## RadarClass

C0274 Boyton School, Boyton School January 2017<br>Report<br>27/01/2017

## CORMAC Consultancy Engineering Design Group

CORMAC Western Region,
Radnor Road, Scorrier, Redruth, Cornwall, TR16 5EH.

|  |  | Radarclass |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | C0274 Boyton School, Boyton J anuary 2017 <br> Northbound / Southbound |  |  |
| Route № | Column № | Neighbourhood Service Area | RadarClass Unit I D | Ordnance Survey Grid Reference |
| C0274 | Post | East | Unit 3 | 231482 / 092427 |
| Date of Deployment |  | End of Operation |  | Total Period of Operation |
| 11/01/2017 |  | 18/ 01/ 2017 |  | 8 days |


| Summary Table |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Observations |  | Weekdays |  | Weekends |  |
| Speed Limit | Northbound | Southbound | Northbound | Southbound | Northbound | Southbound |
| Number of Observations: | 878 | 918 | 672 | 702 | 206 | 216 |
| Mean Speed (mph) : | 26.3 | 25.1 | 25.6 | 24.5 | 28.3 | 27.2 |
| 85\% ile Speed (mph) : | 33 | 32 | 33 | 32 | 34 | 33 |
| Standard Deviation: | 6.9 | 7.1 | 7.1 | 7.3 | 5.8 | 6.0 |
| $\% \leq 30$ : | 73.6\% | 79.2\% | 76.0\% | 80.9\% | 65.5\% | 73.6\% |
| \% 31 mph to 40 mph : | 24.6\% | 19.2\% | 22.0\% | 17.5\% | 33.0\% | 24.5\% |
| \% > 40 mph : | 1.8\% | 1.6\% | 1.9\% | 1.6\% | 1.5\% | 1.9\% |
| Comments: |  |  |  |  |  |  |
| Data Submitted by: | Paul Taylor |  | Data Processed by: |  | Jim Rowe |  |

## 1. Location Map.



## 2. Glossary of Terms \& Abbreviations.

RadarClass is a portable radar device that detects and records the speed of passing vehicles. The unit is housed in an unobtrusive rugged black antivandal housing which can be mounted on any item of roadside furniture without looking conspicuous.

The principal role of the unit is to detect and count passing vehicles and log the date, time and speed at which they passed. Data collected can be used to determine the volume of traffic flow on the road on which the unit has been deployed.


| № of Observations: $\quad$The number of readings recorded by the radar. This does not correspond to an <br> exact count of vehicles passing the sign, since vehicles may pass the sign in a <br> tightly packed group (or 'platoon'); ; the radar will only record data for the 'lead <br> vehicle' that is determining the speed for the remainder of the platoon. |  |
| :--- | :--- |
| Mean Speed: | The arithmetic average of all the speed values recorded. |

$$
\text { 85\% ile Speed: } \quad \text { The speed at or below which } 85 \% \text { of the vehicles recorded were travelling. }
$$

Standard Deviation: A measure of how widely speeds are dispersed from the Mean Speed.
$\% \leq 30$ :
The percentage of vehicles travelling at speeds of 30 mph or below
(i.e. the percentage of vehicles travelling at or within the 30 mph speed limit).
\% 31 mph to $\mathbf{4 0} \mathbf{~ m p h : ~ T h e ~ p e r c e n t a g e ~ o f ~ v e h i c l e s ~ t r a v e l l i n g ~ a t ~ s p e e d s ~ o f ~ b e t w e e n ~} 31 \mathrm{mph}$ and 40 mph .
$\%>\mathbf{4 0} \mathbf{m p h}: \quad \begin{aligned} & \text { The percentage of vehicles travelling at speeds greater than } 40 \mathrm{mph} \\ & \text { (i.e. the percentage of vehicles travelling at speeds in excess of } 10 \mathrm{mph} \text { above } \\ & \text { the } 30 \mathrm{mph} \text { speed limit). }\end{aligned}$

