Pannal & Burnbridge Parish Council

Traffic Monitoring Report

compiled November 2020



Main Street 20mph Board.

Survey Context:

This report covers the period 24/9/20 to 20/10/20

At the Main St site, there are c.300+ entry/exits per day from Clark Beck Close and the Church plus traffic slowing to turn into Crimple Meadows which are abnormally slow, impacting average speeds recorded - but the data set is deemed statistically large enough to discount the impact of this.

The SID device reached storage capacity meaning that no data was recorded from the 20/10 - 25/10. The device has now been cleared and has storage capacity.

Statistically Relevant Data:

Each Speed Indicator Device (SID) collects and stores data on all approaching (inbound) and all outbound passing traffic. This means joggers & cyclists are also included in the raw data. Following best practice, the records for anything moving at less than 15mph in or outbound, have therefore been excluded, rendering this report and average speeds for vehicular traffic data only.



Main St 20 mph Board. Vehicle Usage

Dates	Northbound Vehicles	Southbound Vehicles	Total Vehicles
Thu 24 th Sept – Sun 27 th Sept	6,618	7,490	14,108
Mon 28 th Sept – Sun 4 th Oct	12,049	14,586	26,635
Mon 5th Oct – Sun 11 th Oct	12,405	14,128	26,553
Mon 12 th Oct – Sun 18 th Oct	11,819	13,806	25,625
Mon 19 th Oct – Tue 20 th Oct	2,374	2,887	5,261
Total	45,265	52,897	98,162



Main St 20 mph Board. Vehicle Usage Findings

Total Vehicular Road Usage:

- During this sample period 98,162 vehicles passed through Main Street
- Normalised daily traffic = 3,635 vehicles.
- The previous survey period averaged 3,731 vehicles per day, so this is showing consistency.



Main St 20 mph Board. Traffic Volume By Day

Days	Northbound Vehicles	Southbound Vehicles	Total Vehicles
Monday	7,029	8,385	15,414
Tuesday	C 121	7 4 5 0	13,289
Tuesuay	6,131	7,158	13,205
Wednesday	5,649	6,633	12,282
Thursday	7,705	9,164	16,869
Friday	7,540	8,643	16,183
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Saturday	6,261	7,397	13,658
Sunday	4,950	5,517	10,467
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Total	45,265	52,897	98,162

Main St 20 mph Board. Traffic Volume By Day and Time

Traffic Weight By Direction:

- Inbound (northbound from the Station end of the village towards Harrogate) = 45,265 vehicles
- Outbound (southbound travelling from Church Lane end towards the A61) = 52,897 vehicles
- Each day of the week, there is more traffic flowing southbound than northbound
- 46% of traffic flows northbound and 54% southbound the same as the previous survey period

Dates	Northbound Vehicles	Southbound Vehicles	Total Vehicles
Morning 0600hrs - 1000hrs	9,820	13,384	23,204
Daytime 1000hrs – 1600hrs	21,351	24,367	45,718
Evening 1600hrs – 2359hrs	13,859	14,865	28,724
Overnight 0000hrs – 0600hrs	235	281	516



Main St 20 mph Board. Average Speeds

Speed	% of vehicles	% of vehicles previous survey	
At or below 20mph	55%	49%	
21 - 24mph	35%	33%	
25 - 29mph	9%	10%	
30 - 34mph	1%	7%	
35mph +	0.05%	1%	

Proportion of vehicles travelling over the speed limit: 45% compared to 51% on the previous survey.

Proportion of vehicles travelling over 25mph: 10% vs 18% on the previous



Main St 20 mph Board. Worst Offenders

Day	Date	Time	Entry Speed mph	Exit Speed mph	Reduction
Saturday	03/10/2020	18:23	42	41	-1
Thursday	15/10/2020	23:17	42	Southbound	-
Wednesday	30/09/2020	19:19	41	22	-19
Saturday	03/10/2020	13:49	40	19	-21
Saturday	03/10/2020	18:23	40	25	-15
Thursday	08/10/2020	10:16	40	25	-15
Saturday	17/10/2020	11:34	40	22	-18
Thursday	08/10/2020	10:16	39	40	1
Saturday	10/10/2020	17:08	39	Southbound	-
Saturday	17/10/2020	17:15	39	Southbound	-

Main St 20 mph Board. Impact of SID board.

Impact of SID Board:

Vehicles travelling towards the SID who were facing the sign and duly saw their speed displayed, **on average reduced their speed by 4.1mph vs 4.2 in the previous period** (this termed the vRed figure).

