

Covid-19

Local authority travel and transport data

Weekly digest



Week Commencing

3rd August 2020

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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 27th July saw a small increase in flows (0.5 percentage points) compared to the previous week, bringing the overall traffic count average for the week to a reduction of 13% compared to the baseline (first week in February 2020).
- Despite the reopening of gyms, indoor fitness centres and other services across England on Saturday 25th July, there wasn't any noticeable changes compared to the previous week, except for the 29th July which saw a 7% increase compared to the previous Wednesday.
- Hourly traffic volumes show interpeak levels exceeding pre-lockdown levels, which may be driven by the start of the August holidays. PM peaks returning back to pre-lockdown levels, and although the AM peak is still below pre-lockdown traffic flows, it is higher than the previous week.
- Analysis of vehicle classification data (where available) shows that both car and bus/coach vehicle volumes (not passenger volumes) have returned to baseline levels during the w/c 27th July, while HGV/LGV volumes continue to rise compared to the previous week.

Cycling

- Cycling flows week commencing 27th July show a 77% increased on baseline levels, an increase of approximately 8 percentage points compared to the previous week.
- Monday 27th July experienced a 0.5% drop on baseline cycling volumes, approximately 71 percentage points less than the previous Monday. It is suspected that this was due to poor weather although MET Office data does not exist to support this.
- Cycling volumes continue to increase week to week on both weekdays and weekends, however, cycling levels are significantly reduced compared to the lockdown period of May (Figure 6). This might suggest that increases in cycling reflected in June and July data reflect normal seasonality as opposed to the abnormal lockdown caused cycling levels of April and May.
- Figure 7 shows that for week commencing 27th July, AM peak cycling volumes are at some of the highest volumes since lockdown began, whereas between the peaks and PM peak cycling volumes are significantly reduced compared to weeks in April and May. This shows a shift in patterns with a sustained increase in AM peak cycling and a gradual reduction in between the peaks and PM peak cycling compared to April and May.

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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
27/07/2020	📉 -17.40%	📉 -13.53%	📉 -8.31%	📉 -11.50%	📉 -15.92%	📉 -14.39%	📉 -12.62%	-13.04%
20/07/2020	📉 -14.51%	📉 -13.01%	📉 -15.34%	📉 -16.92%	📉 -13.29%	📉 -12.93%	📉 -8.29%	-13.56%
13/07/2020	📉 -13.50%	📉 -15.63%	📉 -18.42%	📉 -16.52%	📉 -15.04%	📉 -15.75%	📉 -16.56%	-15.69%
06/07/2020	📉 -20.47%	📉 -16.38%	📉 -18.22%	📉 -19.96%	📉 -18.65%	📉 -17.16%	📉 -16.67%	-17.98%
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%
Total	-27.41%	-25.85%	-26.06%	-27.02%	-26.98%	-26.86%	-26.85%	-26.69%

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
27/07/2020	📉 -0.58%	📈 74.26%	📈 65.06%	📈 86.82%	📈 53.06%	📈 118.92%	📈 159.80%	77.14%
20/07/2020	📈 70.79%	📈 81.88%	📈 64.44%	📈 53.66%	📈 53.50%	📈 10.34%	📈 171.43%	68.94%
13/07/2020	📈 52.44%	📈 42.65%	📈 34.74%	📈 50.88%	📈 83.33%	📈 139.61%	📈 110.31%	83.72%
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%
Total	16.47%	16.02%	3.16%	8.11%	16.46%	60.33%	86.36%	25.00%

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

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Figure 3 – Daily average traffic flow change from baseline

