

# Newton and Biggin Parish Council

Traffic Survey undertaken between November 2024 and January 2025

Main Street, Newton – Outside No. 16 (Before the Stag Pub) Newton Road (outside No. 102, near Pilgrims Lane)

Newton Lane (lamp post next to St John's Gate )

Newton Manor Lane (Near Hidden Dip Sign by Farm Entrance)

# **III** Understanding the 85th Percentile

The **85th percentile speed** is a **key** metric in traffic surveys. It represents the speed at or below which 85% of vehicles are travelling.

#### Why it matters:

- It reflects the natural driving behaviour of the majority of road users not just the fastest or the slowest.
- It helps identify whether a road is perceived as safe or encourages speeding.
- It informs decisions about speed limits, traffic calming, and enforcement, based on actual patterns not isolated incidents.
- It is the **accepted standard used by police and traffic authorities**. This helps reinforce its credibility and relevance for enforcement decisions.

Using the 85th percentile ensures that interventions are based on actual driver behaviour — not just outliers — making policies more effective and fair.



#### Main Street, Newton - Outside No. 16 (Before the Stag Pub)

**Survey Period:** 14 Days (20 Jan – 2 Feb 2025)

**Speed Limit:** 30 mph

Focus Metric: 85th Percentile Speed

### 👔 Key Findings

- Typical Speeds:
  - 85th percentile speed was 23.2 mph
  - Well below the 30 mph limit across all hours and directions
- Peak Traffic Times:
  - Morning (08:00): 85th percentile: 23.0 mph
  - Afternoon (16:00): 85th percentile: 23.4 mph
- Highest Recorded 85th Percentile:
  - **27 mph** at 04:00
- Total Vehicle Movements:
  - Over 16,100 vehicles recorded during the 14-day period
- Conclusion
- No evidence of a speeding issue
- Majority of vehicles travel well within the speed limit
- Traffic behaviour appears safe and compliant

 $Speed\ Bins\ Report\ 5001553-Main\ Street-\ Newton\ Before\ the\ Stag\ Pub-\ Outside\ 16\ Monday\ January\ 20\ 2025\ to\ Sunday\ February\ 2\ 2025$ 

Site Name 5001553 - Main Street - Newton

Site ID 000005001553 Grid 453094278116

Description Refore the Stag Pub - Outside 16

l																
	Total Flow	<5.0mph	5.0-	10.0-	15.0-	20.0-	25.0-	30.0-	35.0-	40.0-	45.0-	>50.0mph	Invalid	85 <sup>th</sup>	Mean	Std Dev
			10.0mph	15.0mph	20.0mph	25.0mph	30.0mph	35.0mph	40.0mph	45.0mph	50.0mph		Reading	%ile	Speed	
All directio	ns															
00-24	16124	0	413	2680	6399	5505	1050	70	6	1	0	0	0	23.2	18.8	4.3
Westbound	i															
00-24	7187	0	251	1473	3041	2005	383	32	2	0	0	0	0	22.6	18.2	4.4
Eastbound																
00-24	8937	0	162	1207	3358	3500	667	38	4	1	0	0	0	23.5	19.4	4.2





**Newton Road (outside No. 102, near Pilgrims Lane)** 

**Survey Period:** 14 days (Nov 12–25, 2024)

Speed Limit: 30 mph

Focus Metric: 85th Percentile Speed

🜃 Key Findings

- Typical Speeds:
  - 85th percentile speed was 28.2 mph
  - below the 30 mph limit across most hours and both directions
- Peak Traffic Times:
  - Morning (08:00): 85th percentile = 28.7 mph
  - Afternoon (16:00): 85th percentile = 28.2 mph
- Highest Recorded 85th Percentile:
  - 03:00 AM: 32.1 mph
- Total Vehicle Movements:
  - Over **18,900 vehicles** recorded during the 14-day period
- Conclusion
- No significant speeding issue identified
- The vast majority of vehicles are travelling within or just below the 30 mph limit
- Isolated higher speeds occur during low-traffic hours and are not representative of general behaviour

