



ICART: UTILIZATION OF THE REGIONAL TEST TRACK

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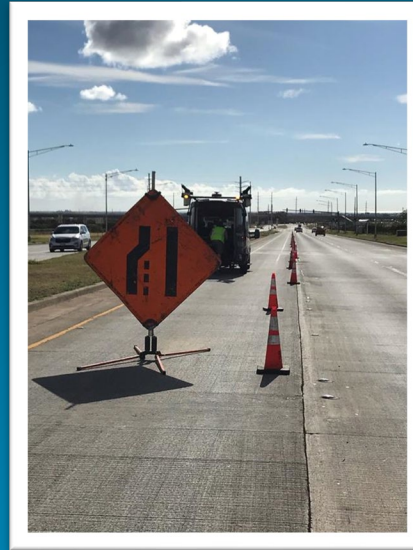
ILLINOIS DEPARTMENT OF TRANSPORTATION



RPUG
Road Profile Users' Group



- MANDLI AND ILDOT HAVE BEEN WORKING TOGETHER ON THEIR CURRENT CONTRACT FOR 7 YEARS
- PREVIOUSLY CERTIFIED AT AN UNCONTROLLED SITE ALONG A FUNCTIONING ROADWAY
- NCAT CERTIFIED YEARLY IN ALABAMA



3D INERTIAL PROFILER



Right of Way
cameras deliver
360° imagery



Dual Velodyne
HDL-32 LiDAR
sensors



Dual LCMS
Pavement
Scanners

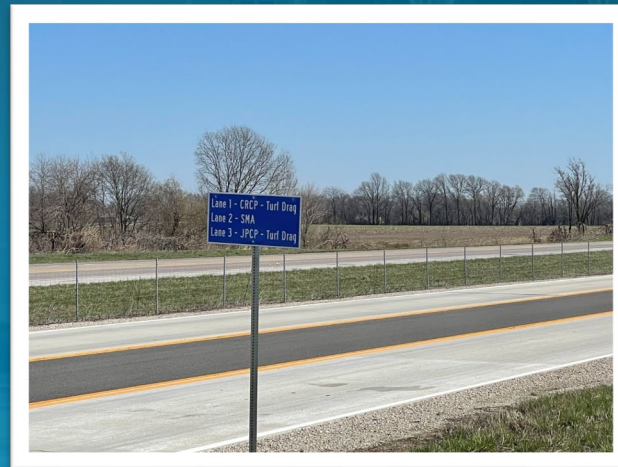


Position Orientation
System with inertial
and distance
measurement



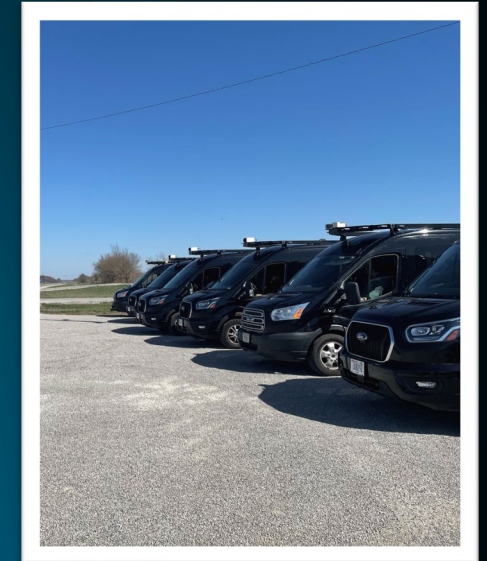
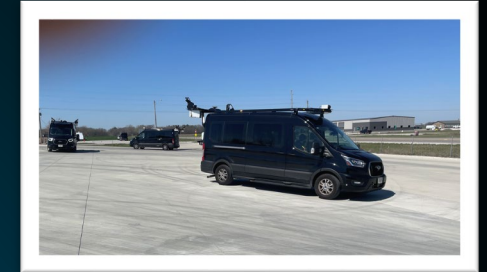
ICART - REGIONAL TEST TRACK

- CONVENIENT, CONTROLLED ENVIRONMENT FOR THIRD PARTY CERTIFICATION OF INERTIAL PROFILER SYSTEMS
- SIGNIFICANTLY SHAPING THE ADVANCEMENT AND REFINEMENT OF INDUSTRY STANDARDS
- DRIVING THE EVOLUTION OF RECOGNIZED NORMS WITHIN THE TRANSPORTATION SECTOR



UTILIZING THE TRACK

- 3RD PARTY CERTIFICATION
- MULTIPLE SYSTEMS CAN RUN AT THE SAME TIME
- ELIMINATE OUTLIERS
- SAVE TIME BY SCANNING DIFFERENT SECTIONS DOWN AND BACK
- TESTS ASPHALT & CONCRETE AT THE SAME TIME
- COOPERATION
 - DESIRE TO UNDERSTAND SYSTEM'S CAPABILITIES & LIMITATIONS