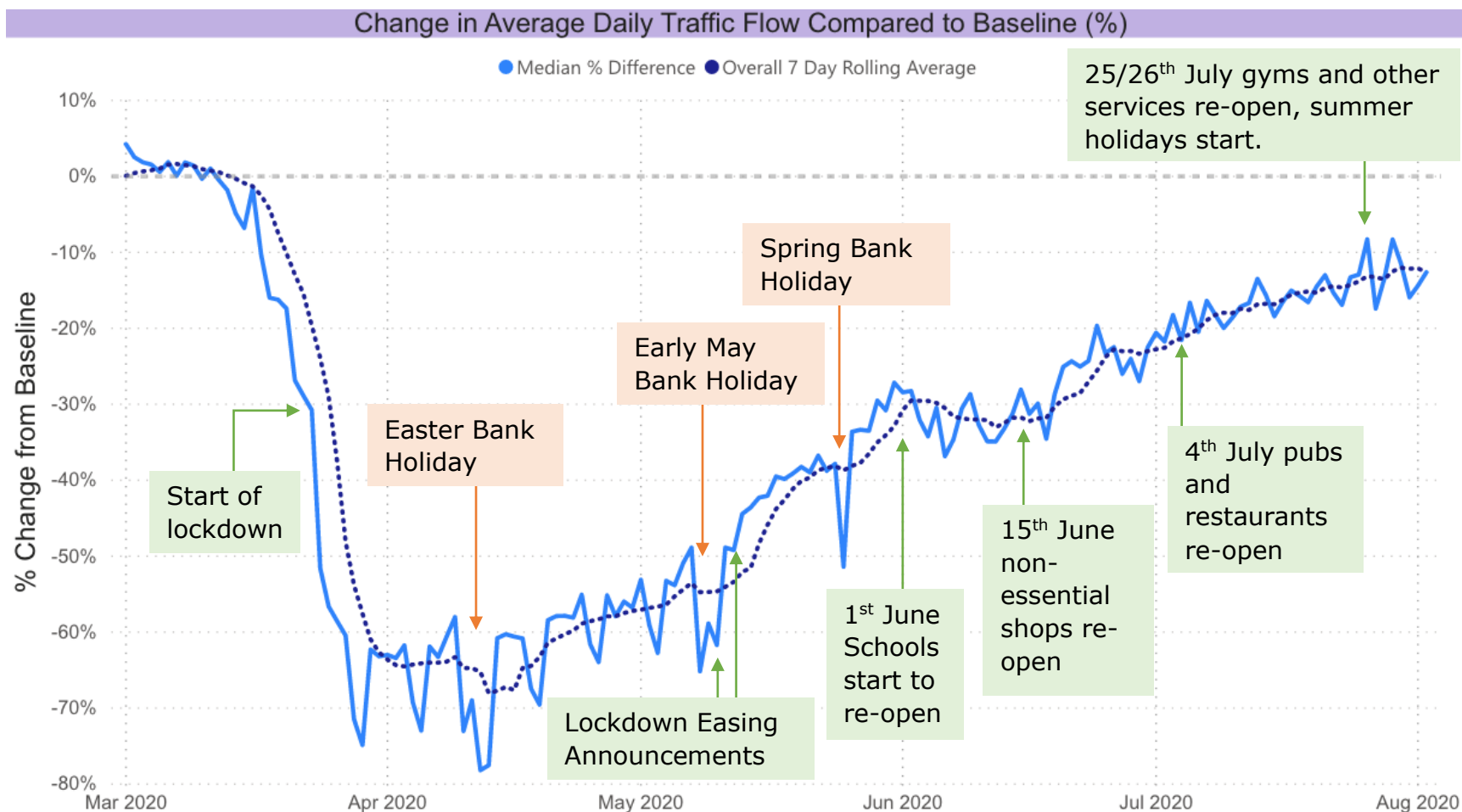


Figure 3: Change in average daily traffic volumes since 01st March across all sources compared to the baseline (first week of February 2020)

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Figure 4 – Hourly traffic flow comparison per week

