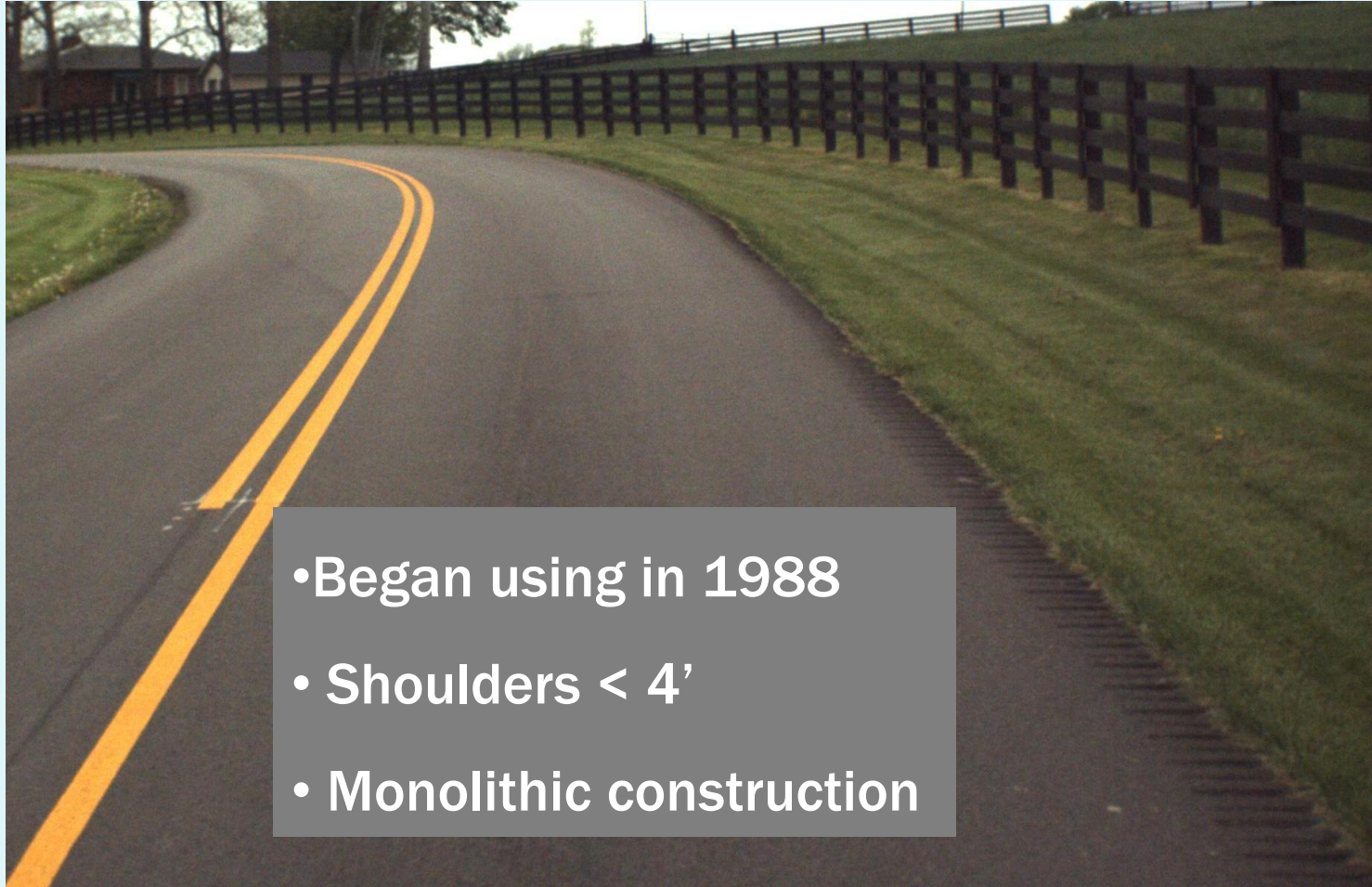# IMPACT OF KENTUCKY RUMBLE STRIP POLICY

Jon Wilcoxson

Director of Maintenance

- **Purpose of Rumble Strips**

- **Installation Types**

- **Safety Impacts**

- **Impacts on Pavement**
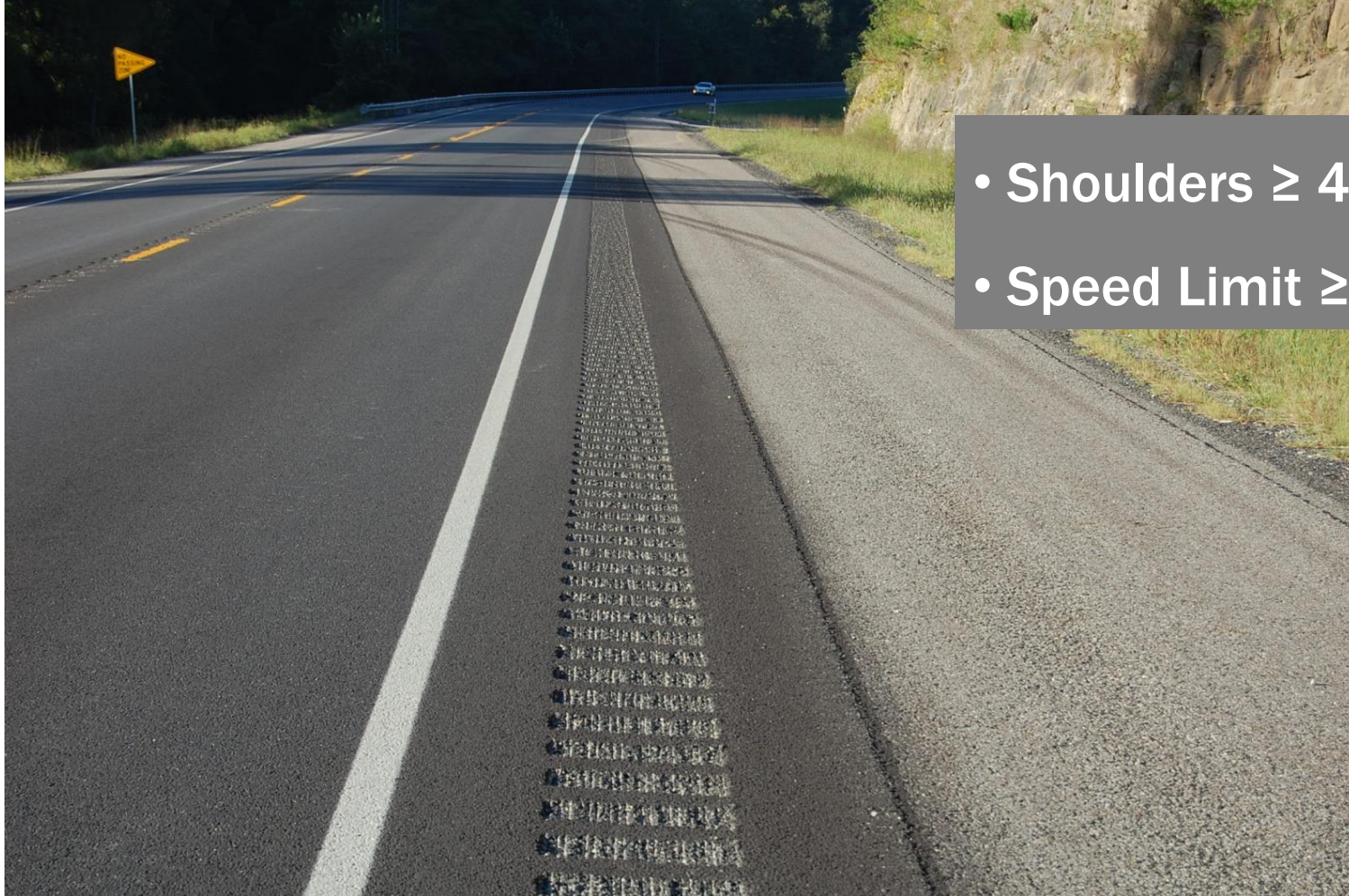
- **Other Considerations**

INSTALLATION TYPES

ROLLED RUMBLE STRIP

- Began using in 1988
- Shoulders < 4'
- Monolithic construction

MILLED SHOULDER RUMBLE STRIP

- Shoulders ≥ 4'
- Speed Limit ≥ 50 MPH

CENTERLINE RUMBLE STRIPS

- Lane width ≥ 11'

- Speed Limit ≥ 50 MPH

- First used in 2001

- Expanded in 2010

- Standard in 2012

EDGE LINE RUMBLE STRIP ("OLD" WAY)

EDGE LINE RUMBLE STRIP ("NEW" WAY)

- Pavement width ≥ 20'

