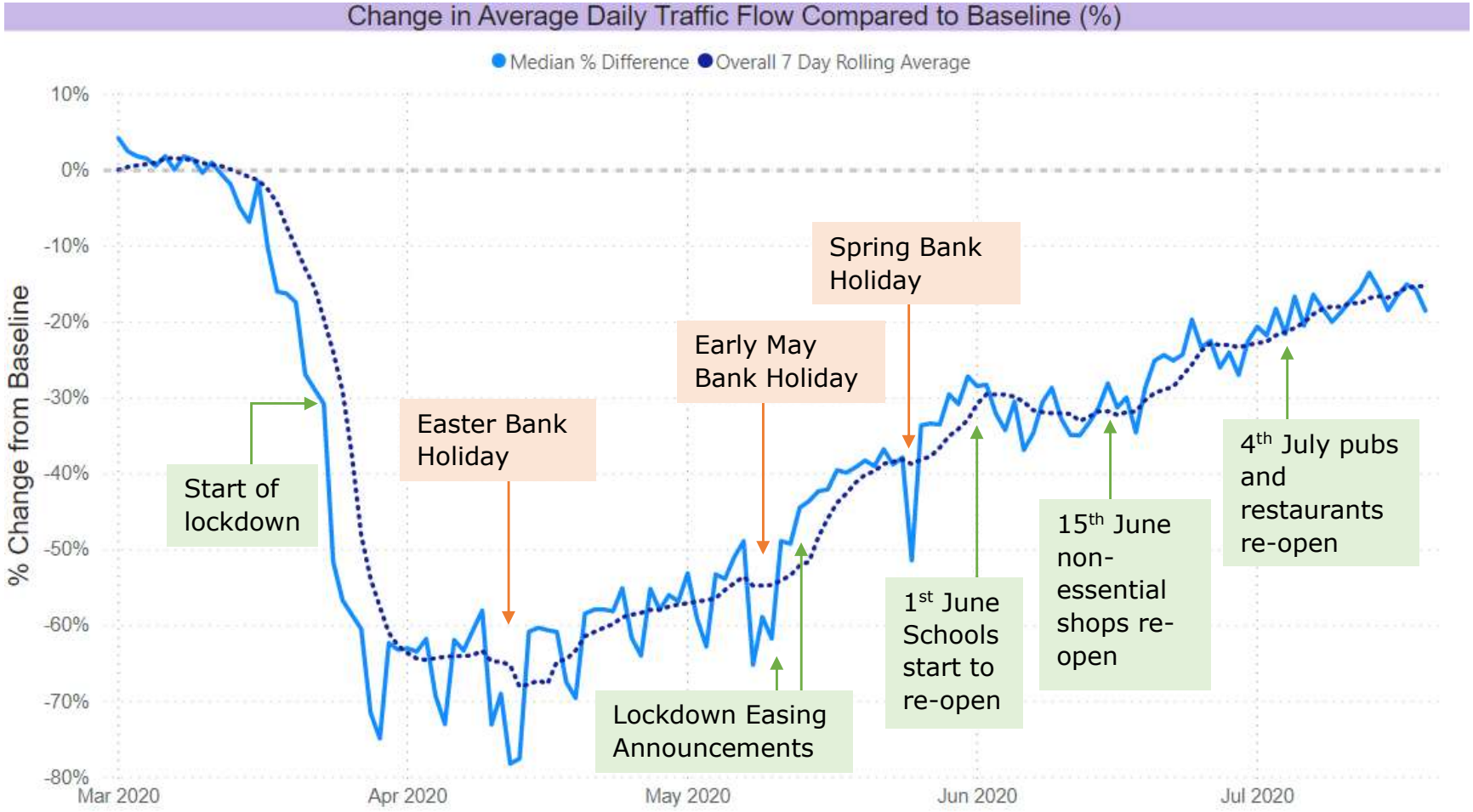


Figure 3: Change in average daily traffic volumes since 01st March across all sources compared to the baseline (first week of February 2020)

