

# **Cowfold Road and Traffic Issues**

## **Background**

The A272 is the designated Major Route North of the A27 and South of the M25.

Cowfold is broadly divided in 4 quadrants separated by the A272 running East/West and the A281 running North/South.

The village Built Up Area consists of 645 dwellings of which 371 (58%) are in the South East quadrant.

There are 23 significant amenities of which 4 can be considered as key amenities, that is those likely to be visited on a daily basis. Unfortunately access to all 4 of these key amenities require the majority of the residents to cross the A272 which is part of the Major Road Network system for the South East.

There is no safe crossing.

There are 3 Mini Refuge Crossings over the A272; located at Mercers Mead, the Village Hall and at the Junction to the A281. All of these are of similar dimensions having a width of 1.2M (that is the dimension perpendicular to the road). This means for a parent pushing a pram, the parent and/or the pram is partially in the carriageway. A pedestrian pushing a bicycle is at even more risk given that the typical length of a bicycle is 1.8M. The most vulnerable are those using a Mobility Scooter where the length is typically 1.6M and the width 70cm.

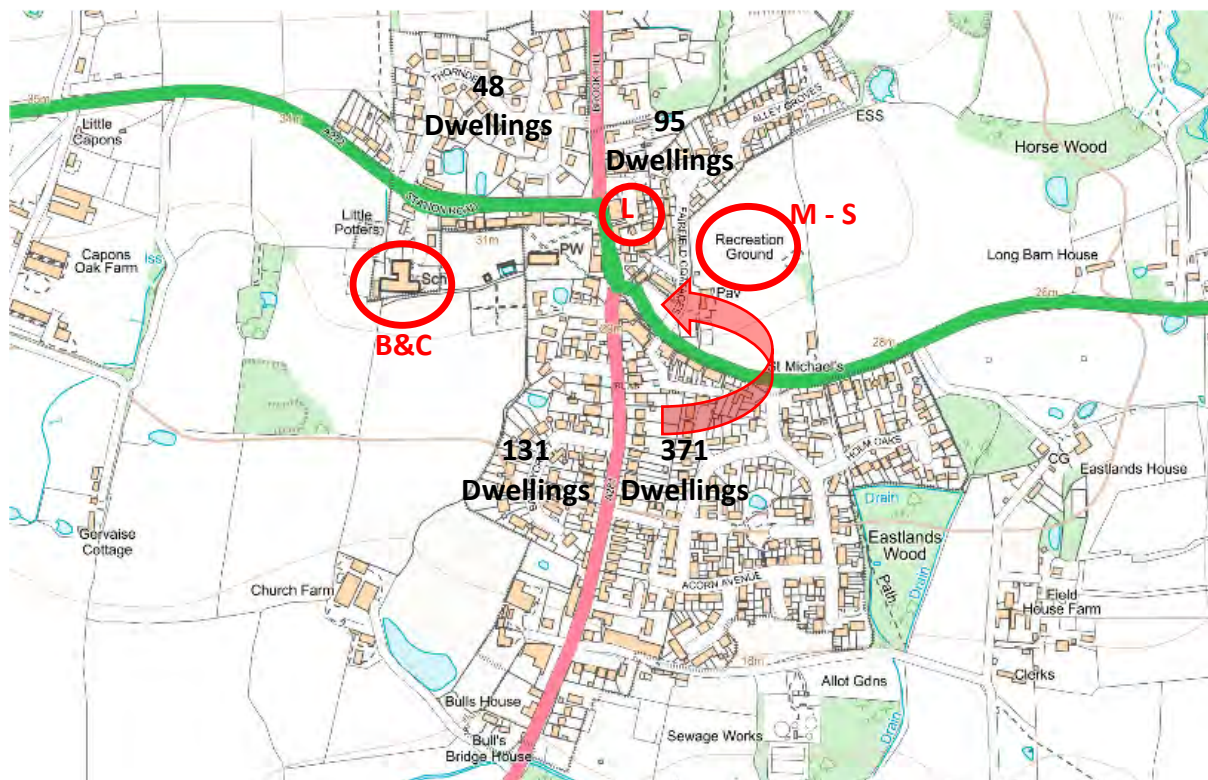
The pavement between Mercers Mead and the Village Hall is uneven and with a kerb height from 0cm to 4cm making use of this dangerous for the elderly and infirm. The pavement width for this section is between 1.0M and 1.4M making it impassable for many mobility scooters and wheelchairs. This is exacerbated on Bin collection day when the width is reduced by 60cm. In some cases, telegraph poles extend into the pavement width.

The A272 typically has 18,500 average vehicle movements per day on a 5-day basis with 5% being HGV, that is nearly 1000 HGV/day. An HGV driver has no visibility of a pedestrian on this pavement close up to the nearside of his vehicle. The risk to Parents with prams/infants and to those using mobility aids is extreme.

Cowfold Parish Council have had their application for a crossing at Mercers Mead rejected despite the fact that this would eliminate the need to use this dangerous section of pavement and provide a safe crossing over the A272 to the key amenities such as the School, Nursery, Recreation ground, Playground and the Village shop/General store.

It is possible to reach the School and Nursery without crossing the A272 but this still means using the unsuitable section of pavement between Mercers Mead and The Gables. Doing so means crossing the A281 without the benefit of the traffic light controlled pedestrian crossing, although there is a lollipop there at school times. From a practical perspective, most people will combine taking or collecting their children to/from the School/Nursery with a visit to the local general store and therefore the logical route involves crossing the A272 as indicated. This is clearly the intended route as it allows the use of the Traffic Light controlled crossing over the A281 between the roundabouts.

