

Mirfield Town Council

ATC Summary
Mirfield Speed Surveys

Knowle Road (Site 12)



Control Sheet

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Acknowledgements

Google MyMaps has been used to generate figures included in this report for illustrative purposes only.

Traffic count data has been provided by Nationwide Data Collection.

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Appendix A

ATC12 – Knowle Road Data

1. Introduction

1.1 Sanderson Associates Consulting Engineers have been appointed by Mirfield Town Council to provide highway consultancy services in relation to speed surveys for 16no. sites located around Mirfield.

1.2 The site locations comprise:

- Hopton Lane (2no. locations)
- Granny Lane
- Stearnard Lane
- Church Lane
- Dunbottle Lane
- Lee Green
- Kitson Hill Road (2no. locations)
- Stocks Bank Road (2no. locations)
- Knowle Road
- Crowlees Road
- Flash Lane
- Shillbank (2no. locations)

1.3 The site locations identified are summarised in **Figure 1**.

Figure 1 – Site Locations [Google MyMaps]



- 1.4 Prior to the commissioning of the surveys, the sites, identified by Mirfield Town Council, were assessed for suitability for ATC surveys during a site visit conducted by Sanderson Associates and Councillors Martyn Bolt and Vivien Lees-Hamilton on Monday 17th November 2025.
- 1.5 Nationwide Data Collection (NDC) were commissioned to carry out the 16.no 24hr Automatic Traffic Count (ATC) surveys concurrently for a period of 7 days.
- 1.6 NDC use Metrocount vehicle by vehicle classifiers or Houston Radar loggers, for sites where tubes are not suitable. Counters are always installed, monitored and removed by full time, experienced technicians; who install ATCs on a regular basis (& undertake full risk assessments on a site-by-site basis prior to installation). Counters were to be installed for 7 full (& aligned) 24hr periods.

Table 1 - Glossary of terms for ATC

| Heading | Description |
|------------|---|
| >PSL | Greater than the posted speed limit |
| >PSL% | Greater than the posted speed limit as a percentage |
| >SL1 ACPO | Greater than ACPO (Association of Chief Police Officers) standard. ACPO is PSL x 10%+2mph |
| >SL1% ACPO | Greater than ACPO displayed as a percentage |
| >SL2 DfT | Greater than DfT (Department for Transport) standard. DfT is PSL plus 10mph. |
| >SL2% DfT | Greater than DfT standard displayed as a percentage |
| Mean | Average speed |
| Vpp 85 | 85th percentile speed |

- The ACPO (Association of Chief Police Officers) limits refer to UK guidelines for speed enforcement, generally allowing a tolerance of 10% + 2 mph over the limit before action (such as a fine or course) is considered.
- 85th percentile speed is the speed at or below which 85% of drivers on a road are travelling.

- 1.7 The following section will analyse the results for the Knowle Road site.

2. Site ATC12 – Knowle Road

2.1 Figure 2 shows the site location plan and photo of the equipment in place.

Figure 2 – ATC12 – Knowle Road [NDC]



2.2 The survey was carried out between Friday 28th November 2025 00:00 – Thursday 4th December 2025 23:59.

2.3 The data collected is summarised in **Tables 2 and 3**.

Table 2 – Summary of speed results – ATC12 – Knowle Road

| Posted Speed Limit 30mph | | | | | | |
|--------------------------|---------------------|-----------------------|------------------------------|-------------------------|----------------------------------|---------------------------------|
| Direction of Travel | Average Speed (mph) | 85th %ile Speed (mph) | Highest Recorded Speed (mph) | Time of Highest Speed | % over speed limit (06:00-22:00) | % over ACPO limit (06:00-22:00) |
| North | 28.7 | 32.1 | 65-70 | 00:00-01:00 | 31.8 | 4.5 |
| South | 28.4 | 32.1 | 50-55 | <i>Various see note</i> | 31.0 | 4.3 |

Table 3 – Summary of traffic flows – ATC12 – Knowle Road

| Direction of Travel | Average Daily Total Vehicles (5-day) | Average Daily Total Vehicles (7-day) | Weekday AM Peak Time Period | Weekday PM Peak Time Period | Weekend Peak Time Period |
|---------------------|--------------------------------------|--------------------------------------|-----------------------------|-----------------------------|--------------------------|
| North | 4,237 | 3,822 | 08:00-09:00 | 17:00-18:00 | 13:00-14:00 |
| South | 3,795 | 3,462 | 08:00-09:00 | 15:00-16:00 | 14:00-15:00 |

