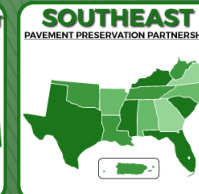




# Montana Pavement Preservation Update

D.J. Berg, PE  
Pavement Analysis Engineer



# Today's Topics



2022 State of Pavement



Treatment Selection



Treatment Performance

# State of Pavement: IRI



**Legend**

IRI\_Index

- 0 - 60 (POOR)
- 60 - 80 (FAIR)
- 80 - 100 (GOOD)



# State of Pavement: Rut

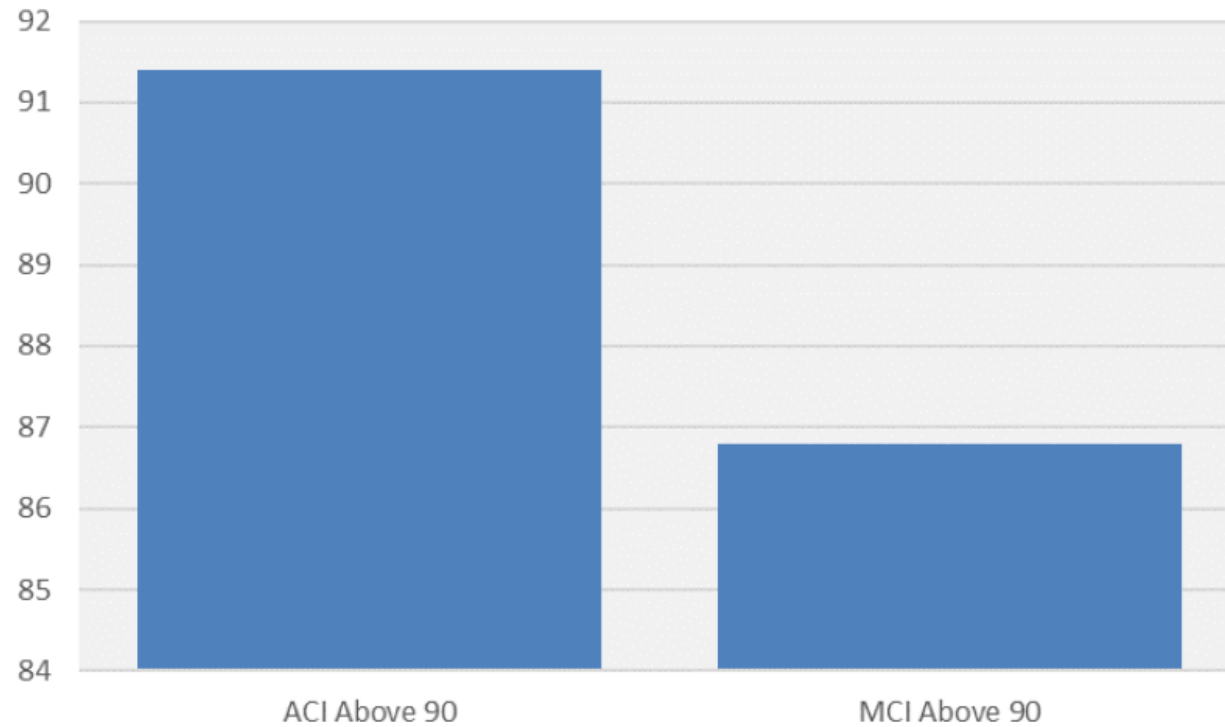


**Legend**

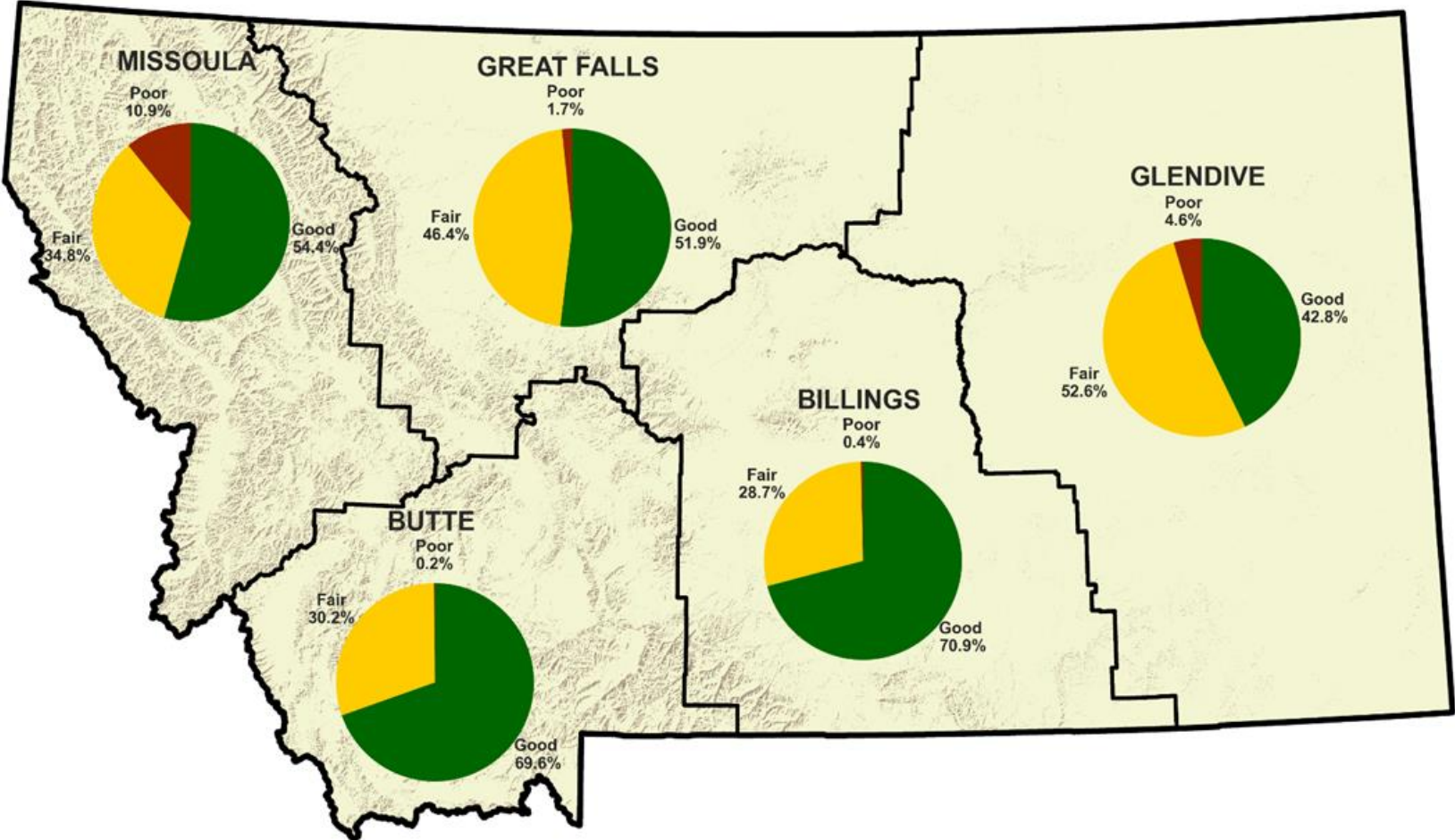
Rut\_Index

- 20 - 40 (POOR)
- 40 - 60 (FAIR)
- 60 - 100 (GOOD)

