

Covid-19

Local authority travel and transport data

Weekly digest



Week Commencing

6th July 2020

Local authority travel and transport data weekly digest

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 29th June saw a further increase in flows of approximately 2.5 percentage points compared to the previous week, bringing the overall traffic count average for the week to a reduction of 21% compared to the baseline (first week in February 2020).
- It is too early to identify if the re-opening of pubs, restaurants and other attractions and services on the 4th July has had an impact on traffic volumes, however Sunday 5th of July experienced traffic levels only 16% below baseline. This is the highest daily traffic level since lockdown began and an 8 percentage point increase in traffic volumes compared to the previous Sunday.
- The week commencing 29th of June observed average hourly traffic levels that were the highest for 23 out of 24 hours of the day compared to all weeks since lockdown began (Figure 4). Most notable was the significant increase in AM and PM peak time traffic levels.
- Analysis of vehicle classification data (where available) shows that motorcycle volumes have seen large increases on weekends suggesting increased recreational travel. Bus and coach volumes however show the largest volume decreases on Sundays and Mondays.
- HGV/LGV volumes continue to demonstrate a return to baseline volumes.
- Figure 9 shows traffic levels in Bournemouth on the 25th June, declared a major incident due to the large numbers of beach goers forgoing social distancing guidelines, and the increase in road traffic that day and in the weeks previous.

Cycling

- The week commencing 29th June experienced an overall decrease in average cycling volumes of 6.5 percentage points in comparison to the previous week. Weekend cycling volumes however increased compared to the previous week by 45 and 11 percentage points respectively.
- While the overall cycling trend since the start of June has been a week on week decrease in both weekend and weekday cycling levels, volumes continue to remain approximately 50% above baseline levels (Figure 6).
- Met Office data continues to reveal the correlation between wet weather and significant troughs in cycling volumes (Figure 7). It is notable that weather related cycling decreases appear to have an impact for multiple days, even if the following days do not experience the same levels of precipitation.
- Figure 8 demonstrates the continued decrease in cycling levels across all hours of the day with the week commencing the 29th June observing the lowest between the peaks cycling levels since the first two weeks after lockdown in March (w/c 23/03 and 30/03).

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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
29/06/2020	📉 -29.10%	📉 -21.92%	📉 -18.25%	📉 -20.66%	📉 -20.66%	📉 -21.79%	📉 -16.91%	-21.03%
22/06/2020	📉 -24.93%	📉 -24.77%	📉 -21.51%	📉 -26.72%	📉 -20.57%	📉 -25.52%	📉 -22.98%	-23.68%
15/06/2020	📉 -27.50%	📉 -30.99%	📉 -29.86%	📉 -34.38%	📉 -27.45%	📉 -26.03%	📉 -26.12%	-29.21%
08/06/2020	📉 -29.61%	📉 -28.13%	📉 -31.40%	📉 -33.13%	📉 -34.91%	📉 -34.04%	📉 -32.16%	-32.07%
01/06/2020	📉 -28.21%	📉 -27.76%	📉 -31.73%	📉 -33.50%	📉 -30.45%	📉 -36.42%	📉 -34.36%	-31.35%
25/05/2020	📉 -50.90%	📉 -33.31%	📉 -32.78%	📉 -32.74%	📉 -29.29%	📉 -30.49%	📉 -26.51%	-32.96%
18/05/2020	📉 -39.42%	📉 -38.89%	📉 -37.21%	📉 -38.30%	📉 -36.59%	📉 -38.03%	📉 -37.59%	-38.06%
Total	-30.56%	-31.42%	-29.96%	-31.78%	-30.24%	-31.27%	-31.12%	-30.75%

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
29/06/2020	📈 20.60%	📈 29.21%	📈 43.48%	📈 46.93%	📈 17.93%	📈 71.11%	📈 125.00%	52.11%
22/06/2020	📈 43.45%	📈 100.00%	📈 60.23%	📈 29.27%	📈 61.67%	📈 25.93%	📈 116.07%	58.54%
15/06/2020	📈 78.04%	📈 61.29%	📈 29.11%	📉 -25.93%	📈 15.15%	📈 155.59%	📈 139.94%	51.43%
08/06/2020	📈 104.44%	📈 135.42%	📈 22.73%	📈 18.87%	📈 1.76%	📈 177.78%	📈 175.00%	76.18%
01/06/2020	📈 81.90%	📈 88.21%	📉 -7.08%	📈 47.30%	📈 47.23%	📈 70.27%	📈 205.71%	65.45%
25/05/2020	📈 97.72%	📈 91.99%	📈 69.93%	📈 81.20%	📈 88.76%	📈 200.00%	📈 260.00%	132.38%
18/05/2020	📈 64.57%	📈 93.59%	📈 75.04%	📈 74.39%	📈 31.52%	📈 83.95%	📈 272.97%	89.87%
Total	10.75%	10.26%	0.00%	2.95%	10.31%	50.00%	69.39%	16.31%

