

RALC Project Speeding Reduction

Lowering Speeding in our Towns and Villages

Objective

- Reduce traffic speeds and improve road infrastructure by adopting an evidence-based approach to engage with the Police to achieve more enforcement and with Highways to define when intervention is viable.

Strategy

- Proposal from the July RALC meeting.
 1. *Invest in Traffic Volume and Speed recording equipment to provide the evidence for informed decision making.*
 2. *Parish Councils, ESCC, SSRP and the Police adopt a partnership approach using the new data.....*
 3. *RALC will lobby regulators to change where needed laws, regulations and funding streams to support our objectives using the data and evidence gathered.*

The Plan

- **Phase 1. Test if using the equipment is viable.**
- Phase 2. Confirm commitment from Parishes, Police , ESCC and MP's prior to a roll use of the equipment .
- Phase 3. Roll out use of the equipment .
- Phase 4. Make the data from all users available from a central source.
- Phase 5 . Use the data for campaigning and wider education.

Pre Install requirements.

- Funding is needed of £2600 for the Black Cat radar, ESCC license and extra brackets (optional if using more than 1 install site).
- Define where it will be installed. The site(s) must be agreed with ESCC in advance.
- Get an annual license (£51) from ESCC to place the equipment on an ESCC pole(s). A license is per parish for multiple sites within the Parish. (3-6 sites?)
- You will need Signing, Lighting and Guarding Certificate if the install site is less that 1.2 meters from the Kerb.
- If 1.2 meters or more the certificate is not needed but Highways policy does say it is needed. That was waved for Catsfield. (Need to confirm this policy for all).
- You need access to a Laptop or tablet (Microsoft) and possibly a step ladder, but the install is just above head height. I did not need that in Catsfield.

Phase 1. Test Install



Phase 1. Test

Is it practical to install and operate?

- The Black Cat Radar was installed in Catsfield in October 2020.
- Data was collected for a period of 12 days (battery life).
- The install was reasonably easy but the initial install for any user will need support from someone with good knowledge of the equipment and the software.
- Downloading the data and the analysis is simple but will require some initial training.
- Reports of the speeding data were provided to the Police. The response was positive.
- Some manipulation of the data was needed to reformat some reports.

Phase 1. Test

Outputs Example

with reformatting in Excel

| Average Daily Volumes and Speeds | | | | | | | | | | | | | | |
|----------------------------------|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------|------|
| Catsfield The Green | | | | | | | | | | | | | Total Flow | |
| From 20/10/2020 To 01/11/2020 | | | | | | | | | | | | | | |
| | Total Volume | <5Mph | 5-<10 | 10-<15 | 15-<20 | 20-<25 | 25-<30 | 30-<35 | 35-<40 | 40-<45 | 45-<50 | 50-<55 | 55-<60 | =>60 |
| Monday | 8320 | 0 | 19 | 43 | 79 | 470 | 3270 | 3084 | 1032 | 229 | 69 | 18 | 4 | 3 |
| Tuesday | 7981 | 0 | 25 | 48 | 96 | 527 | 3245 | 2852 | 895 | 216 | 51 | 17 | 5 | 7 |
| Wednesday | 8200 | 0 | 37 | 48 | 129 | 671 | 3408 | 2830 | 815 | 202 | 42 | 12 | 5 | 4 |
| Thursday | 8284 | 0 | 43 | 59 | 114 | 510 | 3223 | 3058 | 949 | 243 | 62 | 18 | 5 | 4 |
| Friday | 8951 | 0 | 23 | 53 | 104 | 639 | 3759 | 3156 | 926 | 225 | 49 | 13 | 5 | 3 |
| Saturday | 6380 | 0 | 29 | 32 | 95 | 411 | 2531 | 2276 | 751 | 190 | 50 | 14 | 3 | 2 |
| Sunday | 4916 | 0 | 23 | 15 | 31 | 206 | 1729 | 1971 | 706 | 178 | 41 | 12 | 2 | 2 |
| 5 Day Ave. | 8347 | 0 | 29 | 50 | 104 | 563 | 3381 | 2996 | 923 | 223 | 54 | 16 | 4 | 4 |
| 7 Day Ave. | 7576 | 0 | 28 | 42 | 92 | 490 | 3023 | 2747 | 867 | 212 | 52 | 15 | 4 | 3 |
| 5 day average | 8347 | 4127 | | | | | | 2996 | 1146 | 78 | | | | |
| | | 49% | | | | | | 36% | 14% | 1% | | | | |
| | | 51% | | | | | | | | | | | | |

Average Daily traffic volume 8347.

51% or 4220 per day over the speed limit of 30.

