



35th RPUG Annual Conference

“New Technology for an Old World”

World Golf Village Renaissance

St. Augustine, FL, USA, April 29 – May 2, 2024.

General Agenda

MONDAY, April 29th	
08:00 AM – 12:00 PM	TPF-5(399) Distresses Pooled Fund Meeting
01:00 PM – 05:00 PM	TPF-5(463) Friction Pooled Fund Meeting
06:00 PM – 08:00 PM	Ice-Breaker Reception
TUESDAY, April 30th	
07:00 AM – 08:00 AM	Breakfast (visit exhibits)
08:00 AM – 09:00 AM	Session 1 - Welcome, Keynote, and Vendors Introduction
09:00 AM – 09:30 AM	Break (visit exhibits)
09:30 AM – 12:00 PM	Session 2 Texture and Friction I
12:00 PM – 01:00 PM	Break (lunch & poster session I)
01:00 PM – 03:30 PM	Session 3 Texture and Friction II
03:30 PM – 03:45 PM	Break (visit exhibits)
03:45 PM – 05:00 PM	Session 4 Distresses and Open Panel Discussion
06:00 PM – 10:00 PM	Evening Activities (offsite)
WEDNESDAY, May 1st	
07:00 AM – 08:00 AM	Breakfast (visit exhibits)
08:00 AM – 10:05 AM	Session 5 Profile I
10:05 AM – 10:35 AM	Break (visit exhibits)
10:35 AM – 11:50 PM	Session 6 Profile II
11:50 PM – 01:00 PM	Break (lunch & poster session II)
01:00 PM – 02:40 PM	Session 7 Pavement Condition Survey
02:40 PM – 02:55 PM	<i>Break (visit exhibits)</i>
02:55 PM – 04:50 PM	Session 8 Pavement Evaluation and RPUG Business Meeting
06:00 PM – 10:00 PM	Evening Activities (onsite)
THURSDAY, May 2nd	
08:00 AM – 12:00 PM	TPF-5(354) Profile Pooled Fund Meeting
01:00 PM – 05:00 PM	ProVAL Workshop



Monday, April 29, 2024

08:00 AM – 12:00 PM

**TPF-5(399) Distresses Pooled Fund Meeting
Room: Legions Ballrooms**

Moderator: Andy Mergenmeier, FHWA

Improving the Quality of Pavement Surface Distress and Transverse Profile Data Collection and Analysis – Pooled Fund Meeting

This meeting is for its members and all others interested in this subject.

01:00 PM – 05:00 PM

**TPF-5(463) Friction Pooled Fund Meeting
Room: Legions Ballrooms**

Moderators: Edgar D. de León Izeppi, VTTI

This is a TPF-5(463) Friction Pooled Fund Meeting to discuss the TPF's friction studies.

All TPF members and friends are welcome!

06:00 PM – 8:00 PM

**Ice Breaker Reception
Room: Ballroom E, F, G**

It is a great networking opportunity to be held at the exhibit hall.
All RPUG attendees are welcome!



Tuesday, April 30th, 2024

08:00 AM – 09:00 AM		Moderator: John Senger, IDOT (RPUG President)	
Session 1 – Welcome, Keynote, & Vendors Intro			
Room: Legions Ballrooms			
Welcome		John Senger, IDOT (RPUG President)	
Keynotes		Bouzid Choubane, NCPP Charles Holzschuher, FDOT	
Vendors' Introduction		All vendors' oral representatives	
09:00 AM – 09:30 AM Break (visit exhibits)			
09:30 AM – 12:00 PM		Moderator: John Andrews, Powel Engineering	
Session 2 – Texture and Friction (I)			
Room: Legions Ballrooms			
Evaluating the relationships between different testing systems used on roadways to measure friction and macrotexture on state highway agencies to assess similar friction characteristics (macrotexture and microtexture)		Edgar D. de León Izeppi, VTTI, Gerardo W. Flintsch, Ross McCarthy, and Hari Krishnan Nair	
Establishing a Validation Procedure for Continuous Friction Measurement Equipment		Chris Young, ARRB Systems	
Texture Signature Performance and Evaluation		Everett Schmitz, Pathway Services, Inc.	
Application of Artificial Neural Network in Predicting Pavement Macrotexture		Behrokh Bazmara, Vtech, Flintsch, W.G., de León Izeppi, E., Golalipour, A. and Boz, I.	
Are automated distress surveys with high repeatability and reproducibility really possible on statewide projects?		Danilo Balzarini, ICC	
Deterioration Analysis Using Macrotexture and Aggregate Loss Indicators from Multi-Timestamp 3D Pavement Surface Data		Ryan Salameh, GTECH, Pingzhou (Lucas) Yu, Yichang (James) Tsai	
12:00 PM – 01:00 PM Break (lunch)			
12:30 PM – 01:00 PM		Moderator: Thad Bauer, SDDOT	
Poster Session (I)			
Room: Ballroom E, F, G			
3D Reconstruction of Pavement Surface Texture		Mohammad Fakhreddine, U IL, Imad L. Al-Qadi, Mani Golparvar-Fard, and Fangyu Liu	
Aligning Ride Quality Measurement with Road User Experience		Michael Nieminen, ICC	
JPCP Slab-based Spatial-Temporal Deterioration Analysis using Multi-Timestamp 3D Pavement Surface Data		Ryan Salameh, GATech, Yichang (James) Tsai	
Automated crack detection using line laser scanners in Sweden and development of new surface defect parameters		Martin Wiström, Ramboll	



