WisDOT IA Program Annual Meeting

Asphaltic Mixtures and Mix Design

December 9th & 10th, 2014
Wisconsin Dells, WI

Judie Ryan
BTS Materials Lab
Three Topical Updates

QV Failure Notification Process

2014 Mix FAQs

Mix Design Life
QV Failure Process

Six basic steps

1. Mixture Quality Failure (ss460.2.8.3)
2. Split Sample Comparison Testing
   - QV-ret
   - QC-ret Forward and Backward of QV point
3. Additional QV Sample (new quality window)
4. Analysis of Comparison Results (CMM 8-36)
5. Report Completion (MTS 254-record)
6. Recommendation for price impact (CMM 8-36)
7th Step: QV Failure Notification

- Notification of Failure (…and to whom)
- Email (preferred) or Phone Call
- Information:
  - Email Subject Line: HMA QV Failure 7-254-88-14
  - QV Failure at Sample X-X (+, -, v)
  - QV-ret (Y/N?) and QC-ret X-X (Y/N?) … or QC-ret X-Y
  - How Delivered (DOT truck, Fed-Ex, in-person, etc.)

Note: Only 2 samples (max) need to be sent per QV failure
2014 Mix FAQs List

- Mix Design Life
- Testing Variability
- Equipment (set-up, function)
- ASP Changes
- Mixture and Compaction Temps
- Change in RAP extracted %AC
- Change in Agg Gsb over years
- Reheat Factors
Mix FAQs

- Compilation of Q & A
- Weekly Email (eventual LAN or Web App)

- Proposed Categories (?)
  - Standard Specifications
  - CMM Guidance
  - Test Procedures and Equipment
  - HMA Materials-Technical
Mix Design Life

- Top FAQ Category
- Issues:
  - Specification Compliance
  - Aggregate Source Checking
  - Perpetual Testing
  - Continual Tracking
  - Annual Transitions (information, software, personnel, etc)

2014 was …… Ahhhhh …… Ummmmmmmm ……
Mix Design Life in 2014 was ...*

- Challenging
- Inefficient
- Painful
- Confusing
- Annoying
- Hell-ish
- Difficult
- Unclear
- Time Consuming
- Resource Heavy
- Uneventful
- Tricky(er)
- Brutal
- Overwhelming

* Comments by Dept and Industry
Mix Design Life in 2015

- How can we create a win-win scenario for all
Mix Design Life in 2015

- Small Group - Concerns meeting (11/4)
- HMA Tech Team Agenda Item (11/11)
- Mix Design Task Force assembled (11/24 & 25*)
- HMA Tech Team meeting update (12/8)
Mix Design Life Vision

- Vision: Approved List
- Function: like the Aggregate Source Quality List
  - Web Accessible
  - Weekly updates
  - PDF format for search ease (i.e. mobile phone)

- Tasks
  - Define the Filters for Basis of the List (Dec-2014)
  - Create the 2015 Basic List (mid Jan-2015)
  - Identify Process to get on the List (early Feb-2015)
Next steps

- MD Chart
- MD Spreadsheet
- Standardized format for detail submittal
Questions?

- QV Failure Notification Process
- 2014 Mix FAQs
- Mix Design Life

It's QUESTION TIME!!
Asphaltic Mix Design Approved List

approx 1650 mix designs

Must meet current materials specifications AND Previous 2013-2014 production testing

No previous production testing requirements

PRE-2010 not on the list could be considered on a case-by-case basis

Same/current CMM rules still apply going into 2016

What rolls off the list and How?