A Year Of Speed Measurements - 01/11/22 to 31/10/23


## The Big Picture

| Recorded data between <br> 01/11/22 and 31/10/23 | CLUN Side <br> (Radar 1) |  | CR. ARMS Side <br> (Radar 2) |  |
| :--- | ---: | ---: | ---: | ---: |
|  | EAST <br> (In) | WEST <br> (Out) | EAST <br> (Out) | WEST <br> (In) |
| $\mathbf{0 - 2 9 ~ m p h ~}$ | 283723 | 146273 | 113148 | 249186 |
| $\mathbf{3 0 - 3 9 ~ m p h ~}$ | 76868 | 193794 | 233371 | 138306 |
| 40-49 mph | 134 | 348 | 13545 | 49690 |
| 50+ mph | 31356 |  |  |  |
| Total Speed Measurements | 366013 | 353954 | 399377 | 421416 |
| Total Measured Movements | 719967 | 820793 |  |  |
| Average Weekday Movements | 2107 |  | 2412 |  |
| Average Saturday Movements | 1812 |  | 1839 |  |
| Average Sunday Movements | 1456 |  | 1599 |  |

- The CR. ARMS speed profile is significantly higher than CLUN in both directions
- The highest recorded speeds are overwhelmingly related to CR. ARMS
- Recorded entry speeds (into Aston) from both directions are significantly lower than exit speeds
- CR. ARMS recorded traffic volumes are $14 \%$ higher than CLUN - Suggesting most traffic originating in the Hopesay Parish area travels in an Easterly direction
- Average weekend movements are much lower
- Traffic movements are understated by local traffic that does not enter or exit Aston via the B4368


## Traffic Volume Analysis

How does traffic vary by direction, hour, day, week, month and season?

## Traffic Volumes By Season




- Seasons defined as follows:
- Winter: Jan, Feb, Mar
- Spring: Apr, May, Jun
- Summer: Jul, Aug, Sep
- Autumn: Oct, Nov, Dec
- Winter season sees the lowest traffic volumes
- The Spring and Summer season volumes are very similar, and are $11 \%$ greater than Winter volumes
- Autumn sees volumes 3\% higher than Winter.
- As previously identified, total traffic volumes at Cr. Arms (Radar 2) are 14\% higher than those at Clun (Radar 1), suggesting around 100,000 vehicle movements begin or end in the Hopesay Parish area over the year - This equates to around 25,000 local vehicle movements recorded per season

Total counts from period $01 / 11 / 22$ to $31 / 10 / 23$

## Traffic Volumes By Month




- Not surprisingly, Feb sees the lowest recorded volumes (Shortest month, Winter season)
- But, maybe surprisingly, May has the highest volumes - Perhaps two bank holidays in the month brings out the tourists
- June has significantly lower volumes than May, July and August. There are two reasons for this:
- May, Jul \& Aug all have 31 days whilst June has to make do with 30
- The road through Aston was resurfaced during the month, which may have prompted some drivers to take an alternative route
- Based on the volume differences recorded on the two radars, between 7,000 and 10,000 traffic movements per month start or end in the Hopesay Parish area

Total counts from period 01/11/22 to 31/10/23

## Traffic Volumes By Day




- Total traffic counts by day for the year
- The daily differences in volumes between Cr. Arms (Radar 2) and Clun (Radar 1), suggest around 280 local vehicle movements per day
- However, any vehicle movements that do not enter/exit Aston via the B4368 are not captured.
- Of the weekdays, Monday is the quietest with traffic building to a maximum on Friday
- Friday volumes are $13 \%$ higher than Monday, likely due to increased tourist traffic - This idea is supported by the Clun Radar 1 numbers, where Friday is the only day of the week that traffic volumes West, towards Wales and the coast, are greater than volumes to the East
- Sunday is the quietest day, with volumes around 37\% lower than those on Friday

Total counts from period 01/11/22 to 31/10/23

## Weekday Traffic Volumes By Hour




- Stacked bar chart showing total recorded movement East and West
- Good illustration of the greater traffic volumes recorded on the CR Arms side of Aston
- Most traffic is going EAST in the morning and WEST in the late afternoon and evening, indicating a high level of commuter/school traffic
- $87 \%$ off all traffic movements occur between 7am and 7pm. Even so, the average number of vehicles passing through Aston at peak times is less than four per minute