## 3. Northbound Detailed Statistics.

### 3.1.1. Northbound Daily Summary Table.

| Date | Mean Speed | 85\% ile Speed | Standard Deviation | $\% \leq 30$ | \% 31 mph to $\mathbf{4 0} \mathbf{~ m p h}$ | \% > 40 mph |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wed 11/ 01/ 2017 | 26.6 | 34 | 9.0 | 64.9\% | 27.0\% | 8.1\% |
| Thu 12/ 01/ 2017 | 26.4 | 32 | 5.8 | 75.7\% | 24.3\% | 0.0\% |
| Fri 13/ 01/ 2017 | 25.4 | 33 | 6.4 | 77.9\% | 21.3\% | 0.7\% |
| Sat 14/ 01/ 2017 | 27.7 | 33 | 6.1 | 70.2\% | 27.3\% | 2.5\% |
| Sun 15/ 01/ 2017 | 29.2 | 34 | 5.3 | 58.8\% | 41.2\% | 0.0\% |
| Mon 16/ 01/ 2017 | 25.1 | 33 | 7.3 | 77.0\% | 21.7\% | 1.3\% |
| Tue 17/ 01/ 2017 | 25.1 | 32 | 7.4 | 78.5\% | 20.0\% | 1.5\% |
| Wed 18/ 01/ 2017 | 26.1 | 33 | 7.3 | 77.8\% | 19.4\% | 2.8\% |

3.1.2. Northbound Mean Speed \& 85\% ile Speeds by Day Chart.
Mean \& 85\%ile Speed by Day
C0274 Boyton School, Boyton School (Northbound)

3.1.3. Northbound Speed Limit Compliance by Day Chart.


### 3.2.1. Northbound Speed Frequencies by Day Table.

| Date | $\text { № } \leq 30$ |  |  | $\text { № }>30$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 0 \\ & \text { N } \\ & \text { 응 } \\ & \vdots \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline 1 \end{aligned}$ |  |
| Wed 11/ 01/ 2017 | 19 | 11 | 18 | 18 | 2 | 6 | 0 | 0 | 0 | 0 | 74 |
| Thu 12/ 01/ 2017 | 12 | 34 | 32 | 19 | 6 | 0 | 0 | 0 | 0 | 0 | 103 |
| Fri 13/ 01/ 2017 | 28 | 47 | 31 | 20 | 9 | 1 | 0 | 0 | 0 | 0 | 136 |
| Sat 14/ 01/ 2017 | 13 | 22 | 50 | 25 | 8 | 3 | 0 | 0 | 0 | 0 | 121 |
| Sun 15/ 01/ 2017 | 6 | 12 | 32 | 26 | 9 | 0 | 0 | 0 | 0 | 0 | 85 |
| Mon 16/ 01/ 2017 | 36 | 42 | 39 | 23 | 10 | 2 | 0 | 0 | 0 | 0 | 152 |
| Tue 17/ 01/ 2017 | 36 | 26 | 44 | 18 | 9 | 2 | 0 | 0 | 0 | 0 | 135 |
| Wed 18/ 01/ 2017 | 15 | 13 | 28 | 10 | 4 | 2 | 0 | 0 | 0 | 0 | 72 |
| Total \% of Total | 165 | 207 | 274 | 159 | 57 | 16 | 0 | 0 | 0 | 0 | 878 |
|  | 18.8\% | 23.6\% | 31.2\% | 18.1\% | 6.5\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 100.0\% |

### 3.2.2. Northbound Speed Frequencies Chart.



### 3.3.1. Northbound Hour of Day Summary Table.

| Hour of Day | Mean Speed | 85\% ile Speed | Standard Deviation | $\% \leq 30$ | \% 31 mph to 40 mph | \% >40 mph |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00:00 to 00:59 | 26.7 | 29 | 3.2 | 100.0\% | 0.0\% | 0.0\% |
| 01:00 to 01:59 | - | - | - | - | - | - |
| 02:00 to 02:59 | 35.0 | 35 | - | 0.0\% | 100.0\% | 0.0\% |
| 03:00 to 03:59 | - | - | - | - | - | - |
| 04:00 to 04:59 | 28.2 | 32 | 5.4 | 66.7\% | 33.3\% | 0.0\% |
| 05:00 to 05:59 | 31.8 | 35 | 3.3 | 50.0\% | 50.0\% | 0.0\% |
| 06:00 to 06:59 | 34.9 | 39 | 4.5 | 22.2\% | 66.7\% | 11.1\% |
| 07:00 to 07:59 | 30.9 | 38 | 5.8 | 48.2\% | 46.4\% | 5.4\% |
| 08:00 to 08:59 | 22.8 | 30 | 6.9 | 84.7\% | 15.3\% | 0.0\% |
| 09:00 to 09:59 | 23.0 | 29 | 6.1 | 93.7\% | 6.3\% | 0.0\% |
| 10:00 to 10:59 | 25.2 | 30 | 5.3 | 86.3\% | 13.8\% | 0.0\% |
| 11:00 to 11:59 | 25.1 | 32 | 6.5 | 80.6\% | 19.4\% | 0.0\% |
| 12:00 to 12:59 | 25.1 | 31 | 6.0 | 82.3\% | 17.7\% | 0.0\% |
| 13:00 to 13:59 | 25.5 | 31 | 5.4 | 82.9\% | 17.1\% | 0.0\% |
| 14:00 to 14:59 | 26.3 | 32 | 6.7 | 75.7\% | 22.9\% | 1.4\% |
| 15:00 to 15:59 | 21.5 | 29 | 7.4 | 86.7\% | 13.3\% | 0.0\% |
| 16:00 to 16:59 | 26.5 | 32 | 5.8 | 80.6\% | 17.9\% | 1.5\% |
| 17:00 to 17:59 | 29.8 | 35 | 5.2 | 58.1\% | 38.7\% | 3.2\% |
| 18:00 to 18:59 | 29.3 | 35 | 6.8 | 57.1\% | 37.1\% | 5.7\% |
| 19:00 to 19:59 | 29.3 | 36 | 7.5 | 54.3\% | 37.1\% | 8.6\% |
| 20:00 to 20:59 | 32.4 | 37 | 4.8 | 31.6\% | 63.2\% | 5.3\% |
| 21:00 to 21:59 | 32.1 | 40 | 7.2 | 43.8\% | 50.0\% | 6.3\% |
| 22:00 to 22:59 | 30.1 | 33 | 5.6 | 38.5\% | 53.8\% | 7.7\% |
| 23:00 to 23:59 | 32.3 | 37 | 7.8 | 25.0\% | 75.0\% | 0.0\% |