- 2.4 The weekday peak time periods at this site were 08:00-09:00 in the AM and 17:00-18:00 in the PM. The weekend peak time period was 13:00-14:00.
- 2.5 On average, 31% of vehicles exceeded the posted speed limit of 30mph between the hours of 06:00 and 22:00, over the 7-day survey period. During the same period, an average of 4.4% of vehicles exceeded the ACPO limit (35mph).
- 2.6 The highest northbound speed of 65-70mph was recorded on Thursday 4th December at 00:00-01:00.
- 2.7 The highest southbound speed of 50-55mph was recorded on 6 occasions over the 7-day period, 3 of which were between the hours of 06:00-22:00.
- 2.8 On Wednesday 3rd December 2025 at 12:00-13:00 a speed of 90-95mph was recorded twice in a northbound direction. However, this is suspected to be an erroneous record. Occasionally, in congested environments, the ATC can miscalculate speeds due to the close proximity of vehicles (platooning).
- 2.9 The full data report is included at **Appendix A**.




Appendix A

ATC12 – Knowle Road Data

77 Knowl Rd, Mirfield WF14 9RA, UK












☀ 247°SW (T) ● 53.6784, -1.696123 ±3m ▲ 121m



| | | | | | | | | |
|---|------------------|---|---------------|-----------------|-----------|----|-----------|----|
|  | Site / Location: | Knowle Road - 53.678458, -1.696248 | Project No: | 17436 | Photo No: | 12 | Drawn By: | RN |
| | Survey Date: | Friday, 28 November 2025 - Thursday, 04 December 2025 | Project Name: | Mirfield | | | | |
| | Survey Times: | 00:00 - 00:00 (24 Hour) | Title: | Site Photograph | | | | |

| Site No. | Location. | Direction. | Speed Limit - PSL (mph) | Start Date. | End Date. | Total Vehicles. | 5 Day Ave. | 7 Day Ave. | No. > Speed Limit. | % > Speed Limit. | No. > ACPO Limit. | % > ACPO Limit. | No. > DfT Limit. | % > DfT Limit. | Mean Speed | 85%ile Speed |
|----------|------------------------------------|-----------------|-------------------------|--------------------------|----------------------------|-----------------|------------|------------|--------------------|------------------|-------------------|-----------------|------------------|----------------|------------|--------------|
| 12 | Knowle Road - 53.678458, -1.696248 | North | 30 | Friday, 28 November 2025 | Thursday, 04 December 2025 | 26752 | 4237 | 3822 | 8678 | 32.4 | 1316 | 4.9 | 252 | 0.9 | 28.7 | 32.1 |
| | | South | 30 | Friday, 28 November 2025 | Thursday, 04 December 2025 | 24235 | 3795 | 3462 | 7681 | 31.7 | 1152 | 4.8 | 170 | 0.7 | 28.4 | 32.1 |
| | | Both Directions | 30 | Friday, 28 November 2025 | Thursday, 04 December 2025 | 50987 | 8031 | 7284 | 16359 | 32.1 | 2468 | 4.8 | 422 | 0.8 | 28.6 | 32.1 |

