

Covid-19

Local authority travel and transport data

Weekly digest



Week Commencing

17th August 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 10th August saw a very slight decrease in flows (0.84 percentage points) compared to the previous week, bringing the overall traffic count average for the week to a reduction of 12.6% compared to the baseline (first week in February 2020).
- Wednesday 12th August and Sunday 16th August saw 2.5% and 4% decreases respectively compared to the previous week, while the rest of the week showed no significant changes.
- Hourly traffic volumes show a reduction in interpeak levels when compared to the previous week, meaning they are once again below pre-lockdown levels. Both AM and PM traffic levels have shown minor decreases since the previous week, with AM peaks still below pre-lockdown levels and PM peaks on par with traffic peaks in June and July.
- Analysis of vehicle classification data (Figure 5) shows that motorcycle use has decreased significantly when compared to the previous week commencing 3rd August, possibly due to the wet weather. HGV/LGV and bus/coach traffic levels are still above the pre-lockdown baseline.

Cycling

- Cycling flows for the week commencing 10th August show a 55% increase on baseline levels, a significant decrease of 24% compared to the previous week, most likely due to a combination of extremely hot temperatures early in the week followed by rain and thunderstorms that occurred from Thursday onwards.
- The most significant changes were seen on the weekend, with a 90% and 87% decrease on Saturday and Sunday compared to the previous week respectively. Wednesday remained the most stable, with only a 6% decrease, while the rest of the week saw decreases of between 13 and 33 percentage points.
- Cycling volumes overall are still well above pre-lockdown levels, however, cycling levels are significantly reduced compared to the lockdown period of May (Figure 6). As suggested in previous reports, increases in cycling reflected in June and July data may reflect normal seasonality as opposed to what occurred during lockdown in April and May.
- For the week commencing 10th August, AM and PM peak cycling levels are slightly reduced when compared to the previous week, however, remain on par with June and July levels. Interpeak cycling has shown a significant decrease compared to the previous week but is still well above pre-lockdown levels.

Local authority travel and transport data weekly digest

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
10/08/2020	↓ -11.37%	↓ -11.39%	↓ -11.42%	↓ -14.52%	↓ -14.80%	↓ -13.65%	↓ -14.33%	-12.67%
03/08/2020	↓ -10.81%	↓ -11.33%	↓ -8.89%	↓ -14.44%	↓ -14.43%	↓ -12.56%	↓ -10.50%	-11.83%
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%
Total	-25.87%	-24.00%	-23.82%	-25.42%	-25.24%	-25.61%	-25.37%	-25.05%

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			
10/08/2020	↑ 59.65%	↑ 67.69%	↗ 38.98%	↗ 28.71%	↗ 23.60%	↑ 55.10%	↑ 70.54%	54.93%			
03/08/2020	↑ 74.68%	↑ 54.52%	↑ 44.88%	↑ 55.63%	↑ 56.93%	↑ 145.95%	↑ 157.14%	79.29%			
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%			
Total	17.45%	18.94%	5.56%	11.76%	17.33%	62.50%	88.06%	27.27%			