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

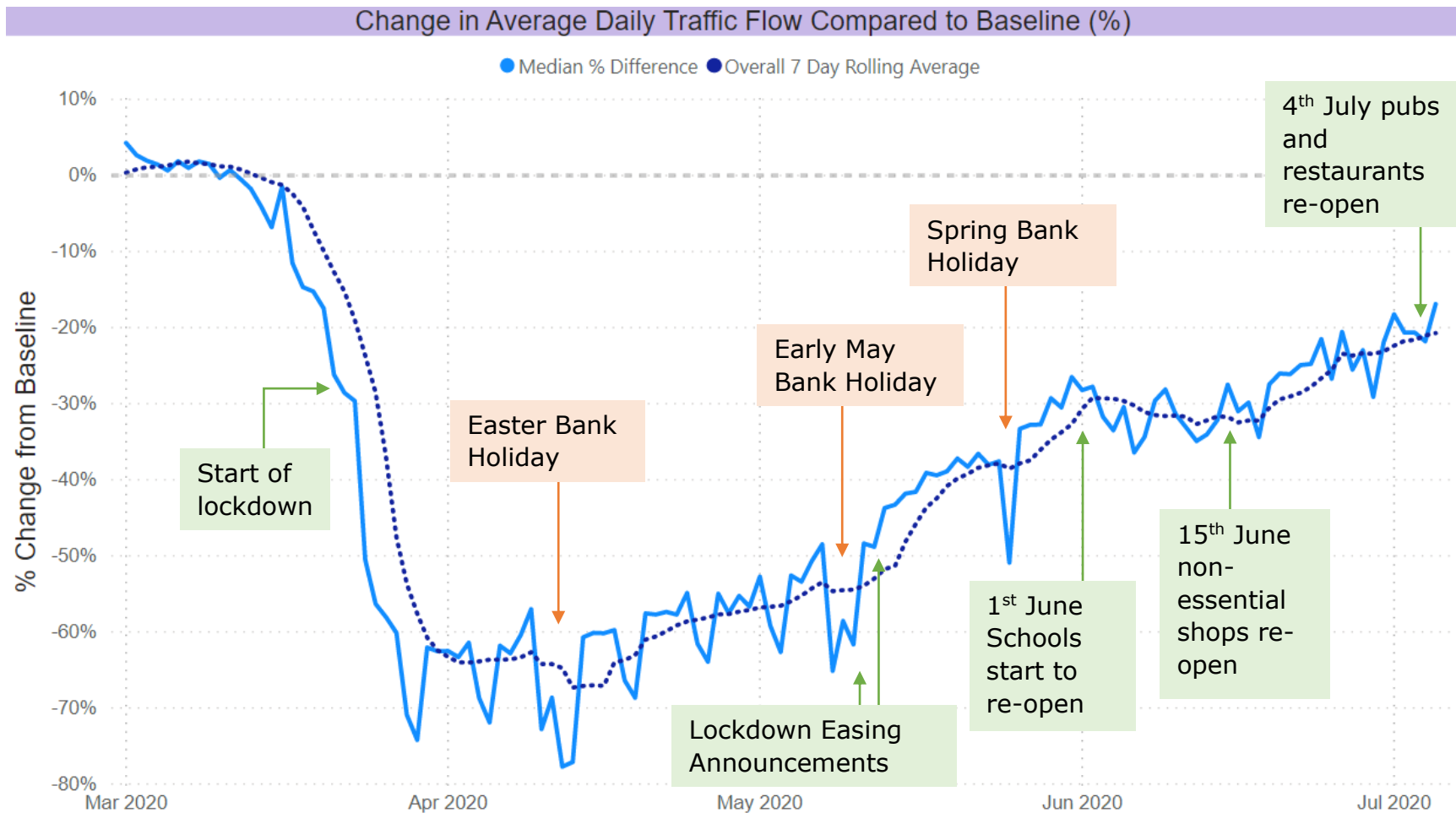


Figure 3: Change in average daily traffic volumes since 01st March across all sources compared to the baseline (first week of February 2020)

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Figure 4 – Hourly traffic flow comparison per week

