



PREVENTIVE MAINTENANCE IN KENTUCKY

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PREVENTIVE MAINTENANCE OVERVIEW

- ▶ WHAT IS PREVENTIVE MAINTENANCE
 - ▶ LONG TERM STRATEGY THAT EXTENDS THE LIFE OF THE PAVEMENT WHILE IMPROVING PERFORMANCE AND SAFETY.

PREVENTIVE MAINTENANCE OVERVIEW

- ▶ TREATMENTS
 - ▶ 0.75" 4.75mm ASPHALT THINLAY
 - ▶ DOUBLE MICROSURFACE
 - ▶ CHIP SEAL
 - ▶ CAPE SEAL (MICRO/THINLAY)





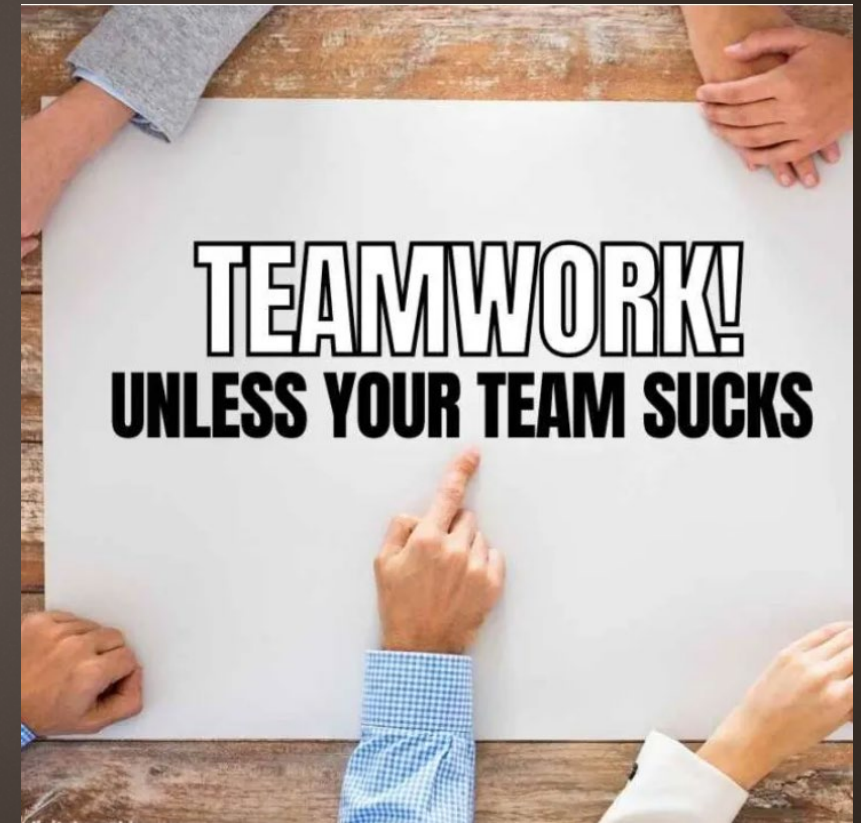




Cape Seal

HOW PM GETS TO LETTING

- ▶ IT ALL HAPPENS AS A TEAM
 - ▶ DISTRICT SELECTS 75 CL MILES
 - ▶ CO EVALUATES SECTIONS
 - ▶ DISTRICT CHOOSES FROM VIABLE CANDIDATES
 - ▶ CO SUBMITS LIST
 - ▶ DISTRICT SUBMITS ESTIMATE
 - ▶ DAVID, KEN AND EVEN BRIAN MAKE THE MAGIC



WHY WE DO PM

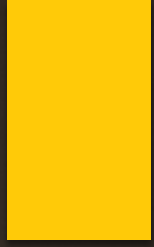
- ▶ IT LOWERS MAINTENANCE COSTS
- ▶ DECREASES VEHICLE OPERATING COSTS
- ▶ INCREASES SAFETY
- ▶ EXTENDS AND IMPROVES THE PAVEMENT SURFACE LIFE



IMPROVING SURFACE LIFE



- ▶ 4,000+ LANE MILES OF PM TREATMENTS
- ▶ AVERAGE OF 14% SURFACE LIFE EXTENTION AND IMPROVEMENT
- ▶ IF WE USED RESURFACING ALONE, IT WOULD COST 8-13% MORE TO GET THE SAME LEVEL OF NETWORK IMPROVEMENT WE HAVE SEEN BY ADDING PM TREATMENTS TO OUR TOOLBOX

