



# 36<sup>th</sup> RPUG Annual Conference

Embassy Suite Convention Center Hotel in Dallas, TX

April 28 – May 1, 2025

<b>MONDAY, April 28<sup>th</sup></b>	
08:00 AM – 12:00 PM	TPF-5(299) Distresses Pooled Fund Meeting
01:00 PM – 05:00 PM	TPF-5(463) Friction Pooled Fund Meeting
01:00 PM – 05:00 PM	ProVAL Workshop & Users Forum
06:00 PM – 08:00 PM	Ice-Breaker Reception
<b>TUESDAY, April 29<sup>th</sup></b>	
07:00 AM – 08:00 AM	Breakfast (visit exhibits)
08:00 AM – 09:50 AM	Session 1 – Opening/PCS/Vendor’s introduction
09:50 AM – 10:20 AM	Break (visit exhibits)
10:20 AM – 12:00 PM	Session 2 – Pavement Condition Surveys (I)
11:50 PM – 01:00 PM	Break (lunch & Poster Session I)
01:00 PM – 02:40 PM	Session 3 – Profile (I)
02:40 PM – 02:55 PM	Break (visit exhibits)
02:55 PM – 04:10 PM	Session 4 – Profile (II)
04:10 PM – 04:25 PM	Break (visit exhibits)
04:25 PM – 05:15 PM	Session 5 – Profile (III) and RPUG Business Meeting
06:00 PM – 10:00 PM	Social Event
<b>WEDNESDAY, April 30<sup>th</sup></b>	
07:00 AM – 08:00 AM	Breakfast (visit exhibits)
08:00 AM – 09:40 AM	Session 6 – Texture/Friction (I)
09:40 AM – 10:10 AM	Break (visit exhibits)
10:10 AM – 11:50 PM	Session 7 – Texture/Friction (II)
11:50 PM – 01:00 PM	Break (lunch & Poster Session II)
01:00 PM – 02:40 PM	Session 8 – Texture/Friction/PMS/PCS
02:40 PM – 02:55 PM	<i>Break (visit exhibits)</i>
02:55 PM – 04:10 PM	Session 9 – Pavement Condition Surveys (II)
04:10 PM – 04:25 PM	<i>Break (visit exhibits)</i>
02:55 PM – 04:10 PM	Session 10 – Open Forum/Closing
<b>THURSDAY, May 1<sup>st</sup></b>	
08:00 AM – 10:00 AM	TRB AKP50 Committee Meeting
10:00 AM – 03:00 PM	TPF-5(537) Profile Pooled Fund Meeting



## Monday, April 28<sup>th</sup>, 2025

**08:00 AM – 12:00 PM**  
**TPF-5(299) Distresses Pooled Fund Meeting** Moderator: **Andy Mergenmeier, FHWA**  
**Room: TBA**

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

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

**01:00 PM – 05:00 PM**  
**TPF-5(463) Friction Pooled Fund Meeting** Moderators: **Edgar D. de León Izeppi, VTTI**  
**Room: TBA**

This is a TPF-5(463) Friction Pooled Fund Meeting to discuss the TPF's friction studies, including the following presentation:

- Physical Interpretation of Contactless Energy-Based Tire-Pavement Friction Models, by Ahmad Alhasan (HNTB)

All TPF members and friends are welcome!

**1:00 PM – 05:00 PM**  
**ProVAL Workshop & Users Forum** Moderator: **George K. Chang, Transtec Group, A Terracon Company**  
**Room: TBA**

This workshop is hands-on and focuses on ProVAL software exercises. It also includes a ProVAL users forum to interact with users for feedback.

Trainers include George Chang, Dave Merritt, Amanda Gilliland, Subu Sankaranarayanan (Transtec Group, A Terracon Company)

All participants need to bring their laptop computer preinstalled with ProVAL 4.0 and sample files.

This workshop is open to all!

