Ride Quality Rating Guide

This set of cards, based on the Wisconsin Transportation Information Center's Pavement Surface Evaluation and Rating (PASER) gravel manual, is designed to help calibrate your eye for when you rate unsealed roads' ride quality. These ratings are not intended to evaluate factors that affect a road's durability, such as crown, drainage and gravel quality. They are only intended to assess the quality of the road's surface as perceived by the general public. Ride comfort and vehicle wear and tear, along with travel speeds, are the criteria by which the road should be evaluated. The table on the back of this sheet lists distress conditions as described in the PASER manual, along with approximate safe travel speeds for roads at each surface quality, assuming geometric factors are not controlling vehicle speed.

The problem with showing these still photographs is simple: Few unsealed roads are in the same condition throughout the section you are rating. How do combine the various conditions into a single rating? The answer is simple but not easy: You average the whole section in your head.

A few rules of thumb may help:

- A road section can't be more than 2 points better than its worst part.
- A road section can't be more than 1 point better than its worst 10%.

Remember, you are trying to see the road through the public's eyes, so rate the road accordingly. How good do they think the road is?

Another problem arises when a road has some severe distresses, but you can easily avoid them by carefully picking your path. Do you rate the good part or the bad part? There is no single answer, and the best approach is to take the middle ground – downgrade the road for the poor parts, while still giving it credit for the better parts. Again, do your best to evaluate the road as the general public sees it.

If you have questions, don't hesitate to contact the Wyoming T²/LTAP office at (800) 231-2815.

Wyoming Technology Transfer Center

Local Technical Assistance Program

	Rating	Speed, mph*	Distresses** Adapted from the Gravel - PASER manual
10	Excellent	65+	
9	Very Good	55 - 65	
8	Good	50 - 55	Dust under dry conditions; Moderate loose aggregate; Slight washboarding
7	Good	45 - 50	
6	Fair	35 - 45	Moderate washboarding (1" - 2" deep) over 10% - 25% of area; Moderate dust, partial obstruction of vision; None or slight rutting (less than 1" deep); An occasional small pothole (less than 2" deep); Some loose aggregate (2" deep)
5	Fair	25 - 35	
4	Poor	17 - 25	Moderate to severe washboarding (over 3" deep) over 25% of area; Moderate rutting (1" - 3") over 10% - 25% of area; Moderate potholes (2" - 4" deep) over 10% - 25% of area; Severe loose aggregate (over 4")
3	Poor	10 - 17	
2	Very Poor	5 - 10	Severe rutting (over 3" deep) over 25% of area; Severe potholes (over 4" deep)
1	Failed	0 - 5	over 25% of area; Many areas (over 25%) with little or no aggregate

^{*} Passenger car speeds based on surface condition allowing for rider comfort and minimal vehicle wear and tear, assuming no safety or geometric constraints force slower travel. Doesn't spill your coffee!

