

AASHTO PP44-00

Standard Practice for Quantifying Cracks in Asphalt Pavement Surfaces

PIARC TC4.2 Workshop on Automated Crack Detection – Quebec City

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- Attempt to set a standard for the rating of surface distress - cracking
- Has been a provisional protocol for quite some time
- Many, many reviews & revisions
- Recent vote on the protocol to keep it alive

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- Standard applies to manual or automated survey of distress
- Recent revisions attempted to simplify the cracking distress into 2 simple components:
 - Environmental: non-load associated (outside the wheel paths)
 - Load related (predominantly in the wheelpaths).

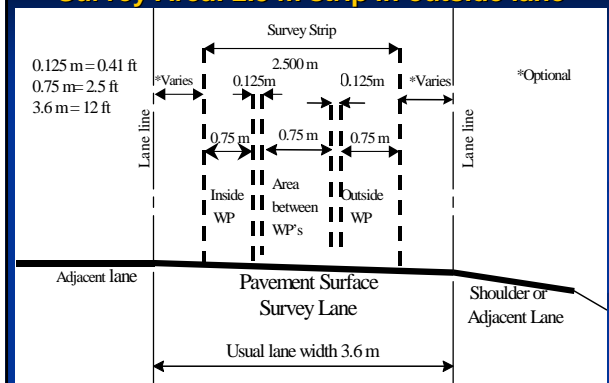
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- Crack definition:
 - Min width of 1 mm
 - Min length of 25 mm
- Manual survey: sealed cracks not to be quantified
- Automated survey: do not quantify cracks greater than 25mm

Cracking by Type

- Mandatory
 - Wheel path
 - Between the wheel paths
- Optional (any other cracking)
 - Edge
 - C/L joints
 - Transverse

Survey Area: 2.5 m strip in outside lane



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- Level was originally going to be just total length in an area.
- The concepts of severity and intensity crept back in to partially appease the old guard but at least the computer didn't have to differentiate between block and alligator cracking (something people can't even do reliably)

Severity Levels

Level	Outside WP (m/m ²)	Inside WP (m/m ²)	Middle of WP (m/m ²)	Edge	C/L Joints	Trans Cracks
1	12	19	5	Opt	Opt	Opt
2	25	10	2	Opt	Opt	Opt
3	10	12	4	Opt	Opt	Opt

Quality Assurance

- Each agency shall develop an adequate quality assurance plan.
- Qualification and Training
- Equipment
- Validation Sections
- Additional Checks
 - Year to year comparisons
 - Gross changes evaluated for trends, consistency and reasonableness against other

Protocol Usage

- Not an official protocol
- Not widely accepted at present
- Follow "Modified" AASHTO protocol
- Based on specific agency "needs"
 - Maintenance strategies used
 - Limitations of resources, technology

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... thank you.



