Transport update: Cambridge and South Cambridgeshire

COVID-19 transport impacts and recovery

December 2023

Policy & Insight Team, Cambridgeshire County Council

Transport Update Aims

This report is intended to:

- Summarise the on-going **impacts of COVID-19** on trends in transport and mobility up to 31st December 2023.

- Highlight **changes in key indicators** by comparing December 2023 data to a pre-pandemic baseline (December 2019 or closest possible equivalent), mid-COVID (December 2021) and to last year (December 2022).

- Provide a **basis for discussion for the Greater Cambridge Partnership** (GCP) to understand and identify existing challenges and future data needs.

Notes:

- **Comparison periods may vary** across the different datasets based on the availability of historic data – comparison periods are clearly noted for each dataset.

- Where reference is made to 'Weekdays' this only includes Monday, Tuesday, Wednesday and Thursday, as per DfT guidance.
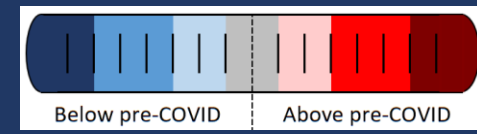
Colour scale

The statistics in this pack have been **colour-coded using a heat scale** to reflect the level of recovery being experienced (pre-COVID compared to now).

A positive (red) value indicates that levels have increased **above** those experienced pre-COVID.

A negative (blue) value indicates that levels remain **below** pre-COVID.

Change from pre-COVID

Above pre-COVID

+30%

+15%

+5%

0%

-5%

Close to pre-COVID

-15%

-30%

Below pre-COVID
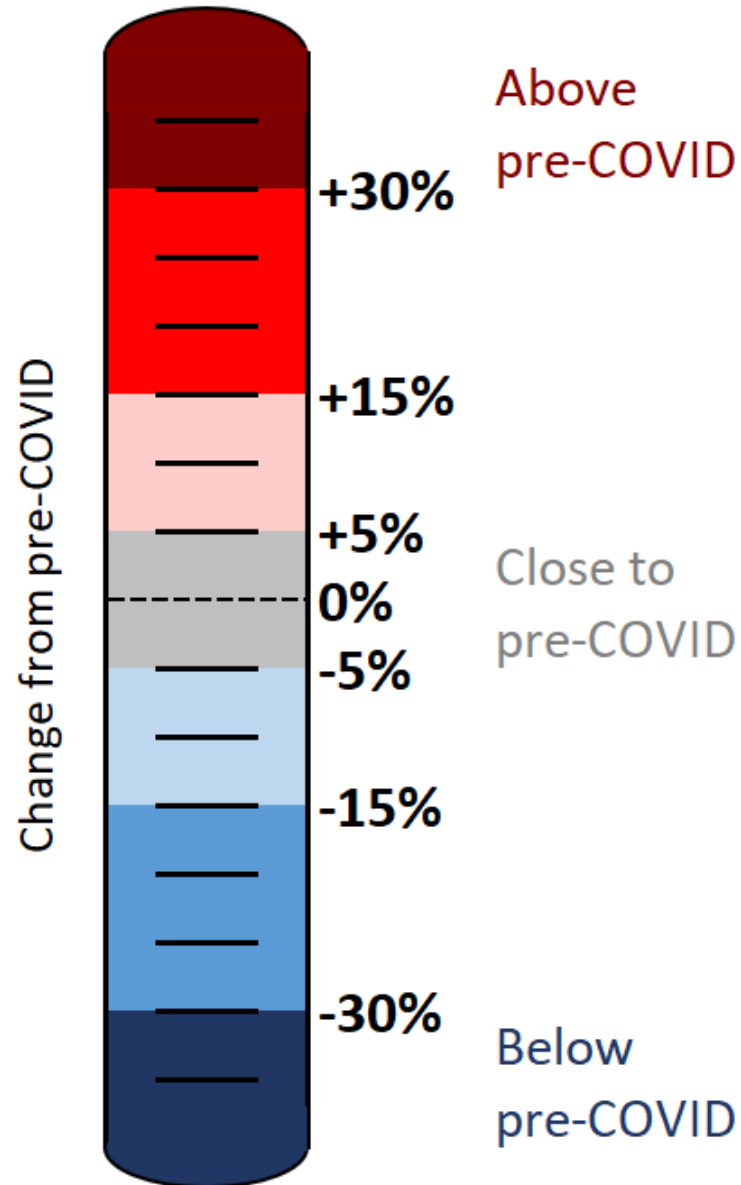
Top tip:

Lookout for the colour scale bar in the **top right-hand corner** of each page for a reminder of the heat scale used to indicate the level of recovery throughout the pack.

3

Accessibility

To access the full functionality of PowerPoint, we recommend opening the slides in **full screen mode.** To do this, click the "Open in New Window" button in the bottom right-hand corner.

SLIDE 1 OF 52

1) Navigate through the slide pack using the left and right arrows in the middle-bottom of the screen. Clicking on the sentence "Slide x of x" brings up a pop-up listing all the slides so you can navigate directly to a slide of interest.

NOTES

2) Open the Notes for each slide to see the data source, technical notes and any additional commentary. See the **"Notes"** button in the bottom right-hand corner.
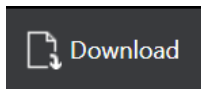
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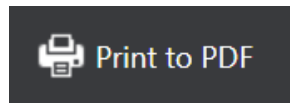
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4) Use the **"Print to PDF"** option to save the PowerPoint as a PDF document (but please be aware you will lose access to the Notes section which contains additional information for the slide).

Accessibility Mode
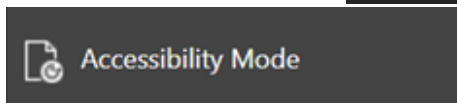
5) Use the **"More options"** icon in the top right-hand corner and choose **"Accessibility mode"** from the pop-up menu to access the slides in a different format which will display any Alt Text that has been set for charts and images.

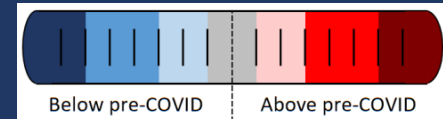We are continually working to improve the accessibility of our content. If you find you are unable to access any part of this update, please contact research.group@cambridgeshire.gov.uk and we will be happy to investigate providing information in a different format.

Overview

Recovery Tracker
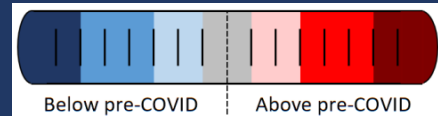
Has transport use returned to pre-COVID levels?

Data Source	Pre-COVID	Apr 2020	June 2020	Sept 2020	Dec 2020	Mar 2021	Jun 2021	Sept 2021	Dec 2021	Mar 2022	Jun 2022	Sept 2022	Dec 2022	Mar 2023	Jun 2023	Sep 2023	Dec 2023	Trendline
Workplace attendance, Cambridge (Google Mobility)	0%	-75%	-59%	-48%	-46%	-53%	-32%	-36%	-42%	-24%	-26%	-31%						
Workplace attendance, South Cambs (Google Mobility)	0%	-70%	-48%	-34%	-43%	-38%	-17%	-16%	-31%	-11%	-12%	-11%						
Retail footfall, Cambridge (Cambridge BID)	0%	-87%	-69%	-29%	-43%	-62%	-18%	-15%	-19%	-10%	-1%	-5%	-14%	-12%	+3%	-5%	-15%	
One Station Square Footfall (Cambridge BID)	0%	-92%	-81%	-52%	-71%	-72%	-31%	-33%	-43%	-24%	-6%	-27%	-50%	-24%	-18%	-34%	-57%	
Walking, Cambridge (Vivacity)	0%		-45%	-18%	-39%	-16%	-11%	-3%	-20%	-34%	-30%	-24%	-22%	-10%	-1%	+8%	-22%	
Cycling, Cambridge (Vivacity)	0%		-52%	-31%	-41%	-39%	-29%	-23%	-29%	-14%	-12%	-21%	-25%	-29%	-11%	-19%	-37%	
Car Parking, Cambridge (Cambridge City Council)	0%	-97%	-74%	-11%	-31%	-79%	-14%	-8%	-4%	-24%	-17%	-15%	-21%	-22%	-20%	-17%	-11%	
Local Road Vehicles, Cambridge (Vivacity)	0%		-43%	-11%	-11%	-19%	-5%	-7%	-11%	-8%	-3%	-8%	-13%	-7%	-9%	-4%	-10%	
Strategic Road Vehicles, Cambridgeshire (National Highways)	0%	-69%	-36%	-11%	-29%	-30%	-6%	-2%	-7%	-8%	-3%	-4%	-4%	-7%	0%	+2%	+6%	
Bus passengers, Cambridge (Stagecoach)	0%	-86%	-77%		-80%	-80%	-51%	-37%	-38%	-27%	-23%	-21%	-27%	-13%	-12%	-9%	-13%	
Park and Ride passengers, Cambridge (Stagecoach)	0%	-99%	-91%	-63%	-72%	-100%	-53%	-40%	-41%	-26%	-16%	-16%	-12%	0%	+16%	+13%	+7%	
Air Pollution (Cambridge City Council)	0%	-53%	-46%	-23%	-9%	-40%	-29%	-22%	-25%	-7%	-39%	-37%	-21%	-41%	-31%	-38%	-40%	

Headlines: December 2023

Local Roads

Volumes at

-10%

compared to pre-COVID
(see analysis on slide 21 onwards)

Strategic Roads

Volumes at

+6%

compared to pre-COVID
(see analysis on slide 10 onwards)

Car Parking

Patronage at

-11%

compared to pre-COVID
(see analysis on slide 41 onwards)

Bus

Patronage at

-13%

compared to pre-COVID
(see analysis on slide 49)

Park and Ride

Patronage at

+7%

compared to pre-COVID
(see analysis on slide 50 onwards)

Station Square Footfall

Volumes at

-57%

compared to pre-COVID
(see analysis on slide 47)

Retail Footfall

Volumes at

-15%

compared to pre-COVID
(see analysis on slide 38 onwards)

Walking

Volumes at

-22%

compared to pre-COVID
(see analysis on slide 35)

Cycling

Volumes at

-37%

compared to pre-COVID
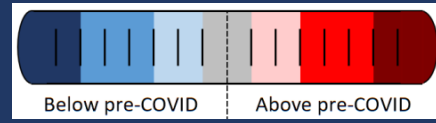(see analysis on slide 34)

Air Pollution

Concentrations at

-40%

compared to pre-COVID
(see analysis on slide 54 onwards)

Travel Demand

Has COVID-19 changed where we spend our time?

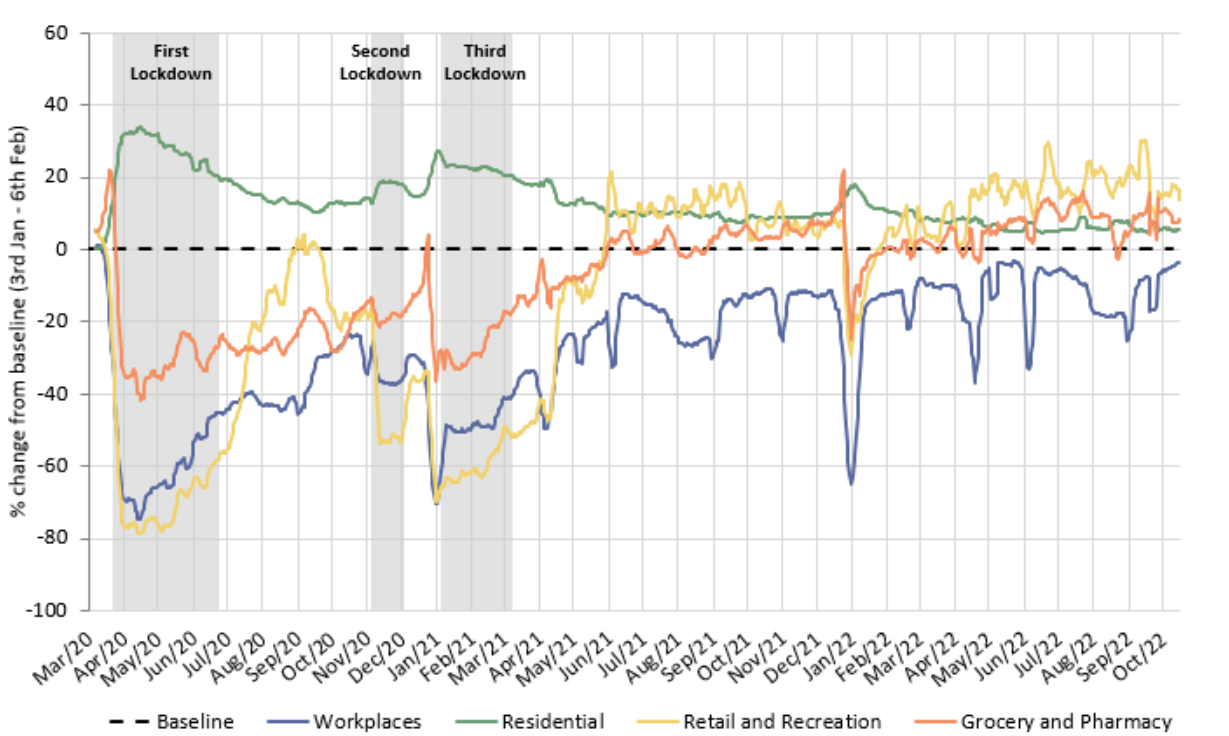Below pre-COVID | Above pre-COVID

The pandemic caused us to spend more time at home and less time at a designated workplace. Whilst the extent of this impact has steadily reduced since Spring 2021, an impact was still being seen when Google discontinued this dataset in October 2022, particularly in Cambridge.

Cambridge
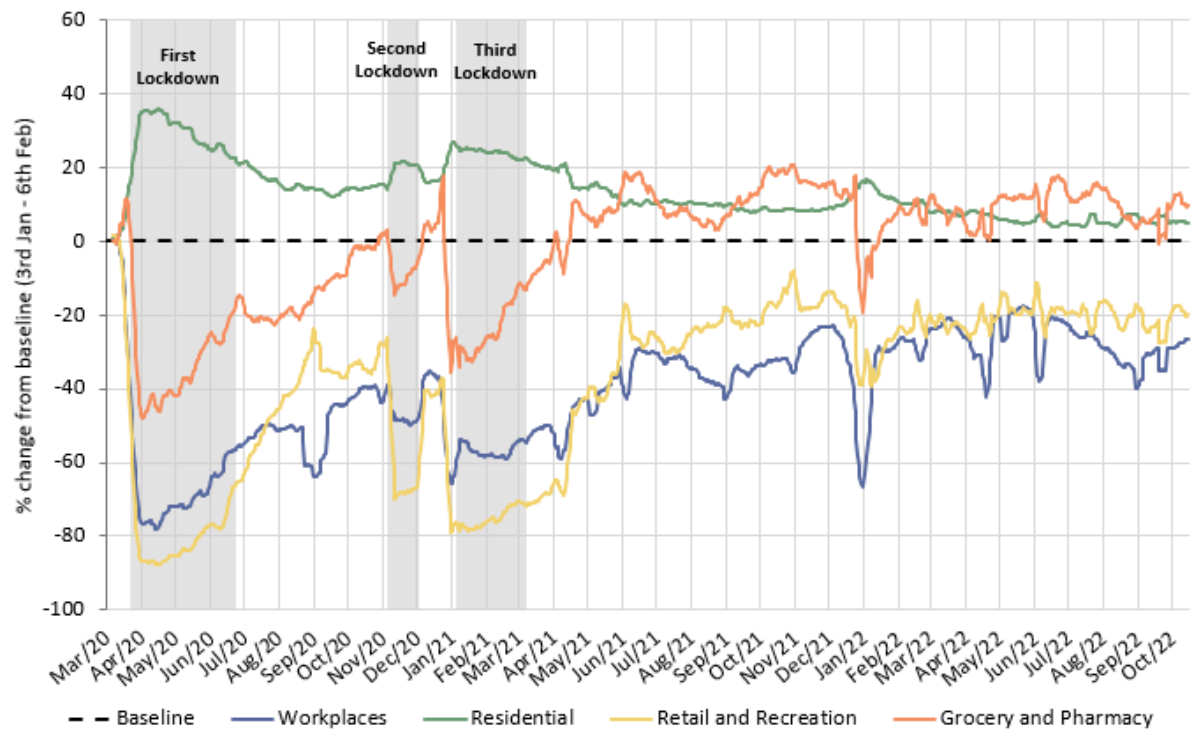
South Cambridgeshire

	Pre-Covid to Now: Baseline (Jan/Feb 2020) to Oct* 2022			
	Workplaces	**Residential**	**Retail and Recreation**	**Grocery and Pharmacy**
Cambridge	-26	+5	-19	+11
South Cambridgeshire	-3	+5	+16	+9

*Sourced from Google Mobility data which was discontinued on 16th October 2022. Numbers represent the % change from the baseline period. The baseline period is defined by Google as 3rd Jan – 6th Feb 2020.

Strategic Road Network

Strategic Road Network Monitoring Sites

Strategic Road Network traffic monitoring sites with continuous data

Map labels: A47, A1, A14, A1, A11, A14, A14, A428, A1, M11

N

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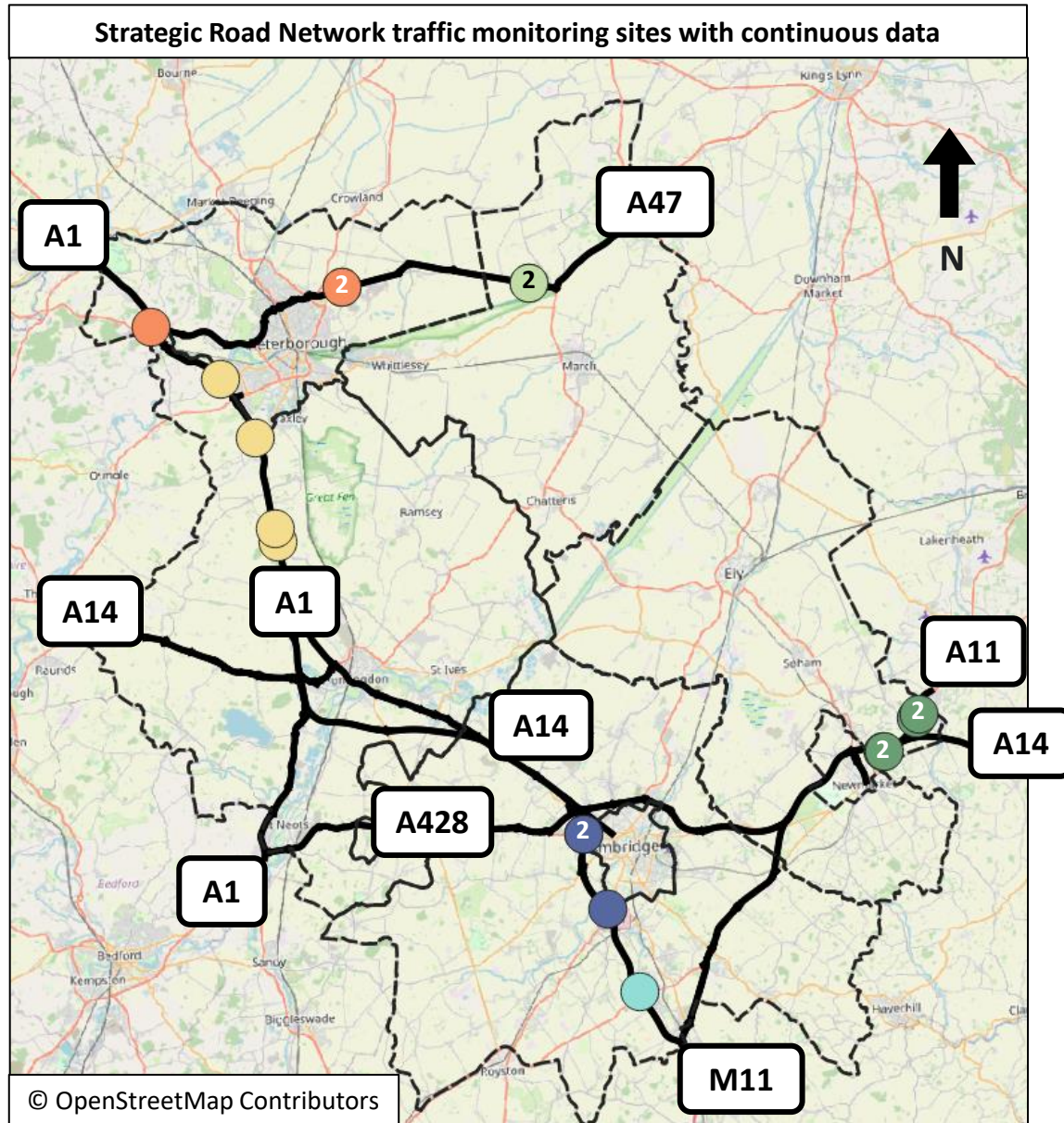
- National Highways have approximately 1,400 permanent traffic monitoring sites on the strategic road network within Cambridgeshire and Peterborough.

