

ATC SUMMARY REPORT



PROJECT	29100 East Stour, Kent
LOCATION	29100-001 - Church Lane (North)
LOC. DESC.	Church Lane (North)
START DATE	Mon 18 Oct, 2021
END DATE	Sun 24 Oct, 2021
SPEED LIMIT	60mph
SURVEY TYPE	7-day ATC, 15min periods, 6 veh. classes

OVERVIEW

A 7-day automatic traffic count on Church Lane (North), commencing Mon 18 Oct 2021, recorded a total of 1,113 vehicles. The posted speed limit of 60mph was exceeded by 0.0% of vehicles, and the seasonally adjusted, combined AADT value is 168 (see Equipment & Methodology below).

COMBINED

Total recorded volume	1,113
Avg daily volume (based on 7 days)	159.0
Average daily speed (7 days)	27.3mph
Average daily 85%ile (7 days)	32.3mph
AADT (annual average daily traffic)	168

Avg weekday volume (Mon-Fri, 24hrs)	168.6
Avg weekday speed (Mon-Fri, 24hrs)	27.1mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	148.6
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	27.0mph

The combined summary on the left shows the total volumes, average speeds, AADT and 85%iles recorded in both directions from all the recorded data. Speeding vehicles are defined as those travelling 61mph and above.

The summaries below provide directionalised details including speeding percentages and weekday daytime details.

NORTHBOUND ↑

Total recorded volume	574
Avg daily volume (based on 7 days)	82.0
Average daily speed (7 days)	27.5mph
Average daily 85%ile (7 days)	32.6mph
% of vehicles exceeding 60mph	0.0%

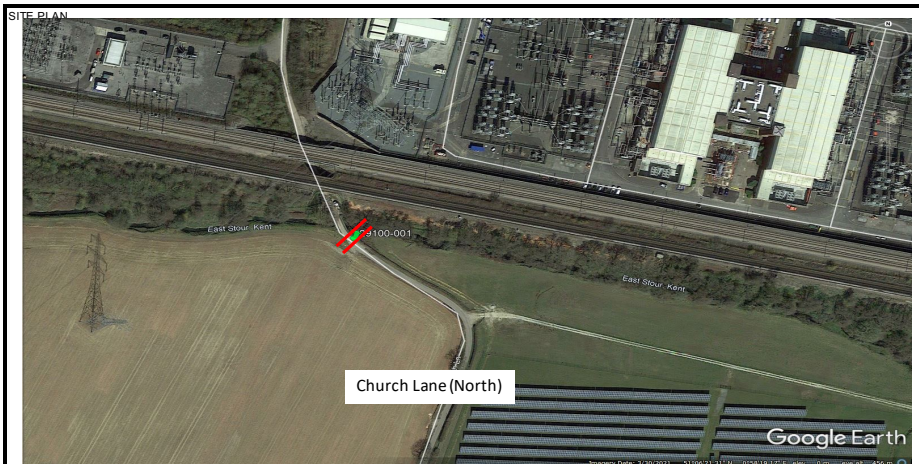
Avg weekday volume (Mon-Fri, 24hrs)	87.4
Avg weekday speed (Mon-Fri, 24hrs)	27.2mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	77.6
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	27.0mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	31.8mph

SOUTHBOUND ↓

Total recorded volume	539
Avg daily volume (based on 7 days)	77.0
Average daily speed (7 days)	27.1mph
Average daily 85%ile (7 days)	31.9mph
% of vehicles exceeding 60mph	0.0%

Avg weekday volume (Mon-Fri, 24hrs)	81.2
Avg weekday speed (Mon-Fri, 24hrs)	27.0mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	71.0
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	27.0mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	31.7mph

