ETG Construction Task Force
Ervin Dukatz-Mathy Construction
Tim Ramirez-PennDOT
Louay Mohammad-LSU
Tim Aschenbrener-FHWA
Mark Buncher – AI
Adam Hand – UNR
Jim Musselman – Oldcastle Materials
Gerry Huber – HRG
Kevin Hall – UAR
Lee Gallivan – GC, Inc
Dave Newcomb – TTI/TAMU
Production/Construction Feedback

- PCF – controls and devices designed to provide rapid feedback to the user to improve the density and hence the performance of asphalt pavements.
Production/Construction Feedback

- Areas of concern to achieve *Pavement Density*:
  - Design
    - Structure
    - Mix
  - Materials
  - Specifications
  - Construction
    - Equipment
    - Feedback
  - Aggregate moisture
  - Asphalt Sampling
  - Compaction

Need: Defined Boundary Conditions
PCF

Area of concern:

- Is the density data being interpreted correctly?
- Is the density data being interpreted in a timely fashion?
IICTG 2017 Conference
Sept. 26-28, 2017
Minneapolis, MN USA

• Integrated Intelligent Construction solutions
• Intelligent Compaction
• Paver-Mounted Thermal Profiling
• Continuous Asphalt Density Measurement
• 3D Modeling and Automated Machine Guidance
SHRP2 Rapid Technologies to Enhance Quality Control on Asphalt Pavements

GPR Rolling Density Meter (RDM) Peer Exchange

MnDOT Bridge Office
3485 Hadley Ave N
Oakdale, MN 55128

October 24 - 25, 2017
PCF – e-circular

What is needed:
- References - pavement density

Schedule:
- References to Lee by Nov. 17
- e-circular draft
- TG Conference call Dec.
- Review by Mix ETG at April meeting
Compaction e - Circular

FHWA ETG Taskforce on Construction
TRB AFH60 Committee
Basic Outline of Compaction Document

● Executive Summary:
  - To be developed with the end user (managers of the DOT’s) in mind.
  - Importance of Compaction
  - A short course of asphalt pavement variabilities
  - 5-7 pages

● Background:
  - Providing a time line from the 1929 AAPT to the 2017 FHWA Document on compaction.
  - Set the Stage on what should be done to get long life projects
  - Limited discussion on Laydown Equipment (will need industry help)
  - 10 pages
Agency Concerns:
- Include the AI work on how to measure densities and their results
- How to support moving forward without breaking the bank
- New technologies (summary)
- NTE 5 pgs

Contractor Concerns:
- Production, Production, and Production
- QC vs Process Control
- New Technologies and how to get the message out, (NCAT and NAPA very important here)
- NTE 5 pgs
Specifications highpoints for best practices to get good compaction and long life.

- Knowing that state specifications vary across the country, try to identify the low hanging fruit that can be included.
- I don’t believe including a few state examples
- Include mat thickness, temperature, pavers, rollers
- Include PWL, rolling density meters, IC-IR (From FHWA report, etc.)
- Try to keep it to 8-10 pages

Summary
- More than one way to skin the cat
Conclusions/Recommendations:
- Include AI, NCAT, NAPA targeted areas for improvements.
- Include a listing of publications, reports, etc. not only as documentation for the work, but as go to documents for more discussions and validation by agency managers.
- Include locals government efforts.
- Support FHWA Tech Brief Development on Compaction (FHWA -Tim).

Acknowledgements:
- FHWA ETG, TRB, and all the Asphalt associations

References:
- Needed more reports, publications, papers, etc.

Reviews:
- ETG Taskforce to review in November, TRB Committee in December.
Thank You & Feedback

- Questions
- Suggestions
- Thoughts