



2024 FALL ASPHALT SEMINAR **NOVEMBER 28 - 2024**

PATHWAYS TO A
SUSTAINABLE FUTURE
FOR ASPHALT TECHNOLOGY

**Recap: 2024 Asphalt Technical Symposium
Updates & Next Steps**

*Chris Campbell, Global Asphalt Group Lead & NA Asphalt Technical Lead,
Imperial Oil, an affiliate of ExxonMobil Technology and Engineering Company, & ATS Co-Chair.*

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

2024 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



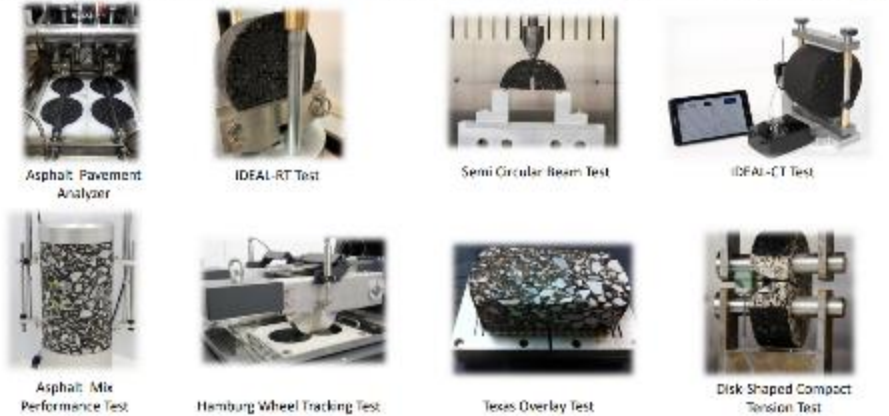
Paving the Way: The Modern Art of Balanced Mix Design

Dr. Amma Agbedor – Canadian & Research Engineer - Asphalt Institute

- What is Balanced Mix Design (BMD)?
- What are common tests in BMD?
- How does one go about implementation?
- Who is doing it today?
- What are the challenges we should be aware of?



Common Tests included in BMD



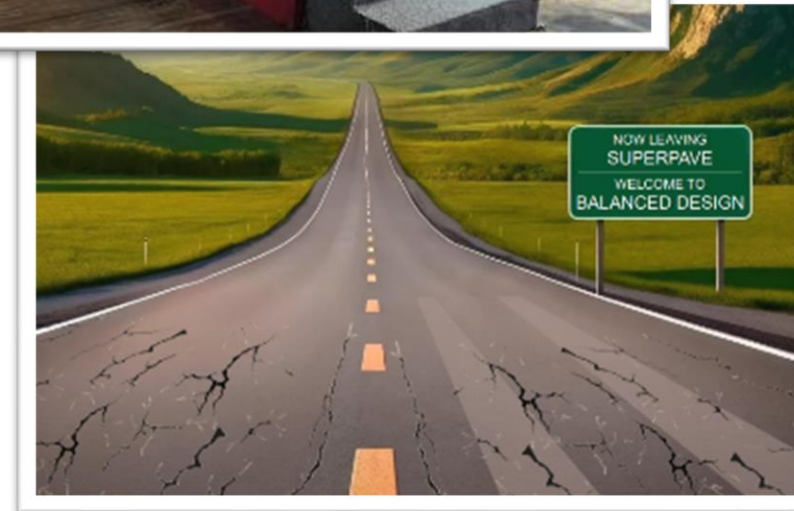
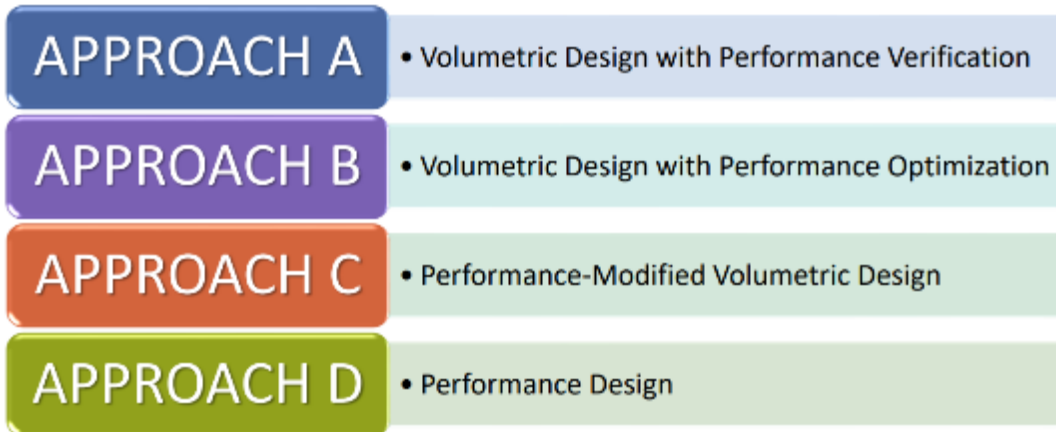
Eight Tasks for BMD Implementation