Tuesday, April 30th, 2024 (cont'd)

01:00 PM – 03:30 PM Session 3 - Texture and Friction (II) Room: Legions Ballrooms		Moderator: Steven Hale, NVDOT
Energy-Based Noncontact Tire-Pavement Friction Models		Ahmad Alhasan, ARA
Smart Tire Sensors for Verifying Accuracy of Continuous Friction Measuring Equipment (CFME)		Richard Ji, FAA
Continuous Tire-Pavement Friction and Macrotecture: Left vs. Right Wheel Paths		Isaac Briskin, WDM, Daniel Galvez, Ryland Potter
Compare CA portable skid tester (PST) against CFMEs		Baron Colbert, Caltrans
Implementation of Relative Performance Targets in a New State PMS Using Deighton's dTIMS Platform		Md S Rahman, CTDOT, Daniel Weymouth, Alex Bernier, PE
03:30 PM – 03:45 PM Break (visit exhibits)		
03:45 PM – 05:00 PM Session 4 - Distresses and Panel Open Discussion Room: Legions Ballrooms		Moderator: Bouzid Choubane, NCPP
How FDOT is using machine learning to detect Raveling from LCMS Images		Mateo Carvajal, FDOT, Noah Borelli, Charles Holzschuher, William Bryant
Panel Discussion on Texture		Brian L. Schleppe, Mandli, WDM, SSI, Pavemetrics, Pathway Services
Open Discussion using online polling software		Steve Karamihas, APTech
06:00 PM – 10:00 PM Evening Activities at the Gatorland		
TBA		



Wednesday, May 1st, 2024

08:00 AM – 10:05 AM Session 5 – Profile (I) Room: Legions Ballrooms		Moderator: Colin McClenahan, PennDOT
The Switch from PRI to IRI: An Update		Steve Hale, NVDOT
All Speed Profiler (ASP)		Everett Schmitz, Pathway Services Inc.
Application of ProVAL SAM Grinding Simulation for Cold Planing		Jeff McGowan , Shelly Sands
Caltrans Stop-and-Go Profiler Implementation		Baron Colbert, Caltrans
Detection of Road Profile Measurement Errors		Steven M. Karamihas, APTech
10:05 AM – 10:35 AM Break (visit exhibits)		
10:35 AM – 11:50 PM Session 6 – Profile (II) Room: Legions Ballrooms		Moderator: Nathan Kebede, Michael Baker
Illinois Certification and Research Track		John Senger, IDOT
ICART		Cindy MacDonald, Mandli, John Senger , IDOT
Key Findings Regarding Cross Correlation		Steven M. Karamihas, APTech
12:05 PM – 01:00 PM Break (lunch)		
12:30 PM – 01:00 PM Poster Session (II) Room: Ballroom E, F, G		Moderator: Stephanie Weigel, NDDOT
Quantifying Longevity of Shotblasting Friction and Texture Improvements		Boris Goenaga, NCSU, Paul Rogers, and Shane Underwood
Multi-temporal Pavement Image Registration for Pavement Distress Deterioration Analysis"		Zhongyu Yang, GATech, Yi-Chang (James) Tsai
Investigation of Relationship between Macrottexture and Percent Embedment in Chip Seals using Image Processing		Brian Moon, ARA, Ahmad Alhasan, Hyung Lee and John Senger
Road Profilers have a major role in assisting Road Agencies meet new MUTCD mandatory pavement marking retroreflectivity requirements.		Joe Turley, RetroTek



Wednesday, May 1st, 2024 (cont'd)

01:00 PM – 02:40 PM Session 7 – Pavement Condition Survey Room: Legions Ballrooms		Moderator: Christy Poon-Atkins, FHWA
From 2D to 3D – the Future of ProVAL		George Chang, Transtec Group
Evaluation on Surface Characteristics of Florida's Concrete Test Road and Longitudinally Grooved Concrete Project		Charles Holzschuher, FDOT
HPMS Pavement Data Reporting and Recent Status		Maxx Grogg, APTech
What is and What's New with TRB AKP50?		Brian L. Schleppe
02:40 PM – 02:55 PM Break (visit exhibits)		
02:55 PM – 04:50 PM Session 8 – Pavement Evaluation and RPUG Business Meeting Room: Legions Ballrooms		Moderator: John Senger, IDOT
FDOT Implementation of the Automated Condition Survey		William Bryant, FDOT
Comparing Road Condition Indices Using Automated PCI, PASER and PSCI methods on standard LCMS road condition data outputs.		John Laurent, Pavemetrics
Value of Asset Lifecycle Management Integration		Maximillian Ovet, Trimble
RPUG Business Meeting		John Senger, IDOT
06:00 PM – 10:00 PM Evening Activities at the Hotel Room: Ballroom E, F, G		
TBA		



Thursday, May 2nd , 2024

08:00 AM – 12:00 PM	
TPF-5(354) Profile Pooled Fund Meeting	Moderator: Thad Bauer, SDDOT
Room: Legions Ballrooms	
Improving the Quality of Highway Profile Measurement – Pooled Fund Meeting This meeting is for its members and all others interested in this subject.	
12:00 PM – 1:00 PM Break (lunch on your own)	
01:00 PM – 05:00 PM	
ProVAL Workshop	Trainers: George Chang and Dave Merritt,
Room: Legions Ballrooms	Transtec Group
This workshop is hands-on and focuses on ProVAL software exercises. All participants need to bring their laptop computer preinstalled with ProVAL 4.0.	
5:00 PM	RPUG 2024 Adjourned
	See You Next Year!