**06:00 PM – 8:00 PM**  
**Ice Breaker Reception**  
**Room: TBA**

It is an ice breaker reception as a great networking opportunity to be held at the exhibit hall.

All RPUG attendees are welcome!



## Tuesday, April 29<sup>th</sup>, 2025

<b>08:00 AM – 09:50 AM</b>	
<b>Session 1 – Opening/PCS/Vendor’s introduction</b>	<b>Moderator: Colin McClenahen (PennDOT) – RPUG President</b>
<b>Room: TBA</b>	
Welcome	Colin McClenahen (PennDOT)
Keynote Speech	Mohamed “Mo” Bur (TxDOT)
State of Connecticut DOT current practice for QC/QA for Pavement Condition Data - Emphasis on LCMS pavement distress identification	Jeannine Moriarty (Connecticut Department of Transportation)
Critical Assessment of Cross-slope Measurement Accuracy from 3D Pavement Data	Mohsen Mohammadi (Georgia Institute of Technology), Yi-Chang (James) Tsai, Zhongyu Yang, Jenny Li
Vendors' brief oral introduction	All vendors’ representatives
09:50 AM – 10:20 AM Break (visit exhibits)	
<b>10:32 AM – 12:00 PM</b>	
<b>Session 2 – Pavement Condition Survey (I)</b>	<b>Moderator: Stephanie J. Weigel (NDDOT)</b>
<b>Room: TBA</b>	
Proposal for an International Standard Crack Map	Michael Nieminen (ICC-IMS)
Pavement Surface Characteristics Evaluation Using Vehicle-Based Data Collection	Gerardo Flintsch (Virginia Tech), Grace Mardirossian, Matteo Pettinari, Edgar de Leon and Björn Zachrisson
Cracking Data Quality Assessment Using Ground References: Developing a Standard Methodology	Zhongyu Yang (Georgia Institute of Technology), Trinh N. Flynt, Ryan Salameh, Georgene Geary, Yi-Chang (James) Tsai
Using AI to enhance the analysis of 3D pavement image data	John Laurent (Pavemetrics Systems Inc.)
12:00 PM – 01:00 PM Break (lunch)	
<b>12:30 PM – 01:00 PM</b>	
<b>Poster Session (I)</b>	<b>Moderator: Steve Hale (NVDOT)</b>
<b>Room: TBA</b>	
Towards Successful Implementation of Automated Raveling Detection: Training Data Size, Illumination Scale, and Image Shift	Xinan Zhang(Georgia Institute of Technology), Yichang (James) Tsai
Feasibility Study on Pavement Surface Friction Estimation Using Vehicle Sensor Data	Nima Kargah-Ostadi(Callentis Consulting Group), Kostiantyn Vasylevskyi, Andrei Ablets, Andrew Drach
Sideways Friction Number Prediction Using Decision Tree Algorithm	Mohammad Fakhreddine(University of Illinois at Urbana-Champaign), Imad L. Al-Qadi, Mani Golparvar-Fard, Hong Lang
Neural Network-Based Model for Predicting Skid Resistance in Asphalt Pavements Using LTPP Data	Bishal Babu Karki(University of Texas at Tyler), Tanvir Ahmed, Mayzan Isied, Mena I. Souliman