Figure 4 – Hourly traffic flow comparison per week

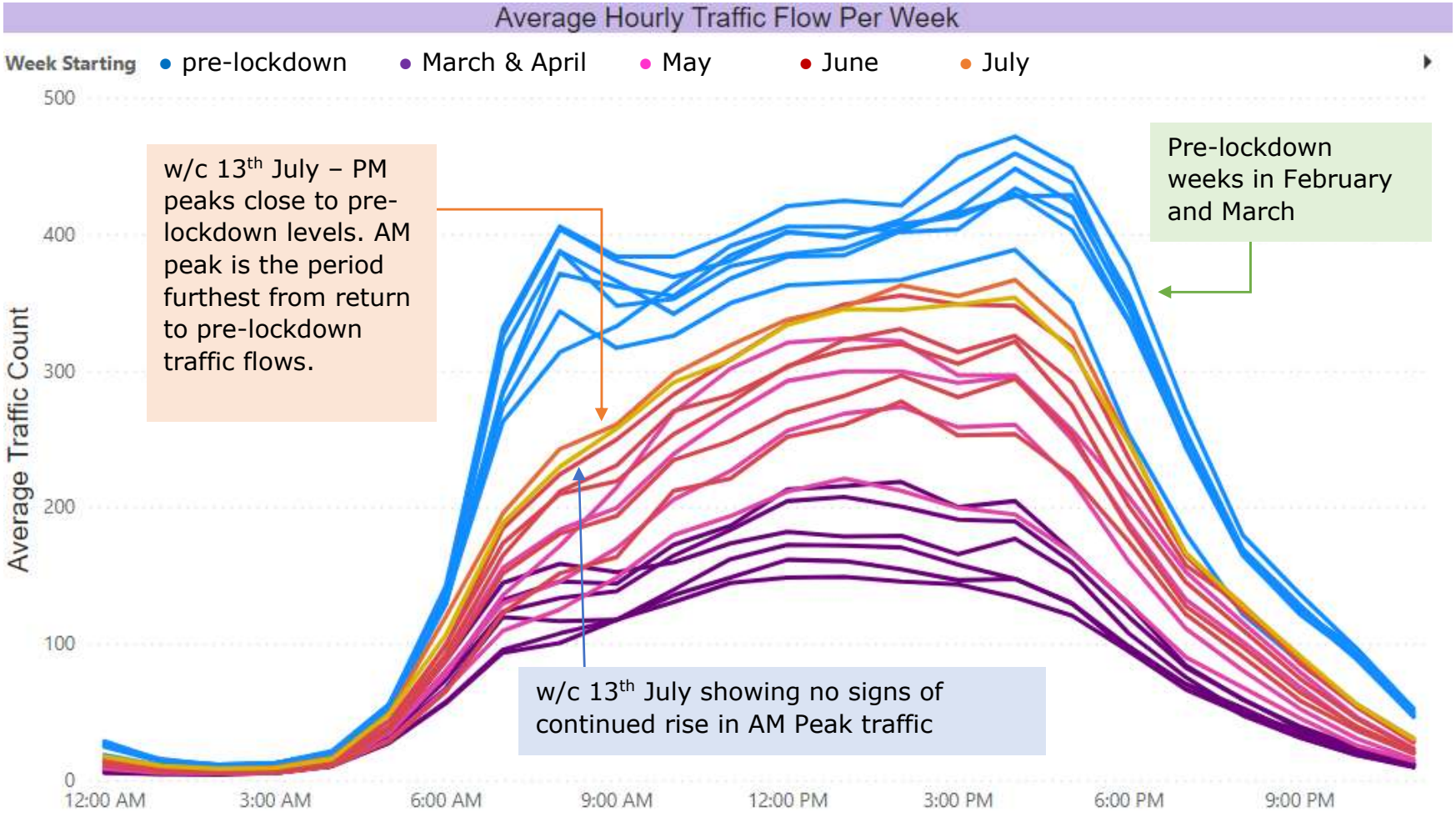


Figure 4: Change in average hourly traffic volumes per week since 1st full week in February across all sources with latest week highlighted.

