

WEIGH-IN-MOTION REQUIREMENTS ANALYSIS

The following questions are designed to assist you in defining your weigh-in-motion requirements and, when completed, can be used to provide the basis for a cost estimate from your weigh-in-motion scale supplier. Please send your completed form to Cardinal Scale Manufacturing Company, 203 East Daugherty, Webb City, MO 64870 for a no-obligation review. It may also be faxed to 417.673.5001 or emailed to

1. What is the purpose of the system?

2. What level of accuracy is required for:
 - a. Gross Vehicle Weight
 - b. Wheel Weight
 - c. Single Axle Weight
 - d. Axle Group Weight
 - e. Speed
 - f. Axle Spacing
 - g. Other

3. What is the estimated average speed of the vehicles to be weighed?

4. Please describe the traffic flow and / or characteristics of the site.

5. How much traffic will the site see (ADT)? What percentage of the traffic is trucks?

6. Should the WIM scale be capable of weighing left and right side weights?

7. Where will the system electronics be located?

8. How far are power and telephone drops?

9. Will the WIM system need to be interfaced to an existing static scale? If so, what brand of scale and associated instrumentation?

10. Is an Automatic Vehicle Identification (AVI) system interface required? If so, what type of interface is used?
11. Will vehicle classification be required and, if so, what classification scheme will be used?
12. What is the ambient temperature range at the scale site?
13. Are there any unusual climatic conditions at the site?
14. What are the approach to and departure from the proposed WIM scale site like?
15. What is the:
 - a. Road surface material?
 - b. Road condition?
 - c. Pavement thickness?
 - d. Slope (lateral and longitudinal)?
 - e. Surface smoothness?
 - f. Road curvature?
 - g. Rutting or cracking?
 - h. Ramp length if at a weigh station?
16. Are there on/off ramps nearby?
17. What types of communications are required?
18. What type of data output / peripheral interface is required?
19. What will the operator interface, if any, be?
20. What kind of data needs to be stored and how much capacity is required?
21. Will a presorting system be required?
22. Are there any other special requirements?
23. What is the location of the site?
24. A sketch of the proposed site would be helpful.