Outline: HMA Inspector Training Webinar Series; Session 2 – Materials and Mix Design
Date: March 24, 2011; 1:00 – 3:00pm EST
Instructors: Dave Johnson, P.E., Asphalt Institute Regional Engineer
Gregory Harder, P.E., Asphalt Institute Regional Engineer

Materials and Mix Design -
- Mixture Design
  - Objectives of Mix Designs
  - Various Mix Design Methods
  - Important Mixture Properties
- Materials Selection
  - Aggregates
  - Asphalt Binder
  - Mix Type
- Sample Preparation
  - Laboratory Mixing
  - Laboratory Compaction
  - Testing of Mixture Specimen
  - Obtaining The Right Balance
- Mixture Volumetrics
  - Definition
  - Importance of Volumetric Properties
  - Volumetric Analysis History
  - Volumetric Terms
  - Importance of Air Voids
  - Importance of VMA
  - Nomenclature for Specific Gravities
  - Unit Diagram
  - Elements Affecting Volumetric Properties
- Superpave Mix Design and Analysis
  - Specific Gravities – Coarse and Fine Aggregates
  - Consensus and Source Properties
  - Compactive Effort
  - Mixture Samples
  - Moisture Sensitivity Testing
  - Mixture Analysis
  - Determine Design Binder Content
  - Verify Mix Properties
- Mix Design Using RAP
  - Incorporating RAP into the mix design