| Speed (mph) | Frequency | |
|---|---|---|
| x | f | f*x |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 25 | 0 | 0 |
| 26 | 3 | 78 |
| 27 | 2 | 54 |
| 28 | 8 | 224 |
| 29 | 2 | 58 |
| 30 | 11 | 330 |
| 31 | 7 | 217 |
| 32 | 3 | 96 |
| 33 | 3 | 99 |
| 34 | 2 | 68 |
| 35 | 1 | 35 |
| 36 | 2 | 72 |
| 37 | 3 | 111 |
| 38 | 0 | 0 |
| 39 | 0 | 0 |
| 40 | 1 | 40 |
| 41 | 0 | 0 |
| 42 | 1 | 42 |
| 43 | 1 | 43 |
| 44 | 0 | 0 |
| 45 | 0 | 0 |
| 46 | 0 | 0 |
| 47 | 0 | 0 |
| 48 | 0 | 0 |
| 49 | 0 | 0 |
| 50 | 0 | 0 |
| 51 | 0 | 0 |
| 52 | 0 | 0 |
| 53 | 0 | 0 |
| 54 | 0 | 0 |
| 55 | 0 | 0 |
| 56 | 0 | 0 |
| 57 | 0 | 0 |
| 58 | 0 | 0 |
| 59 | 0 | 0 |
| 60 | 0 | 0 |
| 61 | 0 | 0 |
| 62 | 0 | 0 |
| 63 | 0 | 0 |
| 64 | 0 | 0 |
| 65 | 0 | 0 |
| 66 | 0 | 0 |
| 67 | 0 | 0 |
| 68 | 0 | 0 |
| 69 | 0 | 0 |
| 70 | 0 | 0 |
| 71 | 0 | 0 |
| 72 | 0 | 0 |
| 73 | 0 | 0 |
| 74 | 0 | 0 |
| 75 | 0 | 0 |
| 76 | 0 | 0 |
| 77 | 0 | 0 |
| 78 | 0 | 0 |
| 79 | 0 | 0 |
| 80 | 0 | 0 |
| 81 | 0 | 0 |
| 82 | 0 | 0 |
| 83 | 0 | 0 |
| 84 | 0 | 0 |
| 85 | 0 | 0 |
| 86 | 0 | 0 |
| 87 | 0 | 0 |
| 88 | 0 | 0 |
| 89 | 0 | 0 |
| 90 | 0 | 0 |
| 91 | 0 | 0 |
| 92 | 0 | 0 |
| 93 | 0 | 0 |
| 94 | 0 | 0 |
| 95 | 0 | 0 |
| 96 | 0 | 0 |
| 97 | 0 | 0 |
| 98 | 0 | 0 |
| Total | 50 | 1567 |

