



Implementation Of Preservation Tables and Curves

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Background

- PG Study objective:

Develop *independent* life-extending benefit curves for a range of pavement preservation treatments, under varying traffic levels and climates

- The end result will be deterioration models that agencies can incorporate into their PMS
- Requires medium to long term monitoring

Implementation

- What is the life-extending benefit of the treatments?
 - ▣ How many more years in good condition compared to untreated?
 - ▣ How many more years before reaching poor condition?
- What is the condition improving benefit?
 - ▣ How much less cracking/rutting/roughness compared to untreated?

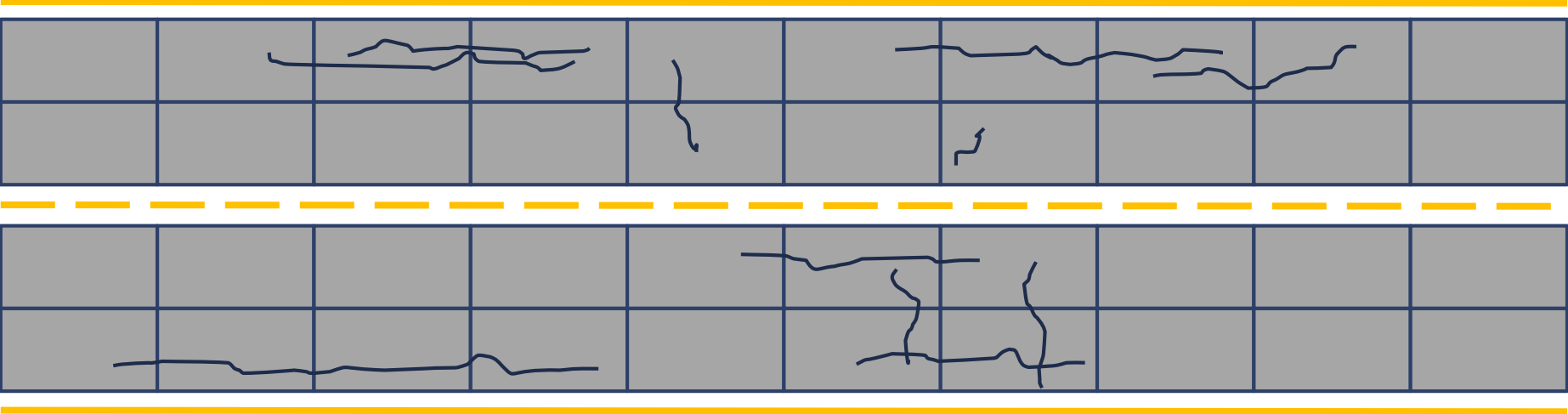
Implementation



