

**SURF 2018**

**ProVAL AND SMOOTHNESS WORKSHOP**

***Profile Viewing and Analysis Software***

*13:30 to 13:15, Friday, May 4, 2018*

*Brisbane Convention and Exhibition Centre, Brisbane, Australia*

**BACKGROUND**

Pavement smoothness is one the major performance measurements for both asphalt and concrete pavements. It has been used in both construction quality acceptance and routine pavement condition surveys for pavement management. The measurement and interpretation of pavement profiles have been advanced tremendously in the past three decades. The use of inertial profilers and 3D imaging/laser scanning technologies has made pavement profile measurements more efficient, accurate and repeatable. To interpret the profile data, ProVAL (Profile Viewing and Analysis) software has been the most widely used public domain tool in the world since 2000. ProVAL is powerful and yet simple to use. The analysis modules in ProVAL are not only for routine reporting of International Roughness Index (IRI), but also for diagnostic of pavement issues or measurement issues. Therefore, ProVAL is an essential pavement profile analysis tool for pavement practitioners, consultants, and researchers.

**OBJECTIVES**

- To refresh key fundamentals of pavement profiling and analysis methods.
- To familiarize attendees with the current version of ProVAL – the *Profile Viewing and Analysis* software ([www.RoadProfile.com](http://www.RoadProfile.com)).
- To inform attendees of the advantages, limitations, and pitfalls related to analyzing and interpreting pavement profiles.
- To provide an interactive and hands-on approach throughout the workshop.

**AGENDA**

| <i>Time</i>          | <i>Topics</i>                                 | <i>Speakers</i> |
|----------------------|---|-----------------|
| <b>13:30 – 13:50</b> | Session 1 - Pavement Profile Measurements     | Dr. Chang       |
| <b>13:50 – 14:10</b> | ProVAL hands-on exercises                     | Dr. Chang       |
| <b>14:10 – 14:30</b> | Session 2 - Vehicle Ride and Ride Indices     | Mr. Wix         |
| <b>14:30 – 14:50</b> | ProVAL hands-on exercises                     | Dr. Chang       |
| <b>14:50 – 15:00</b> | break   |                 |
| <b>15:00 – 15:20</b> | Session 3 - Smoothness Assurance Module (SAM) | Mr. Wix         |
| <b>15:20 – 15:40</b> | ProVAL hands-on exercises                     | Dr. Chang       |
| <b>15:40 – 16:30</b> | More ProVAL hands-on exercises and Qs-&As     | All speakers    |

## SPEAKERS' BIOS



**Dr. George K. Chang, P.E.**

Director of Research

The Transtec Group

Address: 6111 Balcones Drive, Austin, Texas USA

Phone: +1-512-451-6233

Email: GKChang@TheTranstecGroup.com

Dr. George Chang is recognized as the expert on pavement smoothness and intelligent compaction technologies. His research, teaching, specification development and software tools have helped made significant technology advancements in the above fields. Dr Chang has been the principal investigator for numerous projects that enhancing pavement materials/structures, pavement surface characteristics, etc. Recognized for his energetic, lively teaching style, Dr. Chang delivers smoothness and intelligent compaction related workshops around world. Dr. Chang has conducted more than 150 ProVAL workshops since 2005.

Dr. Chang has been the chairman for the International Intelligent Construction Technologies Group (IICTG), Road Profile Users' Group (RPUG), Transportation research Board (TRB) AFD90 Pavement Surface Properties and Vehicle Interaction committee, etc. Dr. Chang received many awards including Kummer Lecture Award and Meyer-Horne Award from the ASTM International; and NOVA award from Construction Innovation Forum. His research work has been featured in 50+ professional publications and 100+ reports.



**Mr. Richard Wix**

Acting Lead, Strategic Enablers Group

ARRB Group Ltd

Address: 500 Burwood Hwy, Vermont South, VIC 3133, Australia

Phone: (+61) 3 9881 1636

Email: Richard.Wix@arrb.com.au

Richard joined the ARRB Group (formerly known as the Australian Road Research Board) in 1990 and since then has been involved in automated pavement data measurement, both as an equipment developer and in the collection of pavement condition data.

During this time, Richard has contributed to the development of Australian standards for automated pavement data collection and has had a keen interest in the verification of automated systems used to collect pavement condition data in Australia and overseas. Additionally, he has overseen many large scale automated data collection projects for each of the Australian State Road Authorities and a variety of international projects too, most recently in Malaysia and Vietnam. He is presently a member of the ARRB's technical advisory group which is responsible for future developments in pavement data collection.

## SOFTWARE DOWNLOAD and INSTALLATION

All participants to the workshop are encouraged to bring their laptop computers.

### *Software Download*

The ProVAL software can be **freely** downloaded from the ProVAL website ([www.RoadProfile.com](http://www.RoadProfile.com)).

Use the latest ProVAL version (3.61 or later). Install the software on your laptop prior to the workshop. <http://www.roadprofile.com/download/ProVAL-3.61.24.msi>

### *System Requirements*

ProVAL 3.6x is supported on 32 or 64 bit versions of Windows 7 or later. Older operating systems are only supported through ProVAL 3.52.

ProVAL 3.6x requires Microsoft .NET 4.5.2. If you do not have the required version of .NET installed, the ProVAL installation will download and install it.

To uninstall the software, go to Programs and Features in the Windows Control Panel.

### *Installation Guide*

Previous versions of the same family will be automatically uninstalled. For example, 3.6x will uninstall previous 3.6x versions, but will not uninstall 3.5. The two versions can co-exist side-by-side.

You must have sufficient privileges to install applications on your computer. If you receive an error message during the installation, ask your administrator to install the software for you. If your administrator is also unable to install the software, then please contact the [ProVAL support team](#).



To learn more, visit [www.RoadProfile.com](http://www.RoadProfile.com)!