

Covid-19

Local authority travel and transport data

Weekly digest



Week Commencing

14th September 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 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 7th September saw a 5.9% increase in traffic flows when compared to the previous week, with the overall traffic count average for the week at 8.9% below the baseline (first week in February 2020).
- The most significant increase in traffic levels occurred on Monday 7th September with an 18.4% increase compared to the previous Monday which notably was a Bank Holiday, while Sunday showed traffic volumes were only 2% below baseline levels.
- Overall hourly traffic volumes across all days of the week show that AM traffic levels have been the highest since before lockdown, but are still well below the baseline. Interpeak and PM levels are higher than the previous week, but remain lower than earlier weeks in August on par with weeks in July.
- Figure 4a provides a comparison of weekday traffic data during pre-lockdown, early lockdown, and the past month. The data suggests that traffic volumes are steadily recovering in the AM, with a slight decrease in interpeak traffic. This could be attributed to most schools now being fully open and workplaces being encouraged to re-open their offices to employees. Further details for weekday and weekend traffic data is shown in Figures 4b and 4c respectively.
- Analysis of vehicle classification data (Figure 5) shows that motorcycle volumes for the week commencing 7th September have increased since the previous week and remain significantly above baseline levels, while car volumes are back to baseline levels. HGV / LGV volumes are now exceeding the baseline.

Cycling

- Cycling flows for the week commencing 7th September show that cycling has increased to 55.4% above baseline levels, on par with the 2nd week of August, which is an increase of 23.7% since the previous week commencing 31st August.
- Monday and Tuesday saw an increase of over 20% in cycling compared to the previous week, while Wednesday and Thursday respectively experienced a 32% and 44% increase compared to the same days in previous week on which there was wet weather. Saturday saw a slight decrease in cycling, but the warm weather on Sunday saw cycling levels soar to 152% above the baseline.
- Hourly cycling volumes show that for the week commencing 7th September, there is significantly more cycling during the AM peak with a slight decline in cycling during the interpeak, bringing interpeak levels on par with July and early weeks in August. PM cycling remains relatively unchanged and is still well above baseline levels.

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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
07/09/2020	📉 -12.38%	📉 -7.86%	📉 -11.84%	📉 -15.62%	📉 -8.77%	📉 -7.68%	📉 -2.01%	-8.85%
31/08/2020	📉 -30.78%	📉 -11.67%	📉 -13.42%	📉 -16.41%	📉 -13.43%	📉 -8.79%	📉 -9.46%	-14.78%
24/08/2020	📉 -11.85%	📉 -12.03%	📉 -10.86%	📉 -13.44%	📉 -12.57%	📉 -10.13%	📉 -5.42%	-11.28%
17/08/2020	📉 -10.70%	📉 -10.33%	📉 -14.60%	📉 -9.21%	📉 -13.20%	📉 -11.13%	📉 -5.88%	-10.80%
10/08/2020	📉 -11.37%	📉 -11.39%	📉 -11.42%	📉 -14.52%	📉 -14.46%	📉 -13.09%	📉 -13.54%	-12.54%
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%
Total	-24.65%	-20.69%	-21.65%	-23.40%	-22.28%	-22.61%	-22.03%	-22.52%

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
07/09/2020	📈 46.23%	📈 57.37%	📈 40.86%	📈 47.05%	📈 39.25%	📈 96.97%	📈 151.72%	55.41%
31/08/2020	📈 26.52%	📈 34.15%	📈 8.45%	📈 3.10%	📈 31.38%	📈 100.00%	📈 122.02%	31.70%
24/08/2020	📈 48.32%	📉 -36.81%	📉 -10.87%	📉 -20.51%	📉 -20.72%	📈 48.87%	📈 100.83%	8.00%
17/08/2020	📈 49.37%	📈 35.48%	📉 -41.46%	📈 55.09%	📉 -20.00%	📈 73.41%	📈 118.39%	33.33%
10/08/2020	📈 57.14%	📈 65.38%	📈 42.41%	📈 29.41%	📈 28.68%	📈 58.03%	📈 75.97%	54.36%
03/08/2020	📈 70.79%	📈 48.75%	📈 44.30%	📈 54.85%	📈 57.14%	📈 146.45%	📈 166.37%	77.19%
27/07/2020	📉 -2.32%	📈 73.53%	📈 63.89%	📈 77.14%	📈 55.95%	📈 119.57%	📈 154.90%	74.57%
Total	20.13%	19.27%	5.29%	12.82%	16.67%	64.99%	94.39%	28.72%

