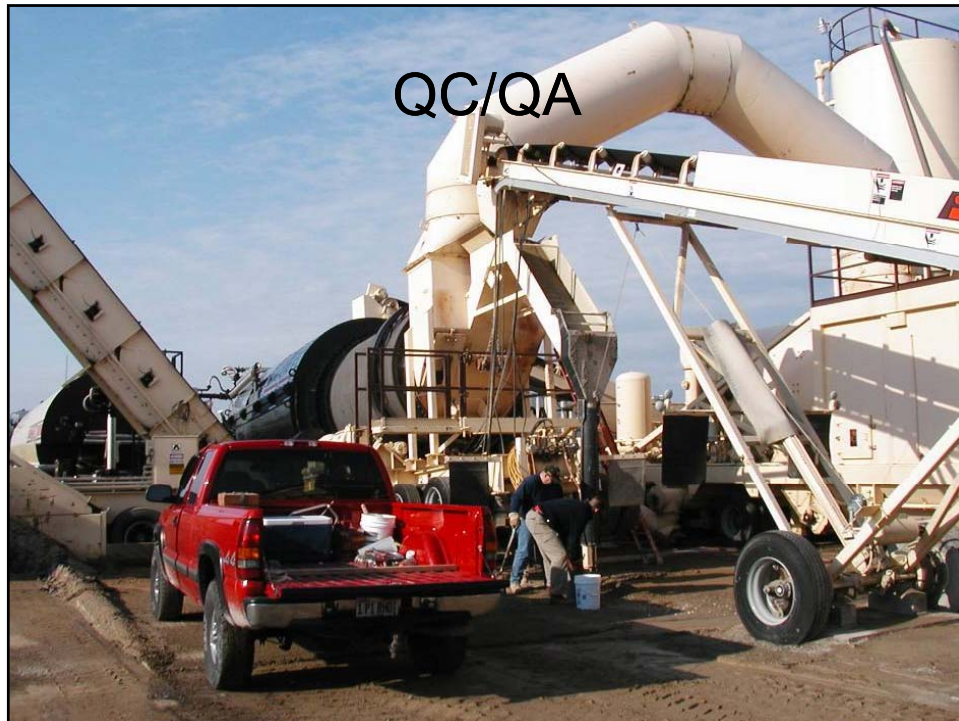


Quality Assurance

- Owner action to assure quality of product
- Contractor - quality control
- Owner - quality assurance
- Low bid system rewards lowest cost

Federal Requirements for Quality Assurance

- 23CFR637 requires QA program
- Specific requirements
 - Qualified technicians
 - Qualified labs
 - Verification



Slippage

- FHWA reviews
- District 1 by Carmen
- Both QC and QA

Illinois Department of Transportation

Hot-Mix Asphalt QC/QA
QC Personnel Responsibilities and Duties Checklist
Appendix B5

Effective: May 1, 1993
Revised: May 1, 2007

The following checklists detail the required minimum duties of Contractor Quality (QC) personnel. The QC Manager has overall responsibility to ensure that duties are performed and documented. The QC Manager shall not perform and/or testing except in emergency situations or in any other situation approved by the Engineer. Additional duties, as necessary, may be required to control the production and placement of the Hot-Mix Asphalt (HMA) mixtures. A Level II Technician may be used to perform any Level I Technician duties.

Note: Testing frequency denoted as "P" = "Prior to Start-up" and as "D" = "Daily"

A. Level I Technician

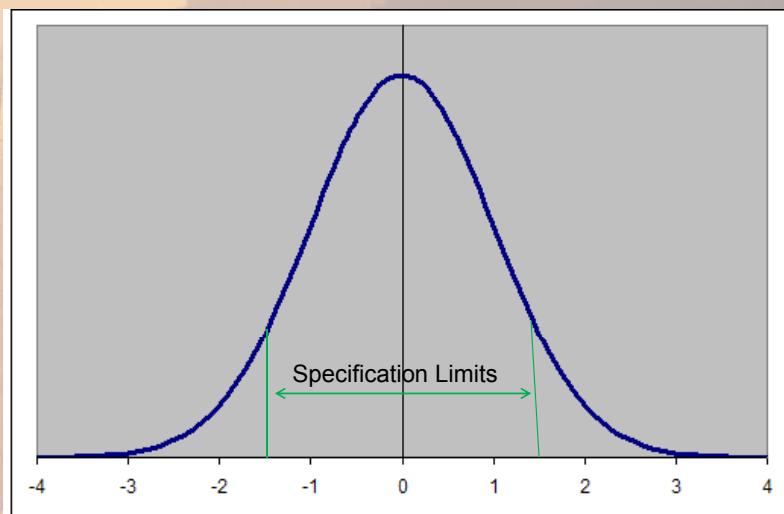
1. Checklist

- a. Perform incoming aggregate gradations before start-up time. (PD)
- b. Ensure lab equipment is on hand and in working order. (PD)
- c. Run moisture samples daily (drum only). (PD)
- d. Determine random sampling times one day in advance and inform

