

Table 2.15.4: Vehicle Attributes for Parametric Study

| | Truck 1 | Truck 2 | Truck 3 | Truck 4 | |
|---------------|---------|---------|----------|----------|--------|
| Mass | 200 | 200 | 200 | 200 | slinch |
| spring k | 31582.7 | 71061.2 | 126330.9 | 197392.1 | lb/in |
| Damping Ratio | 10.0% | 10.0% | 10.0% | 10.0% | |
| Nat. Freq. | 2 | 3 | 4 | 5 | Hz |

The following plots summarize the results of this parametric study.

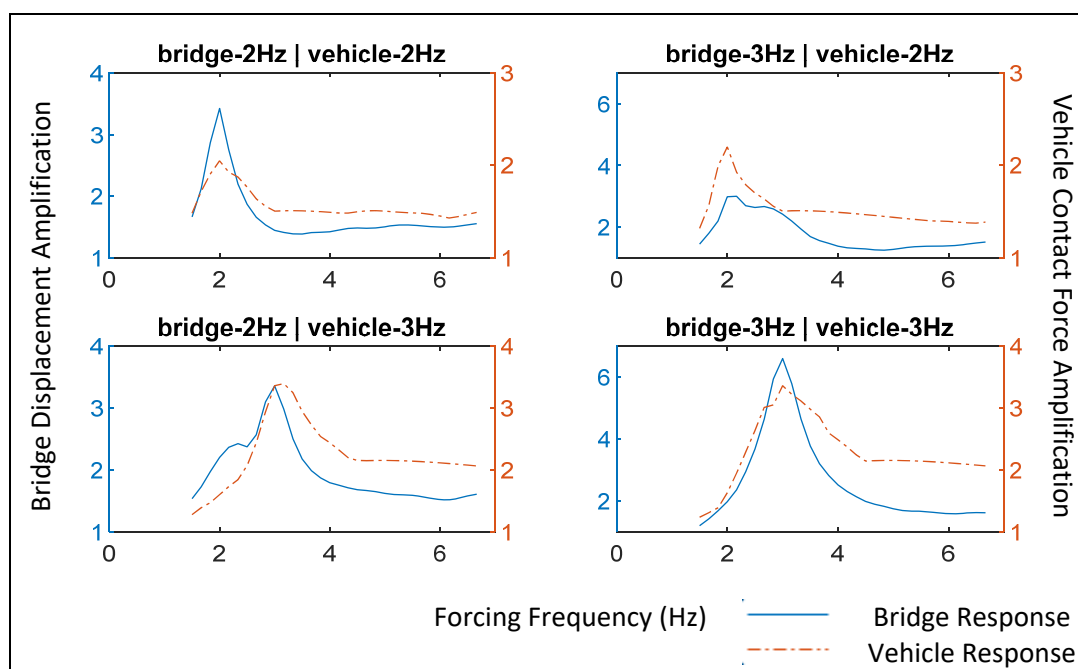


Figure 2.15.8: Effect of Bridge and Vehicle Frequency on Bridge Displacement and Vehicle Contact Force (1/4)