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

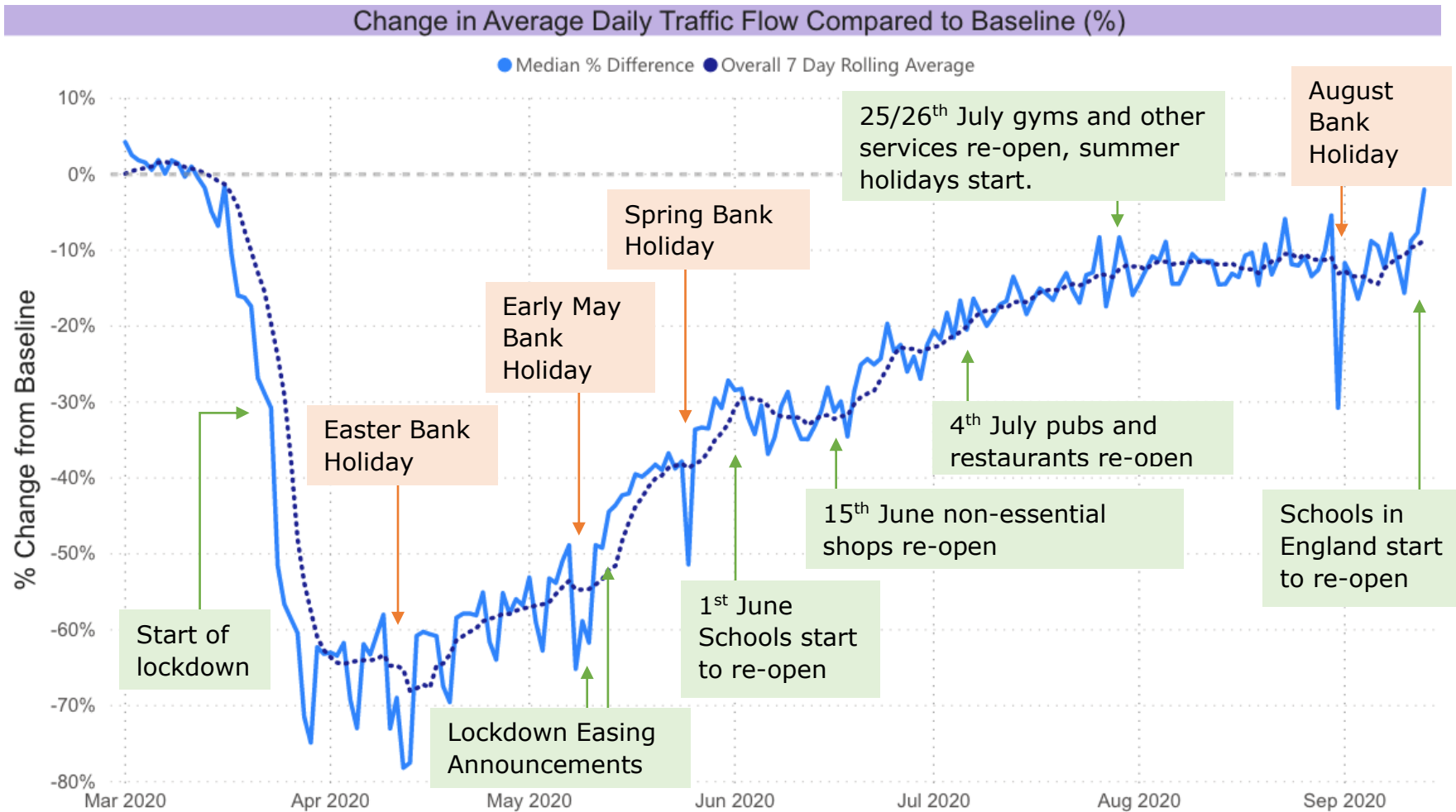


Figure 3: Change in average daily traffic volumes since 01st March across all sources compared to the baseline (first week of February 2020)

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Figure 4a – Comparison of hourly weekday traffic

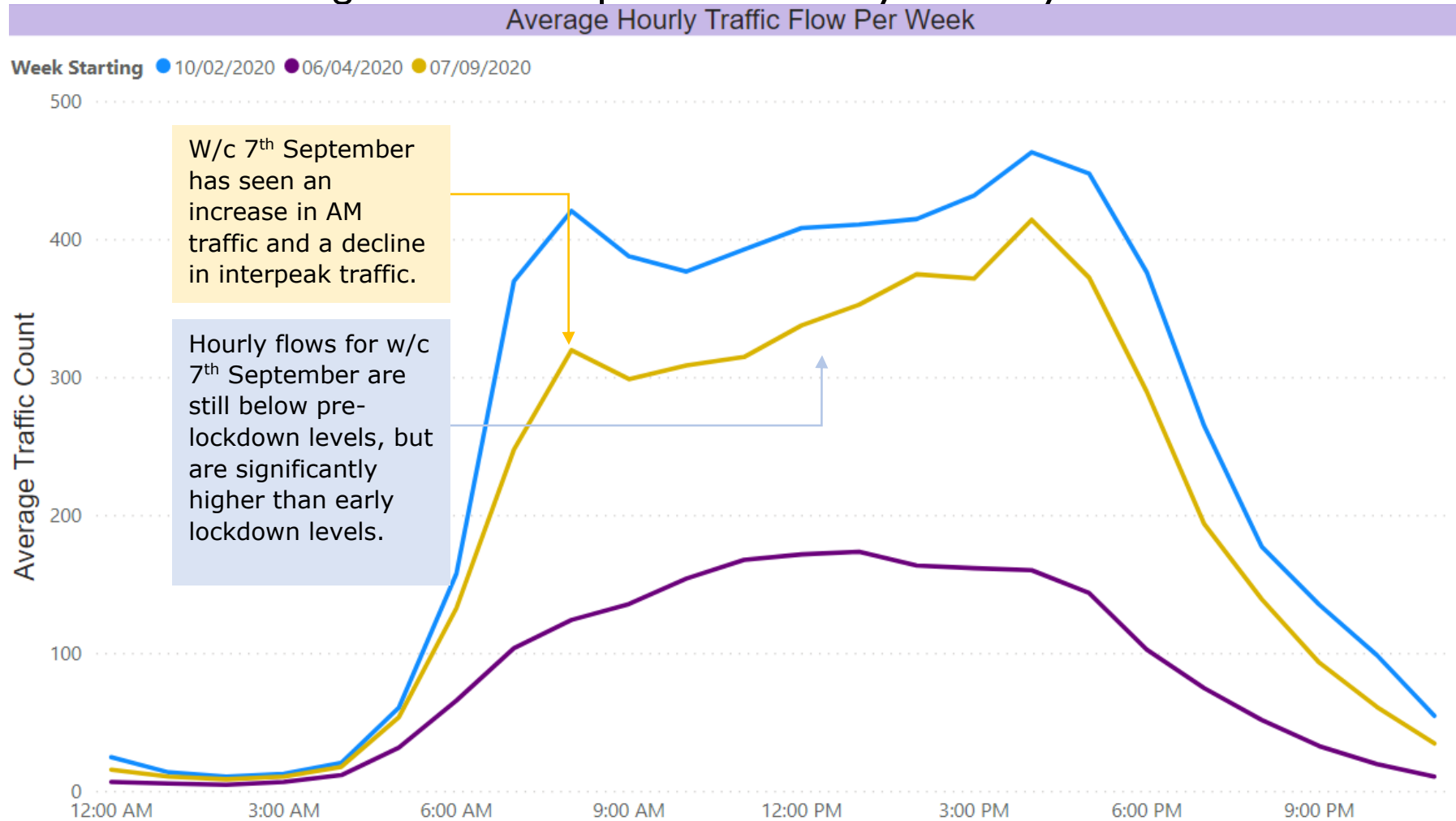


Figure 4a: Weekday traffic volumes comparing pre-lockdown (10/02/20) with early lockdown (06/04/20) and the latest week across all datasets.