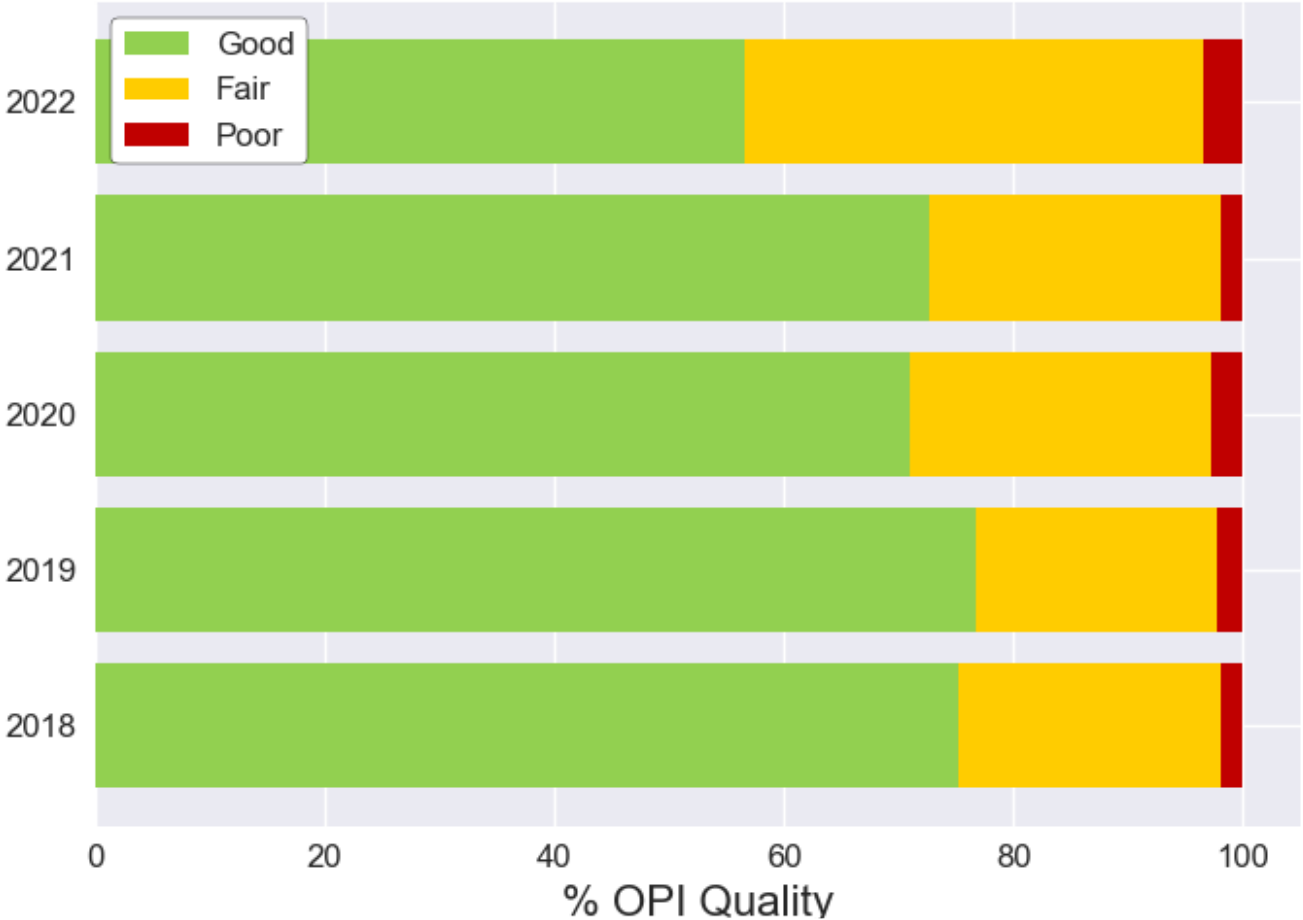
# State of Pavement: Cracking



# State of Pavement: OPI



# State of Pavement: OPI



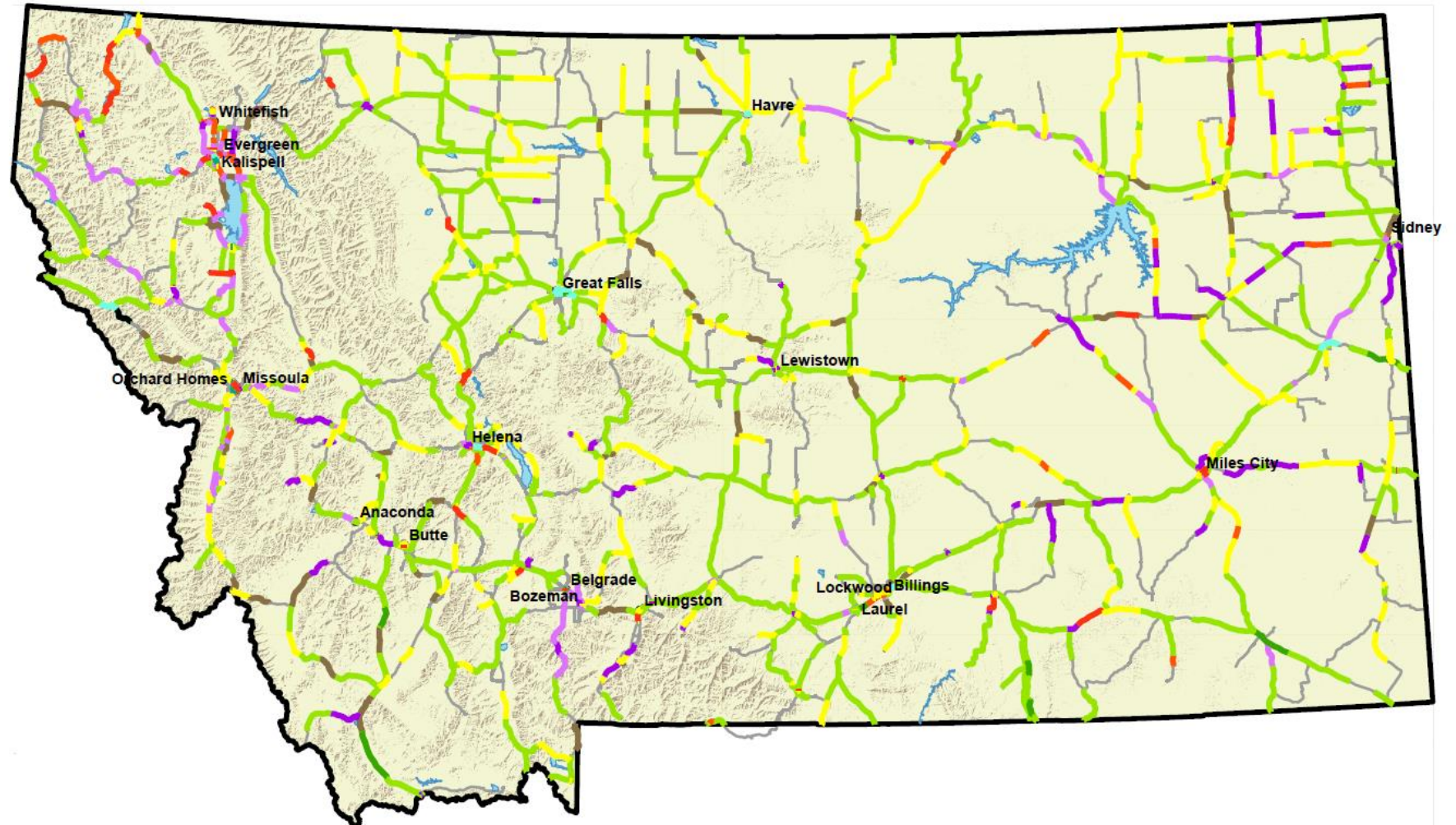


# Treatment Selection

## Legend

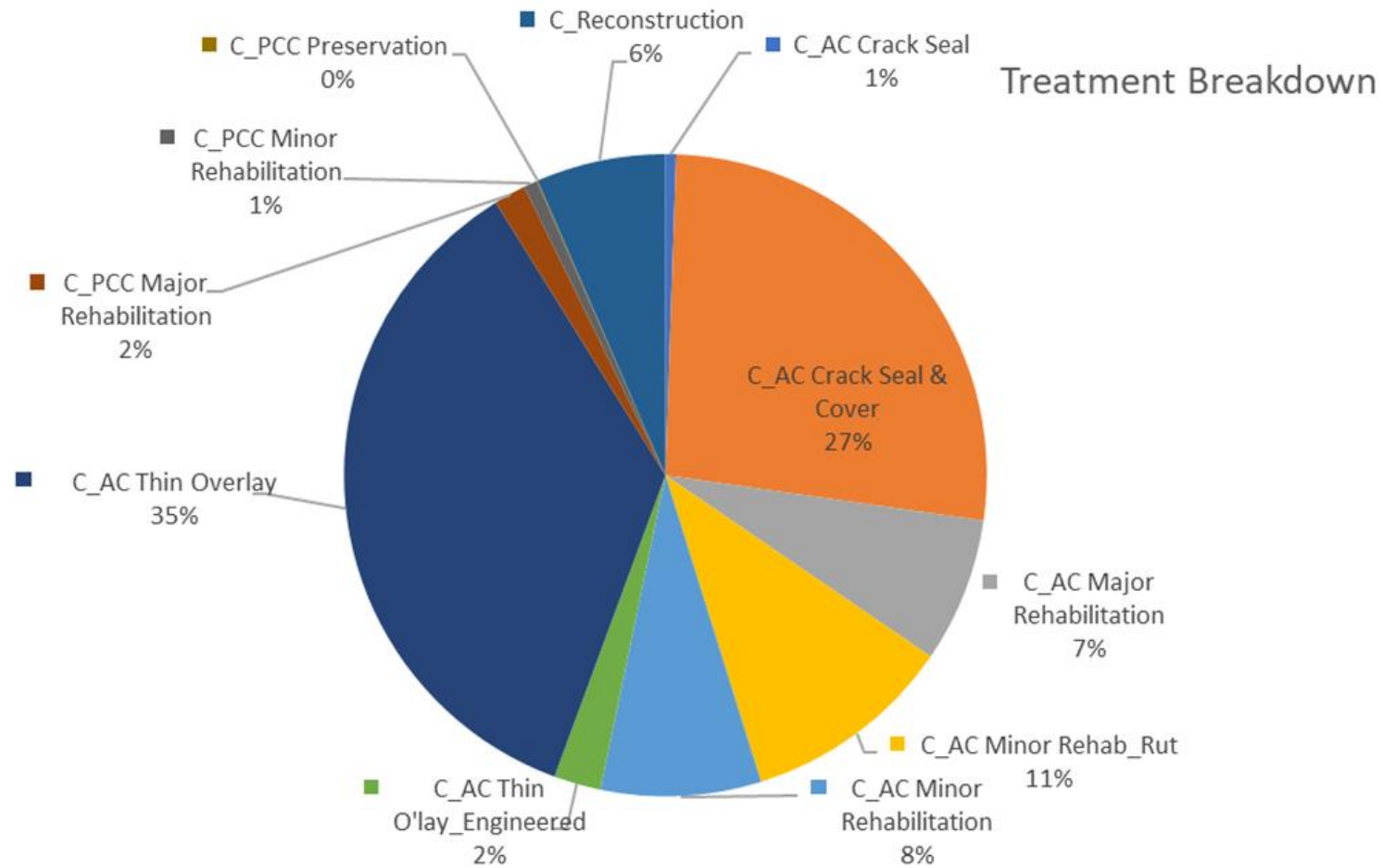
### Treatment

- C\_AC Crack Seal
- C\_AC Crack Seal & Cover
- C\_AC Major Rehabilitation
- C\_AC Minor Rehab\_Rut
- C\_AC Minor Rehabilitation
- C\_AC Thin O'lay\_Engineered
- C\_AC Thin Overlay
- C\_PCC Major Rehabilitation
- C\_PCC Minor Rehabilitation
- C\_PCC Preservation
- C\_Reconstruction

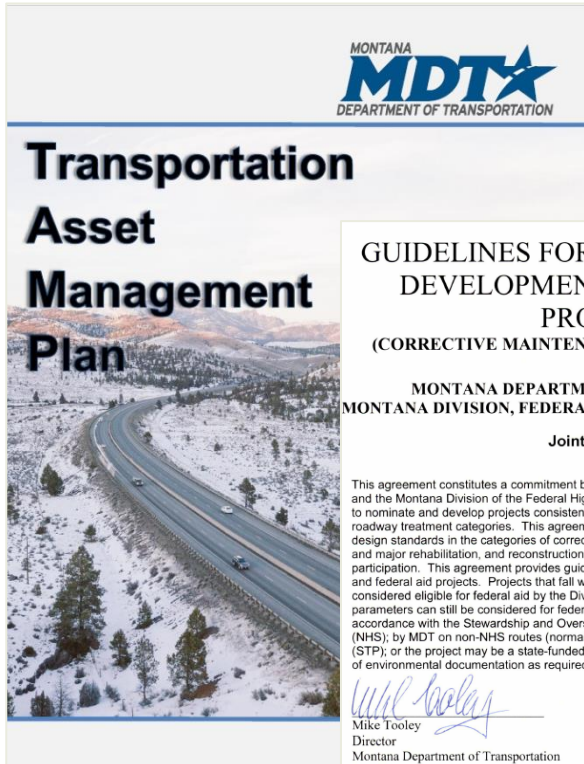




# Treatment Selection



# Treatment Selection



GUIDELINES FOR NOMINATION AND DEVELOPMENT OF PAVEMENT PROJECTS  
(CORRECTIVE MAINTENANCE TO RECONSTRUCTION)

MONTANA DEPARTMENT OF TRANSPORTATION  
MONTANA DIVISION, FEDERAL HIGHWAY ADMINISTRATION

Joint Agreement

This agreement constitutes a commitment by the Montana Department of Transportation (MDT) and the Montana Division of the Federal Highway Administration (FHWA) to provide guidelines to nominate and develop projects consistent with criteria for projects in different funding and roadway treatment categories. This agreement supplements the Department's geometric design standards in the categories of corrective maintenance, pavement preservation, minor and major rehabilitation, and reconstruction. It also establishes guidelines for federal aid