MetroCount®
Traffic Data Specialists

Speed Statistics

MTE User Manual - Classification Reports

3.21

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Speed Statistics

Overview

The Speed Statistics report provides a table of speed bin distribution with multipliers, in a single page format for the entire tagged data.

The first block is MCReport's standard speed statistics block, which shows all speed limits and percentiles per the **Speed** page of the report's Advanced Profile options.

```
Vehicles = 1127611
Posted speed limit = 80 km/h, Exceeding = 438231 (38.86%), Mean Exceeding = 85.82 km/h
Limit 1 (PSL + 5) (80 * 100%) + 5 = 85 km/h, Exceeding = 191266 (16.96%)
Limit 2 (PSL + 10%) (80 * 110%) + 0 = 88 km/h, Exceeding = 107025 (9.49%)
Maximum = 159.6 km/h, Minimum = 10.2 km/h, Mean = 77.3 km/h
85% Speed = 85.3 km/h, 95% Speed = 91.1 km/h, Median = 77.8 km/h
20 km/h Pace = 68 - 88, Number in Pace = 868975 (77.06%)
Variance = 90.07, Standard Deviation = 9.49 km/h
```

Speed Statistics Block Sample

The Speed Bins table provides bin totals, plus cumulative totals above and below the upper limit of each bin (highlighted in bold).

Speed Bins

Speed	Bin		Below		Above		Energy	vMult	n * vMult
0 - 10	0	0.0%	0	0.0%	1127611	100.0%	0.00	0.00	0.00
10 - 20	74	0.0%	74	0.0%	1127537	100.0%	0.89	0.00	0.00
20 - 30	858	0.1%	932	0.1%	1126679	99.9%	3.62	0.00	0.00
30 - 40	1729	0.2%	2661	0.2%	1124950	99.8%	25.14	0.00	0.00
40 - 50	7690	0.7%	10351	0.9%	1117260	99.1%	394.09	0.00	0.00
50 - 60	36929	3.3%	47280	4.2%	1080331	95.8%	2446.95	0.00	0.00
60 - 70	159851	14.2%	207131	18.4%	920480	81.6%	15012.14	0.00	0.00
70 - 80	482249	42.8%	689380	61.1%	438231	38.9%	54137.10	0.00	0.00
80 - 90	365441	32.4%	1054821	93.5%	72790	6.5%	36517.89	1.00	365441.00
90 - 100	61422	5.4%	1116243	99.0%	11368	1.0%	3657.55	2.00	122844.00
100 - 110	8832	0.8%	1125075	99.8%	2536	0.2%	387.99	4.00	35328.00
110 - 120	1742	0.2%	1126817	99.9%	794	0.1%	94.03	8.00	13936.00
120 - 130	509	0.0%	1127326	100.0%	285	0.0%	19.10	16.00	8144.00
130 - 140	186	0.0%	1127512	100.0%	99	0.0%	20.24	32.00	5952.00
140 - 150	74	0.0%	1127586	100.0%	25	0.0%	0.00	64.00	4736.00
150 - 160	25	0.0%	1127611	100.0%	0	0.0%	0.00	128.00	3200.00
160 - 170	0	0.0%	1127611	100.0%	0	0.0%	0.00	0.00	0.00
170 - 180	0	0.0%	1127611	100.0%	0	0.0%	0.00	0.00	0.00
180 - 190	0	0.0%	1127611	100.0%	0	0.0%	0.00	0.00	0.00
190 - 200	0	0.0%	1127611	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 559581.00
Total Moving Energy (Estimated) = 112716.73

Speed Statistics Speed Bins Sample

The Energy calculations use the standard formula: $e = \frac{1}{2}mv^2$ where **m** is the estimated vehicle gross mass from the Advanced Profile mass table. The value is always reported in MegaJoules.

The **vMult** column is each speed bin's multiplier, with **n * vMult** the product of each speed bin's total volume and multiplier. The total gives the Speed Rating for the entire data.

The final block in this report summarises the cumulative totals for each of the speed limits specified in the Advanced Profile options.