Figure 5 – Change in journeys by vehicle class

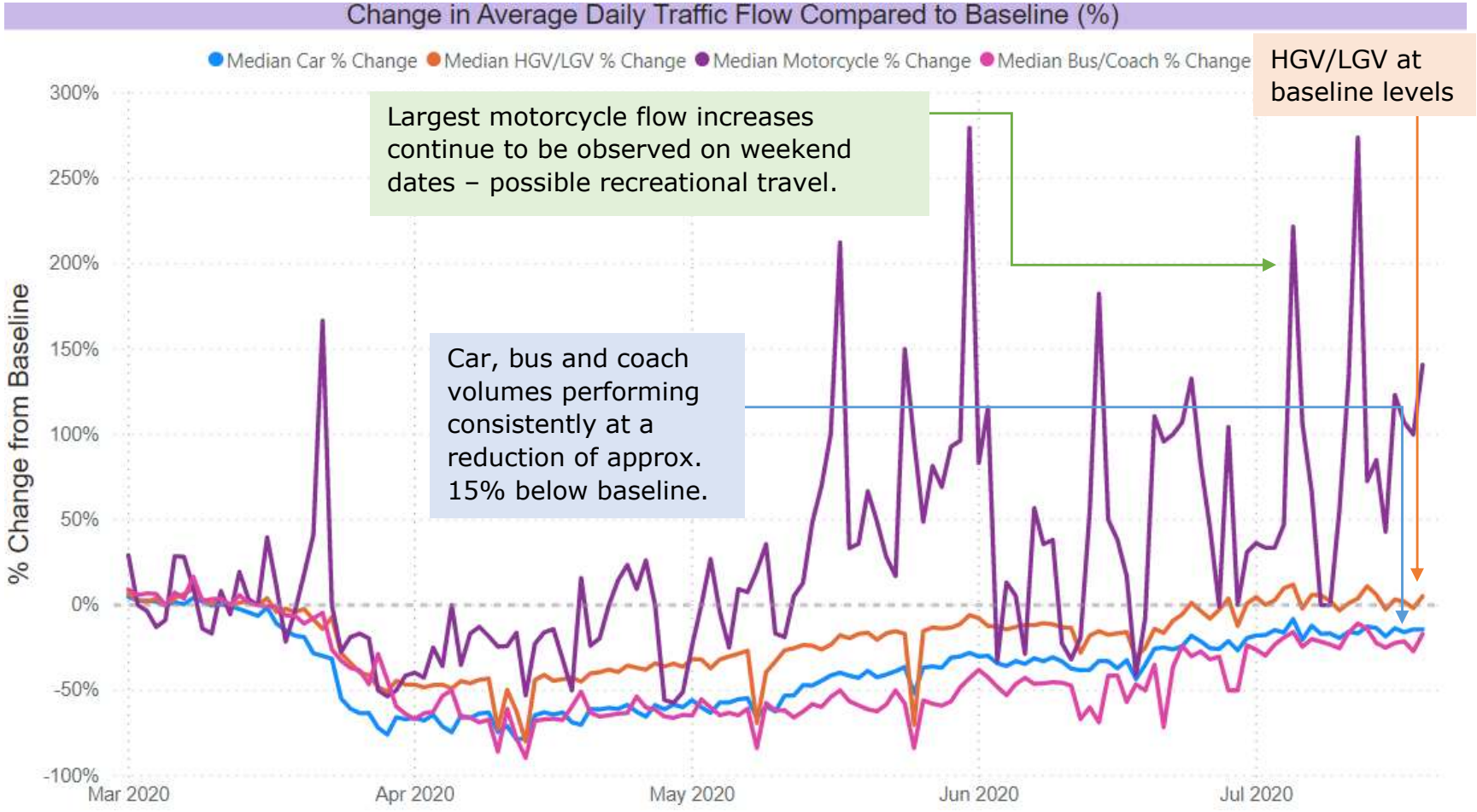


Figure 5: Change in average vehicle trips by vehicles class where available in the source dataset (note this data is measured at sensor level so sources with large numbers of sensors will have a greater contribution to the average count)