Plan to Address FHWA Concerns

- Relies on Pay for Performance (PFP)
- For projects over 8000 tons
- Staged implementation over several years
- Memo to Districts Feb 11, 2010

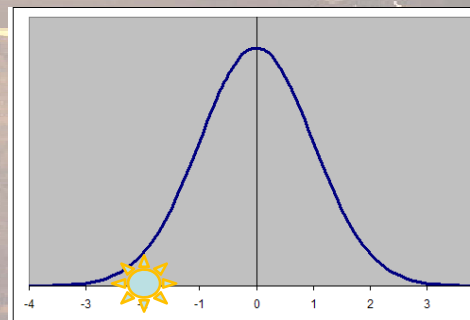
PFP



PFP Implementation Schedule

- 2010 One / District
- 2011 50% of Interstate
- 2012 $\geq 8,000$ tons

Challenge for Remainder of Program



2/3 of HMA production runs

Alternatives

1. QC/QA
2. PFP down to 4000 tons
3. Plant certification
4. QC/QA + (D-5 version)
5. Step based pay w/incentive
6. Method spec
7. Missouri
8. Indiana

Quality Control for Performance QCP

- QC/QA operation
- Builds on existing system in Illinois

QCP Components

- Mixture
 - Secured samples
 - QC test / 1000 tons (sublot)
 - QA test / 4000 tons (lot)
- Density
 - State cores every .2 miles (sublot)

Mixture QC Operation

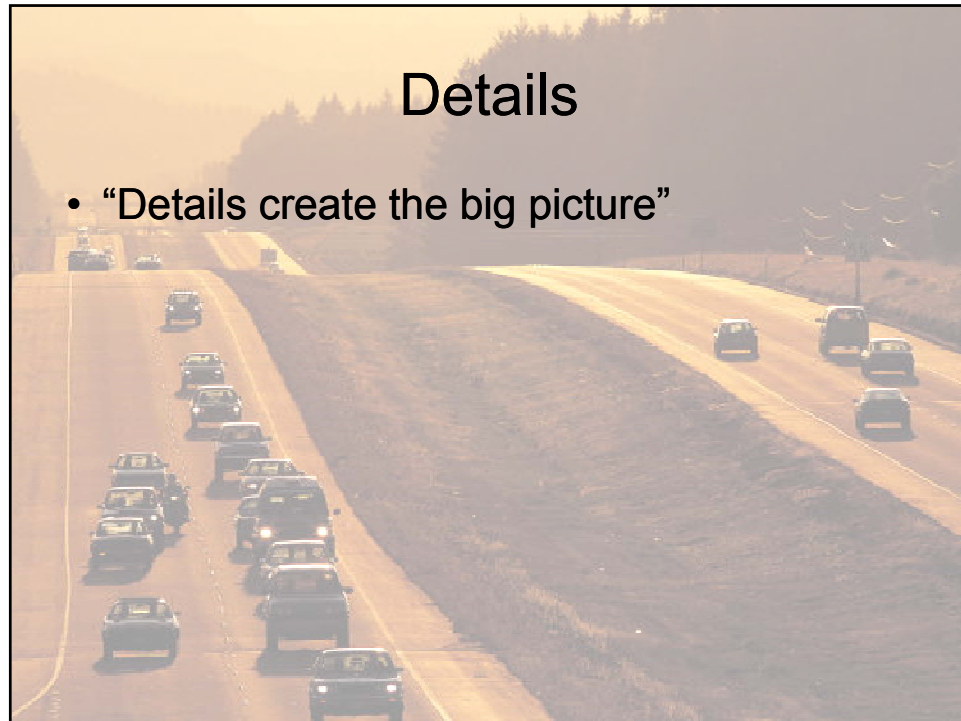
- If QC good, keep going
- If QC bad, check or adjust mix production

Mixture QA

- If QA good
 - compares and in spec
 - Then no further action
- If test QA bad
 - Non compare or outside spec
 - Then check all samples and payment table