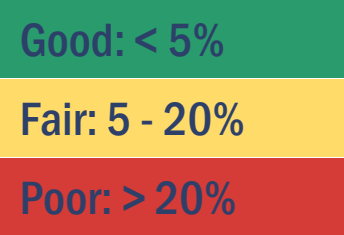
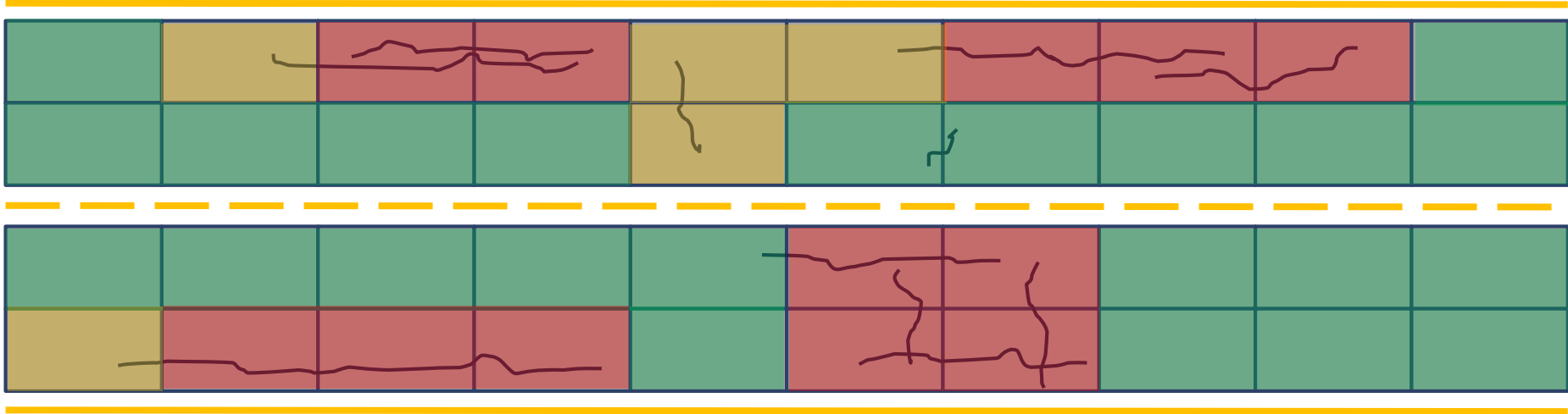
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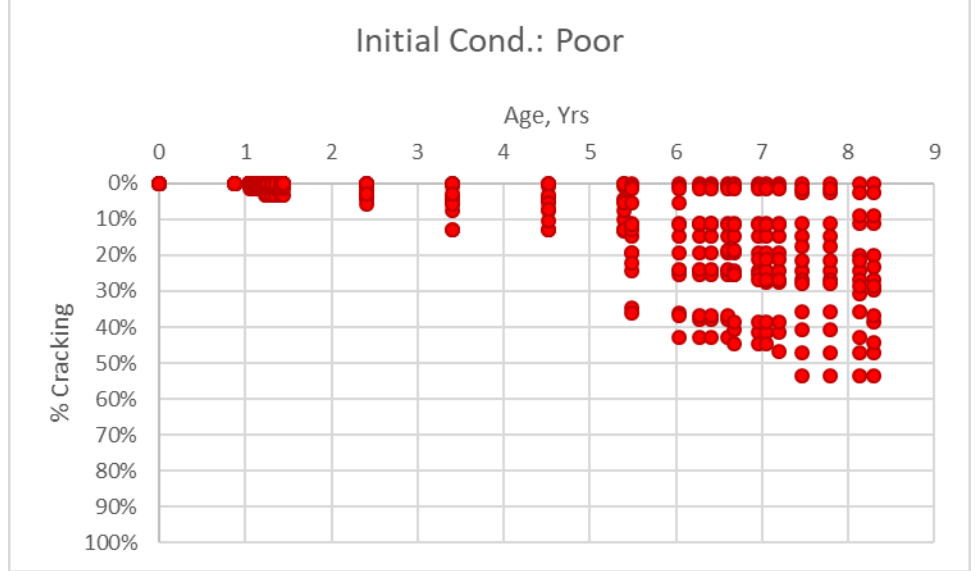
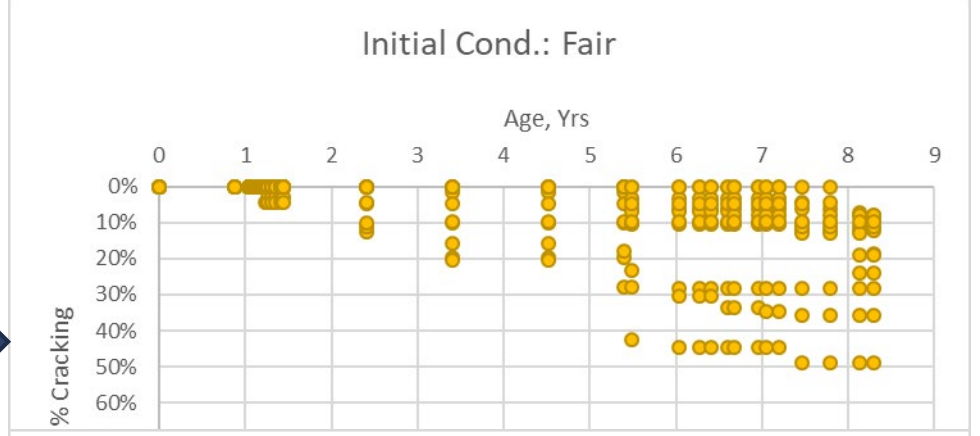
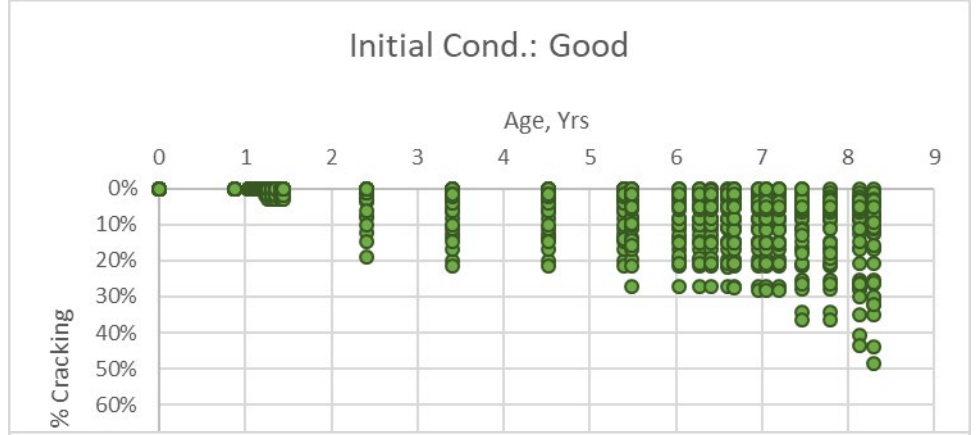