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

Local authority travel and transport data weekly digest

Figure 3 – Daily average traffic flow change from baseline

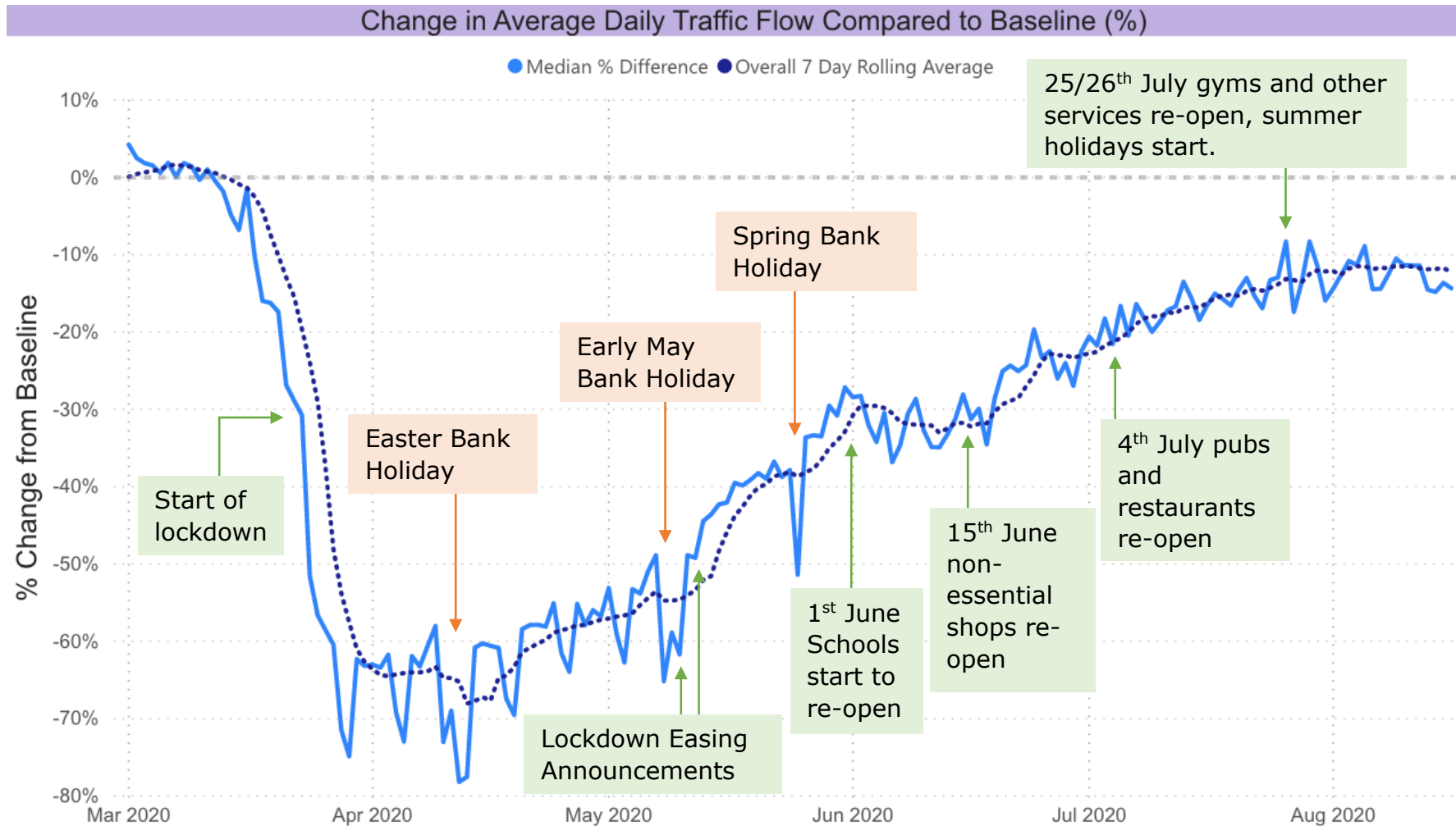


Figure 3: Change in average daily traffic volumes since 01st March across all sources compared to the baseline (first week of February 2020)

