

NOVEMBER 30 - 2023



2023 FALL ASPHALT SEMINAR

2023 Asphalt Technical Symposium Updates & Next Steps

asphalt ontario rides on us



Continuing Objective

Connect asphalt technical experts and collaborate on industry challenges

- Providing a platform for unbiased technical discussion and sharing
- Sharing of new trends in asphalt technology
- Educating on the elements of technology necessary to achieve high performing asphalts
- Respectfully sharing different points of view & visions towards better quality
- Identify and develop technical topics to address

2023 Asphalt Technical Symposium (ATS)

- Great participation
- Growing interest from municipalities and cities
- Audience engagement
- Diverse group of speakers
- Presentations available
 - Go to: www.onasphalt.org
 - Click on Publications & Education
 - Asphalt Technical Symposium Presentations



Ontario – Mix Asphalt Program (O-MAP) Update

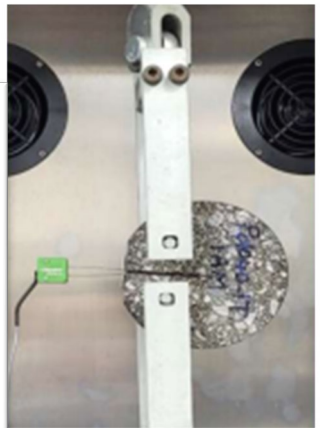
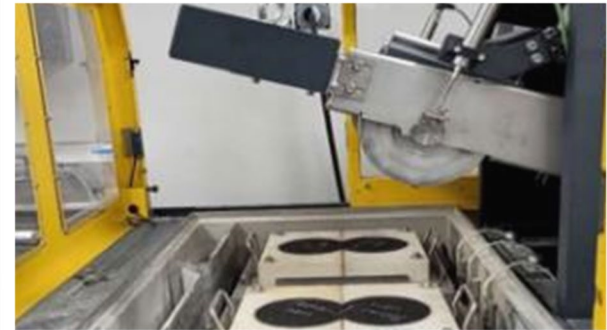
Sina Varamini – OAETG Chair

Objectives

- Understanding Variability
 - Second Phase – single plant produced mix
 - Interlaboratory variability
- Bridging knowledge gap in performance testing methods and acceptance

Findings

- Variability still exists in some tests
 - Equipment
 - Operator
- Recommendations provided to support changes



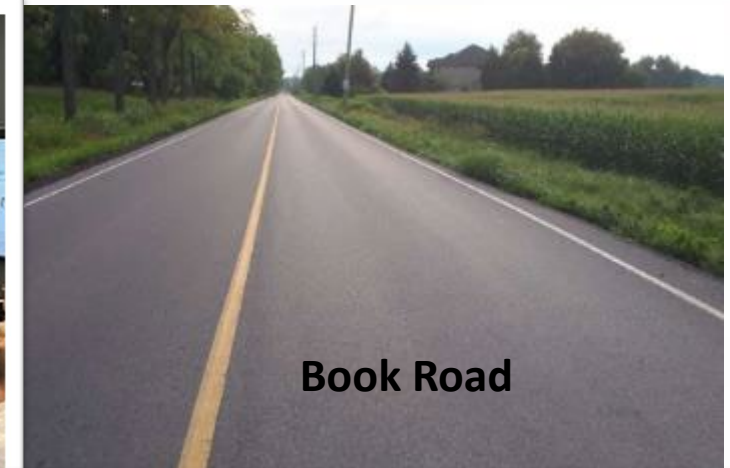
Emerging Approaches to RAP – Municipal and Industry

City of Hamilton – Tyler Renaud

- Overview of recent high RAP usage
 - Book Road - 2020
 - 15% - Control and Surface
 - 40% - Trial section
 - Progressing well
 - Monarch Road – 2021 – side-side
 - 15% - Control surface
 - 35% - Trial surface
 - Some minor reflective cracks

Global High RAP Experiences – Mike Aurilio

- How others manage high RAP
 - Japan, Sweden, Switzerland, US
- Findings
 - Characterization
 - Testing
 - Design adjustments (Gyro, VMA)



Future Asphalt Binder Testing

Dr. Amma Agbedor - Review of How Pavements Behave

- High Temperature
 - Permanent Deformation – rutting, shoving – Addressed through M320/332
- Low Temperature
 - Thermal challenges – Transverse cracks – Addressed through proper binder selection
- Intermediate Temperature
 - Durability/Fatigue Cracks – wandering/longitudinal – Proposed new NCHRP reports
 - 09-59 – GRP, R-Value, Change to intermediate test temperature
 - 09-60 – ΔT_c and ΔT_f
 - 09-61 – Modification to Pressure Aging Vessel (PAV) testing



Chris Campbell – Concerns with Current NCHRP Suggestions

- Modifications to the original intent of the tests – simplification
- Assumptions
- Binder restrictions
- More challenging technician expectations



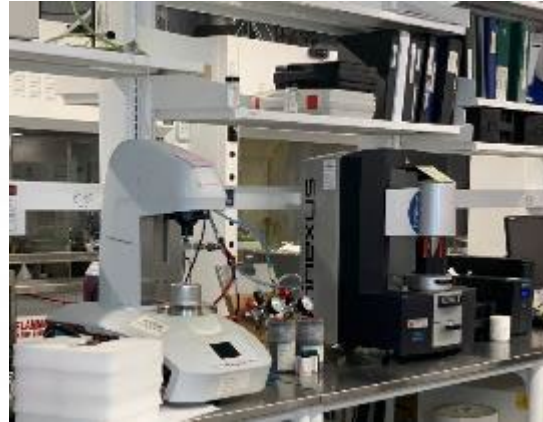
Performance Testing on Asphalt Mixtures and Facility Tour

Gelu Vasiliu – Head of Bituminous Section – MTO

- Review of MTO's research into performance testing in Ontario
 - Flexibility index (FIT), Disk-shaped compact tension (DCT) and Hamburg wheel-tracking (HWT)
- Next Steps for implementation
 - QA Testing for information, Knowledge transfer
 - Work with industry on balanced mix design, training requirements, correlation program

Facility Tour

- Guests of ATS graciously invited on a tour of MTO's Centre for Excellence in Transportation Infrastructure (CETI)



What's Next?

Asphalt Technical Symposium (ATS)

- Start to make preparations for the next ATS
- We will be reaching out for participation when details are finalized

Ontario Asphalt Expert Task Group (OAETG)

- Next meeting in 2024
- Reach out to Doubra or Sina Varamini (OAETG Chair) if interested

Thanks for your attention!



Chris Campbell

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