- Each monitoring site varies in its ability to reliably provide data over time, and periods of inactivity are common. It is therefore not appropriate to conduct a long-term analysis for all sites.

- For this reason, only the 17 sensors with uninterrupted data from January 2019 onwards are included in this analysis. These 17 sites are shown on the map to the left.

- Please note the number of sensors used within this analysis has decreased since the last update due to sensor outages. Therefore, absolute flow volumes will not be comparable to previous updates.
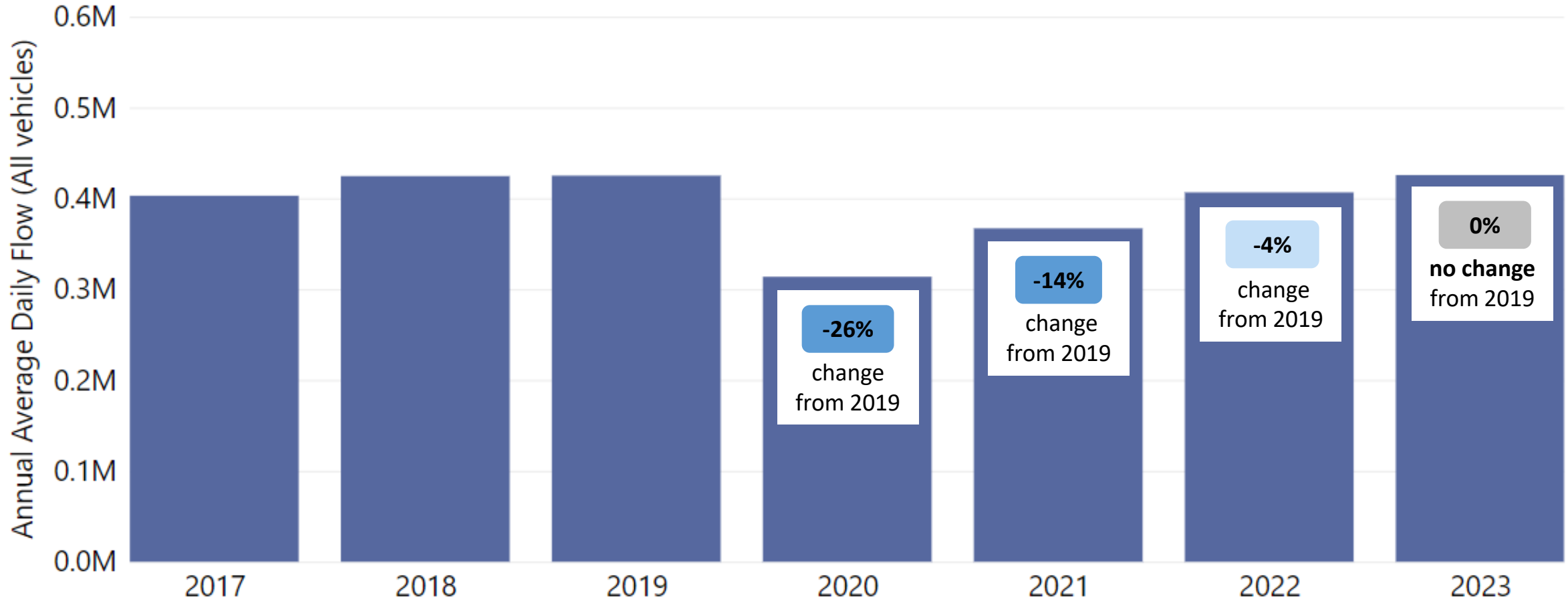
Legend:
- Cambridge sites
- East Cambridgeshire sites
- Fenland sites
- Huntingdonshire sites
- Peterborough sites
- South Cambridgeshire sites
- Strategic Road Network in Cambridgeshire and Peterborough

Strategic Road Network: Annual Average Daily Flow by Year

Below pre-COVID | Above pre-COVID
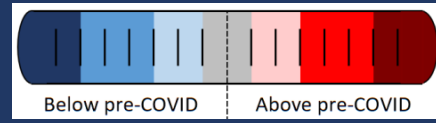
In Cambridgeshire and Peterborough, traffic volumes on the Strategic Road Network in 2023 are back to pre-COVID 2019 volumes.

Annual Average Daily Flow across all 17 sensors

Annual Average Daily Flow (All vehicles)

- 2020: **-26%** change from 2019
- 2021: **-14%** change from 2019
- 2022: **-4%** change from 2019
- 2023: **0%** **no change** from 2019

Years: 2017, 2018, 2019, 2020, 2021, 2022, 2023

Analysis based on 17 sensors - 3 sensors in Cambridge, 4 in East Cambridgeshire, 2 in Fenland, 4 in Huntingdonshire, 3 in Peterborough and 1 in South Cambridgeshire

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Strategic Road Network: Average Daily Flow by Month
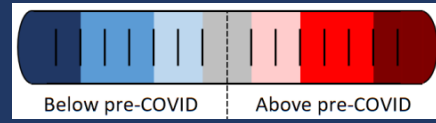
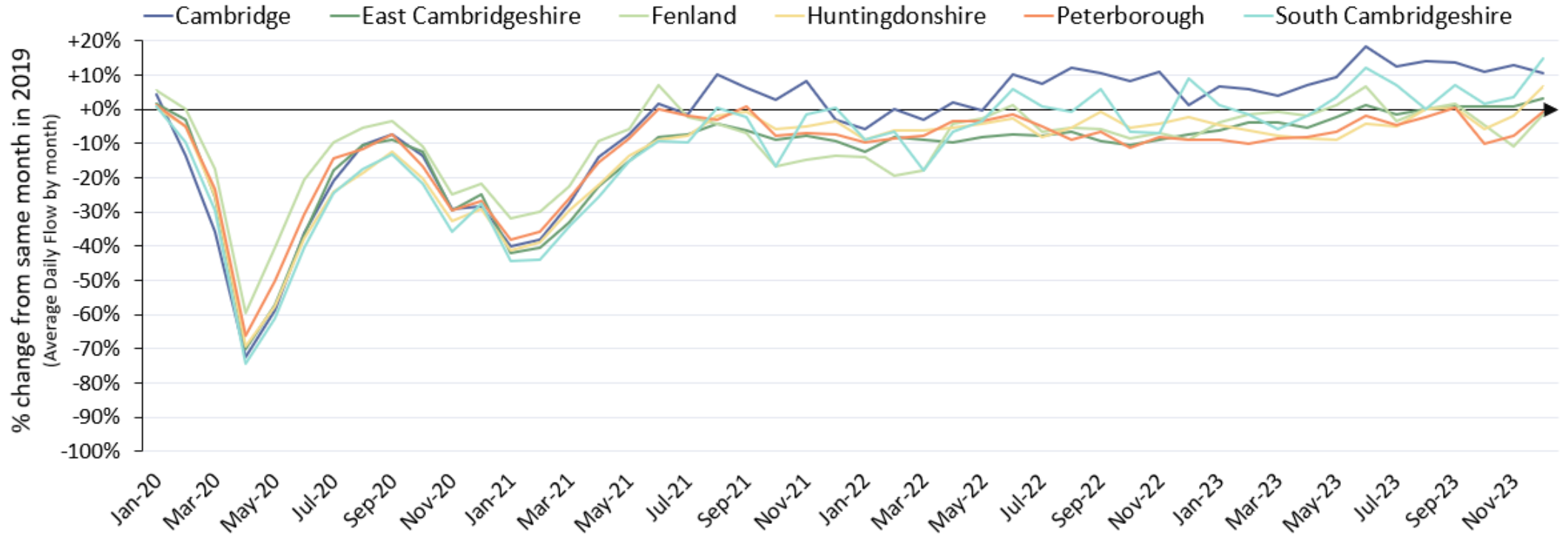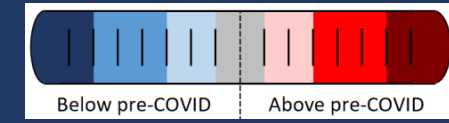In December 2023 all districts present as extremely close to, or beyond, the pre-Covid (December 2019) baseline. Cambridge and South Cambridgeshire are highest above the pre-COVID baseline.

Percentage change from the same month in 2019

	Pre-COVID to Now: Dec 2019 to Dec 2023					
Cambridge	**East Cambridgeshire**	**Fenland**	**Huntingdonshire**	**Peterborough**	**South Cambridgeshire**	**All Districts**
+11%	+3%	-1%	+7%	-1%	+15%	+6%

Analysis based on 17 sensors - 3 sensors in Cambridge, 4 in East Cambridgeshire, 2 in Fenland, 4 in Huntingdonshire, 3 in Peterborough and 1 in South Cambridgeshire. Includes bank holidays.

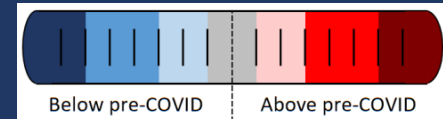# Strategic Road Network: Daily Flow by Day of the Week

On the strategic road network in Cambridgeshire, Monday, Friday and Sunday show similar average flows to pre-COVID volumes in December 2023. However, Tuesday, Wednesday and Thursday are still below 2019, whilst Saturday (+17%) is much higher than pre-COVID.

● December 2019   ● December 2021   ● December 2023
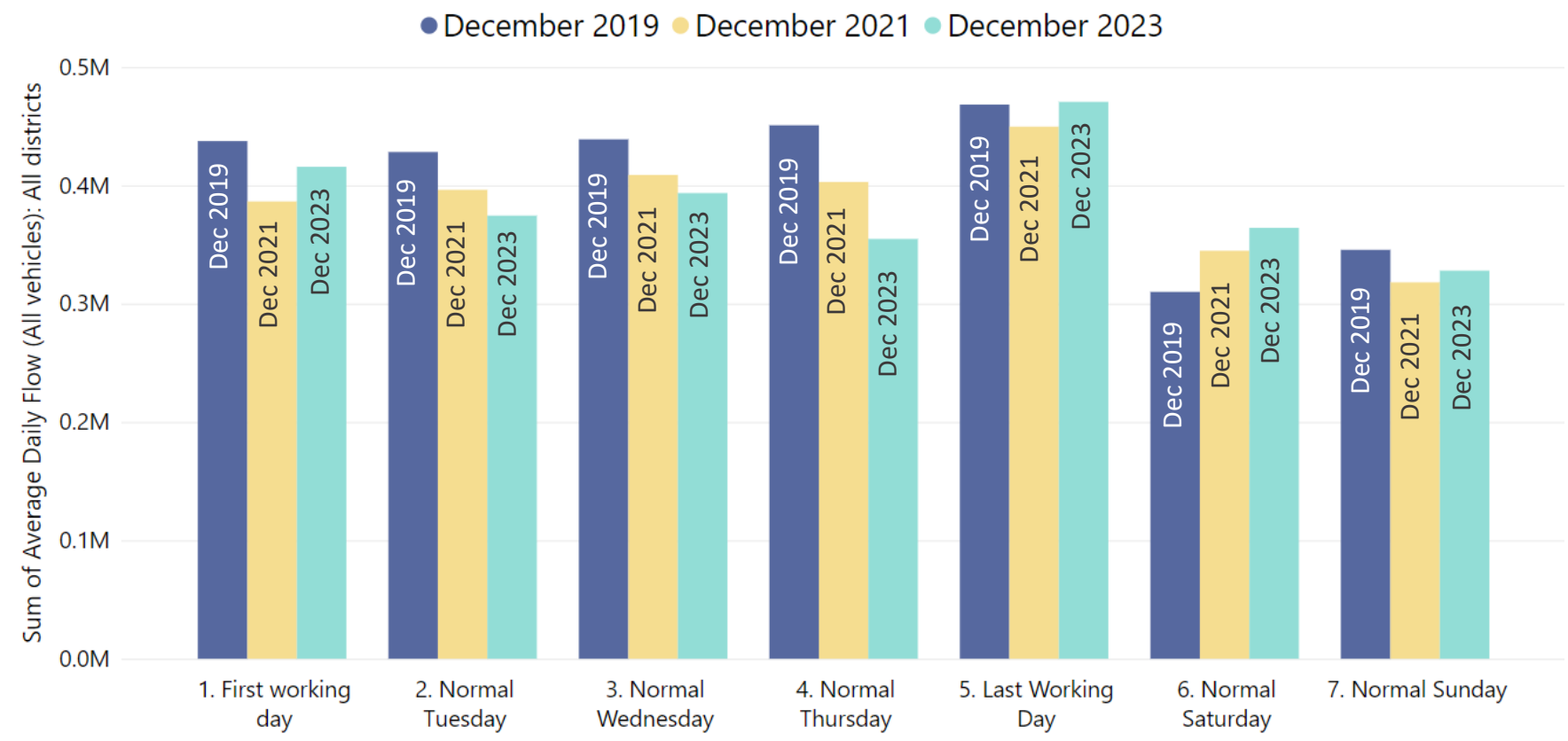
	Pre-COVID to Now:						
	Dec 2019 to Dec 2023						
Average Daily Flow % change	First Working Day	Normal Tuesday	Normal Wednesday	Normal Thursday	Last Working Day	Normal Saturday	Normal Sunday
	-5%	-13%	-10%	-21%	0%	17%	-5%

Analysis based on 17 sensors - 3 sensors in Cambridge, 4 in East Cambridgeshire, 2 in Fenland, 4 in Huntingdonshire, 3 in Peterborough and 1 in South Cambridgeshire. Excludes bank holidays.

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Strategic Road Network: Cambridge

Cambridge strategic road volumes continue to exceed pre-COVID volumes (+11% in December 2023) though have plateaued slightly after experiencing a peak over the summer months.
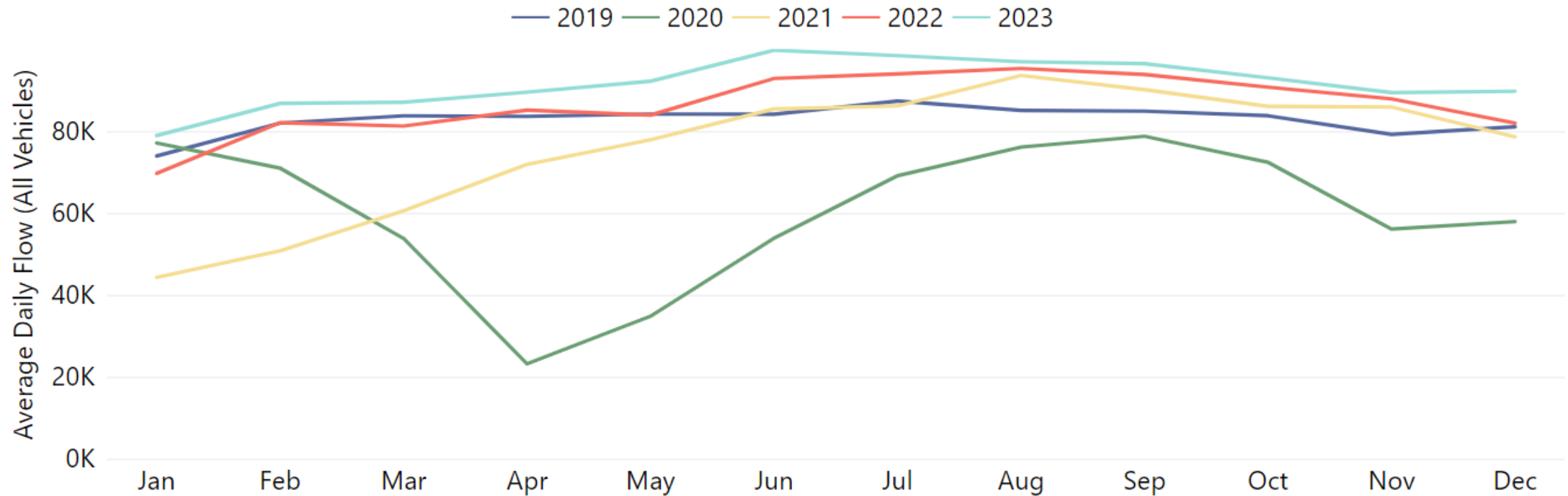
	Pre-COVID to Now: Dec 2019 to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Previous year to Now: Dec 2022 to Dec 2023
	+11%	+14%	+10%

Analysis based on 3 sensors - all on the main carriageway of the M11 (2 near Madingley Road and 1 near Trumpington).

East Cambridgeshire strategic road volumes are near pre-COVID volumes (+3%) and have also seen an increase from December 2022 (+11%).

Pre-COVID to Now: Dec 2019 to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Previous year to Now: Dec 2022 to Dec 2023
+3%	+14%	+11%

Analysis based on 4 sensors - 2 on the main carriageway of the A11 (close to Red Lodge) and 2 on the main carriageway of the A14 (2 north of Newmarket).

Strategic Road Network: Fenland
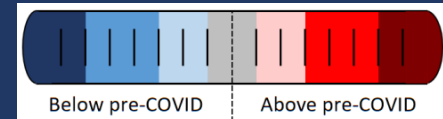
Fenland strategic road volumes are around pre-COVID levels (-1%). Following a gradual increase during 2023, more recent months have experienced a drop in traffic volumes – albeit still ahead of December 2022 (+8%).
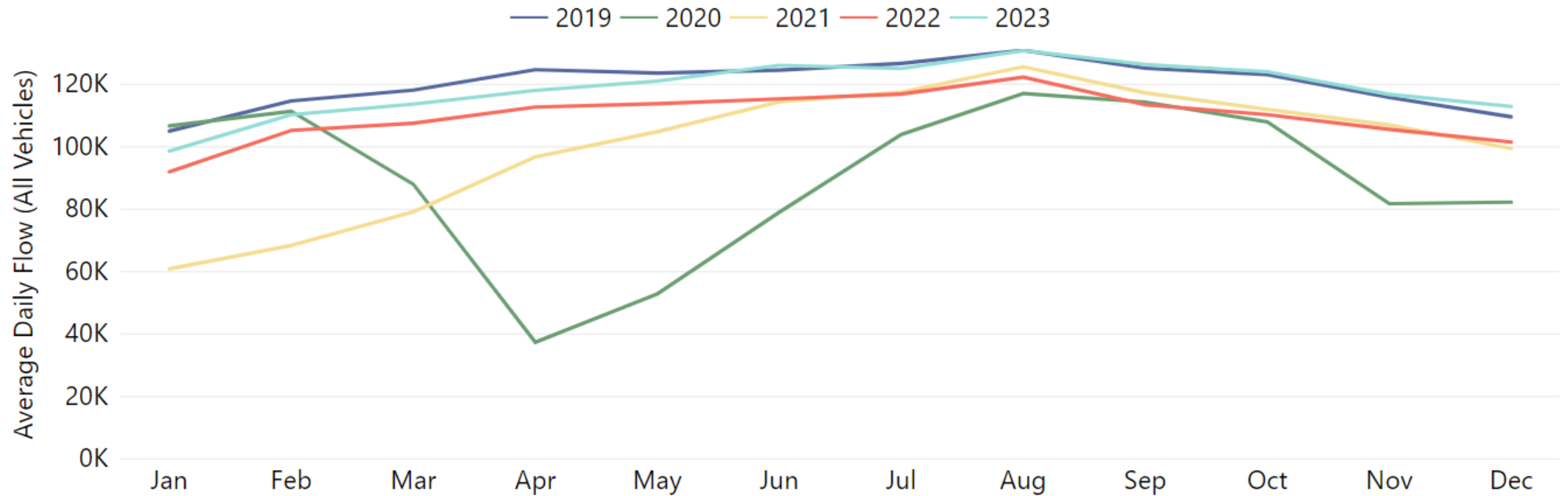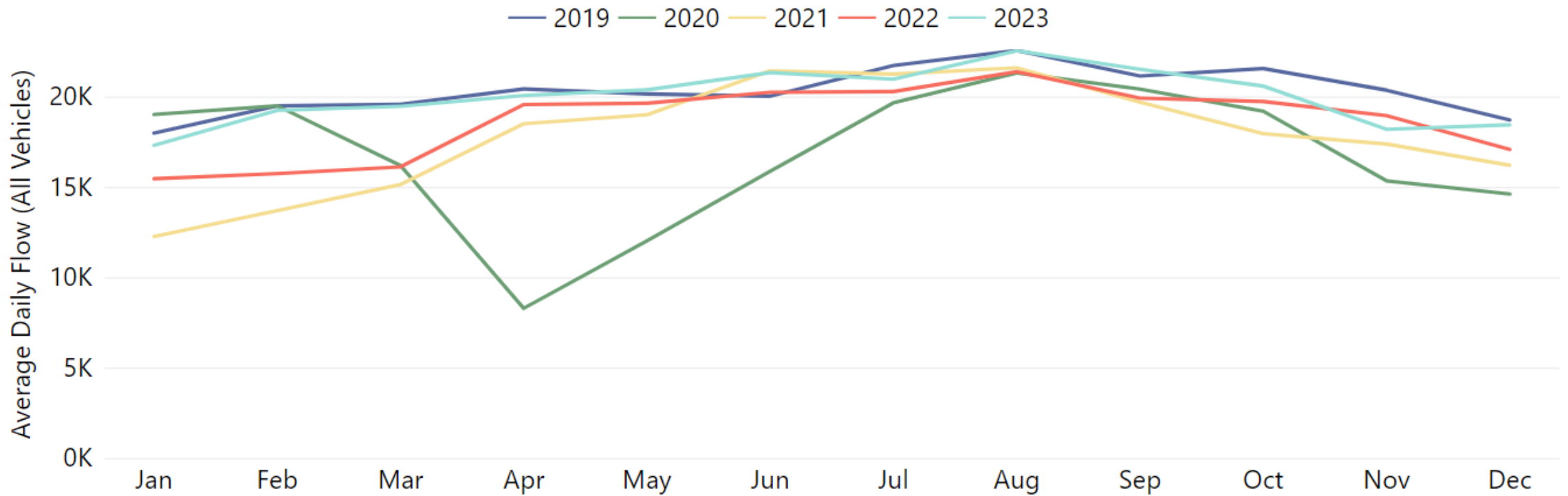

Pre-COVID to Now: Dec 2019 to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Previous year to Now: Dec 2022 to Dec 2023
-1%	+14%	+8%

Analysis based on 2 sensors on the main carriageway of the A47 (both close to Guyhirn).