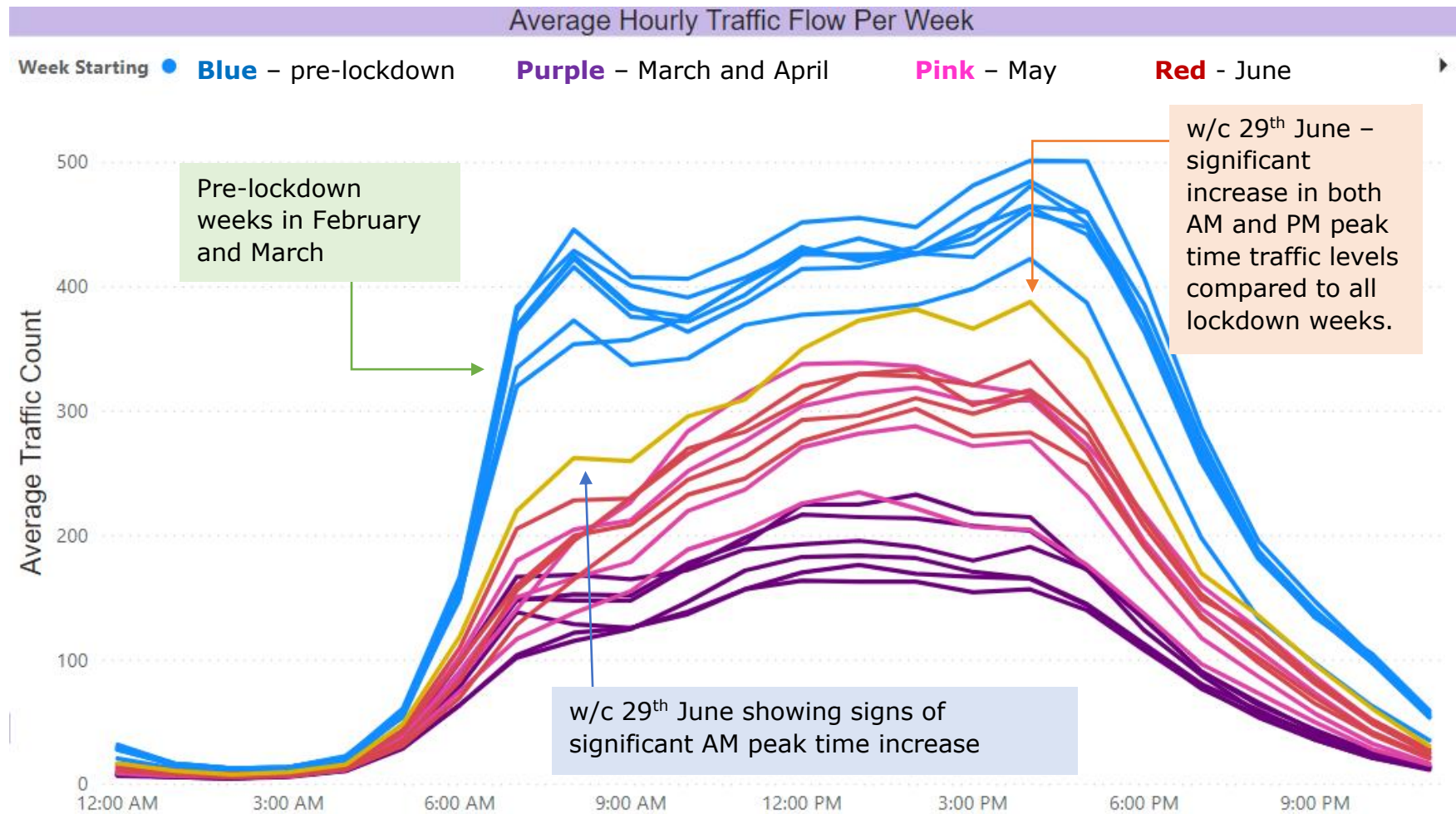


Figure 4: Change in average hourly traffic volumes per week since 1st full week in February across all sources with latest week highlighted.