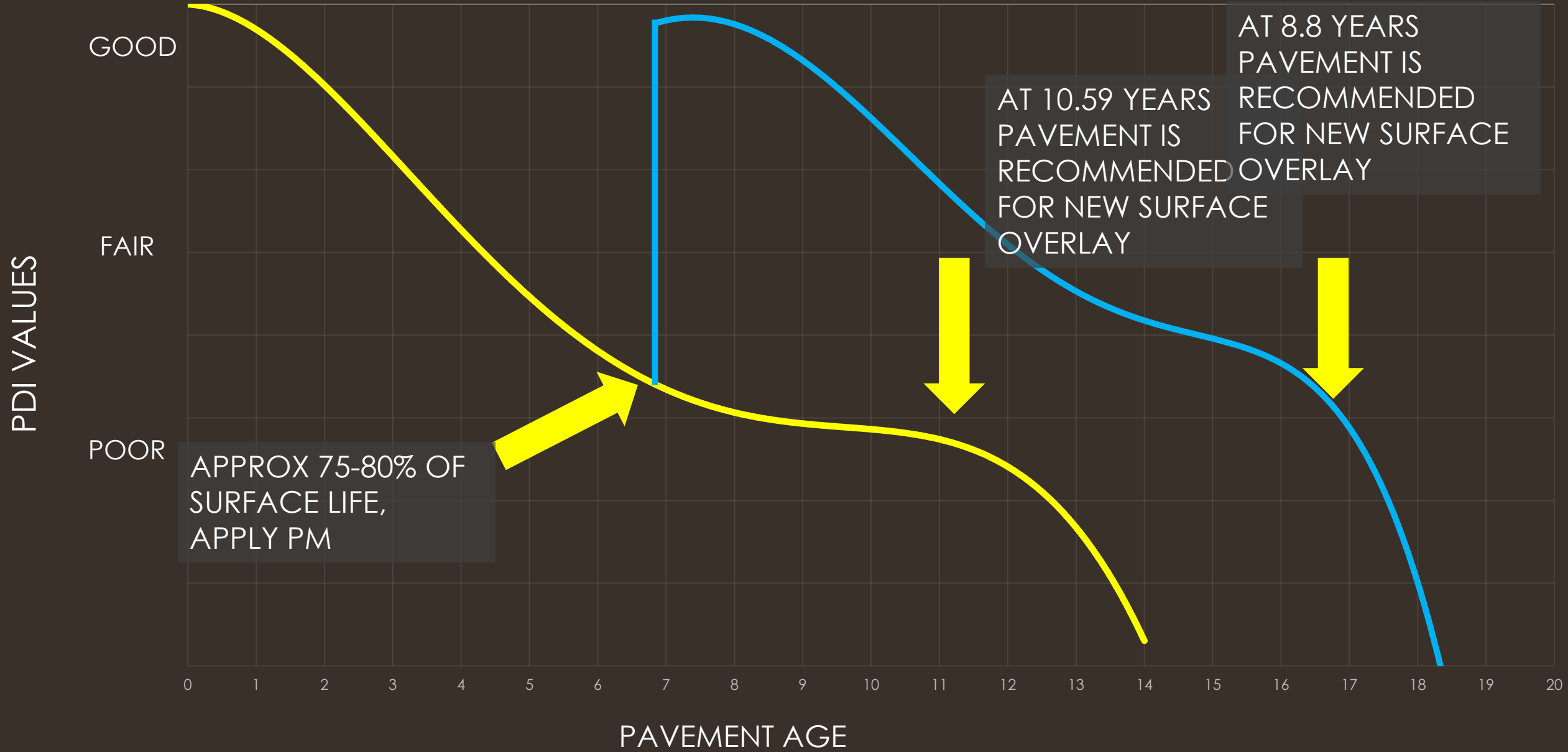


PM TREATMENT SELECTION

TIMING IS EVERYTHING!