- Speed Limit ≥ 50 MPH

- Still experimental

SAFETY IMPACTS

CLRS SAFETY IMPROVEMENTS

2008 Study of Spot Location Installations

Route	Length (miles)	Annual Crashes Pre-CLRS	Annual Crashes Post-CLRS	Annual Opposing Direction Crashes Pre-CLRS	Annual Opposing Direction Crashes Post-CLRS
Mountain Parkway	32.5	52	38	5.3	2.5
Hal Rogers Parkway	54.0	68.3	66.7	8.3	5.1
AA Highway	71.3	156	128	7.4	5.0
US 31W	5.2	59	29	2.0	0.4

CLRS SAFETY IMPROVEMENTS

2008 Study of Spot Location Installations

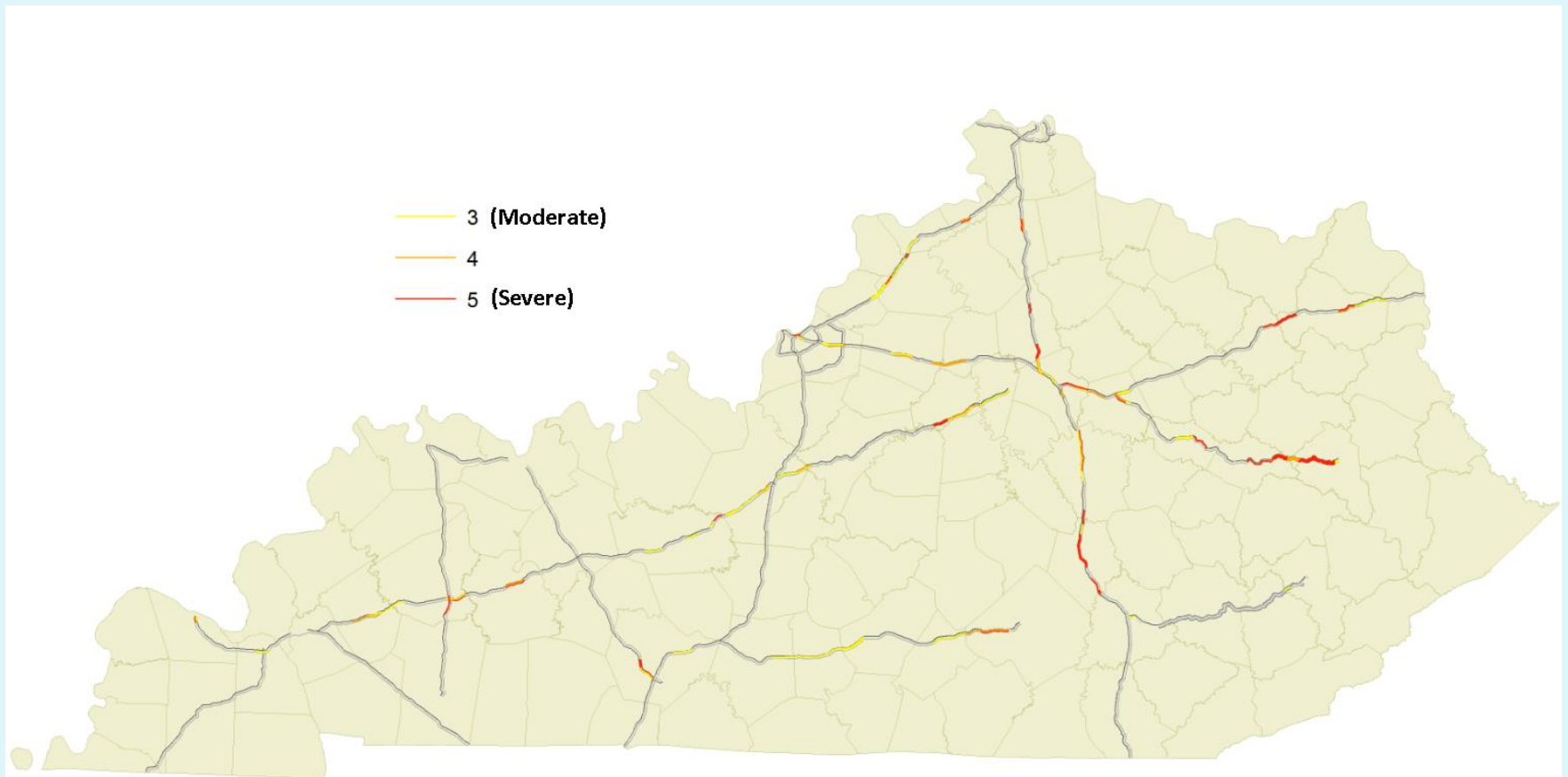| Route	Length (miles)	% Drop in Annual Crashes	% Drop in Annual Opposite Direction Crashes
Mountain Parkway	32.5	27%	53%
Hal Rogers Parkway	54.0	2%	39%
AA Highway	71.3	18%	32%
US 31W	5.2	51%	80%

