



CRACKING GROUP

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WisDOT
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HMA UP NORTH

MARCH....COMES IN LIKE A LION,
GOES OUT LIKE A LAMB



SUBGRADE ISSUES



THERMAL CRACKING



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- ▶ ADDRESS PG GRADE, DON'T USE -22, USE -28 OR -34 (NORTH HALF FOR NEW PAVT) FROM PREVIOUS MNROAD WORK
- ▶ ADDRESS RAM TYPE AND AMOUNT
- ▶ DCT OR SCB OR ?



FATIGUE CRACKING



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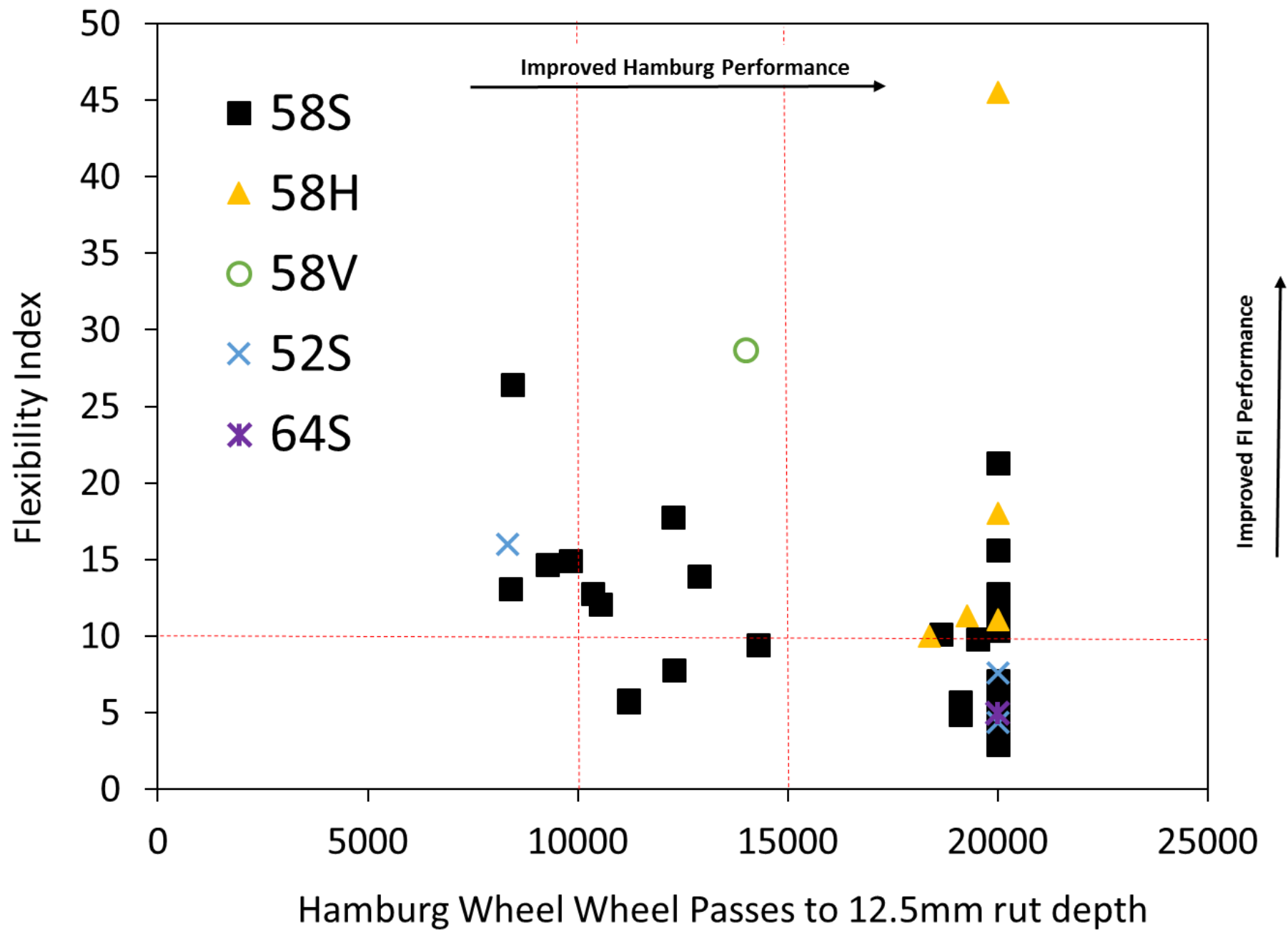
- ▶ INCREASED VMA
- ▶ INCREASED BINDER CONTENT THROUGH AIR VOID REGRESSION
- ▶ ADDRESS RAM TYPE AND AMOUNT
- ▶ I-FIT, OTHER SCB, OT, BBF, IDT, ?, ?, OR ?



WISDOT STATUS

- ▶ PURCHASED HW, SCB, DCT TESTING EQUIPMENT
- ▶ CONTINUED RESEARCH PROJECTS THRU WHRP.





WI HIGHWAY RESEARCH PROGRAM

- ▶ 14-06 CRITICAL FACTORS AFFECTING HMA LIFE
- ▶ 15-04 PERFORMANCE BASED TESTING
- ▶ 16-06 BALANCED MIX DESIGNS
- ▶ 17-06 TACK COAT
- ▶ 18-05 INVESTIGATION OF IN-SERVICE PAVT
- ▶ 19-05 RESULTANT BINDER.



PARTNERSHIPS

- ▶ NATIONAL ROAD RESEARCH ALLIANCE, NRRRA
 - MNROAD SPONSORED, MULTISTATE AND OTHERS
- ▶ NCAT/MNROAD
 - PAVEMENT PRESERVATION GROUP
 - CRACKING GROUP.



NCAT/MNROAD CRACKING STUDY

- ▶ 2 CLIMATES
- ▶ ACCELERATED LOADING
- ▶ VARIOUS MIXES
- ▶ VARIOUS TEST METHODS
- ▶ MONITORING, ANALYSIS

LEARN...

- ▶ WHEN DOES HMA CRACK
- ▶ TESTS TO PREDICT CRACKING
- ▶ METHODS TO **ELIMINATE** CRACKS IN THE FUTURE.



QUESTIONS?



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