17

Below pre-COVID | Above pre-COVID
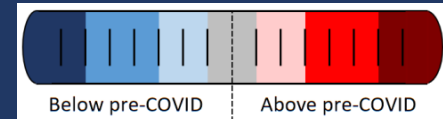
Huntingdonshire strategic road volumes have climbed above 2019 volumes in December 2023 (+7%).

— 2019 — 2020 — 2021 — 2022 — 2023

Pre-COVID to Now: Dec 2019 to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Previous year to Now: Dec 2022 to Dec 2023
+7%	+10%	+9%

Analysis based on 4 sensors - 4 on the A1(M) (2 east of Sawtry, 1 west of Yaxley, 1 near Alwalton). A428 sensors excluded to avoid data bias due to the A14 roadworks.

Strategic Road Network: Peterborough

Peterborough strategic road volumes are around pre-COVID volumes (-1%) and have seen a jump from December 2022 (+9%).

Legend: 2019 — 2020 — 2021 — 2022 — 2023

Y-axis: Average Daily Flow (All Vehicles)

X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Pre-COVID to Now: Dec 2019 to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Previous year to Now: Dec 2022 to Dec 2023
-1%	+7%	+9%

Analysis based on 3 sensors – 2 on the A47 (2 east of Dogsthorpe) and 1 on the A1 (1 north of Wansford).

Below pre-COVID | Above pre-COVID
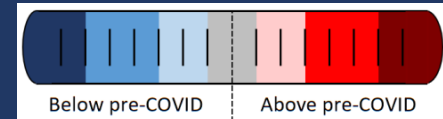
South Cambridgeshire strategic road volumes are some way ahead of pre-COVID volumes +15%) and show an increase on both December 2021 (+14%) and December 2022 (+6%).
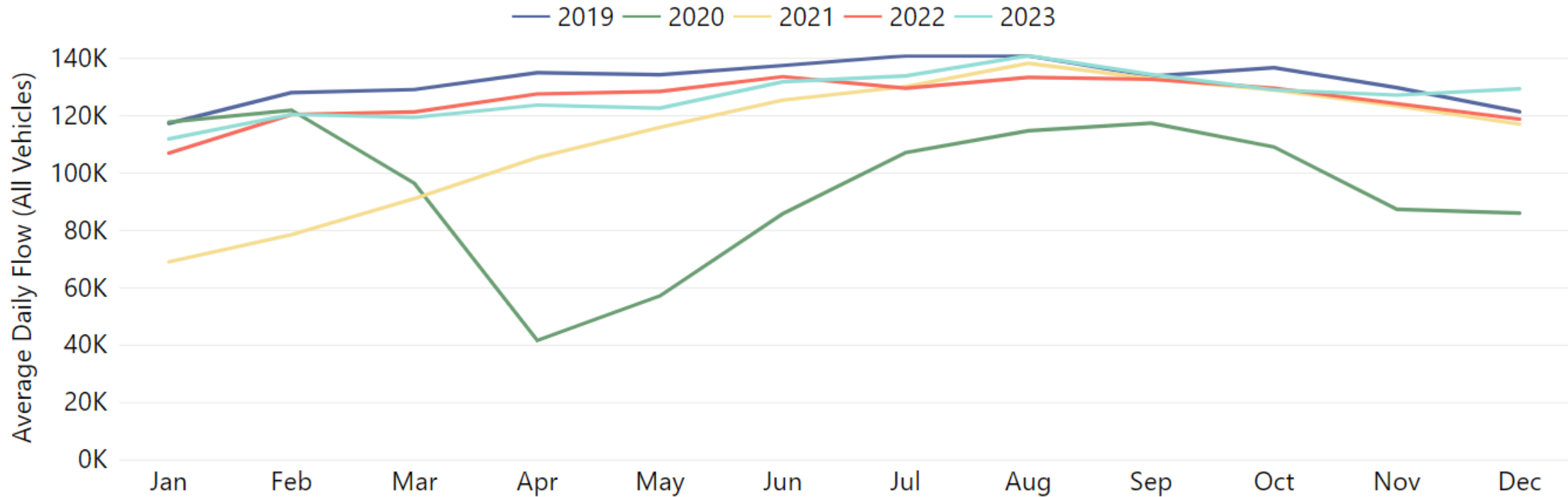

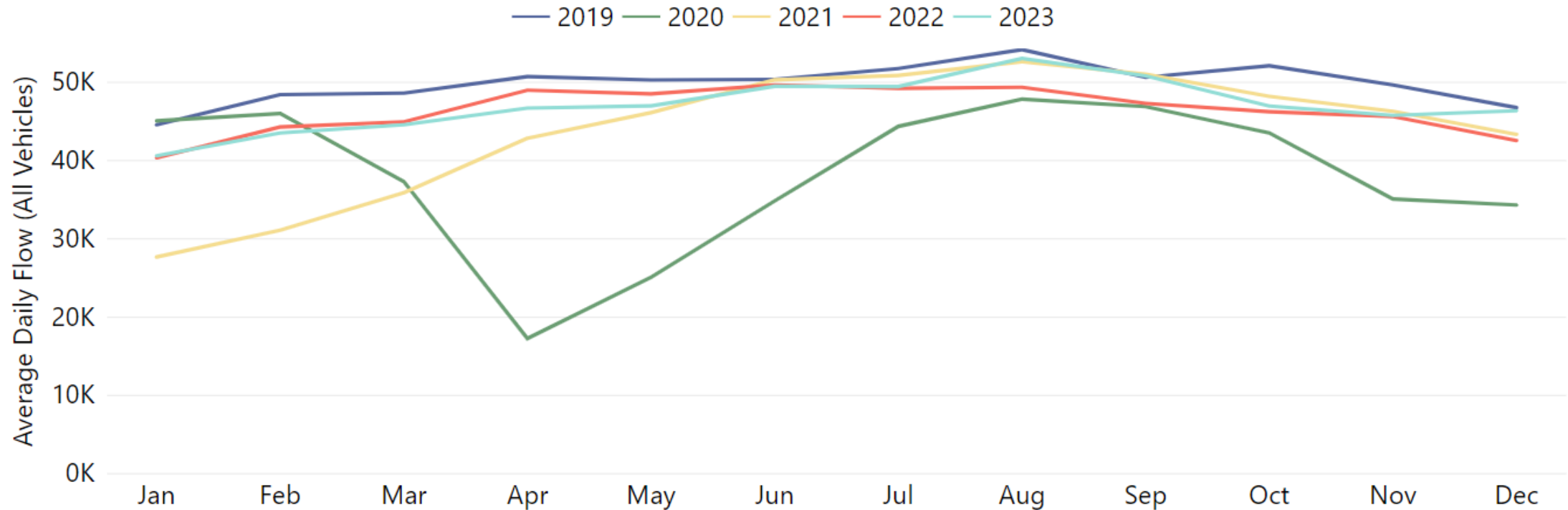| Pre-COVID to Now: Dec 2019 to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Previous year to Now: Dec 2022 to Dec 2023
+15%	+14%	+6%

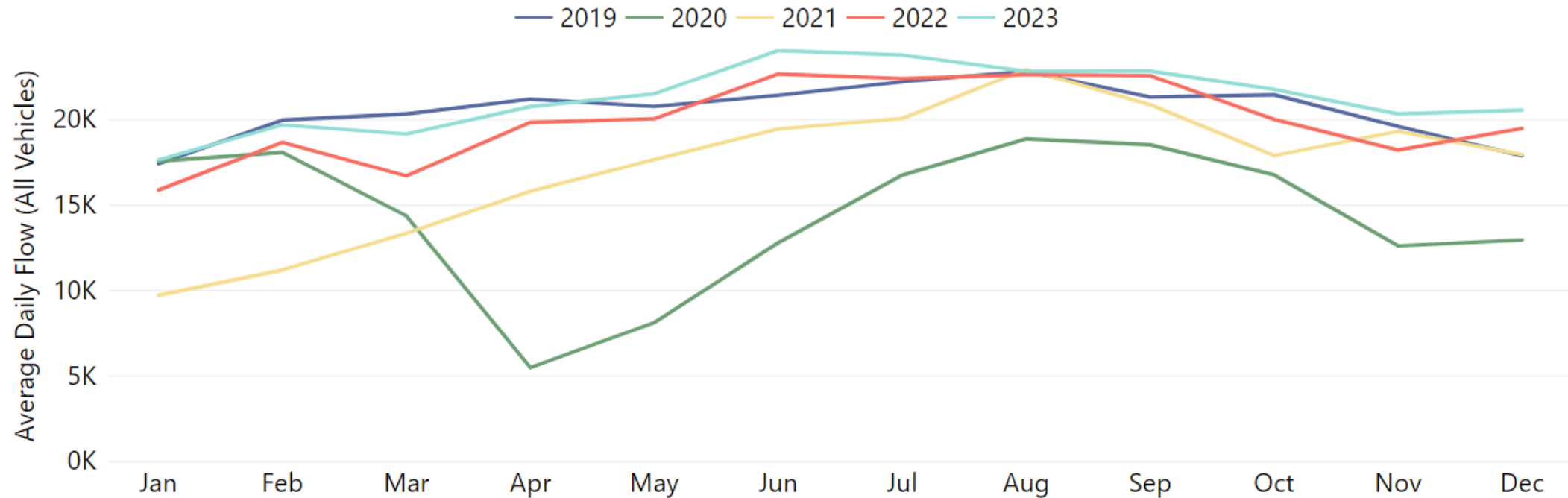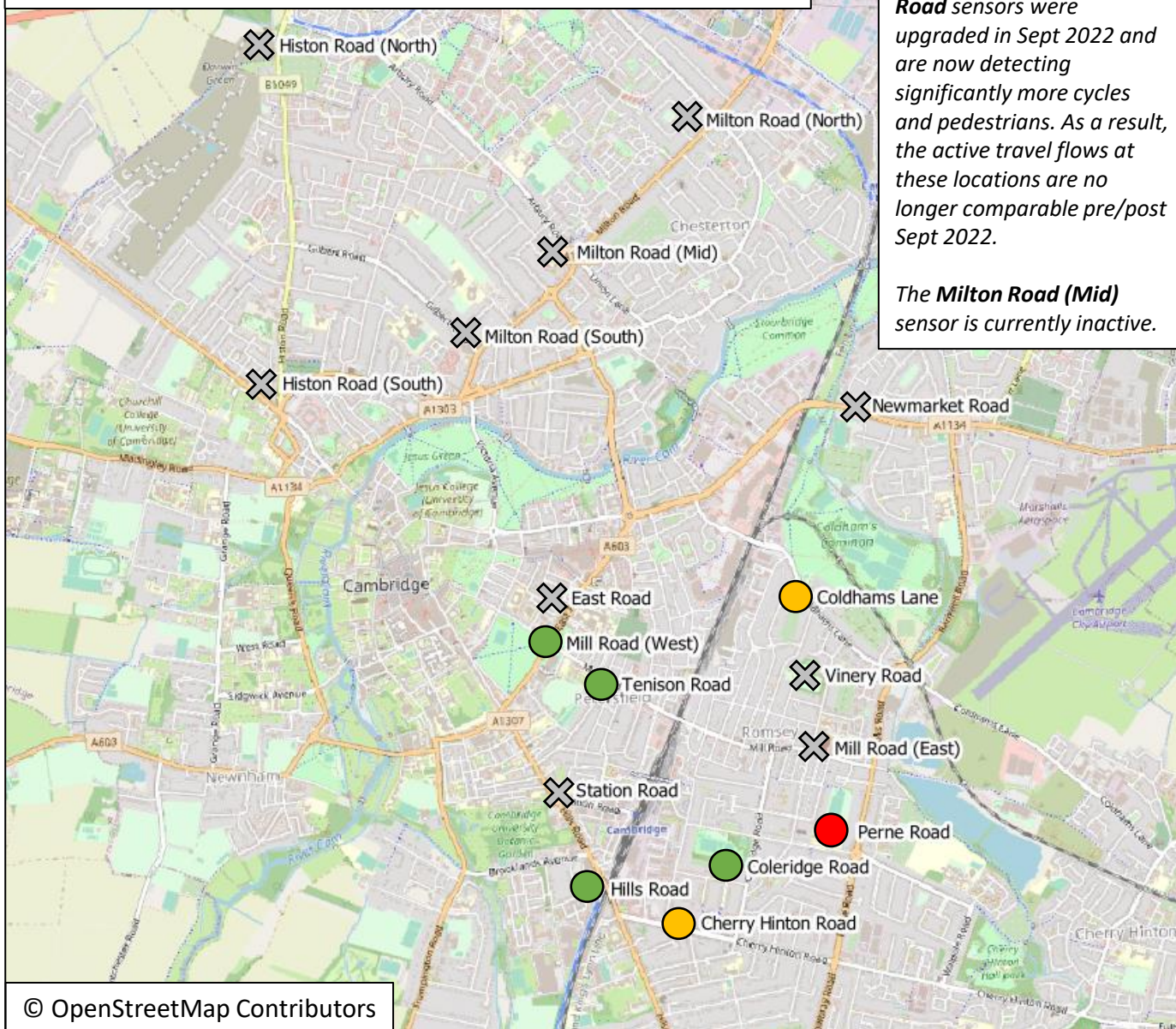Analysis based on 1 sensors - 1 on the M11 (near Duxford) A428 sensors excluded to avoid data bias due to the A14 roadworks.

Local Road Network: Motorised Vehicles

Local Road Network Monitoring Sites: Motorised Vehicles
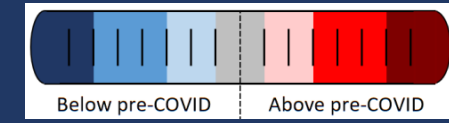
Long Term Vivacity Monitoring Sites – Motorised Vehicles

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*The **Mill Road** and **East Road** sensors were upgraded in Sept 2022 and are now detecting significantly more cycles and pedestrians. As a result, the active travel flows at these locations are no longer comparable pre/post Sept 2022.*

*The **Milton Road (Mid)** sensor is currently inactive.*

Sensor Location	Location description	Installed
Cherry Hinton Road	Near Rock Road	May 2019
Coldham's Lane	Near Coldham's Common	May 2019
Coleridge Road	Near Coleridge recreation ground	May 2019
East Road	Close to ARU site	May 2019
Hills Road Bridge	Near Cherry Hinton Road	May 2019
Histon Road (North)	Just south of A14	Sep 2019
Histon Road (South)	Near Victoria Road	Sep 2019
Mill Road (East)	Close to Brookfield's hospital	May 2019
Mill Road (West)	Close to Parker's Piece	May 2019
Milton Road (Mid)	Near Union Lane	May 2019
Milton Road (North)	Near King's Hedges Road	Sep 2019
Milton Road (South)	Near Gilbert Road	Sep 2019
Newmarket Road	Near Ditton Fields	May 2019
Perne Road	Near Birdwood Road roundabout	May 2019
Station Road	Near Kett House	May 2019
Tenison Road	Near Mill Road	May 2019
Vinery Road	Near Romsey recreation ground	May 2019

Legend

🟢 Comparable motorised vehicle data available for most months and years.

🟡 Comparable motorised vehicle data available for Dec 2019, Dec 2021, Dec 2022 & Dec 2023.

🔴 Comparable motorised vehicle data available for Dec 2019 and Dec 2023.

✖ Comparable data not available for Dec 2019 and / or Dec 2023.

Local Road Network: Motorised Vehicle – Trends

In December 2023, local road vehicle flows were just ahead of December 2022 (+3%). However, volumes are below pre-Covid, December 2019 (-10%).

Average weekday vehicular flow by month, 2019-2023.

Year ● 2019 ● 2020 ● 2021 ● 2022 ● 2023

Pre-COVID to Now:			Mid-COVID to Now:			Previous year to Now:		
December 2019 to December 2023			December 2021 to December 2023			December 2022 to December 2023		
Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)
-10%	-12%	-9%	+7%	+8%	+4%	+3%	-1%	+7%

Sensors used for the analysis on this slide: Coleridge Road, Hills Road, Mill Road (West), and Tenison Road.