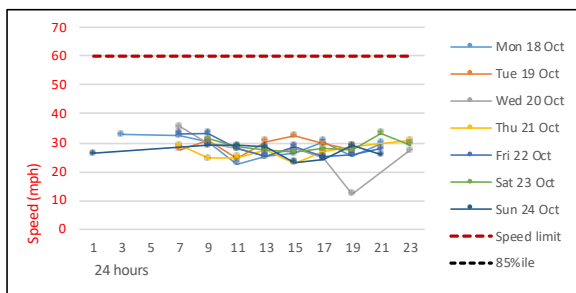
SITE LOCATION



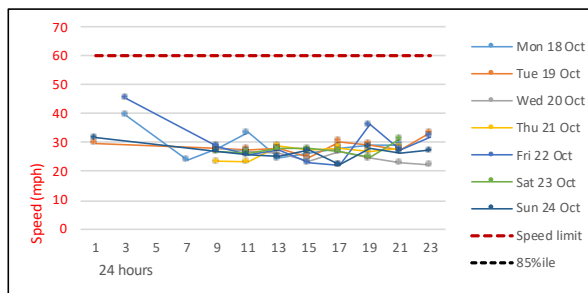
Location	Church Lane (North)
Lat, lng.	51° 6'16.24"N / 0°58'18.98"E
Project & site	29100-001
PSL	60mph
Bus route	No
Direction 1	Northbound↑
Direction 2	Southbound↓

DAILY SPEEDS

NORTHBOUND ↑



SOUTHBOUND ↓

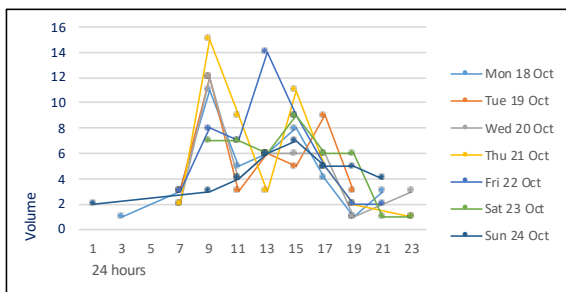


Average daily speeds (solid thin colours) and 85th percentile (dashed black) compared against 60mph posted speed limit (dashed red). The 85th percentile is the speed at which 85% of all vehicles are observed to travel under free flowing conditions. A minimum of ten vehicles per speed bin is required for this calculation, hence the overnight low-volume 85th percentile values may be zero.

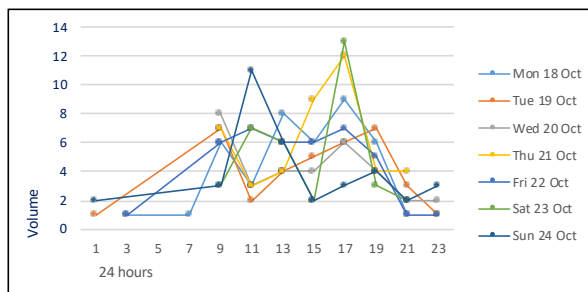
The peak average northbound daytime speed was 38.8mph at 16:45 on Tue 19 Oct, whilst the peak average southbound speed was 48.4mph at 13:30 on Sun 24 Oct (based on 15min averages between 0700 & 1900).

HOURLY VOLUMES

NORTHBOUND ↑



SOUTHBOUND ↓



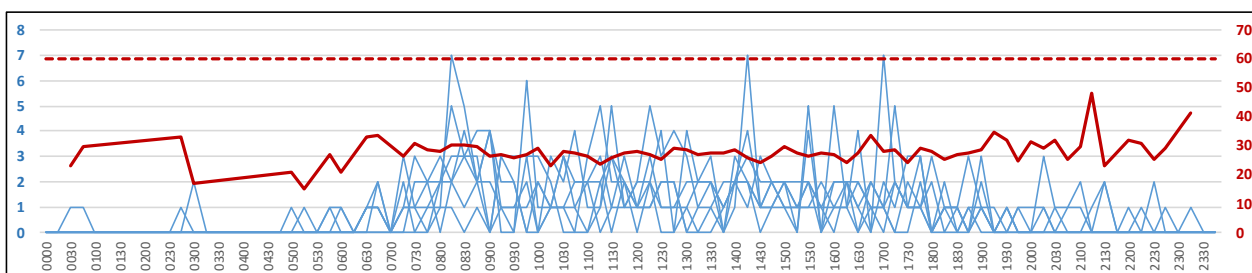
↑

Hourly northbound traffic volumes over each 24hr period for 7 days from all available data.

Hourly southbound traffic volumes over each 24hr period for 7 days from all available data.