PAVEMENT SURFACE DISTRESS

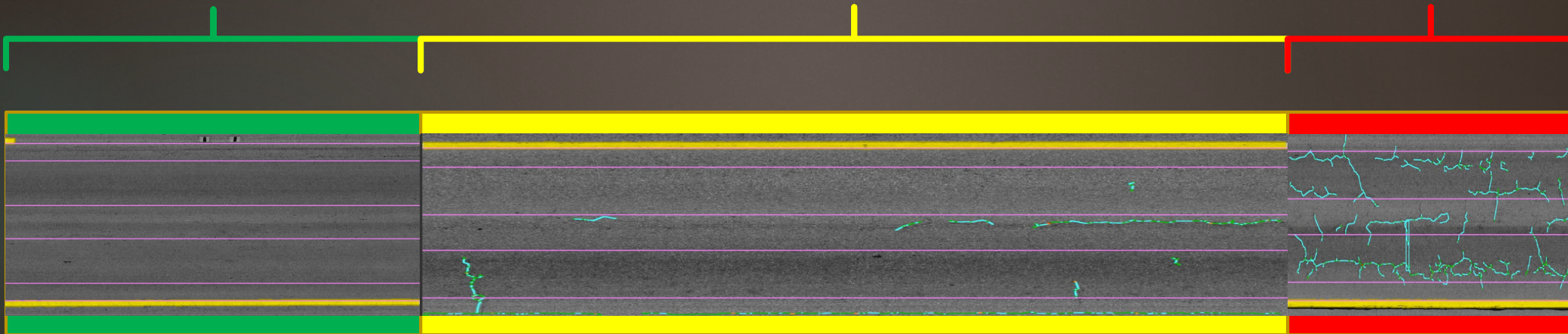


GOOD FAIR POOR

3 YEARS GOOD
PAVEMENT TIME

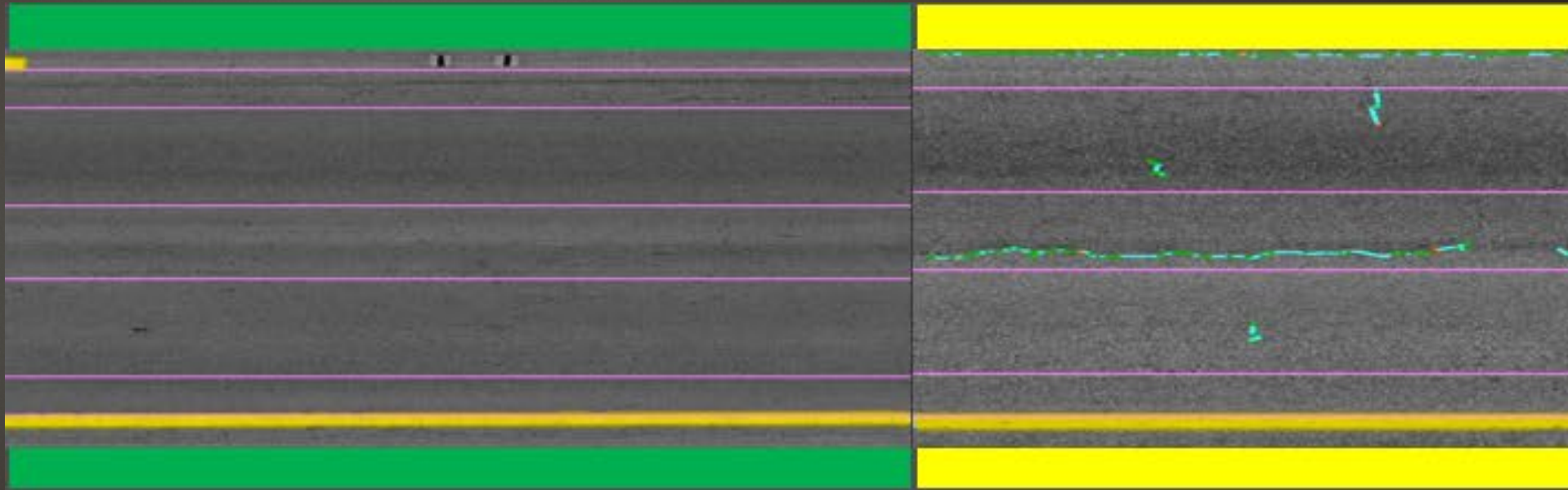
6 YEARS FAIR PAVEMENT
TIME

2 YEARS POOR
PAVEMENT TIME



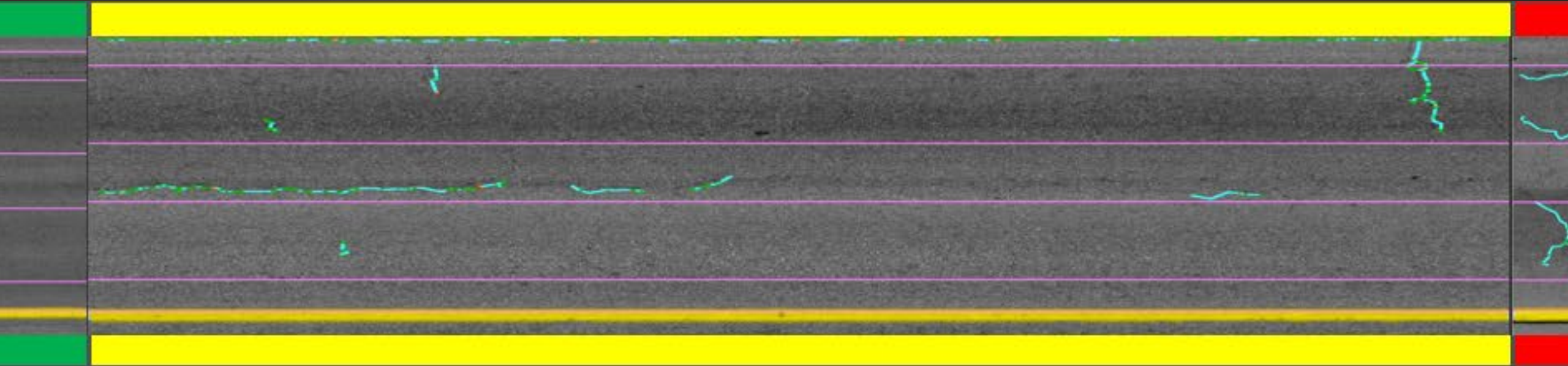
YEARS 1-3

- Lowest Surface Maint Costs
- Possible Crack Sealing
- No PM Surface Treatment Necessary



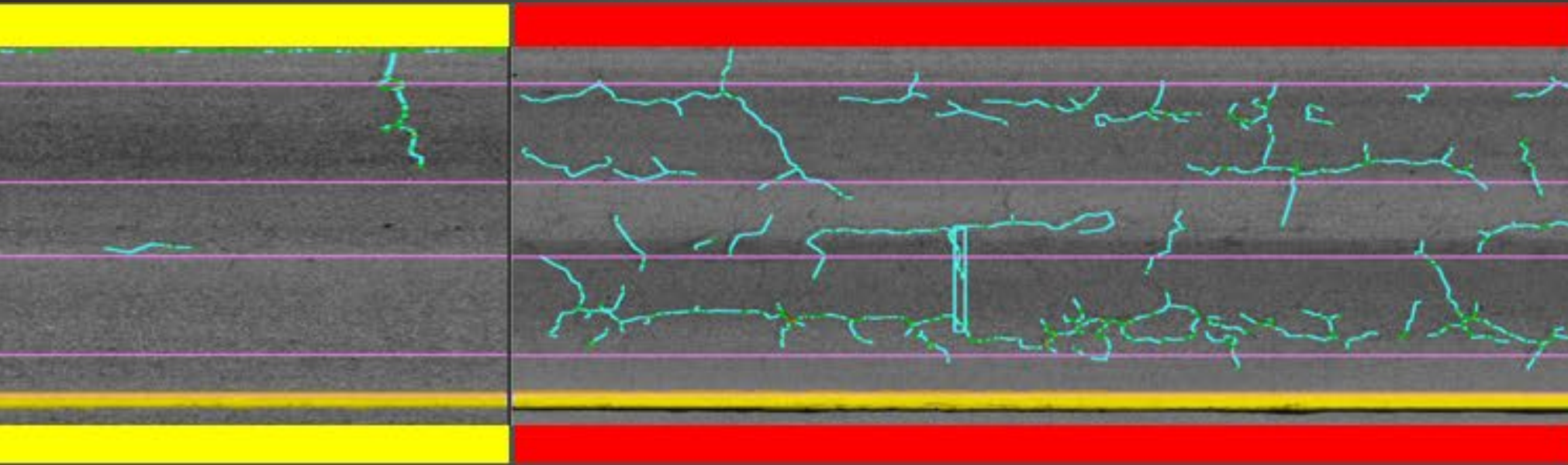
YEARS 4-9

- Low Surface Maint Cost
- Possible Crack Sealing
- Begin Looking at PM Treatment Options



YEARS 10-13

- Highest Surface Maint Costs
- Too Late for Micro or No 4 Thinlay
- Possible Cape Seal Candidate or Full Overlay