Figure 5 – Change in journeys by vehicle class

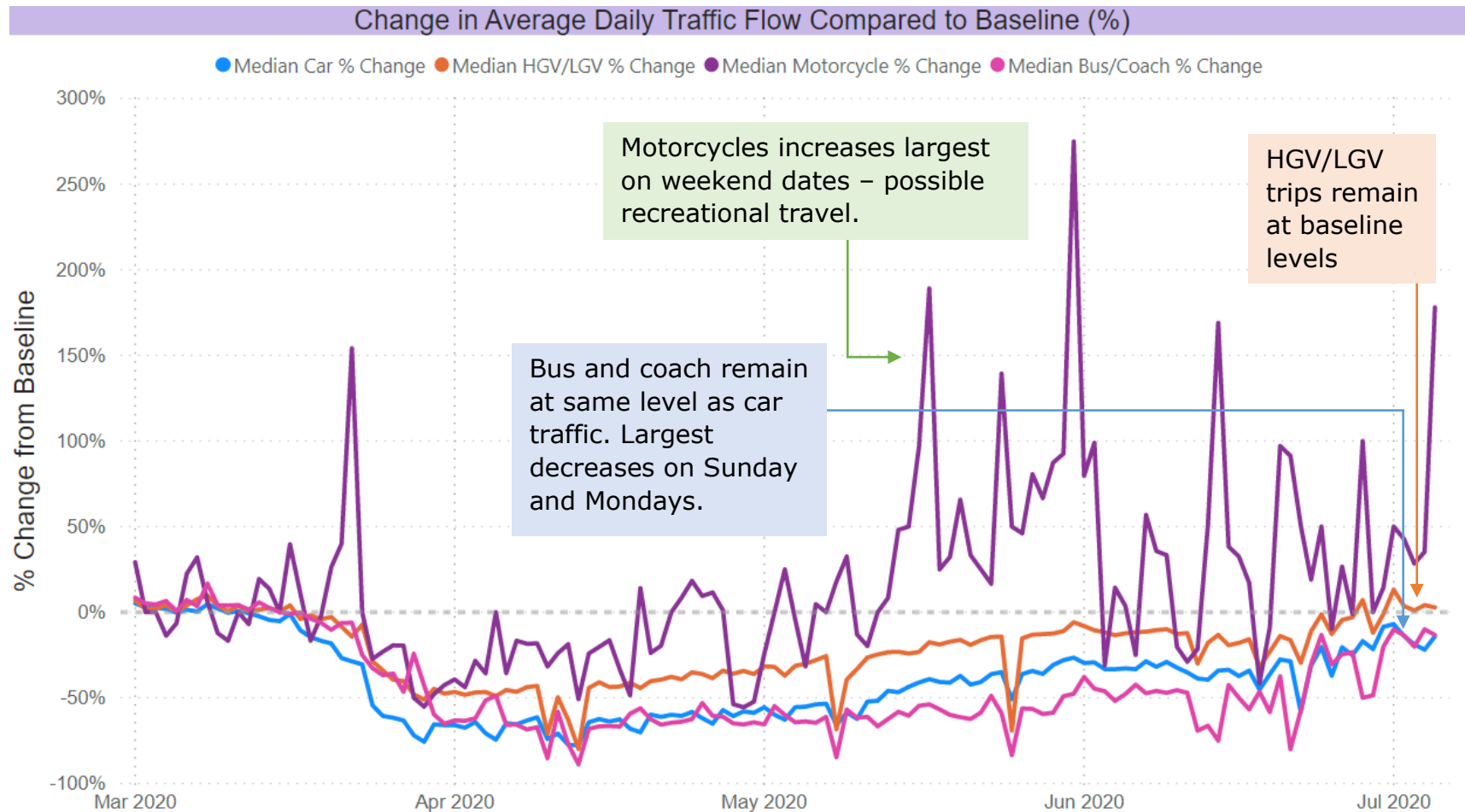


Figure 5: Change in average vehicle trips by vehicles class where available in the source dataset (note this data is measured at sensor level so sources with large numbers of sensors will have a greater contribution to the average count)