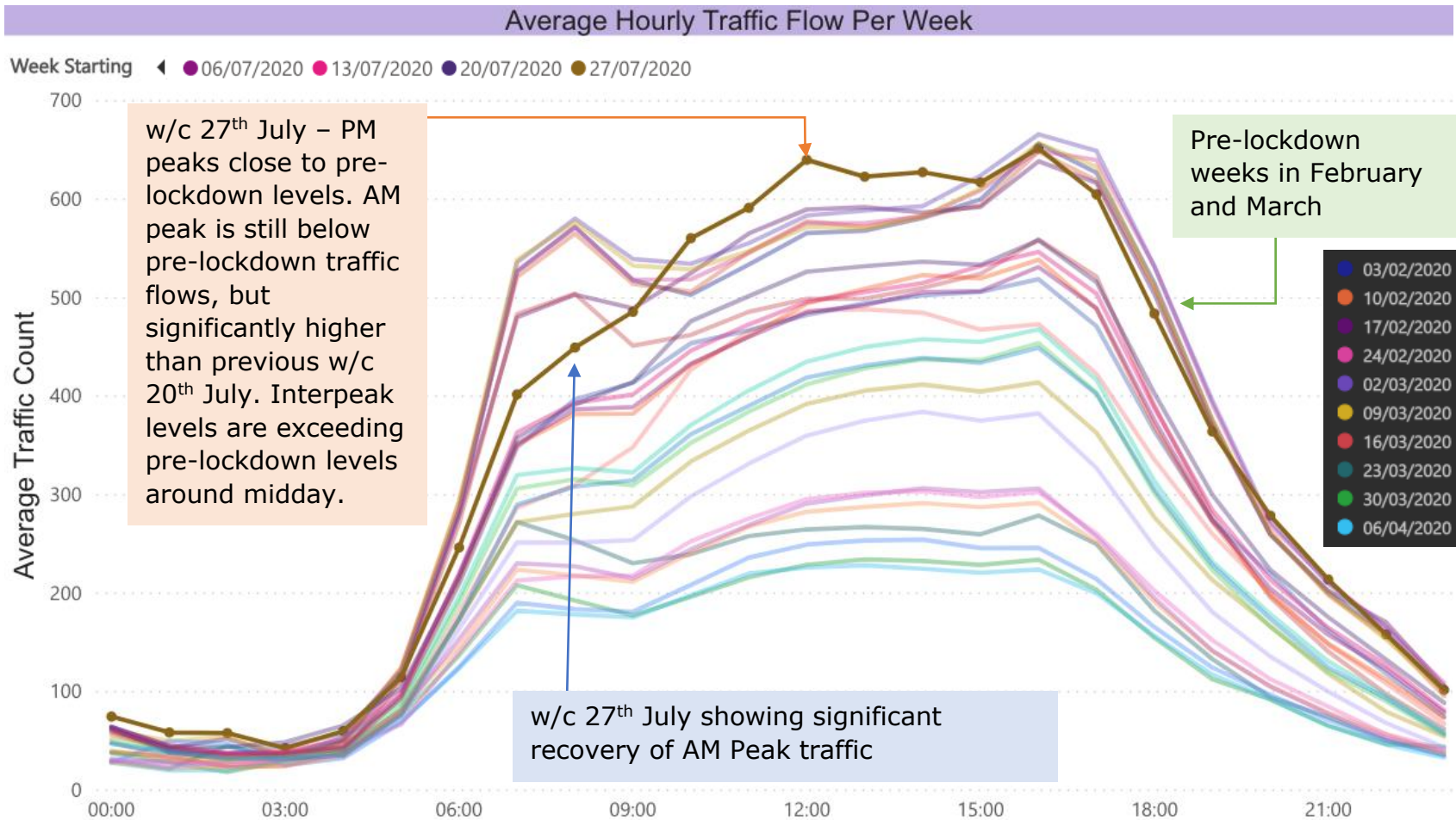


Figure 4: Change in average hourly traffic volumes per week since 1st full week in February across all sources with latest week highlighted.