participation. This agreement provides guidelines for all state maintenance, state construction, and federal aid projects. Projects that fall within the parameters of this agreement will be considered eligible for federal aid by the Division. Projects that do not meet one or more of the parameters can still be considered for federal aid, but further review will be necessary in accordance with the Stewardship and Oversight Agreement on the National Highway System (NHS); by MDT on non-NHS routes (normally funded by the Surface Transportation Program (STP)); or the project may be a state-funded project. All projects will receive the appropriate level of environmental documentation as required by NEPA and MEPA.

*Mike Tooley*  
Mike Tooley  
Director  
Montana Department of Transportation

*Kevin McLaury*  
Kevin McLaury  
Division Administrator  
Federal Highway Administration

*Barb Skelton*  
Barb Skelton  
Chair  
Montana Transportation Commission

12/14/17  
Date

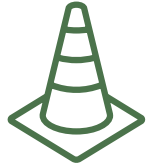
MONTANA MDT DEPARTMENT OF TRANSPORTATION

U.S. Department of Transportation Federal Highway Administration

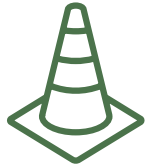
TAMP: Commits to choosing right treatment at right time and cost-effective solutions that consider pavement lifecycle.

FHWA Agreement: Establishes consistent criteria for the treatment selection for different funding and roadway categories.