Figure 6 – Daily average cycling change from baseline

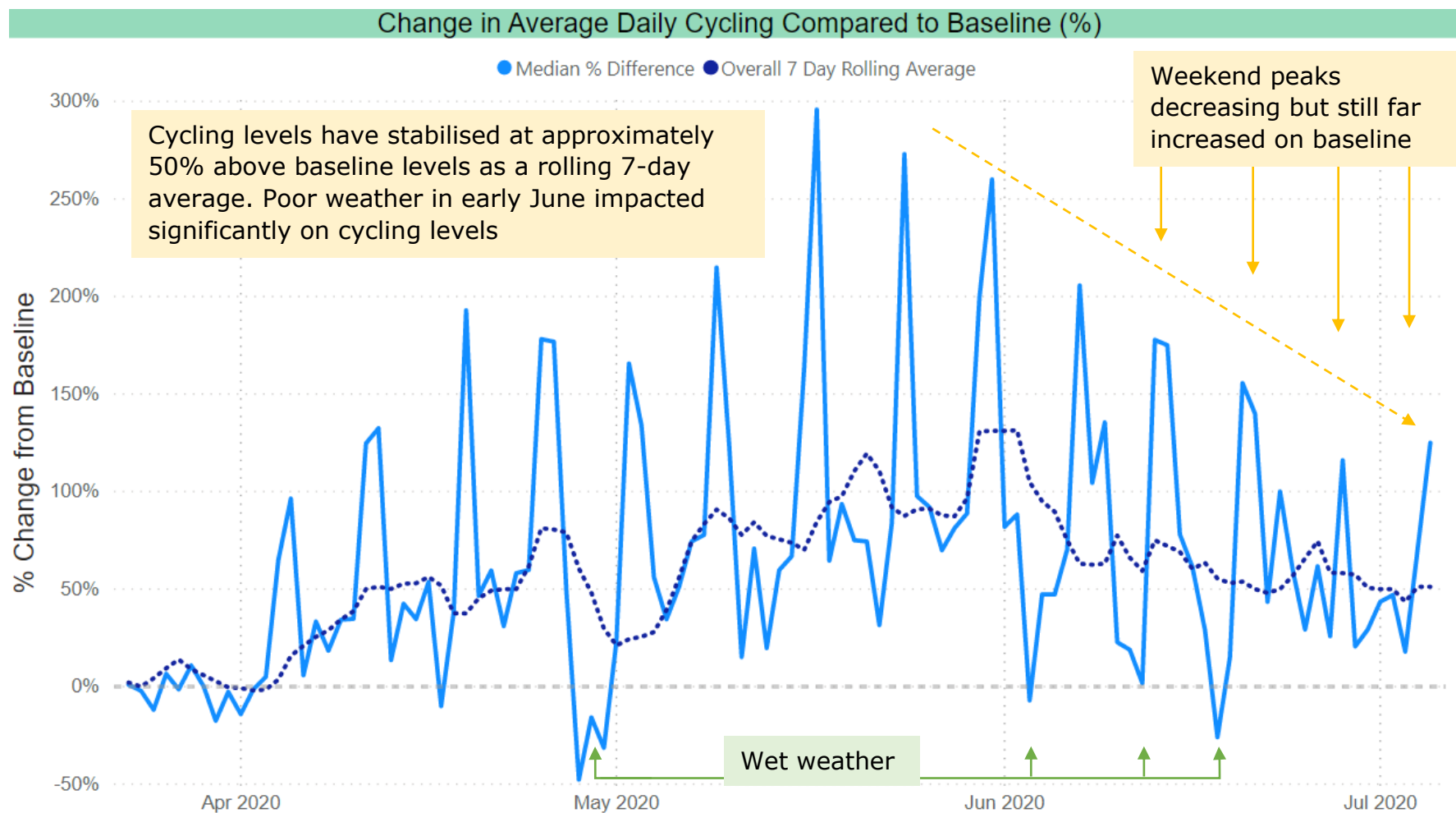


Figure 6: Change in average daily cycling volumes since 23rd March (start of lockdown) across all sources compared to the baseline (first week of February 2020)

