

PROJECT	Copy GOSFIELD
SITE CODE	Copy -01
LOCATION	ATC01 - A1017 Braintree Rd, Gosfield
LOC. DESC.	SB bus stop, 40m N of Westwood House access
START DATE	Tue 28 Jan, 2025
END DATE	Mon 03 Feb, 2025 (inc.)
SPEED LIMIT	60mph
SURVEY TYPE	7-day ATC, 15min periods, 10 veh. classes



7-DAY AUTOMATIC TRAFFIC COUNT

SUMMARY

COMBINED NORTH- & SOUTHBOUND

Total recorded volume	57,697
Avg daily volume (based on 7 days)	8,242.4
Average daily speed (7 days)	42.3mph
Average daily 85%ile (7 days)	47.8mph
AADT (annual average daily traffic)	9,541.6
AAWT (annual average weekday traffic)	10,199.4
Avg weekday volume (Mon-Fri, 24hrs)	8,805.0
Avg weekday speed (Mon-Fri, 24hrs)	41.9mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	7,140.2
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	41.5mph

A 7-day automatic traffic count on A1017 Braintree Rd, Gosfield, commencing Tue 28 Jan 2025, recorded a total of 57,697 vehicles. The posted speed limit of 60mph was exceeded by 0.8% of vehicles, and the seasonally adjusted, combined AADT value is 9,542 (see 'Equipment & methodology' below).

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, plus the Mon-Fri peak periods. Speeding vehicles are defined as those travelling 61mph and above.

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

NORTHBOUND



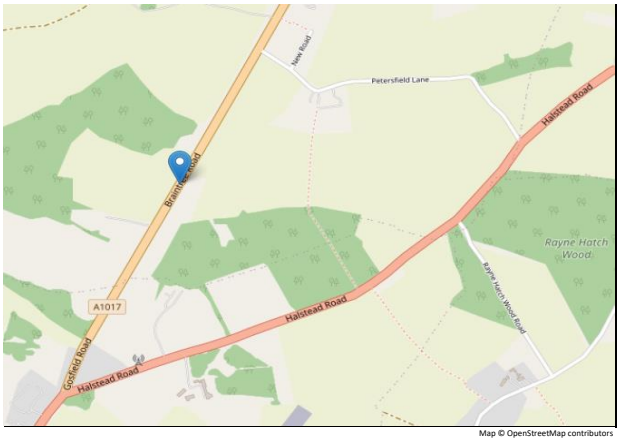
Total recorded volume	28,993
Avg daily volume (based on 7 days)	4,141.9
Average daily speed (7 days)	42.3mph
Average daily 85%ile (7 days)	47.8mph
% of vehicles exceeding 60mph	0.9%
Avg weekday volume (Mon-Fri, 24hrs)	4,433.6
Avg weekday speed (Mon-Fri, 24hrs)	41.9mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	3,646.6
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	41.5mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	46.7mph
AM avg peak vol period (Mon-Fri)	08:15 to 08:30
PM avg peak vol period (Mon-Fri)	15:30 to 15:45

SOUTHBOUND



Total recorded volume	28,704
Avg daily volume (based on 7 days)	4,100.6
Average daily speed (7 days)	42.3mph
Average daily 85%ile (7 days)	47.9mph
% of vehicles exceeding 60mph	0.7%
Avg weekday volume (Mon-Fri, 24hrs)	4,371.4
Avg weekday speed (Mon-Fri, 24hrs)	41.8mph
Avg 12hr weekday volume (Mon-Fri, 0700-1900)	3,493.6
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	41.5mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	46.9mph
AM avg peak vol period (Mon-Fri)	08:30 to 08:45
PM avg peak vol period (Mon-Fri)	16:00 to 16:15