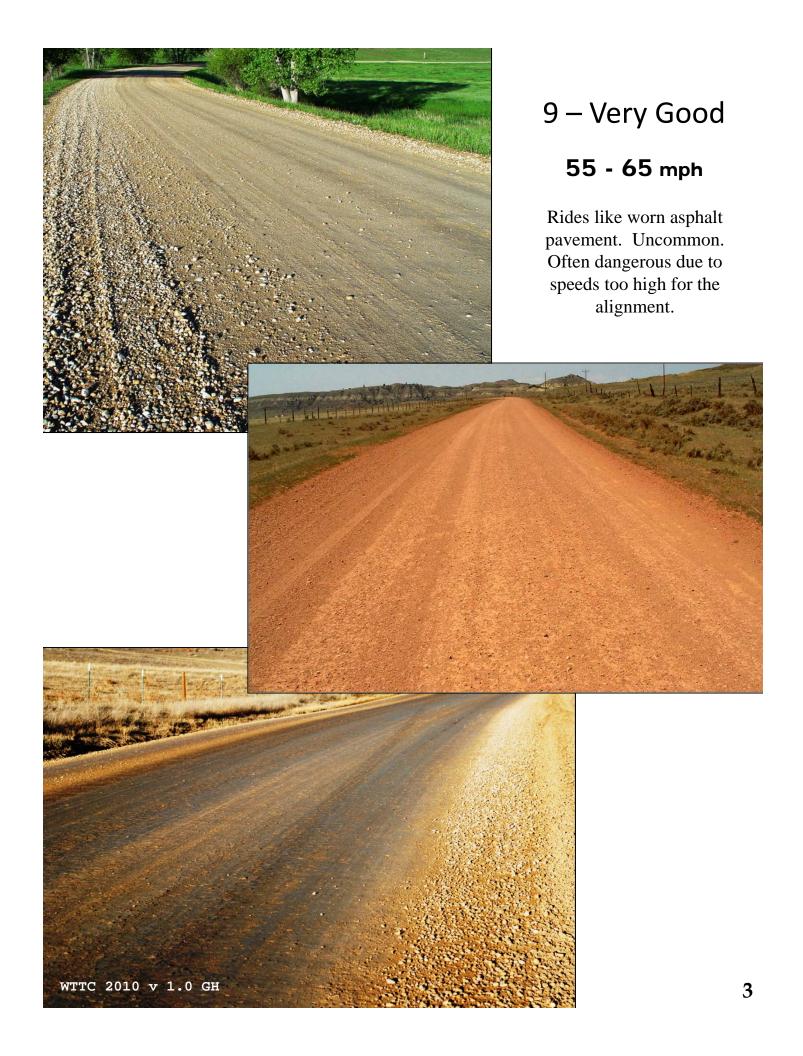
 $** Individual\ roadways\ may\ not\ have\ all\ of\ the\ types\ of\ distress\ listed\ for\ any\ particular\ rating.\ They\ may$

have only one or two types.

10 – Excellent 65+ mph

Rides like good asphalt pavement. Rare. May be hazardous if alignment and shoulders don't allow for safe travel at high speeds.

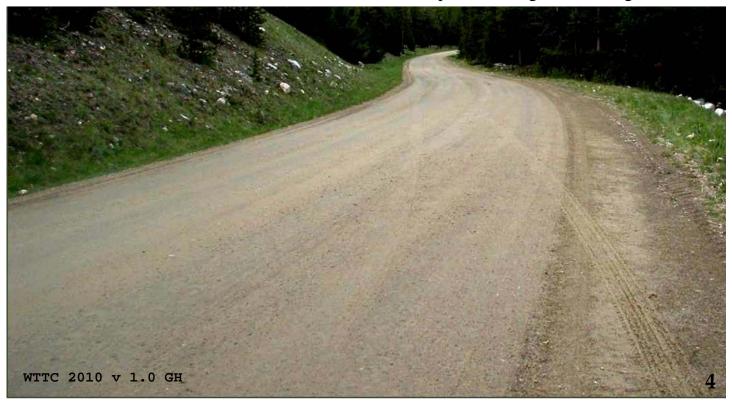






9 – Very Good 55 - 65 mph

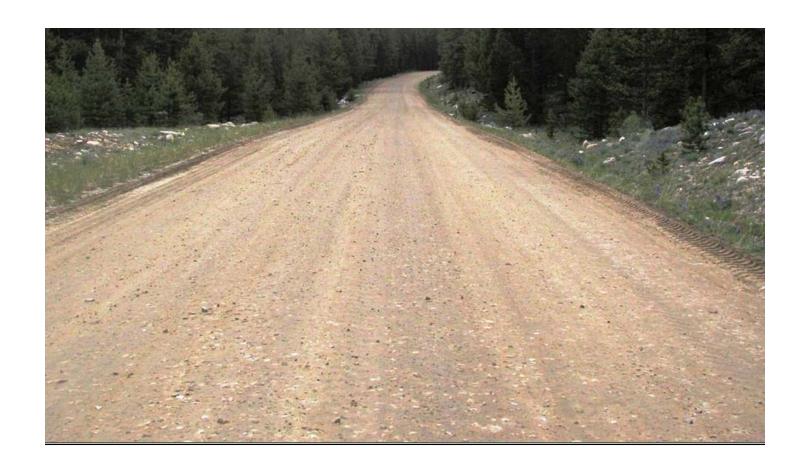
Rides like worn asphalt pavement. Uncommon. Often dangerous due to speeds too high for the alignment.