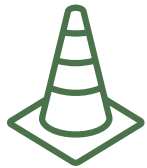
# Treatment Performance Examples



Microsurfacing



Cold & Hot-in-Place Recycling

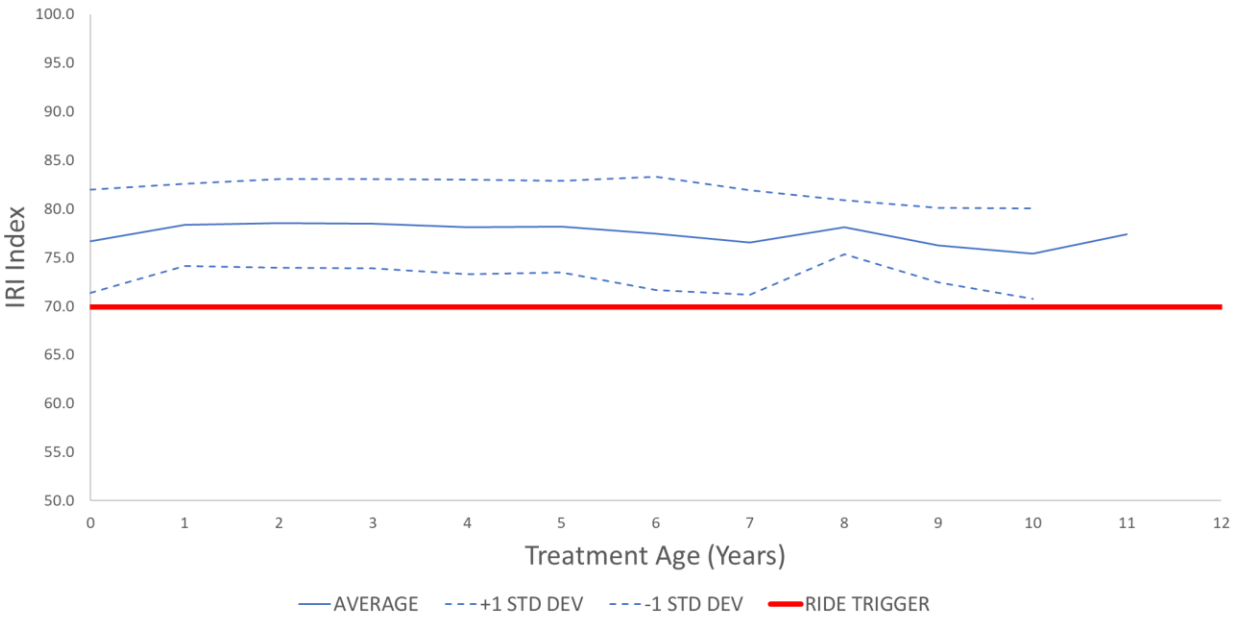


Mill & Fill

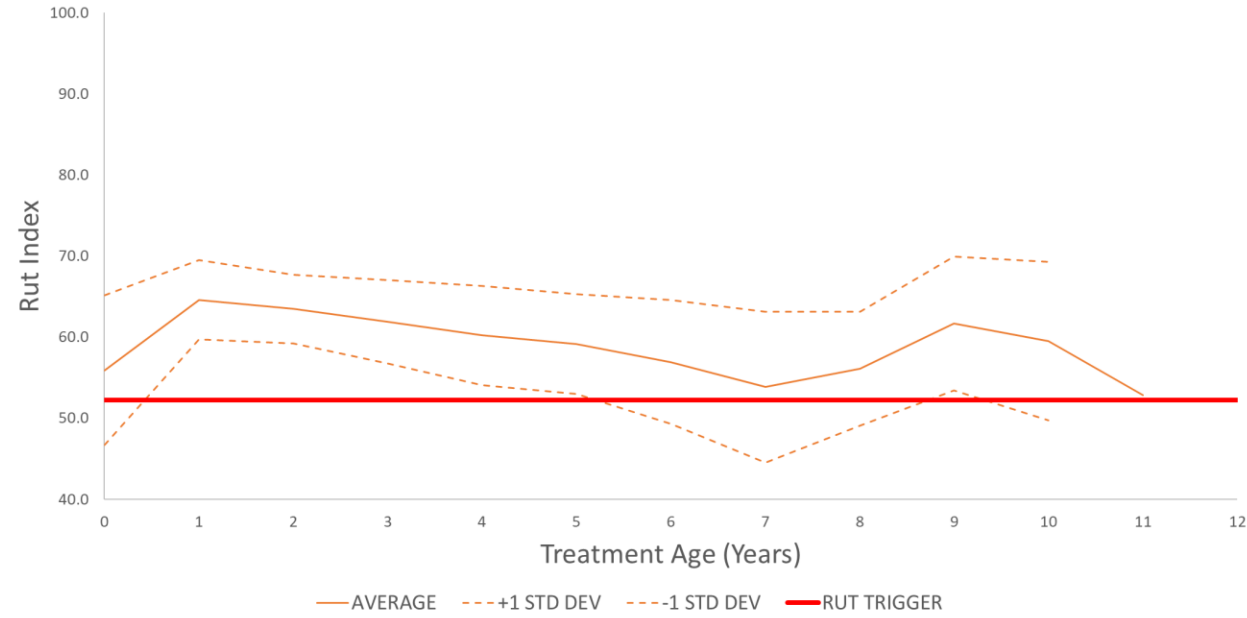


# Microsurfacing

### Microsurfacing Treatment Ride Performance

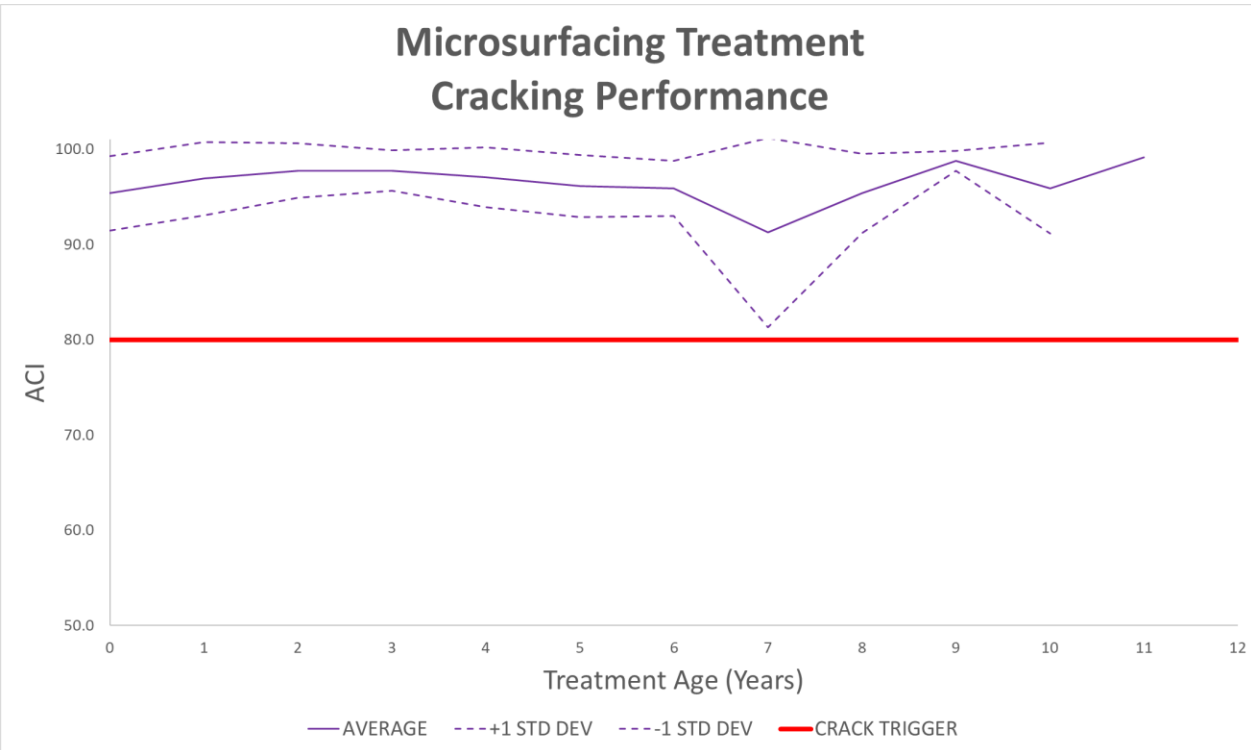


### Microsurfacing Treatment Rut Performance

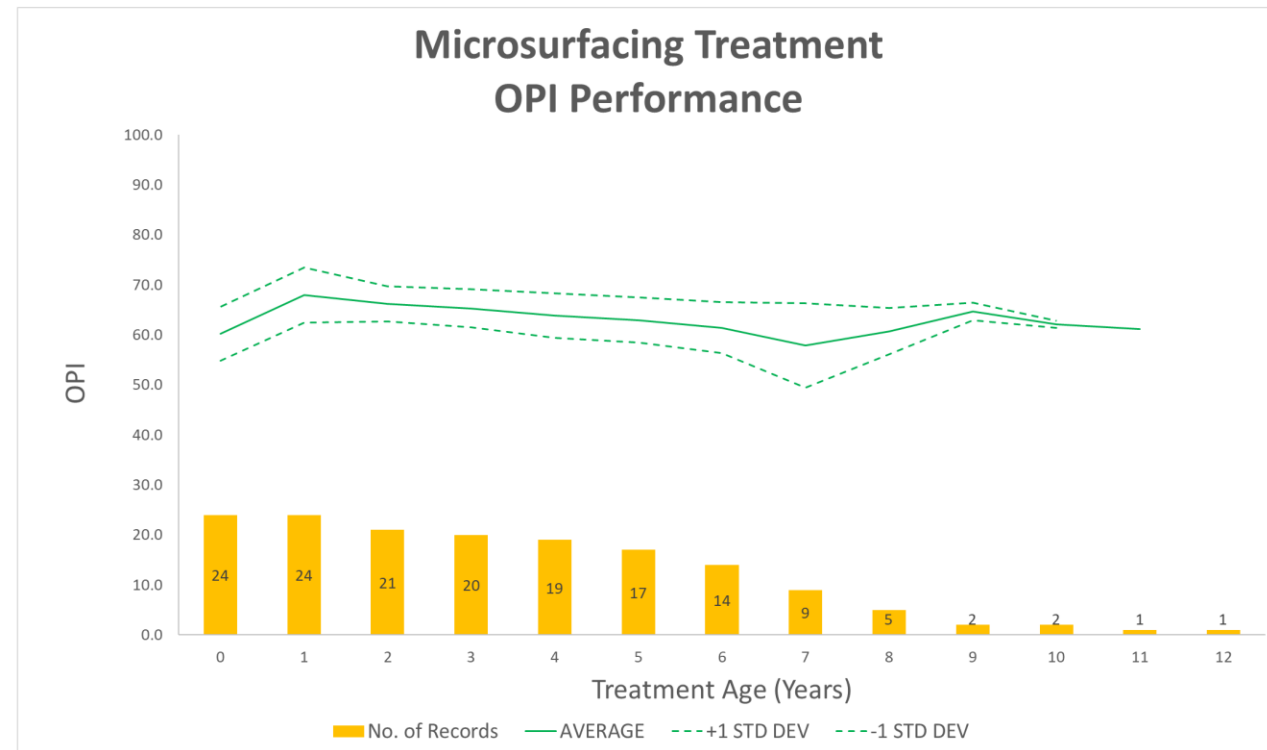