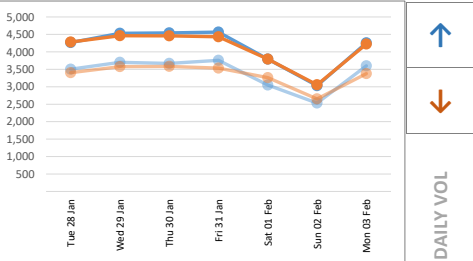
SITE LOCATION



LOCATION	A1017 Braintree Rd, Gosfield
DESC.	SB bus stop, 40m N of Westwood House access
DATES	Tue 28 Jan to Mon 03 Feb inc.
OSGR	578003, 227919
LAT / LNG	51.921337, 0.587086
POST CODE	CO9 1RT
PSL	60mph
BUS ROUTE	Yes
DIRECTION 1	↑ Northbound
DIRECTION 2	↓ Southbound

DAILY VOLUMES

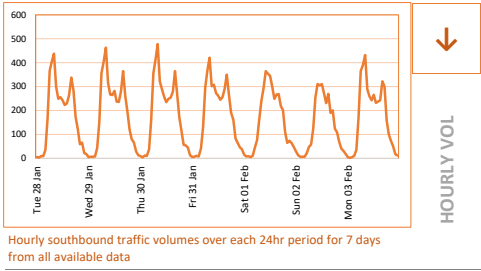
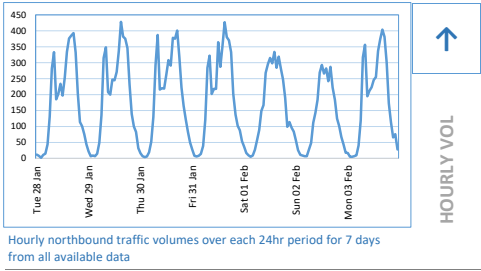
NORTH- & SOUTHBOUND



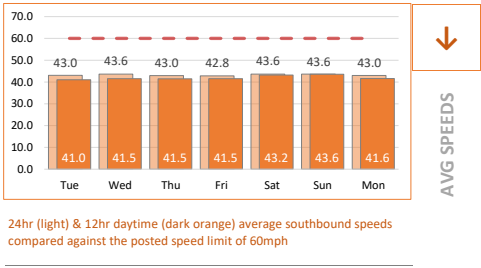
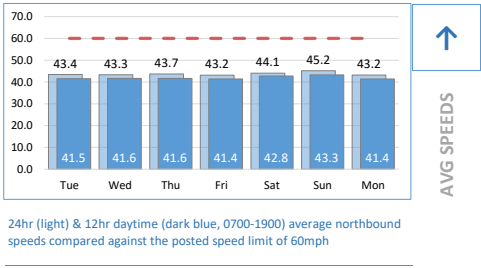
Total 24hr northbound (solid, dark blue) and southbound (solid, dark orange) traffic volumes, with light blue and orange representing 12hr volumes (0700-1900), over 7 consecutive days from all available data.

As can be expected, the lowest 24hr volumes were recorded on the Sunday, whilst the highest was on the Thursday.

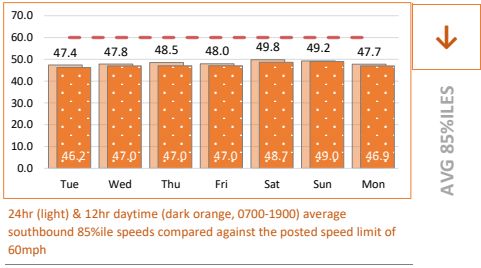
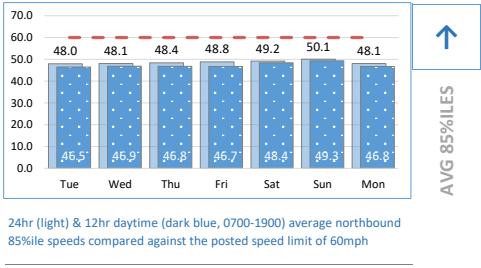
HOURLY VOLUMES