## Cowfold Overview Map



## Notes

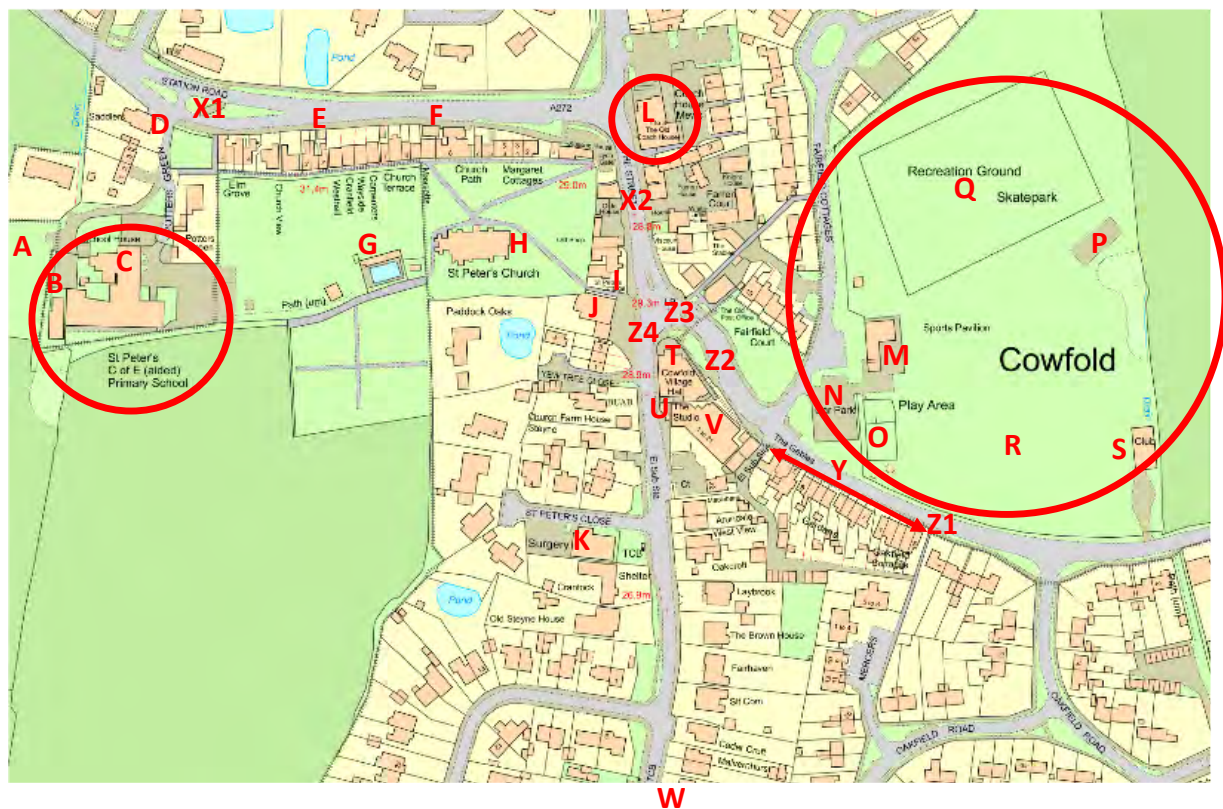
Alley Groves extension to the North East is now included within the BUAB  
 The School and Nursery are accessed from the North.

## Cowfold Village

- A Allotments
- B Country Mice Nursery**
- C St Peter's Primary School**
- D The Fold Café
- E Dennie's Café
- F Still Rooms/Barber/Flower Shop
- G Village Swimming Pool
- H St Peter's Church
- I Cowfold Cottage Tandoori
- J Old Village Store (Under Renovation)
- K Cowfold Medical Practice
- L Co-operative General Store**
- M Allmond Centre**
- N Village Car Park**
- O Childrens Playground (Recreation Ground)**
- P Skate Park/Basket Ball (Recreation Ground)**
- Q Cowfold Football Pitch (Recreation Ground)**

- R** Cowfold Juniors Football Pitch (Recreation Ground)
- S** Cowfold Scouts (Recreation Ground)
- T Village Hall
- U Beauty Salon
- V Godman's Court, Retirement accommodation
- W Hare & Hounds Public House (240M Further South)
- X1 Traffic Light Controlled Crossing (A272 West of Village Centre)
- X2 Traffic Light Controlled Crossing (A281 Village Centre)
- Y Mercers Mead to The Gables, 90M of very narrow pavement (1.0 – 1.4M\*)
- Z1 Mercers Mead Crossing/Mini Refuge ( A272; 1.2M width)
- Z2 Village Hall Crossing/Mini Refuge (A272; 1.2M width)
- Z3 Junction Crossing/Mini Refuge (A272; 1.2M width)
- Z4 Junction Crossing/Mini Refuge (A281; 1.2M width)
- \* Pavement width reduced by 60cm (~half) when refuse bins out)

Key amenities, typically used daily, marked Red/Bold



### Crossing/Mini Refuge Detail

In each case these are 1.2M wide meaning that unless the person crossing, including any Buggy/Pram/Bicycle/shopping trolley or mobility aid, is no longer than 1.2M, then the person and/or the item will project into the path of the traffic flow.

Good practice dictates that any such refuge crossing should have a minimum width of 1.8M, although an absolute minimum of 1.2M considered acceptable this should be sufficient for the location taking into account the usage. These crossings are predominantly used for

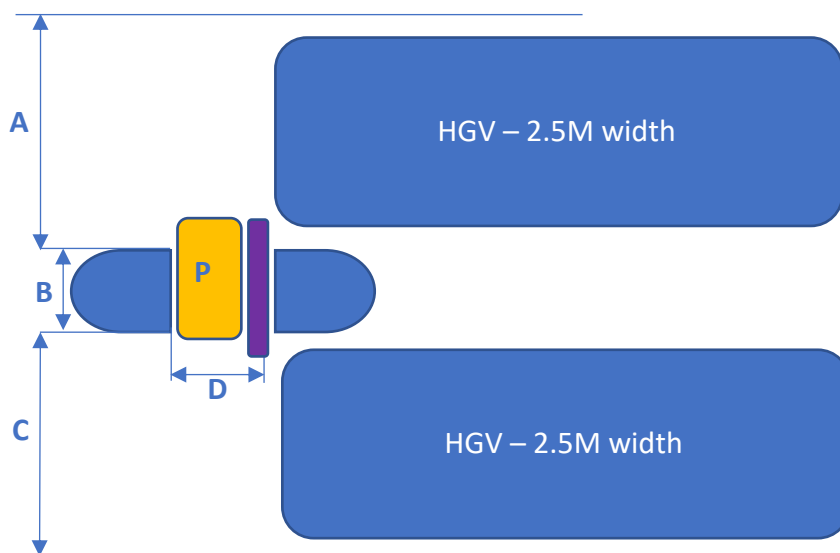
access to school/nursery, by children accessing Play areas and Scouts as well as elderly and disabled people.

Safe Road design principles dictate that the road carriageway width either side of any refuge should be either greater than 3.9M or less than 3.2M to account for Cyclists. This ensures that there is either sufficient width, or, clearly insufficient width for a vehicle to pass a cyclist in the vicinity of a crossing refuge.

