DARWin-ME Pavement Design Software

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Presentation Outline

- Current software status
- Development of DARWin-ME
- Future enhancements/modules, etc.
- Who is participating
Current Software

- DARWin 3.1 is the latest software version of the 1993 AASHTO Guide for Design of Pavement Structures
- Current Contractor
- Sunset planned for 12 months following release of DARWin-ME v2.0
Intellectual property rights transferred from NCHRP to AASHTO – December 2007

Project development is in two parts:
- Part 1 – MEPDG Research Software Maintenance
- Part 2 – DARWin-ME v2.0 Development
Part 2 – DARWin-ME

- Based on the MEPDG
- List of enhancements (not an extensive list)
  - Increase computational speed
  - Ability to optimize for thickness design
  - Inclusion of backcalculation results for rehab design
  - Ability to establish agency specific libraries (materials, traffic, climate)
  - SI Units capability
  - Incorporation third party traffic data
  - Traffic analysis based on Highway Capacity Manual
  - Validation checks during data input
DARWin-ME Current Status

- Project solicitation issued in July 2008
- Minimum of 18 member agencies required to proceed with development
- Project solicitation participation deadline was November 2008, but extended to December
Who Is Participating?

20 Agencies and the FHWA

Funds Committed
Considering Participating
Not Participating
DARWin-ME Development

- Sole Source Contract to ARA
  - Correct known bugs and those discovered during development
  - Incorporate enhancements outlined in solicitation

- Product development proposed schedule
  - Appoint new DARWin-ME Task Force – January/February 2009
  - Meet with contractor – February/March 2009
  - Initiate contract and begin development cycle (approximately 18 months) – February/March 2009
Role of Task Force

- Assist AASHTO Program Manager (Ms. Vicki Schofield) with monitoring development of v2.0
- Review and test beta software
- Recommend licensing fee structure to AASHTO
- Plan for future versions of DARWin-ME
Opportunity for Enhancements

- Upon successful release of DARWin-ME v2.0
  - All member agency licensees who participated in the solicitation will have the opportunity to obtain source code
  - Agreements with AASHTO will apply
  - Allows for state enhancement with the intent that it will be shared with AASHTO
    - AASHTO Joint Technical Committee on Pavement intent to maintain one official version of software
Thank You