# Microsurfacing

Microsurfacing Treatment  
Cracking Performance

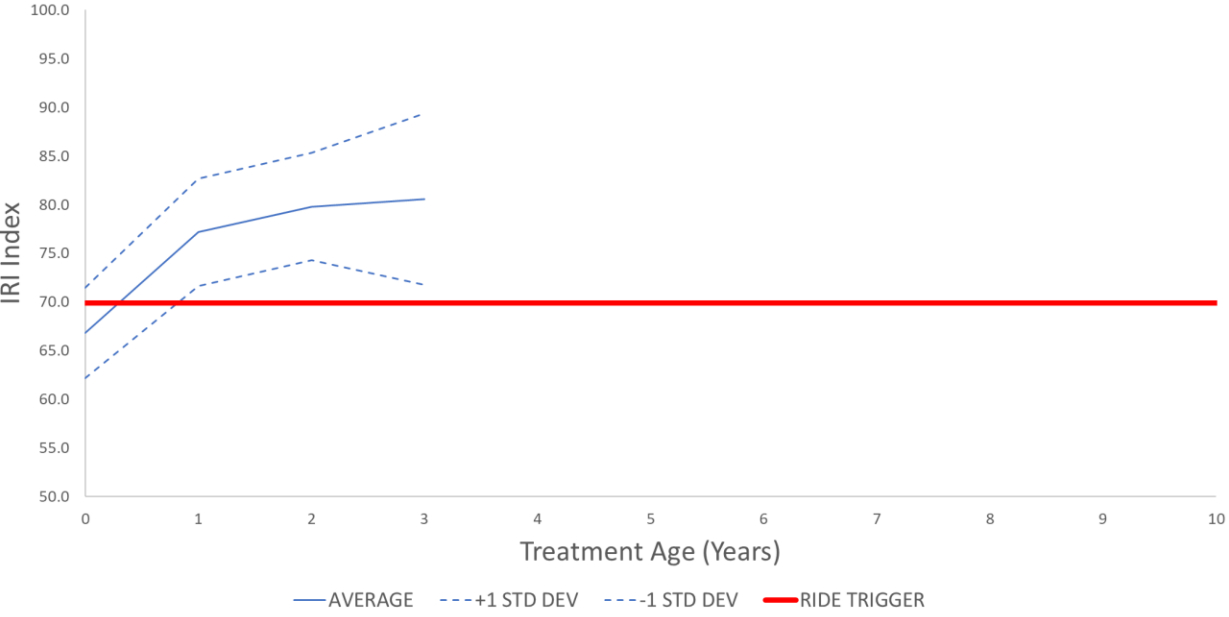


Microsurfacing Treatment  
OPI Performance

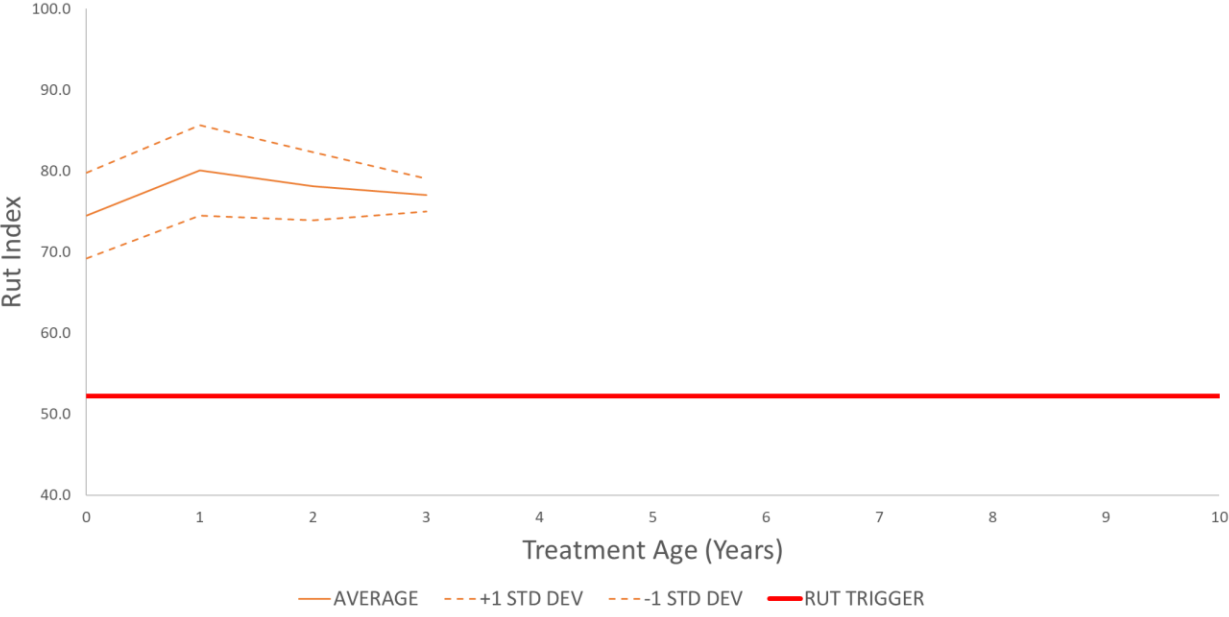


# Hot-in-Place Recycle

### Hot-in-Place Recycle Treatment Ride Performance



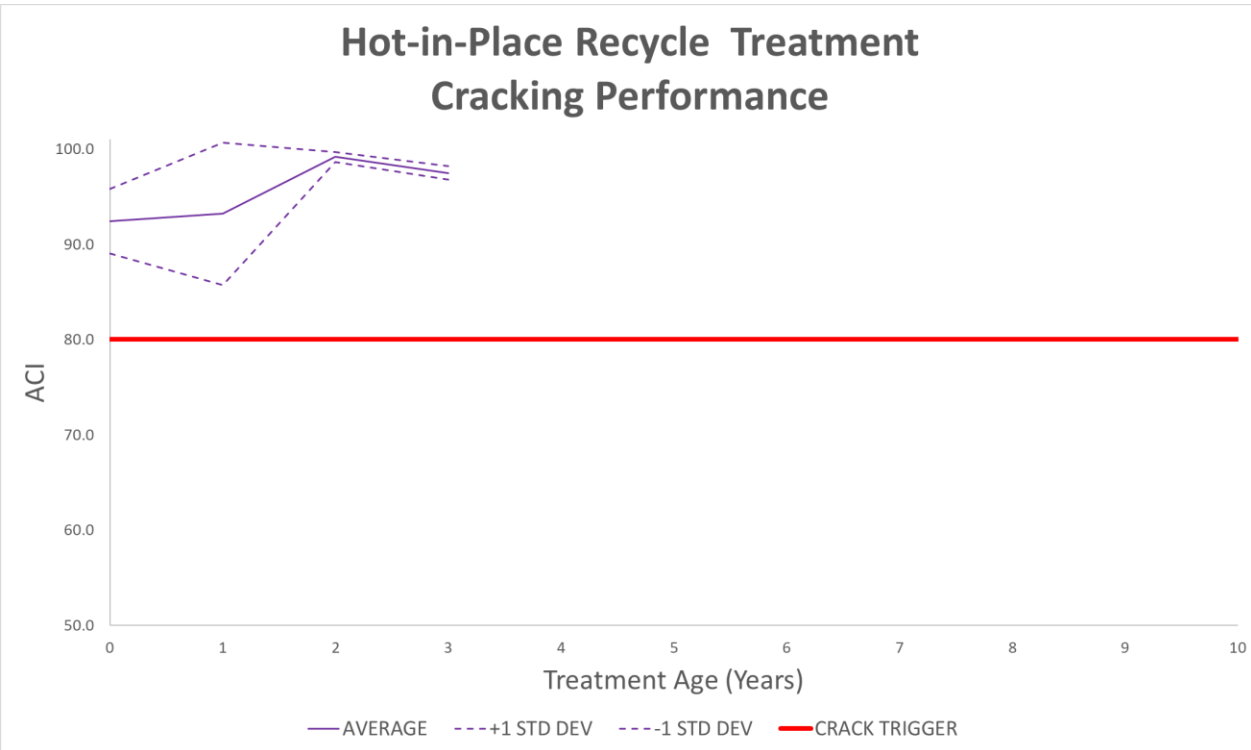
### Hot-in-Place Recycle Treatment Rut Performance