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

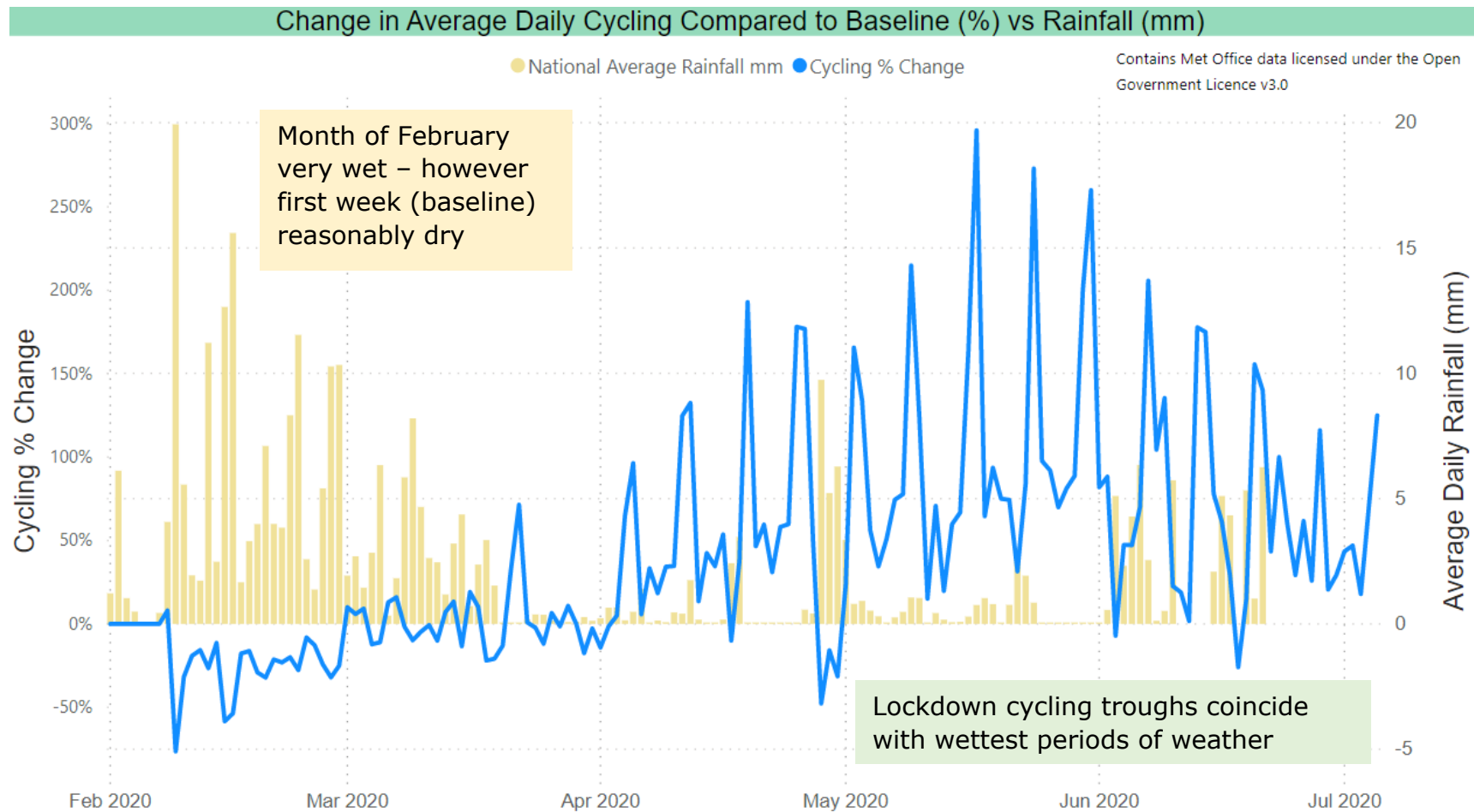


Figure 7: Change in daily cycling volumes compared to average national rainfall (mm)