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Figure 4b – Hourly traffic flow comparison per week across all weekdays

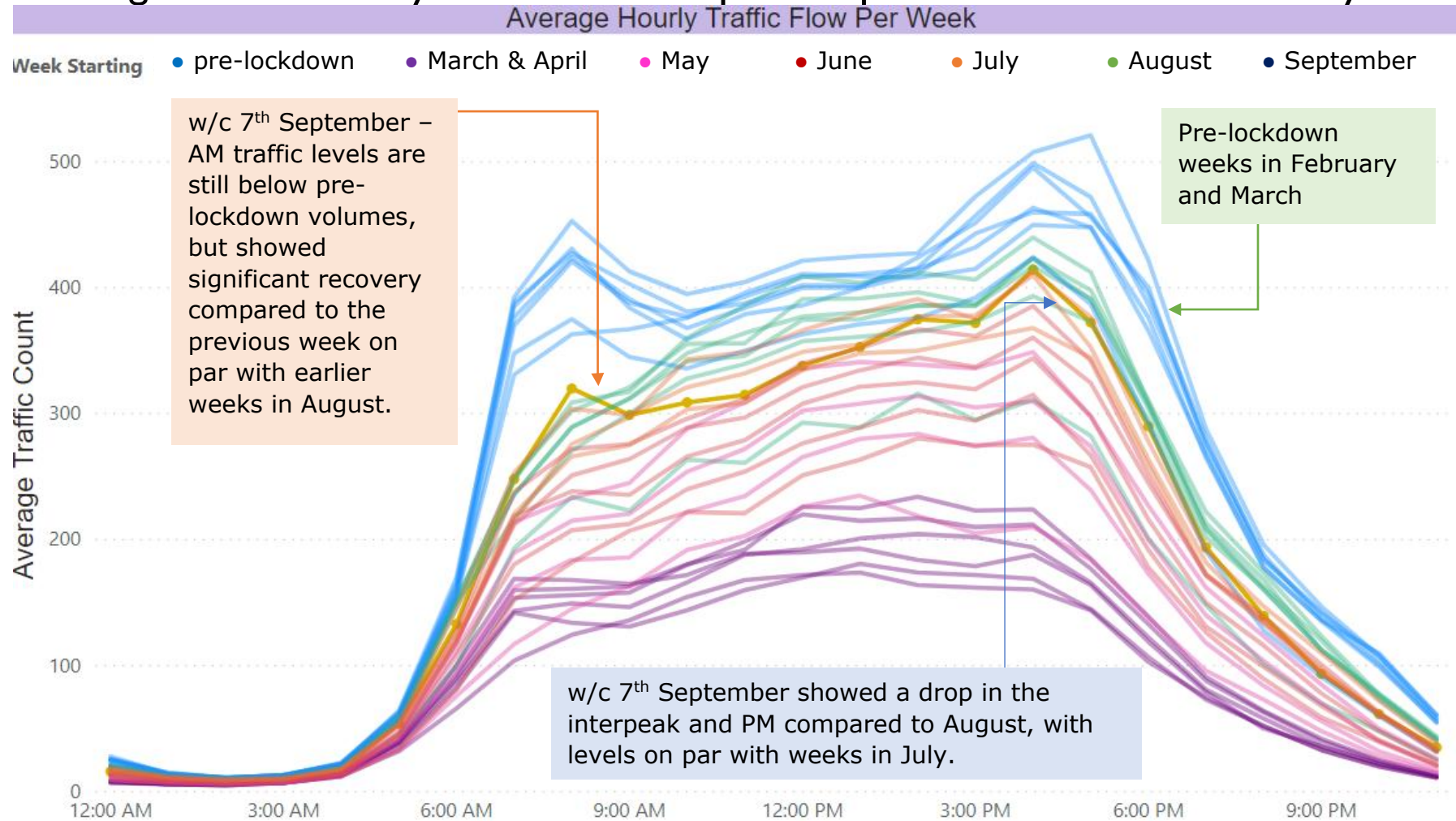


Figure 4b: Change in average weekday hourly traffic volumes per week since 1st full week in February across all sources with latest week highlighted.

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Figure 4c – Hourly traffic flow comparison per week across all weekends