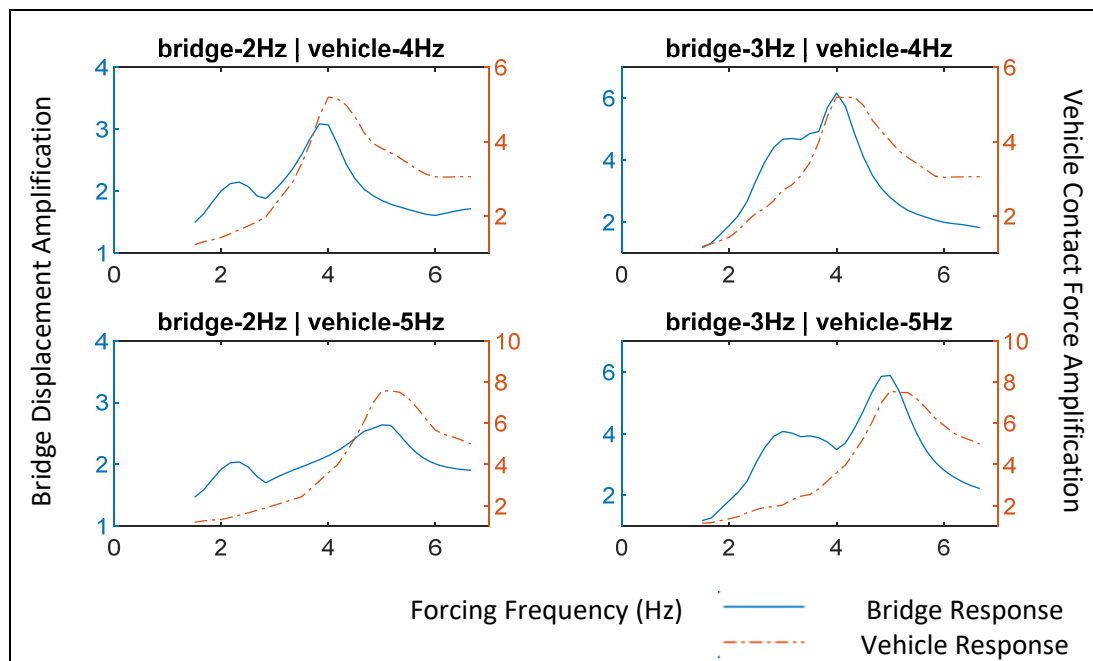


Figure 2.15.9: Effect of Bridge and Vehicle Frequency on Bridge Displacement and Vehicle Contact Force (2/4)

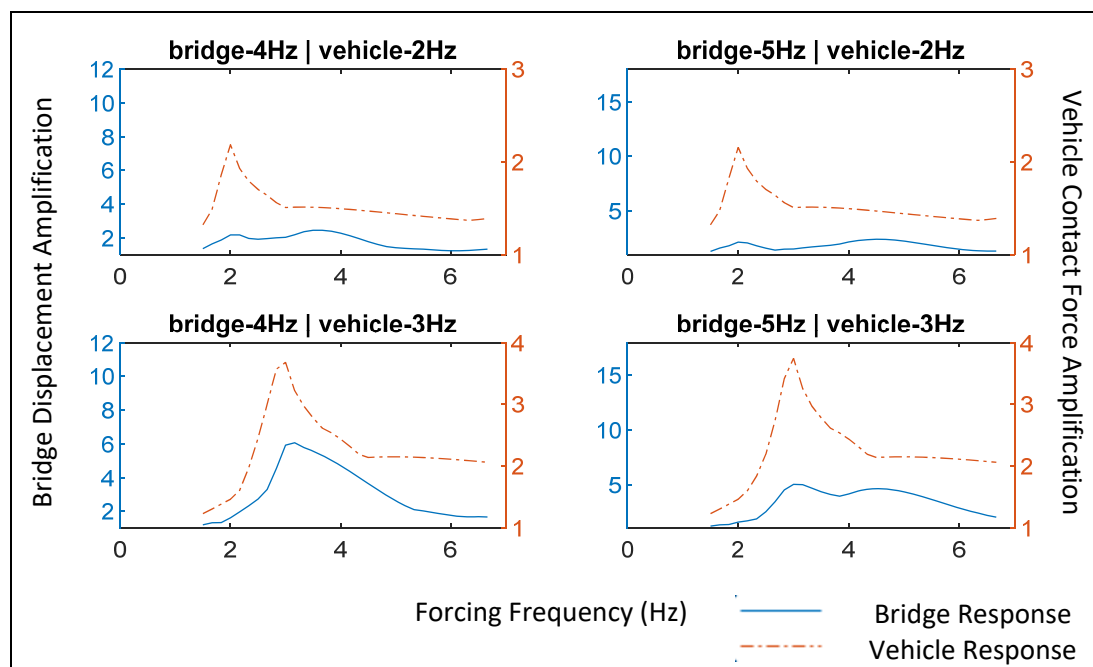


Figure 2.15.10: Effect of Bridge and Vehicle Frequency on Bridge Displacement and Vehicle Contact Force (3/4)