Figure 8 – Hourly cycling comparison per week

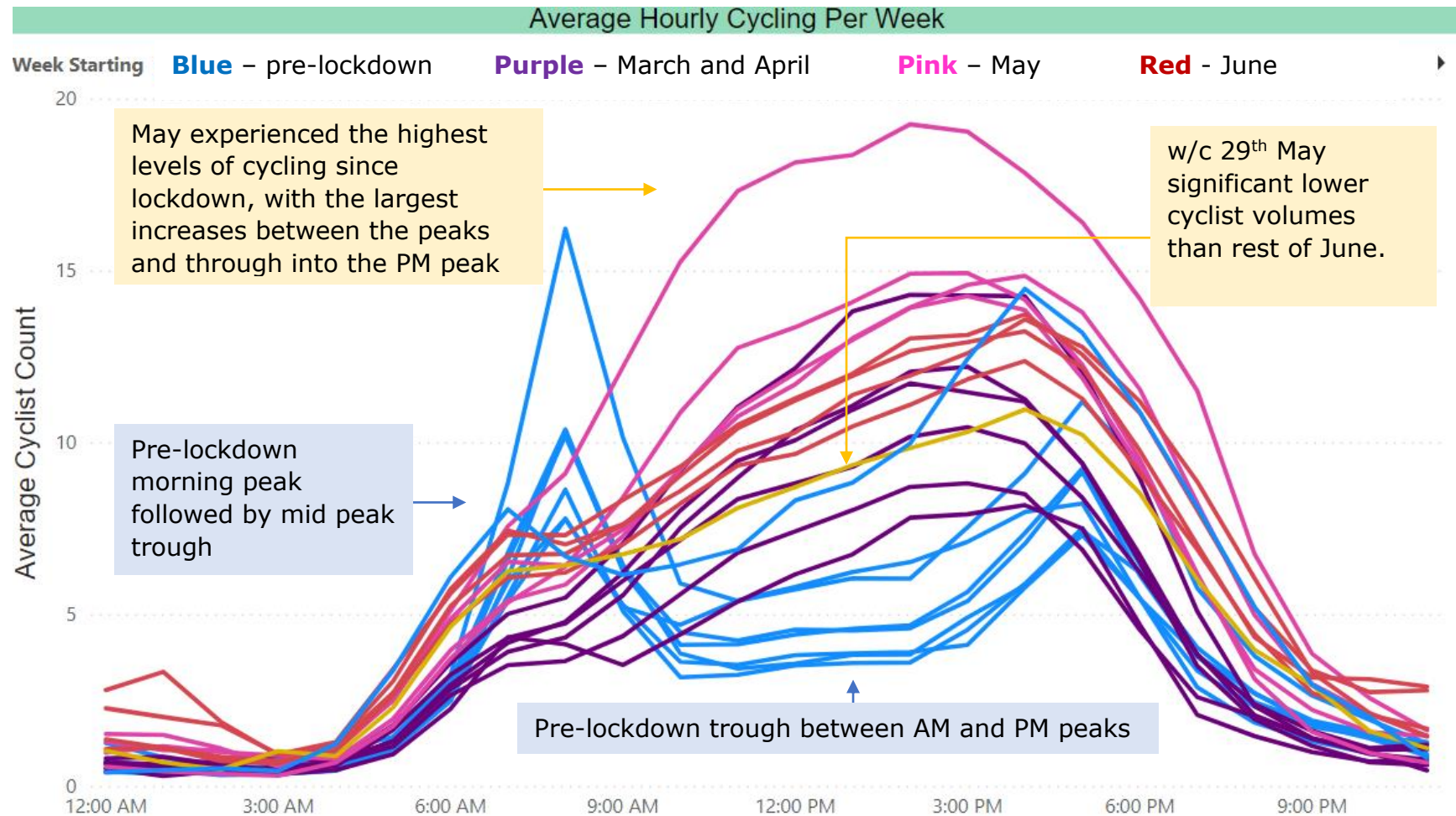


Figure 8: Change in average (mean) hourly cycling volumes per week since 1st full week of February across all sources (in the previous issue this incorrectly showed the sum average)

Figure 9 – Bournemouth traffic change compared to baseline

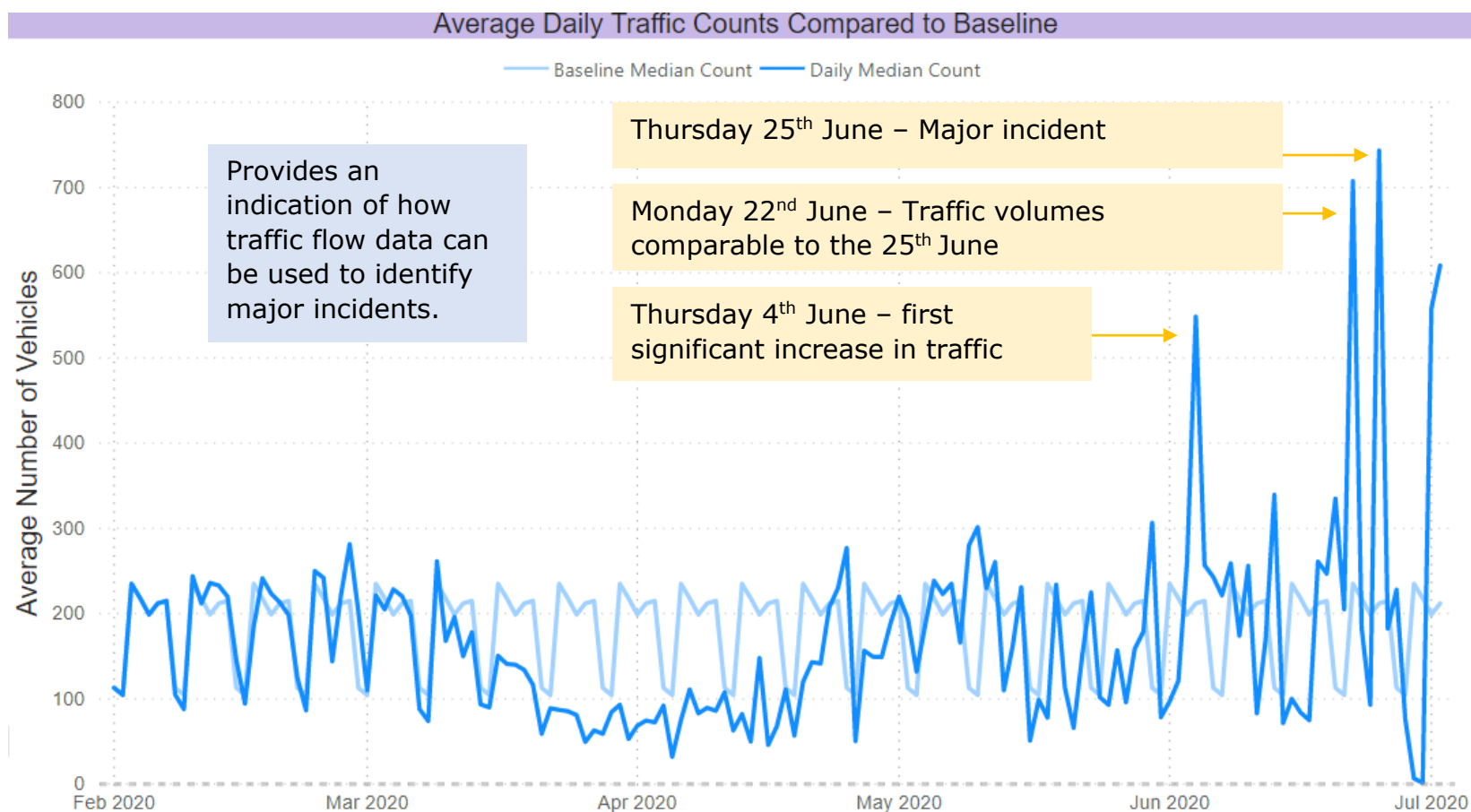


Figure 9: Change in traffic in Bournemouth since 1st February 2020

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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 as we add new datasets, 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 highlight how authorities are getting the opinions of residents before moving ahead with schemes, new walking and cycling projects and a major public-private deal to deliver a 5G solution to play a key role in a region's post coronavirus economic recovery plan.