Speed limit fields

	Limit		Below		Above	
0	80 (PSL)		689380	61.1%	438231	38.9%
1	85 (PSL + 5)		936345	83.0%	191266	17.0%
2	88 (PSL + 10)		1020586	90.5%	107025	9.5%

Speed Statistics Limits block sample

By Hour

The hourly variant of the Speed Statistics report provides all speed statistics grouped by hour of day, in a single page format for the entire tagged data. Additional columns are appended for total vehicles exceeding each of the speed limits defined in the Advanced Profile options.

Hour Bins (Partial days)

Time	Bin		Min	Max	Mean	Median	85%	95%	>PSL 80 km/h		Limit 1 85 km/h PSL + 5		Limit 2 88 km/h PSL + 10%	
0000	11601	1.0%	1.3	158.3	81.7	81.0	89.6	97.6	6670	57.5%	3542	30.5%	2266	19.5%
0100	7286	0.6%	50.5	169.5	84.0	82.4	91.4	101.2	4739	65.0%	2679	36.8%	1814	24.9%
0200	4827	0.4%	14.2	169.2	83.7	82.8	92.5	101.5	3168	65.6%	1897	39.3%	1299	26.9%
0300	4731	0.4%	0.0	159.6	84.6	83.2	93.6	102.2	3223	68.1%	1971	41.7%	1383	29.2%
0400	6614	0.6%	5.5	159.5	85.0	83.5	93.2	100.8	4676	70.7%	2884	43.6%	1992	30.1%
0500	17587	1.6%	2.9	143.7	84.9	83.9	92.5	99.0	12818	72.9%	7755	44.1%	5205	29.6%
0600	46035	4.1%	2.8	144.2	81.9	81.4	88.6	94.3	27224	59.1%	13804	30.0%	8116	17.6%
0700	78749	7.0%	0.0	133.9	75.7	76.3	83.9	88.6	25545	32.4%	9743	12.4%	4826	6.1%
0800	86287	7.6%	3.1	153.9	72.7	74.2	82.4	87.5	20943	24.3%	7793	9.0%	3948	4.6%
0900	66800	5.9%	2.4	145.6	77.1	77.4	84.6	90.0	24130	36.1%	9903	14.8%	5265	7.9%
1000	64155	5.7%	3.7	142.7	77.2	77.4	85.0	90.0	23286	36.3%	9599	15.0%	5174	8.1%
1100	66378	5.9%	2.3	138.2	77.0	77.0	84.6	89.6	23561	35.5%	9399	14.2%	4918	7.4%
1200	70013	6.2%	2.4	150.5	76.6	76.7	84.2	89.6	23682	33.8%	9594	13.7%	5086	7.3%
1300	67360	6.0%	0.0	149.3	77.0	77.0	84.6	90.0	23972	35.6%	9660	14.3%	5147	7.6%
1400	69167	6.1%	0.0	144.9	77.2	77.4	84.6	90.0	24924	36.0%	10049	14.5%	5421	7.8%
1500	79571	7.1%	0.0	153.0	75.9	76.3	84.2	89.3	25570	32.1%	10298	12.9%	5473	6.9%
1600	92027	8.2%	0.0	172.5	75.0	75.6	83.5	88.6	27790	30.2%	10669	11.6%	5358	5.8%
1700	92431	8.2%	0.0	140.7	73.8	75.6	83.5	88.2	27793	30.1%	10540	11.4%	5261	5.7%
1800	62081	5.5%	0.0	161.4	79.1	79.2	86.4	91.4	28462	45.8%	12196	19.6%	6605	10.6%
1900	38631	3.4%	3.7	150.0	81.1	80.6	87.8	94.0	20947	54.2%	9973	25.8%	5788	15.0%
2000	28888	2.6%	2.7	174.8	82.1	81.4	88.9	95.8	16908	58.5%	8355	28.9%	5085	17.6%
2100	26615	2.4%	3.6	153.9	81.8	81.0	88.6	94.7	15311	57.5%	7447	28.0%	4421	16.6%
2200	22823	2.0%	4.1	171.4	81.7	81.0	88.6	95.0	12841	56.3%	6215	27.2%	3808	16.7%
2300	17470	1.5%	0.0	185.0	80.8	81.0	89.6	96.8	10061	57.6%	5314	30.4%	3379	19.3%
----	1128127	100.0%	0.0	185.0	77.3	77.8	85.3	91.1	438244	38.8%	191279	17.0%	107038	9.5%

Speed Statistics by Hour sample

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