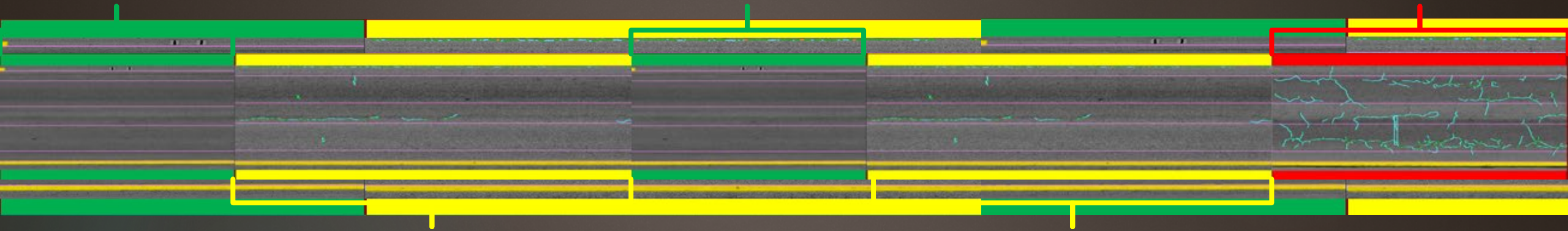
- FULL PAVEMENT CYCLE 20 YEARS



3 YEARS GOOD
PAVEMENT TIME

2 MORE GOOD

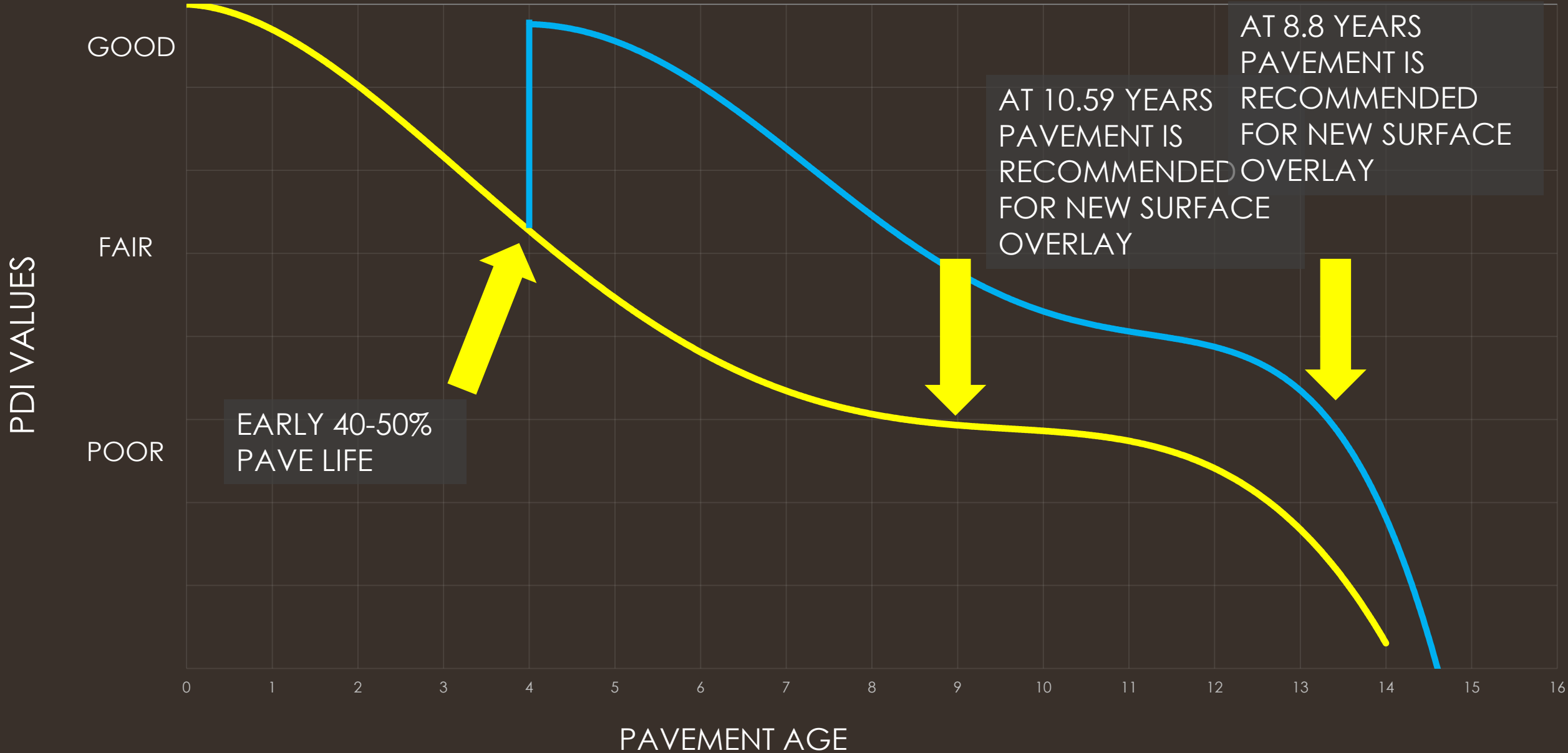
2 YEARS POOR
PAVEMENT TIME



6 YEARS FAIR
PAVEMENT TIME

5 MORE FAIR

PAVEMENT SURFACE DISTRESS



PDI VALUES

GOOD

FAIR

POOR

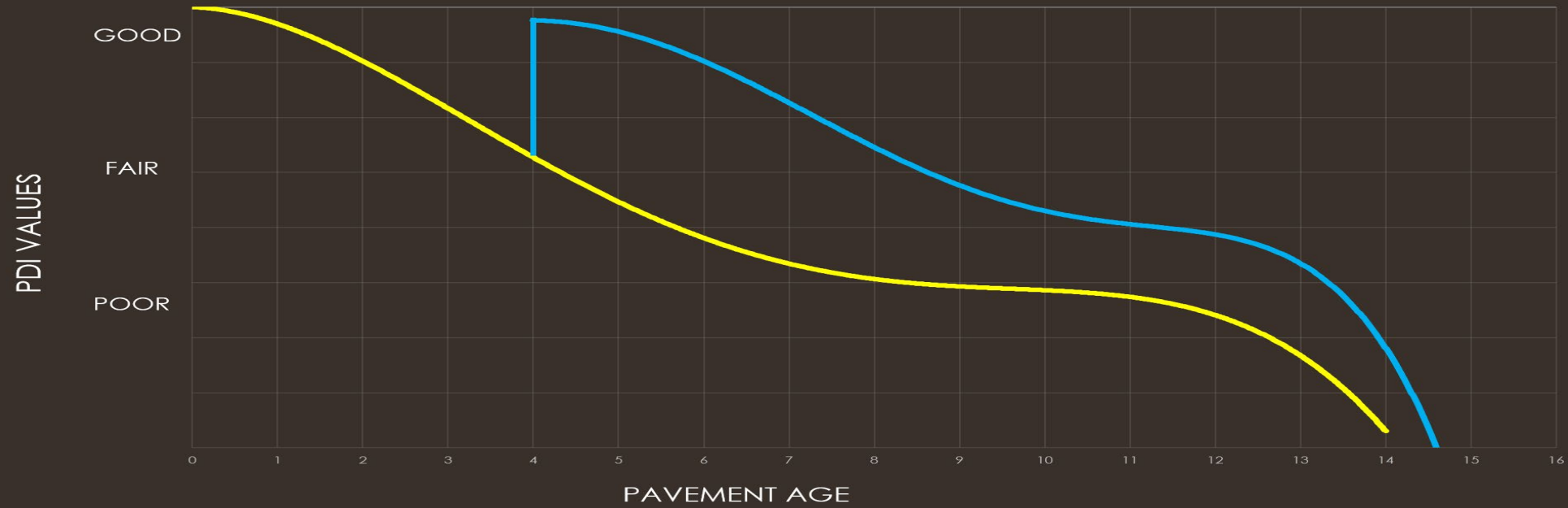
EARLY 40-50%
PAVE LIFE

