

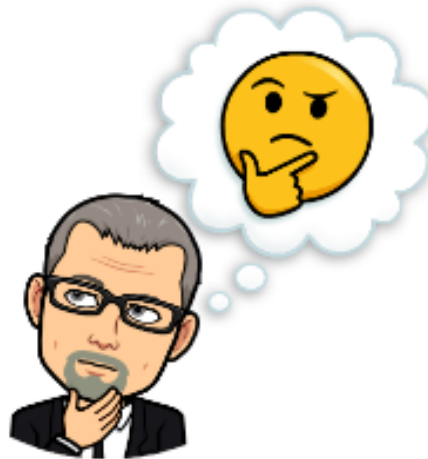
2019 PAPA Bus Tour

Goals, Objectives and Future Direction

George W. McAuley Jr., P.E.

Deputy Secretary for Highway Administration
PA Department of Transportation

July 31, 2019, District 4-0



PennDOT – A Very Large Enterprise



Focus Areas

- Safety
- Relationships
- Diversity and Inclusion
- Asset Management
- Evolution
- Innovation



Safety

- Safety Culture Established - 2011
- Reinvigorate Safety Emphasis
 - Fleet changes
 - Executive Safety Council
- Automated Work Zone Speed Enforcement
- Silica Dust
- Industry Statistics?



Relationships

- PennDOT Connects
- Partnering, Future Leaders, Regional Sessions, Winter Schools
- QIC's, TQI,
- Workforce Development forward?



Diversity and Inclusion

- ✓ 2019 – Third Year of Outreach Sessions
- ✓ Small/Diverse Businesses
- ✓ Training
- ✓ Industry efforts?



Asset Management

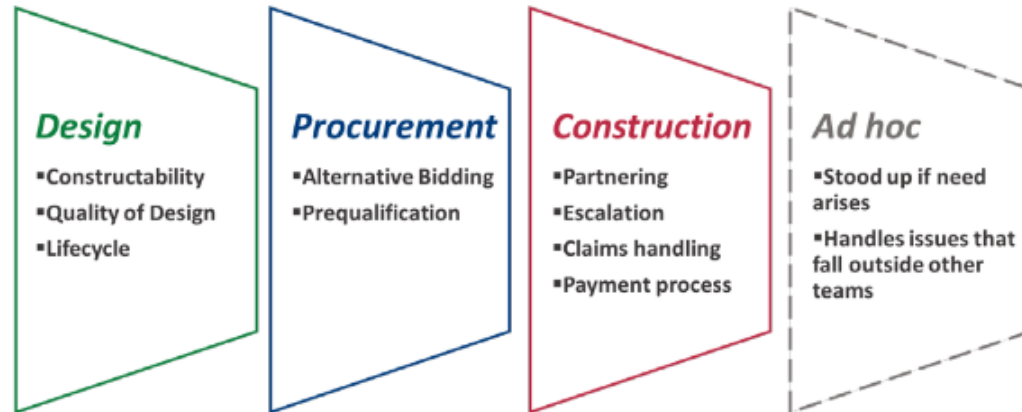
- Transportation Asset Management Plan (TAMP) draft approved by FHWA
 - PAMS, BAMS
 - Adding Guiderail, Drainage, others?
- Design Roads and Bridges Differently?
- Improved rehabilitation techniques?
- Better Preservation Tools and Processes?



