

Appendix D

Pavement Surface Evaluation and Rating (PASER) System

The PASER system is a management tool used to rate the condition of road pavement based on a visual inspection. It provides a way to compare roads within a community and suggests the type of maintenance that may be warranted.

Most pavements will deteriorate through various phases as shown. The rate at which pavement deteriorates from an excellent (10) to a very poor condition (1) depends largely on its environment, traffic loading conditions, original construction quality, and interim maintenance procedures. Two pavements constructed at the same time may have significantly different lives, or certain portions of a pavement may deteriorate more rapidly than others, due to material or construction problems.

PASER	
Rating	Maintenance Category
9 and 10	No maintenance required
7 and 8	Routine maintenance -- cracksealing and minor patching
5 and 6	Preservative treatments – sealcoating
3 and 4	Structural improvement and leveling - -- overlay
1 and 2	Reconstruction

The PASER rating scale can generally be translated into maintenance categories as shown. The normal maintenance or rehabilitation procedure has been found helpful in relating to the surface rating scheme. However, choosing an individual surface rating should not automatically dictate the final maintenance or rehabilitation technique. Future traffic projections, original construction and pavement strength should be considered since these may dictate a more comprehensive rehabilitation. On the other hand, it may be appropriate under special conditions to do nothing and let the pavement fully deteriorate, then rebuild when funds are available.

The key to using the PASER program is to use it consistently and at regular intervals. Once a relative measure for the overall condition of each local road section has been determined it is possible to:

- select appropriate treatments for each section,
- evaluate road sections competing for immediate attention,
- anticipate future deterioration and apply inexpensive maintenance options while they are still feasible; and
- justify budgets for roadway improvements that are adequate to keep the roads in good condition so they will remain less expensive over the long term.

Pavement surface evaluation is an appropriate tool for smaller governmental units, yet it can be used on any size road system. It can be implemented inexpensively using existing staff and can provide a wealth of valuable information at a very reasonable cost.

The best use of PASER is for planning because it gives a picture of road conditions on all roads and can identify candidates for maintenance and rehabilitation. Pavement ride, skid resistance and other safety considerations should be used when selecting final priorities and types of improvement. The PASER system formalizes the procedure to improve consistency from year to year and between individuals, which in turn allows for better planning and decision making.