In Cowfold all 4 Crossings/Mini Refuges have carriage widths of between 3.2M and 3.8M, this contravenes such good practice and introduces an additional and unnecessary risk.

When Traffic is flowing freely then there is the temptation for a vehicle to pass a cyclist within the refuge area where a pedestrian may be standing proud of the refuge width due to a Pram/Bicycle/mobility aid. In times of stationary traffic there is the temptation for a cyclist or motorcyclist to pass a stationary or slow-moving vehicle and encounter a pedestrian using the refuge to cross the road putting them in mortal danger.

### Cowfold Crossing/Mini Refuge Dimensions



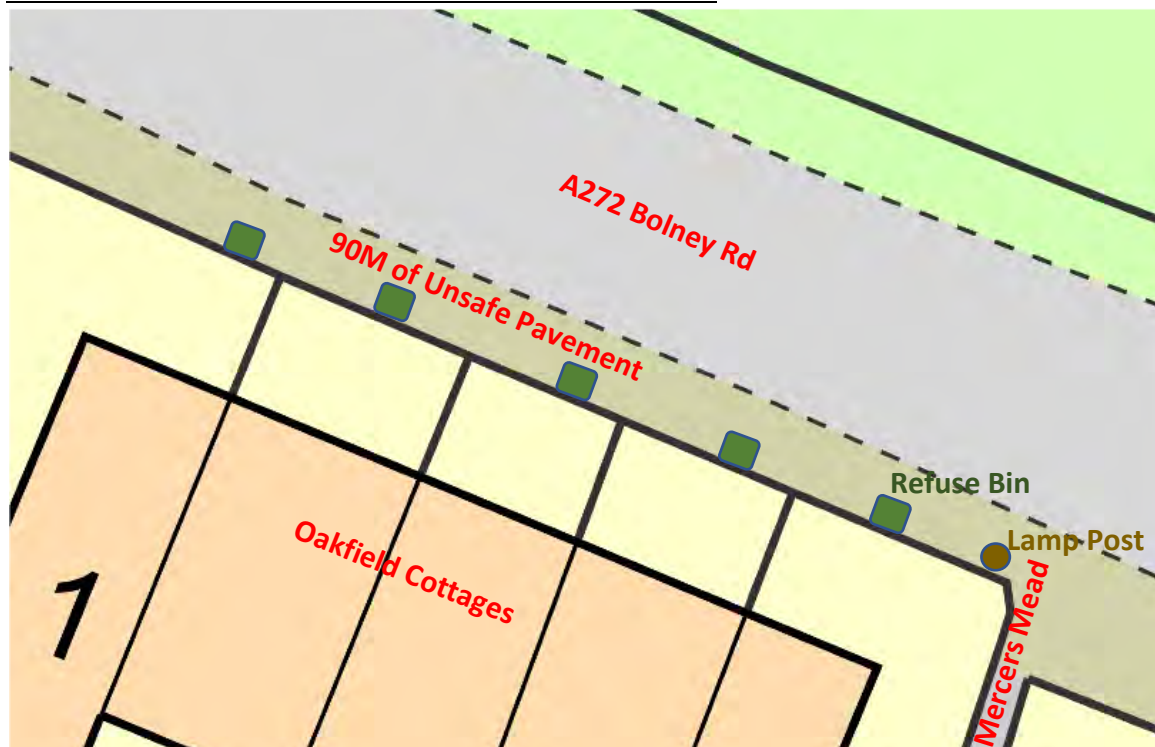
### Crossing/Mini Refuge Dimensions

Location	A	B	C	D	P – see note below
Z1 A272/Mercers Mead	3.4	1.2	3.2	1.6	
Z2 A272/Village Hall	3.3	1.2	3.8	1.3	
Z3 A272/Junction	3.6	1.2	3.2	1.2	
Z4 A281/Junction					

'P' Pedestrian/Buggy represented by Orange Rectangle 80cm wide, 1.4M long. Electric Mobility Scooter is typically about 1.6M long 70cm wide but can be in excess of 1.2M wide and not pass through. A bicycle is typically 1.8M long so would be at risk of simultaneous contact with HGVs on both carriageways!



## A272 Mercers Mead to The Gables – Unsafe Pavement



The available pavement is only 60cm wide when passing the refuse bins and 80cm wide when passing the lamp posts. For a parent pushing a pram and with a Primary school child in hand, this presents an unreasonable risk. A mobility scooter or wheelchair may be simply unable to pass at all. All this on a pavement that is uneven and has very limited kerb height; level with the road in some places, and HGVs passing less than 50cm away.



### Mobility Scooters

Typical

Width 70cm

Length 162cm

Resident Pictured

Width 62cm

Length 125cm

The small wheels on this scooter made it feel very unsafe on the uneven pavement.