CLRS SAFETY IMPROVEMENTS

2013 Preliminary Analysis of Centerline Program

- 5% reduction in Fatal and Injury crashes

- No significant change in total crashes

- Greater benefit in rural locations
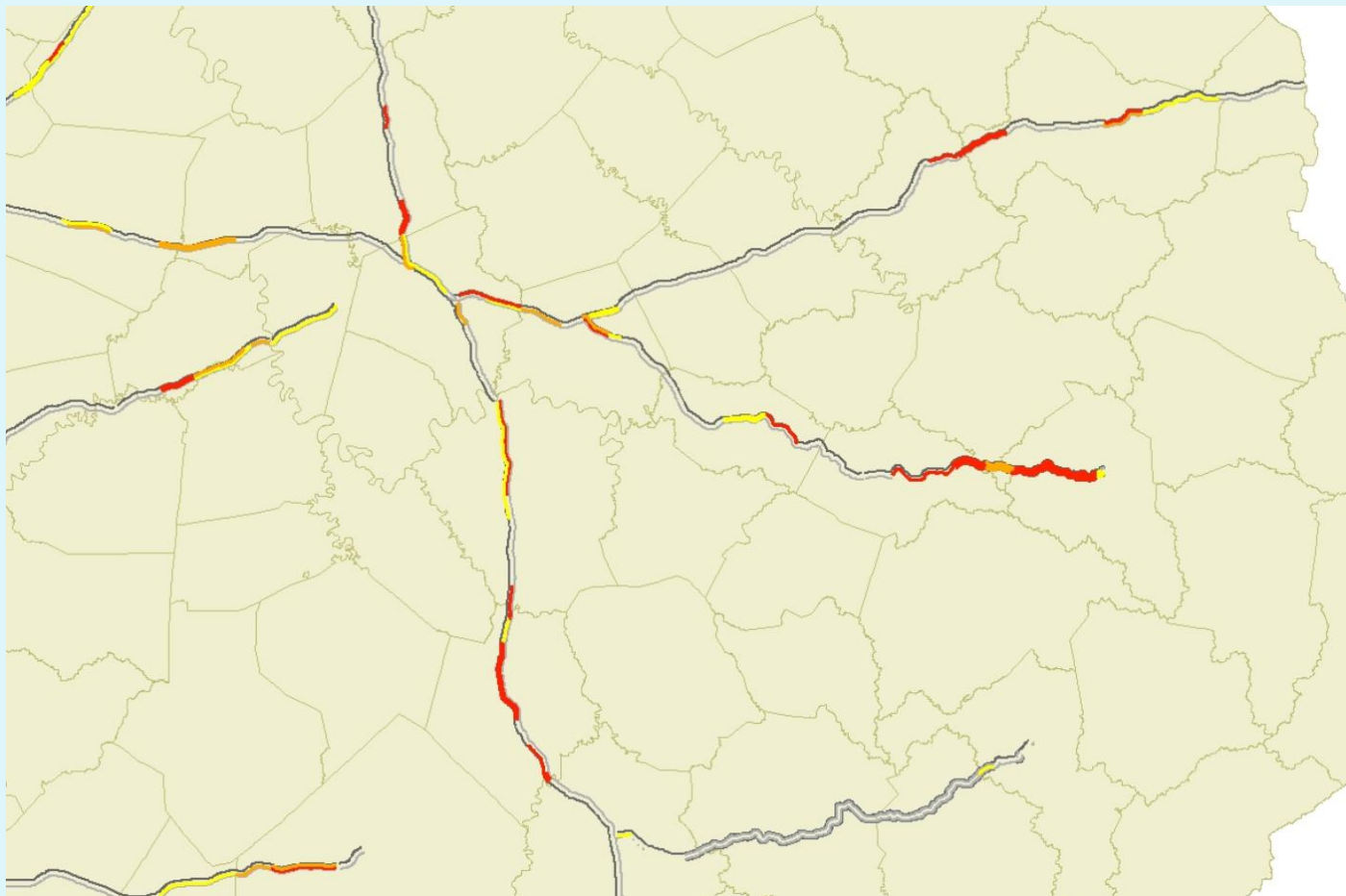
IMPACTS ON PAVEMENT CONDITION