3.3.2. Northbound Mean Speed \& 85\% ile Speed by Hour of Day Chart.

3.3.3. Northbound Speed Limit Compliance by Hour of Day Chart.


## 4. Southbound Detailed Statistics.

### 4.1.1. Southbound Daily Summary Table.

| Date | Mean Speed | 85\% ile Speed | Standard Deviation | $\% \leq 30$ | \% 31 mph to $\mathbf{4 0} \mathbf{~ m p h}$ | \% > 40 mph |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wed 11/ 01/ 2017 | 27.0 | 35 | 7.2 | 70.8\% | 29.2\% | 0.0\% |
| Thu 12/ 01/ 2017 | 24.5 | 31 | 7.0 | 83.4\% | 14.7\% | 1.8\% |
| Fri 13/ 01/ 2017 | 24.8 | 33 | 7.8 | 78.3\% | 16.8\% | 4.9\% |
| Sat 14/ 01/ 2017 | 26.1 | 32 | 6.4 | 78.2\% | 20.2\% | 1.6\% |
| Sun 15/ 01/ 2017 | 28.7 | 34 | 5.2 | 67.4\% | 30.4\% | 2.2\% |
| Mon 16/ 01/ 2017 | 23.3 | 31 | 7.7 | 83.5\% | 15.8\% | 0.8\% |
| Tue 17/ 01/ 2017 | 24.6 | 32 | 6.7 | 81.3\% | 18.7\% | 0.0\% |
| Wed 18/ 01/ 2017 | 23.0 | 29 | 6.4 | 86.5\% | 13.5\% | 0.0\% |

4.1.2. Southbound Mean Speed \& 85\% ile Speed by Day Chart.
——Mean Speed - 85\%ile Speed $\cdots \cdots \cdots \cdot$ Speed Limit ( $\mathbf{3 0} \mathbf{m p h}$ )
Mean \& 85\%ile Speed by Day C0274 Boyton School, Boyton School (Southbound)

4.1.3. Southbound Speed Limit Compliance by Day Chart.


### 4.2.1. Southbound Speed Frequencies by Day Table.

| Date | $\text { № } \leq 30$ |  |  | $\text { № }>30$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 0 \\ & \text { N } \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline 1 \\ & \hline 1 \end{aligned}$ |  |
| Wed 11/ 01/ 2017 | 9 | 24 | 18 | 12 | 9 | 0 | 0 | 0 | 0 | 0 | 72 |
| Thu 12/ 01/ 2017 | 36 | 56 | 44 | 19 | 5 | 2 | 1 | 0 | 0 | 0 | 163 |
| Fri 13/ 01/ 2017 | 39 | 45 | 28 | 20 | 4 | 5 | 2 | 0 | 0 | 0 | 143 |
| Sat 14/ 01/ 2017 | 24 | 34 | 39 | 18 | 7 | 1 | 1 | 0 | 0 | 0 | 124 |
| Sun 15/ 01/ 2017 | 3 | 25 | 34 | 22 | 6 | 2 | 0 | 0 | 0 | 0 | 92 |
| Mon 16/ 01/ 2017 | 47 | 33 | 31 | 12 | 9 | 1 | 0 | 0 | 0 | 0 | 133 |
| Tue 17/ 01/ 2017 | 39 | 35 | 39 | 18 | 8 | 0 | 0 | 0 | 0 | 0 | 139 |
| Wed 18/ 01/ 2017 | 19 | 14 | 12 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| Total \% of Total | 216 | 266 | 245 | 128 | 48 | 11 | 4 | 0 | 0 | 0 | 918 |
|  | 23.5\% | 29.0\% | 26.7\% | 13.9\% | 5.2\% | 1.2\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 100.0\% |

