



PROVAL – NEXT ROUND OF ENHANCEMENTS
BY
GEORGE CHANG, TRANSTEC GROUP – A TERRACON COMPANY

PROVAL – NEXT ROUND OF ENHANCEMENTS



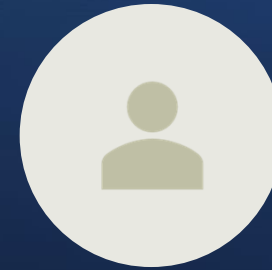
UPCOMING
ENHANCEMENTS
OVERVIEW



ADDRESSING
OPERATIONAL
GAPS



FOCUS ON
STANDARDS AND
CREDIBILITY



USER-CENTERED
DEVELOPMENT



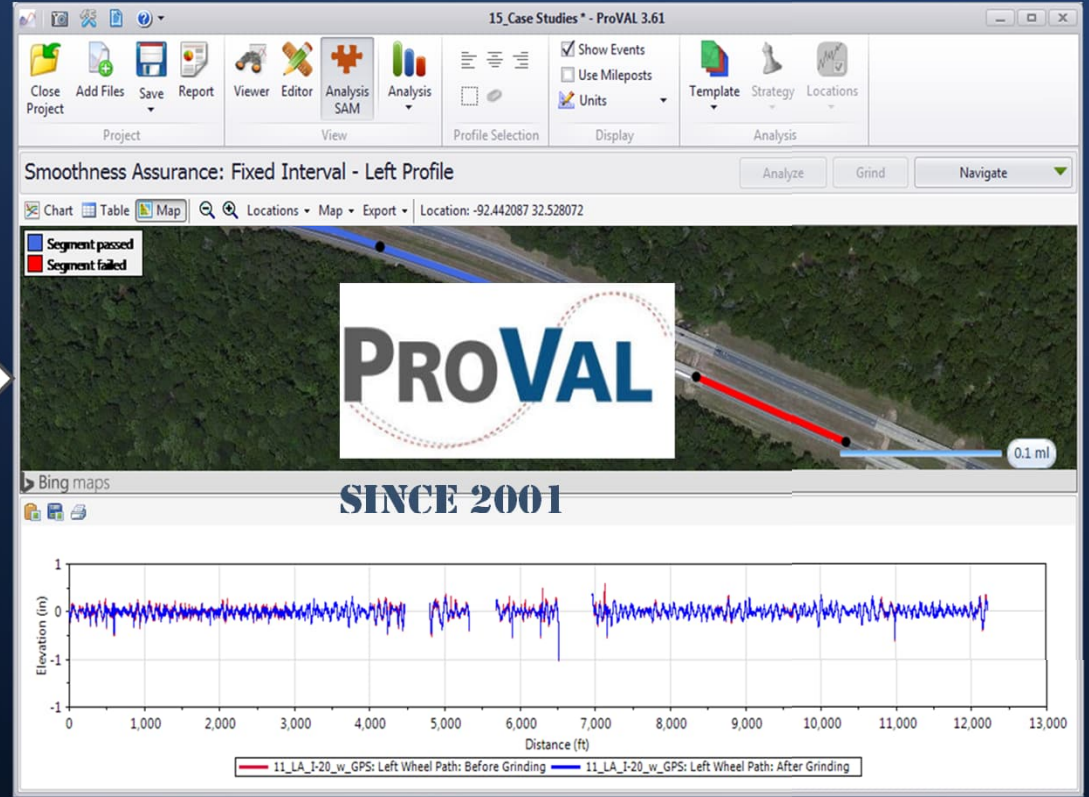
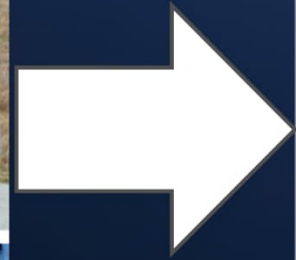
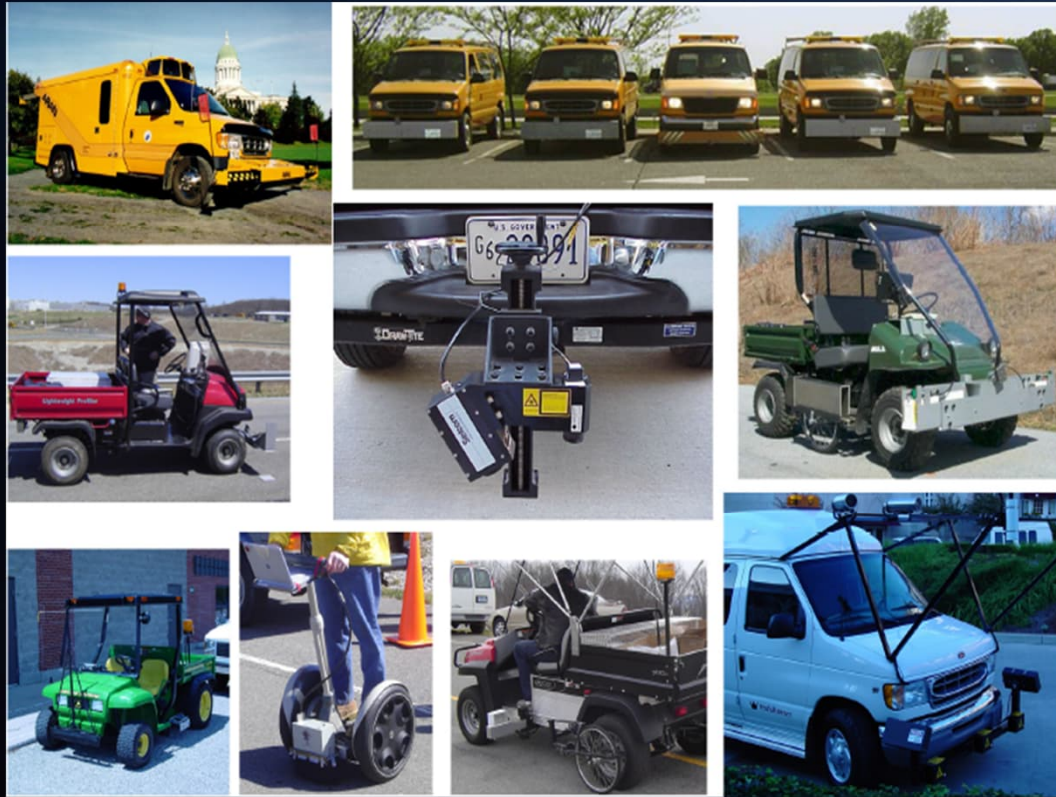
PROVAL BACKGROUND AND CURRENT CAPABILITIES