**Parents with Children are at particular risk, on bin day this is even more dangerous.**



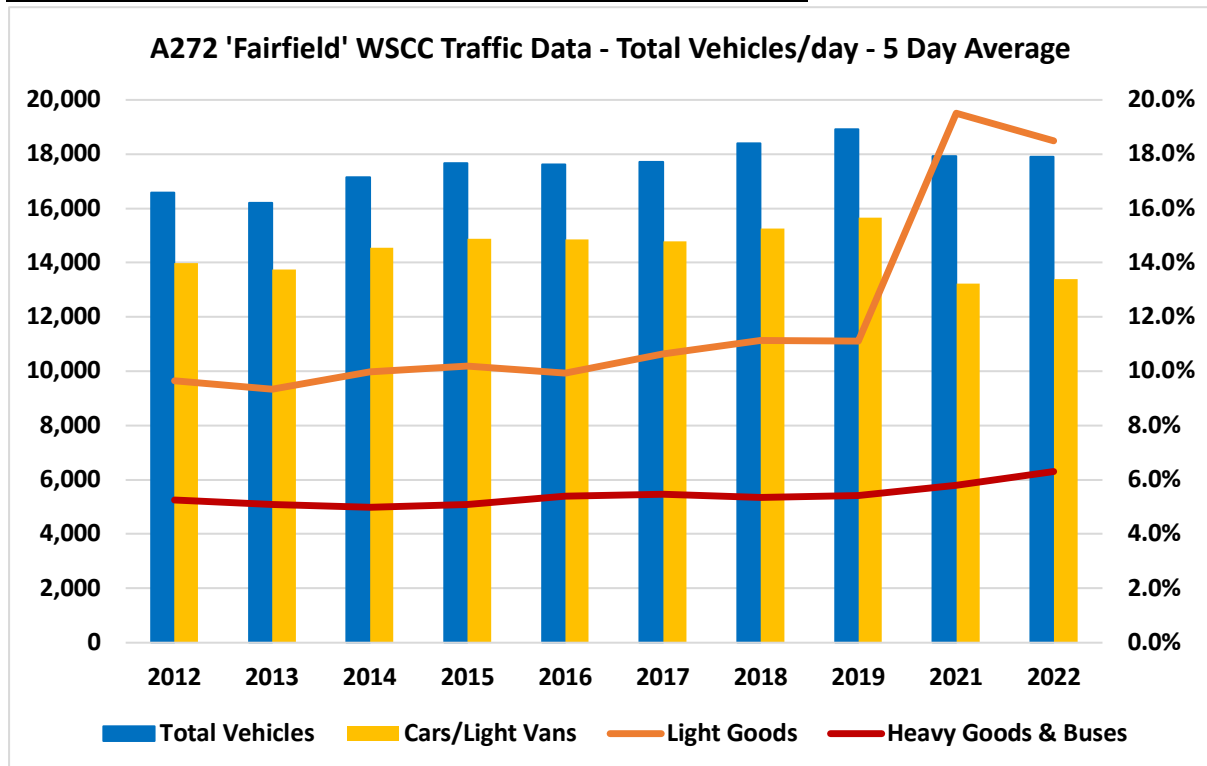
**This demonstrates that even a youngster's bike is at serious risk of collision**



For any residents that need to use this section of pavement or cross the A272 there is no safe option. This is particularly so given the available carriageway width of 3.2M at Mercers Mead and an HGV width of 2.5M leaving just 35cm clearance on either side. Both the young cyclist and the parent crossing with her children, shown in the photographs above, would be at real risk of becoming collision victims.

## Traffic – WSCC 5 Day AADT Data

### Annual Average Daily Traffic Volume – A272; split by category



Pre pandemic Annual Average Daily Traffic had reached about 18,500 vehicles, this dropped dramatically during the pandemic. The data collection point failed so there was no data collected between January and July 2020. There appears to have been a significant change in the traffic profile post pandemic although this could be related to the new equipment. Car journeys have reduced, while delivery and HGV movements have increased.

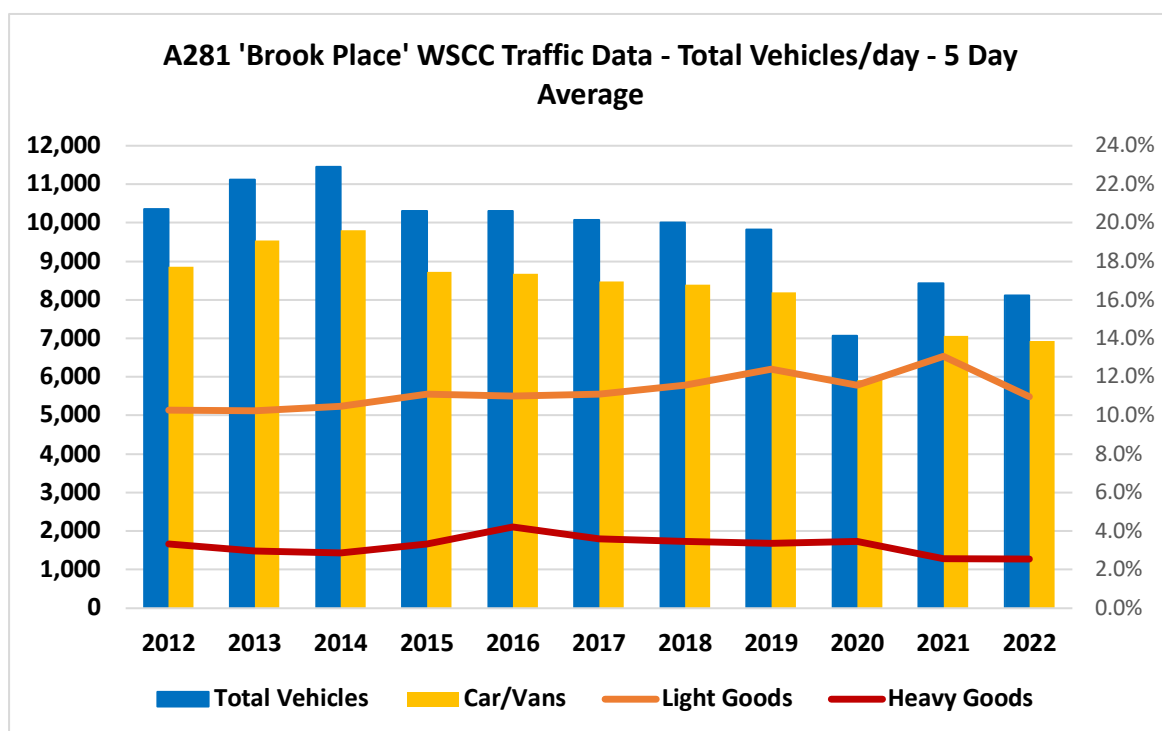
Using April 2022 as a current example, the 5-day average was 18,582 vehicles with an average of 14,896 passing between the hours of 06:00 and 18:00.

That is an average of one vehicle in just under every 3 seconds!

It is difficult to conclude that it is safe for Parents with Young Children, the Elderly or the infirm to cross this busy major route in less than 3 seconds without the assistance of a controlled crossing.

The situation is similar on the A281 although with a lower proportion of HGV and about 10,000 Annual Average Daily Traffic volume. However, at the peak traffic time on weekday evenings there is a substantial volume of stationary traffic backed up North of the northern roundabout. This results in an unsafe crossing of the A281 at this time.