AT 10.59 YEARS
PAVEMENT IS
RECOMMENDED
FOR NEW SURFACE
OVERLAY

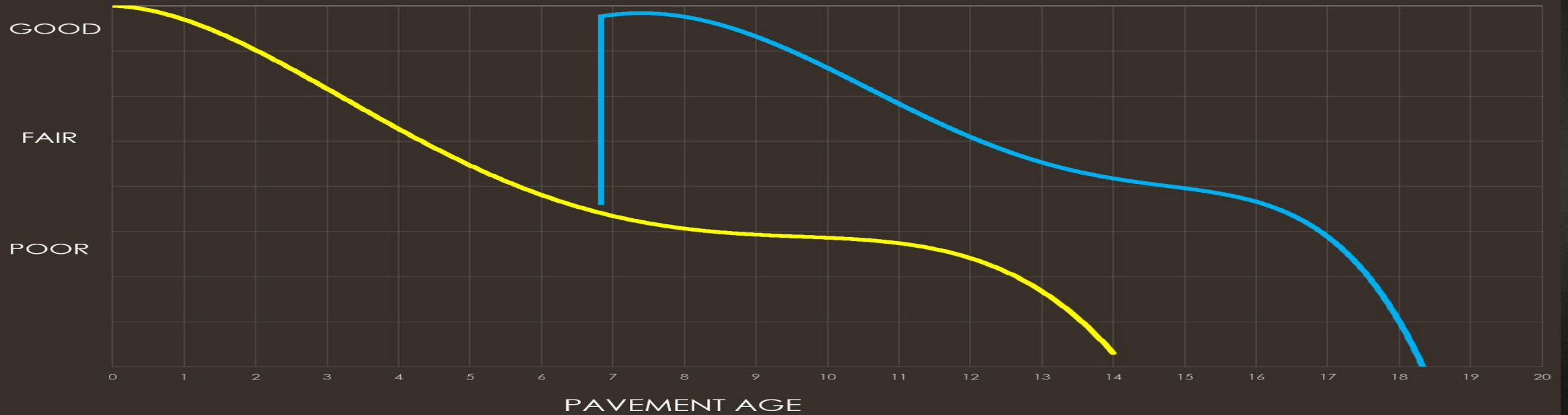
AT 8.8 YEARS
PAVEMENT IS
RECOMMENDED
FOR NEW SURFACE
OVERLAY

PAVEMENT AGE

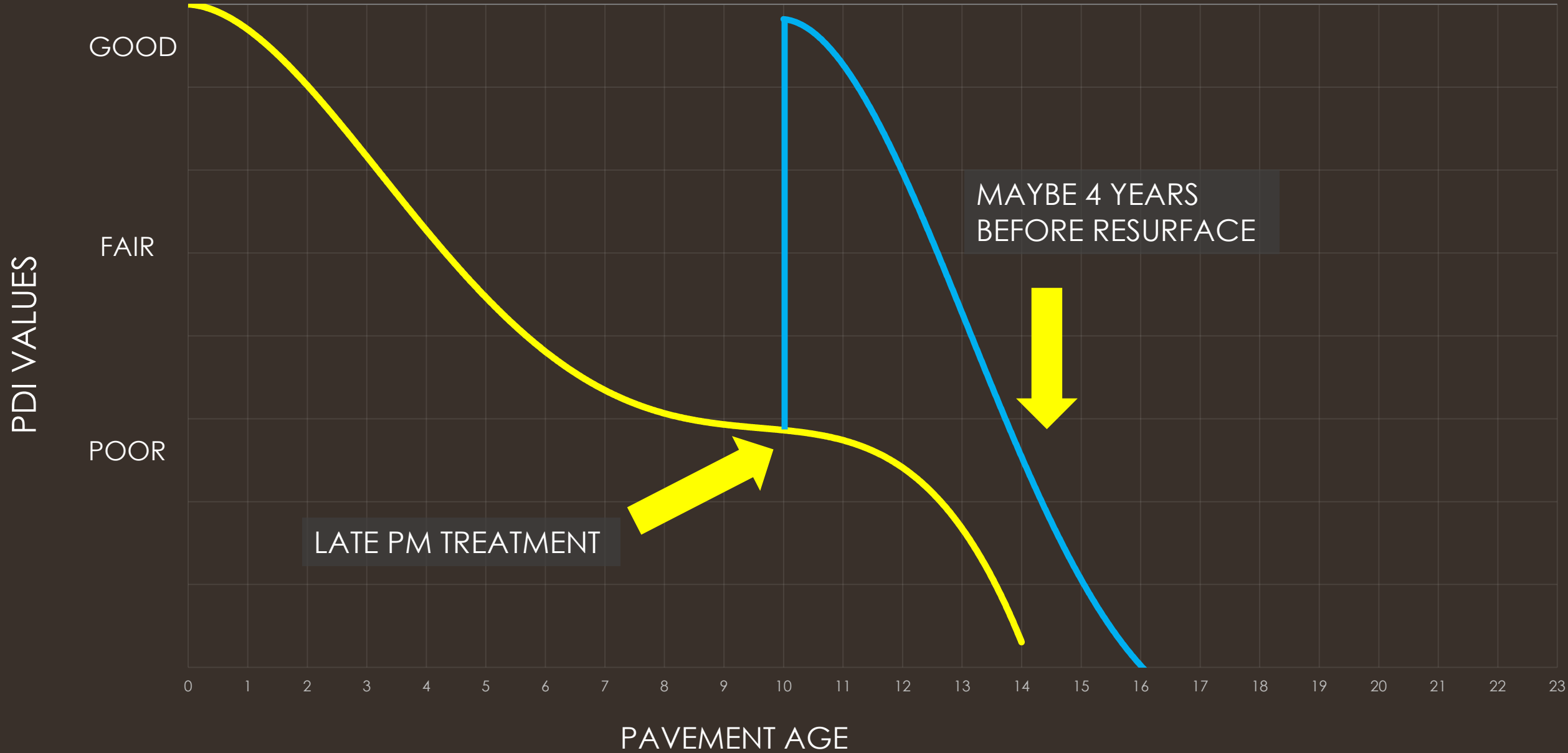
PAVEMENT SURFACE DISTRESS



PAVEMENT SURFACE DISTRESS



PAVEMENT SURFACE DISTRESS



APPROPRIATE
PAVEMENT
DISTRESSES FOR
PM TREATMENTS