ATC VEHICLE CATEGORIES

| Axles | Groups | Description | Class | | Parameters | Dominant Vehicle | Aggregate |
|-----------|--------|---|-------|----|--|---|------------|
| 2 | 1 or 2 | Very Short - Bicycle or Motorcycle | MC | 1 | $d(1) < 1.7\text{m}$ & axles=2 | | |
| 2 | 1 or 2 | Short - Sedan, Wagon, 4WD, Utility, Light Van | SV | 2 | $d(1) \geq 1.7\text{m}$, $d(1) \leq 3.2\text{m}$ & axles=2 |  | |
| 3, 4 or 5 | 3 | Short Towing - Trailer, Caravan, Boat, etc. | SVT | 3 | groups=3, $d(1) \geq 2.1\text{m}$, $d(1) \leq 3.2\text{m}$, $d(2) \geq 2.1\text{m}$ & axles=3,4,5 |  | 1 (Light) |
| 2 | 2 | Two axle truck or Bus | TB2 | 4 | $d(1) > 3.2\text{m}$ & axles=2 |  | 2 (Medium) |
| 3 | 2 | Three axle truck or Bus | TB3 | 5 | axles=3 & groups=2 |  | |
| >3 | 2 | Four axle truck | T4 | 6 | axles>3 & groups=2 |  | |
| 3 | 3 | three axle articulated vehicle or Rigid vehicle and trailer | ART3 | 7 | $d(1) > 3.2\text{m}$, axles=3 & groups=3 |  | 3 (Heavy) |
| 4 | >2 | Four axle articulated vehicle or Rigid vehicle and trailer | ART4 | 8 | $d(2) < 2.1\text{m}$ or $d(1) < 2.1\text{m}$ or $d(1) > 3.2\text{m}$ axles = 4 & groups>2 |  | |
| 5 | >2 | Five axle articulated vehicle or Rigid vehicle and trailer | ART5 | 9 | $d(2) < 2.1\text{m}$ or $d(1) < 2.1\text{m}$ or $d(1) > 3.2\text{m}$ axles=5 & groups>2 |  | |
| >=6 | >2 | six (or more) axle articulated vehicle or Rigid vehicle and trailer | ART6 | 10 | axles=6 & groups>2 or axles>6 & groups=3 |  | |
| >6 | 4 | B-Double or Heavy truck and trailer | BD | 11 | groups=4 & axles>6 |  | |
| >6 | >=5 | Double or triple road train or Heavy truck and two (or more) trailers | DRT | 12 | groups>=5 & axles>6 |  | |


ATC SPEED BINS & DATA HEADINGS


| Heading | Description |
|-----------|--------------------------------|
| 0 - 5 | Speed bin totals 0 - 5 mph |
| 5 - 10 | Speed bin totals 5 - 10 mph |
| 10 - 15 | Speed bin totals 10 - 15 mph |
| 15 - 20 | Speed bin totals 15 - 20 mph |
| 20 - 25 | Speed bin totals 20 - 25 mph |
| 25 - 30 | Speed bin totals 25 - 30 mph |
| 30 - 35 | Speed bin totals 30 - 35 mph |
| 35 - 40 | Speed bin totals 35 - 40 mph |
| 40 - 45 | Speed bin totals 40 - 45 mph |
| 45 - 50 | Speed bin totals 45 - 50 mph |
| 50 - 55 | Speed bin totals 50 - 55 mph |
| 55 - 60 | Speed bin totals 55 - 60 mph |
| 60 - 65 | Speed bin totals 60 - 65 mph |
| 65 - 70 | Speed bin totals 65 - 70 mph |
| 70 - 75 | Speed bin totals 70 - 75 mph |
| 75 - 80 | Speed bin totals 75 - 80 mph |
| 80 - 85 | Speed bin totals 80 - 85 mph |
| 85 - 90 | Speed bin totals 85 - 90 mph |
| 90 - 95 | Speed bin totals 90 - 95 mph |
| 95 - 100 | Speed bin totals 95 - 100 mph |
| 100 - 105 | Speed bin totals 100 - 105 mph |
| 105 - 110 | Speed bin totals 105 - 110 mph |
| 110 - 115 | Speed bin totals 110 - 115 mph |
| 115 - 120 | Speed bin totals 115 - 120 mph |
| 120 - 125 | Speed bin totals 120 - 125 mph |
| 125 - 130 | Speed bin totals 125 - 130 mph |
| 130 - 135 | Speed bin totals 130 - 135 mph |
| 135 - 140 | Speed bin totals 135 - 140 mph |


| Heading | Description |
|---------------|---|
| >PSL | Greater than the posted speed limit |
| >PSL% | Greater than the posted speed limit as a percentage |
| >SL1 ACPO | Greater than ACPO (Association of Chief Police Officers) standard. ACPO is PSL x 10%+2mph |
| >SL1% ACPO | Greater than ACPO displayed as a percentage |
| >SL2 DFT | Greater than DFT (Department For Transport) standard. DFT is PSL plus 10mph. |
| >SL2% DFT | Greater than DFT displayed as a percentage |
| Mean | Average speed |
| Vpp 85 | 85th percentile speed |




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