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Figure 5 – Change in journeys by vehicle class

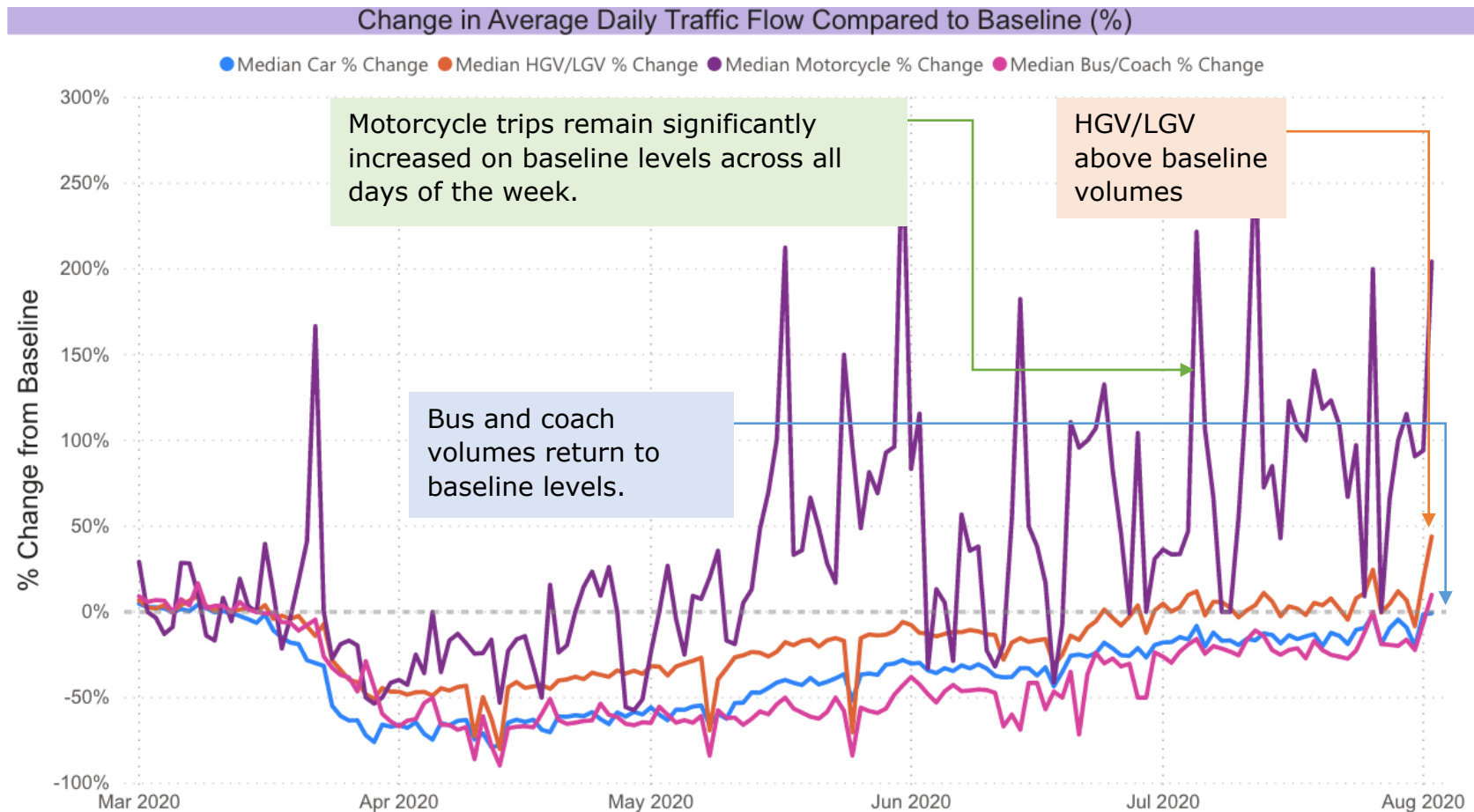


Figure 5: Change in average vehicle trips by vehicles class where available in the source dataset (note this data is measured at sensor level so sources with large numbers of sensors will have a greater contribution to the average count)

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Figure 6 – Daily average cycling change from baseline