Quality

➤ TQI

- Design
- Construction
- Procurement



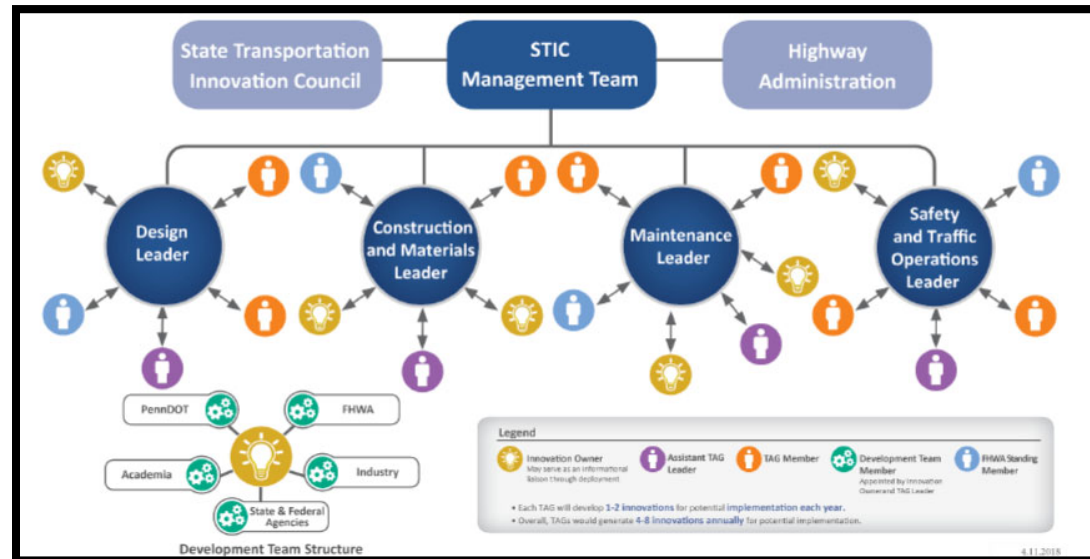
➤ RAC

- Reformatted Approach

➤ STIC

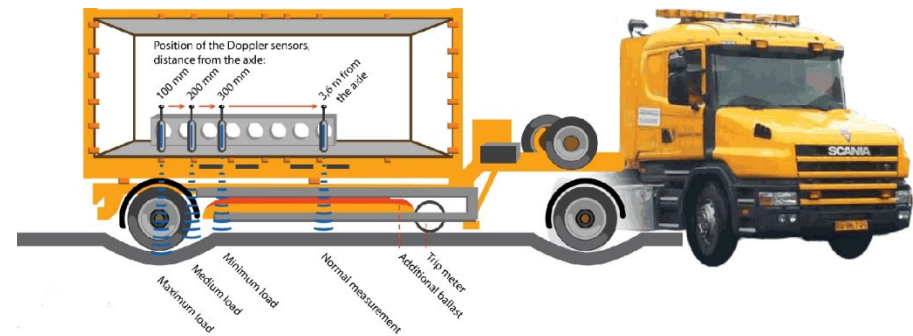
- Restructured

➤ QICs



Traffic Speed Deflection Devices (TSDDs)

- Measurement: Deflection Velocity of Pavement
- Speeds up to 60 mph
- 100-200 miles per day
- Determine Existing Structural Condition
- Data Integrated w/PAMS
- Pooled Fund Study TPF-5(385)
- 3 Years @ 300 Miles/Year
- 2019 – 80 Miles of Asphalt Projects- Project Level Assessment
- Other Objectives:
 - Define Data Collection Protocols
 - Use on Composite or Concrete Pavement?
 - Compare to FWD
 - How to Incorporate Data into Pavement Management
 - Define Value Added