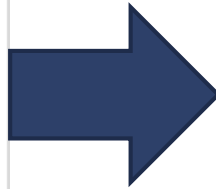
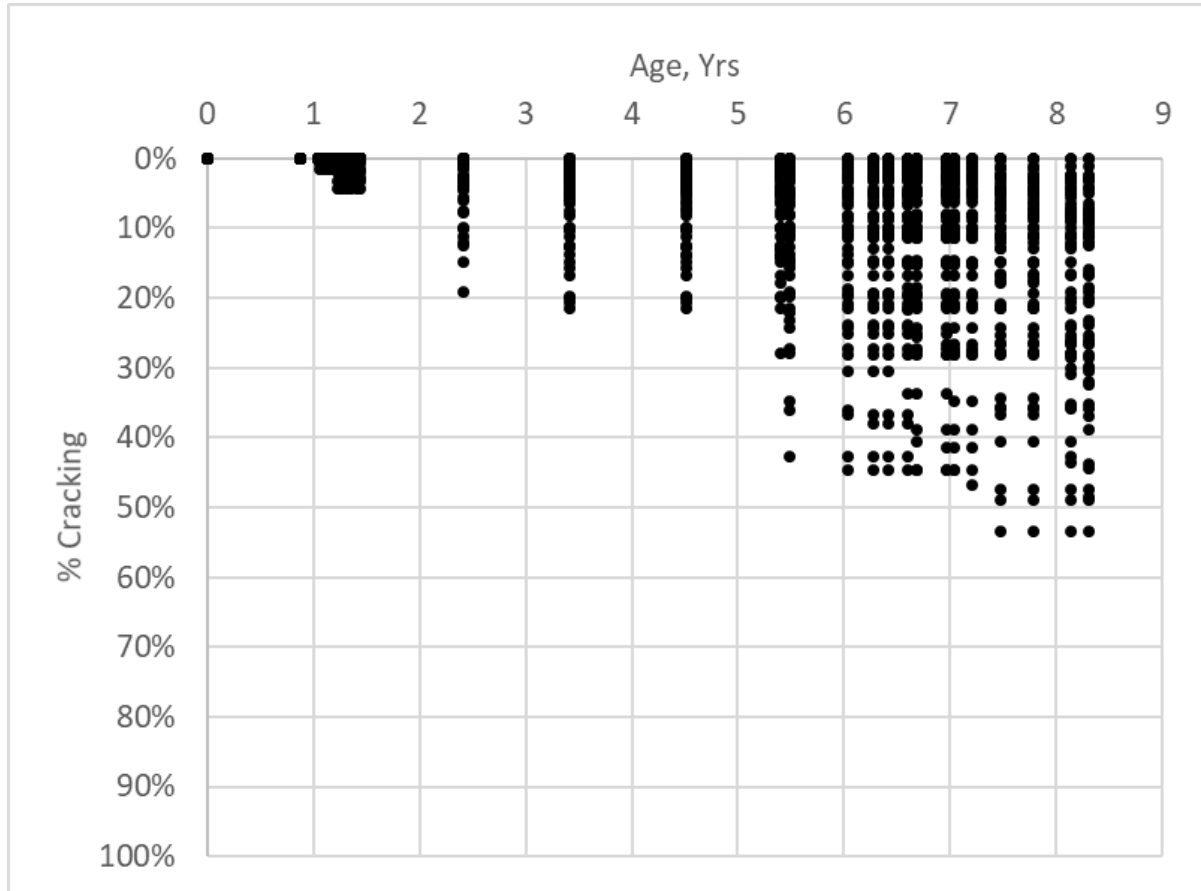
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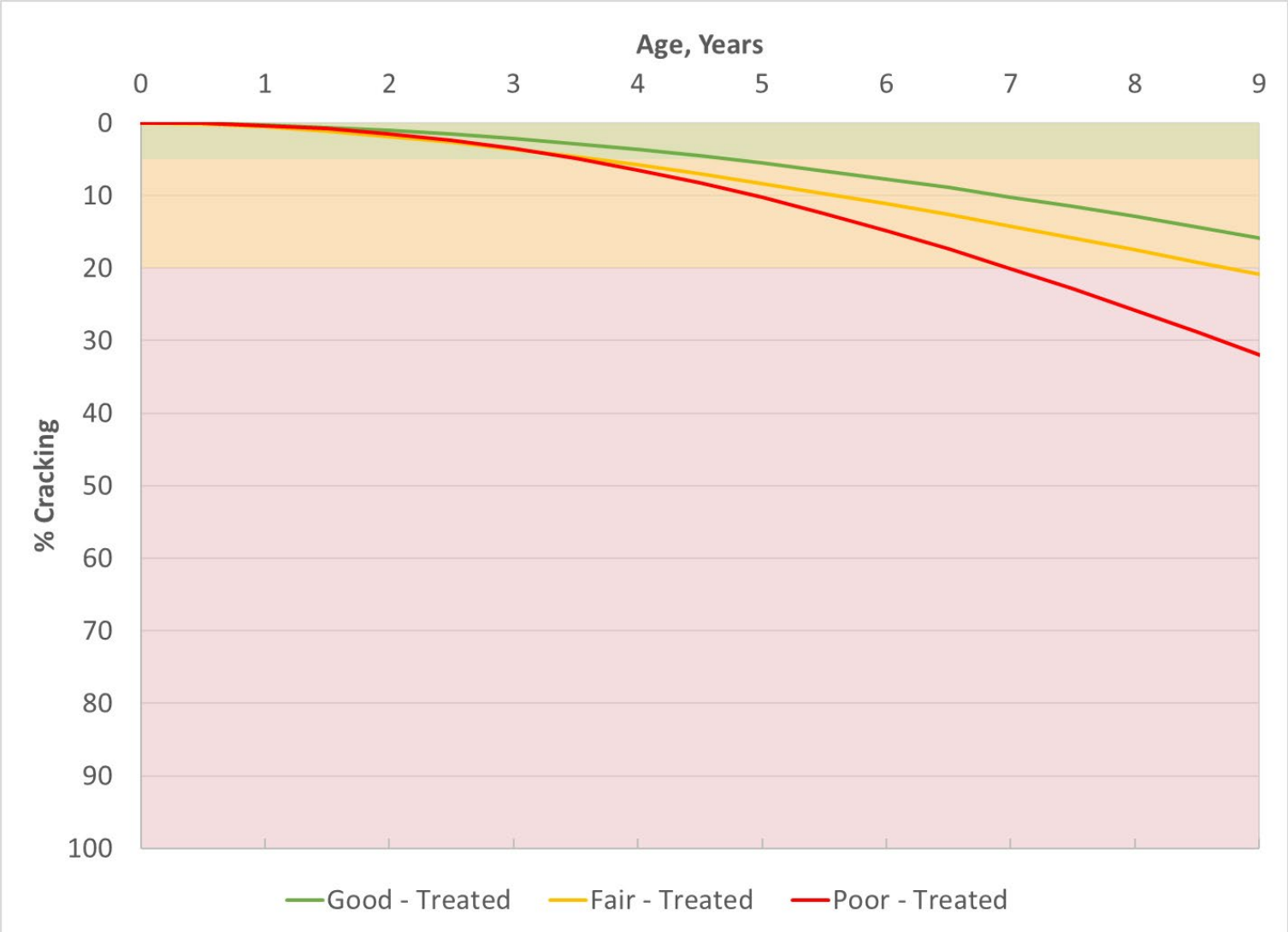
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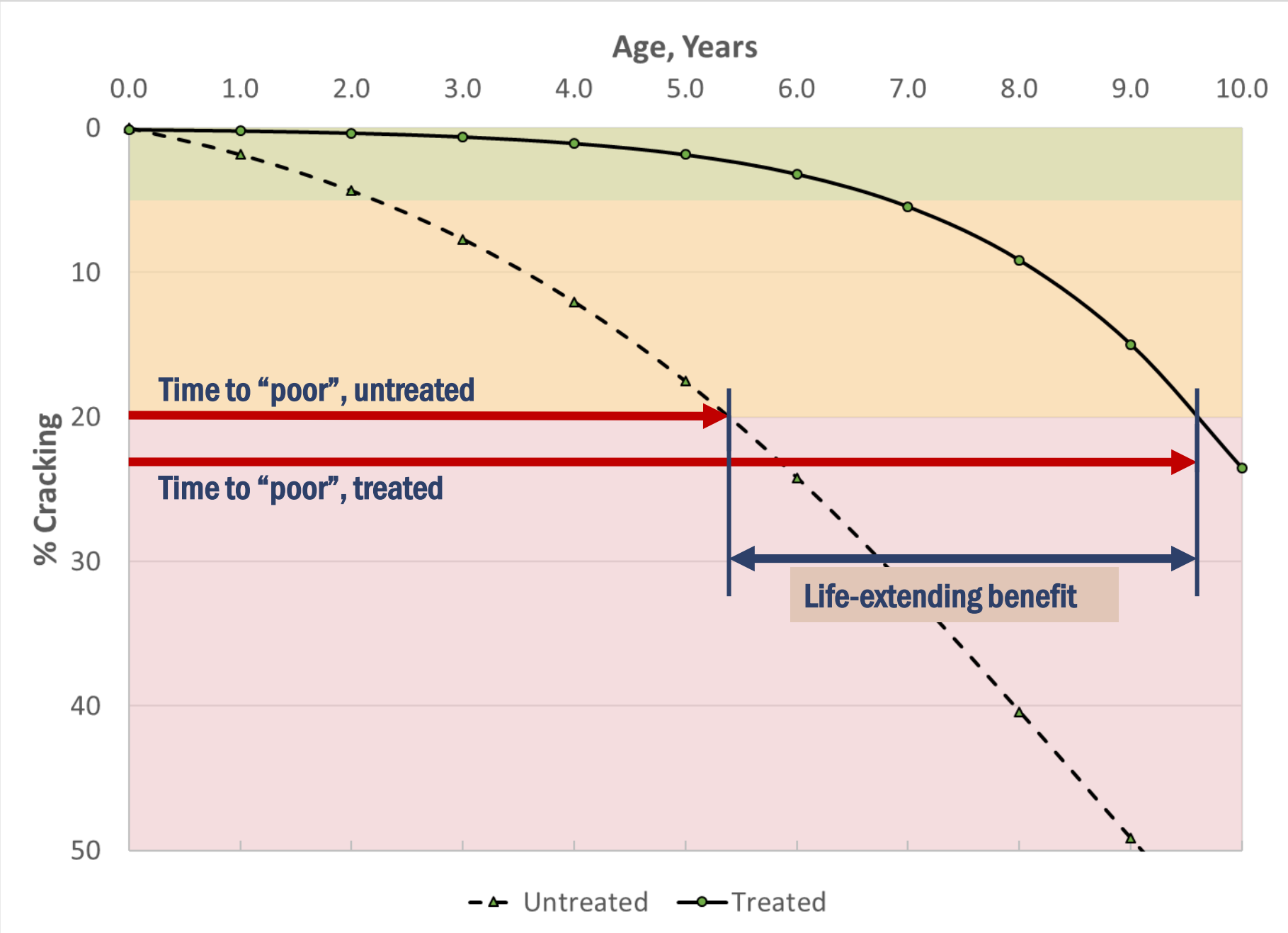