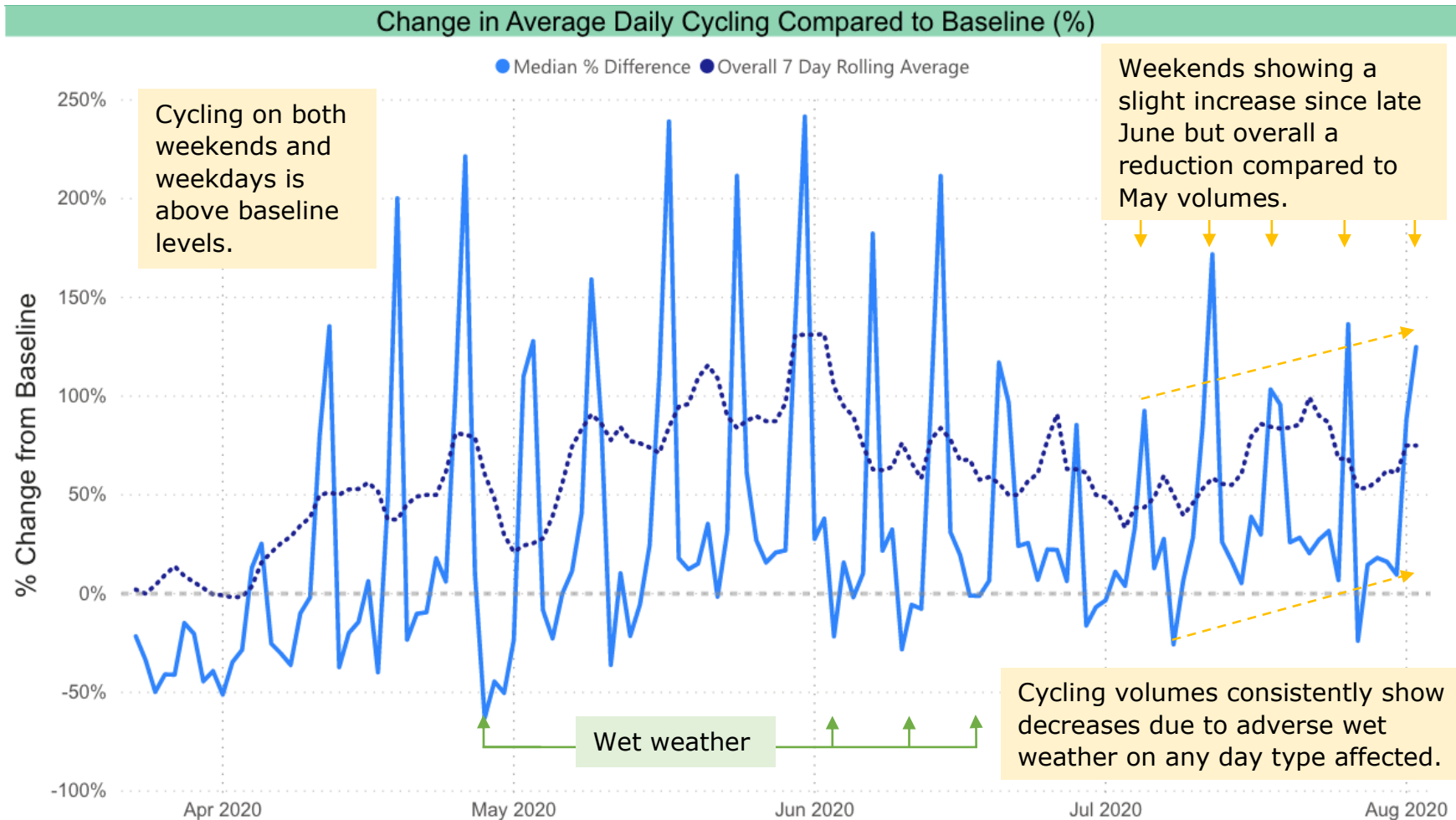


Figure 6: Change in average daily cycling volumes since 01st March (start of lockdown) across all sources compared to the baseline (first week of February 2020)