8-Good 50 - 55 mph Minor roughness and surface distresses.





8 – Good 50 - 55 mph Minor roughness and surface distresses.





7 **–** Good

45 - 50 mph

Significant roughness, distresses and loose aggregate.





7 **–** Good

45 - 50 mph

Significant roughness, distresses and loose aggregate.





7 - Good 45 - 50 mph

Significant roughness, distresses and loose aggregate.





6 – Fair

35 - 45 mph

Washboards, potholes, loose aggregate and fear of isolated,





6 - Fair 35 - 45 mph

Washboards, potholes, loose aggregate and fear of isolated, substantial roughness reduces comfortable travel speeds.







Washboards, potholes, loose aggregate and fear of isolated, substantial roughness reduces comfortable travel speeds.



5 - Fair **25 - 35** mph

Roughness and distresses are prevalent and occasionally severe, significantly reducing speeds.







25 - 35 mph

Roughness and distresses are prevalent and occasionally severe, significantly reducing speeds.

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5 - Fair **25 - 35** mph

Roughness and distresses are prevalent and occasionally severe, significantly reducing speeds.





4 - Poor 17 - 25 mph

Threat of dangerous roughness and vehicle damage substantially reduces speeds.







4 - Poor **17 - 25** mph

Threat of dangerous roughness and vehicle damage substantially reduces speeds.





3 – Poor

10 - 17 mph

High risk of vehicle damage as speeds increase. Dodging hazards is a frequent driving task.





3 – Poor **10 - 17** mph

High risk of vehicle damage as speeds increase. Dodging hazards is a frequent driving task. H

3 – Poor **10 - 17** mph





High risk of vehicle damage as speeds increase. Dodging hazards is a frequent driving task.





Dodging hazards is a constant driving task. Passenger vehicles at risk of bottoming out.

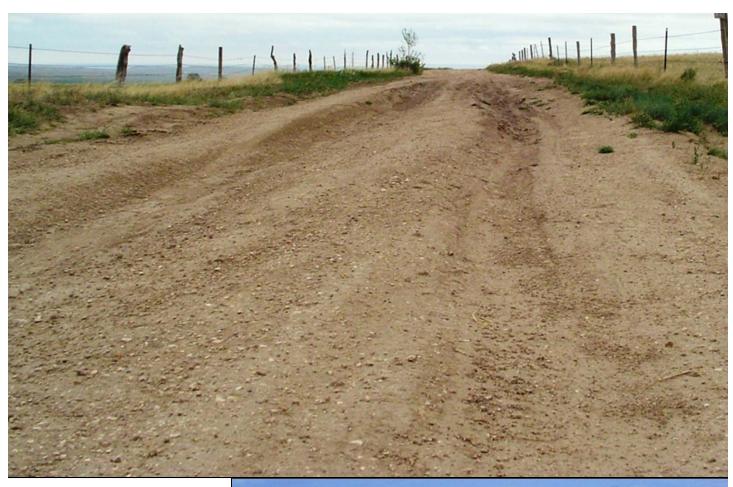


2 – Very Poor

5 - 10 mph

Dodging hazards is a constant driving task. Passenger vehicles at risk of bottoming out.





2 – Very Poor **5 - 10** mph

Dodging hazards is a constant driving task. Passenger vehicles at risk of bottoming out.