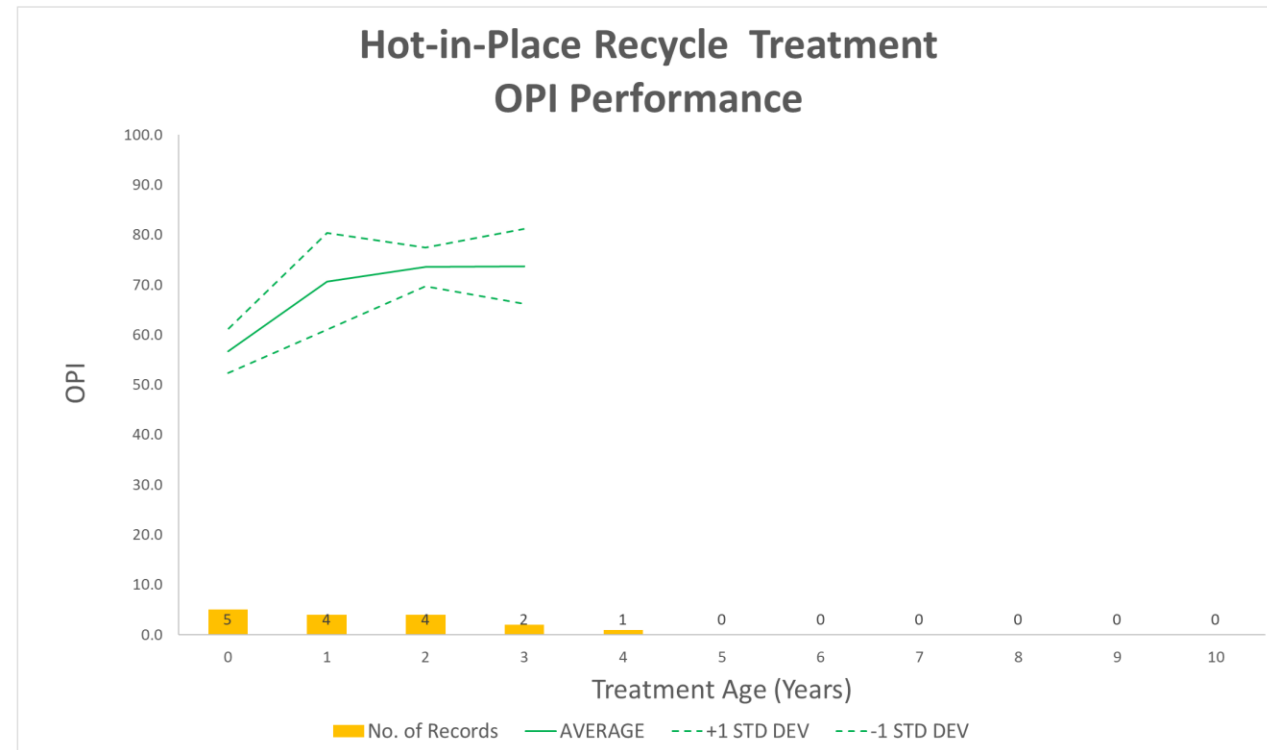


# Hot-in-Place Recycle

Hot-in-Place Recycle Treatment  
Cracking Performance

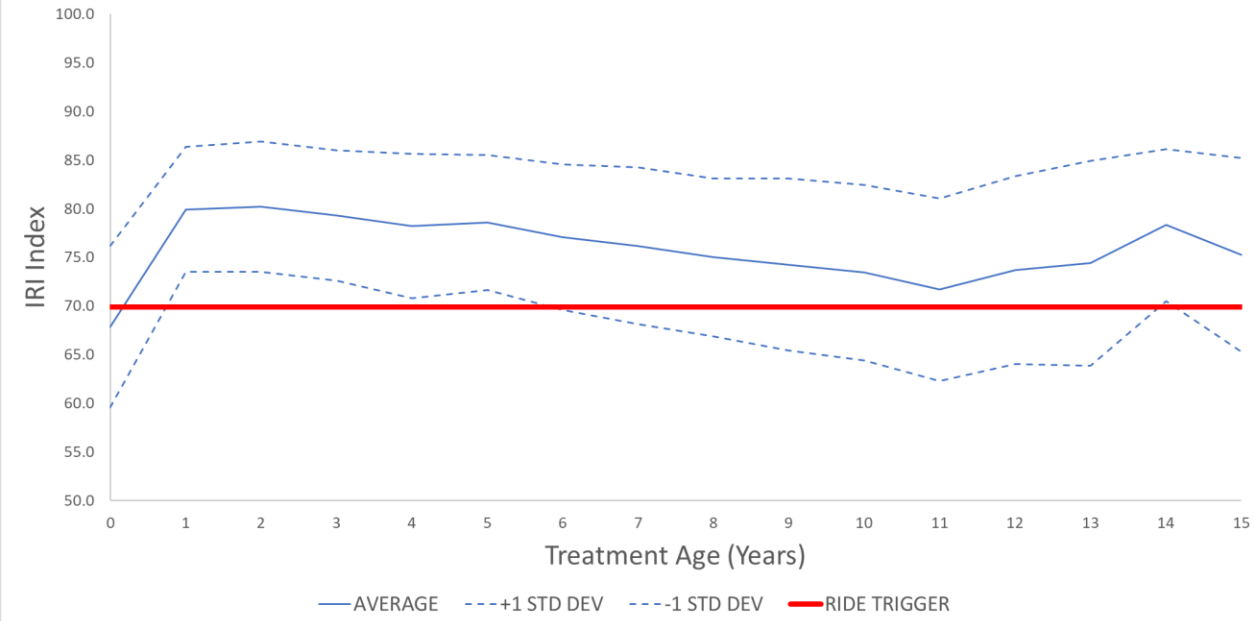


Hot-in-Place Recycle Treatment  
OPI Performance

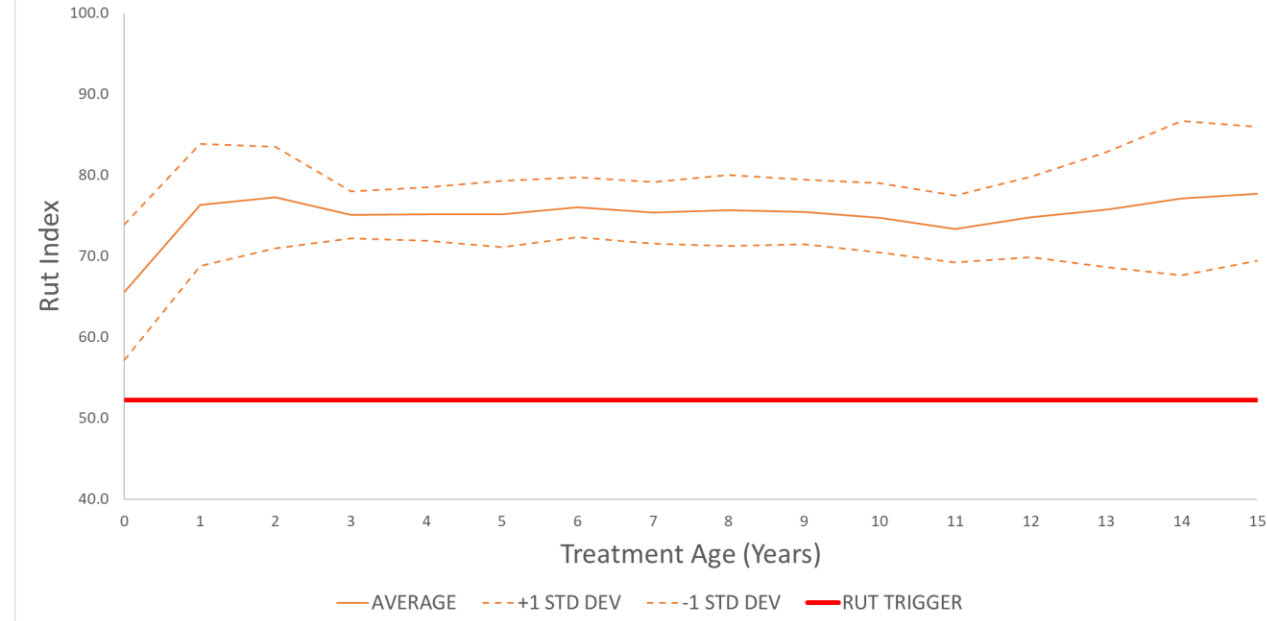


# Cold-in-Place Recycle

## Cold-in-Place Recycle Treatment Ride