Release Notes

Pavement ME Deflection Data Analysis and Backcalculation Tool (Build 1.0)

July 1st 2017

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1   Introduction

This document briefly describes the new Pavement ME Deflection Data Analysis and Backcalculation Tool (BcT) Version 1.0, released on the ME Design website (me-design.com) on July 1, 2017. This tool supplements the rehabilitation design module of AASHTOWare Pavement ME Design software (Pavement ME).

2   Features and Capabilities

Pavement ME Deflection Data Analysis and Backcalculation Tool (BcT) is a standalone software program that can be used to generate backcalculation inputs to the AASHTO Pavement ME Design software for rehabilitation design. BcT would help the users to:

- Analyze raw deflection data files obtained from Falling Weight Deflectometer (FWD) testing devices.
- Backcalculate in-place elastic layer moduli for flexible and rigid pavements.
- Generate inputs that feed into Pavement ME rehabilitation design models.
- Perform loss of support analysis and load transfer efficiency (LTE) calculations.

BcT utilizes EVERCALC® backcalculation engine, and broadly comprises the following three phases:

1. Pre-processing: Allows the user to (a) import and pre-process raw deflection data file formats from three FWD testing devices: Dynatest, JILS and KUAB; (b) segment projects, compare project segments, and merge statistically similar segments; and (c) select project segments for backcalculation.
2. Backcalculation: Allows the user to (a) define pavement layer structure and other backcalculation inputs; and (b) backcalculate elastic layer moduli for every segment with the pavement layer structure.
3. Post-processing: Allows the user to export backcalculation results to an Pavement ME rehabilitation design file.

3   Outstanding Issues

None. Note that this is the first version of the BcT.

4   Frequently Asked Questions (FAQs)

None.

5   Installation and Licensing

To install to the newest version of BcT, users will need to download the BcT installer from http://www.me-design.com. Please refer to the installation procedure document posted on me-design.com for step-by-step instructions to activate BcT license.

6   Contact information

If you have any questions regarding these release notes, or regarding the ME Design software, please contact the ME Design Support Team at:

The ME Design Support Team
Email: pavementmedesign@ara.com
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Monday through Friday
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