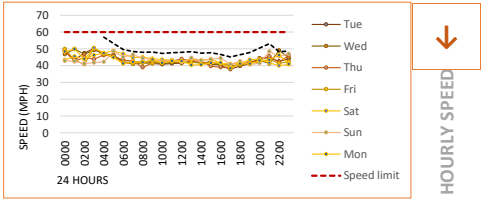
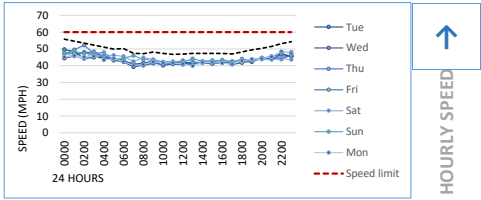
24hr & 12hr AVG SPEEDS



24hr & 12hr 85%ile SPEEDS



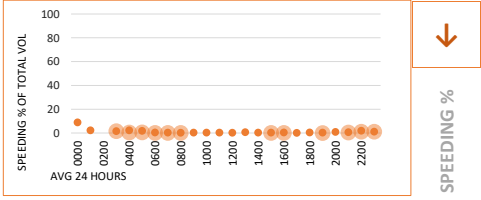
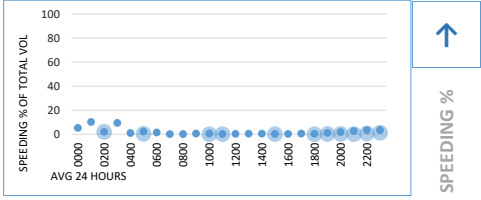
HOURLY SPEEDS



Average hourly speeds (solid thin colours) and 85%ile (dashed black) compared against 60mph posted speed limit (dashed red). The 85%ile 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 85%ile values may be zero.

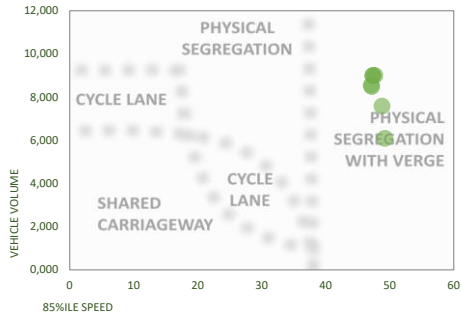
The peak northbound daytime speed was 49.1mph at 07:00 on Sun 02 Feb, whilst the peak southbound speed was 48.5mph at 07:00 on Sun 02 Feb (based on 15min averages between 0700 & 1900).

SPEEDING % EXCEEDING 60mph



7-day average percentages of vehicles exceeding the posted speed limit each hour. The small, darker dots represent the percentage travelling between 60 and 65mph, whilst the larger markers represent those at 66mph and above. A high proportion of larger dots may indicate a potential speeding issue.

CYCLE PROVISION



The cycle provision diagram compares total daily traffic flow (vertical axis) against the average daily 85th percentile 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 85th percentiles are required to plot the graph.

5-DAY AVERAGE CLASSES

NORTHBOUND WEEKDAY AVG

TIME	MOTOR CYCLES	CARS / LGV1	LG2 / MG2	HGV RIGID	HGV ARTIC'D	TOTAL
0000	0.0	16.8	1.4	0.0	0.8	19.0
0100	0.0	5.8	1.0	0.0	0.2	7.0
0200	0.0	4.4	0.6	0.0	0.2	5.2
0300	0.0	7.0	0.2	0.0	0.6	7.8
0400	0.0	13.2	0.6	0.0	0.8	14.6
0500	0.0	38.4	5.4	0.0	1.0	44.8
0600	0.8	114.6	9.4	1.2	1.4	127.4
0700	1.4	255.2	33.6	2.0	5.6	297.8
0800	0.8	309.0	34.0	1.6	3.8	349.2
0900	0.6	165.8	28.4	1.8	4.6	201.2
1000	1.6	174.0	28.0	0.8	6.0	210.4
1100	1.8	192.6	28.4	1.2	4.2	228.2
1200	0.6	232.2	24.2	0.6	5.2	262.8
1300	0.8	244.8	24.4	0.8	4.0	274.8
1400	2.6	291.8	31.4	0.6	4.0	330.4
1500	1.8	361.2	31.0	0.2	2.4	396.6
1600	2.6	362.2	18.0	0.2	2.2	385.2
1700	2.4	362.4	16.2	0.2	2.8	384.0
1800	1.6	310.2	13.0	0.0	1.2	326.0
1900	0.8	197.2	7.4	0.0	1.2	206.6
2000	0.6	127.8	5.2	0.0	0.0	133.6
2100	0.0	93.6	4.2	0.0	0.4	98.2
2200	0.2	77.8	3.0	0.0	0.2	81.2
2300	0.0	39.0	2.2	0.0	0.4	41.6
12hr TTL	18.6	3261.4	310.6	10.0	46.0	3646.6
24hr TTL	21.0	3997.0	351.2	11.2	53.2	4433.6
	0%	90%	8%	0%	1%	