PICK A STRUCTURALLY SOUND PAVEMENT

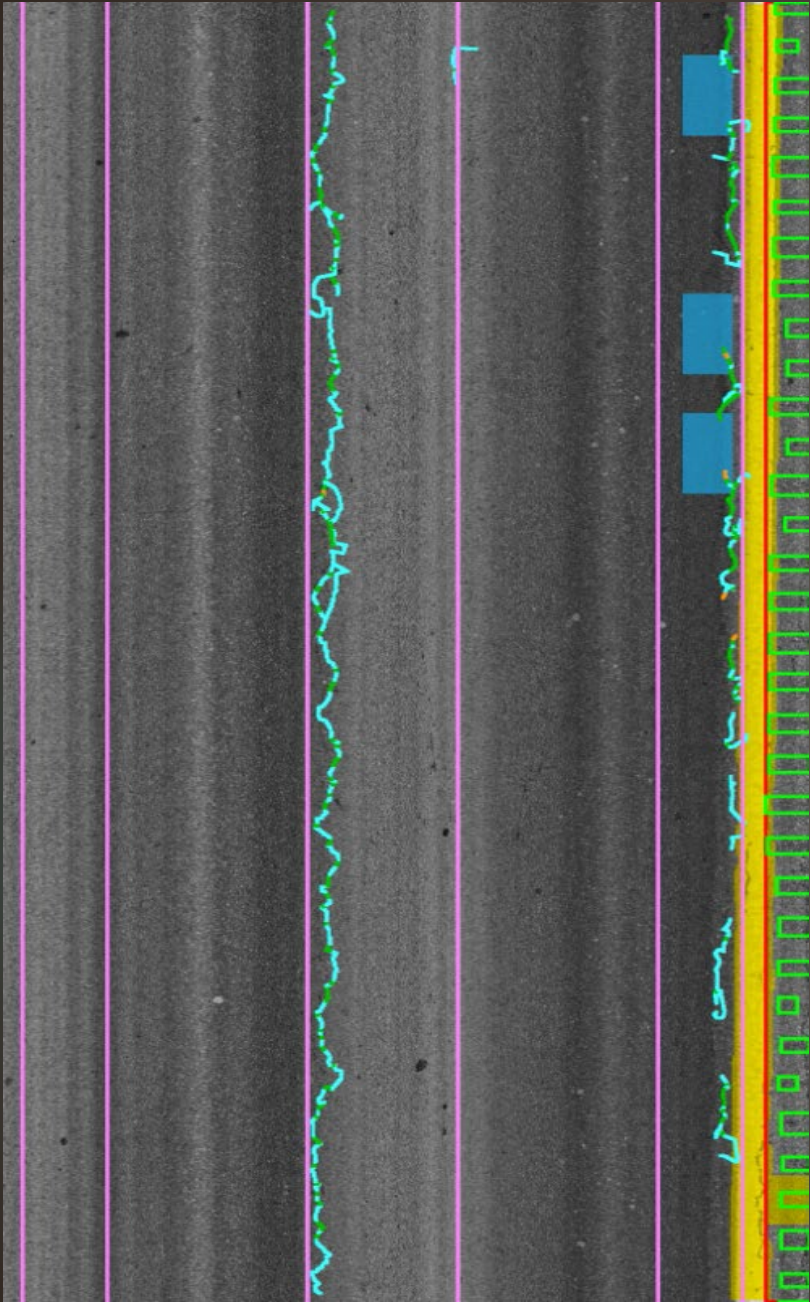
Light To Moderate Wheel Path/Longitudinal

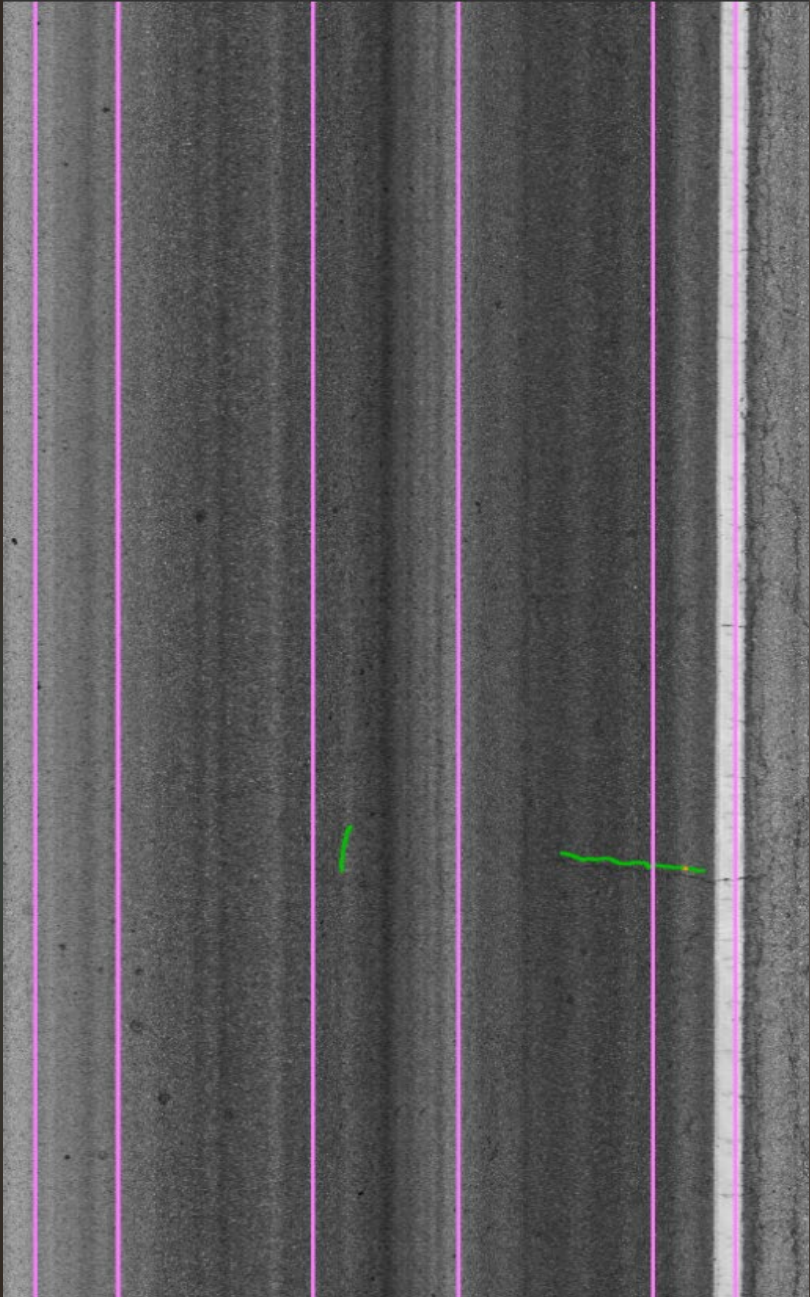
- Moderate appearance of longitudinal cracking
 - Full presence in wheel paths if low severity
 - Little to no transverse cracking
-
- Base failures should be repaired before treatment application