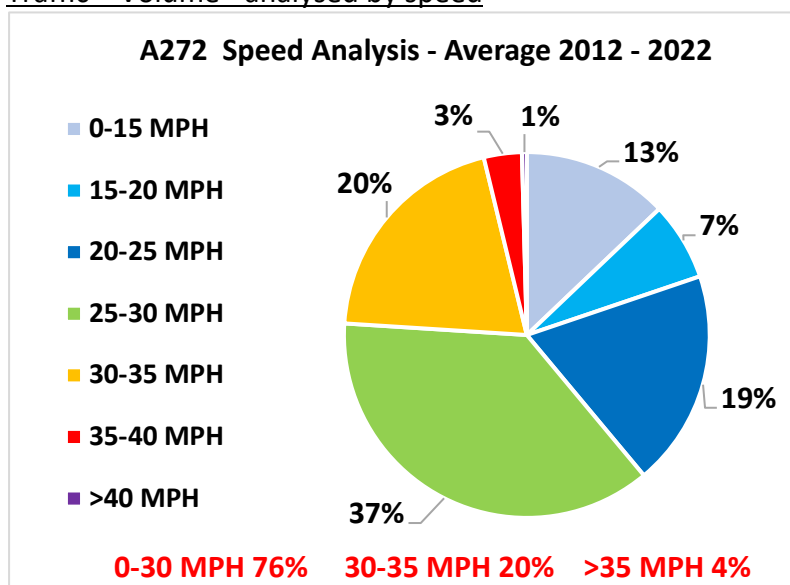


### Traffic Speed

Mean Average Traffic Speed has decreased as volumes have increased. This is as a result of increased stationary traffic indicated by the increased percentage of vehicles travelling at below 15 MPH during peak traffic times. There is no general indication of traffic speeds otherwise changing.

Over the period 2012 – 2022, 76% of vehicles were recorded as travelling at 30 MPH or less, 20% between 30 and 35 MPH and 4% at speeds in excess of 35 MPH. Vehicles have been recorded travelling at speeds in excess of 40 MPH and although these are very few in percentage terms any collision at these speeds with a pedestrian is much more likely to result in a fatality.

### Traffic – Volume - analysed by speed



The mean average speed measured at the WSCC measurement point opposite Fairfield Cottages during the first 4 months of 2022 was 23.6 MPH. This indicates that reducing the speed limit to 20 MPH would have a marginal effect on the journey time for vehicles using the A272 through Cowfold but significantly improve safety for pedestrians by reducing the number of vehicles travelling at or above 25 MPH.



It is believed that by reducing the speed of vehicles approaching the village centre that there would be less standing traffic and therefore a resultant improvement in Air Quality in this area.

### **Accidents**

During the last 5 years, there have been over 50 accidents reported involving casualties on the A272 between the A24 junction and Bolney village. Most are categorised as Slight but 10 have been listed as Serious and 3 have included fatalities. In many cases speed may not have been the cause of the accident but it certainly was a factor in the severity of the injuries. The complete list and location maps are included in the appendix.

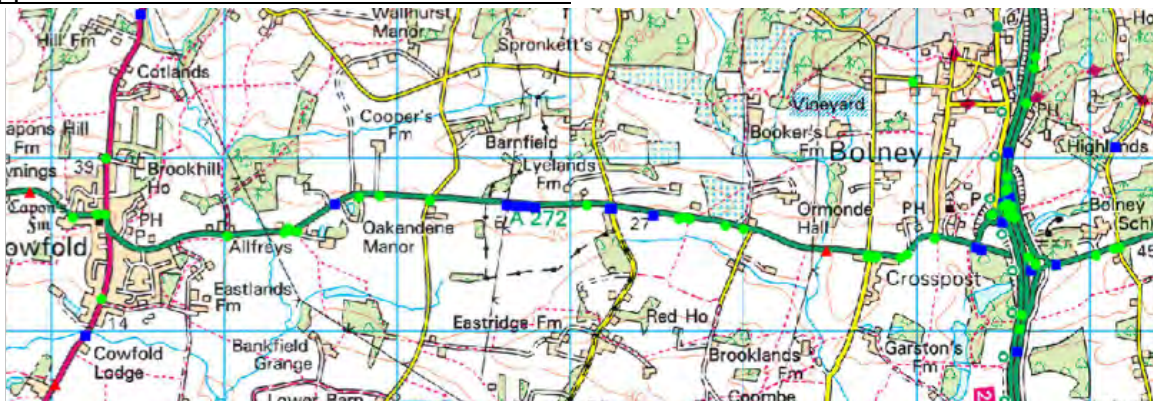
During the same period there were 12 accidents on the A281 between the 40mph limits at Crabtree and Shermanbury. In total 5 were listed as Slight and 5 were listed as serious with the remaining 2 both including fatalities.

### **Approach road issues – A272 West of Cowfold**



The above map shows the reported accidents that have occurred since 2017 and recorded by WSCC. The junctions at Pear Tree Corner and Champions gate are particularly difficult to navigate at any time of day due to the relatively high volume and speed of traffic travelling on the A272. The situation is similar to the East of Cowfold as indicated below with the Kent Street and Wineham Lane junctions and the Oakendene Industrial Estate access posing particular issues.

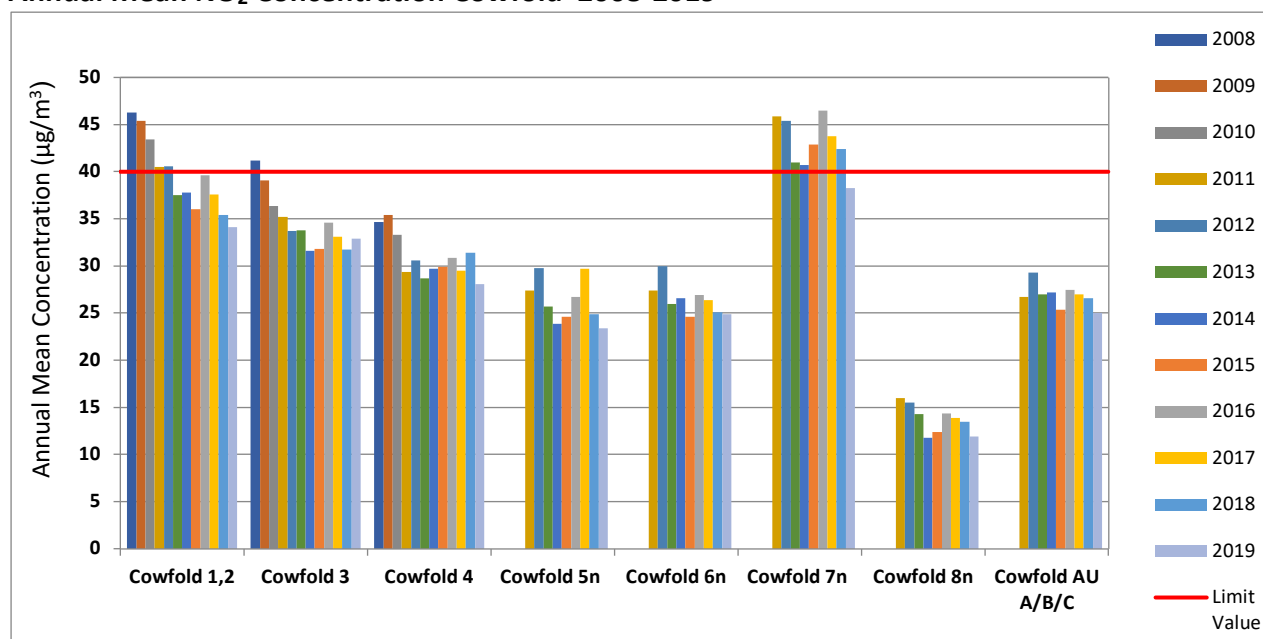
### **Approach Road Issues – A272 East of Cowfold**