BMD and Field Validation

Thomas Harmon – Senior Research Engineer – NCAT

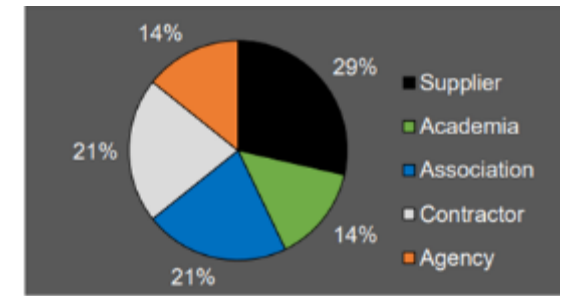
- History of asphalt testing
 - What got us here?
- What tests might you use in your BMD?
 - Which tests show most potential?
- How do you implement your BMD plan?
- What does success look like?
 - Test sections and field analysis



OAETG Performance Review

Sina Varamini – Chair OAETG – General Manager – CRM Canada

- Refresh on Ontario Asphalt Expert Task Group
 - Who are we and where do we come from?
- What are our objectives
- Where are we going – 5 year plan
- Background on OAETG Mix Asphalt Program (O-MAP)



Chair: Sina Varamini, Ph.D., P.Eng., MCSCE
General Manager, CRM/Adjunct Professor

Vice-Chair: Pejooan Tavassoti, Ph.D.
Assistant Professor - University of Waterloo

Secretary: Selena Lavorato, B. Sc., C.E.T.
QS Manager at Green Infrastructure Partners

OAETG 5-YEAR VISION



MIX ASPHALT PROGRAM (MAP)

FINDINGS

Mix Properties

Mix properties do play a role in performance, especially during fabrication of HWT thinner briquets

Procedures and Instructions

Controlling consistency needed – CCIL or MTO technician certification required
Sample Fabrication and Testing Instructions (SFTIs) requires specifics on sample heating, splitting, compaction temp. tolerances and cutting

Collaboration

MTO and other agencies must collaborate with academia and industry to research sources of variability....Minimizing risk to all parties involved.
Thresholds still need to be evaluated for their practicality

Certified Technician Training Program

Agencies and industry need to establish hands-on technician certification training courses... through Good Roads, ORBA Academy, or Local Universities

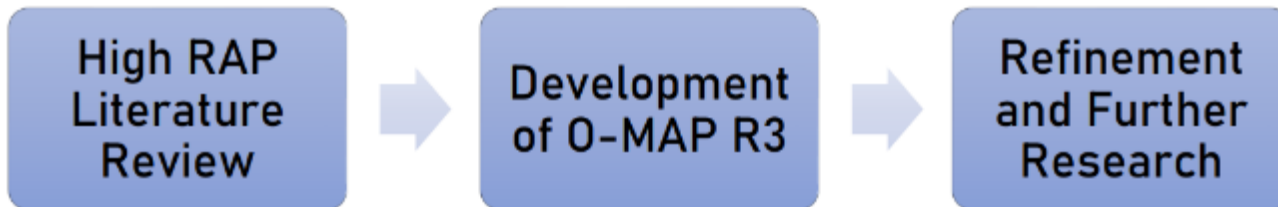


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O-MAP Round 3 and the Future of OAETG

Mike Aurilio – Terminal Manager – Yellowline Asphalt Products Ltd.