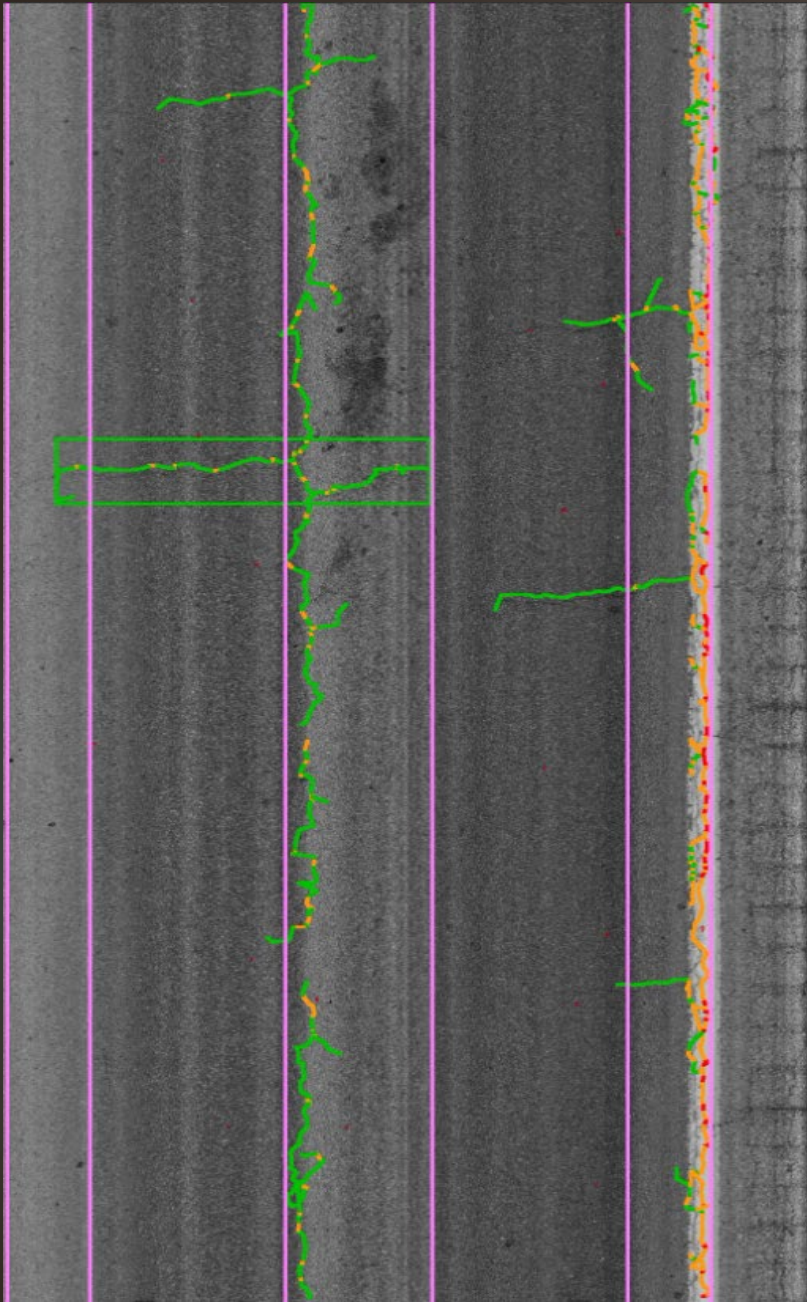
MODERATE
LONGITUDINAL
CRACKING

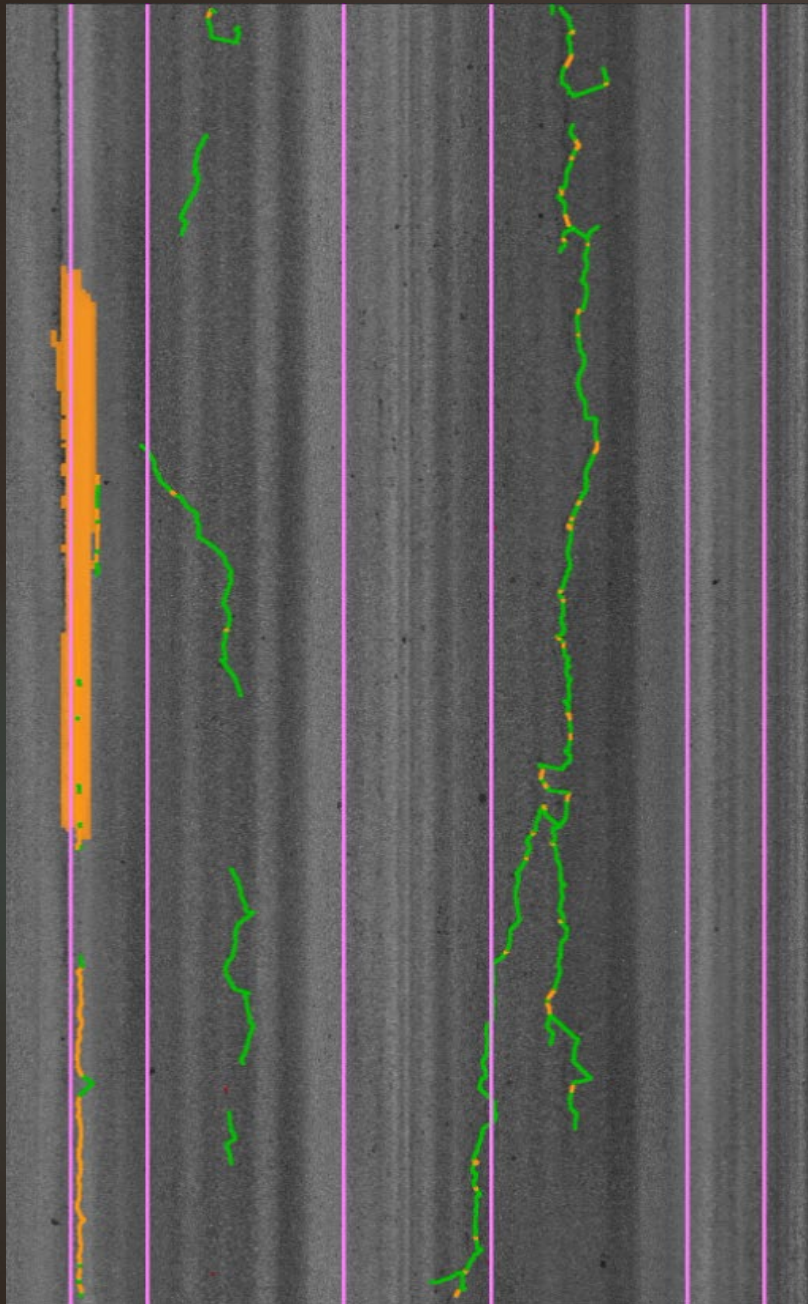


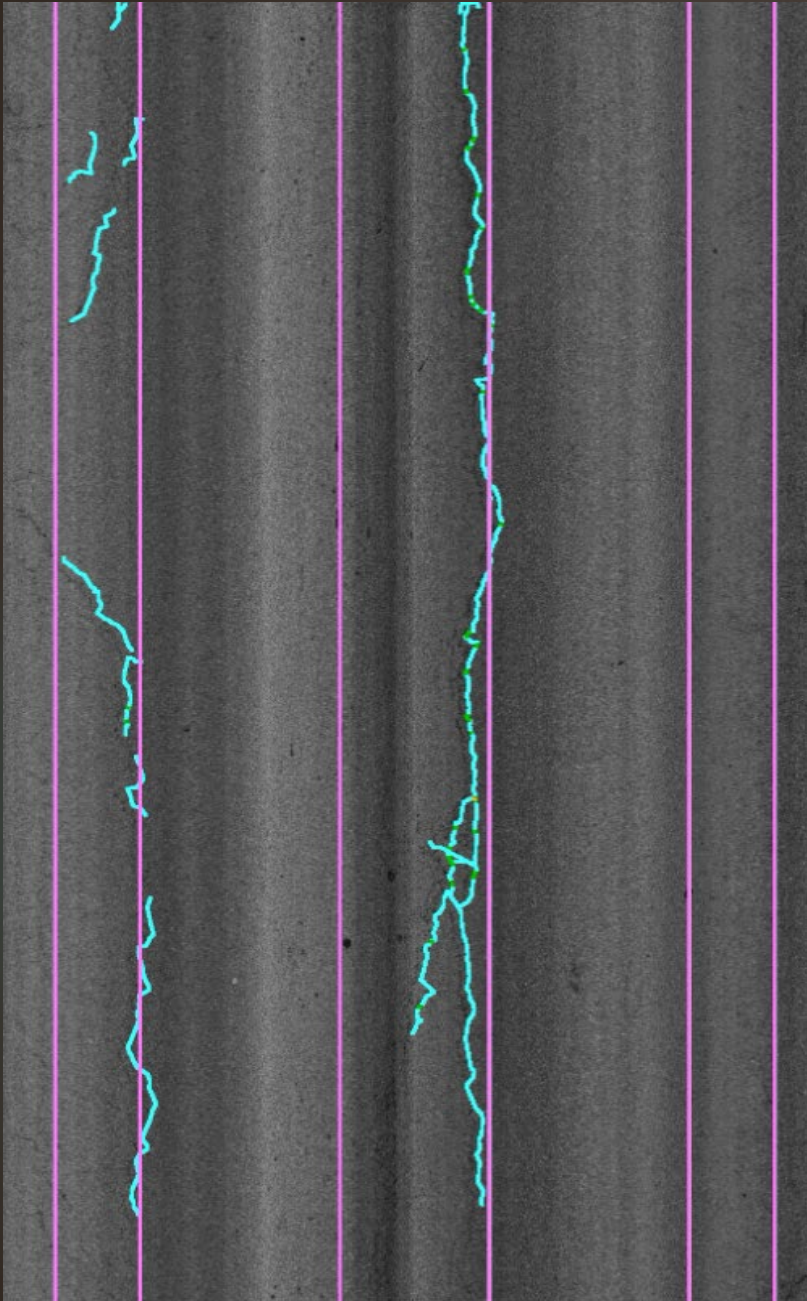












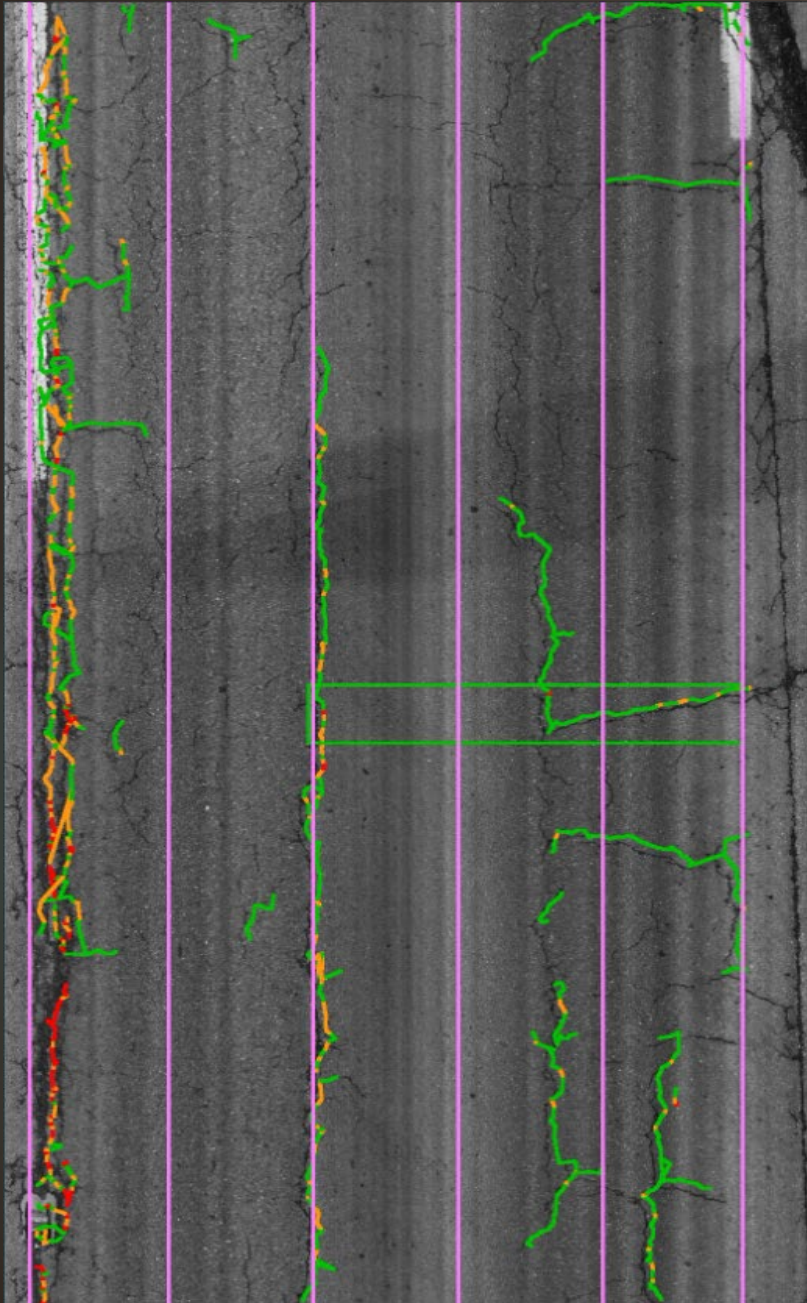
OTHER THINGS TO CONSIDER

- Traffic
- Markers and Loops
- Rumble Strips
- Profile/Curb and Gutter
- Friction Requirements
- Rutting
- Costs
- Repairs



PHOTOLOG EXERCISE

YIPPEEE!





QUESTIONS?

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