BRENT

Nominate streets in need of walking and cycling improvements

Residents are being called on to nominate potential locations for wider pavements, cycle lanes, and other measures to help make active travel easier and safer in Brent.



This London Climate Action Week, Brent Council launched an interactive website to record these suggestions. On the site, local people can drop pins on a map where they would like to see measures introduced. They will then be asked to answer a few questions about the location and how they think it could be improved for pedestrians and cyclists.

Earlier in June, the Council set out its ambitions for active travel and bid for funds to improve walking and cycling infrastructure across the borough.

Once confirmed, the money from the Department for Transport (DfT) and TfL will be used to pay for a host of measures, including wider pavements, low-traffic neighbourhoods, and pop-up cycle lanes.

<https://www.brent.gov.uk/council-news/july-2020/nominate-streets-in-need-of-walking-and-cycling-improvements/>

WEST MIDLANDS

West Midlands awarded £3.85 million to get the region cycling and walking

Plans for pop-up cycle lanes, wider pavements and many other measures to encourage more cycling and walking across the West Midlands have been given overwhelming backing from Government.



The Department for Transport (DfT) has awarded Transport for West Midlands (TfWM) and its partner councils a £3.85 million grant to implement these fast-track measures over the next two months.

A list of more than 45 projects includes a pop-up cycle lane linking Coventry city centre to the Canal Basin, a Birmingham city centre cycle lane connecting the A38 and A34 blue routes, and road closures to improve pedestrian and cycle safety in Wolverhampton city centre.

<https://www.tfwm.org.uk/news/west-midlands-awarded-385-million-to-get-the-region-cycling-and-walking/>

Agreement with Vodafone to develop transport of the future

Cars which find their own parking spaces and trams which report their own faults are just some of the futuristic transport systems being developed under a new agreement.



The Memorandum of Understanding (MOU) will see Transport for West Midlands (TfWM), West Midlands 5G (WM5G) and Vodafone work together to improve the way we travel around the region.

5G innovation will also play a key role in the region's post coronavirus economic recovery plan, driving investment and delivering new jobs. The partnership is already in discussion regarding projects where 5G can potentially improve transport and support congestion and emissions reductions.

<https://www.tfwm.org.uk/news/agreement-with-vodafone-to-develop-transport-of-the-future/>

LIVERPOOL

£22M Upgrade to historic waterfront road to begin

Work is beginning on a radical eco-friendly redesign of one of Liverpool's most famous roads.



The Strand – which runs past the historic Royal Albert Docks, Liverpool ONE and Three Graces and hosted the finale to Liverpool FC's Champions League homecoming last June – is to undergo a £22m upgrade in a bid to reduce congestion and improve safety and air quality.

A key element of the scheme is to create a permanent segregated cycle lane to connect the south of Liverpool to the north, allowing cyclists to eventually ride the full length of the Mersey from Otterspool to Southport. Plans are also being developed to ensure the city's new 65-mile pop-up cycle lane network is connected.

<https://www.liverpoolbidcompany.com/22m-upgrade-to-historic-waterfront-road-to-begin/>

NEWPORT, WALES

New safe route for Lliswerry

A scheme to create a safe and pleasant route for pedestrians and cyclists through a former brownfield site is set to go ahead.

Approval was given for the active travel project through Monkey Island in Lliswerry, part of Newport City Council's work to improve the city's cycling and walking network.



It will also provide a safe route to school for children living in the Lysaght Village development.

<http://www.newport.gov.uk/en/Council-Democracy/News/articles/2020/July/New-safe-route-for-Lliswerry.aspx>

SCOTLAND

Healthier, greener town centres

Diverse views from urban, town, rural and island communities must be heard if town centres are to be revitalised and renewed in the wake of the Coronavirus (COVID-19) pandemic, according to Communities Secretary Aileen Campbell.



Experts in town planning, public health, transport, and business will take on board views of local communities to build on the progress of the Scottish Government's 2013 Town Centre Action Plan.

Professor Leigh Sparks of the University of Stirling will chair the expert group alongside members from COSLA, the Royal Town Planning Institute, South of Scotland Enterprise, the Carnegie Trust, the Federation of Small Businesses, Public Health Scotland, Sustrans, Inclusion Scotland and the Scottish Government.

<https://www.gov.scot/news/healthier-greener-town-centres/>

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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 4 th 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.