CERTIFICATIONS

AASHTO R56 STANDARDS

COMPREHENSIVE REPRESENTATION OF ROAD SURFACES

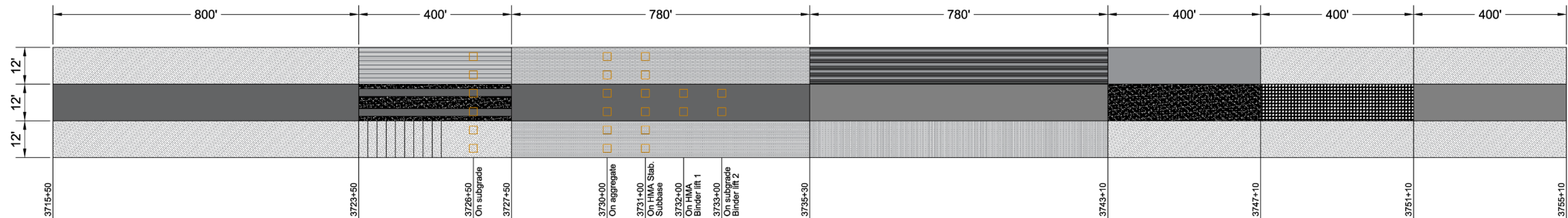
Multiple Asphalt Friction Sections & Concrete Lane

Repeatability of IRI

Accuracy of systems

Block & Bounce Tests

Confirmation of faulting values



8.5" CRCP - Turf Drag Finish	Smooth Finish with Diamond Grooving	Turf Drag Finish w/ Diamond Grooving	Smooth Finish with Diamond Grinding	Smooth Finish	Turf Drag Finish	Turf Drag Finish
11.5" 12.5 mm SMA	Artificial Rutting	12.5 mm SMA	9.5 mm Dense Graded HMA	Micro surfacing with 30% Calcined Bauxite & 70% Slag	Single Chip Seal	9.5 mm Dense Graded HMA
8.5" JPCP - Turf Drag Finish	Artificial Faulting	Longitudinal Tining	Transverse Tining	Turf Drag Finish	Turf Drag Finish	Turf Drag Finish

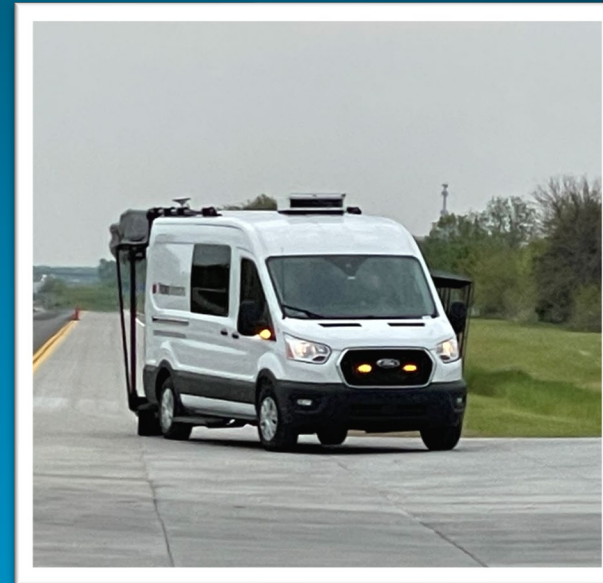


WHY THE NEED FOR 3RD PARTY CERTIFICATION?

- OBJECTIVITY AND CREDIBILITY
 - INDEPENDENT EVALUATION ENSURES UNBIASED, CREDIBLE ASSESSMENTS AGAINST STANDARDIZED CRITERIA
- REGULATORY COMPLIANCE
 - ESSENTIAL FOR MEETING LEGAL AND CONTRACTUAL OBLIGATIONS
- RISK MANAGEMENT
 - MINIMIZES DATA ISSUES BY VERIFYING AND CERTIFYING SYSTEM'S RELIABILITY AND ACCURACY
- CONTINUOUS IMPROVEMENT
 - DRIVES INNOVATION AND EFFICIENCY THROUGH ONGOING ASSESSMENTS AND ENHANCEMENTS TO MEET EVOLVING STANDARDS AND TECHNOLOGIES

BEYOND CERTIFICATIONS...

- OUTSIDE OF CERTIFICATIONS IT ALLOWS ACCESS TO A COURSE FOR THE RESEARCH, DEVELOPMENT, AND ADVANCEMENT OF STANDARDS IN THE INDUSTRY.
 - **RESEARCH & TESTING**
 - TPF-5(463): MANAGING THE PAVEMENT PROPERTIES FOR IMPROVED SAFETY (FRICTION POOLED FUND)
 - TRANSVERSE PAVEMENT PROFILER RODEO





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ANY QUESTIONS?

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