The above maps also show some of the accidents that have occurred in the immediate vicinity of Cowfold. Full detail of the 12 accidents that have occurred since 2017 is given in the appendix.

## Air Quality

### Annual Mean NO<sub>2</sub> Concentration Cowfold 2008-2019



Cowfold is a declared Air Quality Management Area. The highest levels of pollution are created by 'Stop-Start Traffic with about 35% of Nitrogen Dioxide being due to HGV and other larger diesel-powered vehicles. European exhaust legislation was first introduced in 1970 but the introduction of Euro 1 standards in 1992, with the requirement for catalytic converters to petrol cars, was the start of the current process. The latest Standard, Euro 6, was introduced in 2014 with amendments in 2017. This reduces the level of some pollutants by 96% compared to 1992.

There are 8 monitoring locations within Cowfold with the key ones being Cowfold 8n, located near Fairfield Cottages to provide a background measurement and Cowfold 7n located on Bolney Rd near Huntscroft Cottages. This is the only monitoring point close to the road in an area with significant Stop-Start traffic. The data is collected using diffusion tubes at locations Cowfold 1n – Cowfold 8n and by automatic/electronic means at the monitoring station outside the village hall, Cowfold AU A/B/C.

UK legislation sets 40 µg/m<sup>3</sup> as the legal limit which has been breached consistently at the Huntscroft measurement point between 2008 and 2018. There has been no consistent downward trend despite the bulk of HGVs having become Euro 6 compliant during this time. This may be as a result of traffic flow variations as well as the relatively poor accuracy of the Diffusion Tube technology.

The Covid Pandemic reduced traffic flow considerably and so it is anticipated that 2020/21 will show a significant further decrease. However, as can be seen above there has been a significant increase in HGV/Bus traffic in 2022.

The World Health Organisation upper limit for Nitrogen Dioxide is 30 µg/m<sup>3</sup> which has been consistently breached since measurements began and there is little likelihood that the levels at Huntscroft would fall below this within the next decade without significant change in Traffic flow and volume. The move to electric vehicles will reduce the amount of car-based pollution but there is a risk that this reduction will be offset by the increase in goods vehicle volumes.

### **Employment**

Cowfold has very limited employment opportunities within the village, the only significant employment is on the Oakendene Industrial Estate which is situated just over 1km to the East, off the A272. This road has no provision for pedestrians and it is dangerous to walk or cycle between Cowfold and Oakendene.

### **History (prior application)**

WSCC Highways have previously agreed that there is an issue and investigated a proposal to move the carriageway to the North so allowing the section of pedestrian walkway between Mercers Mead and The Gables to be widened and renewed. This was to be facilitated Cowfold Parish Council gifting the necessary land. However, further investigation discovered that this plan would require the moving of services currently under the verge to be used as carriageway. The plan was abandoned on the basis of cost. The current proposal to provide a traffic controlled pedestrian crossing with a new walk way within the Recreation Field is far more cost effective.

### **Proposals/Solutions**

To solve the core issue of safe access by residents to the key amenities there are two obstacles to overcome. The unsafe pavement to the West of Mercers Mead and crossing the A272 East of the A281. The cost of improvements to the pavement is prohibitive as this requires widening as well as relaying and this still does not resolve the issue of safe crossing over the A272.

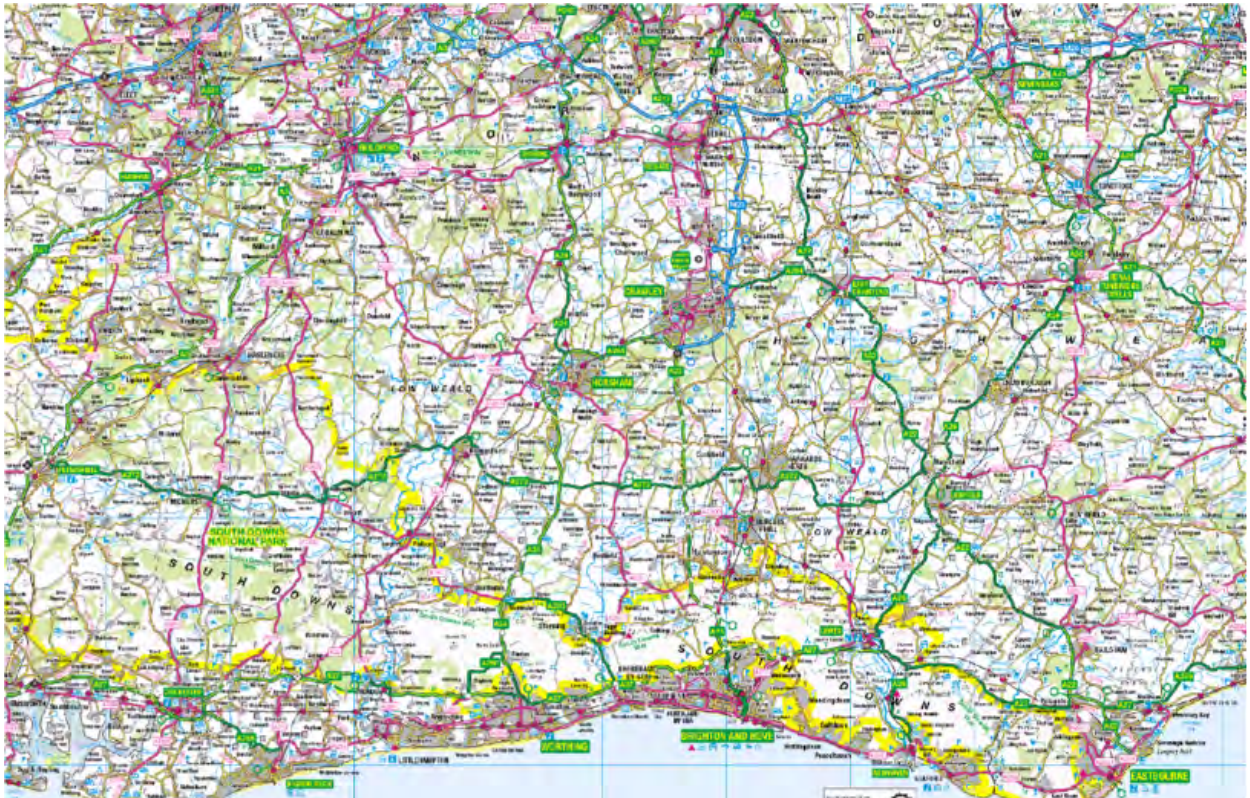
The Parish Council in conjunction with Cowfold scouts have proposed to fund the provision of a suitable walkway along the Northern side of the A272 but within the recreation field, which is Parish Council owned. A traffic light controlled pedestrian crossing located at Mercers Mead would remove the need for substantial works to this pavement as it would no longer be the main pedestrian route. It does not remove the need for significant repair to provide safe use by the residents whose houses adjoin.

