



## Transportation Asset Management Training Opportunities

A project of the Transportation Asset Management Pooled Fund Research Program TPF-5(036)

> Jason Bittner Mary Ebeling Ernie Wittwer

6<sup>th</sup> National Transportation Asset Management Conference November, 2005







## **Rationale and Goals**

- Create comprehensive inventory of Transportation Asset Management short courses
- Make information on training opportunities widely available
- Improve access to Transportation Asset Management training
- Create summary of university based Transportation Asset Management courses offered for Credit





## Acknowledgements

- Michigan Transportation Asset Management Council
  - Education and Training
    Subcommittee
- FHWA Office of Asset Management (Steven Gaj)
- Wisconsin DOT
  - TPF 5-(036) pooled fund lead state





## **Products**

- Inventory of available courses
- Abstract of content for each course
- Identification of major themes of courses
- Identification of potential future training providers







## Advisory Committee/ Expert Panel

- Academics
- FHWA
- State DOT personnel
- LTAPs
- Private training provider







# Survey of providers of Professional Training

- 70 courses identified
  - 33 surveys received; approx. 40 courses represented
  - In addition information collected from approx 30 potential providers
- Many courses no longer offered or were not renewed due to lack of audience





## Survey of providers of Professional Training

- FHWA
- National Highway Institute
- LTAPs
- DOTs
  - In house
  - In cooperation with LTAPs
- Private Providers





# Survey of providers of Professional Training

- Focus
  - Asset Management Generally
  - Rigid or Flexible Pavements
  - Bridge Management
  - Inventorying
  - Strategic Planning
  - Monitoring and Performance Measurement
- Topics Covered
- Primary Audience
- Course Length
- Course Design/Layout/Schedule







## Survey of providers of Professional Training

- Primary Instructional Technique
- Class Size
- Times Offered
- Instructor Characteristics
- Geographic Area
- Cost of Registration
- PDH/CEU
- Open ended







## **Survey Response/Findings**

Common themes of courses are:

- Asset/Infrastructure Management
- Preventive Maintenance
- Pavement Management
- Policy
- Economic Analysis





## **General Findings**



### Instructors tend to

### be either

 Consultants with a practical focus

#### or

 Transportation professionals

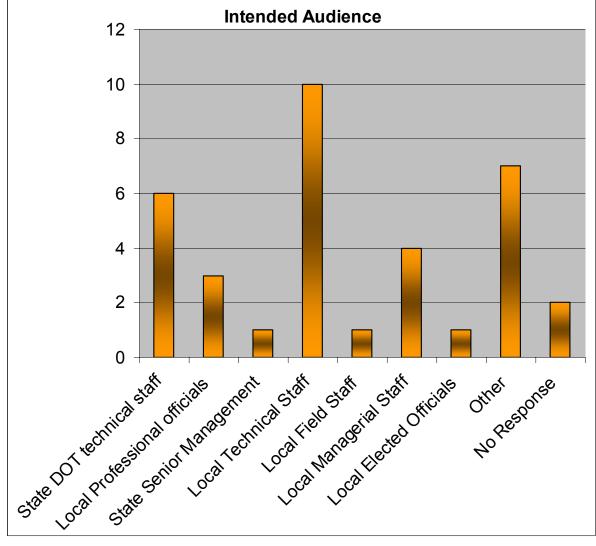
### In addition

- Many courses offer professional development credits as an incentive (as many as 12)
- DOTs rely on the state LTAPs to provide training