Figure 6 – Daily average cycling change from baseline

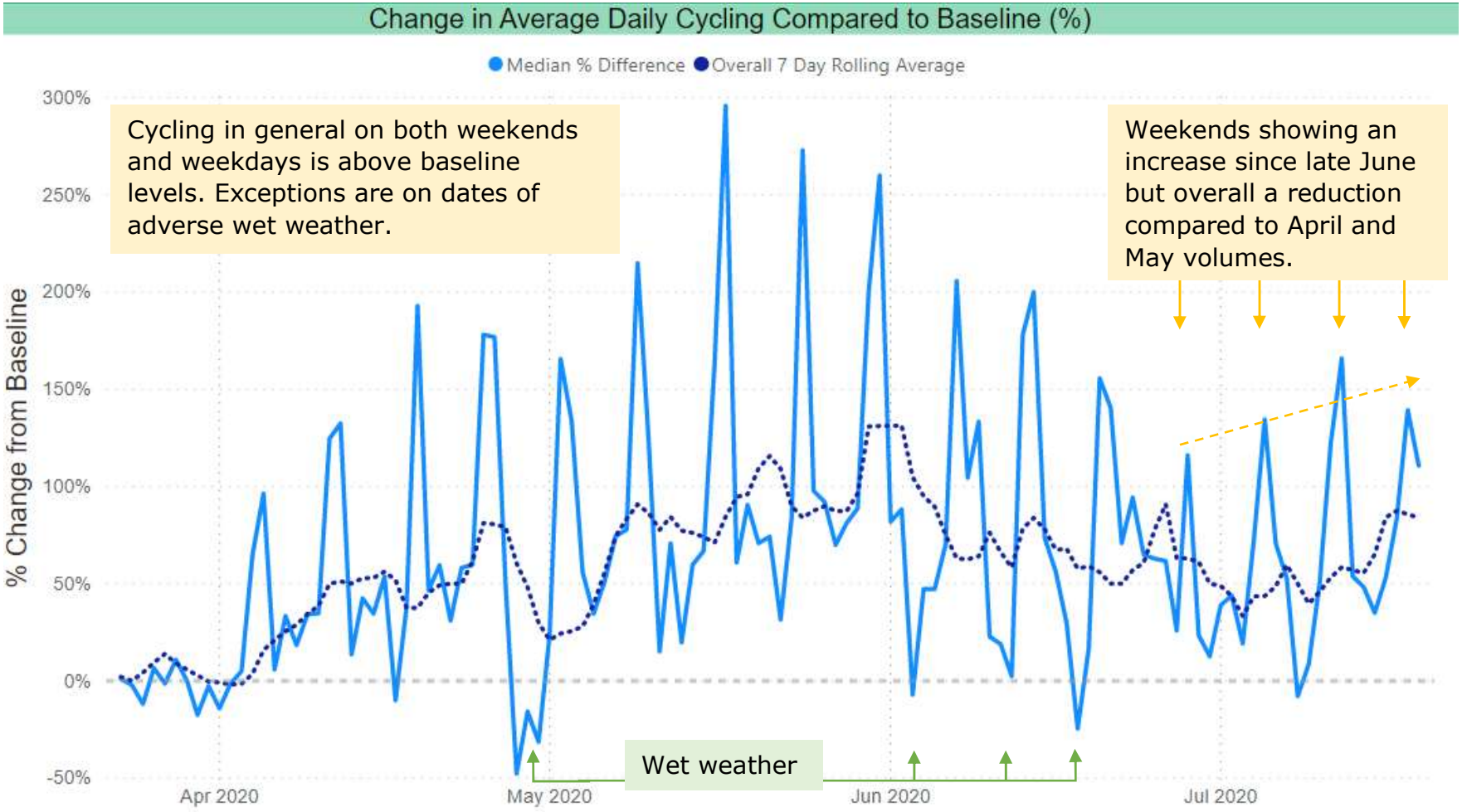


Figure 6: Change in average daily cycling volumes since 01st March (start of lockdown) across all sources compared to the baseline (first week of February 2020)

Figure 7 – Change in daily cycling volumes compared to rainfall (Met Office)