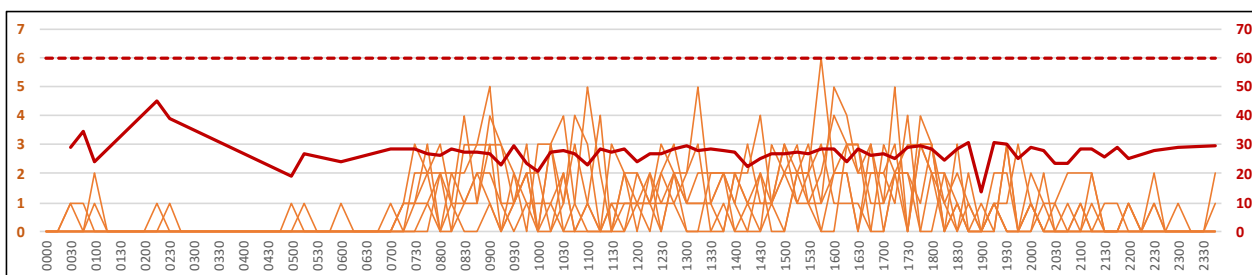
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15min VOL & SPEED



↑

15min daily northbound flows (blue), against the average speed (red) and 85th percentile (dotted black) for each 15min period over the 7-day period.

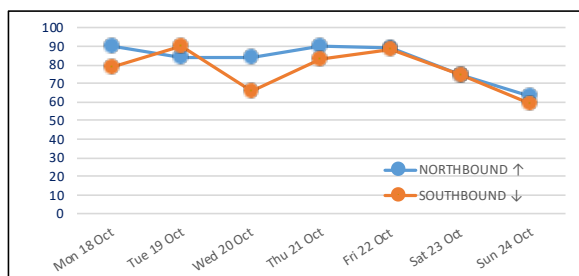


15min daily southbound flows (orange), against the average weekly speed (red) and 85th percentile (dotted black) for each 15min period over the 7-day period.

↓

DAILY VOLUMES

NORTH & SOUTHBOUND



Total 24hr northbound (blue) and southbound (orange) traffic volumes over 7 consecutive days from all available data.

As can be expected, the lowest volumes were recorded on the Sunday, whilst the highest was on the Friday.

7-DAY AVERAGE CLASSES

NORTHBOUND 7-DAY AVG ↑

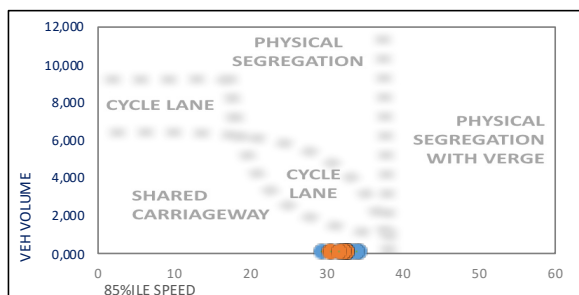
TIME	MOTOR CYCLES	CARS / LGV	OGV1	OGV2	PSV	TOTAL
0000	0.0	0.3	0.0	0.0	0.0	0.3
0100	0.0	0.0	0.0	0.0	0.0	0.0
0200	0.0	0.1	0.0	0.0	0.0	0.1
0300	0.0	0.3	0.0	0.0	0.0	0.3
0400	0.0	0.0	0.0	0.0	0.0	0.0
0500	0.0	0.4	0.1	0.0	0.0	0.6
0600	0.0	1.9	0.0	0.0	0.0	1.9
0700	0.0	3.4	0.0	0.0	0.0	3.4
0800	0.0	9.7	0.0	0.0	0.0	9.7
0900	0.0	7.0	0.0	0.0	0.0	7.0
1000	0.1	5.3	0.1	0.0	0.0	5.6
1100	0.0	7.1	0.1	0.0	0.0	7.3
1200	0.0	6.3	0.3	0.1	0.0	6.7
1300	0.0	4.9	0.0	0.1	0.0	5.0
1400	1.0	6.9	0.0	0.0	0.0	7.9
1500	0.0	5.6	0.0	0.0	0.0	5.6
1600	0.0	4.9	0.6	0.3	0.0	5.7
1700	0.0	6.3	0.3	0.0	0.0	6.6
1800	0.1	2.7	0.0	0.0	0.0	2.9
1900	0.0	2.1	0.0	0.0	0.0	2.1
2000	0.0	1.4	0.0	0.0	0.0	1.4
2100	0.0	1.1	0.0	0.0	0.0	1.1
2200	0.0	0.7	0.0	0.0	0.0	0.7
2300	0.0	0.1	0.0	0.0	0.0	0.1
12hr TTL	1.3	70.0	1.4	0.6	0.0	73.3
24hr TTL	1.3	78.6	1.6	0.6	0.0	82.0
	2%	96%	2%	1%	0%	