Figure 4 – Hourly traffic flow comparison per week

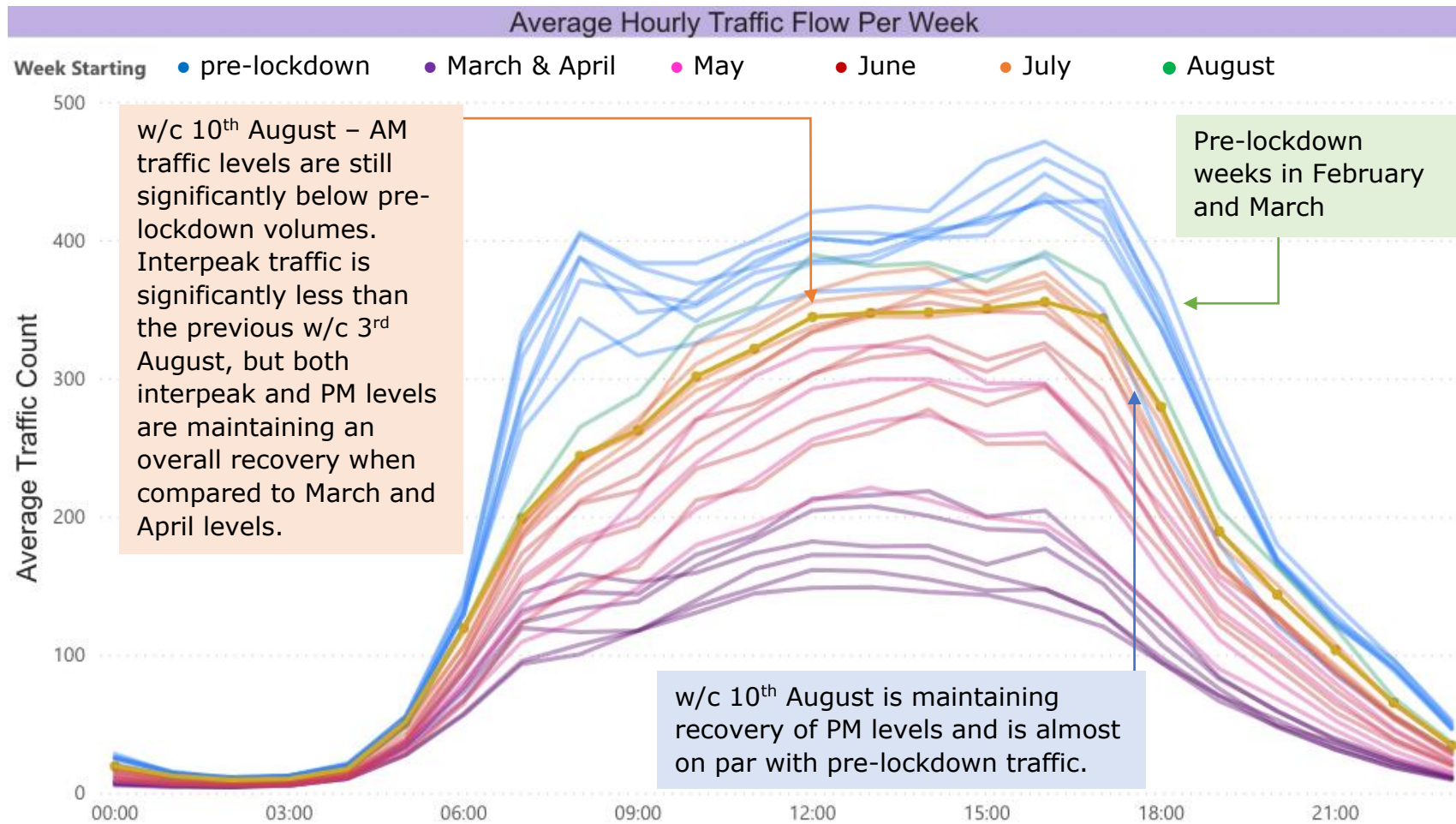


Figure 4: Change in average hourly traffic volumes per week since 1st full week in February across all sources with latest week highlighted.