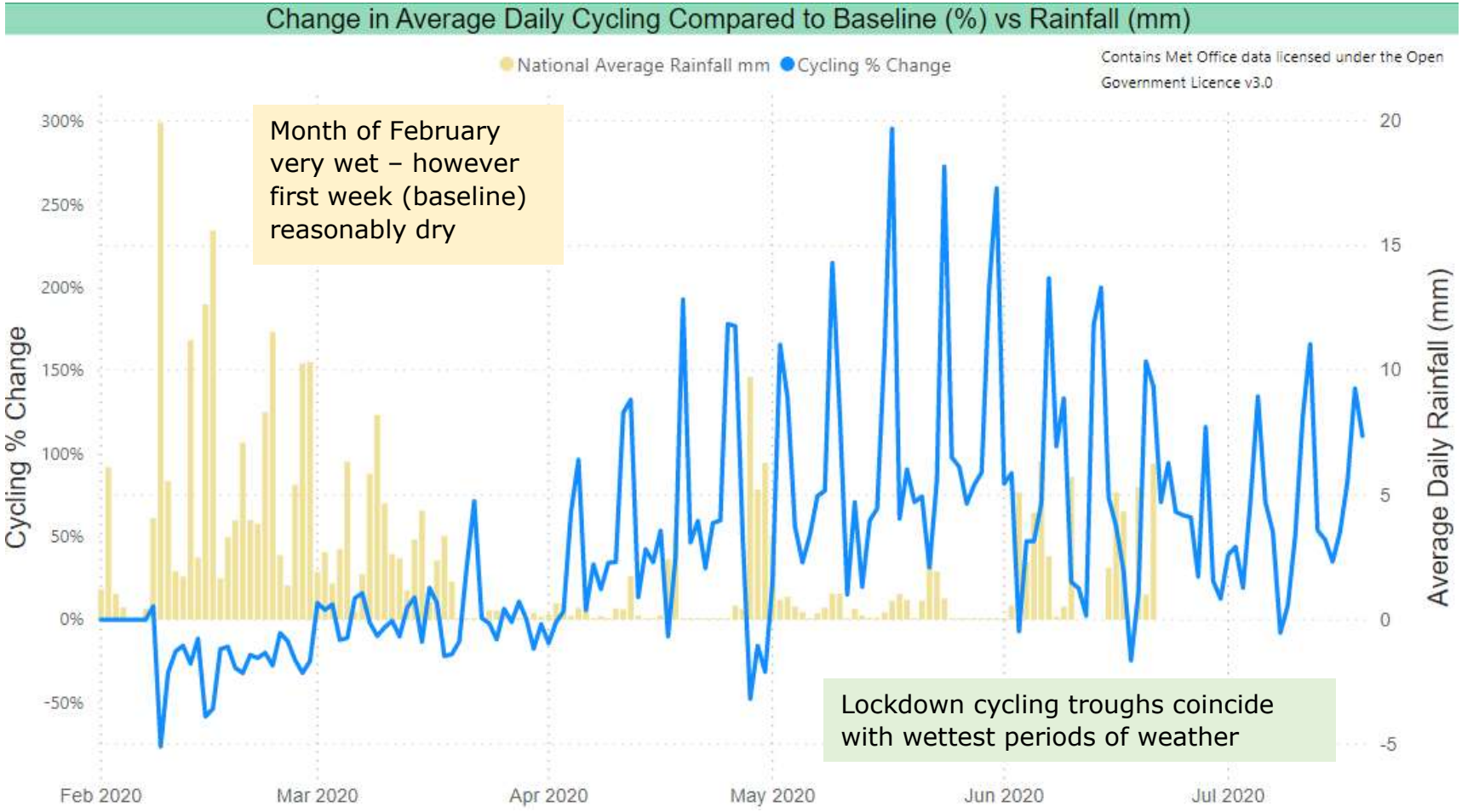


Figure 7: Change in daily cycling volumes compared to average national rainfall (mm), Met Office data only available until the 21st June