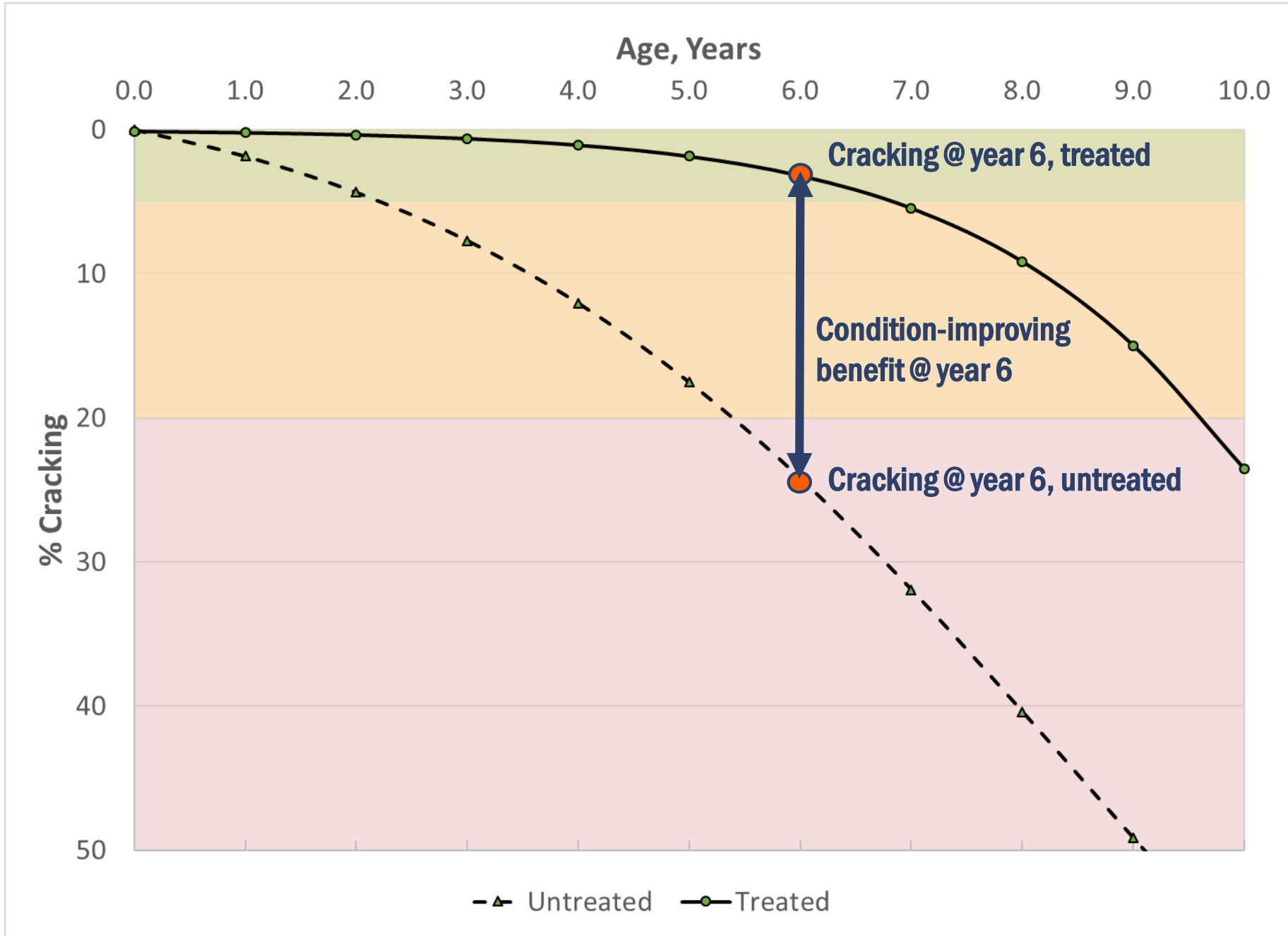


Implementation

- Fit an S-shaped curve using each dataset
- Fit curves for untreated sections, shift to match pretreatment
- Compare treated vs. untreated