14% or 1146 per day between 35-45 mph

Phase 1. Test

Outputs Example

with reformatting in Excel

| Speeds by Range. | 35-<45 | | by day by Hour | | | | | | | | | | Range 1 35-<45 | |
|---------------------------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------------|--|
| | 20-Oct | 21-Oct | 22-Oct | 23-Oct | 24-Oct | 25-Oct | 26-Oct | 27-Oct | 28-Oct | 29-Oct | 30-Oct | 31-Oct | | |
| Time | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | | |
| 00:00 | 0 | 2 | 3 | 6 | 4 | 4 | 1 | 0 | 1 | 2 | 6 | 5 | | |
| 01:00 | 0 | 1 | 2 | 6 | 3 | 5 | 2 | 3 | 6 | 3 | 2 | 4 | | |
| 02:00 | 0 | 6 | 4 | 4 | 1 | 1 | 2 | 4 | 5 | 4 | 2 | 5 | | |
| 03:00 | 0 | 4 | 8 | 6 | 6 | 2 | 8 | 7 | 6 | 3 | 5 | 2 | | |
| 04:00 | 0 | 4 | 7 | 6 | 3 | 3 | 12 | 14 | 7 | 9 | 8 | 5 | | |
| 05:00 | 0 | 37 | 40 | 30 | 10 | 5 | 35 | 46 | 40 | 36 | 42 | 15 | | |
| 06:00 | 0 | 77 | 117 | 80 | 23 | 24 | 104 | 98 | 108 | 104 | 100 | 31 | | |
| 07:00 | 0 | 60 | 97 | 96 | 55 | 18 | 141 | 85 | 106 | 103 | 111 | 54 | | |
| 08:00 | 0 | 48 | 94 | 69 | 55 | 45 | 85 | 63 | 52 | 72 | 81 | 71 | | |
| 09:00 | 0 | 62 | 73 | 67 | 70 | 69 | 57 | 67 | 24 | 82 | 68 | 70 | | |
| 10:00 | 0 | 53 | 78 | 68 | 58 | 75 | 63 | 55 | 40 | 48 | 55 | 66 | | |
| 11:00 | 0 | 54 | 37 | 68 | 81 | 79 | 75 | 44 | 38 | 49 | 72 | 26 | | |
| 12:00 | 74 | 61 | 77 | 65 | 85 | 91 | 78 | 61 | 43 | 51 | 76 | 59 | | |
| 13:00 | 71 | 45 | 64 | 61 | 44 | 58 | 64 | 73 | 37 | 70 | 65 | 77 | | |
| 14:00 | 65 | 74 | 89 | 62 | 40 | 64 | 72 | 63 | 54 | 54 | 42 | 95 | | |
| 15:00 | 55 | 80 | 72 | 82 | 68 | 78 | 82 | 73 | 66 | 79 | 65 | 90 | | |
| 16:00 | 111 | 103 | 93 | 113 | 75 | 61 | 89 | 74 | 65 | 56 | 54 | 71 | | |
| 17:00 | 98 | 109 | 122 | 64 | 56 | 55 | 77 | 48 | 33 | 49 | 48 | 48 | | |
| 18:00 | 56 | 91 | 80 | 79 | 52 | 50 | 79 | 51 | 59 | 50 | 50 | 45 | | |
| 19:00 | 57 | 49 | 49 | 43 | 57 | 39 | 48 | 41 | 49 | 42 | 54 | 57 | | |
| 20:00 | 34 | 36 | 35 | 43 | 24 | 18 | 37 | 30 | 32 | 40 | 31 | 0 | | |
| 21:00 | 32 | 23 | 35 | 27 | 22 | 19 | 28 | 23 | 25 | 33 | 34 | 0 | | |
| 22:00 | 22 | 27 | 17 | 32 | 13 | 13 | 16 | 19 | 15 | 26 | 26 | 0 | | |
| 23:00 | 9 | 8 | 16 | 10 | 10 | 8 | 6 | 9 | 7 | 8 | 18 | 0 | | |
| Total for Range | 684 | 1114 | 1309 | 1187 | 915 | 884 | 1261 | 1051 | 918 | 1073 | 1115 | 896 | | |
| Total All Vehicles | 5075 | 8209 | 9086 | 9256 | 6492 | 4916 | 8320 | 7656 | 8190 | 7481 | 8646 | 5971 | | |
| % of vehicle | 13% | 14% | 14% | 13% | 14% | 18% | 15% | 14% | 11% | 14% | 13% | 15% | | |