Evolution

- Planning
- Design
- Construction
- Maintenance

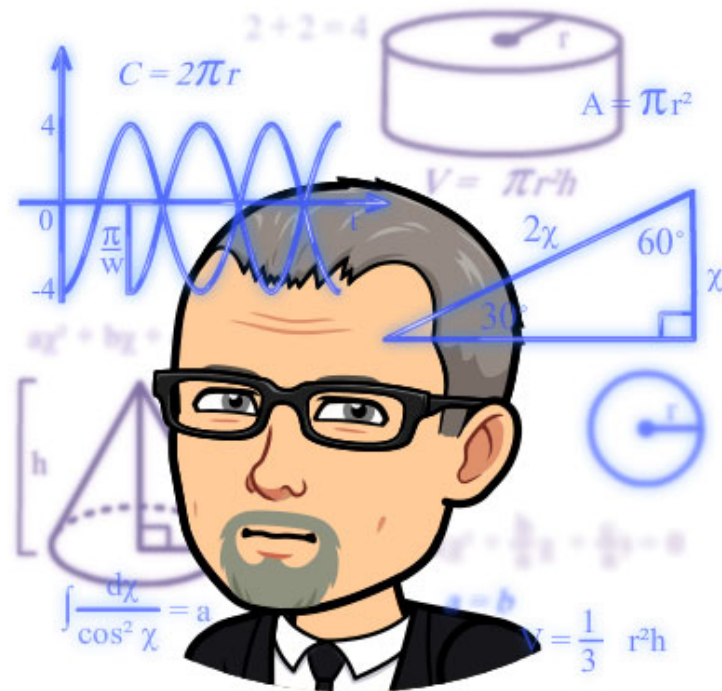
WE GOT THIS!



Innovation – RD&D

- Deployment is where we struggle
- Office of Operations and Performance

- Research
- STIC
- New Products
- QIC's
- TQI



What We've Done – Where We Are Headed

- Research 3-5 years
- Innovation quickly
 - But need to understand plan
- Deployment
- Between R&I

What We've Done

- PWL
- Broader applications of RAP
- Late Season Paving
- Mix enhancements for super pave
- Longitudinal joint density
- Thinlay
- Long life
- Binder overlays
- High RAP Binder

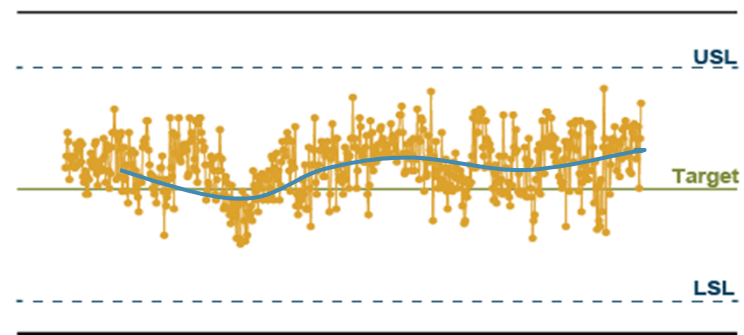
What's Next

- 408 Rewrite
- Thinlay – broader deployment? RAP?
- Fibers in mixes
- RAS
- High RAP wearing
- High RAP 25 mm
- RAP in SMA
- Shoulder applications
- Quality Consistency

Performance Based Acceptance Hybrid Approach

- Quantities typically not to F&T requirements
- Continue acceptance testing
- QC data consistency – Incentive/Disincentive
- What performance improvement can we achieve?

ISO for Asphalt → PASIN
Pennsylvania Asphalt Improvement Network



Flood Impacts

- In 2019, \$42 Million total in Emergency Funding
 - 34 projects let (14 projects approximately \$10 million related to 2018 flooding)
- In 2018, \$125 Million total in Emergency Funding
- Secondary Road Improvement Program impacts



Pennsylvania's Interstate System

Annual Funding Need*

\$460M

- Current Interstate Funding

\$1.2B

- Cyclic Asset Based Need
- Maintain existing highway and bridges

\$1.5-\$3B

- Address Reconstruction Needs
- Modernization
- Strategic Investments

*Needs are based on current dollars, unadjusted for inflation

AASHTO R & I

- Research to Deployment
 - 3 to 5 years
 - How to keep pace with Technology?
- Tools to enhance Research and Innovation
- Culture to Innovate
 - AASHTO Innovations Initiative
 - Innovation Community of Practice



Moving Forward into 2019

We look forward to working with PAPA and its members in 2019!

THANKS!



Any Questions?