4.2.2. Southbound Speed Frequencies Chart.


### 4.3.1. Southbound Hour of Day Summary Table.

| Hour of Day | Mean Speed | 85\% ile Speed | Standard Deviation | $\% \leq 30$ | \% 31 mph to 40 mph | \% >40 mph |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00:00 to 00:59 | - | - | - | - | - | - |
| 01:00 to 01:59 | 24.3 | 28 | 4.2 | 95.2\% | 4.8\% | 0.0\% |
| 02:00 to 02:59 | - | - | - | - | - | - |
| 03:00 to 03:59 | 36.0 | 36 | - | 0.0\% | 100.0\% | 0.0\% |
| 04:00 to 04:59 | 12.5 | 13 | 0.8 | 100.0\% | 0.0\% | 0.0\% |
| 05:00 to 05:59 | 38.0 | 44 | 11.3 | 50.0\% | 0.0\% | 50.0\% |
| 06:00 to 06:59 | 28.9 | 36 | 9.4 | 61.5\% | 23.1\% | 15.4\% |
| 07:00 to 07:59 | 31.1 | 37 | 6.9 | 33.3\% | 61.1\% | 5.6\% |
| 08:00 to 08:59 | 18.6 | 27 | 7.4 | 90.5\% | 9.5\% | 0.0\% |
| 09:00 to 09:59 | 24.4 | 29 | 6.0 | 88.5\% | 9.8\% | 1.6\% |
| 10:00 to 10:59 | 26.0 | 32 | 6.2 | 76.6\% | 21.3\% | 2.1\% |
| 11:00 to 11:59 | 22.3 | 28 | 5.6 | 95.2\% | 4.8\% | 0.0\% |
| 12:00 to 12:59 | 22.1 | 27 | 5.5 | 96.3\% | 3.7\% | 0.0\% |
| 13:00 to 13:59 | 25.3 | 32 | 7.0 | 76.0\% | 22.0\% | 2.0\% |
| 14:00 to 14:59 | 23.9 | 29 | 5.0 | 95.0\% | 5.0\% | 0.0\% |
| 15:00 to 15:59 | 20.7 | 28 | 6.3 | 94.1\% | 5.9\% | 0.0\% |
| 16:00 to 16:59 | 24.3 | 32 | 7.0 | 81.0\% | 19.0\% | 0.0\% |
| 17:00 to 17:59 | 29.8 | 36 | 6.2 | 59.3\% | 36.1\% | 4.6\% |
| 18:00 to 18:59 | 30.0 | 37 | 6.3 | 57.5\% | 37.5\% | 5.0\% |
| 19:00 to 19:59 | 29.0 | 35 | 6.0 | 58.1\% | 41.9\% | 0.0\% |
| 20:00 to 20:59 | 28.7 | 35 | 6.1 | 52.6\% | 47.4\% | 0.0\% |
| 21:00 to 21:59 | 30.4 | 35 | 3.5 | 62.5\% | 37.5\% | 0.0\% |
| 22:00 to 22:59 | 28.8 | 38 | 9.0 | 66.7\% | 33.3\% | 0.0\% |
| 23:00 to 23:59 | 30.0 | 33 | 3.2 | 66.7\% | 33.3\% | 0.0\% |

4.3.2. Southbound Mean Speed \& $85 \%$ ile Speed by Hour of Day Chart.
Mean \& 85\%ile Speed by Hour of Day
C0274 Boyton School, Boyton School (Southbound)

4.3.3. Southbound Speed Limit Compliance by Hour of Day Chart.


## Produced by <br> Engineering Design Group <br> Cormac Solutions Ltd



RadarClass is part of the Engineering Design Group Speed Analysis Programme


View the SpeedVI SOR \& RadarClass layer on I ntranet mapping at http:// cornwallcouncilintranet.cc.cornwallonline.net/ default.aspx?page=1480 (Cormac and Cornwall Council employees only)

View the locations of all SpeedVI SOR and RadarClass deployments since 2002 on an interactive map of Cornwal with an option to view and download speed analysis statistics reports.

To request a deployment and/ or obtain a quote for SpeedVI SOR, RadarClass or Hand-held Radar deployment please contact

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