

**Bridge Junction & Railway Track Effects On Vehicle Motion For Two-Second Reaction Intervals**

Location	Date	Bridge Junction or Railway Crossing	Test Vehicle Speed (km/h)	Lateral Motion Stan Deviation (Radians/Second)	Longitudinal Motion Stan Deviation (Radians/Second)
Adelaide St N, SB, London at N Branch Thames River Bridge	Mar 3-14	North Bridge Junction	55.0	0.0191	0.0844
Adelaide St N, SB, London at N Branch Thames River Bridge	Mar 3-14	South Bridge Junction	56.0	0.0392	0.0793
Adelaide St N, SB, London at CPR Tracks S of Pall Mall	Mar 3-14	Railway Tracks	49.0	0.0328	0.1200
Adelaide St N, SB, London at S Branch Thames River Bridge	Mar 3-14	North Bridge Junction	58.0	0.0270	0.0759
Adelaide St N, SB, London at S Branch Thames River Bridge	Mar 3-14	South Bridge Junction	58.0	0.0336	0.0793
Clarke Rd, NB, Crossing RR Tracks Just North of Oxford St	May 22-14	Railway Tracks	32.0	0.0603	0.1345
Clarke Rd, NB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	81.0	0.0422	0.0591
Clarke Rd, NB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	83.0	0.0545	0.0729
Clarke Rd, NB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	82.0	0.0385	0.0670
Clarke Rd, NB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	83.0	0.0444	0.0648
Clarke Rd, NB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	81.0	0.0409	0.0465
Clarke Rd, NB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	82.0	0.0426	0.0460
Clarke Rd, NB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	54.0	0.0318	0.0541
Clarke Rd, NB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	81.0	0.0432	0.0523
Clarke Rd, SB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	82.0	0.0303	0.0477
Clarke Rd, SB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	82.0	0.0276	0.0497
Clarke Rd, SB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	80.0	0.0281	0.0422
Clarke Rd, SB, Crossing N Junction of Bridge of N Branch of Thames River	May 22-14	North Bridge Junction	82.0	0.0294	0.0437
Clarke Rd, SB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	82.0	0.0416	0.0630
Clarke Rd, SB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	81.0	0.0341	0.0670
Clarke Rd, SB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	80.0	0.0356	0.0723
Clarke Rd, SB, Crossing S Junction of Bridge of N Branch of Thames River	May 22-14	South Bridge Junction	81.0	0.0395	0.0748
Dundas St, EB, at Kelloggs Manufacturing Plant	Mar 12-14	Railway Tracks	41.0	0.0338	0.1219
Dundas St, EB, at Hale Street	Mar 12-14	Railway Tracks	23.0	0.0484	0.0368
Dundas St, EB, at Hale Street	Mar 31-14	Railway Tracks	37.0	0.0676	0.0951
Horton St, EB, London at Lond Pt Stanley RR at Maitland St	Mar 3-14	Railway Tracks	53.0	0.0296	0.0917
Hwy 80, NB CPR Tracks North of Glencoe	Feb 14-14	Railway Tracks	90.0	0.0283	0.0658
Hwy 80, WB, at Sydenham River Bridge	Feb 14-14	Both Bridge Junctions	90.0	0.0291	0.0333
Hwy 402, WB, East of Longwoods Road	Feb 14-14	East Bridge Junction	106.0	0.0225	0.0324
Hwy 402, WB, East of Longwoods Road	Feb 14-14	West Bridge Junction	106.0	0.0331	0.0233
Hwy 402, WB, Overpass of Longwoods Road	Feb 14-14	East Bridge Junction	77.0	0.0287	0.0427
Hwy 402, WB, Overpass of Longwoods Road	Feb 14-14	West Bridge Junction	68.0	0.0257	0.0315
Longwoods Road, WB at Newbiggen Creek	Feb 14-14	Both Bridge Junctions	90.0	0.0304	0.0381
Oxford St, EB, London at N Branch Thames River Bridge E of Wharcliffe Rd	Mar 31-14	West Bridge Junction	58.0	0.0363	0.0735
Oxford St, EB, London at N Branch Thames River Bridge E of Wharcliffe Rd	Mar 31-14	East Bridge Junction	55.0	0.0320	0.0707
Oxford St, EB, Crossing RR Tracks Just West of Clarke Rd	May 22-14	Railway Tracks	39.0	0.0469	0.0702
Plover Mills Rd, EB, Thames River Bridge West of Nissouri Rd	Mar 14-14	West Bridge Junction	88.0	0.0230	0.0304
Plover Mills Rd, EB, Thames River Bridge West of Nissouri Rd	Mar 14-14	East Bridge Junction	82.0	0.0251	0.0270
Plover Mills Rd, EB, West of Wellburn Rd	Mar 14-14	Railway Tracks	81.0	0.0555	0.1012
Third Street, Northbound, Crossing RR Tracks N of Dundas	May 22-14	Railway Tracks	30.0	0.0730	0.1668
Third Street, Northbound, Crossing RR Tracks N of Culver Rd	May 22-14	Railway Tracks	30.0	0.0559	0.0736
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	Feb 14-14	North Bridge Junction	80.0	0.0245	0.0272
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	82.0	0.0442	0.0313
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	81.0	0.0351	0.0302
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	82.0	0.0384	0.0318
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	82.0	0.0360	0.0316
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	74.0	0.0223	0.0327
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	50.0	0.0213	0.0249
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	65.0	0.0229	0.0295
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	Feb 14-14	South Bridge Junction	80.0	0.0290	0.0383
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	82.0	0.0263	0.0407
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	82.0	0.0283	0.0428
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	82.0	0.0295	0.0457
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	82.0	0.0293	0.0404
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	81.0	0.0338	0.0372
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	53.0	0.0241	0.0321
Veterans Memorial Parkway, SB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	79.0	0.0323	0.0352
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	82.0	0.0430	0.0793
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	82.0	0.0442	0.0854
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	97.0	0.0536	0.0785
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	90.0	0.0462	0.0627
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	89.0	0.0239	0.1204
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	South Bridge Junction	48.0	0.0240	0.1334
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	60.0	0.0530	0.0859
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	68.0	0.0429	0.0848
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	96.0	0.0815	0.3289
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	90.0	0.0489	0.0682
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	87.0	0.0336	0.0453
Veterans Memorial Parkway, NB, Crossing Bridge over S Branch of Thames	May 22-14	North Bridge Junction	48.0	0.0219	0.0443
Veterans Memorial Parkway, SB, Crossing RR Tracks Just S of Huron St	May 22-14	Railway Tracks	74.0	0.0408	0.0767
Wharcliffe Rd, NB, London at Thames River Bridge Near Riverside Drive	Mar 31-14	South Bridge Junction	57.0	0.0307	0.1095
Wharcliffe Rd, NB, London at Thames River Bridge Near Riverside Drive	Mar 31-14	North Bridge Junction	61.0	0.0708	0.3760

Average = 71.9 0.0372 0.0702