WHY PROVAL



- NEUTRAL STANDARDIZED PLATFORM
- TRANSPARENCY AND REPEATABILITY
- SUPPORT FOR EVOLVING TECHNOLOGIES
- CONSISTENT AND DEFENSIBLE DECISIONS

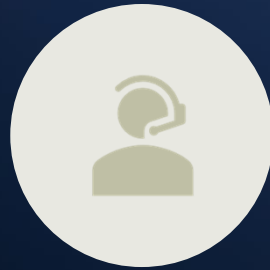
PROVAL – PROFILE VIEWING AND ANALYSIS



PROVAL HISTORY SINCE 2001



INITIAL RELEASE
AND PURPOSE



CONTINUOUS
UPDATES AND
SUPPORT



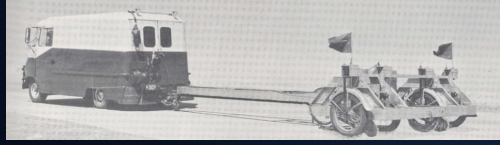
STANDARDS
ALIGNMENT



WIDESPREAD
ADOPTION

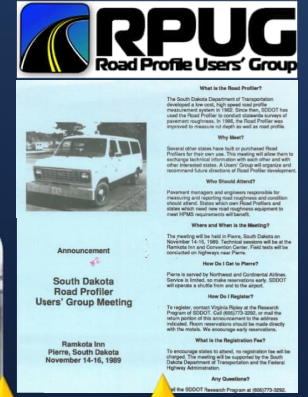
PAVEMENT PROFILING HISTORY

1st RPUG
 AASHTO
 Spec
 ProVAL 1.0



AASHTO
 Road Test

World Bank IRI
 Experiment



IPF
 Studies



Rolling
 Straightedge



BPR
 Roughometer



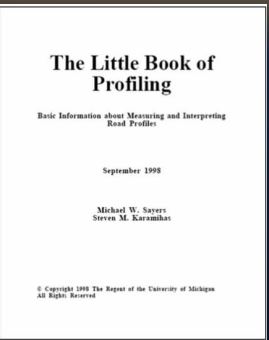
GMR Profiler