Figure 8 – Hourly cycling comparison per week

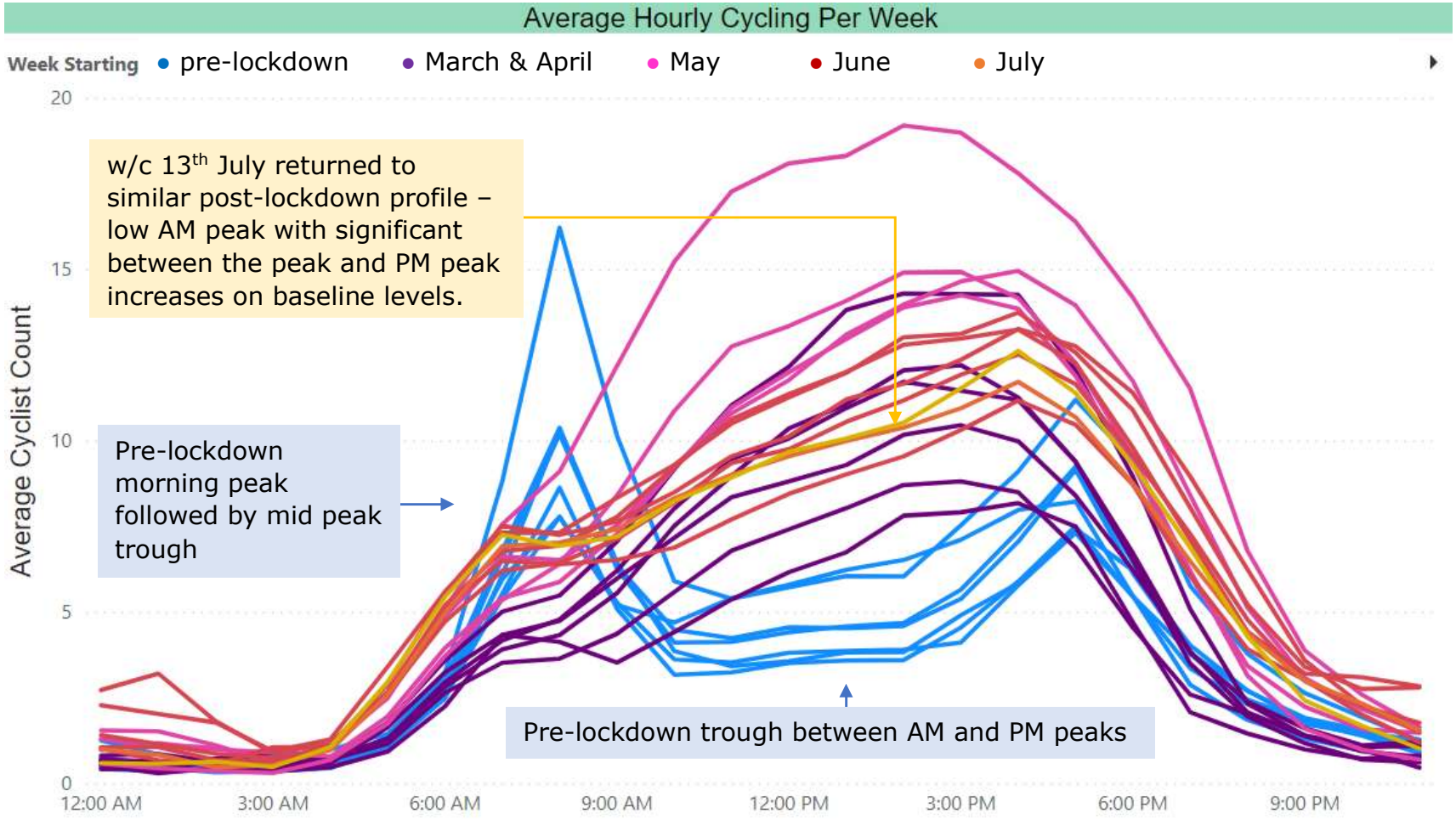


Figure 8: Change in average (mean) hourly cycling volumes per week since 1st full week of February across all sources

Data Method

The following provides some detail behind how the data has been analysed:

- The baseline has been defined as the first week of February 2020 (1st February – 7th February) for the following reasons:
  - This is consistent with national reporting.
  - Not all data sources can provide baseline data from previous years.
  - The first week of February is considered a normal working week unaffected by poor weather and half term dates later in February.
- Each day of the week has its own baseline.
- Only those datasets for which data was available for the first week of February have been included in the baseline comparison outputs.
- Baseline comparisons at aggregated Local Authority District level have only been calculated using traffic/cycling sensors that contributed to the baseline to reduce the impact of new sensors being added to data sources
- Average daily traffic volumes have been used to minimise the impact of individual sensors changing between active and inactive states.
- Averages have been calculated using the median (50th percentile) to reduce the impact of outliers (with the exception of Figure 8 which is a mean average)

Please note that each week not all datasets that contribute to our analysis are available when this report is produced. Therefore, as we add new datasets when they become available, enhance validation of those we've received and refine the underlying methodology, the overall values may change, however we expect the trends to remain the same.

Coming Soon

The Transport Technology Forum is now looking at how these datasets can be collated in the long term as a national data asset to be used following the pandemic. We hope very soon to open up the data sets so authorities can compare their own data with others and the national picture online. Please let us know if you have any thoughts about this, or if you do not want your data being made available in this way.

If you have traffic flow data that you can provide on a daily basis at an hourly aggregation and would like to contribute, please see the contact section for details of how to get in touch.