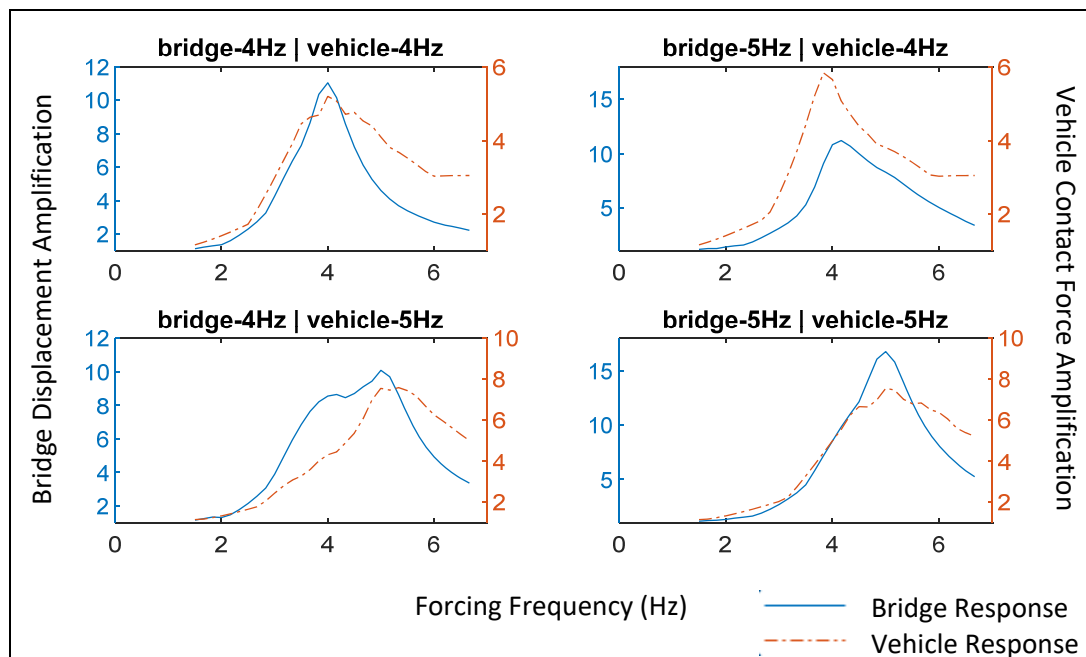


Figure 2.15.11: Effect of Bridge and Vehicle Frequency on Bridge Displacement and Vehicle Contact Force (4/4)

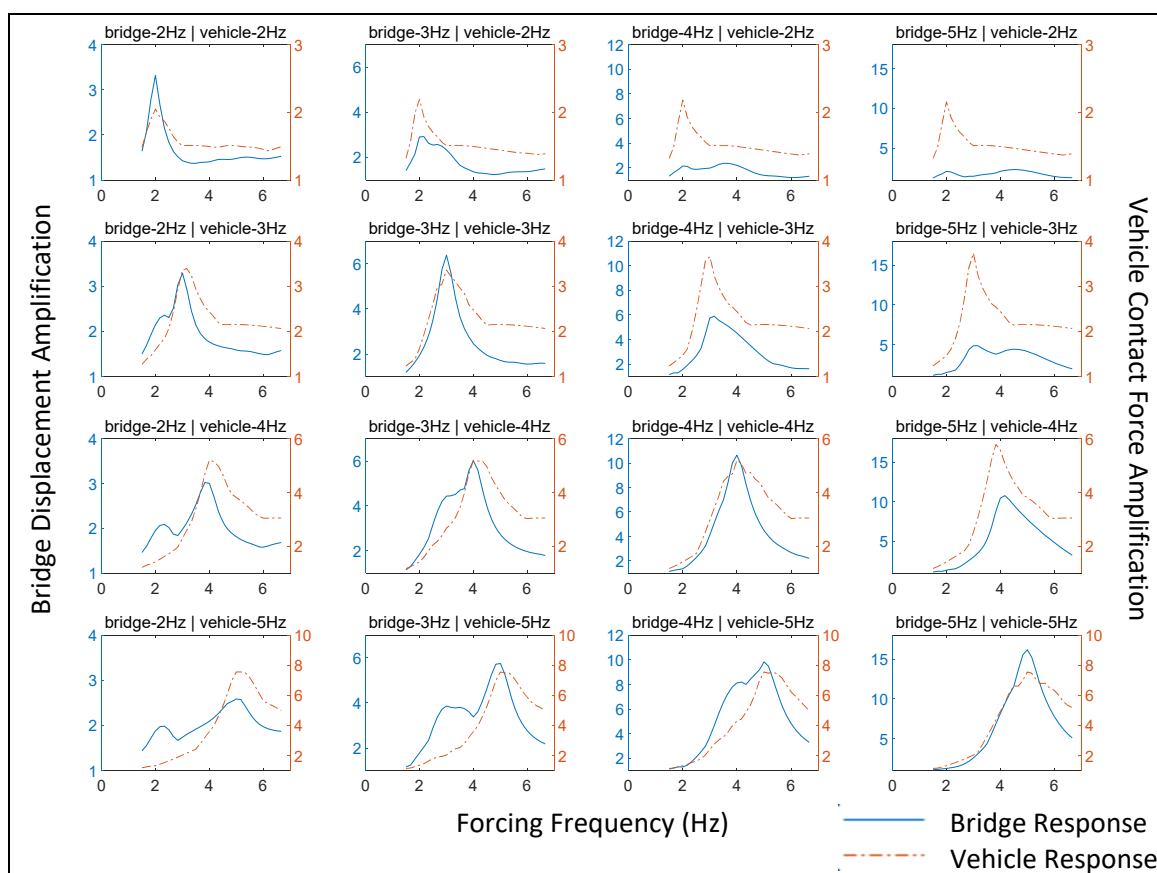


Figure 2.15.12: Effect of Bridge and Vehicle Frequency on Bridge Displacement and Vehicle Contact Force (Total)