SOUTHBOUND 7-DAY AVG ↓

TIME	MOTOR CYCLES	CARS / LGV	OGV1	OGV2	PSV	TOTAL
0000	0.0	0.4	0.0	0.0	0.0	0.4
0100	0.0	0.4	0.0	0.0	0.0	0.4
0200	0.0	0.3	0.0	0.0	0.0	0.3
0300	0.0	0.0	0.0	0.0	0.0	0.0
0400	0.0	0.0	0.0	0.0	0.0	0.0
0500	0.0	0.3	0.0	0.0	0.0	0.3
0600	0.0	0.1	0.0	0.0	0.0	0.1
0700	0.0	2.9	0.3	0.1	0.0	3.3
0800	0.1	5.3	0.3	0.0	0.0	5.7
0900	0.6	5.6	0.1	0.3	0.0	6.6
1000	0.1	4.9	0.1	0.0	0.0	5.1
1100	0.0	4.3	0.0	0.0	0.0	4.3
1200	0.0	5.0	0.3	0.1	0.0	5.4
1300	0.1	4.4	0.1	0.3	0.0	5.0
1400	0.0	4.9	0.0	0.0	0.0	4.9
1500	0.0	7.1	0.0	0.0	0.0	7.1
1600	0.1	7.6	0.1	0.1	0.0	8.0
1700	0.1	7.1	0.0	0.0	0.0	7.3
1800	0.1	4.6	0.0	0.0	0.0	4.7
1900	0.0	2.7	0.0	0.0	0.0	2.7
2000	0.0	2.1	0.0	0.0	0.0	2.1
2100	0.0	1.6	0.0	0.0	0.0	1.6
2200	0.0	1.0	0.0	0.0	0.0	1.0
2300	0.0	0.6	0.0	0.0	0.0	0.6
12hr TTL	1.4	63.6	1.4	1.0	0.0	67.4
24hr TTL	1.4	73.1	1.4	1.0	0.0	77.0
	2%	95%	2%	1%	0%	

Average daily northbound and southbound volumes by class (condensed to the AQMA scheme), including 12hr totals for 0700-1900 and overall average percentages. Calculated from all available data over 7 days.

CYCLE PROVISION



The diagram compares total daily traffic flow (vertical axis) against the average daily 85%ile speed (horizontal axis) to demonstrate cyclist and vulnerable user considerations.

The guidelines are based on the Sustrans Design Manual (Apr 2014); Understanding User Needs, part 2.

Valid 85%iles are required to plot the graph.

METHODOLOGY

Equipment & methodology

Automatic traffic counts are undertaken using a pair of pneumatic tubes installed securely across the carriageway, one metre apart, recording air pulses to determine vehicle speed, class and volume. The ATC equipment generally remains in place for a consecutive seven day period, and the data analysed post-survey.

In queuing conditions, the accuracy of ATC recording equipment will reduce as follows;

- 20 – 30mph: potential reduction of 9% accuracy in volume values
- 10 – 20mph: potential reduction of 26% accuracy in volume values
- 00 – 10mph: potential reduction of 39% accuracy in volume values

These figures are based on multiple ATC results compared against accepted reference values from resilient manual counts.

AADTs are calculated using the seasonal COBA methodology; DMRB Vol. 13, Pt 4:

Weather & environmental

Inclement conditions during winter months or outbreaks of unseasonable weather may affect survey data collection. This can result in distorted traffic flows or unusable data and should be considered prior to survey approval. Although forecast checks are made prior to the survey commencing, we cannot be held responsible for the forecast accuracy.

CLASS	ABBREV.	DESCRIPTION	LENGTH	COBA
1	MC	Motorcycle	SHORT Up to 5.5m	N/A
2	SV	Cars, taxis, 4WD, vans		MEDIUM 5.5m to 14.5m
3	SVT	Class 2 plus trailer	OGV1 & PSV	
4	TB2	2 axle truck / bus	OGV1	
5	TB3	3 axle truck / bus	LONG 11.5m to 19.0m	
6	T4	4 axle truck		
7	ART3	3 axle articulated		
8	ART4	4 axle articulated		
9	ART5	5 axle articulated		
10	ART6	6+ axle articulated		

Equipment damage & failure

Although checked intermittently the equipment remains unmanned for much of the duration of the survey, and can potentially be interfered with, vandalised, damaged or stolen and we cannot be held responsible for any periods where data has not been captured.