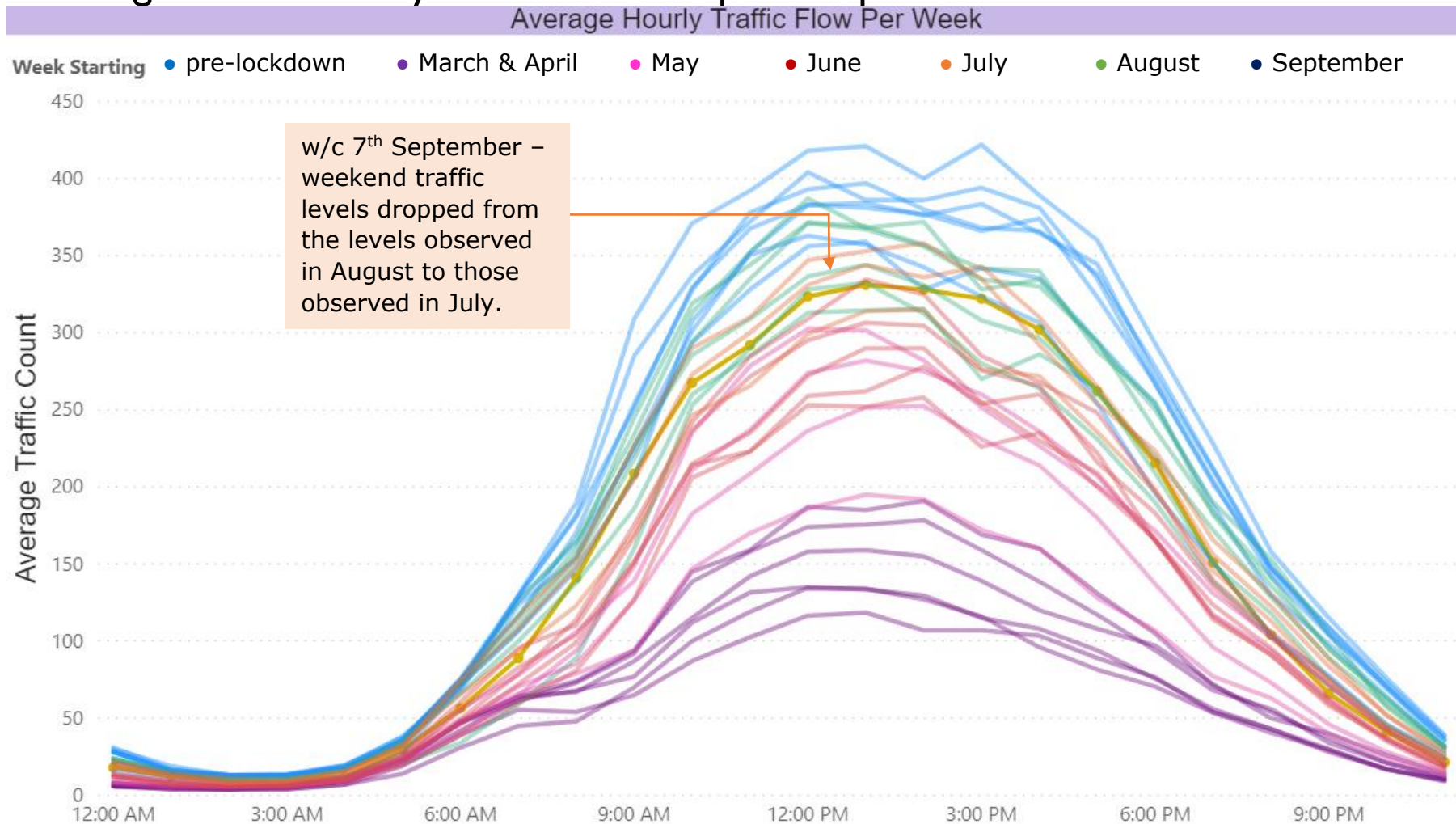


Figure 5c: Change in average weekend hourly traffic volumes per week since 1st full week in February across all sources with latest week highlighted.