IMPACTS ON PAVEMENT CONDITION
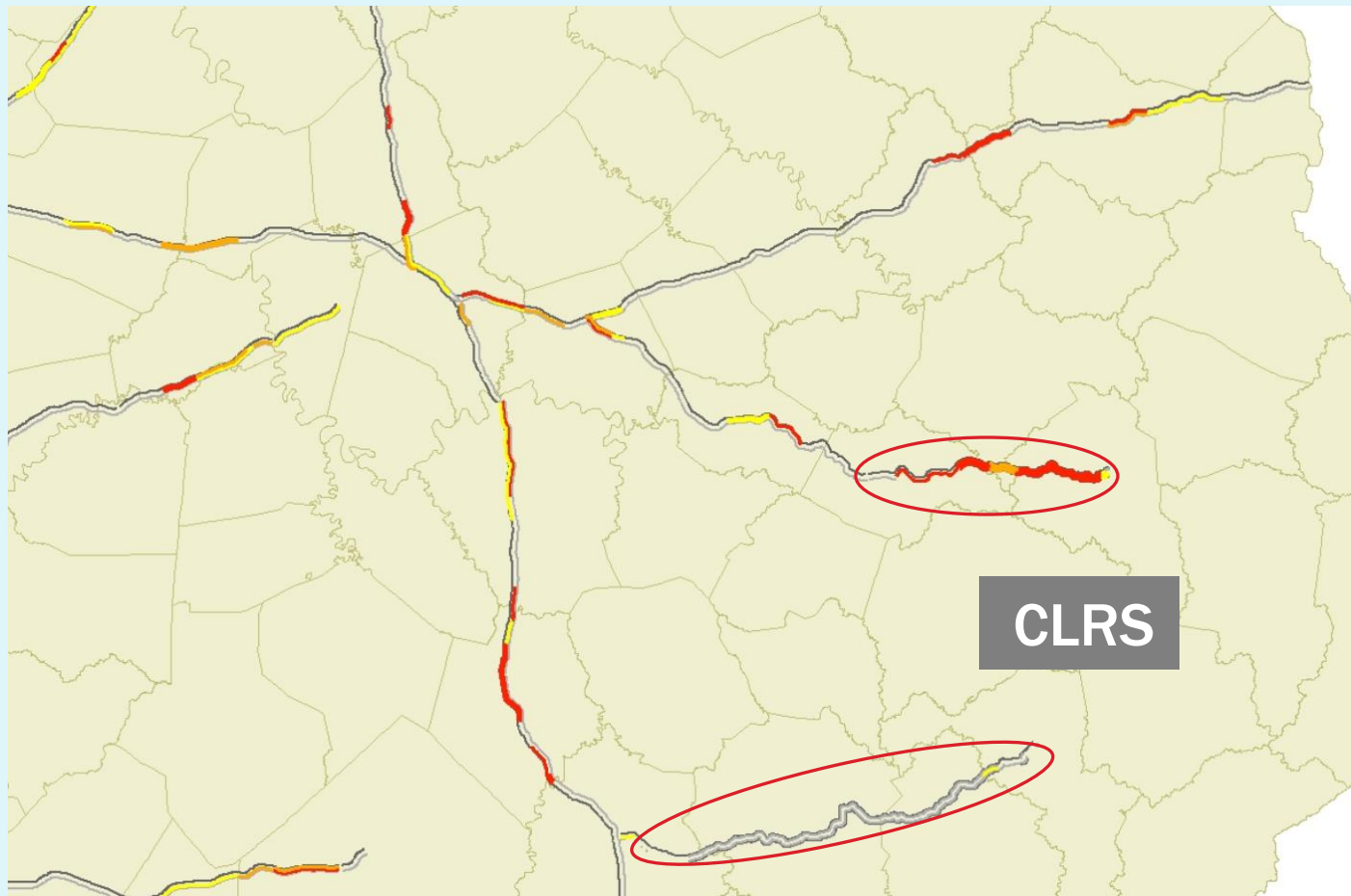
Interstate and Parkway Joint Separation

