68. Roadside Rating

Definition: A rating of the safety of the roadside, ranked on a seven-point categorical scale from 1 (best) to 7 (worst). See Figure 8 and Figure 9 on for additional detail.

Recommended Attributes:

1. Rating = 1
   - Wide clear zones greater than or equal to 30 ft from the pavement edgeline.
   - Sideslope flatter than 1:4.
   - Recoverable.

2. Rating = 2
   - Clear zone between 20 and 25 ft from pavement edgeline.
   - Sideslope about 1:4.
   - Recoverable.

3. Rating = 3
   - Clear zone about 10 ft from pavement edgeline.
   - Sideslope about 1:3 or 1:4.
   - Rough roadside surface.
   - Marginally recoverable.

4. Rating = 4
   - Clear zone between 5 to 10 ft from pavement edgeline.
   - Sideslope about 1:3 or 1:4.
   - May have guardrail (5 to 6.5 ft from pavement edgeline).
   - May have exposed trees, poles, or other objects (about 10 ft from pavement edgeline).
   - Marginally forgiving, but increased chance of a reportable roadside collision.

5. Rating = 5
   - Clear zone between 5 to 10 ft from pavement edgeline.
   - Sideslope about 1:3.
   - May have guardrail (0 to 5 ft from pavement edgeline).
   - May have rigid obstacles or embankment within 6.5 to 10 ft of pavement edgeline.
   - Virtually non-recoverable.

6. Rating = 6
   - Clear zone less than or equal to 5 ft.
   - Sideslope about 1:2.
   - No guardrail.
   - Exposed rigid obstacles within 0 to 6.5 ft of the pavement edgeline.
   - Non-recoverable.

7. Rating = 7
   - Clear zone less than or equal to 5 ft.
   - Sideslope 1:2 or steeper.
   - Cliff or vertical rock cut.
   - No guardrail.
   - Non-recoverable with high likelihood of severe injuries from roadside collision.
Figure 8. Illustration of Roadside Ratings.

Source: Zegeer, C.V., J. Hummer; D. Reinfurt; L. Herf; and W. Hunter (1986). Safety Effects of Cross-Section Design for Two-Lane Roads, FHWA-RD-87-008, Federal Highway Administration, Washington, DC.
Figure 9. Illustration of Roadside Ratings (continued).

Source: Zegeer, C.V., J. Hummer; D. Reinfurt; L. Herf; and W. Hunter (1986). Safety Effects of Cross-Section Design for Two-Lane Roads, FHWA-RD-87-008, Federal Highway Administration, Washington, DC.