- Ave entry speed northbound with SID visible = 20.1mph vs 20.3 last time
- Ave exit speed once SID seen and speeds adjusted = 16.0mph vs 16.1 last time

Whilst speeds were reduced by 4.1mph for northbound traffic (where SID was visible), for traffic heading southbound on the exact same stretch of road/conditions (but where no SID was visible) average speed was 20.5mph vs 20.7 last time. This figure of 20.5 appears low because it includes all turning and queuing traffic at busy times



Church Lane 30mph Board.

Survey Context:

The SID was operational from 4/10/20 to 25/10/20. Repeated comparisons with vehicles and other equipment show that the speed detection is accurate.

Statistically Relevant Data:

Each Speed Indicator Device (SID) collects and stores data on all approaching (inbound) and all outbound passing traffic. This means joggers & cyclists are also included in the raw data. Following best practice, the records for anything moving at less than 15mph in or outbound, have therefore been excluded. However, as the Church Lane site is a flat and fairly straight area, it's likely that a higher % of cyclists will have registered above 15mph than on Main Street which is narrower.



Church Lane 30 mph Board. Vehicle Usage

Dates	Northbound Vehicles	Southbound Vehicles	Total Vehicles
Sun 4 th Oct	800	734	1,534
Mon 5 th Oct – Sun 11 th Oct	14,780	15,008	29,788
Mon 12 th Oct – Sun 18 th Oct	13,972	14,847	28,819
Mon 19 th Oct – Sun 25 th Oct	13,818	13,681	27,499
Total	43,233	44,407	87,640



Church Lane 30 mph Board. Vehicle Usage Findings

Total Vehicular Road Usage:

- During this sample period 87,640 vehicles passed through Church Lane
- Normalised daily traffic = Calculating an average week of full survey data (no outages and no part weeks) normalised daily traffic = 3,790 vehicles.
- The previous survey period averaged 3,983 vehicles per day, so this is showing consistency.



Church Lane 30 mph Board. Traffic Volume By Day

Days	Northbound Vehicles	Southbound Vehicles	Total Vehicles
Monday			
	6,742	6,900	13,642
Tuesday			
	6,609	7,082	13,691
Wednesday			
	6,869	7,020	13,889
Thursday			
	6,748	7,249	13,997
Friday			
	7,119	6,964	14,083
Saturday			
	4,958	5,265	10,223
Sunday			
	4,188	3,927	8,115
Total			
	43,233	44,407	87,640

Church Lane 30 mph Board. Traffic Volume By Day and Time

Dates	Northbound Vehicles	Southbound Vehicles	Total Vehicles	
Morning 0600hrs - 1000hrs	10,059	11,249	21,308	
Daytime 1000hrs – 1600hrs	19,721	19,581	39,302	
Evening 1600hrs – 2359hrs	13,236		26,495	
Overnight 0000hrs – 0600hrs	217	318	535	



Church Lane 30 mph Board. Average Speeds

Speed	% of vehicles	% of vehicles previous survey	
At or below 30mph	48%	39%	
31 - 34mph	30%	31%	
35 - 39mph	17%	22%	
40 - 44mph	4%	6%	
45mph +	1%	2%	

Proportion of vehicles travelling over the speed limit: 52% compared to 61% on the previous survey.

Proportion of vehicles travelling over 35mph: 22% vs 30% on the previous



Church Lane 30 mph Board. Worst Offenders

Day		Date	Time	Entry Speed mph	Exit Speed mph	Difference
Monday	12/10/2020		06:28	75	72	-3
Saturday	17/10/2020		20:09	73	71	-2
Thursday	15/10/2020		18:53	71	Northbound	-
Saturday	17/10/2020		20:09	69	39	-30
Friday	16/10/2020		23:00	68	68	0
Sunday	25/10/2020		00:00	68	Northbound	-
Wednesday	21/10/2020		19:52	66	40	-26
Monday	12/10/2020		06:28	65	59	-6
Saturday	24/10/2020		08:05	65	Northbound	-
Saturday	24/10/2020		08:05	65	Northbound	_

Church Lane 30 mph Board. Impact of SID board.

Impact of SID Board:

Vehicles travelling towards the SID who were facing the sign and duly saw their speed displayed, **on average reduced their speed by 4.2mph** (this termed the vRed figure). This is identical to the previous report.

- Ave entry speed southbound with SID visible = 30.5 vs 31.6mph during the previous period.
- Ave exit speed once SID seen and speeds adjusted = 26.4 vs 27.4mph during the previous period.

Whilst speeds were reduced by 4.2mph into legal compliance for southbound traffic (where SID was visible), for traffic heading northbound on exact same stretch of road/conditions but where no SID was visible, average speed was 31.9 vs 32.9mph in the previous period.





