



## 2020 TECHNICAL COURSE: INSPECTING HOT MIX ASPHALT FOR PERFORMANCE

**Presenter: Gerry Huber, Heritage Research Group**

*Course fee of \$45.00 (early-bird) is in addition to Conference Registration*

This course is focused on the construction and inspection of HMA pavements, with specific focus on the influence of the design and material properties.

### ASPHALT BINDER

Participants will be provided a general understanding of asphalt binder behaviour with emphasis on the properties affecting hot mix compaction

### AGGREGATES

- The course will provide an understanding of what the important aggregate properties are and how they influence the properties of the mix
- Specific emphasis will be on the role of gradation in the picking of aggregate
  - ❖ This is considered one of the most important pieces of information that inspectors can possess
  - ❖ Knowing how adjustments in gradation will influence mixture properties (air voids and VMA) and compaction in the field (ability to achieve density) can save frustration and poor-quality material being placed

### MIXTURE DESIGN

- This part of the course will focus the importance of mixture properties on the performance of hot mix on the road:
  - ❖ This allows contractors/inspectors to better understand what mixture properties could cause poor performance in rutting or durability
  - ❖ The discussion will also look at what mixture properties are important and how they can be adjusted

### ASPHALT MIXING PLANTS

- The focus of this part of the course will be to review what properties can be influenced by the plant operation
  - ❖ This will allow contractors/inspectors to recognize plant operations that might cause mixture performance issues in rutting or durability
- Surface Preparation
- Review of important items that will influence constructability or performance
  - ❖ Subgrade or compacted aggregate base
  - ❖ Prime coats
  - ❖ Tack coats
  - ❖ Repairs prior to paving

### MIXTURE DELIVERY

- Important properties and practices to ensure uniform delivery of homogenous mix to the paver
- This includes different types of trucks and loading of the paver