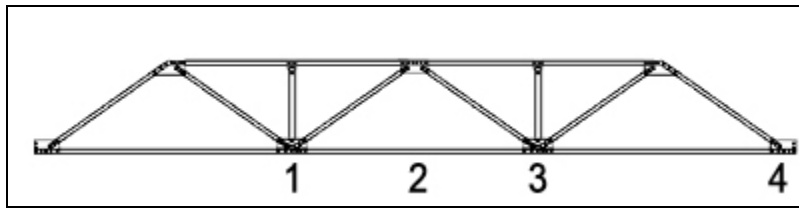


UMass Amherst  
 Adaptive Use Bridge Project  
 Southern Vermont (1906) Bridge Load Test 1 Results



Bridge diagram and node labeling. Dial gages located at points 1, 2 and 3.

Test #1. Truck's front axle placed at location 3.

| Gage # | Zero (in) | Disp 3 (in) | Net 3 (in) |
|--------|-----------|-------------|------------|
| 1      | 0.0035    | 0.0335      | 0.0300     |
| 2      | 0.0035    | 0.0400      | 0.0365     |
| 3      | 0.0000    | 0.0400      | 0.0400     |

Test #2. Truck's front axle placed at location 3.

| Gage # | Zero (in) | Disp 3 (in) | Net 3 (in) |
|--------|-----------|-------------|------------|
| 1      | 0.0035    | 0.0310      | 0.0275     |
| 2      | -0.0025   | 0.0380      | 0.0405     |
| 3      | -0.0015   | 0.0355      | 0.0370     |

Test #3. Moving Load; Front axle placed at location 1, 3 and 4.

| Gage # | Zero (in) | Disp 1 (in) | Net 1 (in) | Disp 3 (in) | Net 3 (in) | Disp 4 (in) | Net 4 (in) |
|--------|-----------|-------------|------------|-------------|------------|-------------|------------|
| 1      | 0.0040    | 0.0250      | 0.0210     | 0.0310      | 0.0270     | 0.0090      | 0.0050     |
| 2      | -0.0035   | 0.0235      | 0.0270     | 0.0365      | 0.0400     | 0.0150      | 0.0185     |
| 3      | -0.0020   | 0.0185      | 0.0205     | 0.0355      | 0.0375     | 0.0180      | 0.0200     |

Test #4. Moving Load; Front axle placed at location 1, 3 and 4.

| Gage # | Zero (in) | Disp 1 (in) | Net 1 (in) | Disp 3 (in) | Net 3 (in) | Disp 4 (in) | Net 4 (in) |
|--------|-----------|-------------|------------|-------------|------------|-------------|------------|
| 1      | 0.0040    | 0.0240      | 0.0200     | 0.0295      | 0.0255     | 0.0075      | 0.0035     |
| 2      | -0.0015   | 0.0250      | 0.0265     | 0.0380      | 0.0395     | 0.0155      | 0.0170     |
| 3      | -0.0010   | 0.0185      | 0.0195     | 0.0350      | 0.0360     | 0.0170      | 0.0180     |

Summary of results. All displacements are inches.

| Test | Front axle at 1 |        |        | Front axle at 3 |        |        | Front axle at 4 |        |        |
|------|-----------------|--------|--------|-----------------|--------|--------|-----------------|--------|--------|
|      | gage 1          | gage 2 | gage 3 | gage 1          | gage 2 | gage 3 | gage 1          | gage 2 | gage 3 |
| 1    | -               | -      | -      | 0.0300          | 0.0365 | 0.0400 | -               | -      | -      |
| 2    | -               | -      | -      | 0.0275          | 0.0405 | 0.0370 | -               | -      | -      |
| 3    | 0.0210          | 0.0270 | 0.0205 | 0.0270          | 0.0400 | 0.0375 | 0.0050          | 0.0185 | 0.0200 |
| 4    | 0.0200          | 0.0265 | 0.0195 | 0.0255          | 0.0395 | 0.0360 | 0.0035          | 0.0170 | 0.0180 |
| Mean | 0.0205          | 0.0268 | 0.0200 | 0.0275          | 0.0391 | 0.0376 | 0.0043          | 0.0178 | 0.0190 |
| Max  | 0.0210          | 0.0270 | 0.0205 | 0.0300          | 0.0405 | 0.0400 | 0.0050          | 0.0185 | 0.0200 |
| Min  | 0.0200          | 0.0265 | 0.0195 | 0.0255          | 0.0365 | 0.0360 | 0.0035          | 0.0178 | 0.0180 |