

Influence surface

An **influence surface** is generated for a specific point along a structure subjected to moving load, where the variation of a given response quantity (axial, shear, or flexural force, reaction, etc.) at that specific point is plotted as the moving load travels across the structure. The influence surface provides insight into the structural response expected at a point within a structural member or connection relative to where the structure is subjected to loading. Resolution of the influence surface is integral to [influence-based moving-load](#) analysis.

For example, Figure 1 presents an influence line which indicates the flexural response (Moment 3-3) which occurs at the midspan location of the left span as a vehicle load moves across the two-span continuous girder system.

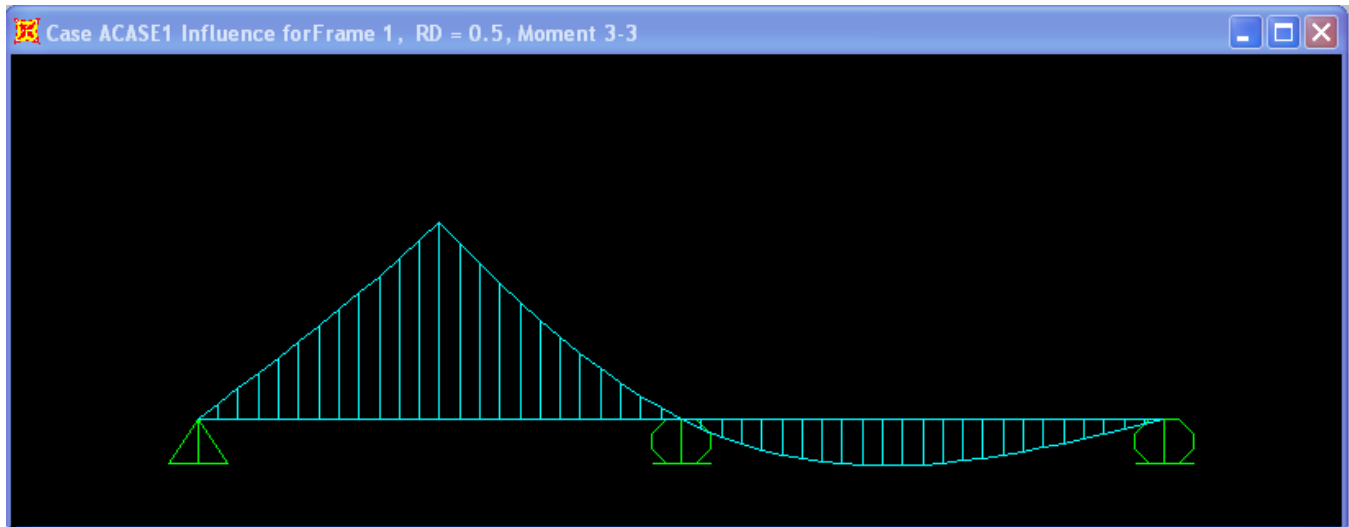


Figure 1 - Influence line

See Also

- [Influence line](#)