Figure 5 – Change in journeys by vehicle class

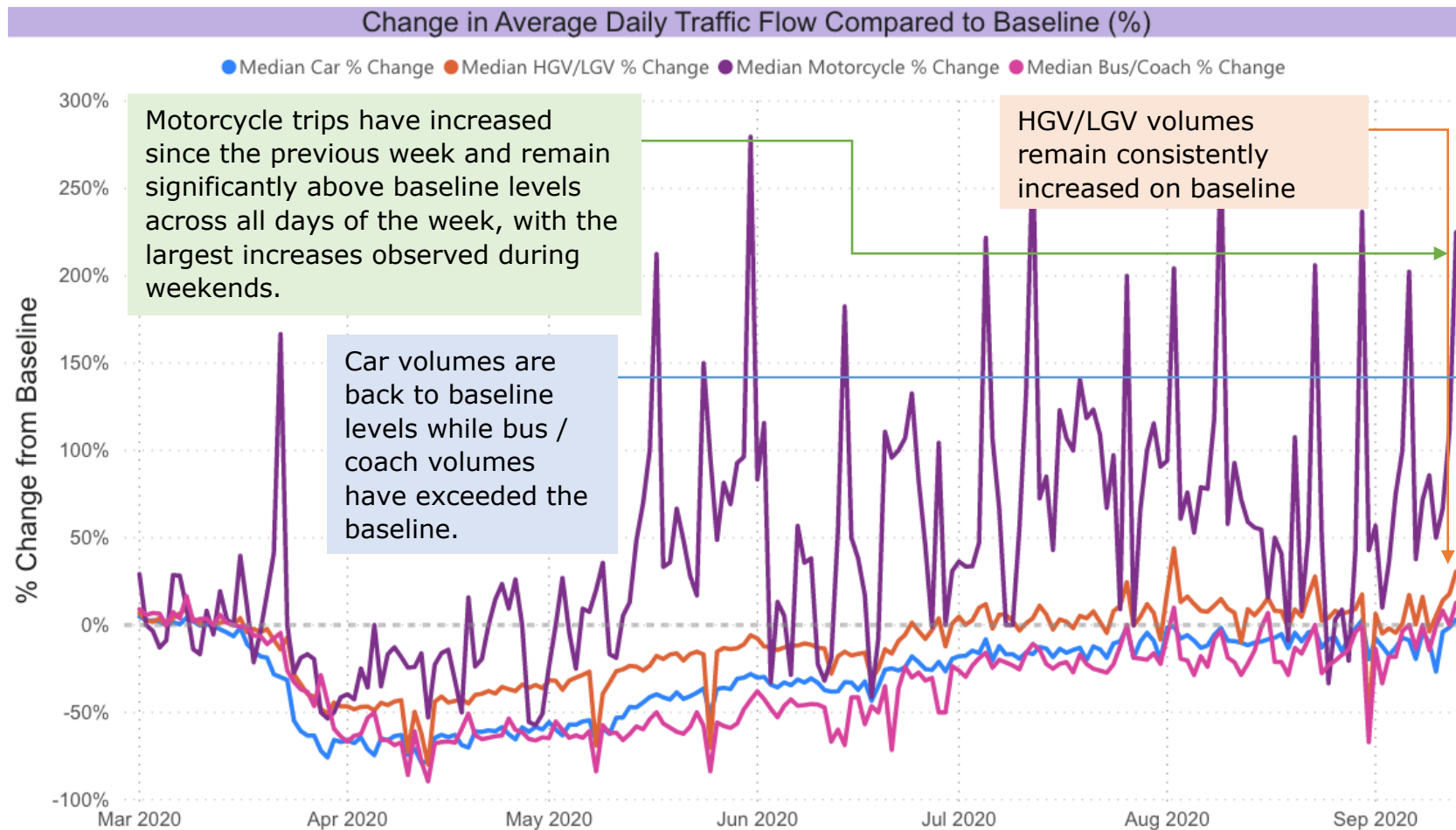


Figure 6: Change in average vehicle trips by vehicles class where available in the source dataset (note this data is measured at sensor level so sources with large numbers of sensors will have a greater contribution to the average count)

Figure 6 – Daily average cycling change from baseline

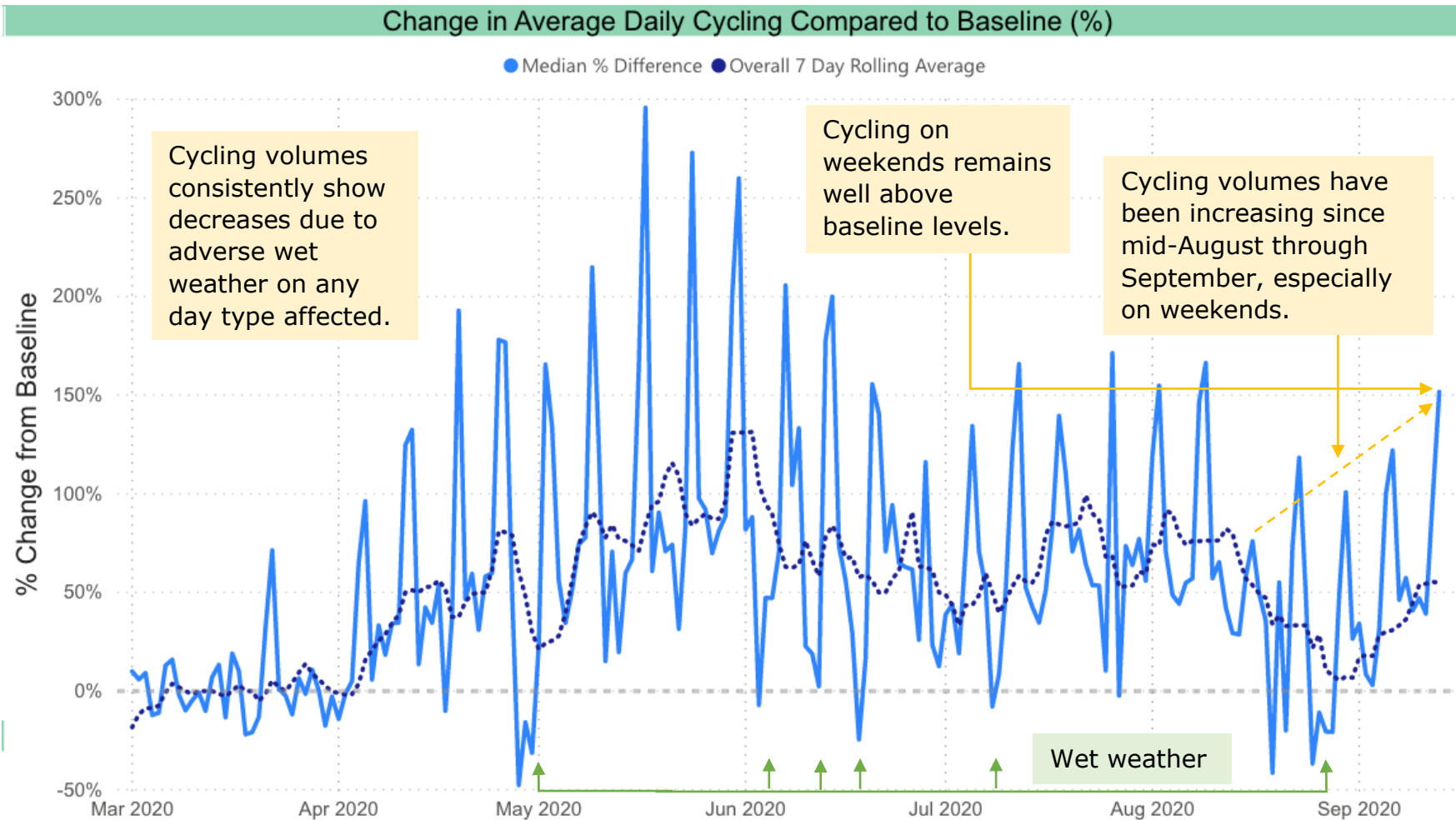


Figure 7: Change in average daily cycling volumes since 01st March (start of lockdown) across all sources compared to the baseline (first week of February 2020)