| Speed (mph) | Frequency | Class Mark | x - mean | |
|---|---|---|---|---|
| Band | f | x | e | e*f |
| 6.5-7.4 | 0 | 7 | 592.44 | 0.00 |
| 7.5-8.4 | 0 | 8 | 544.76 | 0.00 |
| 8.5-9.4 | 0 | 9 | 499.08 | 0.00 |
| 9.5-10.4 | 0 | 10 | 455.40 | 0.00 |
| 10.5-11.4 | 0 | 11 | 413.72 | 0.00 |
| 11.5-12.4 | 0 | 12 | 374.04 | 0.00 |
| 12.5-13.4 | 0 | 13 | 336.36 | 0.00 |
| 13.5-14.4 | 0 | 14 | 300.68 | 0.00 |
| 14.5-15.4 | 0 | 15 | 267.00 | 0.00 |
| 15.5-16.4 | 0 | 16 | 235.32 | 0.00 |
| 16.5-17.4 | 0 | 17 | 205.64 | 0.00 |
| 17.5-18.4 | 0 | 18 | 177.96 | 0.00 |
| 18.5-19.4 | 0 | 19 | 152.28 | 0.00 |
| 19.5-20.4 | 0 | 20 | 128.60 | 0.00 |
| 20.5-21.4 | 0 | 21 | 106.92 | 0.00 |
| 21.5-22.4 | 0 | 22 | 87.24 | 0.00 |
| 22.5-23.4 | 0 | 23 | 69.56 | 0.00 |
| 23.5-24.4 | 0 | 24 | 53.88 | 0.00 |
| 24.5-25.4 | 0 | 25 | 40.20 | 0.00 |
| 25.5-26.4 | 3 | 26 | 28.52 | 85.55 |
| 26.5-27.4 | 2 | 27 | 18.84 | 37.67 |
| 27.5-28.4 | 8 | 28 | 11.16 | 89.24 |
| 28.5-29.4 | 2 | 29 | 5.48 | 10.95 |
| 29.5-30.4 | 11 | 30 | 1.80 | 19.75 |
| 30.5-31.4 | 7 | 31 | 0.12 | 0.81 |
| 31.5-32.4 | 3 | 32 | 0.44 | 1.31 |
| 32.5-33.4 | 3 | 33 | 2.76 | 8.27 |
| 33.5-34.4 | 2 | 34 | 7.08 | 14.15 |
| 34.5-35.4 | 1 | 35 | 13.40 | 13.40 |
| 35.5-36.4 | 2 | 36 | 21.72 | 43.43 |
| 36.5-37.4 | 3 | 37 | 32.04 | 96.11 |
| 37.5-38.4 | 0 | 38 | 44.36 | 0.00 |
| 38.5-39.4 | 0 | 39 | 58.68 | 0.00 |
| 39.5-40.4 | 1 | 40 | 75.00 | 75.00 |
| 40.5-41.4 | 0 | 41 | 93.32 | 0.00 |
| 41.5-42.4 | 1 | 42 | 113.64 | 113.64 |
| 42.5-43.4 | 1 | 43 | 135.96 | 135.96 |
| 43.5-44.4 | 0 | 44 | 160.28 | 0.00 |
| 44.5-45.4 | 0 | 45 | 186.60 | 0.00 |
| 45.5-46.4 | 0 | 46 | 214.92 | 0.00 |
| 46.5-47.4 | 0 | 47 | 245.24 | 0.00 |
| 47.5-48.4 | 0 | 48 | 277.56 | 0.00 |
| 48.5-49.4 | 0 | 49 | 311.88 | 0.00 |
| 49.5-50.4 | 0 | 50 | 348.20 | 0.00 |
| 50.5-51.4 | 0 | 51 | 386.52 | 0.00 |
| 51.5-52.4 | 0 | 52 | 426.84 | 0.00 |
| 52.5-53.4 | 0 | 53 | 469.16 | 0.00 |
| 53.5-54.4 | 0 | 54 | 513.48 | 0.00 |
| 54.5-55.4 | 0 | 55 | 559.80 | 0.00 |
| 55.5-56.4 | 0 | 56 | 608.12 | 0.00 |
| 56.5-57.4 | 0 | 57 | 658.44 | 0.00 |
| 57.5-58.4 | 0 | 58 | 710.76 | 0.00 |
| 58.5-59.4 | 0 | 59 | 765.08 | 0.00 |
| 59.5-60.4 | 0 | 60 | 821.40 | 0.00 |
| 60.5-61.4 | 0 | 61 | 879.72 | 0.00 |
| 61.5-62.4 | 0 | 62 | 940.04 | 0.00 |
| 62.5-63.4 | 0 | 63 | 1002.36 | 0.00 |
| 63.5-64.4 | 0 | 64 | 1066.68 | 0.00 |
| 64.5-65.4 | 0 | 65 | 1133.00 | 0.00 |
| 65.5-66.4 | 0 | 66 | 1201.32 | 0.00 |
| 66.5-67.4 | 0 | 67 | 1271.64 | 0.00 |
| 67.5-68.4 | 0 | 68 | 1343.96 | 0.00 |
| 68.5-69.4 | 0 | 69 | 1418.28 | 0.00 |
| 69.5-70.4 | 0 | 70 | 1494.60 | 0.00 |
| 70.5-71.4 | 0 | 71 | 1572.92 | 0.00 |
| 71.5-72.4 | 0 | 72 | 1653.24 | 0.00 |
| 72.5-73.4 | 0 | 73 | 1735.56 | 0.00 |
| 73.5-74.4 | 0 | 74 | 1819.88 | 0.00 |
| 74.5-75.4 | 0 | 75 | 1906.20 | 0.00 |
| 75.5-76.4 | 0 | 76 | 1994.52 | 0.00 |
| 76.5-77.4 | 0 | 77 | 2084.84 | 0.00 |
| 77.5-78.4 | 0 | 78 | 2177.16 | 0.00 |
| 78.5-79.4 | 0 | 79 | 2271.48 | 0.00 |
| 79.5-80.4 | 0 | 80 | 2367.80 | 0.00 |
| 80.5-81.4 | 0 | 81 | 2466.12 | 0.00 |
| 81.5-82.4 | 0 | 82 | 2566.44 | 0.00 |
| 82.5-83.4 | 0 | 83 | 2668.76 | 0.00 |
| 83.5-84.4 | 0 | 84 | 2773.08 | 0.00 |
| 84.5-85.4 | 0 | 85 | 2879.40 | 0.00 |
| 85.5-86.4 | 0 | 86 | 2987.72 | 0.00 |
| 86.5-87.4 | 0 | 87 | 3098.04 | 0.00 |
| 87.5-88.4 | 0 | 88 | 3210.36 | 0.00 |
| 88.5-89.4 | 0 | 89 | 3324.68 | 0.00 |
| 89.5-90.4 | 0 | 90 | 3441.00 | 0.00 |
| 90.5-91.4 | 0 | 91 | 3559.32 | 0.00 |
| 91.5-92.4 | 0 | 92 | 3679.64 | 0.00 |
| 92.5-93.4 | 0 | 93 | 3801.96 | 0.00 |
| 93.5-94.4 | 0 | 94 | 3926.28 | 0.00 |
| 94.5-95.4 | 0 | 95 | 4052.60 | 0.00 |
| 95.5-96.4 | 0 | 96 | 4180.92 | 0.00 |
| 96.5-97.4 | 0 | 97 | 4311.24 | 0.00 |
| 97.5-98.4 | 0 | 98 | 4443.56 | 0.00 |
| Total | 50 | | | 745.22 |

**Survey Details**

| | |
|---|---|
| Date: | Jul-25 |
| Road / Location: | Haigh Lane |
| Direction of traffic: | Northbound |
| Weather: | Dry |
| Surveyor: | GD |
| Speed Limit: | 60mph |

**DMRB - TA22/81 Calculations**

Mean Speed = sum (f*x)/x 31.34 mph

Standard deviation = SQRT(sum(e*f))/sum(f) 3.90 mph

Dry 85th%ile Design Speed = Mean Speed + Standard Deviation

Wet 85th%ile Design Speed Correction = -2.5mph

**Therefore, the 85th%ile Wet Condition = 32.74 mph or 52.68 kph**

| | | |
|---|---|---|
| | **Calculation of 85th Percentile Design Speed from Speed Survey** | **SP/01** |
| | | **Jul-25** |
| | **Haigh Lane, Hoylandswaine** | **Job No. 25009** |