SOUTHBOUND WEEKDAY AVG

TIME	MOTOR CYCLES	CARS / LGV1	LG2 / MG2	HGV RIGID	HGV ARTIC'D	TOTAL
0000	0.2	4.8	1.2	0.2	0.0	6.4
0100	0.0	2.6	1.6	0.0	0.4	4.6
0200	0.0	7.4	0.8	0.0	0.8	9.0
0300	0.0	7.6	1.6	0.0	0.2	9.4
0400	0.0	30.6	4.6	0.0	3.2	38.4
0500	1.6	126.6	24.8	0.6	2.4	156.0
0600	1.6	302.2	41.6	0.4	2.0	347.8
0700	3.2	341.6	49.6	1.4	1.0	396.8
0800	2.8	408.8	29.4	1.6	3.8	446.4
0900	1.4	263.4	35.2	0.8	5.0	305.8
1000	0.6	234.6	34.8	1.0	3.6	274.6
1100	0.4	220.2	33.2	0.6	4.6	259.0
1200	1.4	217.0	33.6	0.4	5.2	257.6
1300	1.0	199.0	30.0	1.0	6.2	237.2
1400	1.2	208.4	28.2	1.0	3.8	242.6
1500	1.8	232.8	32.8	1.2	2.4	278.0
1600	2.0	309.4	32.6	0.8	3.2	348.0
1700	0.4	254.4	20.6	0.0	1.0	276.4
1800	1.0	164.0	12.4	0.2	0.6	178.2
1900	0.2	117.2	6.2	0.0	0.6	124.2
2000	0.0	65.4	4.6	0.6	0.0	70.6
2100	0.2	55.6	4.8	0.0	0.0	60.6
2200	0.0	30.8	1.2	0.0	0.0	32.0
2300	0.6	17.2	0.6	0.0	0.4	18.8
12hr TTL	17.2	3053.6	372.4	10.0	40.4	3493.6
24hr TTL	21.6	3821.6	466.0	11.8	50.4	4371.4
	0%	87%	11%	0%	1%	

Average weekday 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 5 weekdays. See 'Equipment & Methodology' below for accuracy details.

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 may 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.

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, Essex Highways cannot be held responsible for the forecast accuracy.

Equipment damage, failure & calculations

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 Essex Highways 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 Essex Highways cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

16hr AADTs are calculated using the seasonal COBA methodology; DMRB Vol. 13, Pt 4: Traffic Flow Input To COBA, with formulae available in the (hidden) config worksheet.

Roadworks & events

Where possible, roadworks checks are made 10 days before, and 48 hours 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 (bins) 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, AQMA (air quality management standard) and the Essex 9-class, as used in manual junction counts undertaken by Essex Highways.

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, neither Essex County Council nor Essex Highways may be held liable for errors of fact or interpretation.

Generated 05 Feb 2025 v7.1g

Copy of 24529-01 - A1017 Braintree Rd GOSFIELD - JAN 2025 (ATC).xlsx