The equipment is located in accordance with the details provided by the client and we cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

Roadworks & events

Where possible, roadworks checks are made 7 days before the survey commences. Additionally, influencing major local events are also monitored, covering the immediate vicinity of the surveys and any routes likely to affect the outcome of the survey.

Vehicle classifications

Vehicles recorded by the ATC are placed into one of ten classes based on axle spacing and pattern. This scheme is based on the AustRoad 94 algorithm and modified for UK traffic, referred to as ARX. The table on the left aligns the ARX classifications with the COBA Chapter 8 (Vol 13, Sec 1) classifications.

Under adverse conditions the accuracy of ATC classifications will deteriorate and an appropriate link count should be used for validation.

Disclaimer

Although every attempt is made to achieve accuracy, we may not be held liable for errors of fact or interpretation.

Generated 26 Apr 2022 v6.0

29100-001 East Stour, Kent. Church Lane North. Summary.TSUK



ATC SUMMARY REPORT

PROJECT	29100 East Stour, Kent
LOCATION	29100-002 - Church Lane (South)
LOC. DESC.	Church Lane (South)
START DATE	Mon 18 Oct, 2021
END DATE	Sun 24 Oct, 2021
SPEED LIMIT	60mph
SURVEY TYPE	7-day ATC, 15min periods, 6 veh. classes

OVERVIEW

A 7-day automatic traffic count on Church Lane (South), commencing Mon 18 Oct 2021, recorded a total of 1,000 vehicles. The posted speed limit of 60mph was exceeded by 0.0% of vehicles, and the seasonally adjusted, combined AADT value is 151 (see Equipment & Methodology below).

COMBINED

Total recorded volume	1,000
Avg daily volume (based on 7 days)	142.9
Average daily speed (7 days)	28.4mph
Average daily 85 th ile (7 days)	33.8mph
AADT (annual average daily traffic)	151

Avg weekday volume (Mon-Fri, 24hrs)	149.6
Avg weekday speed (Mon-Fri, 24hrs)	28.6mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	132.0
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	28.3mph

NORTHBOUND ↑

Total recorded volume	523
Avg daily volume (based on 7 days)	74.7
Average daily speed (7 days)	28.4mph
Average daily 85 th ile (7 days)	34.4mph
% of vehicles exceeding 60mph	0.0%

Avg weekday volume (Mon-Fri, 24hrs)	78.8
Avg weekday speed (Mon-Fri, 24hrs)	28.4mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	70.2
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	28.3mph
Avg 12hr weekday 85 th ile (Mon-Fri, 0700-1900)	34.1mph

SOUTHBOUND ↓

Total recorded volume	477
Avg daily volume (based on 7 days)	68.1
Average daily speed (7 days)	28.4mph
Average daily 85 th ile (7 days)	33.3mph
% of vehicles exceeding 60mph	0.0%

Avg weekday volume (Mon-Fri, 24hrs)	70.8
Avg weekday speed (Mon-Fri, 24hrs)	28.7mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	61.8
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	28.3mph
Avg 12hr weekday 85 th ile (Mon-Fri, 0700-1900)	32.9mph

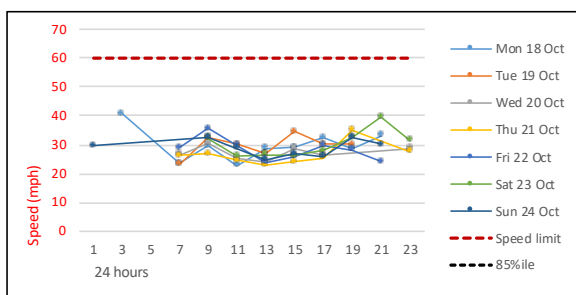
SITE LOCATION



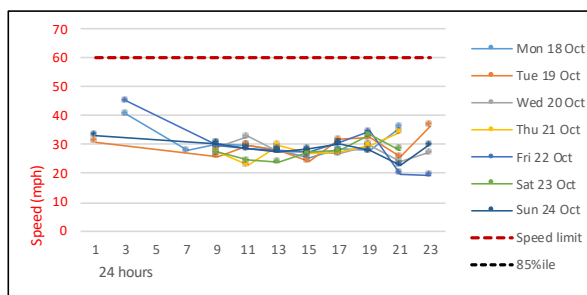
Location	Church Lane (South)
Lat, lng.	51° 5'55.60"N / 0°58'4.41"E
Project & site	29100-002
PSL	60mph
Bus route	No
Direction 1	Northbound↑
Direction 2	Southbound↓