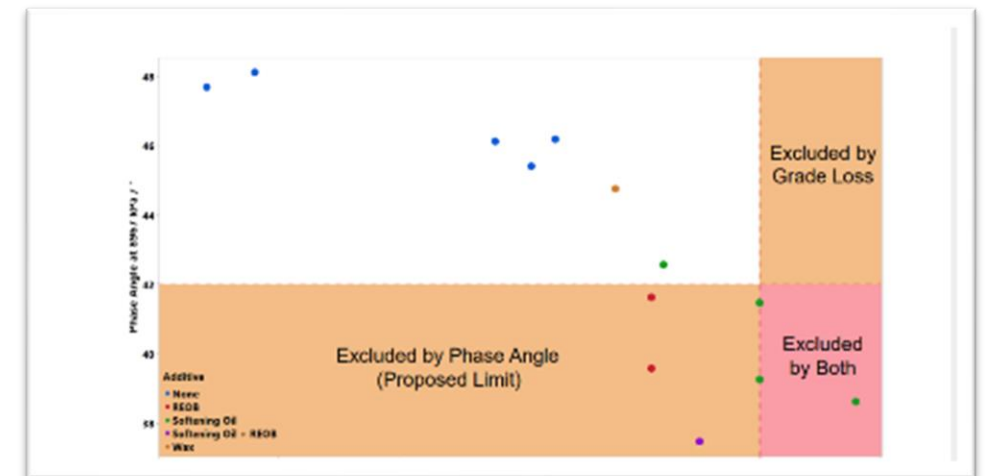
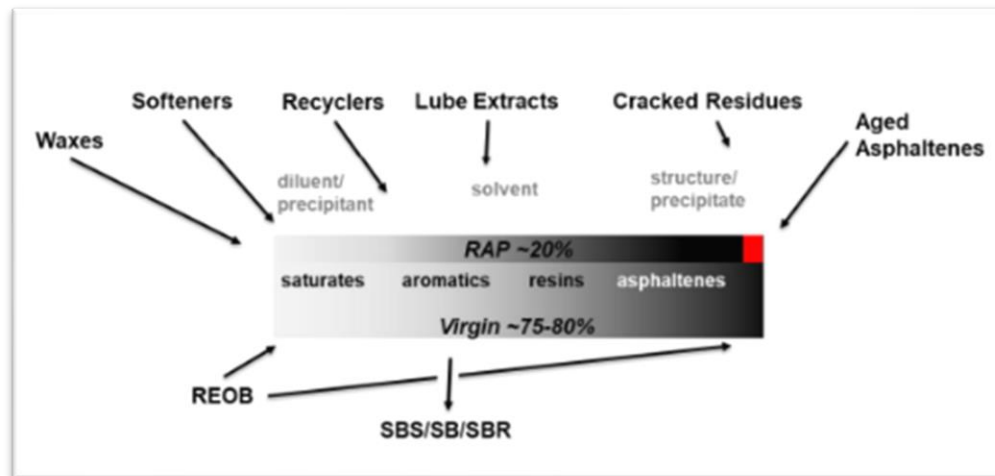
- Where does Ontario need to focus?
 - Design changes
 - RAP
 - Performance tests
- Leveraging what we learned in O-MAP to include RAP
- Learning from others
 - New Jersey / Georgia



Identifying Best Performing Binders

John Noel – Asphalt Technical Advisor – Imperial Oil

- What is Superpave for binders and how did we get there?
- What new specifications are we starting to see?
- What is an ideal cracking specification?
 - Science, Cost, Reproducible, Simple, Validated
- Which specifications show best promise?



High-RAP Mix Trial in Ontario

Doubra Ambaiwei – Director, Technical Services – ORBA/OAPC

- Understand interest in RAP “Pave-in: Demo Day”
 - Challenges, Design, Production, Placement
- A collaborative partnership is in-place between ORBA/OAPC, Regional Municipality of York, National Research Council Canada, and Ingevity, to demonstrate a "High-RAP Warm-mix Asphalt" trial
- Potential exists for more opportunities
- Reach out if interested

To learn more and/or if interested in joining forces towards realizing the objectives of a high-RAP Pave-in Project in Ontario, please connect with ORBA/OAPC Technical Director at: Doubra.Ambaiwei@orba.org



<https://www.onasphalt.org/publications/spring2024>

Facility Tour – McAsphalt Industries

Guided tour of McAsphalt Industries Limited Performance Testing Laboratory Toronto Research Centre



What's Next?

Asphalt Technical Symposium (ATS)

- Start to make preparations for the next ATS (June 10, 2025)
- We will be reaching out for participation when details are finalized

Ontario Asphalt Expert Task Group (OAETG)

- Meetings held bi-monthly
- Next meeting in 2025
- Reach out to Doubra or Sina Varamini (OAETG Chair) if interested

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OAPC's continuing focus on Asphalt Binder Technology
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Thanks for your attention!



Chris Campbell
Global Asphalt Group Lead & NA Technical Lead

**Imperial Oil, an affiliate of ExxonMobil Technology
and Engineering Company**

453 Christina Street South

Sarnia, ON N7T 8C8

(c) 519 520 5247

christopher.campbell@esso.ca