

Dowel Bar Task Force

National Concrete Consortium

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National Concrete Pavement
Technology Center



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Members

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Goal of Dowel Bar Task Force

Our overarching goal is to create/update specifications and testing so all types of dowel bars can be tested and each DOT can make a decision on the type of dowel bars that are acceptable for the designed pavement life.

Updates

6/2/2017

- Email to Mike Praul, FHWA
- Development of Improved Tests and Specifications for Corrosion Resistant Dowel Bars - \$240,000, 24 months
- Supportive of research but project is not at stage where it would be permissible use of FHWA's funds
- Recommended involving Turner-Fairbanks in the discussion

7/31/2017

- Conference call – cracked beam tests
- Two reports – Purdue paper and FHWA paper

8/3/2017 – Consideration of NCHRP 20-7 Proposal, funding limited to \$100,000

Updates

9/5/2017

- Discussed AASHTO 253 & 254 ballot
 - To be re-balloted
 - Only negative to resolve was from Pennsylvania
- Briefly discussed Purdue paper & FHWA presentation
- Determined that there is a need to:
 - Two prong approach
 - Structural, estimate for structural costs \$150,000
 - Corrosion test protocol
 - Find a corrosion engineer

Future - Structural

- Get an updated proposal and cost on structural test validation
- Determine possible funding sources and how to proceed

Future - Corrosion

Obtain FHWA report **Corrosion Resistance Study of Metallic Dowel Bars**

- A total of 7 dowel bar types evaluated: black, epoxy-coated, galvanized, zinc clad, stainless steel clad, epoxy-coated covered plus stainless steel cladding, solid stainless steel (also serve as macro-cathode) – started in 2005
- Synthesis of corrosion testing on dowel bars by a corrosion engineer with a recommendation for corrosion test protocol and estimated longevity of performance based on corrosion results