Figure 5 – Change in journeys by vehicle class

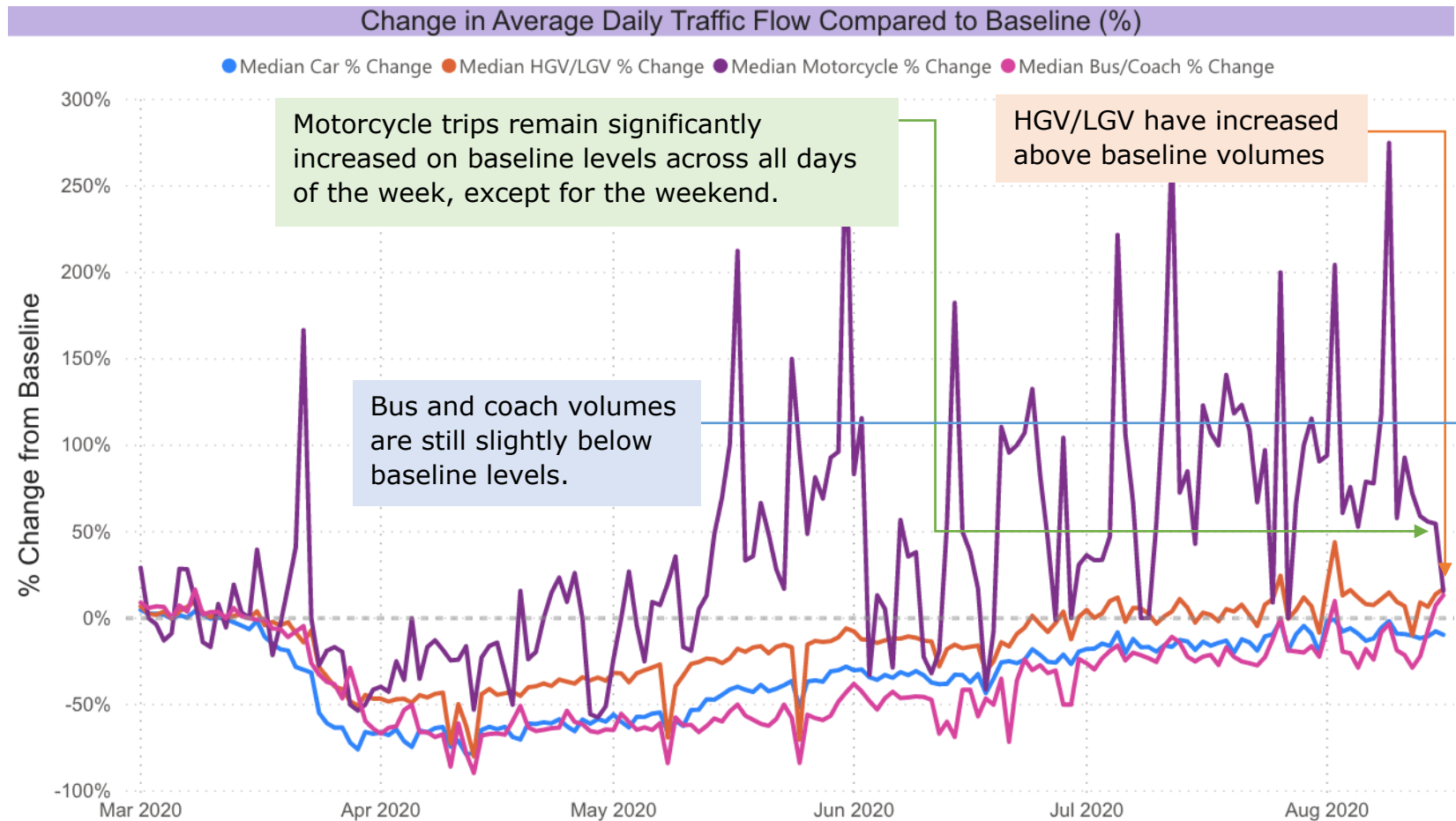


Figure 5: Change in average vehicle trips by vehicles class where available in the source dataset (note this data is measured at sensor level so sources with large numbers of sensors will have a greater contribution to the average count)