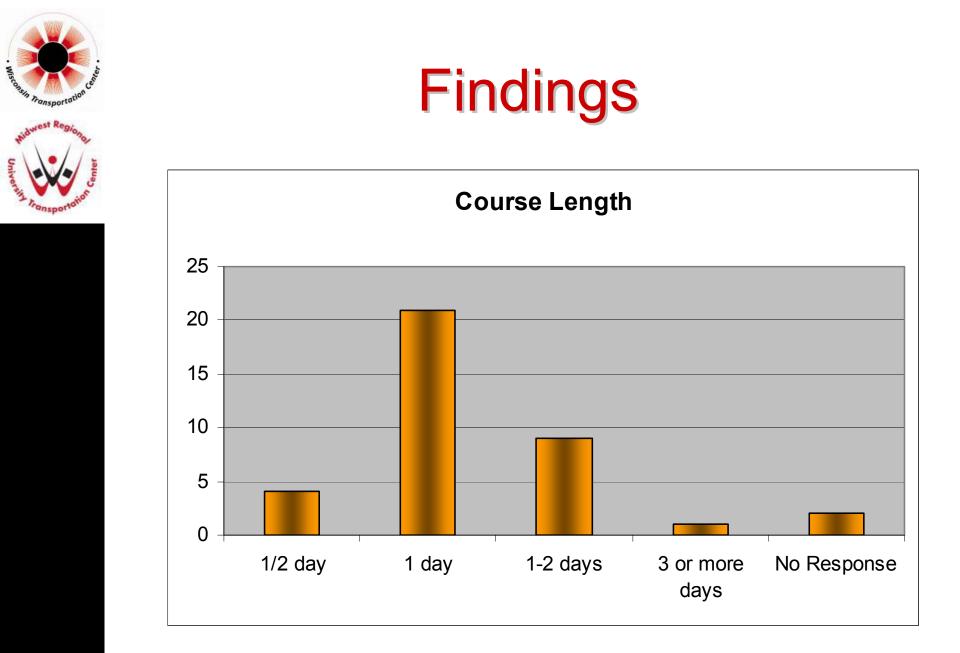










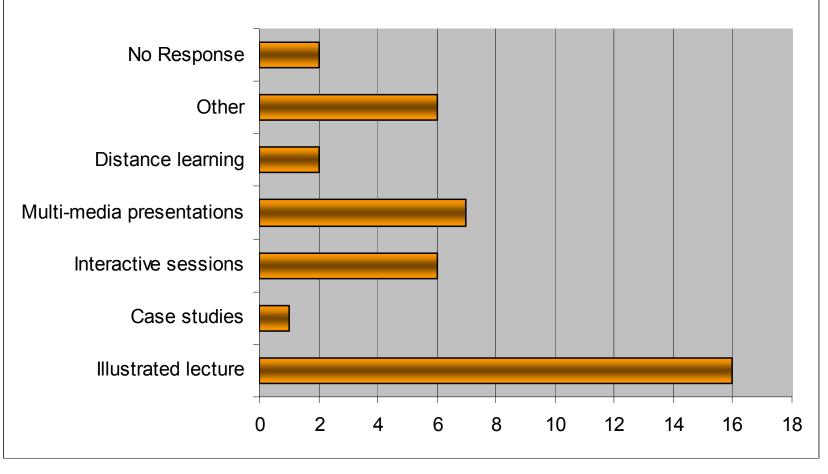








#### **Primary Instructional Technique**

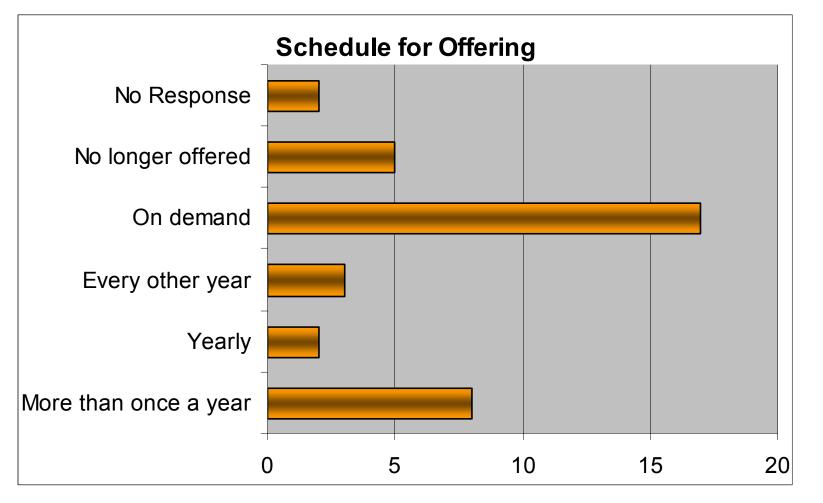










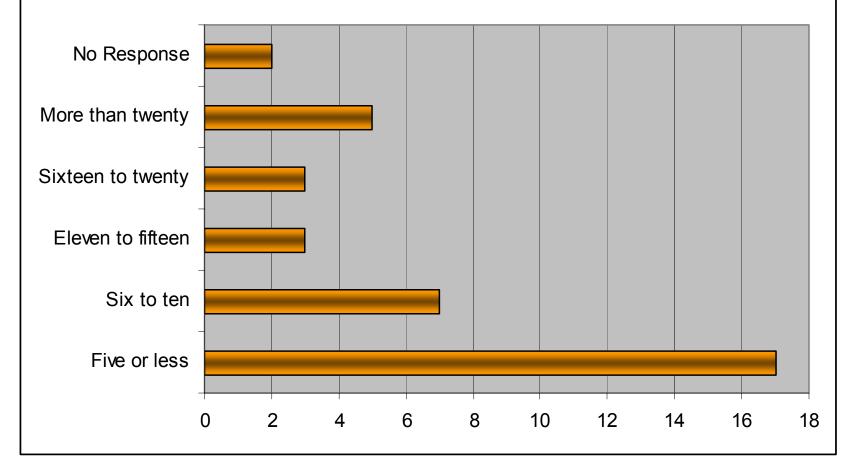








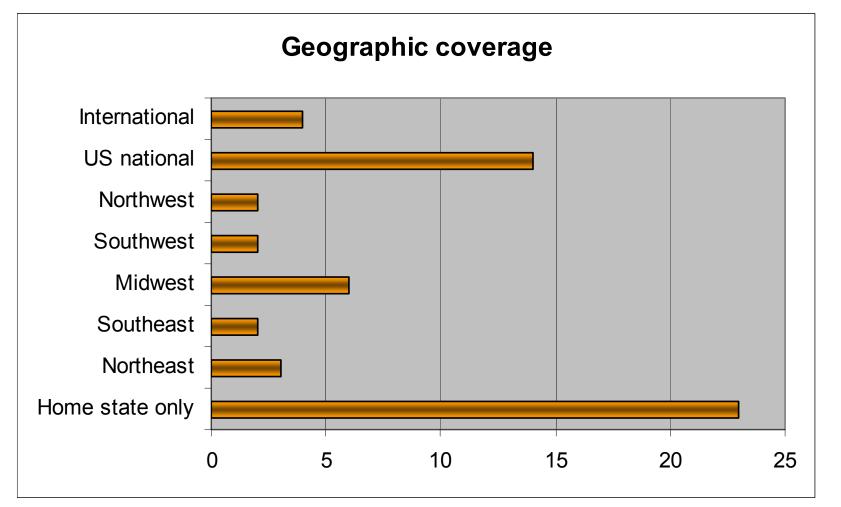
#### **Frequency Offered**











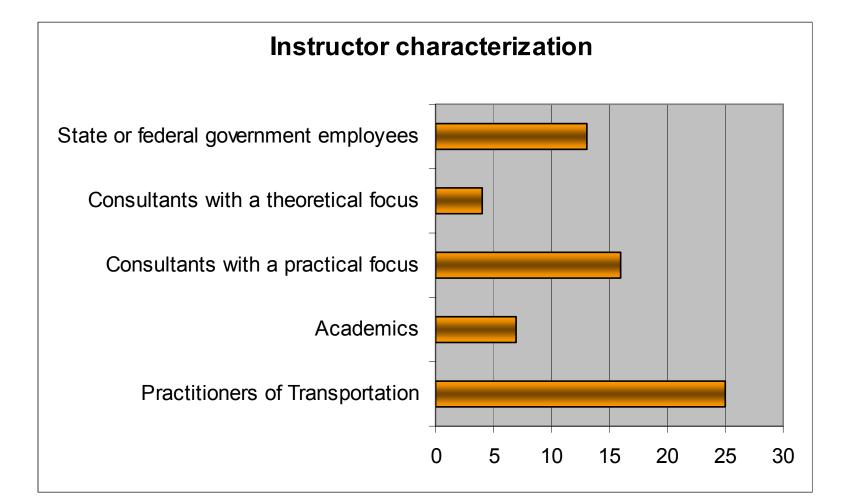


-MADISON





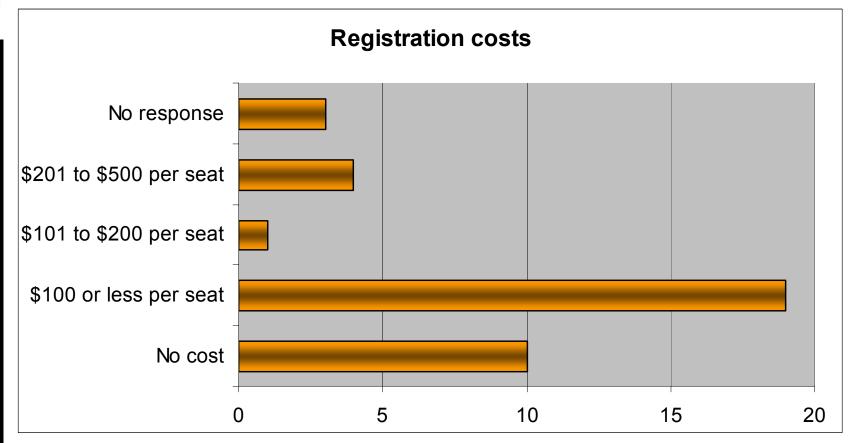


















