

# Influence-based moving-load analysis first steps (CSiBridge)

Tutorial	
Name:	Influence-based moving-load analysis first steps (CSiBridge)
Description:	Procedure for setting up influence-based moving-load analysis.
Program:	CSiBridge
Version:	18.0.1
Model ID:	

Influence-based [moving-load](#) analysis can be setup using the following procedure:

- Define [Vehicle](#) through "Loads Tab > Vehicles > New"
- Define vehicle class through "Loads Tab > Vehicle Classes > New". Note that default vehicle class is automatically added for each vehicle.
- Define [layout line](#) via "Layout Tab > Layout Line > New"
- Define [lane](#) via "Layout Tab > Lane > New"
- Define a moving-load [case](#) via "Analysis Tab > Load Cases > New". Set the load-case type to Moving Load, then specify the vehicles and lanes assigned to this moving load, as shown in Figure 1:

CSiBridge 2016 v18.0.1 Advanced w/Rating - T-Ramp V18.0.1 original

Load Case Data - Moving Load

Load Case Name

Moving

Set Def Name

Notes

Modify/Show...

Load Case Type

Moving Load

Design...

Stiffness to Use

☒ Zero Initial Conditions - Unstressed State

☐ Stiffness at End of Nonlinear Case

Important Note: Loads from the Nonlinear Case are NOT included in the current case

Directional Factors

☒ Vertical

1.

☐ Braking/Acceleration

☐ Centrifugal

MultiLane Scale Factors

Number of Lanes Loaded

Reduction Scale Factor

1

1

2

1

Modify

Lanes Loaded for Assignment 1

List of Lane Definitions

Selected Lane Definitions

LANE1  
LANE2

Mass Source

MSSSRC1

Loads Applied

Assign Number	Vehicle Class	Scale Factor	Min Loaded Lanes	Max Loaded Lanes	Lanes Loaded
1	COOPERE80	1	0	0	All

Add

Modify

Delete

OK

Cancel

Figure 1: Moving load case definition

## See Also

- [CSI Analysis Reference Manual](#) , Chapter "Moving Load Analysis"