## Tuesday, April 29<sup>th</sup>, 2025 (cont'd)

<b>01:00 PM – 02:40 PM</b> <b>Session 3 - Profile (I)</b> <b>Room: TBA</b>		<b>Moderator: Steve Miles (OHDOT)</b>
IDOT Profiler Comparison Experiment	Steve Karamihas (Applied Pavement Technology), John Senger	
Pilot Certification of Profilors for Use at Low Speed, During Braking, and Through Stops	Steve Karamihas (Applied Pavement Technology), John Senger	
Illinois DOT's IRI Specification – Looking Back at the First Four Years	John Senger (ILDOT)	
Smooth Roads, Strong Partnerships: Developing CDOT's Latest Specification	Sarah Dalton (CDOT/ACPA), Eric Prieve	
02:40 PM – 02:55 PM Break (visit exhibits)		
<b>02:55 PM – 04:10 PM</b> <b>Session 4 - Profile (II)</b> <b>Room: TBA</b>		<b>Moderator: Alex Middleton (MSDOT)</b>
Real Time Smoothness for Concrete Pavements: State-of-the-Practice and Value Proposition	David Merritt (Transtec Group, A Terracon Company), Gary Fick, John Adam	
History and Current Status of Dual-Laser Inertial Profiling Technology	Paul Toom (ICC-IMS)	
Leveraging Lidar Data to Construct Smoother Pavements	Jim Preston (Topcon Positioning Systems)	
04:10 PM – 04:25 PM Break (visit exhibits)		
<b>04:25 PM – 05:15 PM</b> <b>Session 5 - Profile (III) &amp; RPUG Business Meeting</b> <b>Room: TBA</b>		<b>Moderator: Jeannine Moriaty (CTDOT)</b>
Automated and Interpretable Classification of Jointed Plain Concrete Pavement (JPCP) Slab State Using Crack Vector Model(CVM)	Zhongyu Yang (Georgia Institute of Technology), Trinh N. Flynt, Ryan Salameh, Georgene Geary, Yi-Chang (James) Tsai	
RPUG Open Business Meeting	Colin McClenahen (PennDOT)	
<b>06:00 PM – 10:00 PM</b> <b>Social Event</b> <b>(details to be announced at the conference)</b>		



## Wednesday, April 30<sup>th</sup>, 2025

<b>08:00 AM – 09:40 AM</b> <b>Session 6 – Texture/Friction (I)</b> <b>Room: TBA</b>		<b>Moderator: Sarah Sanders (ACPA)</b>
A fraction too much friction-never		Richard Wix (National Transport Research Organization - NTRO)
Evolution of High Friction Surface Treatment Projects in Kentucky		Richard (Alex) Mucci (Kentucky Transportation Cabinet)
iSAVE–The Mississippi Experience		Jim Poorbaugh (Mississippi Department of Transportation)
The Role of Continuous Tire-Pavement Friction Measurement in the Management of High Friction Surface Treatments		Isaac Briskin (WDM), Ryland Potter
09:40 AM – 10:10 AM Break (visit exhibits)		
<b>10:10 AM – 11:50 PM</b> <b>Session 7 – Texture/Friction (II)</b> <b>Room: TBA</b>		<b>Moderator: Edgar de Leon Izeppi (Virginia Tech)</b>
Texture Signature Performance Index(TSPI)Implementation		Everett Schmitz (Pathway Services Inc)
Establishing Friction and Macrotecture Investigatory Thresholds		Boris Goenaga(North Carolina State University), Shane Underwood, Cassie Castorena, Paul Rogers
Investigating the Combined Effects of Macrotecture and Friction on Crash Counts and Safety Performance Functions for Different Pavement Mix Types and Roadway Categories		Behrokh Bazmara(Virginia Tech), Gerardo W. Flintsch, Edgar de León Izeppi
Evaluation of an alternative measure of macro-texture to that of MPD (Mean Profile Depth)		Richard Dal Lago (WDM limited)
11:50 AM – 01:00 PM Break (lunch)		
<b>11:50 AM – 01:00 PM</b> <b>Poster Session (II)</b> <b>Room: TBA</b>		<b>Moderator: Nathan Kebede (M Baker Intl)</b>
Advancing Pavement Evaluation with 3D GPR: Applications, Advantages, and Limitations		Ali Hafiz (Advanced Infrastructure Design), Manuel Celaya, Kaz Tabrizi
Cascaded Workflow for Automated Pavement Crack Detection and Measurement Using Generative AI Models and Image Processing Techniques		Yongsheng Bai (Texas State University), Feng Wang
Quantification and Prediction of Pavement Flushing Using Surveying, Texture, Temperature and Traffic Data		Gauri Mahajan (Texas State University, San Marcos), Sadia Bhuiyan Shampa, Feng Hong, Xiaohua Luo, Feng Wang
Multi-Objective Pavement Distress Detection with CNN and Transformer Deep Learning Architectures		Fateme Ansari (Oklahoma State University), Kaustav Chatterjee, Joshua Q. Li , Kelvin Wang, Amir Golalipour
Development of Physics-Guided Neural Networks for IRI Prediction in Jointed Plain Concrete Pavements		Tanvir Ahmed (University of Texas at Tyler), Mayzan Isied, Mena I. Souliman