Figure 6 – Daily average cycling change from baseline

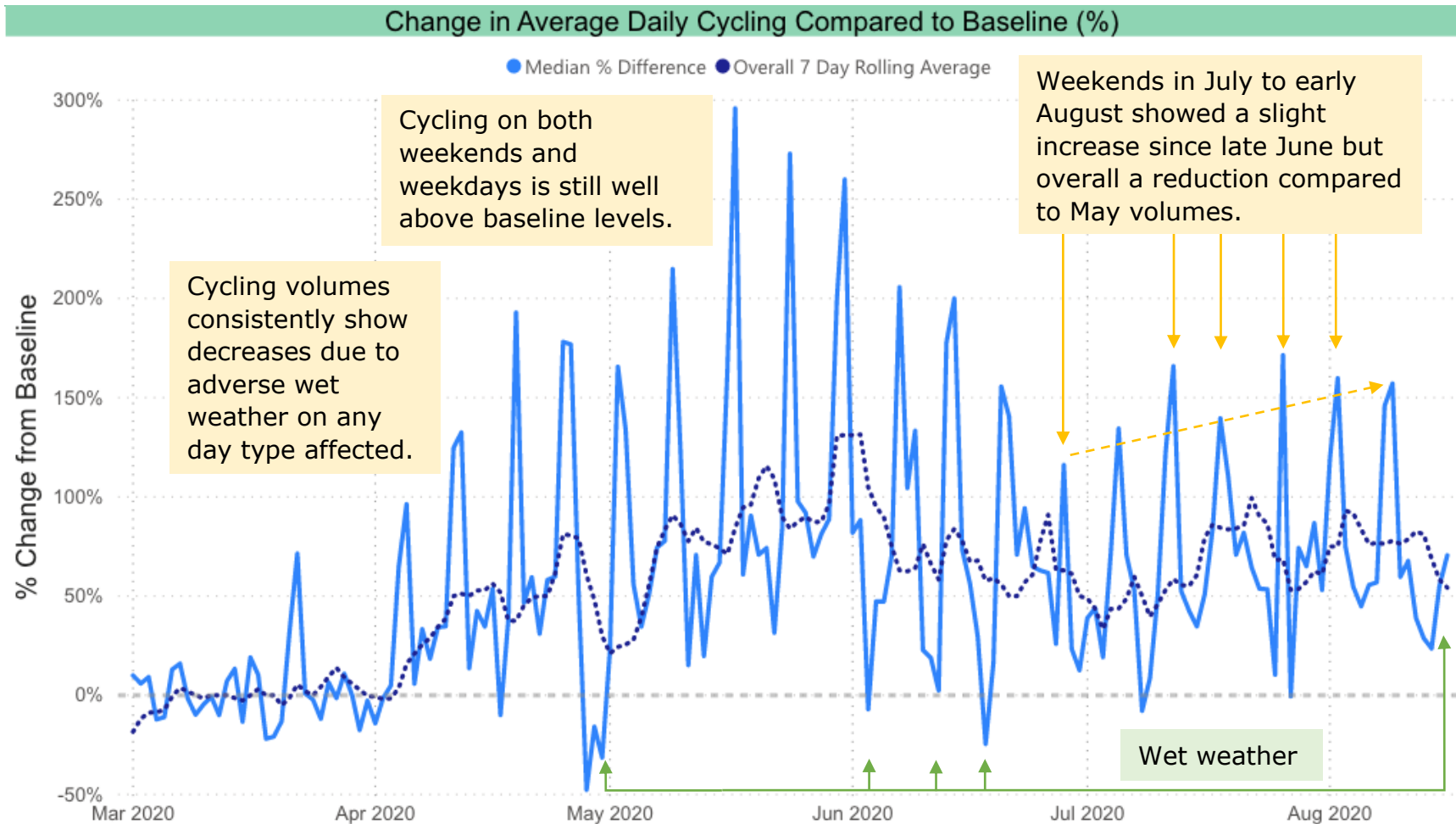


Figure 6: Change in average daily cycling volumes since 01st March (start of lockdown) across all sources compared to the baseline (first week of February 2020)