DAILY SPEEDS

NORTHBOUND ↑



SOUTHBOUND ↓

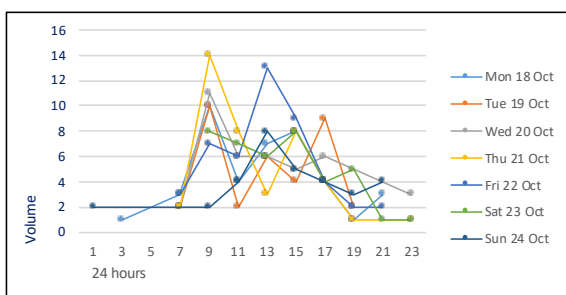


Average daily speeds (solid thin colours) and 85th percentile (dashed black) compared against 60mph posted speed limit (dashed red). The 85th percentile is the speed at which 85% of all vehicles are observed to travel under free flowing conditions. A minimum of ten vehicles per speed bin is required for this calculation, hence the overnight low-volume 85th percentile values may be zero.

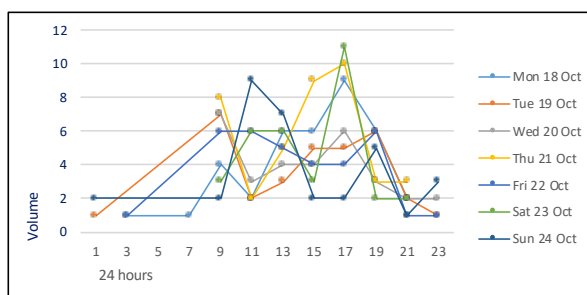
The peak average northbound daytime speed was 42.2mph at 07:45 on Wed 20 Oct, whilst the peak average southbound speed was 41.3mph at 18:45 on Tue 19 Oct (based on 15min averages between 0700 & 1900).

HOURLY VOLUMES

NORTHBOUND ↑



SOUTHBOUND ↓



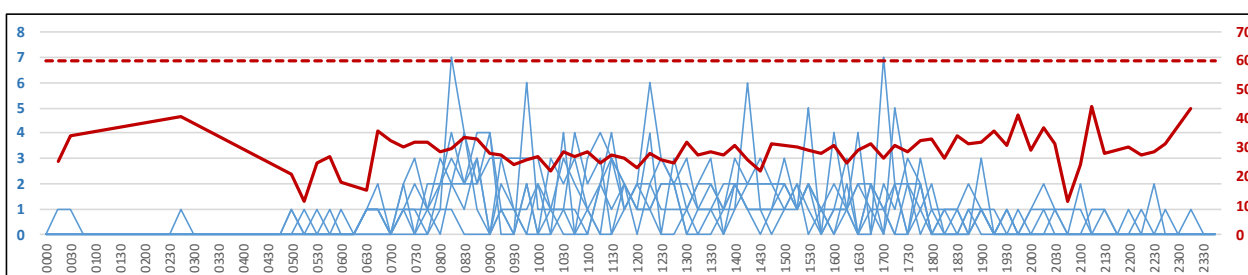
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Hourly northbound traffic volumes over each 24hr period for 7 days from all available data.

Hourly southbound traffic volumes over each 24hr period for 7 days from all available data.

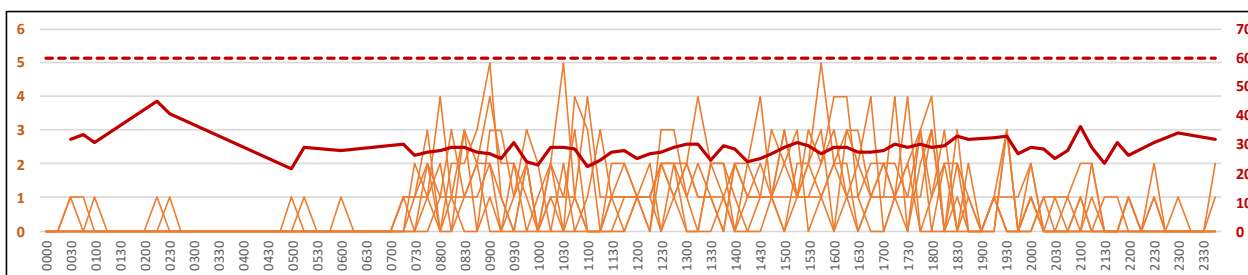
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15min VOL & SPEED



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15min daily northbound flows (blue), against the average speed (red) and 85th percentile (dotted black) for each 15min period over the 7-day period.