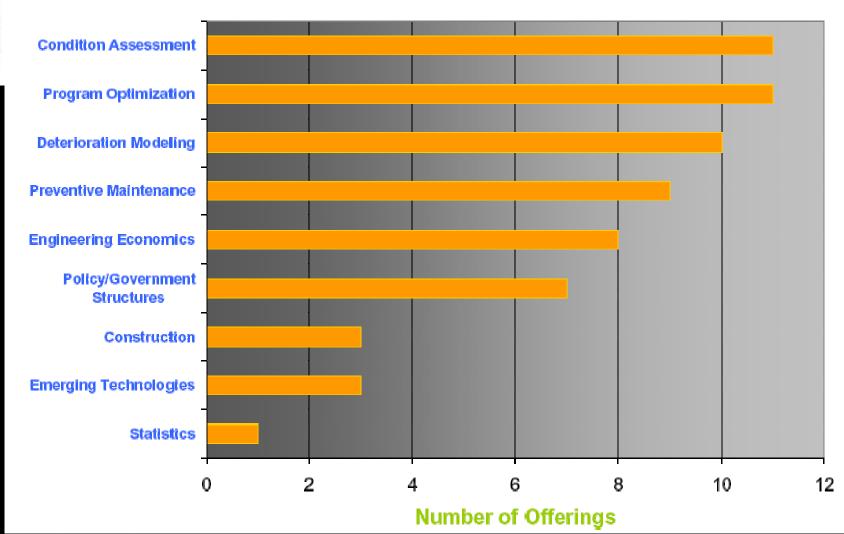
# Review of for-credit university courses: Tasks Completed

- Reviewed 16 for-credit graduate course offerings
- Cataloged information on each offering such as instructor contact information, syllabus, topics covered and teaching materials used
- Summarized and categorized findings





## Common Themes of For-Credit Asset Management Offerings









# **Summary of Findings**

- Majority of courses offered by Civil Engineering departments; some are offered by Public Policy schools
- Most courses carry 3 credit hours
- Common subjects include Infrastructure Management, Transportation Asset Management, or Management of Pavement Networks
- Most courses do not use a textbook, but provide reading materials drawn from research papers and government publications.