Figure 7 – Hourly cycling comparison per week

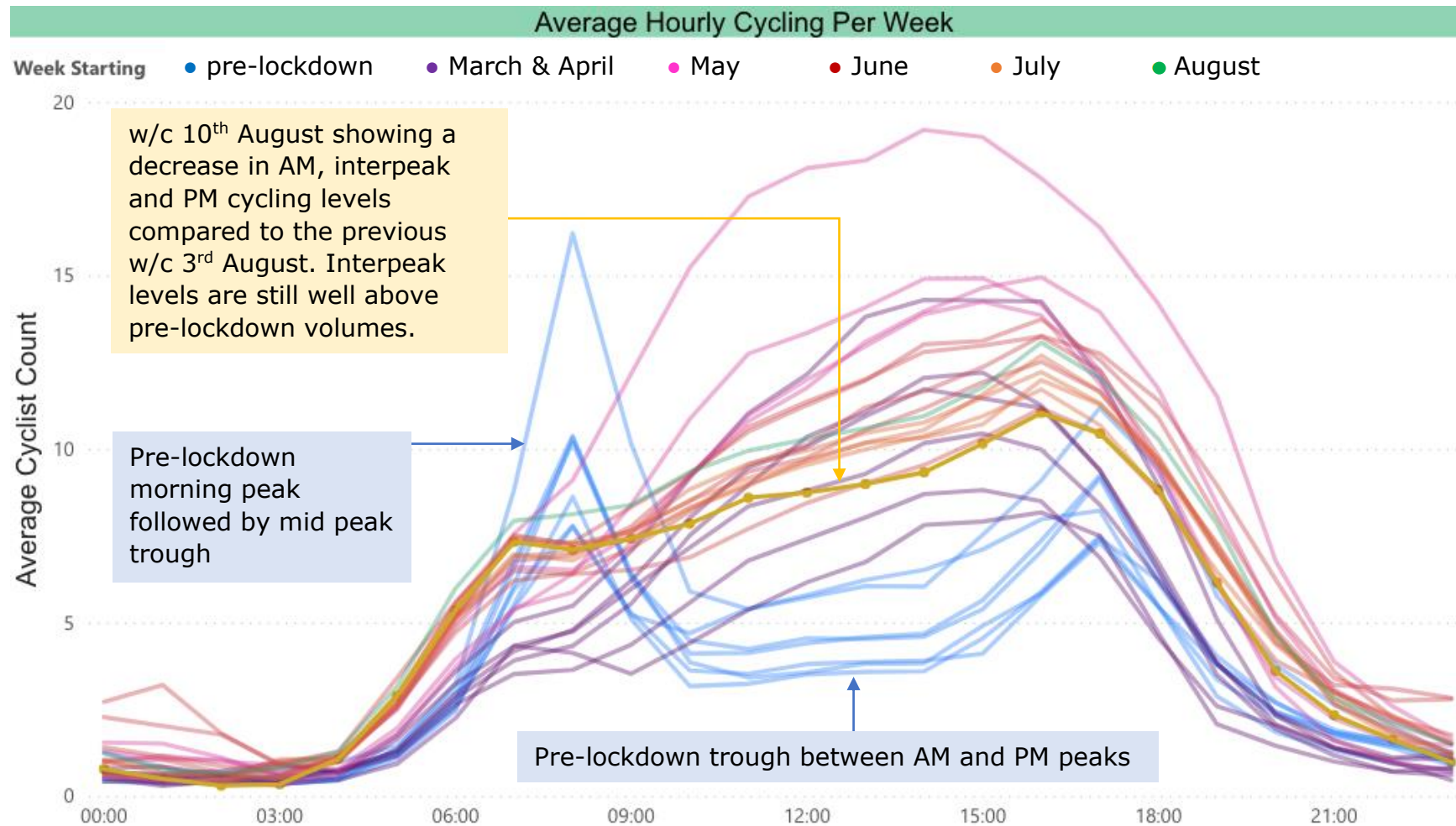


Figure 7: Change in average (mean) hourly cycling volumes per week since 1st full week of February across all sources

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 - please email info@ttf.uk.net. 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.