Figure 7a – Hourly cycling comparison per weekday

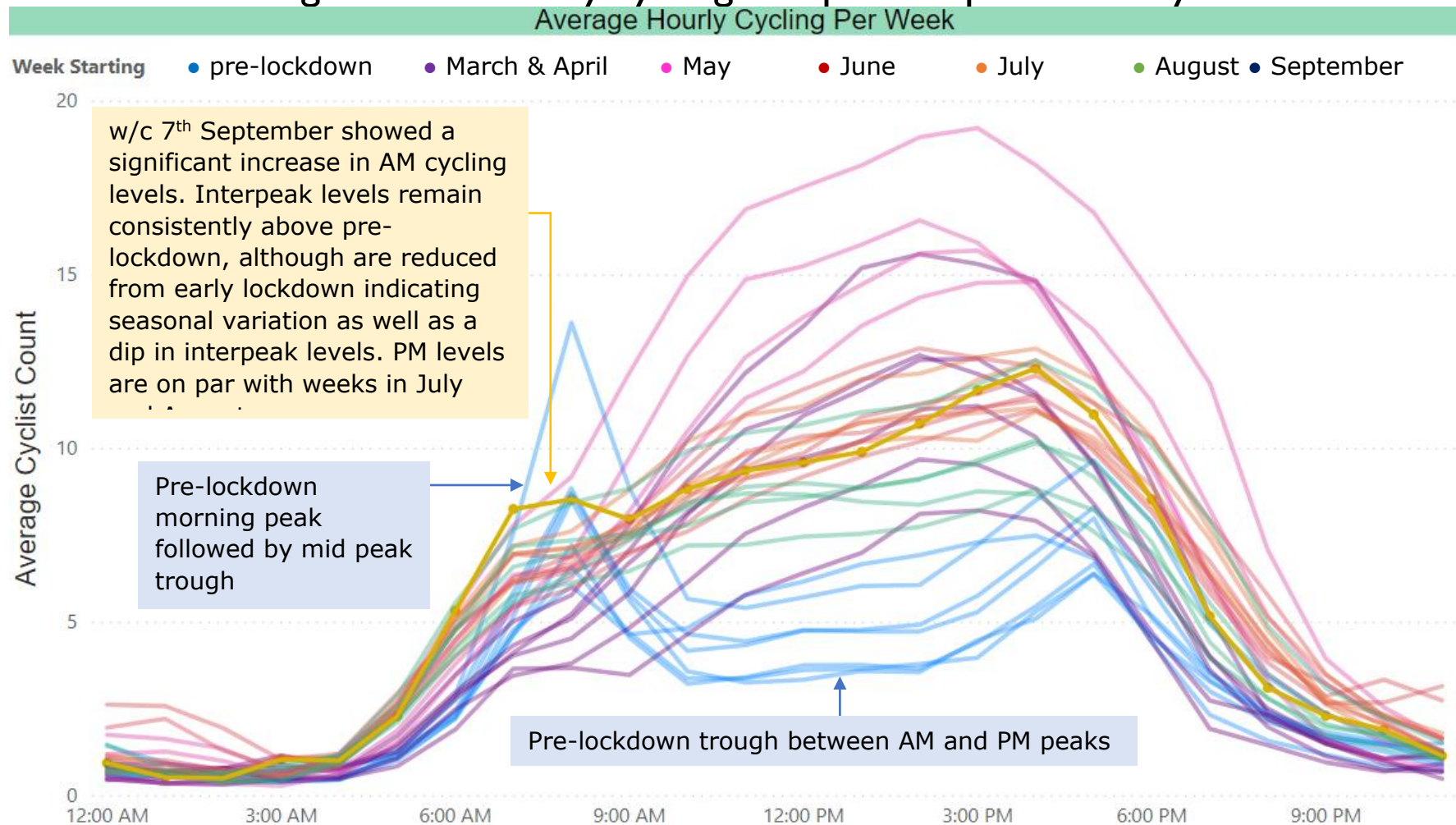


Figure 8a: Change in average weekday (mean) hourly cycling volumes per week since 1st full week of February across all sources

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Figure 7b – Hourly cycling comparison per weekend