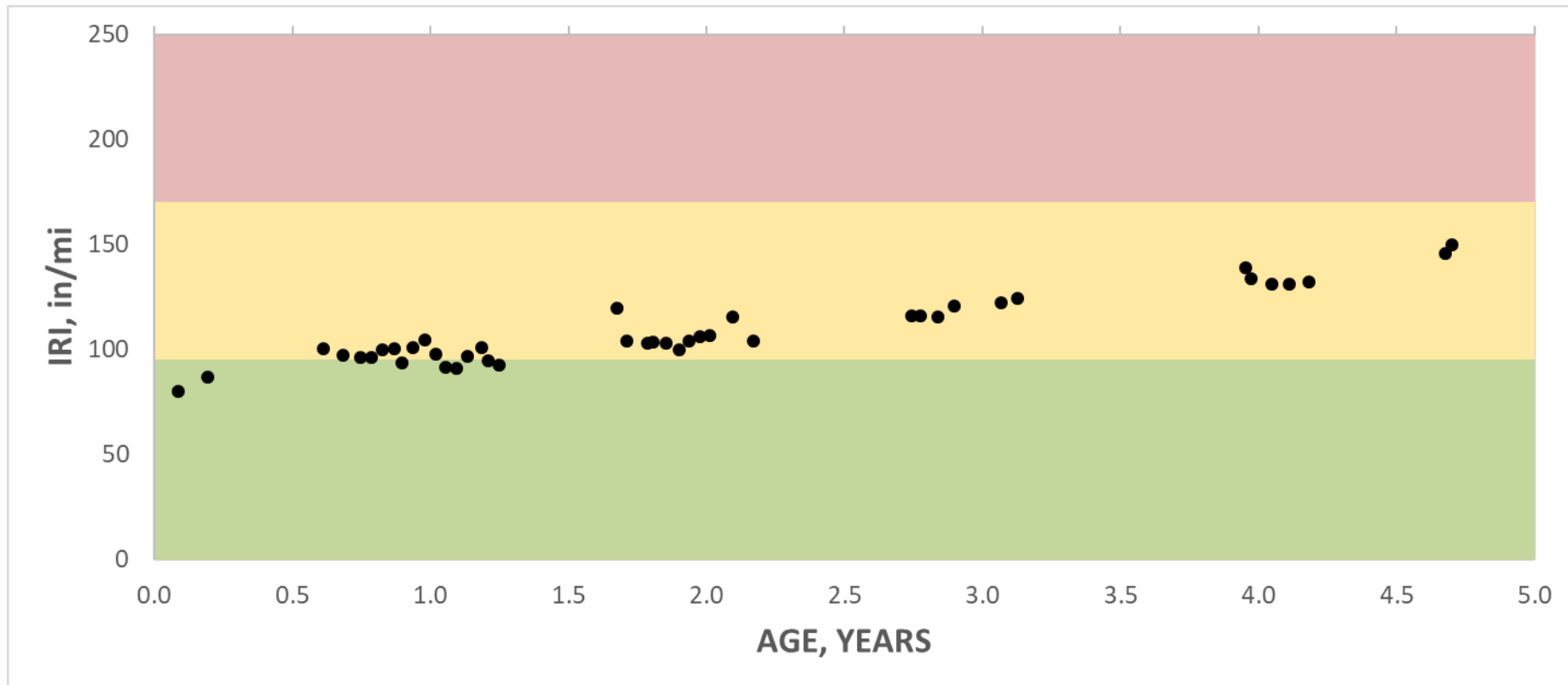






Other Parameters

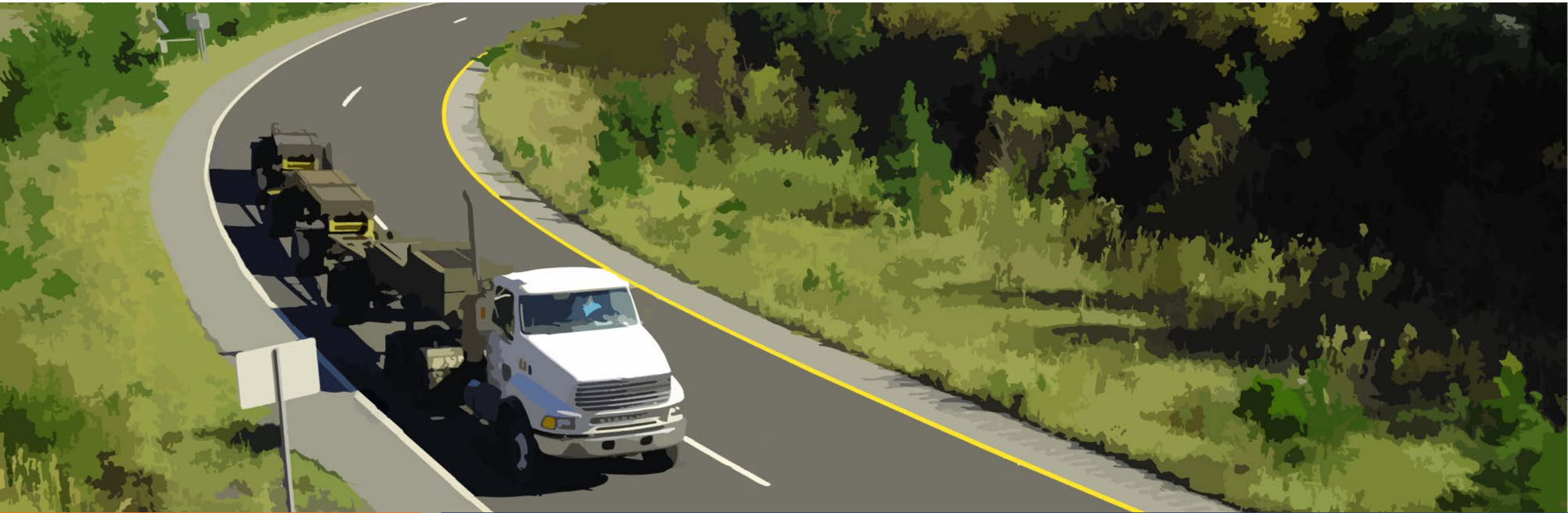
- Can use the same approach for other parameters (rutting, IRI)
- Adequate data for cracking models
 - ▣ Increasing IRI trends seen in some MN sections



Things to Consider

- Sample size
 - ▣ Subdividing could lead to few samples in a given category
- Similarities among treatments
 - ▣ Combine?
- Incorporate variability
 - ▣ Confidence intervals, survival analysis
- STILL WORK IN PROGRESS

Questions and Answers



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