Figure 7 – Hourly cycling comparison per week

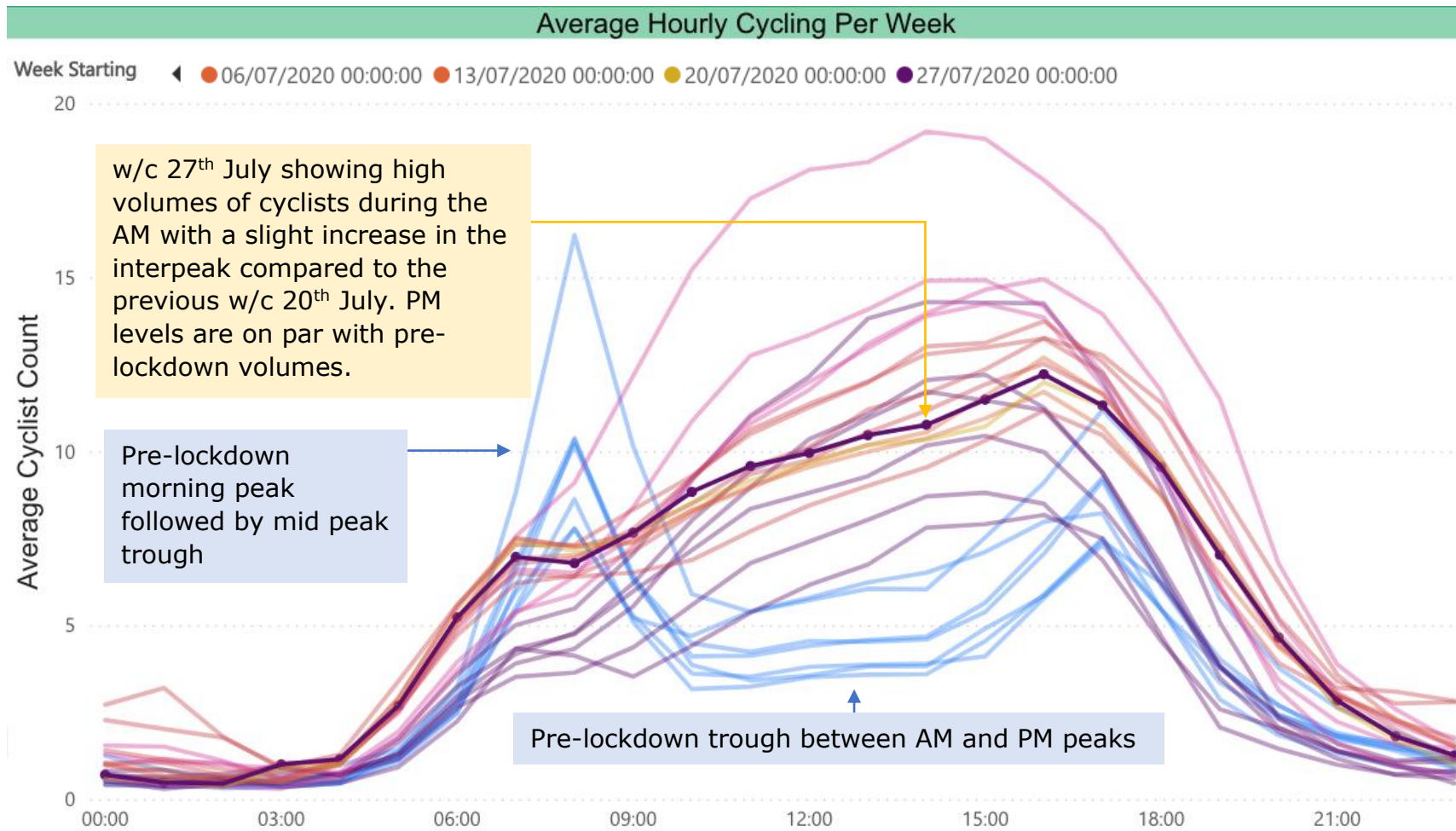


Figure 7: Change in average (mean) hourly cycling volumes per week since 1st full week of February across all sources

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 7 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 details of innovations by local authorities, to give readers ideas for 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 some ideas on how to make active travel changes seen during the Covid-19 crisis permanent, a new data service to help encourage cycling and details of grant funding and its allocation.