QCP Summary

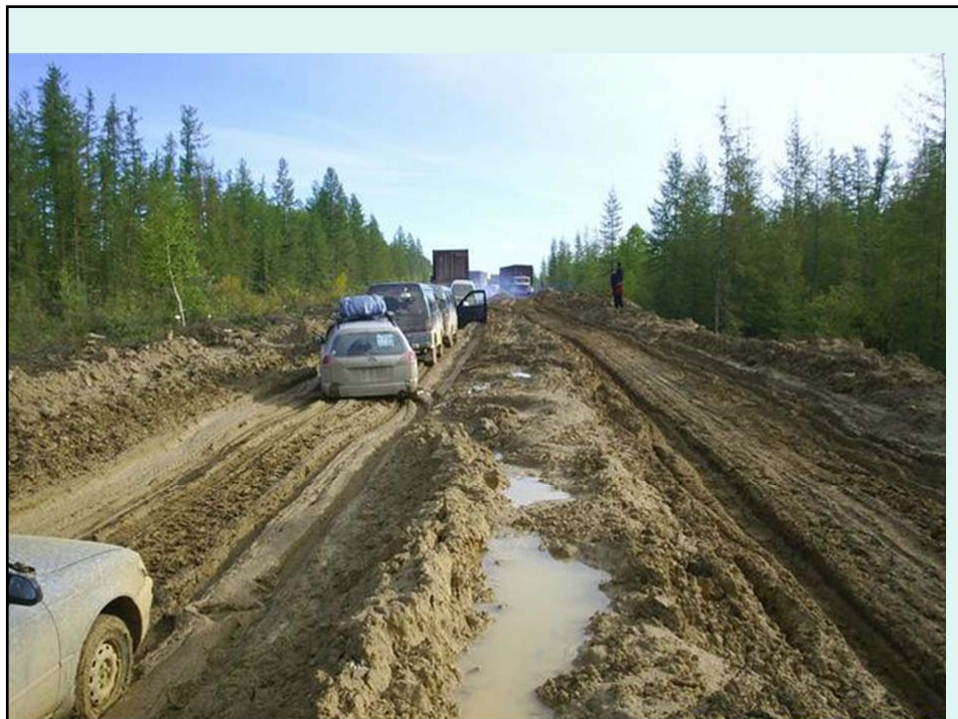
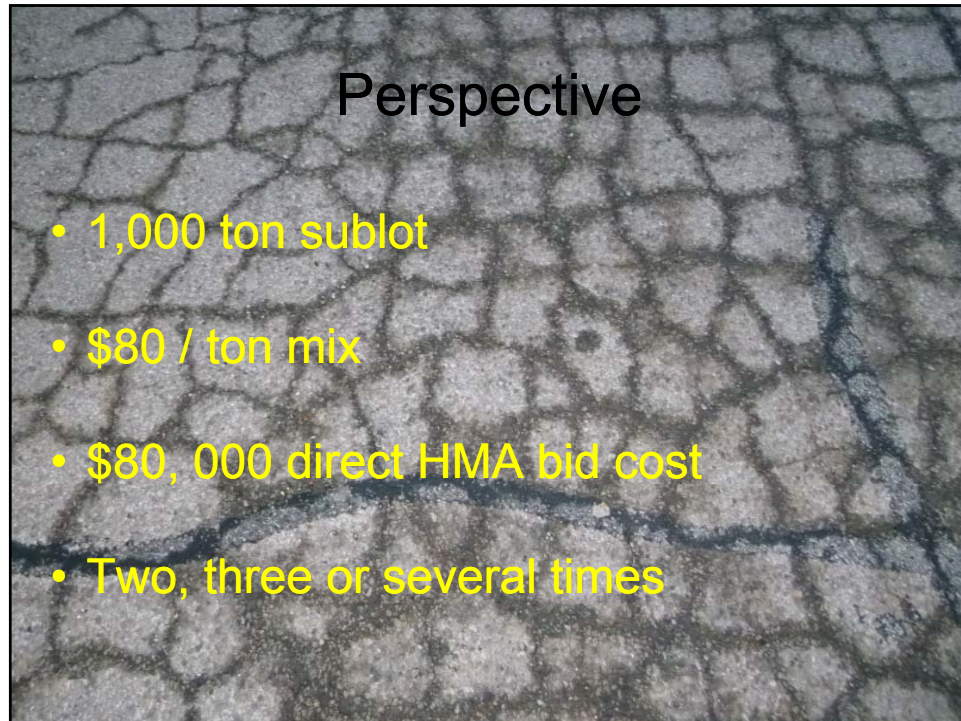
- QC operates the same
- QA
 - Sample security
 - Financial consequences



Longitudinal Joint Density

- 2% adjustment for unconfined edge









Local Agency FA Program FY 2011

- FA program 1.5 billion
- 650 Projects
- 50% funding through local agencies

Federal Aid Local Agency Oversight

- FA program administered through state
- Control document – procedures and specs, and
- Periodic processes and product reviews

Division - Stewardship / Oversight Agreement - Windows Internet Explorer

http://www.fhwa.dot.gov/ildiv/oversight.htm

View Favorites Tools Help

FHWA IL Division - Stewardship / Oversight Agre...