## Weekend Traffic Volumes By Hour




- Overall, traffic is $24 \%$ lower than weekday volumes
- 82\% of all traffic movements occur between 8am and 6pm
- Much lower morning and evening traffic - No weekday commuters or school runs!
- However, during the period 10 am to 3 pm, volumes are similar to weekday traffic volumes

Traffic Speed Analysis

## Clun (Radar 1) Speed Profile By Hour



- The Easterly direction is into Aston and West is out of Aston
- Traveling East, 95\% of vehicles were measured at under 36 mph
- Traveling West, $86 \%$ of vehicles were measured at under 36 mph
- Speeds into Aston are generally 5 mph slower than speeds out of Aston
- In fact, the West profile is almost identical to the East profile, just shifted by 5 mph to the right
- It suggests the bulk of drivers are very familiar with the road and they drive in the same manner every time they use the road - Just 5 mph faster when leaving Aston to the West
Counts from period 01/11/22 to $31 / 10 / 23$


## Cr. Arms (Radar 2) Speed Profile By Hour

## Cr. Arms - West



Cr. Arms - East
55000
50000
45000
40000
35000
30000
25000
20000
15000
10000 5000 0


- The Westerly direction is into Aston and East is out of Aston
- Traveling West, $84 \%$ of vehicles were measured at under 36 mph
- Traveling East, 70\% of vehicles were measured at under 36 mph
- Like the Clun radar, Cr. Arms radar speeds out of Aston are around 5 mph faster than speeds into Aston
- However, the two profiles are quite different, with the Easterly profile having a broader spread of higher speeds (over 35 mph )
- The faster speeds are attributed to the radar being close to the speed limit change from 30 mph to 60 mph Counts from period $01 / 11 / 22$ to $31 / 10 / 23$


# Clun (Radar 1) Speed Profile By Day 



## Cr. Arms (Radar 2) Speed Profile By Day

| Cr Arms - West |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100\% |  |  |  |  |  |  |  |
| 90\% |  |  |  |  |  |  |  |
| 80\% |  |  |  |  |  |  |  |
| 70\% |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 50\% |  |  |  |  |  |  |  |
| 40\% |  |  |  |  |  |  |  |
| 30\% |  |  |  |  |  |  |  |
| $\begin{aligned} & 20 \% \\ & 10 \% \end{aligned}$ |  |  |  |  |  |  |  |
| 0\% | Mon | Tue | Wed | Thur | Fri | Sat | Sun |
| - 50+ | 385 | 391 | 371 | 351 | 387 | 371 | 312 |
| -40-49 | 4483 | 4845 | 4570 | 4785 | 4899 | 4357 | 3417 |
| - 30-39 | 19242 | 21154 | 20603 | 21532 | 22539 | 19042 | 14194 |
| $\square<30$ | 35347 | 38462 | 37760 | 40033 | 41455 | 32373 | 23756 |
| Cr. Arms - East |  |  |  |  |  |  |  |
| 100\% |  |  |  |  |  |  |  |
| 100\%90\% |  |  |  |  |  |  |  |
| 80\% |  |  |  |  |  |  |  |
| 70\% |  |  |  |  |  |  |  |
| $\begin{aligned} & 60 \% \\ & 50 \% \end{aligned}$ |  |  |  |  |  |  |  |
| $50 \%$ |  |  |  |  |  |  |  |
| 40\% |  |  |  |  |  |  |  |
| 30\% |  |  |  |  |  |  |  |
| $20 \%$$10 \%$ |  |  |  |  |  |  |  |
| 0\% |  | Tue | Wed | Thur | Fri | Sat | Sun |
| - 50+ | 458 | 446 | 478 | 433 | 501 | 479 | 373 |
| -40-49 | 7556 | 7662 | 7681 | 7639 | 7637 | 6296 | 5219 |
| - 30-39 | 33725 | 36109 | 35923 | 36372 | 36923 | 30464 | 23855 |
| $\square<30$ | 15911 | 17125 | 17184 | 18306 | 17924 | 14656 | 12042 |