OH Profiler



SD Profiler



The Little Book of
 Profiling



Modern HSIP



3D Survey



Profilograph

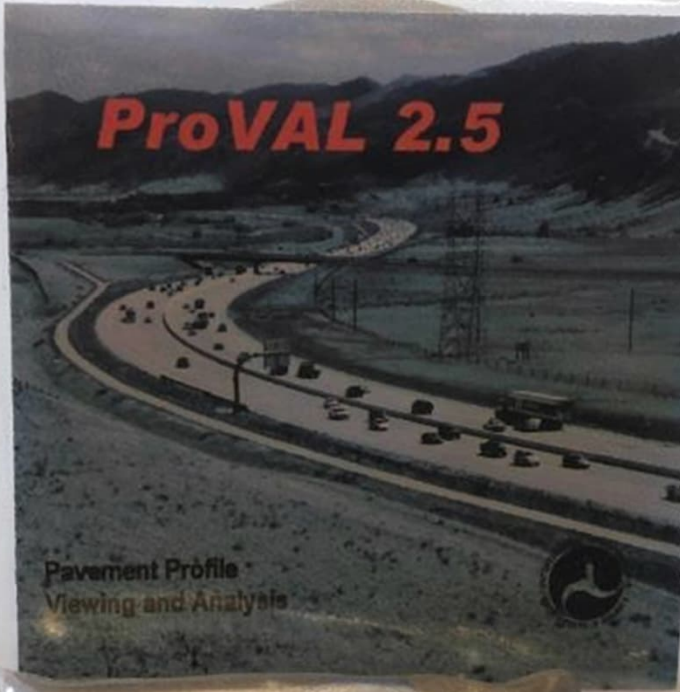


PROVAL HISTORY

2001



2026



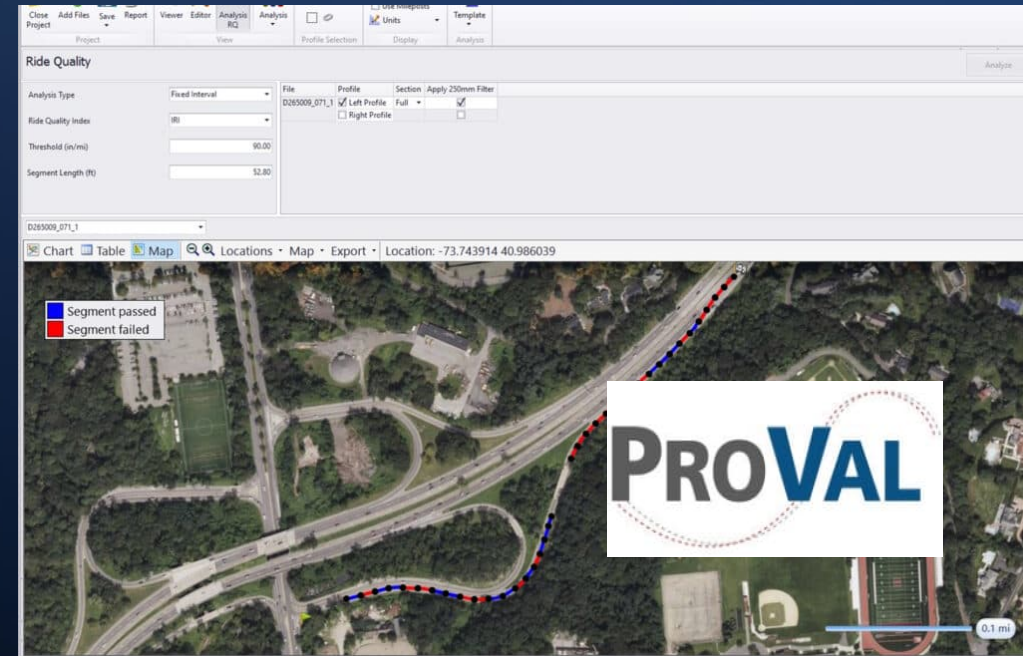
Version
4.0

THE TRANSTEC GROUP
ProVAL User's Guide



WHAT PROVAL DOES TODAY

- DATA IMPORT AND VISUALIZATION
- RIDE QUALITY AND ROUGHNESS ANALYSIS
- CERTIFICATION AND REPORTING
- USER WORKFLOW CONTINUITY





PLANNED ENHANCEMENTS FOR 2026–2027

2026–2027 ENHANCEMENT ROADMAP

- SPEED PROFILES & STOP AND GO EXCLUSIONS
- AASHTO R56 25 CERTIFICATION ANALYSIS
- STATIONING SUPPORT (LIMITED, REPORTING ONLY)
- MISCELLANEOUS USABILITY AND PERFORMANCE UPDATES