## Wednesday, April 30<sup>th</sup>, 2025 (cont'd)

<b>01:00 PM – 02:40 PM</b>	
<b>Session 8 – Texture/Friction/PMS/PCS</b>	<b>Moderator: Thad Bauer (SDDOT)</b>
<b>Room: TBA</b>	
Statistical Analysis of Different Spatial Sampling Alternatives in Network-Level Pavement Texture Data	Feng Hong (Texas State University), Ruohan Li, Jorge A Prozzi
Diamond Grinding for Fuel Economy Improvement and Safety grooving for Friction Remediation	Nicholas Davis (IGGA)
Unboxing The Blackbox: Uncertainty and AI in Pavement Condition Data and Performance Models	Ahmad Alhasan (HNTB), John Senger
Automated Project-Level Maintenance and Rehabilitation Planning and Design for Jointed Plain Concrete Pavements Using 3D Pavement Surface Data	Ryan Salameh (Georgia Institute of Technology), Jaden Lim, and Yi-Chang (James) Tsai
02:40 PM – 02:55 PM Break (visit exhibits)	
<b>02:55 PM – 04:10 PM</b>	
<b>Session 9 – Pavement Condition Survey (II)</b>	<b>Moderator: Jenny Li (TxDOT)</b>
<b>Room: TBA</b>	
Network-Wide Screening Using Connected Vehicle Data	Björn Zachrisson (Nira Dynamics)
Implementing Artificial Intelligence in Automated Pavement Distress Detection at the State Level: Lessons Learned in Texas	Haitao Gong (Texas State University), Feng Wang, Jelena Tesic, and Andrew Scouten
Evaluating Pavement Macrottexture Using 3D Laser Technology and its Correlation with Skid Resistance	Ali Hafiz (Advanced Infrastructure Design), Manuel Celaya, Kaz Tabrizi
04:10 PM – 04:25 PM Break (visit exhibits)	
<b>04:25 PM – 05:25 PM</b>	
<b>Session 10 – Open Forum/Closing</b>	<b>Moderator: Jianhua Li (WSDOT)</b>
<b>Room: TBA</b>	
Open Forum	John Andrews (Powell Industries)
Closing	Colin McClenahen (PennDOT)



**Thursday, May 1<sup>st</sup>, 2025**

**08:00 AM – 12:00 PM**  
**TRB AKP50 Committee Meeting** **Moderator: Brian Schleppe (VIHSC)**  
**Room: TBA**

TRB Standing Committee on Pavement Surface Properties & Vehicle Interaction mid-year meeting  
This meeting is for its members and all others interested in this subject.

**10:00 AM – 03:00 PM**  
**TPF-5(537) Profile Pooled Fund Meeting** **Moderator: John Senger, ILDOT**  
**Room: TBA**

This is TPF-5(537) Profile Pooled Fund Meeting, including the following presentations:

- Testing with the Benchmark Profiler and the Urban and Low-Speed Profiler at ICART, by Steve Karamihas (APTech)
- Contractor Pavement and Bridge Profiling Verification, by Max G. Grogg (APTech)

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

**3:00 PM** **RPUG 2025 Adjourned**  
**See You Next Year!**