IMPACTS ON PAVEMENT CONDITION

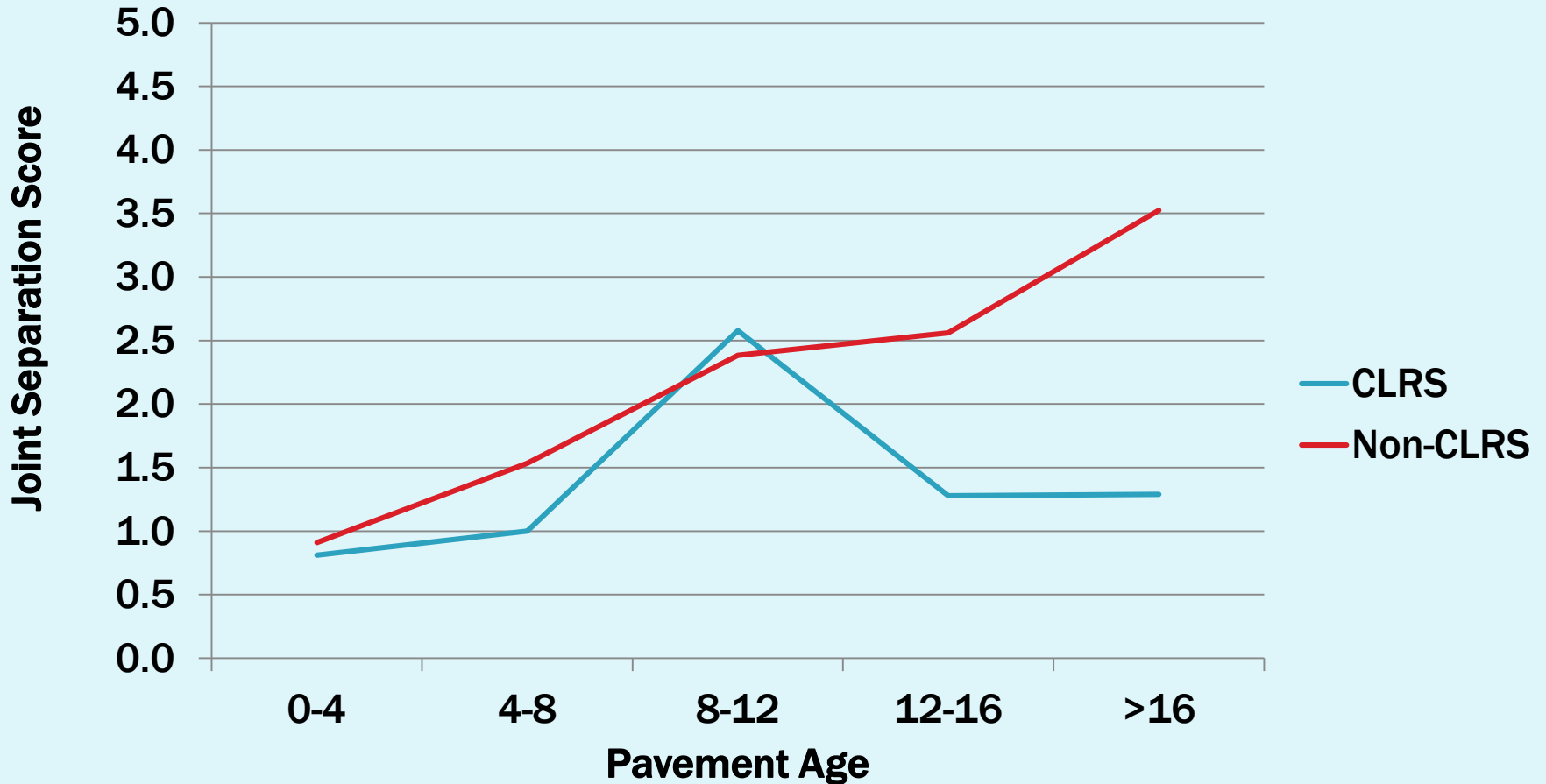## Interstate and Parkway Joint Separation

IMPACTS ON PAVEMENT CONDITION

Interstate and Parkway Joint Separation

INTERSTATE AND PARKWAY JOINT SEPARATION BY AGE

MILLED CLRS ON OLDER PAVEMENT

CLRS MILLED TOO DEEP

JOINT ISSUE WITHOUT CLRS

OTHER CONSIDERATIONS

- Patching Operations

- Impacts on Cyclists

- May limit future treatment options

SUMMARY

- Rumble strips provide a measurable safety benefit.

- Direct impacts on pavement condition appear to be negligible.

- May impact future treatment options.

QUESTIONS?