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Local Road Network: Motorised Vehicle - Annual Survey Sites

Cambridgeshire Annual Traffic Survey Sites

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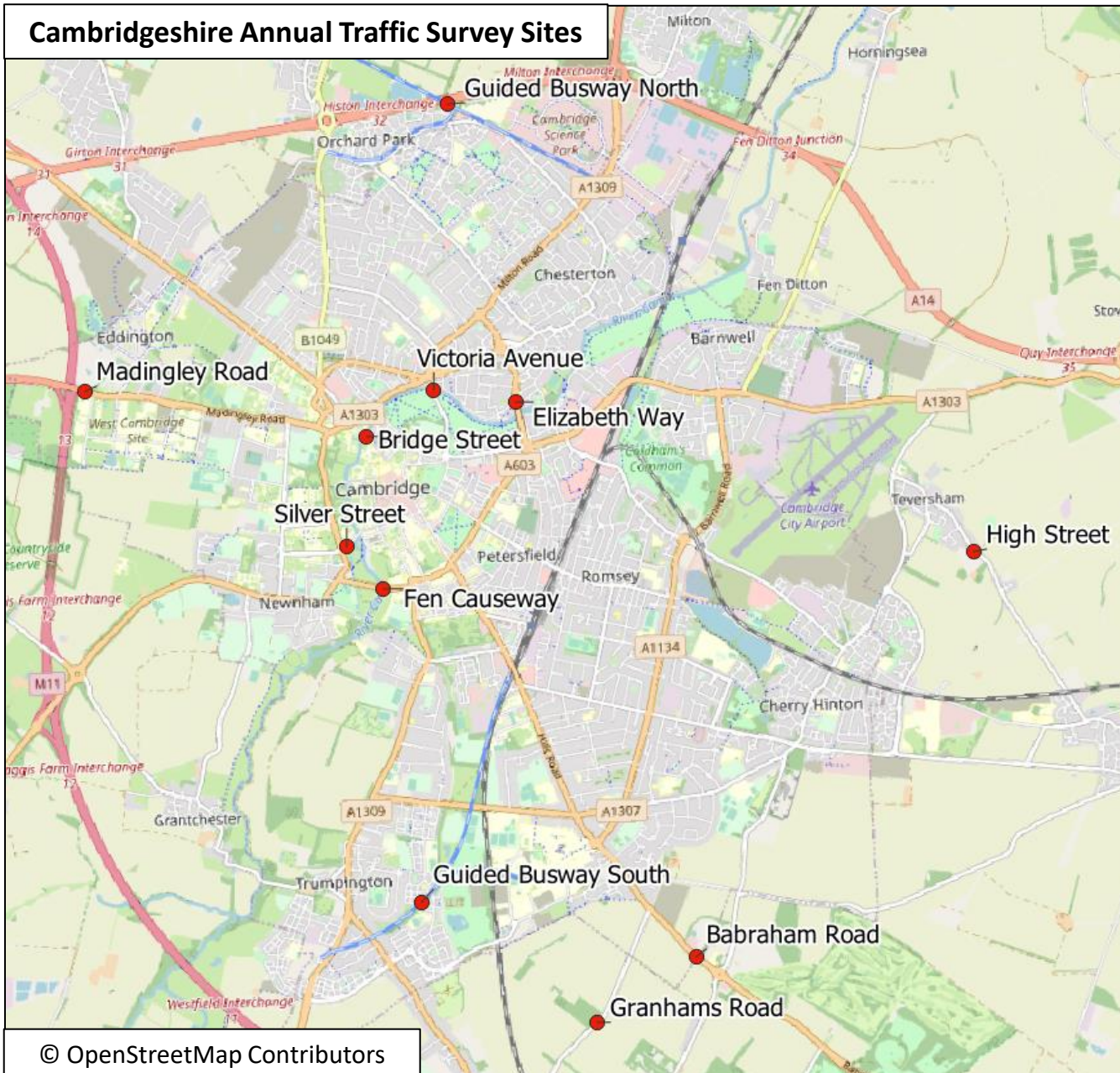
Traffic Survey Site Name
Elizabeth Way
Victoria Avenue
Bridge Street
Silver Street
Fen Causeway
High Street, Teversham
Babraham Road
Granhams Road
Madingley Road
Guided Busway (North)
Guided Busway (South)

Cambridgeshire County Council commissions annual traffic surveys to determine traffic levels around the county on a "typical" weekday.

The sites shown in this map are those in and around Cambridge at which CCC has collected motorised traffic flows over several years.

Analysis of motorised traffic counts from these sites is presented on the following slide.

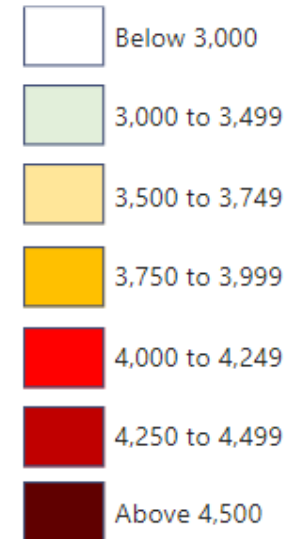*2023 data is currently being analysed and not yet available.

Local Road Network: Motorised Vehicle - Peak Spreading

Motorised traffic is more evenly spread across the morning and afternoon than was observed pre-COVID (2017 – 2019). There is a gradual return of the evening peak in motorised traffic, though volumes are lower than in 2017, 2018 and 2019.

Half Hour beginning	2017	2018	2019	2020	2021	2022
07:00	3,723	3,534	3,258	1,784	2,645	2,900
07:30	4,540	4,229	3,967	2,229	3,501	3,614
08:00	4,522	4,636	4,194	2,147	3,634	3,791
08:30	4,335	4,443	4,047	2,179	3,495	3,783
09:00	4,169	3,914	3,841	1,855	3,191	3,706
09:30	3,700	3,656	3,655	1,743	3,016	3,400
10:00	3,324	3,167	3,405	1,668	2,790	3,013
10:30	3,314	3,284	3,301	1,739	2,967	3,164
11:00	3,348	3,168	3,364	1,663	2,859	3,214
11:30	3,353	3,290	3,341	1,778	2,941	3,220
12:00	3,388	3,332	3,441	2,001	2,991	3,258
12:30	3,360	3,340	3,540	1,920	3,056	3,303
13:00	3,435	3,468	3,411	1,882	2,921	3,194
13:30	3,485	3,482	3,486	1,906	3,034	3,160
14:00	3,535	3,666	3,574	1,995	3,017	3,309
14:30	3,664	3,763	3,570	1,903	3,042	3,539
15:00	3,732	3,931	3,728	2,126	3,278	3,611
15:30	4,215	4,238	4,182	2,283	3,621	3,884
16:00	4,581	4,550	4,413	2,388	3,813	4,082
16:30	4,678	4,598	4,428	2,361	3,828	4,195
17:00	4,964	4,805	4,474	2,267	3,880	4,203
17:30	4,731	4,830	4,473	2,154	3,880	4,054
18:00	4,543	4,436	4,309	1,800	3,418	3,767
18:30	3,804	3,865	3,780	1,545	2,855	3,415

Number of motor vehicles per half hour

- Below 3,000
- 3,000 to 3,499
- 3,500 to 3,749
- 3,750 to 3,999
- 4,000 to 4,249
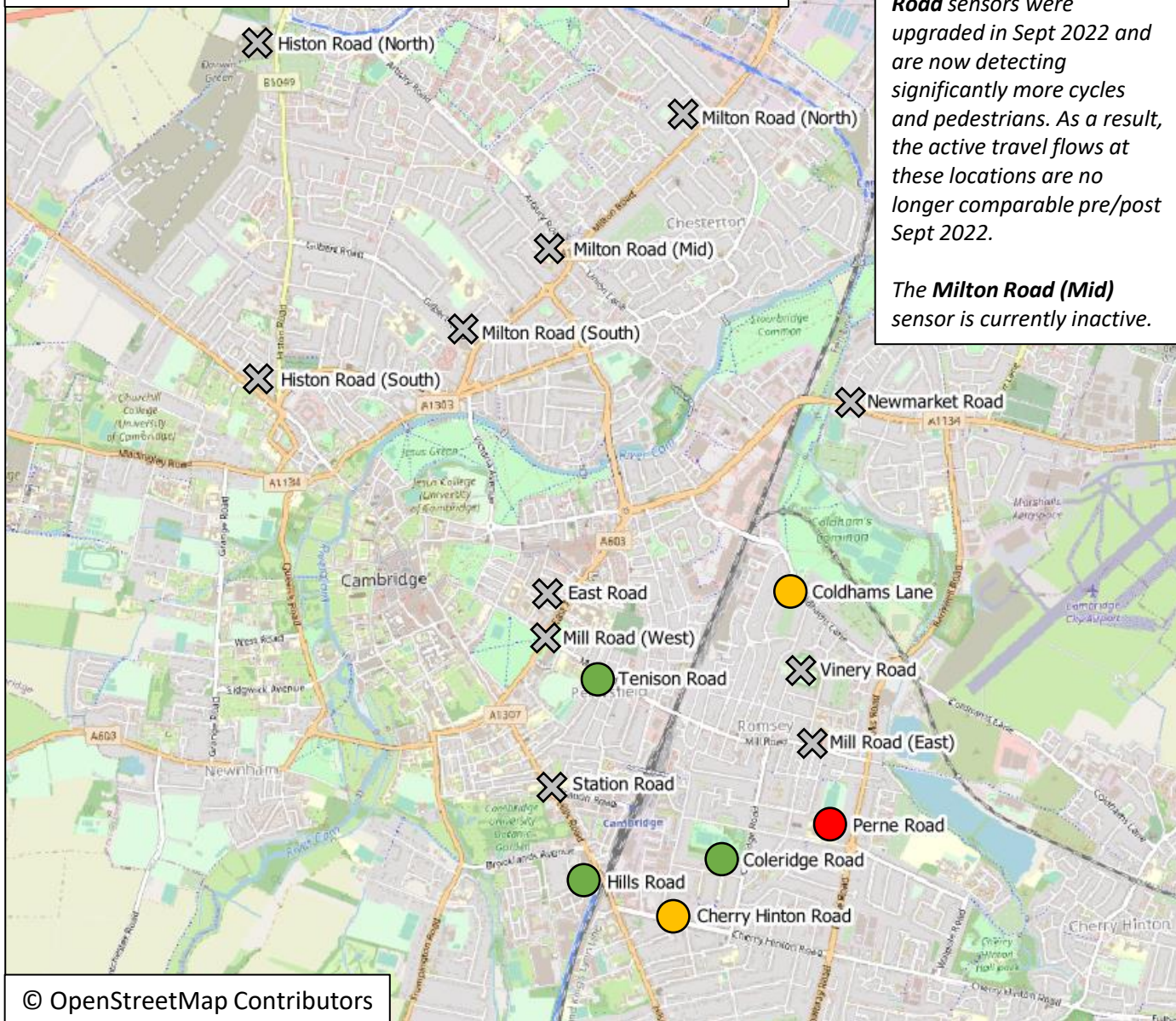- 4,250 to 4,499
- Above 4,500

*2023 data is currently being analysed and not yet available.

Local Road Network: Vehicle Split

Local Road Network Monitoring Sites: Vehicle Split

Long Term Vivacity Monitoring Sites – Vehicle Split

© OpenStreetMap Contributors

*The **Mill Road** and **East Road** sensors were upgraded in Sept 2022 and are now detecting significantly more cycles and pedestrians. As a result, the active travel flows at these locations are no longer comparable pre/post Sept 2022.*

*The **Milton Road (Mid)** sensor is currently inactive.*

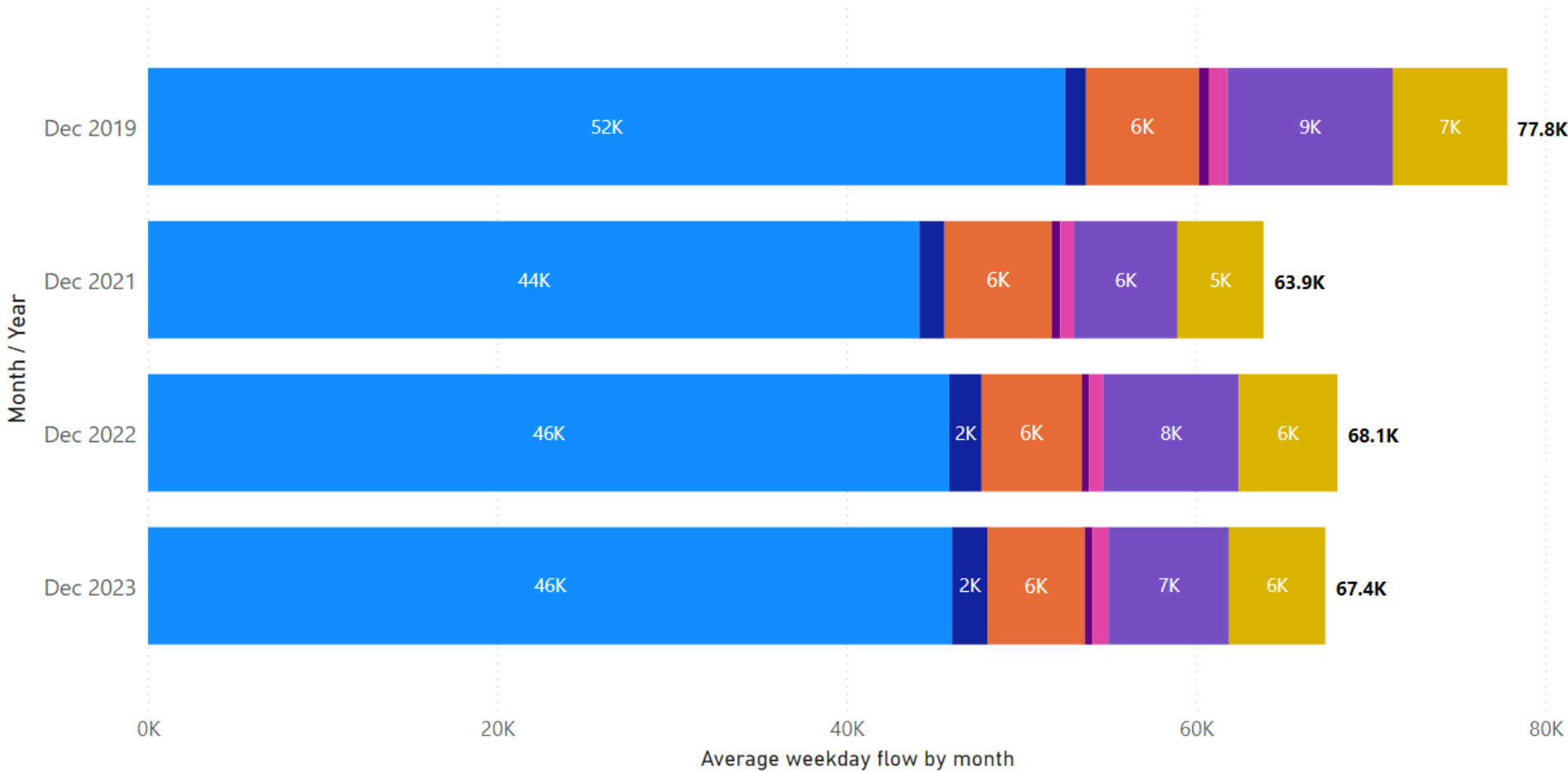| Sensor Location	Location description	Installed
Cherry Hinton Road	Near Rock Road	May 2019
Coldham's Lane	Near Coldham's Common	May 2019
Coleridge Road	Near Coleridge recreation ground	May 2019
East Road	Close to ARU site	May 2019
Hills Road Bridge	Near Cherry Hinton Road	May 2019
Histon Road (North)	Just south of A14	Sept 2019
Histon Road (South)	Near Victoria Road	Sept 2019
Mill Road (East)	Close to Brookfield's hospital	May 2019
Mill Road (West)	Close to Parker's Piece	May 2019
Milton Road (Mid)	Near Union Lane	May 2019
Milton Road (North)	Near King's Hedges Road	Sept 2019
Milton Road (South)	Near Gilbert Road	Sept 2019
Newmarket Road	Near Ditton Fields	May 2019
Perne Road	Near Birdwood Road roundabout	May 2019
Station Road	Near Kett House	May 2019
Tenison Road	Near Mill Road	May 2019
Vinery Road	Near Romsey recreation ground	May 2019

Legend

- 🟢 Comparable motorised vehicle data available for most months and years.
- 🟡 Comparable motorised vehicle data available for Dec 2019, Dec 2021, Dec 2022 & Dec 2023.
- 🔴 Comparable motorised vehicle data available for Dec 2019 and Dec 2023.
- ✖ Comparable data not available for Dec 2019 and / or Dec 2023.

Local Road Vehicle Split: Overall

December 2023 weekday flows are similar to December 2022 and some way below pre-COVID levels in December 2019. The proportion of active compared to motorised travel has held fairly steady since 2019, at approx. 20%.

Vehicle type split – sum of 5 sensors in Cambridge

Vehicle type ● Car ● Motorbike ● LGV ● OGV ● Bus ● Cycle ● Pedestrian

Average weekday flow by month

Active Travel* proportion by year	
Year	Active %
December 2019	21%
December 2021	17%
December 2022	20%
December 2023	18%

Dec 2023 Active Travel* proportion by location	
Location	Active %
Mill Road (West)	46%
Station Road	42%
Tenison Road	35%
East Road	26%
Cherry Hinton Road	21%
Hills Road	21%
Coleridge Road	14%
Perne Road	11%
Histon Road (North)	8%
Coldham's Lane	6%
Newmarket Road	5%

*Active Travel includes cyclists and pedestrians

Sensors used for the analysis on this slide: Cherry Hinton Road, Coldham's Lane, Coleridge Road, Hills Road, and Tenison Road.

Average two-way weekday flow by mode for Dec 2019, Dec 2021, Dec 2022, Dec 2023.
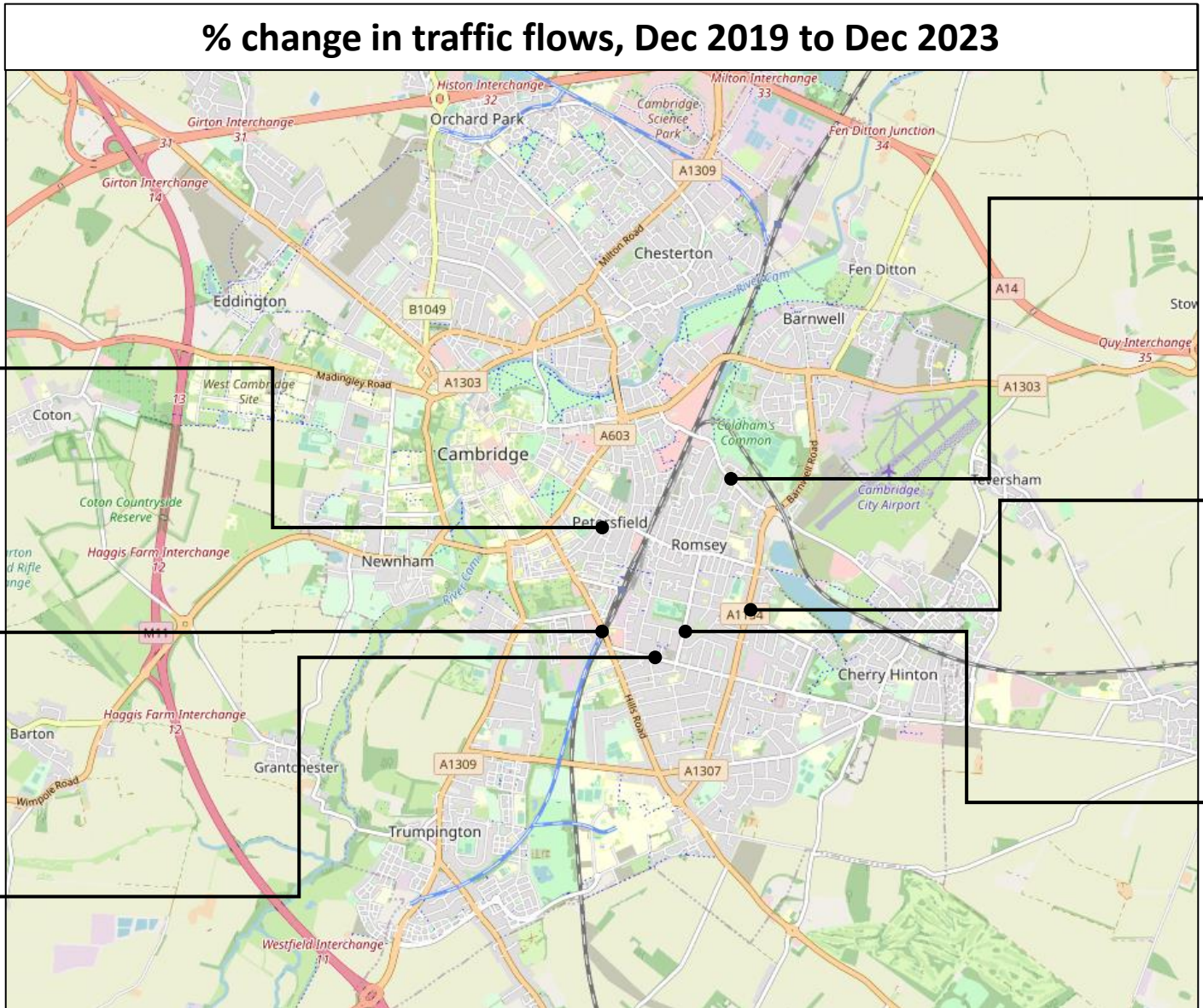
Local Road Network: Recovery Map
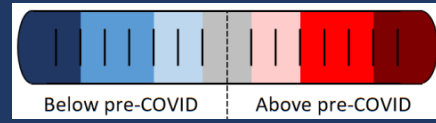
The motorised flow across 6 Cambridge sensors in December 2023 is 11% below pre-COVID levels (December 2019). Some sites have seen large increases in active travel volumes in comparison to December 2019 – however, the combined overall figure for these 6 sites is a 16% drop against pre-COVID volumes.