SPEED PROFILES AND STOP-AND-GO EXCLUSIONS

Limitations
of Traditional
Profilers

Integration
of Speed
Profile Data

User-
Controlled
Exclusions

Balancing
Automation
and Control

SPEED PROFILES AND STOP-AND-GO EXCLUSIONS

- PROBLEM: CONVENTIONAL HSIPs PRODUCE INVALID DATA AT LOW SPEED
- ENHANCEMENT: IMPORT AND VISUALIZE SPEED PROFILES
- BENEFIT: IDENTIFY AND EXCLUDE INVALID STOP AND GO DATA
- HOW IT WORKS: SPEED-BASED EXCLUSION RULES
- FEEDBACK NEEDED: GUI CLARITY AND CONTROL LEVEL

SPEED PROFILES: EXAMPLE WORKFLOW

1

Import profile
+ speed data

2

Identify low
speed or stop
events

3

Review
suggested
exclusions

4

Apply
exclusions to
analyses and
reports

SUPPORTING ANALYSIS FOR AASHTO R56-25

Expanded
Certification
Scope

ProVAL
Module
Enhancements

Analytical
Methods

Transparent
and Auditable
Results

SUPPORTING AASHTO R56 25

- PROBLEM: R56 25 ADDS NEW OPERATING CONDITIONS
- ENHANCEMENT: EXTEND PCM BEYOND CONSTANT SPEED
- BENEFIT: ENABLE AGENCIES TO IMPLEMENT R56 25
- HOW IT WORKS: MODE-SPECIFIC ANALYSES
- FEEDBACK NEEDED: *WORKFLOW TRANSPARENCY*

R56 25 ANALYSIS

- MINIMUM OPERATING SPEED VERIFICATION
- BRAKING OPERATION VERIFICATION
- STOP-AND-GO VERIFICATION
- INVALID AREA CONFIRMATION USING CONTINUOUS



SUPPORT FOR STATIONING

Stationing
Support
Purpose

Technical
Challenges

Controlled
Functionality

Benefits of
Enhancement

STATIONING SUPPORT

- PROBLEM: AGENCIES REPORT BY STATION, NOT DISTANCE
- ENHANCEMENT: STATION-BASED REPORTING ONLY
- BENEFIT: ALIGN REPORTS WITH AGENCY PRACTICES
- HOW IT WORKS: GPS-REFERENCED STATION MAPPING
- NOT INCLUDED: PROFILE DISPLAY VS STATION

STATIONING: USE CASE

- FIXED INTERVAL RIDE INDEX BY STATION
- PAYMENT AND ACCEPTANCE REPORTING
- CONSISTENT TABULAR OUTPUTS





RISKS & FEEDBACK

RISKS, LIMITATIONS, AND WHAT IS NOT CHANGING



CERTIFICATION
WORKFLOW
STABILITY



STATIONING
SUPPORT
LIMITATIONS



DEPENDENCE ON
SPEED DATA



INTENTIONAL
SAFEGUARDS

RISKS, LIMITATIONS & WHAT'S NOT CHANGING

- NO CHANGE TO EXISTING R56 2018 WORKFLOWS
- NO REINTERPRETATION OF STANDARDS
- STATIONING LIMITED TO REPORTING ONLY
- SPEED SUPPORT DEPENDS ON DATA AVAILABILITY

FEEDBACK COLLECTION AND SUMMARY



IMPORTANCE OF
USER FEEDBACK



FEEDBACK
COLLECTION
METHODS



GOAL OF
ENHANCEMENTS



COMMUNITY
COLLABORATION



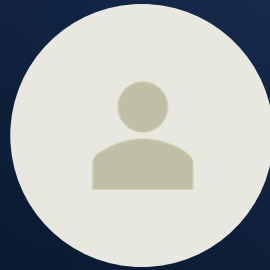
WE NEED YOUR FEEDBACK

- SPEED PROFILE VISUALIZATION CLARITY
- EXCLUSION RULE TRANSPARENCY
- R56 25 WORKFLOW NAVIGATION
- ERROR MESSAGING AND DEFAULTS