Phase 1. Test

Outputs Example Volumes

| Catsfield The Green | | | | | Speed Summary (Mon-Fri)-Speed Limit 30 Mph | | | | | | | | | | | | |
|---------------------|--------------|-----------------|--------------|--------------------|--|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|-------------|
| | | | | | From 20/10/2020 To 01/11/2020 | | | | | | | | | | | | |
| | Total Volume | 85th Percentile | Mean Average | Standard Deviation | Bin 1 <5Mph | Bin 2 5-<10 | Bin 3 10-<15 | Bin 4 15-<20 | Bin 5 20-<25 | Bin 6 25-<30 | Bin 7 30-<35 | Bin 8 35-<40 | Bin 9 40-<45 | Bin 10 45-<50 | Bin 11 50-<55 | Bin 12 55-<60 | Bin 13 =>60 |
| 00:00 | 8 | | 35 | 8 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 |
| 01:00 | 9 | | 35 | 9 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 1 | 0 | 1 | 0 | 0 |
| 02:00 | 8 | | 39 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 0 | 0 | 0 |
| 03:00 | 11 | 43 | 37 | 7 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 3 | 1 | 0 | 0 | 0 |
| 04:00 | 20 | 47 | 39 | 8 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 4 | 5 | 3 | 1 | 0 | 0 |
| 05:00 | 83 | 44 | 37 | 8 | 0 | 0 | 0 | 1 | 3 | 10 | 21 | 21 | 18 | 6 | 2 | 1 | 1 |
| 06:00 | 271 | 40 | 34 | 6 | 0 | 0 | 0 | 2 | 5 | 58 | 95 | 69 | 30 | 8 | 3 | 1 | 1 |
| 07:00 | 629 | 36 | 31 | 5 | 0 | 3 | 4 | 6 | 29 | 238 | 244 | 85 | 18 | 2 | 0 | 0 | 0 |
| 08:00 | 628 | 35 | 30 | 5 | 0 | 2 | 5 | 10 | 51 | 262 | 226 | 62 | 10 | 2 | 0 | 0 | 0 |
| 09:00 | 530 | 35 | 30 | 5 | 0 | 4 | 5 | 9 | 41 | 224 | 181 | 52 | 10 | 3 | 0 | 0 | 0 |
| 10:00 | 588 | 34 | 30 | 5 | 0 | 1 | 3 | 10 | 42 | 264 | 208 | 51 | 7 | 1 | 0 | 0 | 0 |
| 11:00 | 572 | 34 | 30 | 5 | 0 | 4 | 5 | 9 | 40 | 255 | 200 | 48 | 8 | 1 | 1 | 0 | 0 |
| 12:00 | 584 | 35 | 30 | 5 | 0 | 2 | 3 | 6 | 43 | 256 | 207 | 58 | 8 | 2 | 0 | 0 | 0 |
| 13:00 | 582 | 34 | 30 | 5 | 0 | 1 | 3 | 9 | 41 | 250 | 216 | 53 | 8 | 2 | 0 | 0 | 0 |
| 14:00 | 624 | 34 | 30 | 5 | 0 | 3 | 5 | 6 | 46 | 265 | 232 | 56 | 9 | 2 | 0 | 0 | 0 |
| 15:00 | 725 | 34 | 30 | 5 | 0 | 2 | 5 | 9 | 50 | 322 | 262 | 66 | 8 | 2 | 1 | 0 | 0 |
| 16:00 | 780 | 34 | 30 | 5 | 0 | 2 | 5 | 10 | 50 | 330 | 296 | 71 | 14 | 2 | 0 | 0 | 0 |
| 17:00 | 731 | 34 | 30 | 5 | 0 | 2 | 4 | 12 | 67 | 319 | 251 | 64 | 9 | 1 | 0 | 0 | 0 |
| 18:00 | 409 | 36 | 31 | 5 | 0 | 1 | 1 | 2 | 26 | 158 | 151 | 52 | 15 | 3 | 1 | 0 | 0 |
| 19:00 | 217 | 38 | 32 | 6 | 0 | 1 | 0 | 2 | 11 | 66 | 85 | 35 | 13 | 3 | 1 | 0 | 0 |
| 20:00 | 148 | 38 | 32 | 6 | 0 | 1 | 0 | 1 | 9 | 49 | 48 | 26 | 10 | 3 | 1 | 0 | 0 |
| 21:00 | 97 | 39 | 33 | 7 | 0 | 0 | 0 | 0 | 5 | 28 | 30 | 21 | 8 | 2 | 1 | 1 | 0 |
| 22:00 | 71 | 41 | 34 | 7 | 0 | 0 | 1 | 0 | 3 | 16 | 25 | 14 | 8 | 3 | 1 | 0 | 0 |
| 23:00 | 25 | 43 | 36 | 7 | 0 | 0 | 0 | 0 | 1 | 4 | 8 | 7 | 3 | 2 | 0 | 0 | 0 |
| Total | | | | | | | | | | | | | | | | | |
| 12H(7-19) | 7381 | 35 | 30 | 5 | 0 | 26 | 48 | 98 | 526 | 3143 | 2674 | 718 | 122 | 21 | 4 | 1 | 1 |
| 16H(6-22) | 8113 | 35 | 30 | 5 | 0 | 29 | 49 | 103 | 555 | 3343 | 2932 | 869 | 182 | 37 | 10 | 3 | 2 |
| 18H(6-24) | 8209 | 35 | 30 | 5 | 0 | 29 | 50 | 103 | 559 | 3363 | 2965 | 890 | 193 | 41 | 11 | 3 | 3 |
| 24H(0-24) | 8347 | 35 | 30 | 5 | 0 | 29 | 50 | 104 | 563 | 3381 | 2996 | 923 | 223 | 54 | 16 | 4 | 4 |

Phase 1. Test

Is it Practical?

Findings

Conclusion Yes. There are improvements to process and support we need to make but this is a viable for a single user. Shared use needs to be tested but follows the same principle.

Learnings

1. The install is fairly simple if you are OK confident using / installing software on a laptop and using a screwdriver.
2. Define how support will be provided and by who before a roll out.
3. How training will be provided and by who before a roll out.
4. Improve the software install process and improve the user manuals.
5. Test how shared equipment would work.
6. Review what format we want the output in.