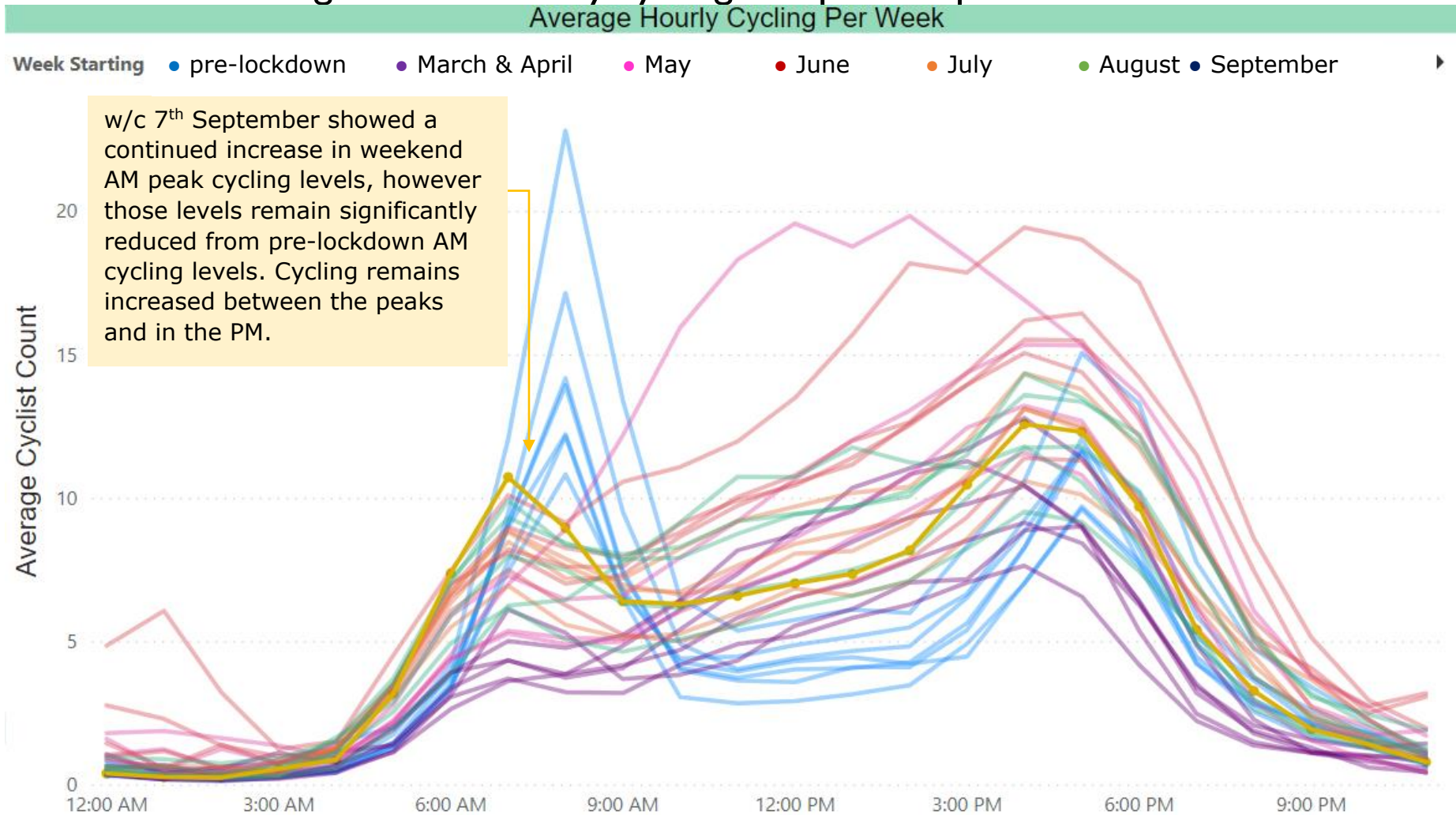


Figure 9b: Change in average weekend (mean) hourly cycling volumes per week since 1st full week of February across all sources

Figure 8 – Comparison of hourly weekday traffic City of Birmingham

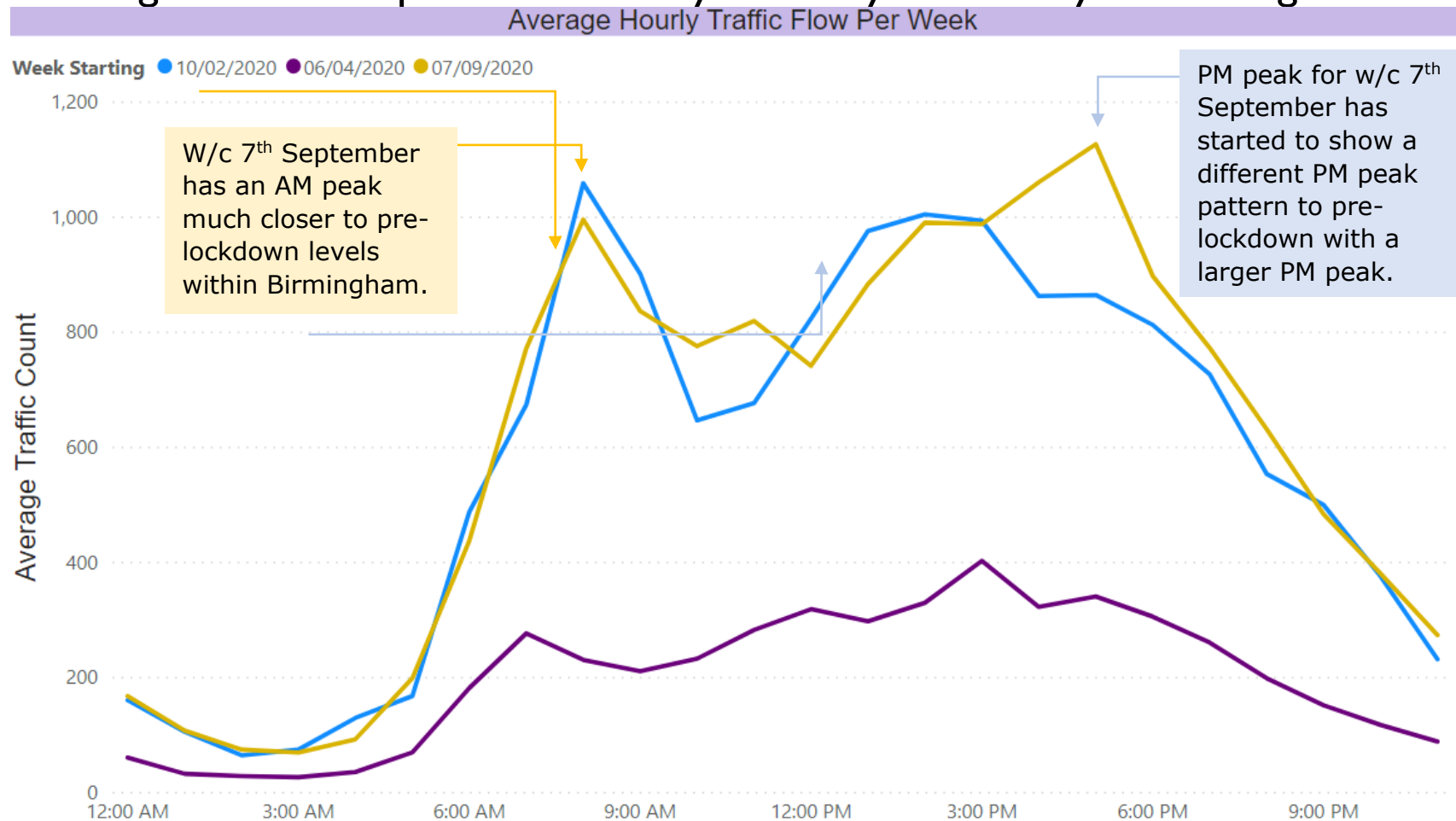


Figure 8: Weekday traffic volumes comparing pre-lockdown (10/02/20) with early lockdown (06/04/20) and the latest week for the City of Birmingham. This data has been provided by Birmingham City Council.

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 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 look at a way to engage the public with new measures plus an app to allow them to report road defects. There's an example of how active travel is being built into new road schemes, Scotland's new road safety consultation and guidelines for protecting the workforce on highways.

HAMPSHIRE

Help shape the way we travel in Hampshire

A new survey has been launched by Hampshire County Council to get a better understanding of how people feel about walking and cycling in their local areas.

