

Appendix D

PCI Results



RESULTS

Using the data collected during the visual inspection, the MicroPAVER software calculated a Pavement Condition Index (PCI) for each pavement section inspected by averaging the PCIs for each sample unit inspected in the section. Using each section's PCI, a Pavement Condition Rating (PCR) was assigned. The PCIs from this inspection are shown in Table 1. This table also contains PCIs from past inspections as well as projected PCIs for 2006 and 2011. The projections were based on pavement deterioration models developed by MicroPAVER using the inspection data from other pavements in the same airport category as your airport, and with the same surface type and use. The Branch Report in Appendix 1 summarizes current pavement condition by branch while the Section Report in Appendix 2 lists pavement condition by section. The current PCR is shown graphically in Figure NE-3.

Table 1. Past, Present and Future Pavement Condition Indices.

Branch	Section	Inspections				Forecast	
		1988 ¹	1995	1999	2001	2006	2011
A01NE	01	80	77	77	77	63	49
	02	---	79	78	72	65	58
	03	80	84	84	82	68	54
	04		72	68	63	49	39
	05	---	---	99	97	84	70
	06	---	88	88	88	75	60
A02NE	01	---	---	100	100	87	73
AH16NE	01	95	99	99	99	87	73
AH34NE	01	33	98 ²	98	97	90	83
R02NE	01	---	---	75	59	33	8
	02	64	98 ²	98	98	89	81
R16NE	01A	---	73	73	64	33	8
	01B	---	73	73	59	33	8
	01C	---	73	73	64	33	8
	02A	88	85	84	79	73	48
	02B	88	85	84	71	41	15
	02C	88	85	84	76	71	41
	03A	71	73	73	67	58	50
	03B	71	73	73	62	53	46
	03C	71	73	73	68	59	51
T01NE	01	---	97	97	97	84	73
T02NE	01	---	97	96	94	81	71
	02	---	100	100	93	87	84
T03NE	01	---	---	---	100	86	75
TANE	01	96	100	99	100 ²	86	75
	02	98	95	95	100 ²	86	75
TBNE	01	100	96	96	92	80	70

¹ Inspection completed by others.

² Increase in PCI due to maintenance or rehabilitation.



Table 1. Past, Present and Future Pavement Condition Indices - continued.

Branch	Section	Inspections				Forecast	
		1988 ¹	1995	1999	2001	2006	2011
TCNE	01	---	96	96	97 ²	84	73
	02	30	95 ²	94	100 ²	89	87
TDNE	01	88	90	89	86	75	66
TENE	01	33	98 ²	98	98	88	86
	02	42	99 ²	99	99	88	87
	03	66	84	72	72	55	52

¹ Inspection completed by others.

² Increase in PCI due to maintenance or rehabilitation.

Section PCIs at the airport range from a low of 59 (a PCR of "Good") to a high of 100 (a PCR of "Excellent"). The average PCI for all airport pavements is 84, corresponding to an overall PCR of "Very Good". Figure NE-4 shows how much pavement area is associated with each Pavement Condition Rating category and also shows pavement condition distribution from the inspections conducted in 1999 and 1995. The primary distresses observed during the inspection were longitudinal and transverse cracking and weathering and raveling with isolated occurrences of alligator cracking, block cracking, depressions, oil spillage, patching and rutting.

A graphical representation of the projected PCIs listed in Table 1 is shown in Figure NE-5.

RECOMMENDATIONS

Data collected during the visual condition survey were used by the MicroPAVER software to generate the Network Maintenance Report contained in Appendix 3. This report identifies, for each pavement section, the recommended localized maintenance activities that should be completed to repair the defects observed during the visual inspection. The repair quantities identified in the report were extrapolated to cover the entire pavement section, based on the inspected sample units. If the repair activities identified are completed, the rate of deterioration will be slowed.

The localized maintenance activities to be applied are selected by the MicroPAVER software based on the Maintenance & Repair (M&R) policy established for the Oregon aviation system. The report results indicate that, over the entire airport, the following quantities of localized maintenance are needed:

- 6,010 linear feet of asphalt concrete crack sealing.
- 36 square feet of asphalt concrete shallow patching.

The MicroPAVER software can also identify and schedule recommended global maintenance activities (applied over an entire section) such as fog seals, slurry seals and other surface treatments, as well as major rehabilitation activities such as asphalt concrete overlays and complete reconstruction. MicroPAVER schedules global

