

Table A-2
Ratio of Total Load Moments of the Study Vehicles to the HS20 (Short) Design Vehicle

Bridge Type	Length of Main Span (ft)	Total Length (ft)	HS20 (Short)	HS20 (Long)	3S2 w/40' trailer 73,280 lbs	3S2 w/45' trailer 80,000 lbs	3S2 w/53'trailer 80,000 lbs	3S2 2 Rocky Mtn Dbl 104,000 lbs	3S2 4 Turnpike Dbl 128,000 lbs.
Simple	20	20	1.00	1.00	0.85	0.89	0.89	0.89	0.83
Simple	30	30	1.00	0.95	0.88	0.89	0.89	0.95	0.95
Simple	40	40	1.00	0.84	0.80	0.82	0.82	0.86	0.90
Simple	50	50	1.00	0.80	0.78	0.80	0.80	0.83	0.88
Simple	60	60	1.00	0.82	0.77	0.80	0.80	0.82	0.87
Simple	70	70	1.00	0.86	0.82	0.80	0.80	0.85	0.87
Simple	80	80	1.00	0.88	0.85	0.84	0.81	0.87	0.88
Simple	90	90	1.00	0.91	0.88	0.88	0.82	0.89	0.90
Simple	100	100	1.00	0.92	0.90	0.90	0.86	0.93	0.93
Simple	110	110	1.00	0.93	0.92	0.92	0.88	0.96	0.97
Simple	120	120	1.00	0.94	0.93	0.94	0.91	0.99	1.00
Simple	130	130	1.00	0.95	0.94	0.95	0.92	1.01	1.03
Simple	140	140	1.00	0.96	0.95	0.96	0.94	1.03	1.06
Simple	150	150	1.00	0.96	0.96	0.97	0.95	1.04	1.07
Simple	160	160	1.00	0.96	0.96	0.98	0.96	1.05	1.09
Simple	170	170	1.00	0.97	0.96	0.98	0.96	1.06	1.10
Simple	180	180	1.00	0.97	0.97	0.99	0.97	1.06	1.11
2-span Cont	20	40	-1.00	-1.05	-0.93	0.92	0.92	-0.92	0.91
2-span Cont	30	60	1.00	-1.02	-0.96	-0.93	0.86	-0.92	0.91
2-span Cont	40	80	1.00	-0.99	-1.00	-1.01	-0.94	-1.03	-1.03
2-span Cont	50	100	1.00	-0.98	-1.01	-1.08	-1.07	-1.16	-1.19
2-span Cont	60	120	-1.00	-0.95	-0.99	-1.07	-1.10	-1.25	-1.23
2-span Cont	70	140	-1.00	-0.92	-0.94	-1.03	-1.07	-1.24	-1.22
2-span Cont	80	160	-1.00	-0.94	-0.92	-0.99	-1.03	-1.21	-1.25
2-span Cont	90	180	-1.00	-0.95	-0.94	-0.95	-1.00	-1.18	-1.25
2-span Cont	100	200	-1.00	-0.96	-0.95	-0.96	-0.97	-1.15	-1.24
2-span Cont	110	220	-1.00	-0.97	-0.96	-0.98	-0.95	-1.12	-1.23
2-span Cont	120	240	-1.00	-0.98	-0.97	-0.99	-0.97	-1.09	-1.21
2-span Cont	130	260	-1.00	-0.98	-0.98	-1.00	-0.98	-1.09	-1.19
2-span	140	280	-1.00	-0.98	-0.98	-1.01	-0.99	-1.11	-1.17

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Cont									
2-span Cont	150	300	-1.00	-0.98	-0.99	-1.01	-1.00	-1.12	-1.15
2-span Cont	160	320	-1.00	-0.99	-0.99	-1.02	-1.00	-1.13	-1.17
2-span Cont	170	340	-1.00	-0.99	-0.99	-1.02	-1.01	-1.14	-1.18
2-span Cont	180	360	-1.00	-0.99	-0.99	-1.02	-1.01	-1.14	-1.20
3-span Cont	20	60	1.00	-1.02	-0.96	-0.92	0.86	-0.95	0.92
3-span Cont	30	90	1.00	-1.00	-0.99	-1.00	-0.92	-1.01	-1.03
3-span Cont	40	120	-1.00	-0.98	-1.00	-1.06	-1.04	-1.12	-1.16
3-span Cont	50	150	-1.00	-0.92	-0.96	-1.03	-1.04	-1.16	-1.16
3-span Cont	60	180	-1.00	-0.91	-0.92	-0.99	-1.02	-1.16	-1.14
3-span Cont	70	210	-1.00	-0.94	-0.91	-0.96	-0.99	-1.15	-1.18
3-span Cont	80	240	-1.00	-0.95	-0.94	-0.94	-0.97	-1.13	-1.19
3-span Cont	90	270	-1.00	-0.96	-0.95	-0.96	-0.95	-1.11	-1.19
3-span Cont	100	300	-1.00	-0.97	-0.96	-0.98	-0.94	-1.08	-1.18
3-span Cont	110	330	-1.00	-0.98	-0.97	-0.99	-0.96	-1.06	-1.17
3-span Cont	120	360	-1.00	-0.98	-0.98	-1.00	-0.98	-1.09	-1.16
3-span Cont	130	390	-1.00	-0.98	-0.98	-1.01	-0.99	-1.11	-1.15
3-span Cont	140	420	-1.00	-0.98	-0.98	-1.01	-1.00	-1.12	-1.15
3-span Cont	150	450	-1.00	-0.99	-0.99	-1.02	-1.00	-1.13	-1.16
3-span Cont	160	480	-1.00	-0.99	-0.99	-1.02	-1.01	-1.14	-1.18
3-span Cont	170	510	-1.00	-0.99	-0.99	-1.02	-1.01	-1.14	-1.19
3-span Cont	180	540	-1.00	-0.99	-0.99	-1.02	-1.01	-1.14	-1.20