FEEDBACK COLLECTION PLAN



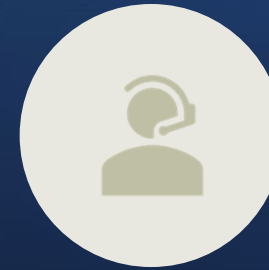
LIVE DISCUSSION



USER FORUMS IN
2026



BETA REVIEWS WITH
PANEL MEMBERS

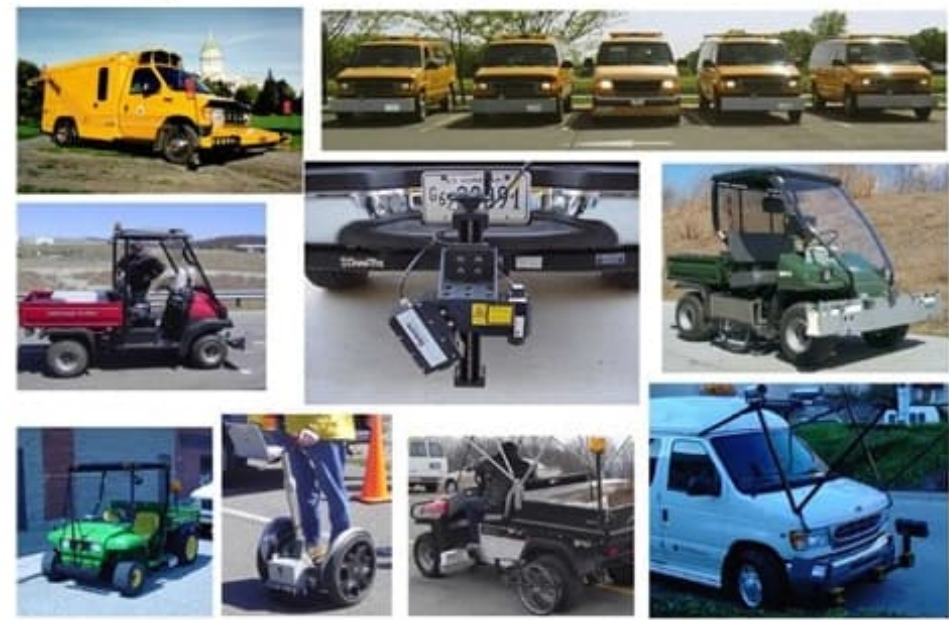


SUPPORT TICKET
FEEDBACK

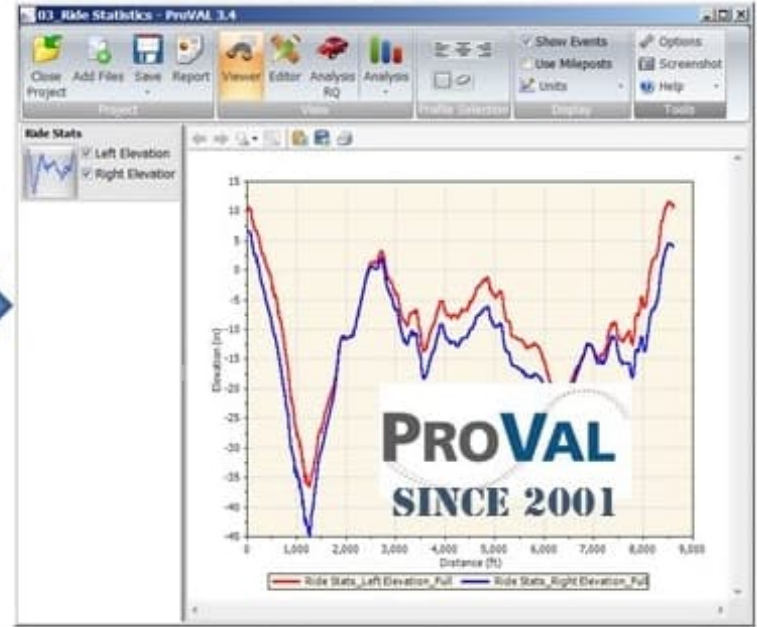
WWW.ROADPROFILE.COM

PROVAL *View and analyze pavement profiles* SOFTWARE WORKSHOPS LIBRARY FAQ SUPPORT

Many Different Profilers...



One Standard Software





PROVAL USERS FORUM

forum.roadprofile.com Forum

Forum.RoadProfile.Com

ProVAL Forum [Add topic](#)

Category	Topics	Posts	Forum Participants
ProVAL New Features	1	1	1
ProVAL Bug Fixes	4	6	3
ProVAL Wish List	1	1	1



SUMMARY

- PROVAL CONTINUES TO EVOLVE WITH PRACTICE
- ENHANCEMENTS ADDRESS REAL OPERATIONAL GAPS
- USER FEEDBACK WILL SHAPE FINAL DESIGN

THANK YOU!