General safety for all pedestrians and cyclists as well as those using mobility aids would be much enhanced by adopting the 20mph proposals as well as slowing down the approaching traffic to the junction with the A281 and so helping to move this from Stop-Start to slow moving. This would provide a significant improvement to air quality in the village centre. We understand that the 20mph zone would require a buffer zone on the approaches to the village, presumed to be at 40mph. This would also help to regulate traffic flow as well as having the potential, if extended out to the crossroads at Champions Gate and Wineham lane, of improving safety at these junctions. A 40mph zone from the village to at least Oakendene Industrial Estate could also open up employment opportunities to Cowfold Residents.



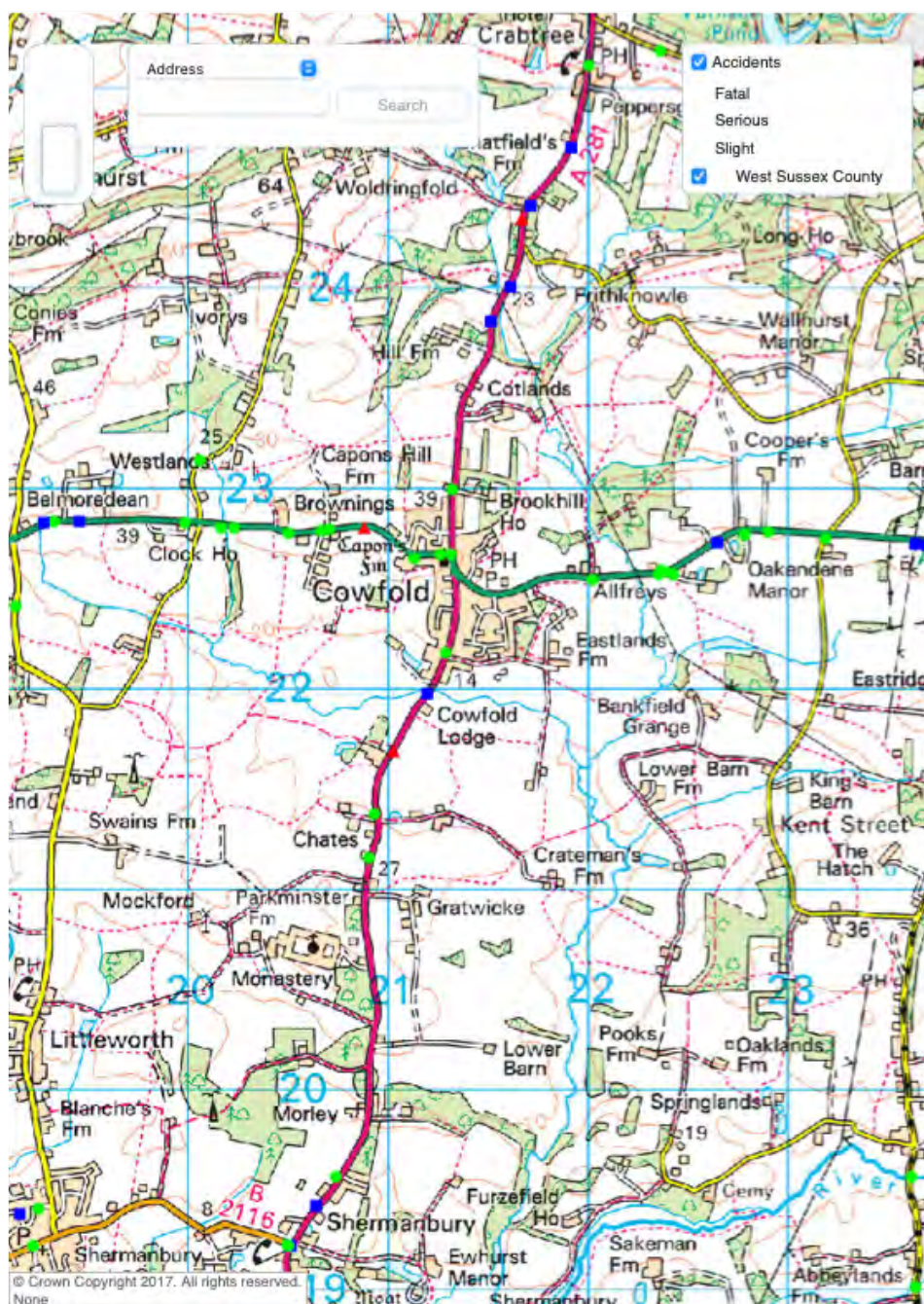
## Appendix

### #1 East/West Routes (M25, A272, A27)



Accident Records 2017 - 2022 inclusive. A272 between A24 and Bolney, West to East									
Ref	Date	Day	Time	Severity	Road	Location	Vehicles	Casualties	Fatal
1	28/07/2017	Friday	15:30	Slight	A272	Junction A24		1	
2	07/08/2018	Tuesday	15:10	Slight	A272	Junction A24		1	
3	08/02/2018	Thursday	07:42	Slight	A272	Junction A24	2	1	
4	03/09/2021	Friday	15:45	Slight	A272	Old Sussex Stud		1	
5	11/06/2021	Friday	17:54	Slight	A272	Old Sussex Stud	2	1	
6	01/07/2021	Thursday	23:00	Slight	A272	Old Sussex Stud		1	
7	24/09/2019	Tuesday	08:00	Slight	A272	Newbridge Farm	4	2	
8	18/06/2019	Tuesday	14:58	Slight	A272	North Lodge	1	1	
9	20/01/2020	Monday	15:30	Slight	A272	Park Lane	2	2	
10	10/11/2021	Wednesday	09:05	Slight	A272	Bowshots		1	
11	24/09/2019	Tuesday	08:42	Slight	A272	Bowshots	2	2	
12	05/08/2019	Monday	12:33	Serious	A272	Champions Gate	2	3	
13	17/07/2018	Tuesday	11:50	Slight	A272	Champions Gate	3	2	
14	22/09/2020	Tuesday	08:56	Serious	A272	Champions Gate	2	2	
15	11/04/2022	Monday	12:00	Slight	A272	Champions Gate (Report)	3	3	
16	28/03/2022	Monday	11:30	Fatal	A272	Champions Gate (Report)	3	4	3
17	18/12/2017	Monday	07:24	Slight	A272	Burnthouse Lane	3	2	
18	10/05/2019	Friday	05:40	Slight	A272	Burnthouse Lane	1	1	
19	15/10/2019	Tuesday	10:50	Slight	A272	Burnthouse Lane	2	1	
20	06/03/2021	Saturday	20:30	Slight	A272	Capons Farm	1	1	
21	19/04/2021	Monday	15:20	Slight	A272	Capons Farm	2	1	
22	17/08/2021	Friday	17:25	Slight	A272	Capons Farm	4	2	
23	02/01/2022	Sunday	19:45	Fatal	A272	West of Cowfold 30mph		1	1
24	02/05/2019	Thursday	22:45	Slight	A272	Potters Green	3	2	
25	24/07/2017	Monday	15:40	Slight	A272	West of A281 Junction	2	1	
26	21/08/2018	Tuesday	18:20	Slight	A272	A281 Junction	2	1	