All 6 Sites Combined

Active Travel: **-16%**

Motorised Travel: **-11%**

Tenison Road

Active Travel: **+7%**

Motorised Travel: **-13%**

Hills Road

Active Travel: **-40%**

Motorised Travel: **-6%**

Cherry Hinton Road

Active Travel: **+18%**

Motorised Travel: **-15%**

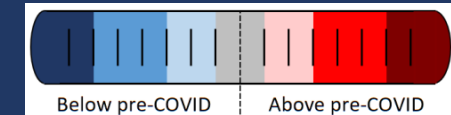## % change in traffic flows, Dec 2019 to Dec 2023

Coldham's Lane

Active Travel: **-7%**

Motorised Travel: **-13%**

Perne Road

Active Travel: **+50%**

Motorised Travel: **-10%**

Coleridge Road

Active Travel: **-38%**

Motorised Travel: **-14%**

30

Below pre-COVID | Above pre-COVID

Motorcycle volumes are higher than pre-Covid (December 2019) at all sites. Some sites show a large increase in active travel volumes – most notably Perne Road (+50%) and Cherry Hinton Road (+18%). Motorised volumes have fallen at all sites in comparison to pre-Covid.

% change in weekday volumes

Pre-COVID to Now:
December 2019 to December 2023

	Car	Cycle	Bus	OGV	LGV	Motorbike	Pedestrian	All modes	Motorised Vehicles	Active Modes
Cherry Hinton Road	-18%	13%	-26%	-56%	-0%	58%	23%	-10%	-15%	18%
Coldham's Lane	-13%	12%	-56%	-9%	-22%	153%	-35%	-12%	-13%	-7%
Coleridge Road	-15%	-44%	-59%	72%	-15%	18%	-28%	-18%	-14%	-38%
Hills Road Bridge	-8%	-40%	-1%	-24%	-16%	70%	-40%	-16%	-6%	-40%
Perne Road	-10%	76%	-47%	-22%	-0%	9%	17%	-6%	-10%	50%
Tenison Road	-13%	2%	-30%	-75%	-9%	44%	9%	-7%	-13%	7%
Total	**-12%**	**-19%**	**-18%**	**-25%**	**-11%**	**61%**	**-13%**	**-12%**	**-11%**	**-16%**

Data shown only for the sensors with comparable data for December 2019 and December 2023.

31

Local Road Network: Active Travel

Local Road Network Monitoring Sites: Active Travel
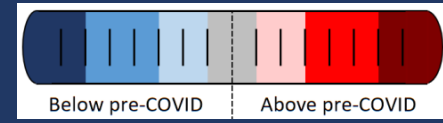
Long Term Vivacity Monitoring Sites – Active Travel
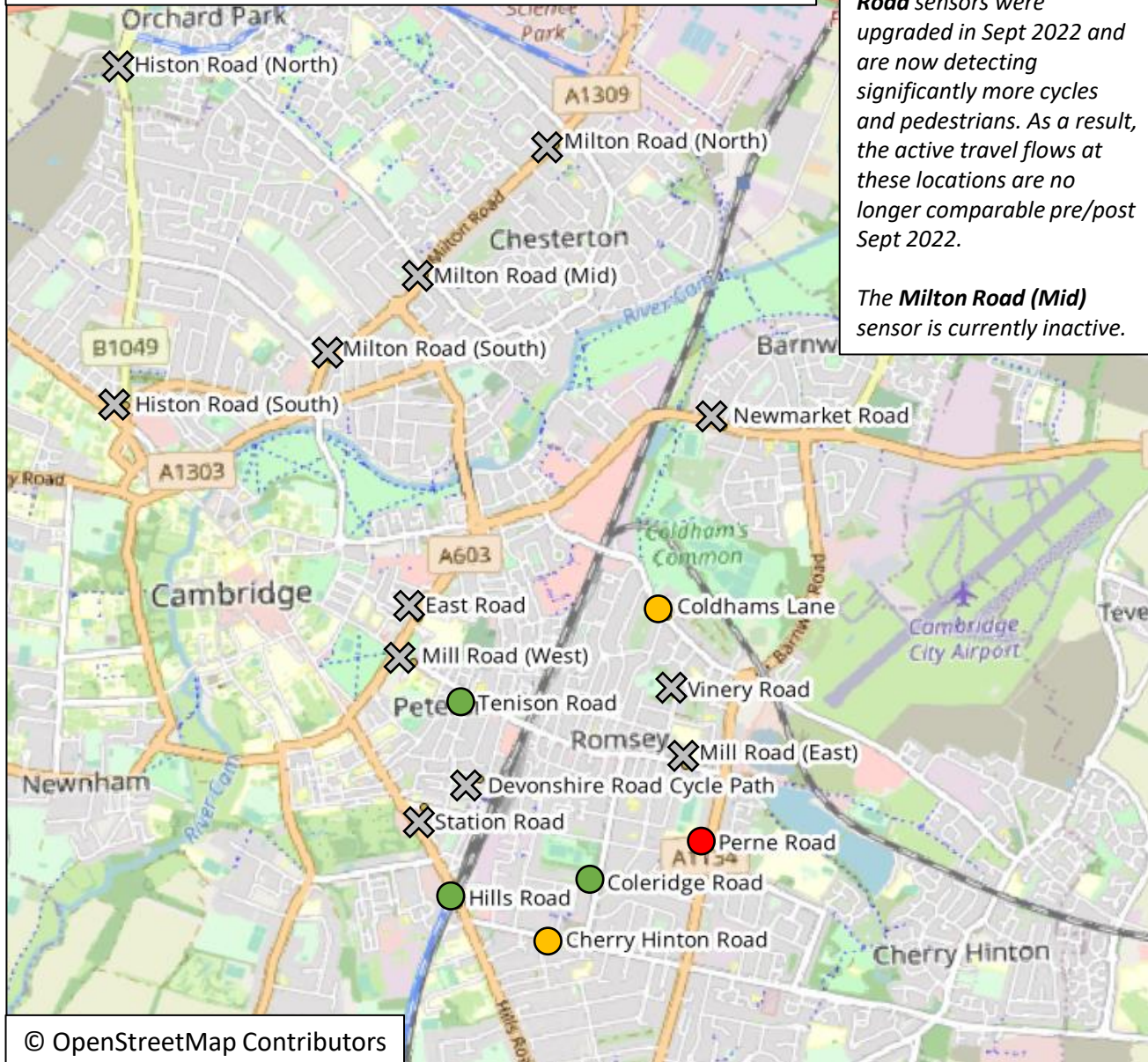
© OpenStreetMap Contributors

*The **Mill Road** and **East Road** sensors were upgraded in Sept 2022 and are now detecting significantly more cycles and pedestrians. As a result, the active travel flows at these locations are no longer comparable pre/post Sept 2022.*

*The **Milton Road (Mid)** sensor is currently inactive.*

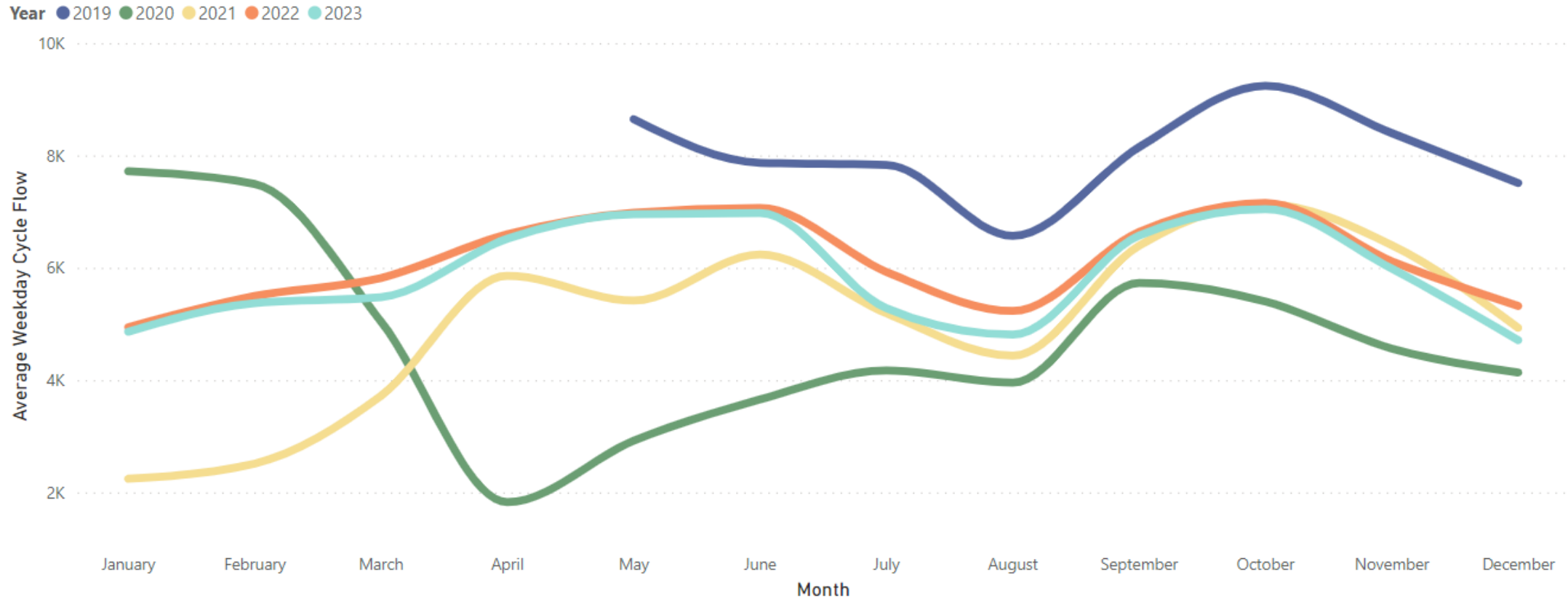| Sensor Location	Location description	Installed
Cherry Hinton Road	Near Rock Road	May 2019
Coldham's Lane	Near Coldham's Common	May 2019
Coleridge Road	Near Coleridge recreation ground	May 2019
Devonshire Rd Cycle Path	Opposite 55-57 Devonshire Road	May 2019
East Road	Close to ARU site	May 2019
Hills Road Bridge	Near Cherry Hinton Road	May 2019
Histon Road (North)	Just south of A14	Sept 2019
Histon Road (South)	Near Victoria Road	Sept 2019
Mill Road (East)	Close to Brookfield's hospital	May 2019
Mill Road (West)	Close to Parker's Piece	May 2019
Milton Road (Mid)	Near Union Lane	May 2019
Milton Road (North)	Near King's Hedges Road	Sept 2019
Milton Road (South)	Near Gilbert Road	Sept 2019
Newmarket Road	Near Ditton Fields	May 2019
Perne Road	Near Birdwood Road roundabout	May 2019
Station Road	Near Kett House	May 2019
Tenison Road	Near Mill Road	May 2019
Vinery Road	Near Romsey recreation ground	May 2019

Legend

🟢 Comparable motorised vehicle data available for most months and years.

🟡 Comparable motorised vehicle data available for Dec 2019, Dec 2021, Dec 2022 & Dec 2023.

🔴 Comparable motorised vehicle data available for Dec 2019 and Dec 2023.

✖ Comparable data not available for Dec 2019 and / or Dec 2023.
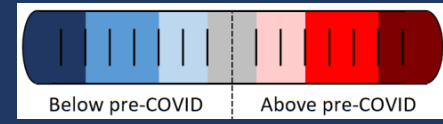
Below pre-COVID   Above pre-COVID

December 2023 weekday cycling volumes are 37% below pre-COVID levels (December 2019) but are much closer to the volumes seen in Dec 2021 (-11%) and in Dec 2022 (-3%).

Average weekday cycle flow by month, 2019-2023.

Year ● 2019 ● 2020 ● 2021 ● 2022 ● 2023

	Pre-COVID to Now:			Mid-COVID to Now:			Previous year to Now:		
	December 2019 to December 2023			December 2021 to December 2023			December 2022 to December 2023		
Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	
-37%	-37%	-33%	-11%	-4%	-19%	-3%	-11%	+30%	

Sensors used for this analysis: Coleridge Road, Hills Road, and Tenison Road.

Pedestrian volumes in December 2023 were 22% below pre-Covid (December 2019) but 13% ahead of last year (December 2022).

Average weekday pedestrian flow by month, 2019-2023.

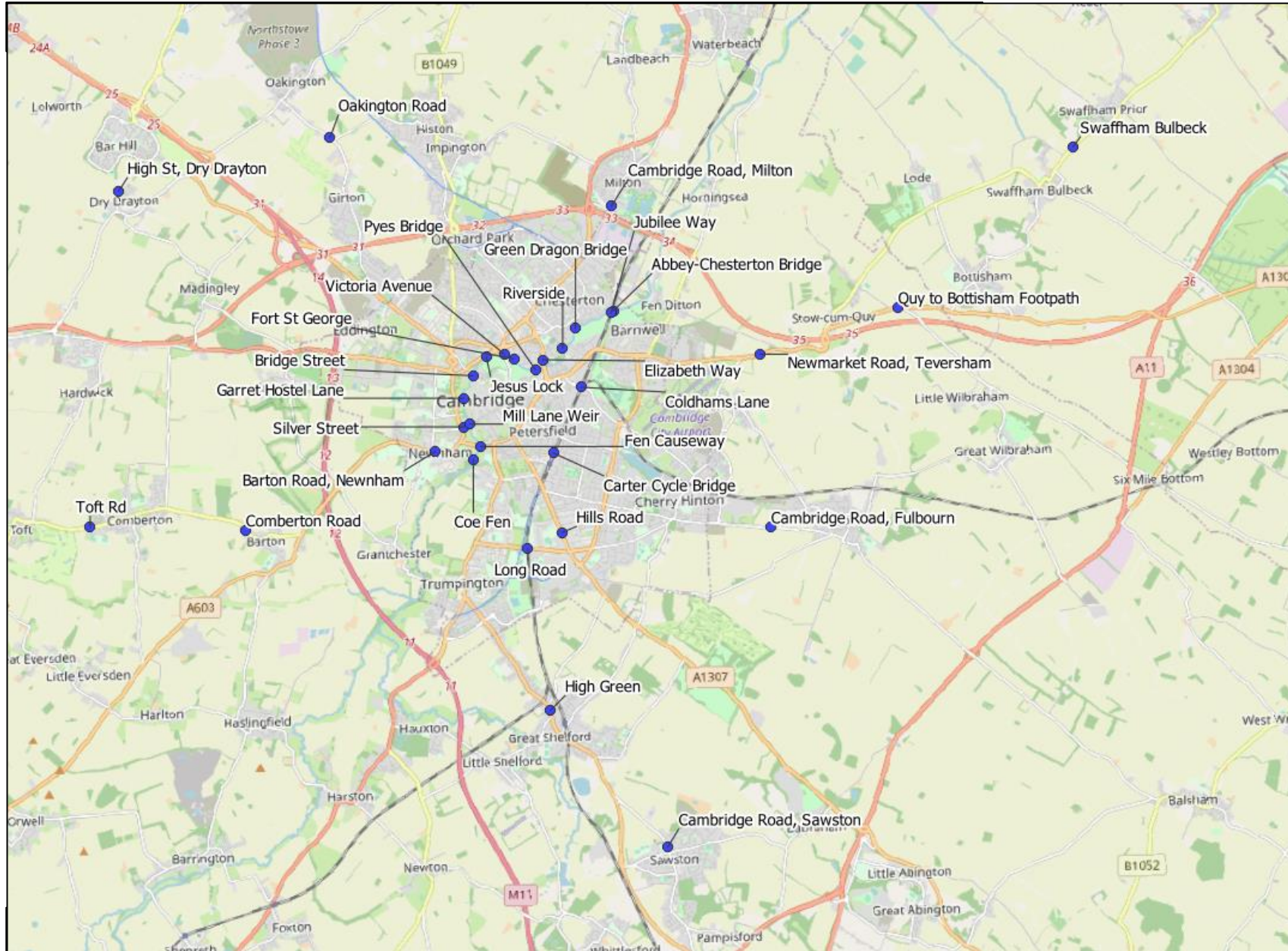| Pre-COVID to Now:			Mid-COVID to Now:			Previous year to Now:		
December 2019 to December 2023			December 2021 to December 2023			December 2022 to December 2023		
Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)
-22%	-23%	-18%	No change	+2%	-4%	+13%	+6%	+36%

Sensors used for this analysis: Coleridge Road, Hills Road, and Tenison Road.

Local Road Network: Active Travel Census Sites

Sensor Location
Elizabeth Way
Victoria Avenue
Bridge Street
Silver Street
Fen Causeway
Green Dragon Bridge
Pye's Bridge
Fort St George
Jesus Lock
Garrett Hostel Lane
Mill Lane Weir
Coe Fen
Riverside
Abbey-Chesterton Bridge (new for 2022)
Barton Road, Newnham
Comberton Road
Toft Road
High Street, Dry Drayton
Oakington Road
Cambridge Road, Milton
Cambridge Road, Fulbourn
Newmarket Road, Teversham
Coldhams Lane
Carter Cycle Bridge
High Green, Great Shelford
Hills Road
Long Road
Jubilee Way
Cambridge Road, Sawston
Swaffham Bulbeck Footpath
Quy to Bottisham Footpath

Local Road Network: Active Travel Peak Spreading

The pattern of active travel in 2023 more closely resembles that from 2017 to 2019, particularly the extent of peak spreading in the afternoon / evening – although volumes are still a little below pre-COVID levels. Morning peak volumes are still some way below pre-COVID levels.
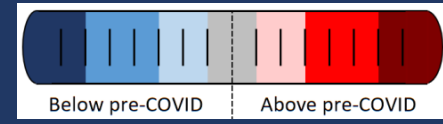
Half Hour beginning	2017	2018	2019	2020	2021	2022	2023
07:00	1,989	1,917	1,695	778	1,346	1,421	1,616
07:30	3,358	3,389	3,023	1,131	2,284	2,436	2,721
08:00	5,187	5,362	4,921	1,091	3,740	4,039	4,526
08:30	6,224	6,570	6,345	1,148	4,065	4,839	5,475
09:00	4,208	4,220	4,181	922	2,452	3,192	3,638
09:30	3,261	3,299	3,037	1,069	2,127	2,447	2,993
10:00	2,544	2,541	2,422	1,012	1,998	2,234	2,469
10:30	2,501	2,723	2,395	1,127	2,050	2,218	2,727
11:00	2,514	2,565	2,294	1,221	2,202	2,173	2,450
11:30	2,823	2,793	2,613	1,359	2,402	2,441	2,518
12:00	2,751	3,087	2,760	1,415	2,626	2,615	3,139
12:30	3,369	3,582	3,428	1,504	2,826	3,025	3,370
13:00	3,037	3,760	3,314	1,574	2,812	3,088	3,362
13:30	3,005	3,644	3,199	1,481	2,784	2,868	3,490
14:00	2,817	3,020	2,699	1,645	2,441	2,728	3,028
14:30	2,993	2,463	2,870	1,716	2,675	2,915	3,044
15:00	3,571	3,403	3,376	1,893	2,962	3,127	3,283
15:30	3,772	3,458	3,628	2,053	3,188	3,420	3,571
16:00	4,395	4,111	4,075	2,099	3,799	3,934	4,276
16:30	4,725	4,082	4,248	2,238	3,586	3,757	4,252
17:00	5,512	5,194	5,357	2,344	3,807	4,203	4,849
17:30	5,349	5,249	5,264	2,649	3,826	4,520	5,132
18:00	5,087	4,878	4,595	2,664	3,594	4,083	4,327
18:30	4,308	4,002	4,037	2,336	3,188	3,549	3,726