ASSOCIATION OF DIRECTORS OF ENVIRONMENT, ECONOMY, PLANNING AND TRANSPORT

ADEPT policy position: Active Travel

Investment in active travel must enable structural and behavioural changes to become a permanent part of everyday life, according to the Association of Directors of Environment, Economy, Planning and Transport (ADEPT).



Following the Government's £250m emergency active travel fund back in May, local authorities across England have been installing temporary infrastructure to enable more walking and cycling, ADEPT has now launched its key policy position.

Its paper argues that to truly usher in the Government's 'new era' and ensure active travel is here to stay, walking and cycling must be designed into the travel network to maintain the changes that Covid-19 has brought about.

<https://www.adeptnet.org.uk/system/files/documents/Active%20Travel%20Policy%20Position%20July%202020.pdf>

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OXFORDSHIRE

Oxbike: Explore the current transport hotspots around Oxfordshire

Oxbike.co.uk is an experimental platform where anyone can view cycling data collected for Oxfordshire County Council and partners. It is an output from the Smart Cycle Detection project, which looks to deploy new technology to better provide accurate cycling and walking data for users and insight into planning policy.

They hope this will show how easy it is to get around the city by cycling, how quick it can be and encourage people to travel by bike or “Park & Pedal”.



By presenting this data, Oxfordshire County Council seeks to share and open information about cyclists in Oxford. Data sources and provision of this service are experimental and noncontinuous. Due to the experimental nature of this platform and near-live data sources, Oxfordshire County Council cannot guarantee the accuracy of

information provided. As new data sources and technology become available, they will be included on oxbike.co.uk wherever possible so that the public may unlock the potential of emerging smart city technology.

<https://oxbike.co.uk/>

TRANSPORT FOR GREATER MANCHESTER

£3.1 million schemes confirmed to enable thousands more journeys on foot or by bike through first phase of emergency active travel measures

The Greater Manchester Combined Authority (GMCA) has allocated the first phase of its emergency active travel grant set to prioritise the rapid implementation of emergency protected routes. Schemes across GM districts will provide safe travel options for people without cars and to keep public transport free for those that need it most as retail, hospitality and workplaces start to re-open.



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Following submission of a funding bid developed by Greater Manchester districts, the DfT has responded with confirmation that an initial £3.1m will be provided to deliver the first phase. In recognition of the ambition shown in the region's bid for tranche 1 schemes, Greater Manchester received 100% of its allocation.

Councils have worked alongside the GMCA and TfGM to decide which routes will form part of tranche one and are expected to be delivered by October. More interventions will be delivered across the districts as further funding is confirmed.

<https://news.tfgm.com/news/gbp-3-1-million-schemes-confirmed-to-enable-thousands-more-journeys-on-foot-or-by-bike-through-first-phase-of-emergency-active-travel-measures>

WEST YORKSHIRE

West Yorkshire Combined Authority secures funding to make ambitious cycling and walking plans a reality

The West Yorkshire Combined Authority has been awarded £2.5 million from the Department for Transport's Emergency Active Travel Fund to deliver the first phase of ambitious proposals to create more space for cycling and walking, while easing the pressure on public transport and relieving congestion.

In partnership with local authorities, the Combined Authority will deliver a wide-ranging programme of trial cycling and walking measures, with schemes starting in the coming weeks.

Trial, protected cycle lanes will be created along key routes into city and town centres.



<https://www.westyorks-ca.gov.uk/all-news-and-blogs/west-yorkshire-combined-authority-secures-funding-to-make-ambitious-cycling-and-walking-plans-a-reality/>

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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
25/07/2020	Gyms and other indoor services reopen in England

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.