

Sensors were installed on the morning of July 7th, 2016. Data was gathered continuously for several hours during normal operation of the bridge (i.e. no restrictions imposed on traffic) on the afternoon of July 7th. Daytime temperatures were steady near 90°F (32°C) with mostly cloudy skies and no precipitation. Sensors were removed from the bridge on July 8th.

Results and Interpretation

The resulting acceleration data was compared by examining and comparing time-histories for different cross-girders. All instrumented cross girders experienced similar levels of vertical and longitudinal acceleration, while the cross girder at pier 7 experienced much higher transverse acceleration. The transverse acceleration time history is shown below, while those for vertical and longitudinal acceleration are provided in the appendix.

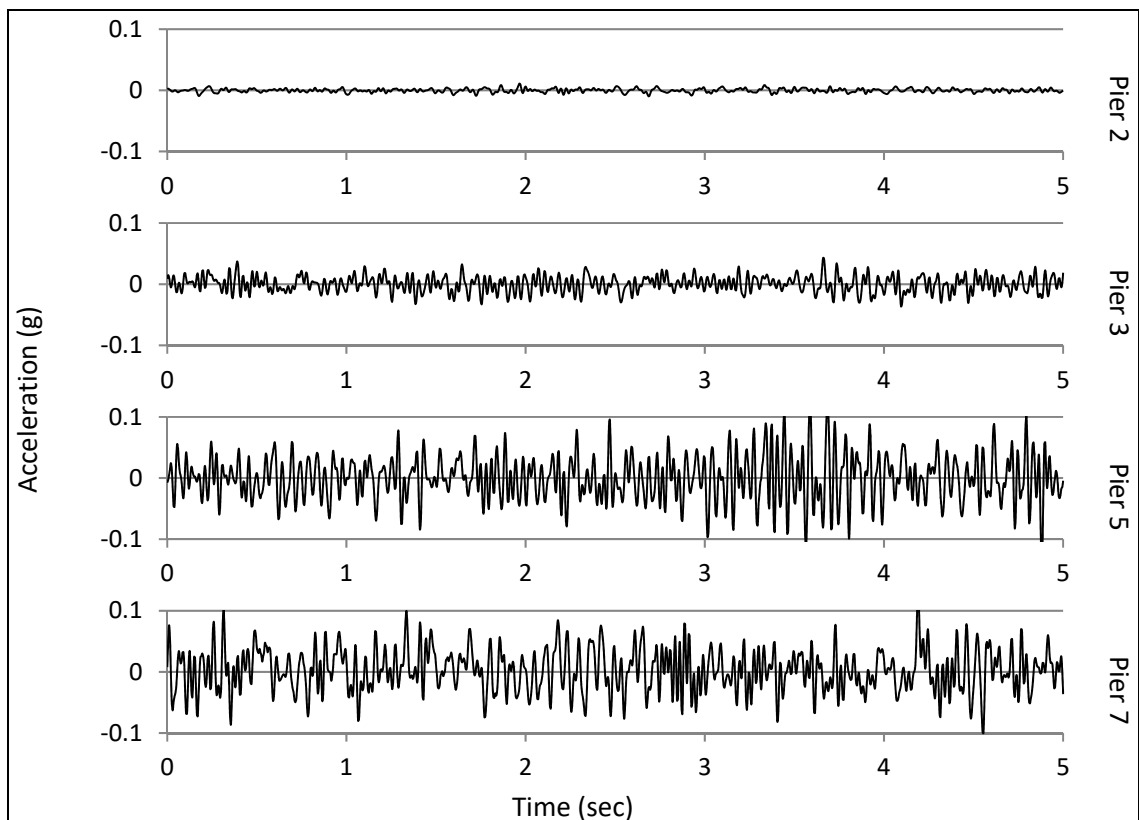


Figure 1.5.6: Transverse Acceleration Time Histories

To further compare acceleration the root-mean-square (RMS) was computed for each location over a period of 28 minutes. Because of the cyclic nature of structural acceleration that is nearly