U.S. Department of Transportation
Federal Highway Administration

Illinois Division Office

3250 Executive
Springfield,
Phone (217) 492-4600 Fax (217) 492-4601

U.S. Department of Transportation
Federal Highway Administration
Illinois Division

Department of Transportation
in Dirksen Parkway
Illinois 62764

Federal-aid Highway Program

**Illinois
Stewardship/Oversight
Agreement**

Department of Transportation and the Federal Highway Administration agree to administer the Federal-aid Highway Program in the State of Illinois as follows:

Oversight Agreement

- “IDOT will oversee the design and construction of the projects.”
- “On federally funded projects where a local unit of government has the lead, IDOT will be involved with these projects to ensure requirements are met. “
- “IDOT retains responsibility for the appropriate use of Federal funds.

Local Agency HMA Guidance

- Section 700 Project Procedures Guide
 - Requires same procedures on LA projects
 - Does not distinguish between MFT and FA
- 12/1/2000 Memo on LA HMA QC/QA 00-11
 - Mixture test and plant support by IDOT

Local Agency Practice

- Many local agencies provide field inspection and density testing
- Most districts provide testing and plant monitoring support
- Some districts considering dropping testing support

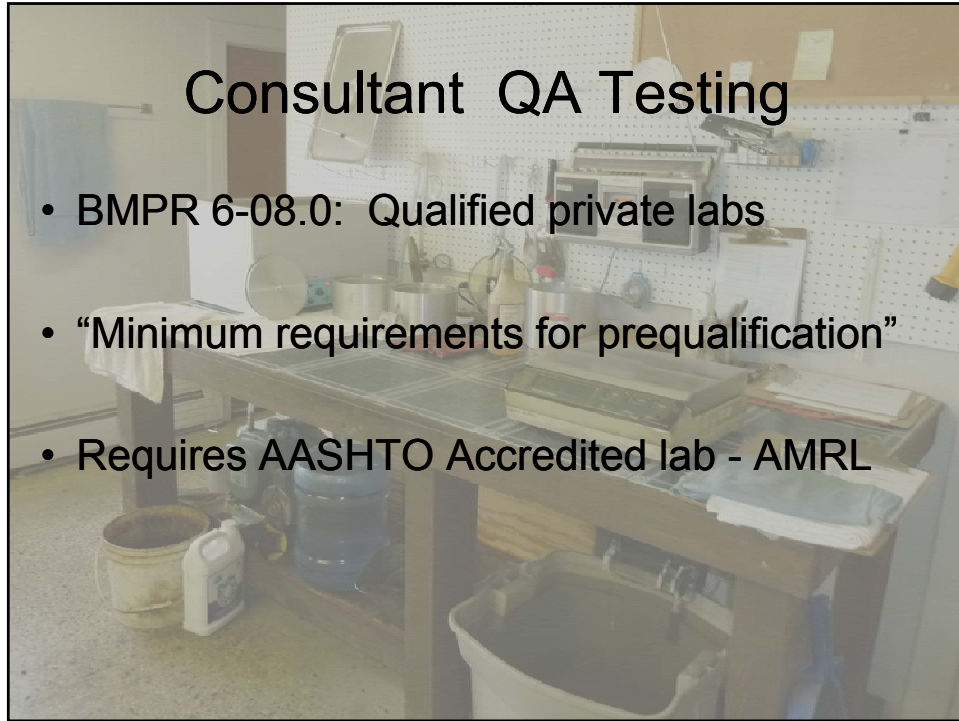
HMA – Mixture Testing & Monitoring

- Lab requires expensive equipment
- Requires trained experienced technician



Consultant QA Testing

- BMPR 6-08.0: Qualified private labs
- “Minimum requirements for prequalification”
- Requires AASHTO Accredited lab - AMRL



Consultant HMA Testing

- District One the most experience
- Thirteen accredited labs
- One downstate
- Independent evaluation program
- Use consultant technicians in state lab



Local Agency Conclusion

- IDOT is responsible for oversight
- Existing requirements rely on IDOT mixture and plant support for Federal-aid projects
- For those districts looking for assistance, consider all options

Summary

- Quality assurance depends on us
 - We will get what we measure
- New age HMA QA components and origin
 - PFP and QCP
- Local agency requirements
 - Requires plant and lab support by IDOT

