

# Initial Velocity Bucket Analysis Report

## Report Summary:

- Bucket Type: Initial Velocity
- Total Buckets: 13
- Date Range: 2025-08-01 to 2025-10-15

This report contains three tables showing:

1. Median statistics for each bucket
2. 95th percentile statistics for each bucket
3. 99th percentile statistics for each bucket

## Each table shows:

- Bucket range
- Total events in the bucket
- Median/95th/99th percentile values for:
  - \* Max Brake Pedal Position (BPP)
  - \* Total Time (seconds)
  - \* Total Distance (meters)
  - \* Deceleration ( $\text{m/s}^2$ )

Initial Velocity - Median Statistics

bucket	total_events	median_max_bpp	median_total_time	median_total_distance	median_deceleration
20-25	4	35.4	14.81	64.06	0.46
25-30	493	28.8	13.28	33.82	0.58
30-35	493	30.8	13.66	44.28	0.66
35-40	449	32.8	13.7	51.46	0.76
40-45	355	34.0	13.92	62.96	0.85
45-50	251	36.0	13.98	70.68	0.95
50-55	150	36.4	14.17	82.83	1.04
55-60	105	38.0	13.84	85.46	1.14
60-65	57	41.6	14.22	97.66	1.23
65-70	36	45.2	14.0	101.0	1.34
70-75	15	47.6	14.02	119.21	1.43
75-80	6	46.4	14.57	132.21	1.48
80-85	2	57.0	14.48	139.08	1.58

Initial Velocity - 95th Percentile Statistics

bucket	total_events	p95_max_bpp	p95_total_time	p95_total_distance	p95_deceleration
20-25	4	54.0	14.98	66.66	0.47
25-30	493	44.4	14.86	54.65	0.96
30-35	493	50.16	14.91	67.49	1.0
35-40	449	51.6	14.9	75.77	1.09
40-45	355	50.52	14.92	84.78	1.12
45-50	251	55.0	14.92	99.34	1.28
50-55	150	55.82	14.9	107.63	1.39
55-60	105	59.84	14.96	115.86	1.41
60-65	57	61.36	14.9	130.32	1.38
65-70	36	64.5	14.92	132.67	1.56
70-75	15	58.8	14.98	136.86	1.7
75-80	6	57.6	14.78	140.49	1.54
80-85	2	66.54	14.48	141.25	1.61

Initial Velocity - 99th Percentile Statistics

bucket	total_events	p99_max_bpp	p99_total_time	p99_total_distance	p99_deceleration
20-25	4	55.92	14.98	67.03	0.47
25-30	493	50.83	14.96	63.02	1.17
30-35	493	60.43	15.0	80.51	1.19
35-40	449	58.0	14.99	90.56	1.27
40-45	355	60.67	15.0	92.48	1.35
45-50	251	66.2	15.0	109.11	1.45
50-55	150	63.83	14.95	117.35	1.53
55-60	105	65.9	14.99	123.78	1.73
60-65	57	71.66	14.99	131.05	1.41
65-70	36	79.16	14.99	158.02	1.79
70-75	15	61.04	14.98	142.29	1.77
75-80	6	57.6	14.78	140.5	1.55
80-85	2	67.39	14.48	141.44	1.61