Performance

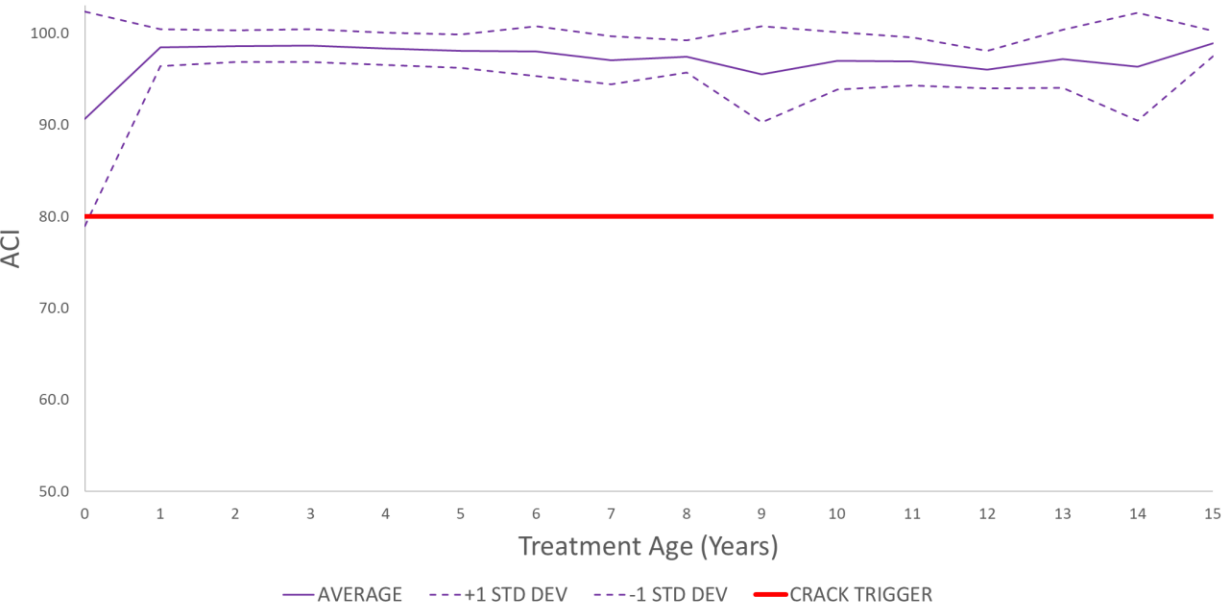


## Cold-in-Place Recycle Treatment Rut Performance

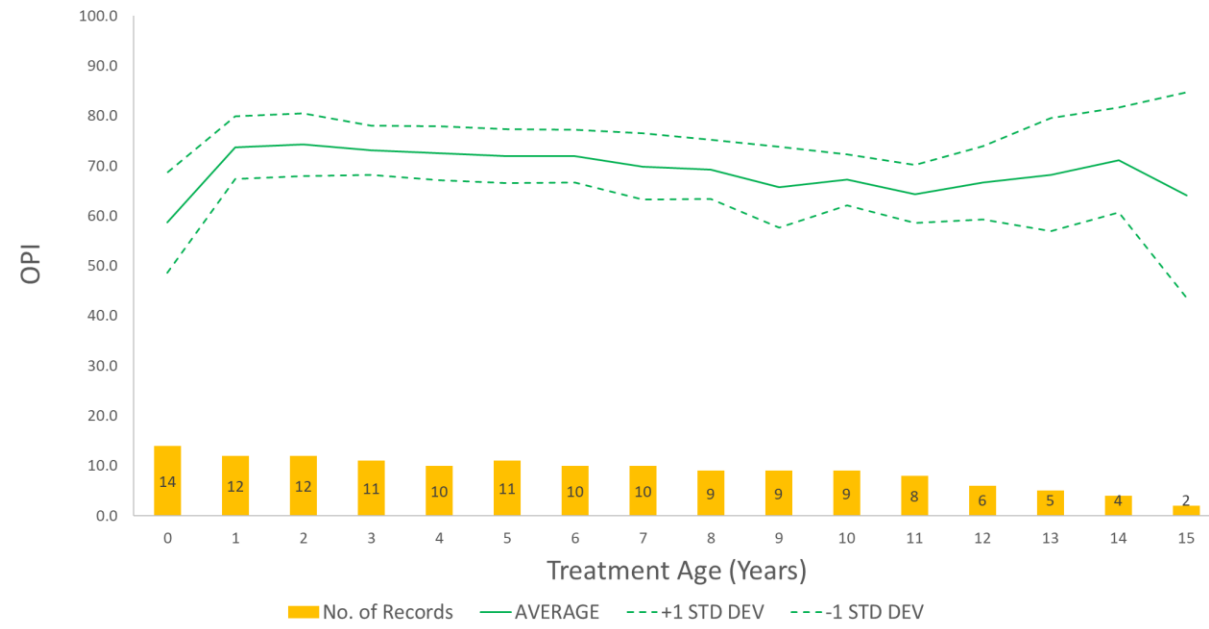


# Cold-in-Place Recycle

Cold-in-Place Recycle Treatment  
Cracking Performance



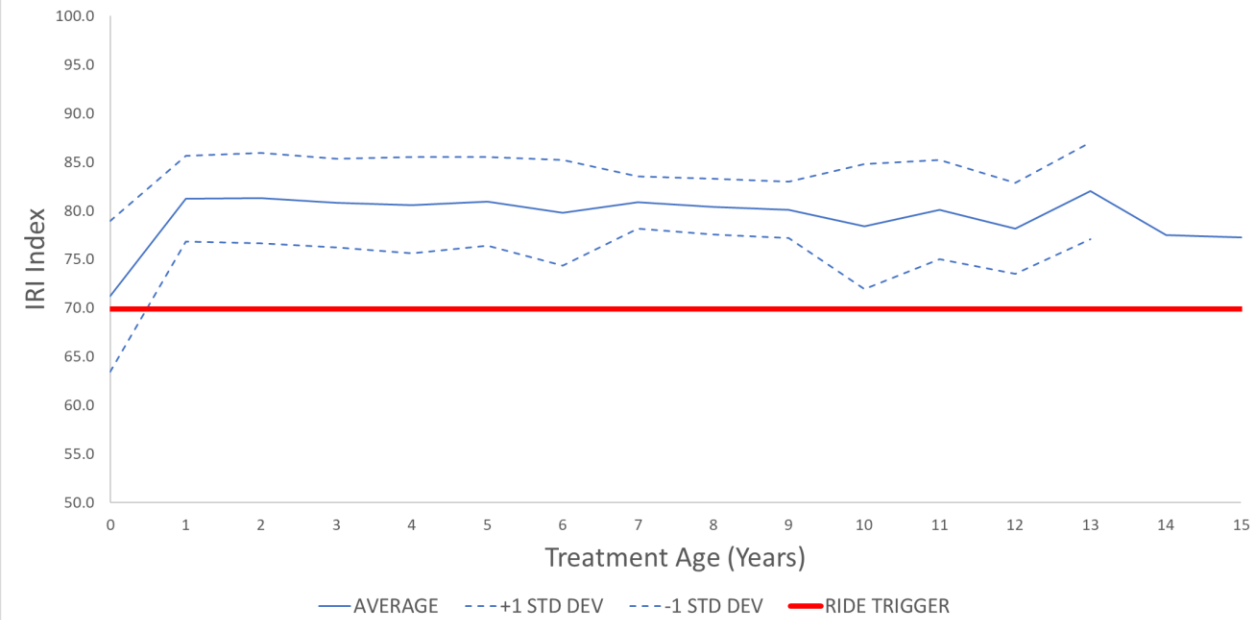
Cold-in-Place Recycle Treatment  
OPI Performance