Number of active travel counts per half hour

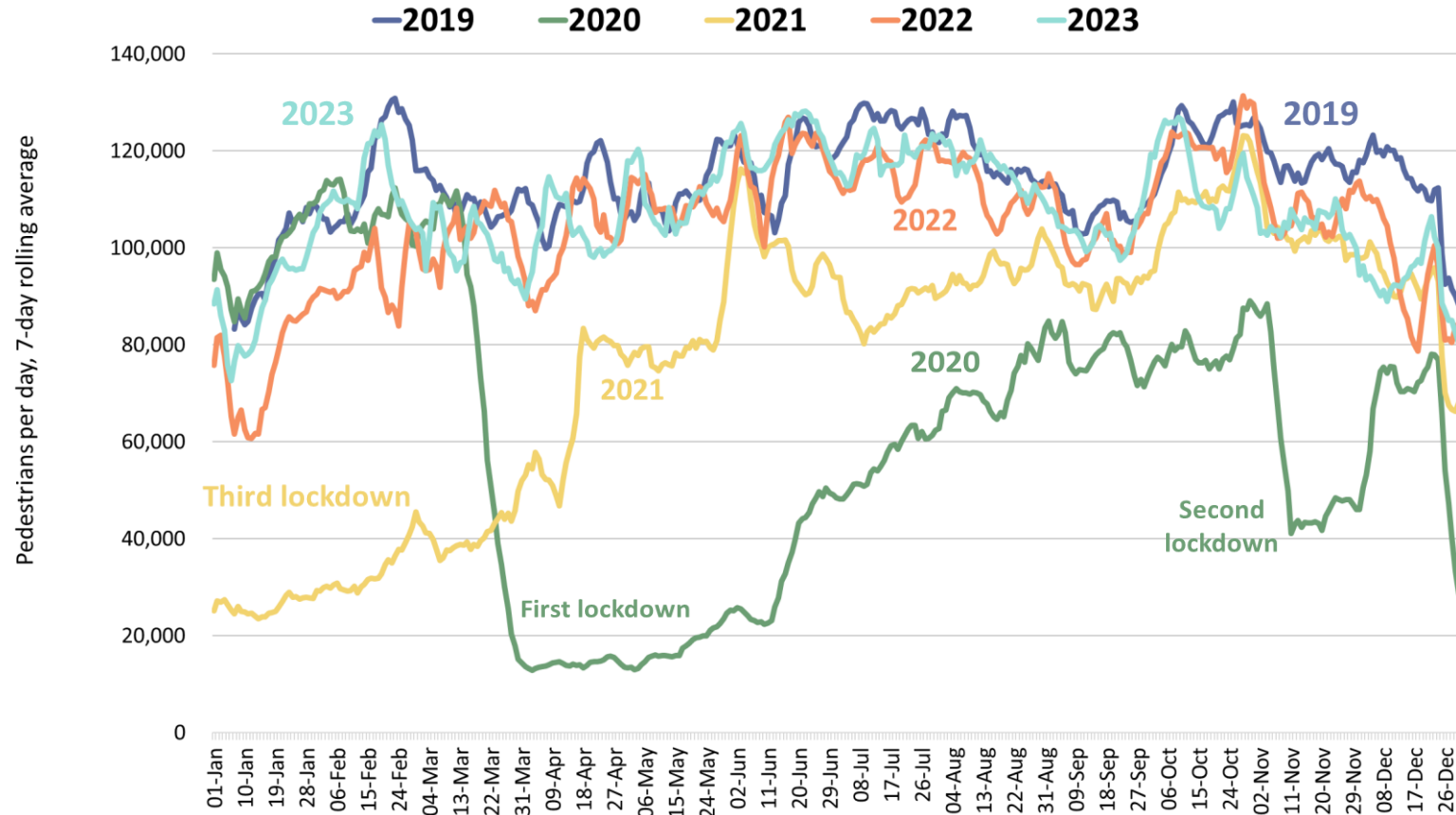|	
☐	Below 2,500
☐	2,500 to 2,999
☐	3,000 to 3,499
☐	3,500 to 3,999
☐	4,000 to 4,999
☐	5,000 to 5,999
☐	6,000 and above

37
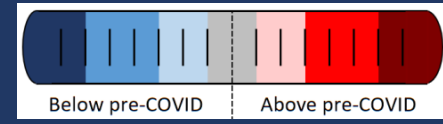
Retail Footfall

Retail Footfall: Central Cambridge

Retail footfall in Cambridge is 15% below pre-COVID (December 2019) levels – and is 4% below last year (December 2022).


	Pre-COVID to Now:			Mid-COVID to Now:			Previous year to Now:		
	Dec 2019 to Dec 2023			Dec 2021 to Dec 2023			Dec 2022 to Dec 2023		
Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)
-15%	-25%	-8%	+2%	-1%	+4%	-4%	-12%	+10%

Retail Footfall: Central Cambridge by Day of the Week

All days are below pre-Covid (December 2019) levels. Wednesday (-37%) experienced the largest decrease, while Saturday (-8%) is closest to pre-Covid.
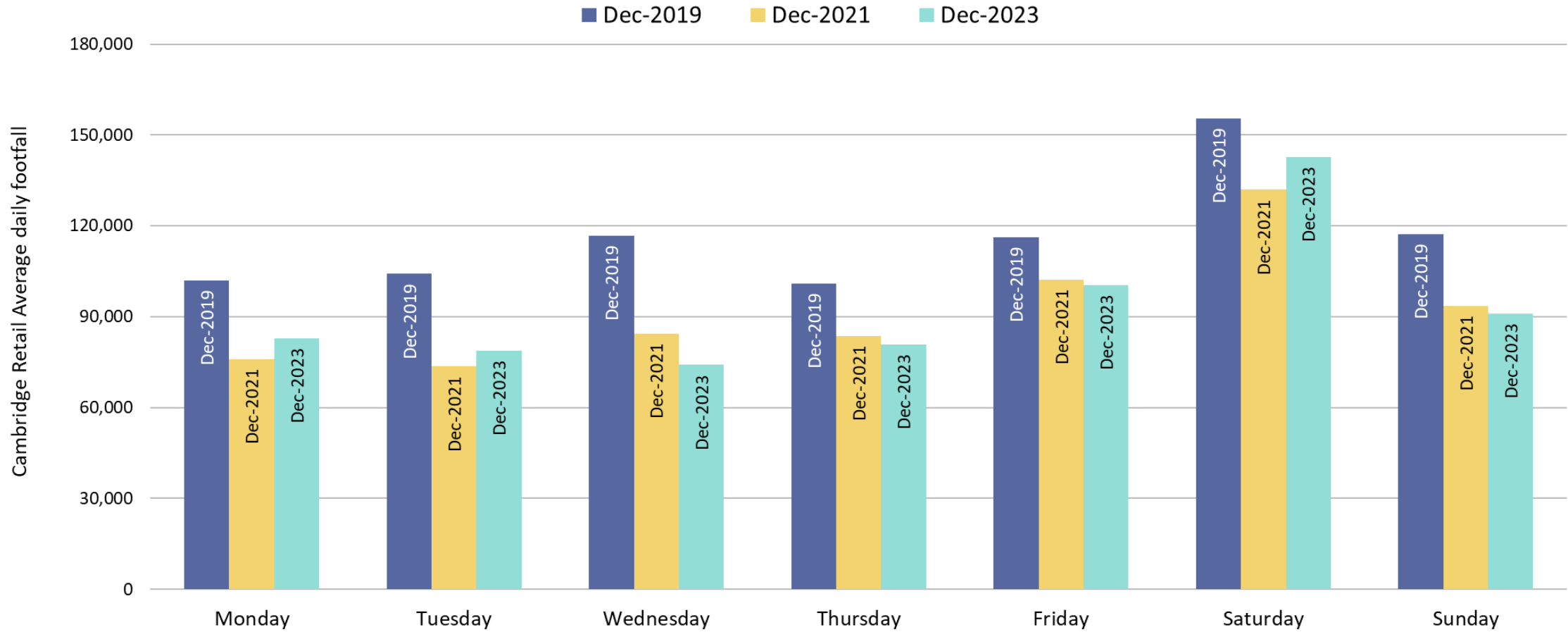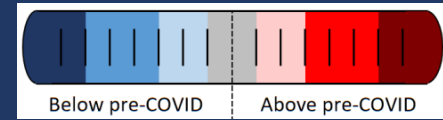

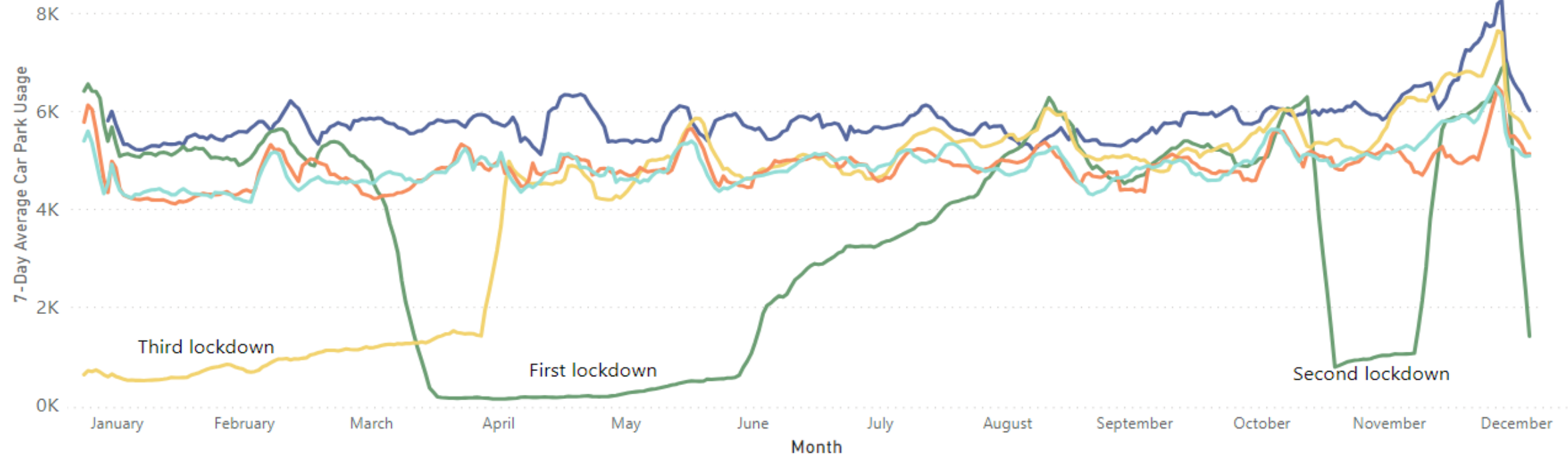| Pre-COVID to Now: Dec 2019 to Dec 2023						
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
-19%	**-24%**	**-37%**	**-20%**	**-14%**	**-8%**	**-22%**

Car Parking

Car Parking: Daily Use

Multi-storey car park use in December 2023 was 11% below pre-Covid (December 2019) levels. Grafton East (-20%) has seen the largest fall in usage among individual car parks compared to pre-Covid; whereas Grand Arcade has seen the largest increase in usage (+12%).

Rolling 7 Day Average Car Park Usage, Cambridge.

**Year** ● 2019 ● 2020 ● 2021 ● 2022 ● 2023

Pre-COVID to Now: December 2019 to December 2023			Mid Covid to Now: December 2021 to December 2023			Previous year to Now: December 2022 to December 2023		
Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)
-11%	-18%	-4%	-12%	-13%	-12%	+18%	+11%	+27%

*Park Street car park closed for redevelopment on 4th January 2022; usage figures for this car park are included up to its closure.
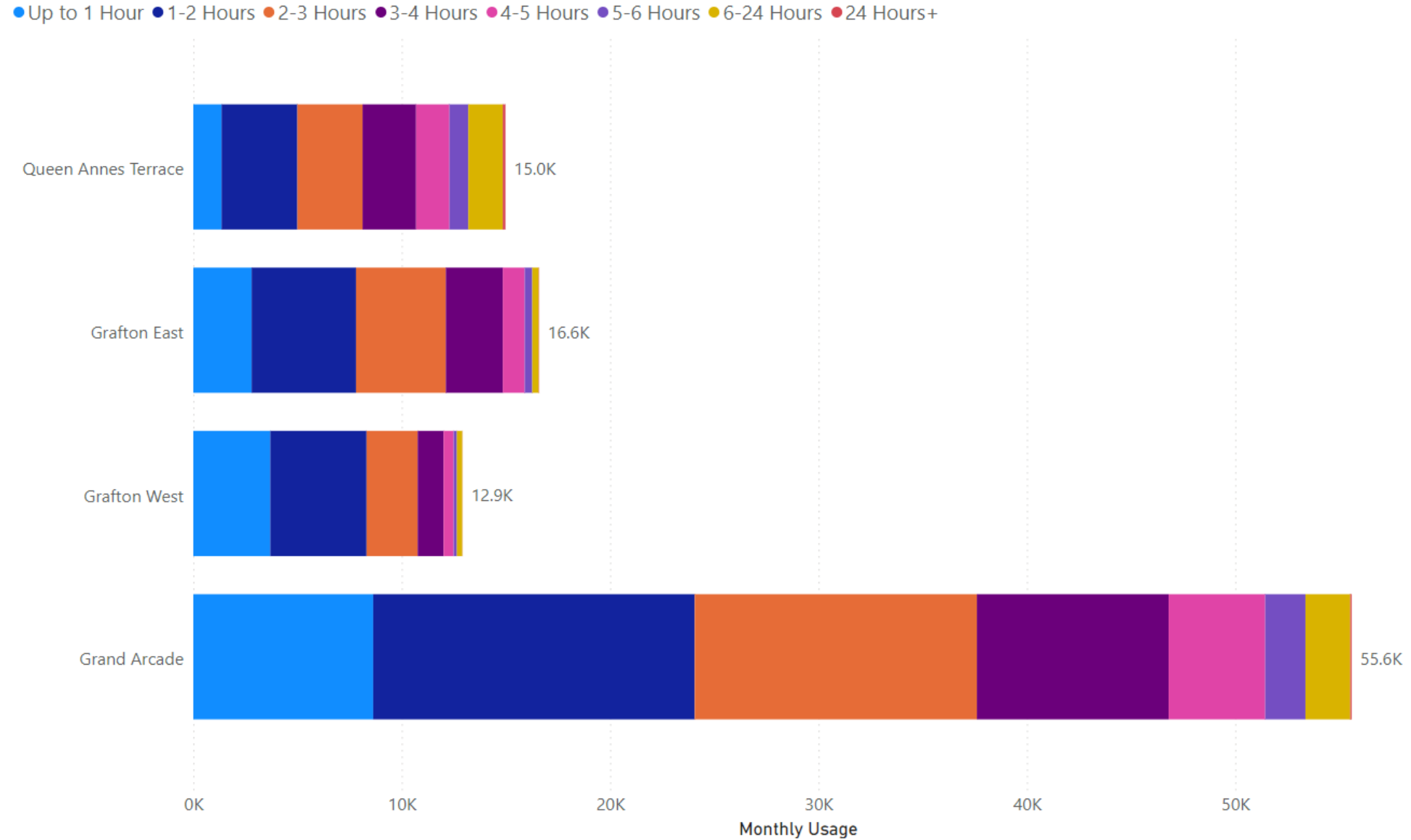
Car Parking: Length of Stay by Month

Typical daily multi-storey car park usage has increased in December 2023 in comparison to last year (18% higher than December 2022).
The proportionate split in length-of-stay within multi-storey car parks has stayed fairly consistent over time.

● Up to 1 hour ● 1 to 2 hours ● 2 to 3 hours ● 3 to 4 hours ● 4 to 5 hours ● 5 to 6 hours ● 6 to 24 hours ● 24 hours+

December 2019 — 6,632
December 2021 — 6,691
December 2022 — 4,973
December 2023 — 5,886

Average number of daily transactions

Park Street car park closed for redevelopment on 4th January 2022; usage figures for this car park are included up to its closure.
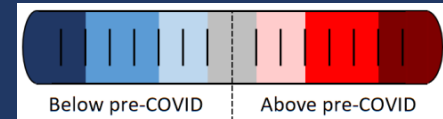
43
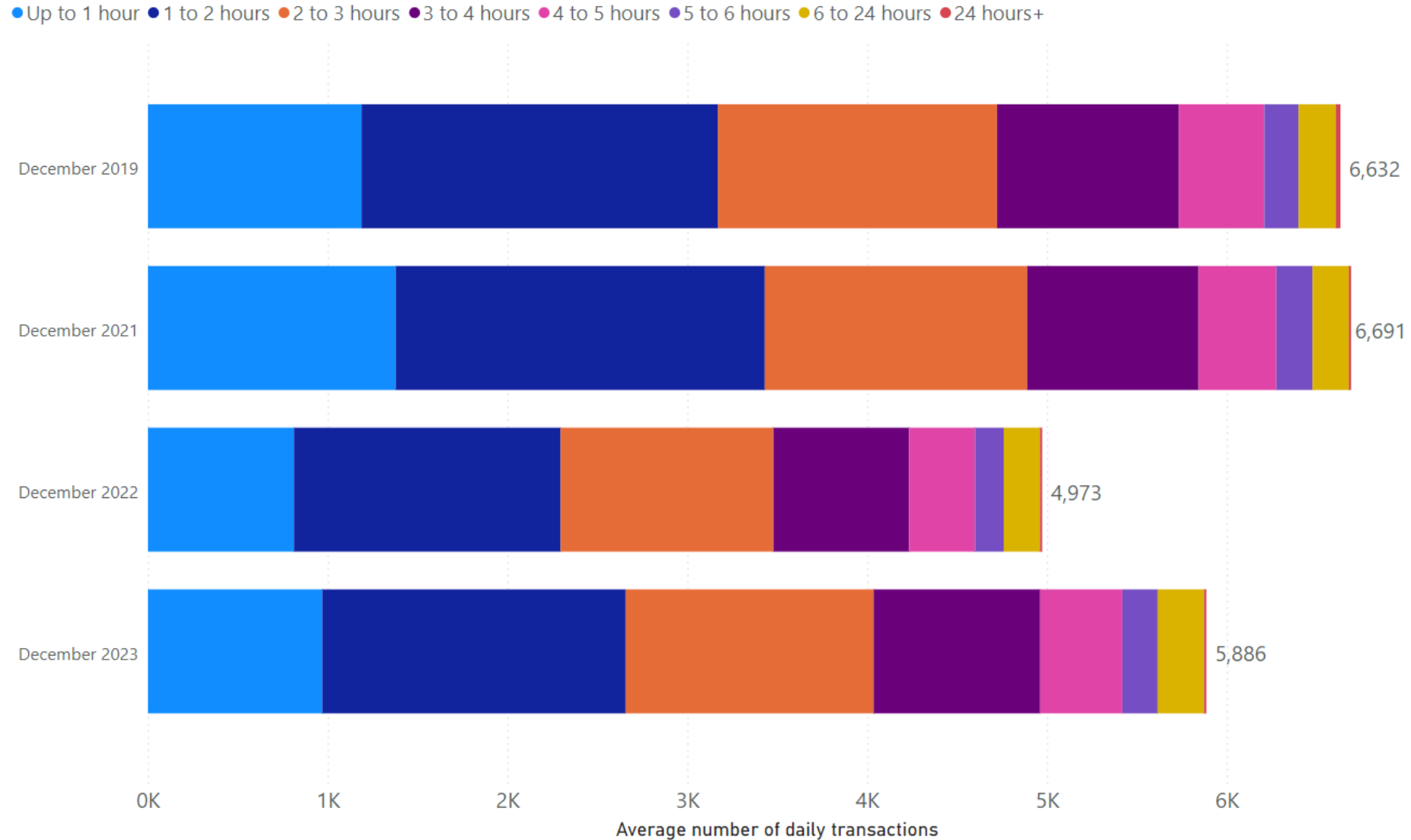
Car Parking: Length of Stay by Car Park

In December 2023, Grafton West had the highest proportion of stays under 3 hours (83%) whilst Queen Anne's Terrace had the lowest proportion (54%). Grand Arcade remains comfortably the most popular car park – with over 55,000 transactions recorded in December 2023.