News from local authorities

Introduction

Each week in this digest we will share best practice amongst local authorities. Ideas and implementations promoted by authorities are included to give readers inspiration about policy they could use in their respective areas. This includes new initiatives and the publicity of existing plans and policies with specific relevance to today's challenges. The authors encourage all authorities to share a brief summary of what they are doing in their respective areas. This could simply be a link to a tweet, press release or other online post – it need not be onerous on officials' already busy workload. See "contact us" below for details.

This week we look at a range of connected solutions being implemented by local authorities, work that is getting underway to support sustainable transport solutions and promote active travel, a survey aimed at gaining public opinion and support and plans putting transport at the heart of town centre regeneration.

TRANSPORT TECHNOLOGY FORUM

TTF report highlights the range of benefits connected vehicles deliver to travellers by local authorities across the UK

The latest Transport Technology Forum report into the value of connected vehicles is highlighting how technology boosts productivity, increases safety, helps revitalise high streets and reduces real-world costs.

The State of the Connected Nation report summarises a range of Department for Transport funded C-ITS Pilot Projects which have already delivered benefits. These include smarter parking, using new data to address road maintenance, better ways to set traffic signals to reduce emissions and congestion, and providing better information and intelligence.

The projects took place across a wide range of local highway authorities, examining the use of emerging technologies and making use of public and private data. Projects addressed areas such as smart parking, asset management, opening up of data and signal phase and timing with the aim of trialling new solutions to the challenges faced by local authorities.

The report details a range of benefits such as cutting emissions and particulates by using technology to reduce stops at traffic signals by 14 per cent, improving the efficiency of traffic signal timings to cut delays by up to 30 per cent and using connected vehicles to measure road quality, leading to a five per cent cut in maintenance costs.

https://www.ttf.uk.net/wp-content/uploads/2020/07/TTF_State_of_the_Nation_2020_Ed-1.pdf

OXFORD

Major Oxford transport improvement work starts

Works include an upgraded traffic signalised junction, amendments to bus stops, improvements to pedestrian and cyclist facilities and carriageway resurfacing. This section also includes works to the spine road into the park and ride site.

Funding of £9.1m has been secured by Oxfordshire County Council to deliver a package of work to improve the travelling experience along the Botley Road and provide a route that prioritises sustainable transport modes such as public transport, cycling and walking.

https://news.oxfordshire.gov.uk/major-oxford-transport-improvement-work-to-start-on-13-juy/

DEVON

Drivers can help shape Devon's low carbon future in electric vehicle questionnaire

Drivers are being asked to help deliver a network of electric vehicle (EV) charging points across Devon by revealing their driving habits and attitudes towards EV in an online questionnaire.

Devon County Council (DCC) is working with district councils and the private sector on two projects which aims to deliver more than a 100 EV charging points across Devon.

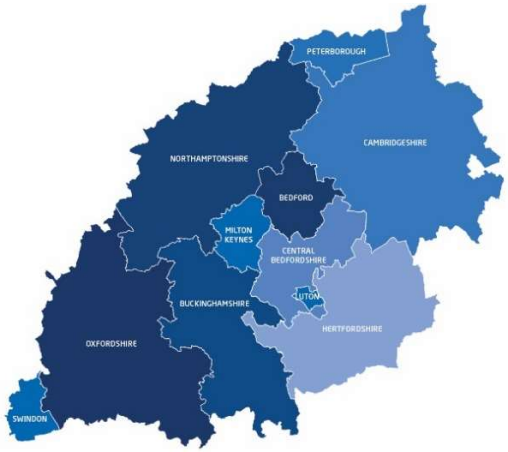
Now DCC has launched three online questionnaires, each one targeted to a specific group, to gauge the public's attitudes towards EV.

https://www.devonnewscentre.info/drivers-can-help-shape-devons-low-carbon-future-in-electric-vehicle-questionnaire/

ENGLAND'S ECONOMIC HEARTLAND

EEH launches bold Draft Transport Strategy to underpin green recovery

A bold new strategy enabling the region's transport system to underpin a green recovery from COVID-19 and support sustainable economic growth has been launched for consultation.



The Draft Transport Strategy has been produced by England's Economic Heartland, the Sub-national Transport Body covering Swindon across to Cambridgeshire, and Northamptonshire down to Hertfordshire. A global hub for science and technology businesses, the Heartland is a net contributor to the Treasury and a vital asset for the UK during its recovery from the pandemic and in the decades which follow.

http://www.englandseconomicheartland.com/latest-news/Pages/eeh-launches-draft-transport-strategy-underpinning-green-recovery.aspx

BATH AND NE SOMERSET

Healthier, greener town centres

Ambitious roadmaps to tackle the Climate Emergency and improve people's health by reducing vehicle use, promoting active travel and creating liveable communities are to be considered by Bath & North East Somerset Council.