Speed Bins Report 5001555 - Newton Road - Newton - No 102 Next to Pilgrims Lane- Next to Lamppost, Outside House No 102 Tuesday November 12 2024 to Monday November 25 2024
Site Name 5001555 - Newton Road - Newton -

ite ID 000005001555

453033278006

Next to Pilgrims Lane- Next to

Description Lamppost, Outside House No 102

														- 15		
	Total Flow	<5.0mph	5.0-	10.0-	15.0-	20.0-	25.0-	30.0-	35.0-	40.0-	45.0-	>50.0mph	Invalid	85 <sup>th</sup>	Mean	Std Dev
			10.0mph	15.0mph	20.0mph	25.0mph	30.0mph	35.0mph	40.0mph	45.0mph	50.0mph		Reading	%ile	Speed	
All directio	ns															
00-24	18962	0	50	344	2553	8502	6107	1272	127	6	1	0	0	28.2	24	4.2
Northbound	d															
00-24	10445	0	39	142	1100	4656	3686	749	70	3	0	0	0	28.4	24.4	4.1
Southbound	d															
00-24	8517	0	11	202	1453	3846	2421	523	57	3	1	. 0	0	28	23.5	4.3





#### **Newton Lane (lamp post next to St John's Gate)**

**Survey Period:** 14 days (Nov 12–25, 2024)

Speed Limit: 30 mph

Focus Metric: 85th Percentile Speed

# **Key Findings Typical Speeds:**

The 85th percentile speed was 36.4 mph, which is above the 30 mph speed limit.

#### Peak Traffic Times:

• Morning (08:00): 85th percentile = 37 mph

• Afternoon (16:00): 85th percentile = 36.7 mph

#### Highest Recorded 85th Percentile:

• 06:00 AM: 38.6 mph

#### Total Vehicle Movements:

•Over 11,712 vehicles recorded during the 14-day period

#### Conclusion

• The data confirms that **speeding is prevalent**, with the 85th percentile consistently above the 30 mph limit.

 Over a two-week period, nearly 12,000 vehicles passed Newton Lane near St Johns Gate. Half of them exceeded the 30 mph speed limit, and over 600 were recorded driving above 40 mph. Southbound traffic was notably faster. These figures highlight a clear need for police attention and possible traffic calming to protect residents and pedestrians.

Speed Bins Report 5001554 - Newton Lane - Newton - Lampost next to St Johns Gate - Tuesday November 12 2024 to Monday November 25 2024

te Name 5001554 - Newton Lane - Newton

Site ID 000005001554 Grid 453013278429

Description Lampost next to St Johns Gate

	Total Flow	<5.0mph	5.0-	10.0-	15.0-	20.0-	25.0-	30.0-	35.0-	40.0-	45.0-	>50.0mph	Invalid	85 <sup>th</sup>	Mean	Std Dev
			10.0mph	15.0mph	20.0mph	25.0mph	30.0mph	35.0mph	40.0mph	45.0mph	50.0mph		Reading	%ile	Speed	
All direction	ıs															
00-24	11712	0	15	84	630	1809	3397	3415	1733	506	99	24	0	36.4	29.9	6.4
Southbound																
00-24	7074	0	6	47	222	865	2075	2303	1157	323	60	16	0	36.7	30.7	(
Northbound																
00-24	4638	0	9	37	408	944	1322	1112	576	183	39	8	0	35.7	28.7	6.





**Newton Manor Lane (Near Hidden Dip Sign by Farm Entrance)** 

**Survey Period:** 14 days (Nov 12–25, 2024)

Speed Limit: 40 mph

Focus Metric: 85th Percentile Speed

# 📊 Key Findings

#### • Typical Speeds:

- The 85th percentile speed was **43.2 mph**, which is **above the 40 mph speed limit**, suggesting that speeding is common, even during off-peak hours.
- Peak 85<sup>th</sup> percentile readings reaching up to 47.4 mph during early morning hours and 46.3 mph late at night.

#### • Peak Traffic Times:

- Morning (08:00): 85th percentile = 43.4 mph
- Afternoon (16:00): 85th percentile = 41.3mph
- Highest Recorded 85th Percentile: 02:00 AM: 47.4mph
- Total Vehicle Movements:
  - •Over 96,900 **vehicles** recorded during the 14-day period, so the speeding concern is amplified.

## Conclusion

Speeding here is not occasional but habitual and supports the case for further engagement with enforcement partners and consideration of safety measures to reassure residents and protect road users.