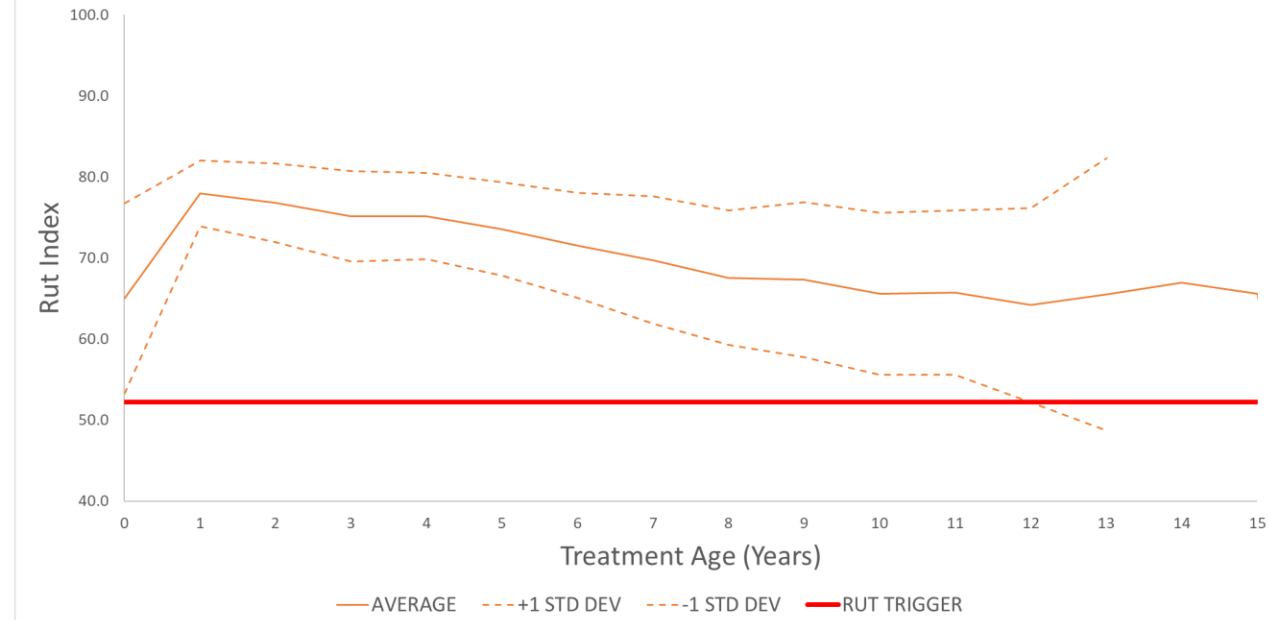


# Mill & Fill

### Mill & Fill Treatment Ride Performance

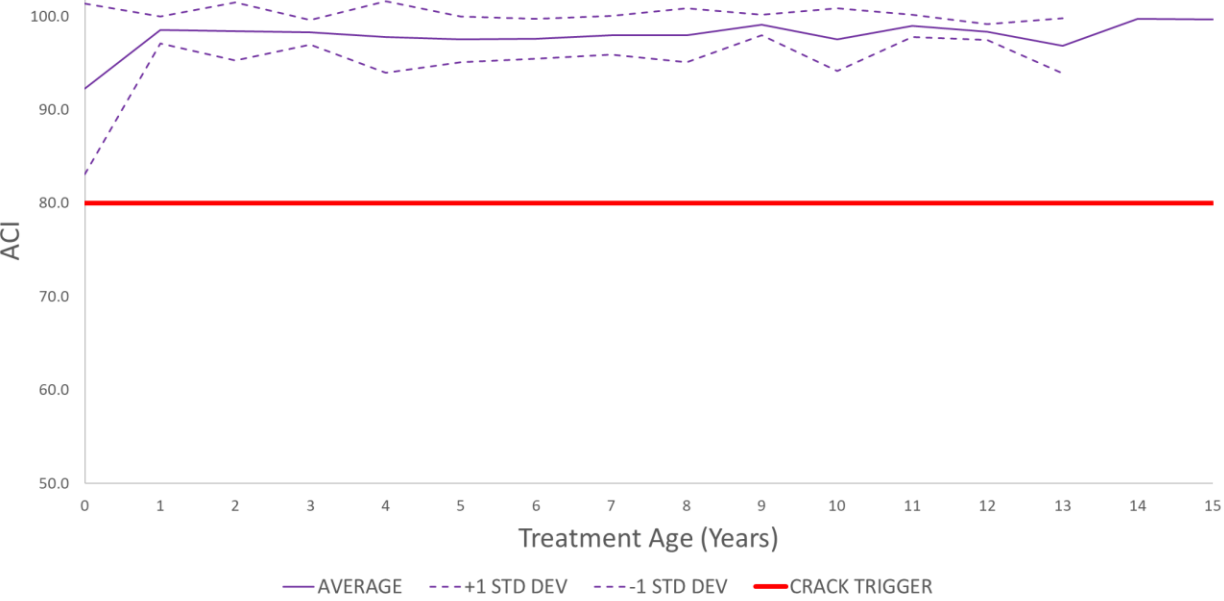


### Mill & Fill Treatment Rut Performance

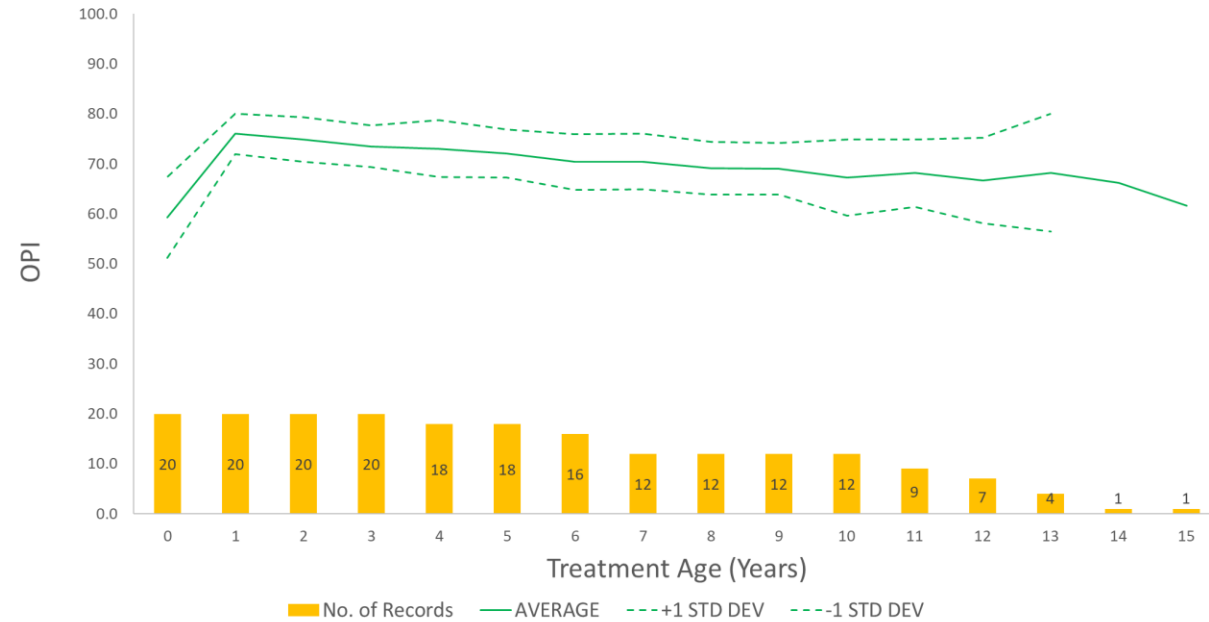


# Mill & Fill

### Mill & Fill Treatment Cracking Performance



### Mill & Fill Treatment OPI Performance



# Thank You!