The council has developed three complimentary strategies for low traffic neighbourhoods, residents' parking schemes and electric vehicle charging. The proposed strategies will go before the council's Climate Emergency & Sustainability Policy Development & Scrutiny Panel on Monday 20 July. If supported residents will be able to have their say during a public consultation later this summer.

https://newsroom.bathnes.gov.uk/news/council-unveils-roadmaps-cut-vehicle-use-improve-health-and-tackle-climate-emergency

WALES

Support for town centres in response to the coronavirus pandemic

The Welsh Government says it wants town centres to be great places to live, learn, work and play and to be sources of civic pride, confidence and wellbeing.

Llywodraeth Cymru
Welsh Government

At the moment, town centres are facing challenges in light of the coronavirus pandemic.

To support town centres up to £5.3m will be available during 2020-21 to fund adaptations to make them coronavirus safe.

This includes A new £15.4m local sustainable transport fund to make it safer and easier for people to get around their towns by providing better active and sustainable travel infrastructure.

https://gov.wales/written-statement-support-town-centres-response-coronavirus-pandemic

Covid-19 Timeline

FEBRUARY 2020	
04/02/2020	China Advice - All UK citizens advised to leave China
MARCH 2020	
10/03/2020	Italy Air Travel - Majority of flights to and from Italy suspended
12/03/2020	7-day Isolation - 7-day self-isolation for individuals presenting symptoms
16/03/2020	Social Distancing - Households to self-isolate for 14-days if symptoms present. Work from home where possible. Avoid pubs, clubs, theatres etc. 12-week isolation for elderly and vulnerable (commencing end of week)
17/03/2020	UK Foreign Travel 1 - Foreign Secretary advises against all non-essential travel overseas
21/03/2020	Schools Closed - Schools to remain closed until further notice (exception for key workers)
23/03/2020	**UK Lockdown** - Guidance provided for essential travel only. All non-essential businesses required to close. Public events banned
23/03/2020	UK Foreign Travel 2 - Foreign Secretary advises all British travellers to return to the UK
28/03/2020	PM's Letter - Prime Minister issues guidance letter to all UK households
APRIL 2020	
16/04/2020	NPCC Guidance - NPCC issues guidance clarifying reasonable excuses for leaving home
MAY 2020	
10/05/2020	Those who cannot work from home are encouraged to return to work. Avoid public transport where possible and instead walk or cycle.
11/05/2020	Relaxation Document - The UK government publishes a 50-page document setting out further details of the phases for lifting the lockdown restrictions.
13/05/2020	Individuals can undertake unlimited exercise (and can travel to do so). Individuals can meet someone from another household providing it is on a one-to-one basis. All garden centres are allowed to open. House moves and viewings are now permitted.
18/05/2020	Rail Operators - Rail operators begin running more train services.
JUNE 2020	
01/06/2020	Schools re-open for some pupils. Groups of up to six people from different households allowed to meet outside
15/06/2020	All non-essential retailers and zoos in England reopened
19/06/2020	UK's COVID-19 Alert Level is lowered from Level 4 (severe risk, high transmission) to Level 3 (substantial risk, general circulation)
JULY 2020	
04/07/2020	Further relaxation of social distancing and reopening of pubs, restaurants, hotels and hairdressers on 4th July

Contact us

All authorities are encouraged to share best practice for inclusion in this report. Authorities not yet contributing but who still have, in particular, cycling data to share are encouraged to do so.

Please contact info@ttf.uk.net

Thank you to…

All local authorities and their consultancies and contractors who have shared data with the Transport Technology Forum to enable this report to be collated, and those in the wider industry who also provided data directly. The TTF, which is sponsored by the Department for Transport and Innovate UK is grateful to ITS (UK) and its members for their swift support in recruiting Local Authorities to participate.

This report provides regularly updated intelligence and findings from the Transport Technology Forum Covid-19 Local Authority Travel Data Project. This project is collecting and analysing traffic and travel data from local highway authorities across England to present a national picture of travel patterns and behaviour, and local authority responses to the Covid-19 crisis.