Active Places Survey  

Cycling in Hampshire

We would like to ask you what you think about cycling for everyday journeys in your local area. For each aspect, please say whether you think it is good or bad.

	Very bad	Fairly bad	Neither good nor bad	Fairly good	Very good	Don't know
Your local area overall as a place to cycle	☐	☐	☐	☐	☐	☐
Cycling safety	☐	☐	☐	☐	☐	☐
Children's cycling safety	☐	☐	☐	☐	☐	☐
The amount of cycle routes	☐	☐	☐	☐	☐	☐
The directness of cycle routes – to the places you want to go	☐	☐	☐	☐	☐	☐
The availability of suitable crossing points	☐	☐	☐	☐	☐	☐
The condition of cycle routes	☐	☐	☐	☐	☐	☐
The signposting of cycle routes	☐	☐	☐	☐	☐	☐
The security of cycle parking	☐	☐	☐	☐	☐	☐
The availability of cycle parking	☐	☐	☐	☐	☐	☐

The Active Places Survey aims to gather people's opinions and experiences about what it is like to walk, scoot, cycle and use a wheelchair, mobility scooter and/or pushchair in Hampshire. This is not just about Active Travel for pleasure but as a mode of day-to-day transport e.g. getting to work, the shops or school.

To accompany the survey there is the opportunity for participants to send photographs illustrating how they feel about Active Travel in Hampshire.

<https://www.hants.gov.uk/News/07092020activeplacessurvey>

OXFORDSHIRE

Super solution to local road problems

Oxfordshire residents are being urged to take on some 'super' powers to help enable faster fixing of potholes, damaged kerbing and drains through a county council initiative that is now being more widely rolled out following many successfully pilots.



For a number of years Oxfordshire County Council has been using Fix My Street to enable residents and its own staff to report problems on the roads and to give updates on progress.

Anything added to Fix My Street by members of the public results in a council highways inspector visiting the site and assessing each problem to see if a repair is needed according to set criteria. If it is, they then place an order for the work to be done.

<https://news.oxfordshire.gov.uk/super-solution-to-local-road-problems/>

ROTHERHAM AND SHEFFIELD

Funding boost for major link road

Major improvements on one of Rotherham and Sheffield's main thoroughfares has begun this summer to support motorists and keep pedestrians and cyclists safe.



Almost a kilometre of carriageway on Sheffield Road, Templeborough, will benefit from the works which includes a full-width road resurface, the installation of new cycle lanes and repairs to 500 metres of damaged highway drainage.

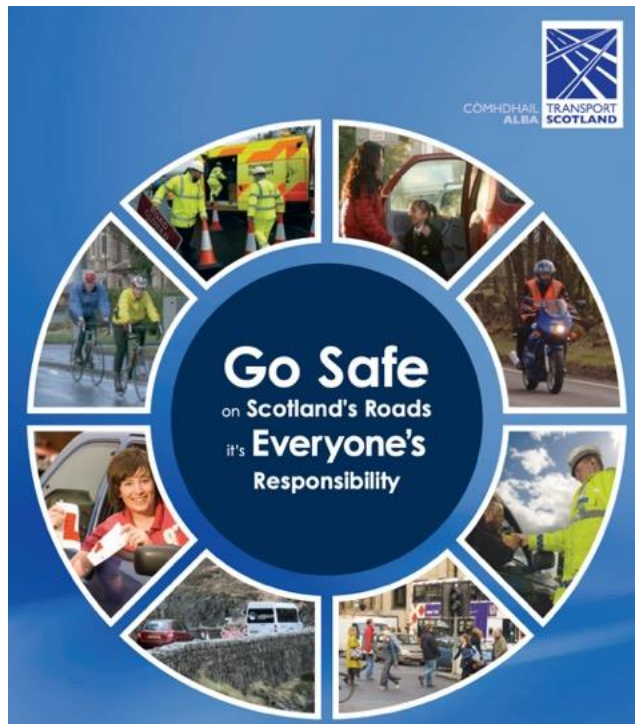
The route will benefit from national funding intended for active travel and to support the new ways people have begun to travel in the aftermath of coronavirus.

<https://www.rotherham.gov.uk/news/article/187/funding-boost-for-major-link-road>

SCOTLAND

Consulting on Scotland's Road Safety Framework to 2030

The Scottish Government is now consulting on an ambitious Road Safety Framework for the next decade, as outlined in the Programme for Government.



The Road Safety Framework to 2030 sets out a compelling long-term vision for road safety, Vision Zero, where there are zero fatalities and injuries on Scotland's roads by 2050. The journey to achieving this vision will also include ambitious interim targets where the number of people being killed or seriously injured on our roads will be halved by 2030.

Views are being sought to inform proposals for achieving the targets which will be crucial to Scotland having the best road safety performance in the world.

<https://www.transport.gov.scot/media/29622/j243698.pdf>

<https://www.transport.gov.scot/news/consulting-on-scotland-s-road-safety-framework-to-2030/>

HIGHWAYS SECTOR COUNCIL

Coronavirus (COVID-19) Local Highways Safe Operating Procedures – Protecting Your Workforce Guidance Document

A new Protecting Your Workforce Guidance Document has been released on Local Highways Safe Operating Procedures.



This guidance is based upon the Construction Leadership Council (CLC) Site operating procedures Version 5 published on 4th July 2020 and has been adapted for the local highways sector where appropriate. They also refer to the CLC Document Use of Face Coverings in Construction During Coronavirus COVID 19.

<https://www.ciht.org.uk/media/12055/covid19-hsc-safe-operating-procedures-version-4-final-version.pdf>

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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

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AUGUST 2020	
21/08/2020	Driving tests are approved to go ahead
SEPTEMBER 2020	
01/09/2020	Large number of schools across England re-open for the autumn term.
08/09/2020	All schools across England have re-opened
14/09/2020	Rule of six comes into effect to tackle coronavirus, where any social gatherings of more than six people will be against the law

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.