- The charts show speed profile by day of the week, expressed as the total no of vehicles measured for each day of the week, grouped by speed, as a \% to total
- There is consistency in the speed profiles by day in each direction
- Going West, $58 \%$ of vehicles are traveling under 30mph, with 32\% traveling between 30 mph and 39 mph . A more concerning $10 \%$ of vehicles exceed 39mph
- Going East, $28 \%$ of vehicles are traveling less than 30mph, with 58\% traveling between 30 mph and 39 mph . $14 \%$ of vehicles exceed 39mph
Counts from period 01/11/22 to $31 / 10 / 23$


## Clun (Radar 1) Speed Profile By Month



## Cr. Arms (Radar 2) Speed Profile By Month




- The charts show speed profile by month, expressed as the total no. of vehicles measured for each month, grouped by speed, as a \% to total
- Going West, speed profiles are consistently lower than East. Mar \& Apr have marginally higher speed profiles Again, June has the lowest speed profile (B3468 resurfacing)
- Going East, Speed profiles are much higher since the radar 'sees' into the 60mph zone. Profiles are pretty consistent except for slower June
- Given the location of the SID, measured speeds over 50 are gratifyingly low across all months Counts from period 01/11/22 to $31 / 10 / 23$



## Excessive Speed Analysis

Analysis of excessive recorded speeds
Clun direction - All speeds recorded at 50mph and greater
Cr. Arms direction - All speeds recorded at 60mph or greater

## Clun (Radar 1) Excessive Speed 50+





- The charts show recorded speed counts by mph, for the whole period
- Going West out of Aston, the number of vehicles recorded at $50 \mathrm{mph}+$ was 353 - representing less than $0.001 \%$ of the total. Most were in the 5060 mph range, anticipating the coming 60 mph limit. Only 15 vehicles were recorded above 60 mph , with 3 exceeding 66 mph and a maximum of 91 mph
- Going East into Aston, the number of vehicles recorded at $50 \mathrm{mph}+$ was 139 - representing less than $0.0004 \%$ of the total. Most were in the 5055 mph range with only 9 vehicles recorded above 55 mph , and a maximum speed recorded was 64 mph - Drivers know the sharp bend at the Arbour Tree is coming...
- The numbers indicate we do not have an excessive speeding problem to/from Clun

Counts from period 01/11/22 to $31 / 10 / 23$

## Cr. Arms (Radar 2) Excessive Speed 60+

- The charts show recorded speed counts by mph, for the whole period
- Going West into Aston, the number of vehicles recorded at $60 \mathrm{mph}+$ was 146 - representing less than $0.00035 \%$ of the total. Most were in the 6065 mph range, close to the speed limit of the road prior to the Aston 30 mph limit. Only 29 vehicles were recorded above 65 mph , with 4 exceeding 66 mph with a maximum of 76 mph
- Going East out of Aston, the number of vehicles recorded at $60 \mathrm{mph}+$ was 325 - representing just over $0.0008 \%$ of the total. 175 were in the 6070 mph range with 150 recorded at $70 \mathrm{mph}+$
- The conclusion is that we do not have a serious excessive speeding problem to/from Craven Arms. However, there are a small number of drivers who seemingly treat the road to Long Meadow End as a race track

Counts from period 01/11/22 to $31 / 10 / 23$

## Clun (Radar 1) Speed 50+ By Hour




- This bar chart shows the total recorded excessive speed counts for the year, for each hour of the day in both directions
- The graph illustrates 2 major timeframes, when excessive speeding is more likely:
- 5am to 8am - The maximum count of 43 occurs between 6am and 7am
- In the afternoon, there's a prolonged period when excessive speeds are more likely, between 4 pm and 10 pm , with a maximum count of 42 occurring between 7 pm and 8 pm
- Perhaps people in a hurry to get home?


## Cr. Arms (Radar 2) Speed 60+ By Hour



Cr. Arms - East and West


- This bar chart shows the total recorded excessive speed counts for the year, for each hour of the day in both directions
- The graph highlights a clear morning peak for excessive speeds between 5am and 7am when $20 \%$ of all excessive speeds were recorded
- The graph is quite different from the Clun side, with a much higher incidence of excessive speeds in the early morning hours and a lower incidence in the evening hours