This week we share details of a major new cycling network, more ideas for schemes which could be funded by the Department for Transport's Emergency Active Travel Fund, some advice for local authorities looking to benefit from the deployment of e-scooters and news of Scotland's largest electric vehicle charging station.

WEST MIDLANDS

New West Midlands cycling network unveiled

Transport for West Midlands (TfWM) has unveiled the Starley Network, a new 500-mile cycling vision for the West Midlands.



The Starley Network represents a new era for the region's cycling network, which has been reimagined and re-branded to reflect the West Midlands' ambitions following a surge in people taking to their bikes since the coronavirus pandemic.

All 493 miles of the routes on the new network will be dedicated for active travel, with the ambition that the routes will either be traffic free away from the highway, or within roads but physically separated from traffic.

<https://www.wmca.org.uk/news/new-west-midlands-cycling-network-unveiled/>

Local authority travel and transport data weekly digest

WEST SUSSEX

£4.7million bid for cycling and walking improvements in West Sussex

A bid for £4.7million worth of improvements and initiatives for cyclists and pedestrians has been put forward – all to encourage active travel choices.



West Sussex County Council's application in Tranche Two of the Department for Transport's Emergency Active Travel Fund was submitted on Friday 7 August.

This second tranche follows the council's successful Tranche One bid to fund seven temporary cycleway schemes. This second wave of funding is for longer-term projects.

<https://www.westsussex.gov.uk/news/47million-bid-for-cycling-and-walking-improvements/>

DEVON

Devon bid for next phase of Emergency Active Travel Fund

Devon is bidding for around £1.3 million to create more permanent schemes that provide extra space for pedestrians and cyclists in order provide alternatives to public transport and to improve safety and encourage more active travel.



The authority successfully bid for all of the £338,000 allocation available to Devon in the first tranche – funding a series of temporary “pop-up” measures which have been installed in Exeter, Barnstaple, Bideford and Newton Abbot.

The bid would provide the opportunity to make temporary measures permanent, subject to consultation and approval from Highway and Traffic Order Committees.

<https://www.devonnewscentre.info/devon-preparing-bid-for-next-phase-of-emergency-active-travel-funding/>

CENTRE FOR EXCELLENCE FOR LOW CARBON AND FUEL CELL TECHNOLOGIES

Local policy and strategy essential to maximise e-scooter benefits

Local authorities need to take an active role in the deployment of e-scooters within cities in order to maximise their benefits, concludes a report from Cenex, the Centre of Excellence for Low Carbon and Fuel Cell technologies.



E-scooters are a low emission solution for first and last mile travel that are inclusive and sustainable, and can reduce congestion, improve city-centre journey times and produce less CO2 compared to alternative transport methods, but concerns can arise over safety if implementation is poorly planned.

The report, titled 'E-scooters – Maximising the benefits of e-scooter deployment in cities' and released for the Climate-KIC funded SuSMo project, analyses the impact of e-scooter deployment in several European cities and the key considerations that need to be looked at to maximise the benefits from both environmental and social perspectives.

<https://www.cenex.co.uk/news/local-policy-and-strategy-essential-to-maximise-e-scooter-benefits/>

FALKIRK

Scotland's largest electric vehicle charging station officially opens in Falkirk

The largest electric vehicle (EV) charging station in Scotland has been officially opened in the heart of one of the country's most important economic areas.



The £1.4m facility at the Falkirk Stadium, which has capacity for 26 electric vehicles - 30% more than the second largest EV station in Scotland - was officially opened by Michael Matheson MSP, Cabinet Secretary for Transport, Infrastructure and Connectivity.

The new EV station will generate over 30% of the required electricity to power the facility from its own solar canopy made up by 1272 panels covering an area of over 2,000sqm, saving 75 tonnes of carbon per year. It also brings the number of EV charging bays in the Falkirk and Grangemouth area to 68, an increase of almost 70%.

<https://www.falkirk.gov.uk/news/article.aspx?aid=6615>

Local authority travel and transport data weekly digest

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.