● Up to 1 Hour ● 1-2 Hours ● 2-3 Hours ● 3-4 Hours ● 4-5 Hours ● 5-6 Hours ● 6-24 Hours ● 24 Hours+

Queen Annes Terrace — 15.0K
Grafton East — 16.6K
Grafton West — 12.9K
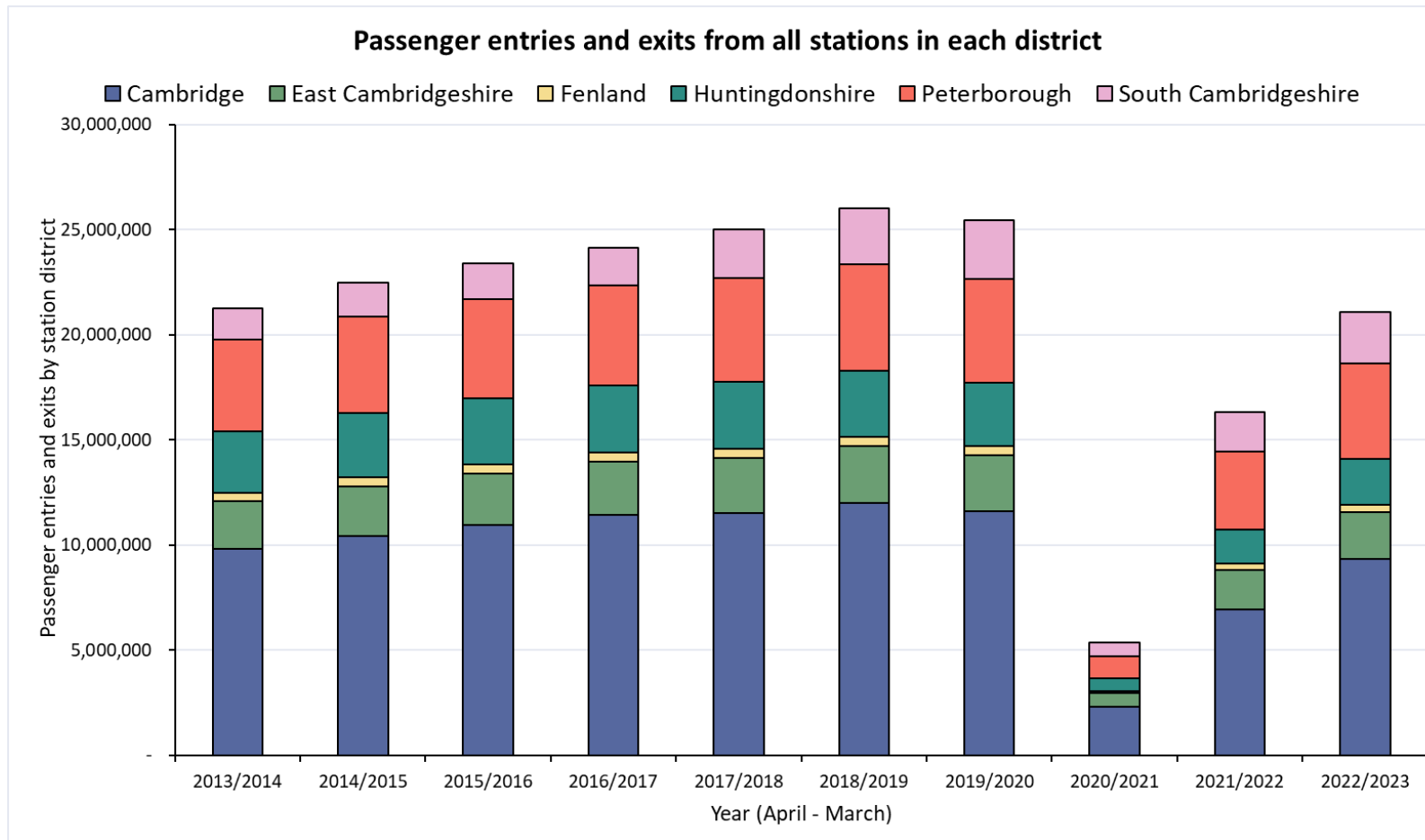Grand Arcade — 55.6K

Monthly Usage

44

Rail Passengers
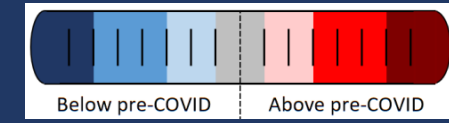
Rail Passengers: Usage

Railway station entries and exits across Cambridgeshire are still below pre-COVID (2018/19) volumes. Huntingdonshire (-30%) presents the largest fall since pre-COVID, while South Cambridgeshire (-7%) is closest to pre-COVID.

Passenger entries and exits from all stations in each district

■ Cambridge ■ East Cambridgeshire ■ Fenland ■ Huntingdonshire ■ Peterborough ■ South Cambridgeshire

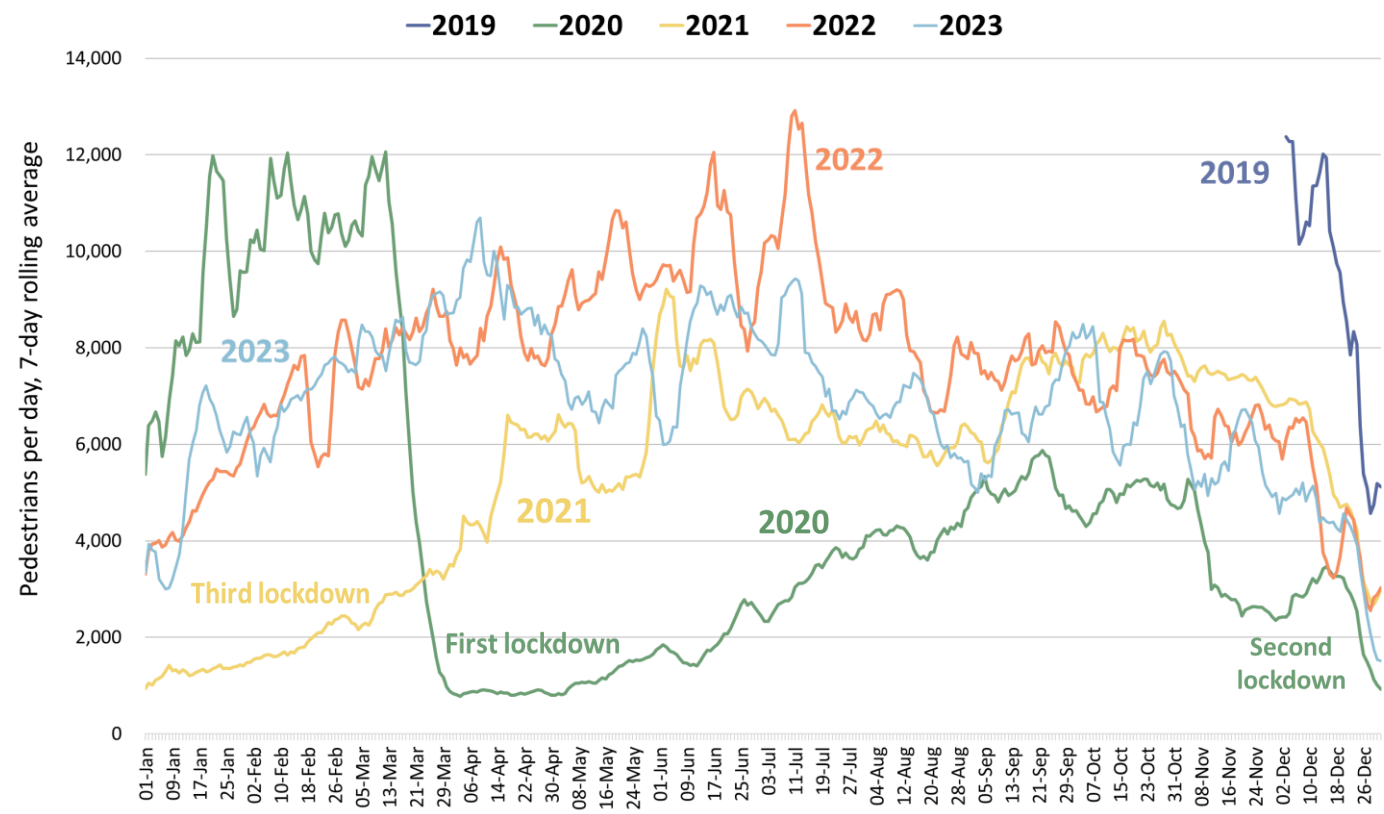| District	Cambridge	East Cambridgeshire	Fenland	Huntingdonshire	Peterborough	South Cambridgeshire
Pre-COVID to Now: 2018/19* to 2022/23	-22%	-19%	-22%	-30%	-11%	-7%

*2018/19 used as the pre-COVID baseline as 2019/20 entries and exit data is affected in March 2020 by the first COVID-19 lockdown.

One Station Square Footfall

One Station Square footfall is 57% below pre-Covid (December 2019) and is 12% below last year (December 2022).
This is likely due to disruption to rail services caused by engineering works at Cambridge Station beginning in September 2023.

Footfall at One Station Square (directly outside Cambridge train station)

—2019   —2020   —2021   —2022   —2023

Pre-COVID to Now:			Mid-COVID to Now:			Previous year to Now:		
Dec 2019 to Dec 2023			Dec 2021 to Dec 2023			Dec 2022 to Dec 2023		
Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)	Mon-Sun	Weekdays (Mon-Thu)	Weekends (Sat-Sun)
-57%	-61%	-53%	-20%	-22%	-20%	-12%	-25%	+22%

Bus Passengers

Bus Passengers in Cambridgeshire and Peterborough

Below pre-COVID | Above pre-COVID

Bus passenger volumes remain below pre-COVID but are gradually increasing. The number of bus passengers decreases during school holidays.

## Stagecoach CPCA Area Bus Passengers

£2 bus fare cap introduced by the government (1st Jan 2023)

2019-20

2023-24

2022-23

2021-22

Bus Passengers

2020-21

First lockdown continued

Second lockdown

Third lockdown

First lockdown begins

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51

May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr
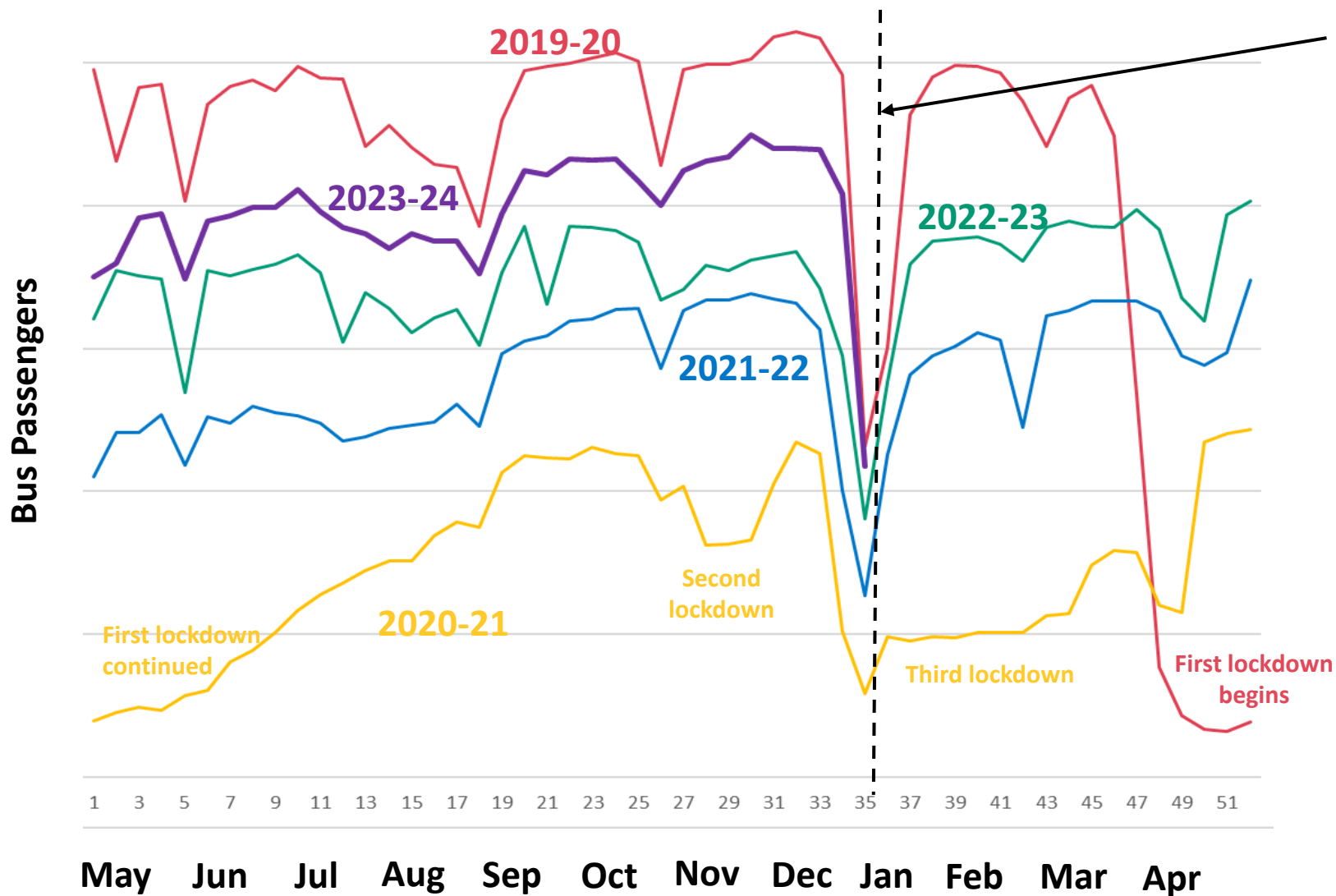
Cambridge
Pre-COVID to Now:
Dec 2019 to Dec 2023

-13%

Peterborough
Pre-COVID to Now:
Dec 2019 to Dec 2023

-18%

Due to the commercial sensitivity of this data, bus passenger volumes are not marked on the y-axis of this graph.

Bus Passengers: Park and Ride

Usage of all P&R sites has increased month-on-month in 2023 with a particular peak in the May and October half terms and the summer holidays.
Babraham Road and Trumpington are the most popular sites, with usage now similar to pre-COVID (2019).
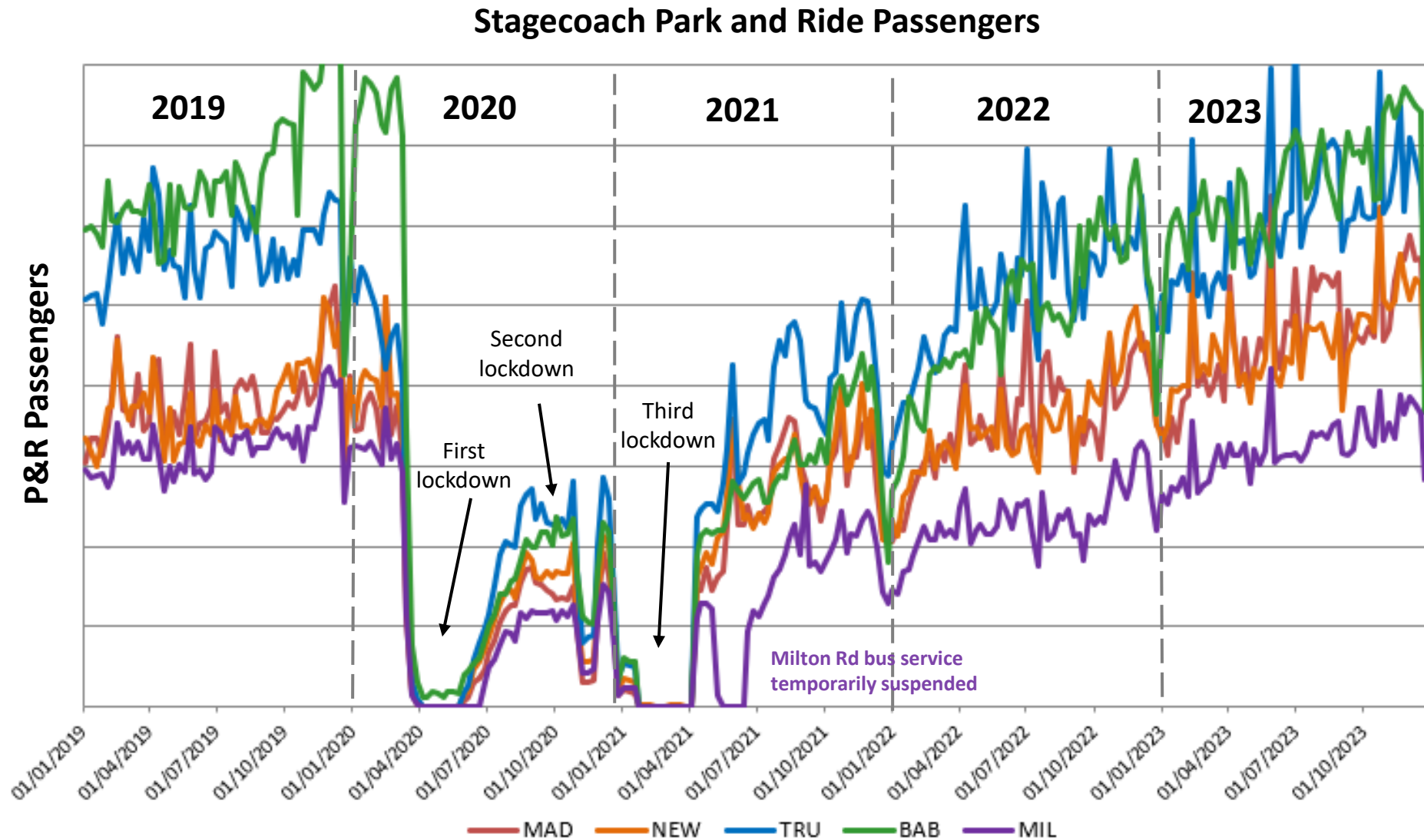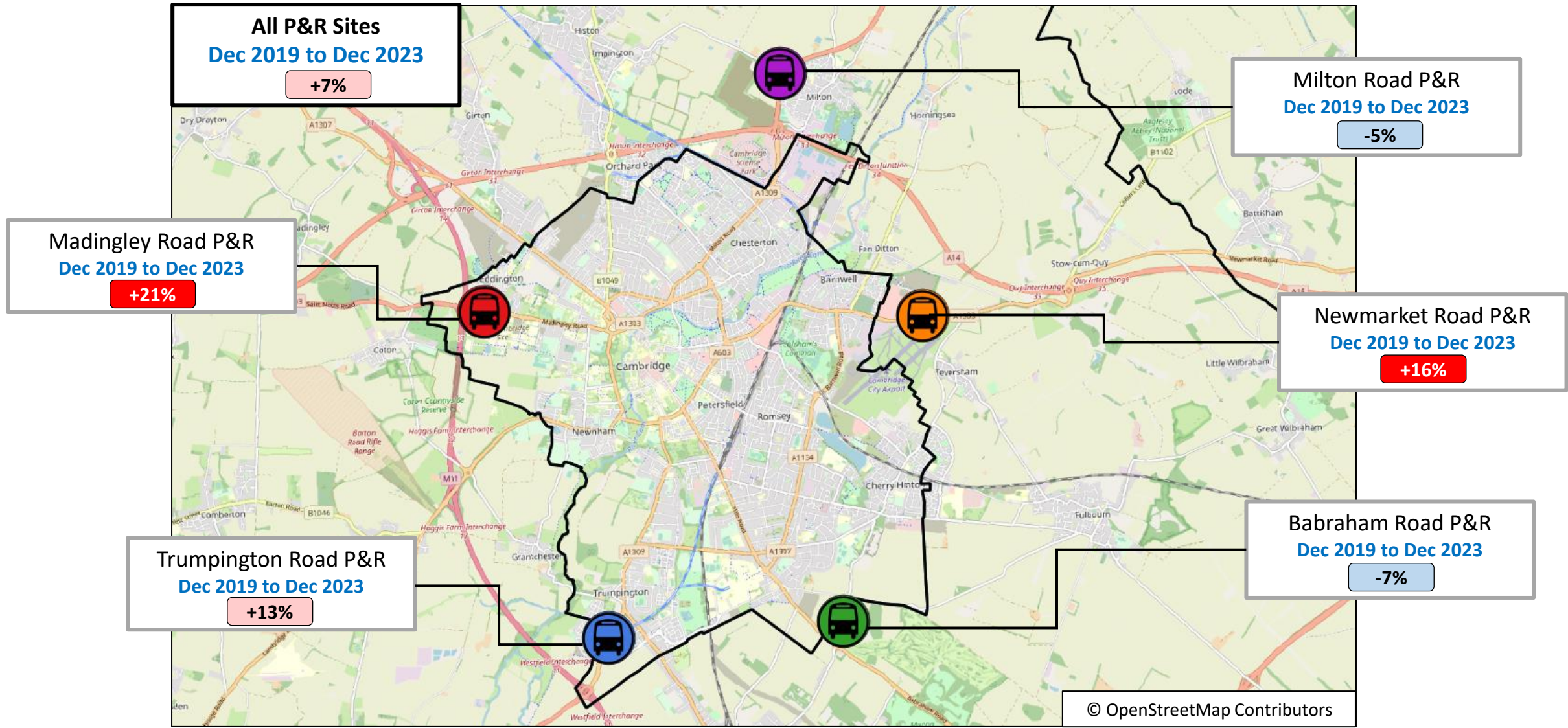
Stagecoach Park and Ride Passengers

Due to the commercial sensitivity of this data, bus passenger volumes are not marked on the y-axis of this graph.

Bus Passengers: Park and Ride by Site

Below pre-COVID | Above pre-COVID
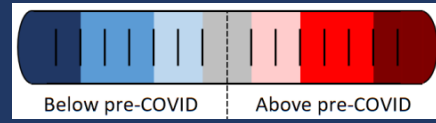
Park and Ride site usage has exceeded pre-COVID levels across most sites. Madingley Road and Newmarket Road show the largest increases on pre-COVID volumes at +21% and +16% respectively.