										100	a accid	<del>/•</del>	
Speed Bins	Report 500155	6 - Newto	on Manor La	ne - Nr Newt	ton Hidden	Dip Sign by	Farm Entrar	nce Tuesda	y November	12 2024 to I	Monday Nov	ember 25 2	024
Site Name	5001556 - Ne	wton Man	ıor Lane -										
Site ID	0000050015	56											
Grid	45252727749	95											
Description	Hidden Dip Si	gn by Farı	m Entrance										
	Total Flow <1	L0.0mph	10.0- 20.0mph	20.0- 30.0mph	30.0- 40.0mph	40.0- 50.0mph	50.0- 60.0mph	60.0- 70.0mph	>70.0mph	Invalid Reading	85 <sup>th</sup> %ile	Mean Speed	Std Dev
All directio	ns												
00-24	96972	46	499	4238	60102	30184	1781	116	6	0	43.2	38.1	5.4
Westbound	I												
00-24	48091	13	203	1534	27107	18061	1097	70	6	0	44	39	5.4
Eastbound													
00-24	48881	33	296	2704	32995	12123	684	46	0	0	42.1	37.2	5.3



## **##** HGV Usage Summary – Newton Speed Survey

#### **Survey Periods:**

- •Newton Road, Newton Manor Lane, Newton Lane: 12–25 Nov 2024
- •Main Street: 20 Jan 2 Feb 2025

Location	🚜 Total Vehicles	🚚 % HGVs (note #1)	% R3/A3 class and higher (note #2)
Newton Road (Pilgrims Lane)	18,962	3.2%	0.21%
Newton Manor Lane (Farm Entrance)	96,972	2.4%	0.22%
Newton Lane (St Johns Gate)	11,712	2.6%	0.22%
Main Street (Stag Pub)	16,124	2.7%	0.22%

# Key Insights

- Across all sites, HGVs consistently represent 2.4%–3.2% of total traffic, with 0.2% being R3 / A3 class vehicles and above.
- While concerns about HGVs are valid, the data shows that heavy goods vehicles make up a small proportion of overall traffic.
- It's important to note that the % HGV includes R2 class vehicles, which comprise both smaller 2 axle lorries and larger 2 axle lorries. Only the larger ones exceed 7.5 tonnes, and some roads have 7.5 tonne restrictions. Therefore, the total HGV percentage includes delivery vehicles, which may be exempt or permitted under certain conditions.
- These figures can help guide future monitoring, signage, or enforcement discussions but they do not currently indicate a significant spike or anomaly.

#### Note #1 % HGV is calculated as:

 $[(R2 + R3 + R4 + A3 + A4 + A5) \div Total Flow] \times 100$  This includes R2 class vehicles, which range from small 2-axle lorries to larger ones over 7.5 tonnes. Some may be delivery vehicles under 7.5 tonnes and subject to local restrictions.

Note #2 % R3/A3 class HGV and higher is calculated as:

 $[(R3 + R4 + A3 + A4 + A5) \div Total Flow] \times 100$ 

This reflects only the heaviest vehicle classes typically associated with long-haul freight.

# **What Counts as an HGV?**

Class	Description	Typical Weight	Included in % HGV?	Included in R3/A3 class and higher
R2	2-axle lorries (small & large)	Some under 7.5t, some over	Yes (includes delivery vehicles)	<b>X</b> No
R3	3-axle rigid lorries	Over 7.5t	Yes	Yes
R4	4-axle rigid lorries	Over 7.5t	Yes	Yes
А3	3-axle articulated lorries	Over 7.5t	Yes	Yes
A4	4-axle articulated lorries	Over 7.5t	Yes	Yes
<b>A</b> 5	5+ axle articulated lorries	Up to 44t	Yes	Yes

### A SIMPLIFIED GUIDE TO LORRY TYPES AND WEIGHTS

	commer Descripti		Identifier	UK Maximum Gross Weight (tonnes)	Shape				
	HT GOVERNICLE		2 axles	3.5	no rear side windows				
		SMALLER 2-AXLE LORRIES	2 axles	Over 3.5 7.5		<b>R2</b>			
L		BIGGER 2-AXLE LORRIES	2 axles	Over 7.5 18		<b>R2</b>			
			3 axles rigid	25 26*		КЗ			
0	HEAVY		3 axles artic.	26		A3			
R	GOODS	MULTI-	4 axles rigid	30 32*		R4			
N	VEHICLES		4 axles artic.	36 38*		A4			
R	(Vehicles		Vehicle and draw-bar trailer 4 axles	30 36**		J			
	over 7.5 tonnes gross	AXLE	AXLE	AXLE	AXLE	5 axles or more artic. See note (a)	40		A5
ı	require a Heavy Goods		Vehicle and draw-bar trailer 5 axles See note (a)	40**		J			
Ε	Vehicle Driver's Licence)	LORRIES	6 axles artic. See note (b)	41*	00000	T.			
			6 axles draw-bar See note (b)	41* and **		Ţ			
S			5 or 6 axles artic. See notes (b) and (c)	44* and ***	00 000				
			6 axles draw-bar	44*,** and ***		J			
			6 axles artic. See note (b) and (d)	44*	00 000				
			6 axles draw-bar See note (b) and (d)	44* and **		Ţ			