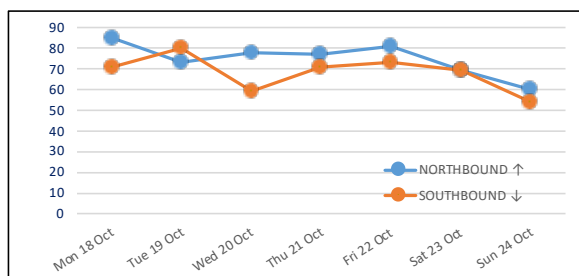


15min daily southbound flows (orange), against the average weekly speed (red) and 85th percentile (dotted black) for each 15min period over the 7-day period.

↓

DAILY VOLUMES

NORTH & SOUTHBOUND



Total 24hr northbound (blue) and southbound (orange) traffic volumes over 7 consecutive days from all available data.

As can be expected, the lowest volumes were recorded on the Sunday, whilst the highest was on the Monday.

7-DAY AVERAGE CLASSES

NORTHBOUND 7-DAY AVG ↑

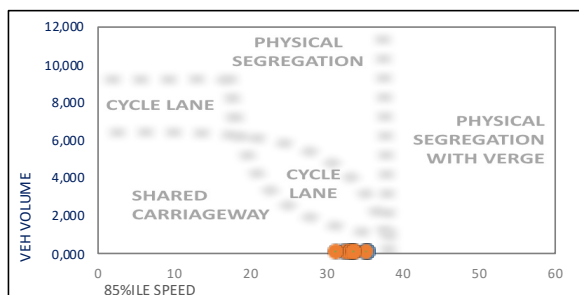
TIME	MOTOR CYCLES	CARS / LGV	OGV1	OGV2	PSV	TOTAL
0000	0.0	0.3	0.0	0.0	0.0	0.3
0100	0.0	0.0	0.0	0.0	0.0	0.0
0200	0.0	0.1	0.0	0.0	0.0	0.1
0300	0.0	0.0	0.0	0.0	0.0	0.0
0400	0.0	0.0	0.0	0.0	0.0	0.0
0500	0.0	0.7	0.0	0.0	0.0	0.7
0600	0.0	1.7	0.0	0.0	0.0	1.7
0700	0.0	3.1	0.0	0.0	0.0	3.1
0800	0.0	8.9	0.0	0.0	0.0	8.9
0900	0.0	5.9	0.1	0.0	0.0	6.0
1000	0.1	5.0	0.1	0.0	0.0	5.3
1100	0.0	6.4	0.1	0.0	0.0	6.6
1200	0.0	6.6	0.3	0.1	0.0	7.0
1300	0.0	4.3	0.0	0.1	0.0	4.4
1400	0.6	5.9	0.0	0.3	0.0	6.7
1500	0.0	5.6	0.0	0.0	0.0	5.6
1600	0.0	4.4	0.4	0.1	0.0	5.0
1700	0.0	6.1	0.1	0.0	0.0	6.3
1800	0.1	1.9	0.0	0.0	0.0	2.0
1900	0.0	1.9	0.0	0.0	0.0	1.9
2000	0.0	1.4	0.0	0.0	0.0	1.4
2100	0.0	0.9	0.0	0.0	0.0	0.9
2200	0.0	0.7	0.0	0.0	0.0	0.7
2300	0.0	0.1	0.0	0.0	0.0	0.1
12hr TTL	0.9	64.0	1.3	0.7	0.0	66.9
24hr TTL	0.9	71.9	1.3	0.7	0.0	74.7
	1%	96%	2%	1%	0%	