All P&R Sites
Dec 2019 to Dec 2023
+7%

Milton Road P&R
Dec 2019 to Dec 2023
-5%

Madingley Road P&R
Dec 2019 to Dec 2023
+21%

Newmarket Road P&R
Dec 2019 to Dec 2023
+16%

Babraham Road P&R
Dec 2019 to Dec 2023
-7%

Trumpington Road P&R
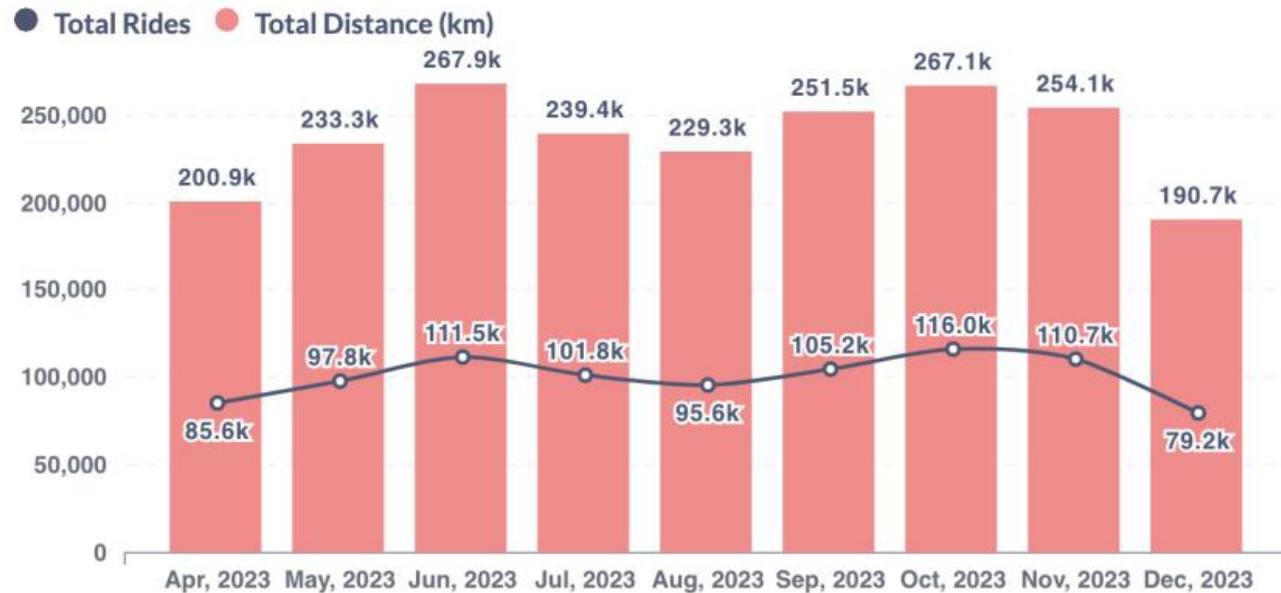**Dec 2019 to Dec 2023**
+13%

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Micro-mobility

E-scooters and E-bikes in Cambridge

December 2023 saw just under 80,000 Voi rides. Weekdays continue to see peaks in travel around 8am and 5pm, suggesting use for commuting/education. The weekends see a mid-afternoon peak. Throughout 2023, the 26-39 age group has consistently seen the largest number of riders.

Voi have operated an electric bike (e-bike) and electric scooter (e-scooter) trial scheme in Cambridge City since October 2020.

Monthly Rides & Distance

● Total Rides ● Total Distance (km)

Total Distance (km): 200.9k (Apr), 233.3k (May), 267.9k (Jun), 239.4k (Jul), 229.3k (Aug), 251.5k (Sep), 267.1k (Oct), 254.1k (Nov), 190.7k (Dec)

Total Rides (k): 85.6k, 97.8k, 111.5k, 101.8k, 95.6k, 105.2k, 116.0k, 110.7k, 79.2k

Apr, 2023 May, 2023 Jun, 2023 Jul, 2023 Aug, 2023 Sep, 2023 Oct, 2023 Nov, 2023 Dec, 2023

December 2023 key statistics

Total journeys:	Total distance:	Returning users:	New users:
79,230	190,700 km	15,350	2,000

Average Daily Distribution of Rides by Hour

● Weekdays ● Weekend

Weekdays: 47, 18, ..., 62, 112, 125, ..., 198, ..., 225, 206, 148, 123, 114, 101, 116, 96

Weekend: 94, 61, 46, 31, 21, 31, 46, 80, 95, 113, 129, 132, 130, 143, 144, 151, 166, 160, 108

Monthly Rides by Age Group

● 18 - 21 ● 22 - 25 ● 26 - 39 ● 40 - 69 ● 70 and above

26-39: 44.4k, 48.5k, 53.3k, 52.9k, 50.1k, 50.9k, 49.7k, 48.0k, 39.6k

22-25: 25.1k, 29.6k, 33.2k, 27.2k, 26.3k, 28.4k, 31.5k, 29.5k, 21.5k

18-21: 18.4k, 23.5k, 27.9k, 21.3k, 24.2k, 34.5k, 32.3k, 15.7k

40-69: 12.2k, 13.7k, 16.2k, 16.3k, 18.8k, 17.1k, 15.6k, 12.4k

70 and above: 704, 663, 414, 104, 116, 92, 122, 43, 46

Apr, 2023 May, 2023 Jun, 2023 Jul, 2023 Aug, 2023 Sep, 2023 Oct, 2023 Nov, 2023 Dec, 2023
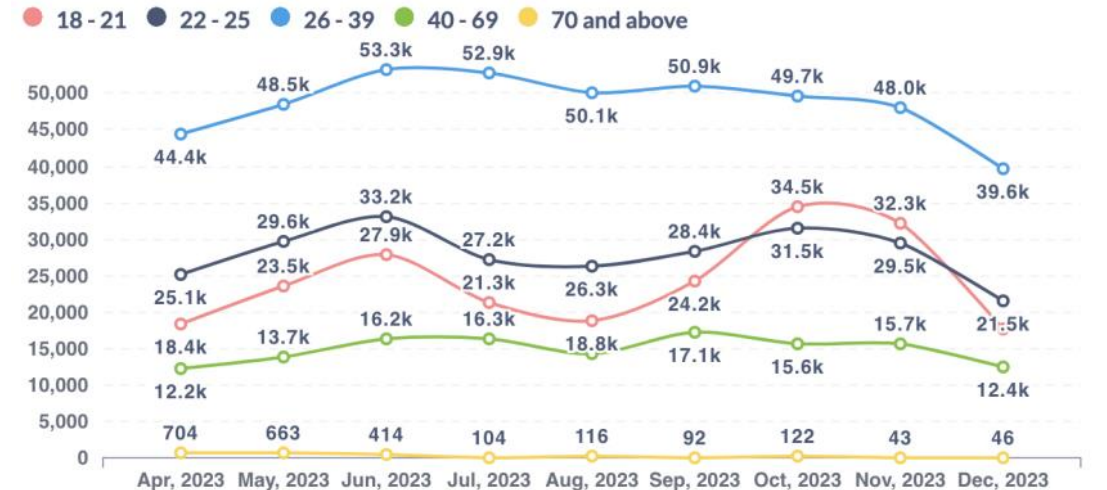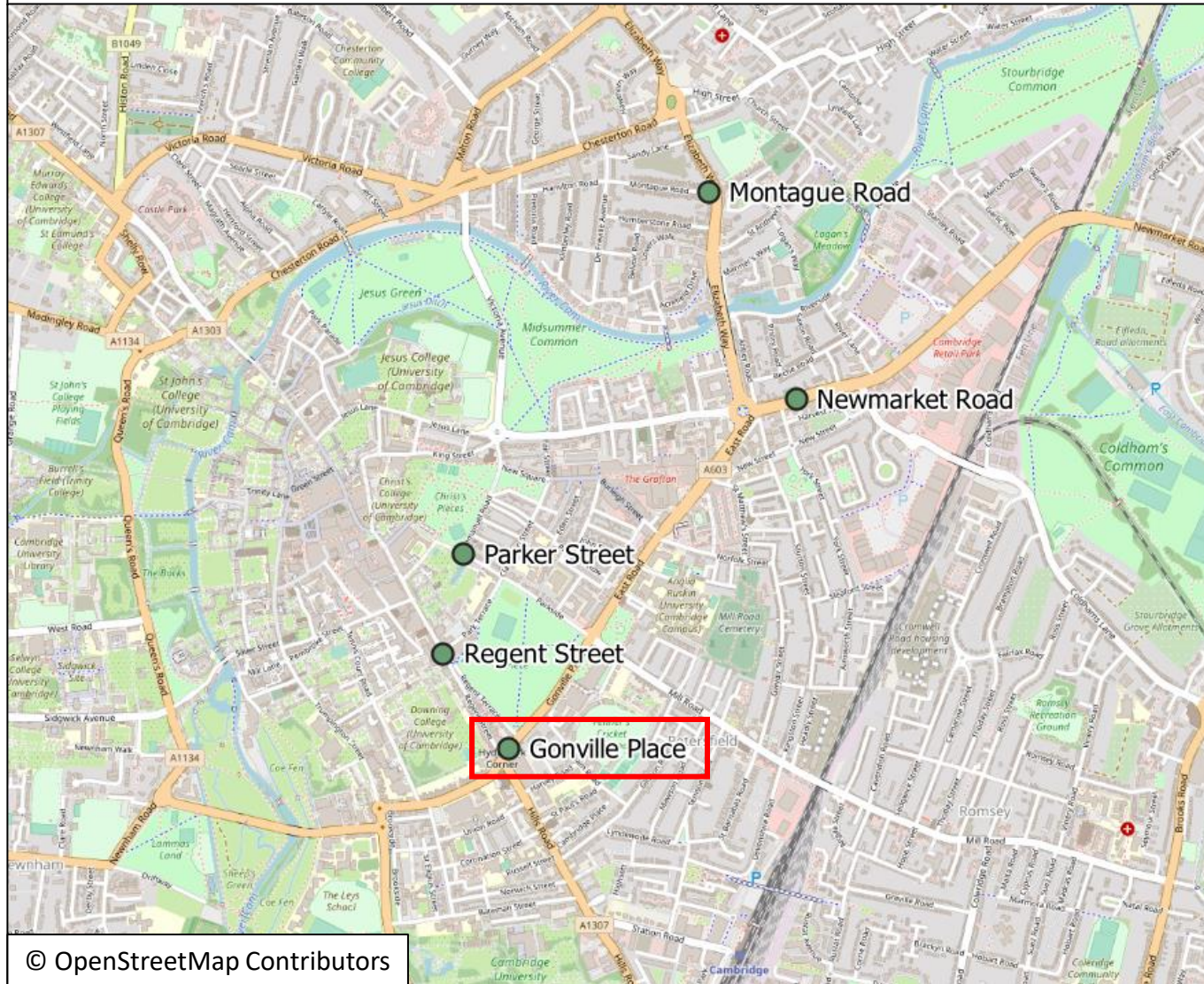
Air Quality

# Air Quality Monitoring Locations

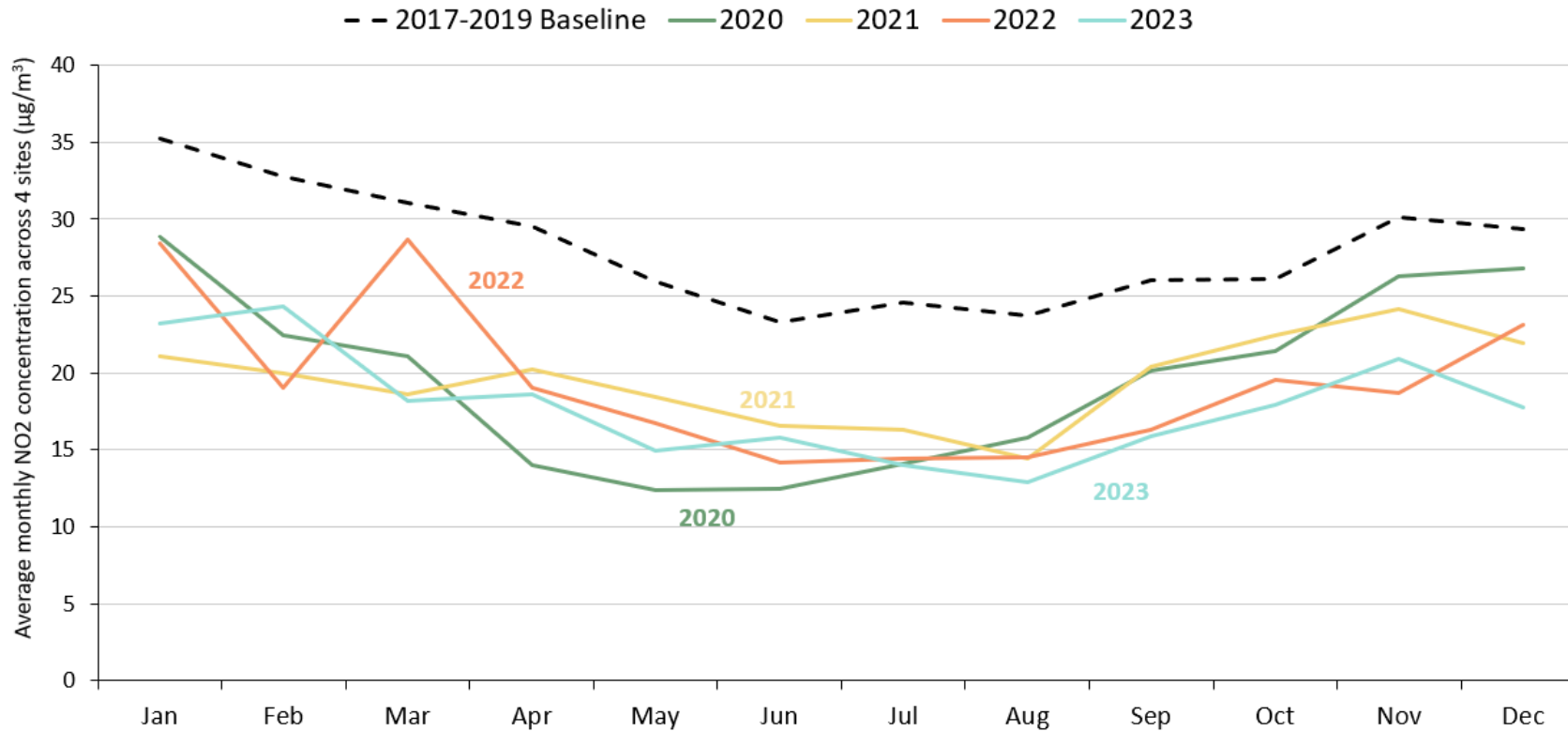**Continuous Air Quality Monitoring Sites, Cambridge**

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Location	Description
Montague Road	Close to the junction with Elizabeth Way
Newmarket Road	Close to Cambridge Retail park on Newmarket Road.
Parker Street	Close to the bus station
Regent Street	To the West of Parker's Piece
Gonville Place	Near Hill's Road, South of Parker's Piece. This sensor was removed in April 2022 so data is no longer available for this site.

Cambridge City Air Quality team provide data from 4 continuous air quality monitors in central Cambridge. The monitors primarily measure Nitrogen Oxides (NOx) and Particulate Matter (PM) which are proxies for overall air quality.

Below pre-COVID | Above pre-COVID
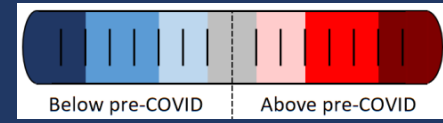
NO$_2$ concentrations remained below the 2017-2019 baseline level throughout 2023. December 2023 is 40% below the baseline and lower than December concentrations in the previous three years.

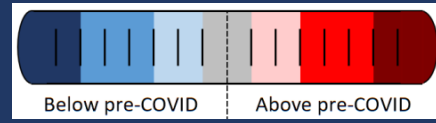## Monthly average NO$_2$ concentration across the continuous monitoring sites

Pre-COVID to Now: Dec 2017-19 baseline to Dec 2023	Mid-COVID to Now: Dec 2021 to Dec 2023	Last year to Now: Dec 2022 to Dec 2023
-40%	**-19%**	**-24%**

*Data for Gonville Place is only included in the 2022 line until March 2022 as the sensor was removed in April 2022.

Below pre-COVID | Above pre-COVID

NO$_2$ concentrations have increased in all locations since the summer of 2023, likely in part due to expected seasonal variations. Regent Street saw a particularly notable peak in November 2023 but concentrations had reduced again by December 2023.

Monthly average NO$_2$ concentration by site

Legend: Montague Road — Newmarket Road — Parker Street — Regent Street — Gonville Place (to Apr 2022)
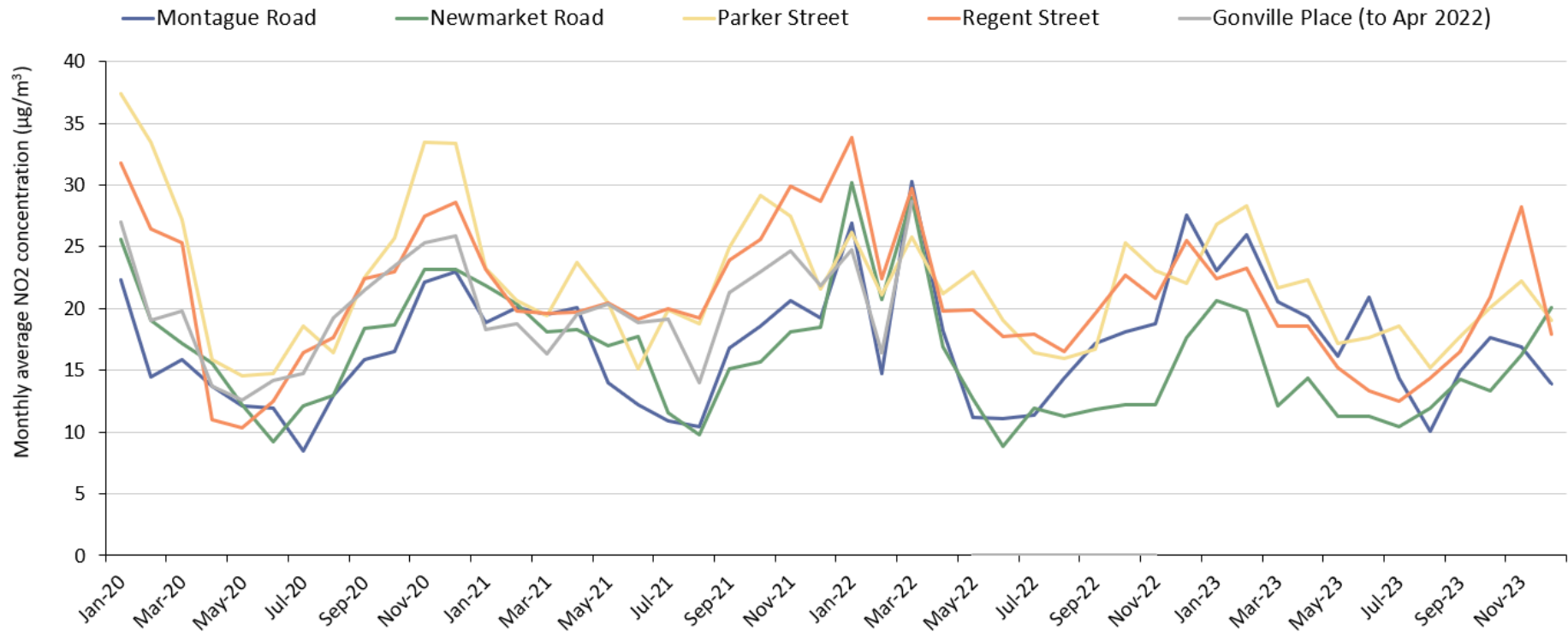
Location	Pre-COVID to Now:	Mid-COVID to Now:	Last year to Now:
	Dec 2017-19 baseline to Dec 2023	Dec 2021 to Dec 2023	Dec 2022 to Dec 2023
Montague Road	-42%	-28%	-50%
Newmarket Road	-36%	+9%	+14%
Parker Street	-46%	-12%	-14%
Regent Street	-35%	-38%	-30%
Gonville Place	No 2023 data	No 2023 data	No 2023 data

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