27	19/03/2021	Friday	14:18	Slight	A272	Ashurst Lane	2	2	
28	21/01/2022	Friday	03:00	Slight	A272	Coopers Cottage		1	
29	08/06/2018	Thursday	18:10	Slight	A272	Oakendene Ind Est	2	1	
30	26/10/2021	Monday	08:00	Slight	A272	Oakendene Ind Est	3	1	
31	21/11/2019	Thursday	10:57	Slight	A272	Oakendene Ind Est	3	1	
32	06/12/2020	Sunday	17:03	Fatal	A272	Oakendene Ind Est		1	
33	19/07/2021	Monday	16:40	Serious	A272	New Barn		1	
34	08/10/2018	Monday	14:15	Slight	A272	South Lodge	3	3	
35	22/10/2018	Monday	13:46	Slight	A272	Coopers Farm	1	1	
36	15/11/2021	Monday	17:10	Slight	A272	Kent St		1	
37	29/07/2021	Thursday	20:20	Serious	A272	East of Kent St		1	
38	26/06/2021	Saturday	17:27	Serious	A272	East of Kent St	3	4	
39	05/03/2020	Thursday	17:15	Serious	A272	East of Kent St	1	1	
40	09/08/2020	Sunday	10:10	Serious	A272	East of Kent St	3	1	
41	02/05/2017	Tuesday	17:30	Slight	A272	Lyelands	3	1	
42	11/04/2018	Wednesday	17:05	Serious	A272	Wineham Lane	2	4	
43	19/09/2020	Saturday	12:03	Serious	A272	Wineham Lane	3	1	
44	06/05/2022	Friday	10:10	Slight	A272	Wineham Lane (Report)	2	2	
45	23/02/2018	Friday	10:19	Serious	A272	High Meadows	2	2	
46	29/09/2017	Friday	08:30	Slight	A272	Homewood House	1	1	
47	02/09/2018	Sunday	15:21	Slight	A272	Homewood House	2	1	
48	10/09/2017	Sunday	13:04	Slight	A272	Homewood House	3	1	
49	09/08/2020	Sunday	18:19	Slight	A272	Homewood House	4	2	
50	11/11/2017	Saturday	20:50	Slight	A272	Homewood House	1	1	
51	07/06/2020	Tuesday	10:05	Slight	A272	Ormonde Hall	3	2	
52	29/07/2018	Sunday	23:22	Fatal	A272	East of Crosspost, Bolney		1	1
53									
Highlighted are reported accidents, not included in WSCC database.									





Accident Records 2017 - 2022 inclusive. A281 Crabtree to Shermanbury 40mph limits.									
Ref	Date	Day	Time	Severity	Road	Location	Vehicles	Casulties	Fatal
1	13/12/2019	Friday	17:20	Serious	A281	South Cottage		1	
2	29/07/2017	Saturday	17:56	Serious	A281	Kiln Cottages		3	
3	18/04/2017	Tuesday	22:45	Fatal	A281	East Lodge	1	2	2
4	06/01/2022	Thursday	08:42	Serious	A281	Little Cotlands		1	
5	13/06/2021	Sunday	12:40	Serious	A281	South of Little Cotlands		2	
6	09/11/2020	Monday	06:50	Slight	A281	But n Ben		1	
7	21/08/2018	Tuesday	18:20	Slight	A281	Junction with A272 (Dup)		1	
8	21/12/2018	Friday	18:45	Slight	A281	Quince Cottage		1	
9	19/02/2019	Tuesday	07:55	Serious	A281	South of Bulls Bridge		1	
10	24/06/2019	Monday	10:25	Fatal	A281	Jeremy's Two		2	1
11	28/06/2020	Sunday	13:36	Slight	A281	Chates Farm		1	
12	25/06/2017	Sunday	11:04	Slight	A281	Chalet Café		1	
7	Accident occurred on the Junction and is a duplicate listing on both A272 and A281 datasets.								