SOUTHBOUND 7-DAY AVG ↓

TIME	MOTOR CYCLES	CARS / LGV	OGV1	OGV2	PSV	TOTAL
0000	0.0	0.4	0.0	0.0	0.0	0.4
0100	0.0	0.1	0.0	0.0	0.0	0.1
0200	0.0	0.3	0.0	0.0	0.0	0.3
0300	0.0	0.0	0.0	0.0	0.0	0.0
0400	0.0	0.0	0.0	0.0	0.0	0.0
0500	0.0	0.3	0.0	0.0	0.0	0.3
0600	0.0	0.1	0.0	0.0	0.0	0.1
0700	0.0	2.1	0.3	0.1	0.0	2.6
0800	0.0	5.0	0.3	0.0	0.0	5.3
0900	0.3	5.0	0.1	0.3	0.0	5.7
1000	0.0	4.1	0.1	0.0	0.0	4.3
1100	0.0	3.6	0.0	0.0	0.0	3.6
1200	0.0	5.0	0.0	0.1	0.0	5.1
1300	0.0	3.9	0.3	0.4	0.0	4.6
1400	0.0	4.6	0.0	0.1	0.0	4.7
1500	0.0	6.7	0.0	0.0	0.0	6.7
1600	0.0	6.7	0.0	0.0	0.0	6.7
1700	0.1	5.7	0.0	0.0	0.0	5.9
1800	0.1	4.3	0.0	0.0	0.0	4.4
1900	0.0	2.3	0.0	0.0	0.0	2.3
2000	0.0	1.9	0.0	0.0	0.0	1.9
2100	0.0	1.4	0.1	0.0	0.0	1.6
2200	0.0	1.0	0.0	0.0	0.0	1.0
2300	0.0	0.6	0.0	0.0	0.0	0.6
12hr TTL	0.6	56.7	1.1	1.1	0.0	59.6
24hr TTL	0.6	65.1	1.3	1.1	0.0	68.1
	1%	96%	2%	2%	0%	

Average daily northbound and southbound volumes by class (condensed to the AQMA scheme), including 12hr totals for 0700-1900 and overall average percentages. Calculated from all available data over 7 days.

CYCLE PROVISION



The diagram compares total daily traffic flow (vertical axis) against the average daily 85%ile speed (horizontal axis) to demonstrate cyclist and vulnerable user considerations.

The guidelines are based on the Sustrans Design Manual (Apr 2014); Understanding User Needs, part 2.

Valid 85%iles are required to plot the graph.

METHODOLOGY

Equipment & methodology

Automatic traffic counts are undertaken using a pair of pneumatic tubes installed securely across the carriageway, one metre apart, recording air pulses to determine vehicle speed, class and volume. The ATC equipment generally remains in place for a consecutive seven day period, and the data analysed post-survey.

In queuing conditions, the accuracy of ATC recording equipment will reduce as follows;

- 20 – 30mph: potential reduction of 9% accuracy in volume values
- 10 – 20mph: potential reduction of 26% accuracy in volume values
- 00 – 10mph: potential reduction of 39% accuracy in volume values

These figures are based on multiple ATC results compared against accepted reference values from resilient manual counts.

AADTs are calculated using the seasonal COBA methodology; DMRB Vol. 13, Pt 4:

Weather & environmental

Inclement conditions during winter months or outbreaks of unseasonable weather may affect survey data collection. This can result in distorted traffic flows or unusable data and should be considered prior to survey approval. Although forecast checks are made prior to the survey commencing, we cannot be held responsible for the forecast accuracy.

CLASS	ABBREV.	DESCRIPTION	LENGTH	COBA
1	MC	Motorcycle	SHORT Up to 5.5m	N/A
2	SV	Cars, taxis, 4WD, vans		MEDIUM 5.5m to 14.5m
3	SVT	Class 2 plus trailer	OGV1 & PSV	
4	TB2	2 axle truck / bus	OGV1	
5	TB3	3 axle truck / bus	LONG 11.5m to 19.0m	
6	T4	4 axle truck		
7	ART3	3 axle articulated		
8	ART4	4 axle articulated		
9	ART5	5 axle articulated		
10	ART6	6+ axle articulated		

Equipment damage & failure

Although checked intermittently the equipment remains unmanned for much of the duration of the survey, and can potentially be interfered with, vandalised, damaged or stolen and we cannot be held responsible for any periods where data has not been captured.

The equipment is located in accordance with the details provided by the client and we cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

Roadworks & events

Where possible, roadworks checks are made 7 days before the survey commences. Additionally, influencing major local events are also monitored, covering the immediate vicinity of the surveys and any routes likely to affect the outcome of the survey.

Vehicle classifications

Vehicles recorded by the ATC are placed into one of ten classes based on axle spacing and pattern. This scheme is based on the AustRoad 94 algorithm and modified for UK traffic, referred to as ARX. The table on the left aligns the ARX classifications with the COBA Chapter 8 (Vol 13, Sec 1) classifications.

Under adverse conditions the accuracy of ATC classifications will deteriorate and an appropriate link count should be used for validation.

Disclaimer

Although every attempt is made to achieve accuracy, we may not be held liable for errors of fact or interpretation.

Generated 26 Apr 2022 v6.0

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