



# Training: Where & How to Get It

Peter Weykamp. P.E.

MICHIGAN STATE  
UNIVERSITY

# Objective

Training is available

Training can be local

Training options exist

Training is worthwhile  
*necessary*





# What's in it for You?

- Understand bridge needs
- Improve crew skills set
- Achieve cost savings
- Expand capabilities
- Reduce user delays
- Reduce injuries
- Improve crew morale







# Formal Training Availability

NHI: Bridge Maintenance NHI-130108

4 day course – covers all aspects

Exper. & trained instructors

All new

Recommended – requisite

Web based training

NHI 130107A



MICHIGAN STATE  
UNIVERSITY



# Bridge Maintenance NHI 130108

- Develop & implement cost-effective preservation strategy
- Identify maintenance &/or repair needs
- Discuss preservation options
- Describe tasks step-by-step
- Identify critical members
- Recognize problems that warrant specialized expertise
- Apply effective management techniques



Training Level: Intermediate

Fee: ~ \$1000/per person;

Length: 4 days

MICHIGAN STATE  
UNIVERSITY



# NHI Training (cont.)

Recommended pre-requisite:  
Web-based training to review  
fundamentals

www.fhwa.dot.gov/training/course\_search.aspx?tab=0&key=bridge+maintenance&typ=5&sr=0&course\_no=130107A

[Return to Search Results](#) [Show Search Criteria](#) +

JUMP TO: [Course Information](#) | [Outcomes](#) | [Target Audience](#)

## Course Description

*Fundamentals of Bridge Maintenance WBT*

**PROGRAM AREA:** Structures

**COURSE NUMBER:** FHWA-NHI-130107A

Web-based Training (WBT)

[Print Friendly Page](#)

Calendar Year	Length	CEU	Price
2016	7 Hours	0.7 Units	\$0 Per Participant

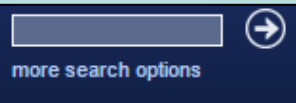
[Add To Cart](#)

**TRAINING LEVEL:** Basic

**CLASS SIZE:** Minimum: 500 Maximum: 500

**COURSE DESCRIPTION:**

Fundamentals of Bridge Maintenance (NHI-130107A) teaches the participant the fundamental aspects of an effective bridge maintenance program. Module 1 - Introduction to Bridge Maintenance explains the importance of a balanced bridge maintenance program and the organizational structure, roles, and



Connect with us



eSubscribe  
Receive regular  
email updates




Tell Me More

Find Training



# NHI Training (cont.)

Self-paced with  
“assessments”



**Fundamentals of Bridge Maintenance**

EHWA-NHI-130107A

Welcome & Introduction

Resources

Glossary

Help

NHI-130107A Module 0

Outline Narration Search

Slide Notes

NHI-130108. This training will be most relevant to participants who are involved in bridge maintenance activities or supervise these activities. After completing Modules 1 through 6, you will complete the End-of-Course Assessment. In order to receive a "Certificate of Course Completion" and the continuing education units, or CEUs, associated with this course series, you must successfully pass the final assessment with a minimum score of 70 percent or better. You will be given three opportunities to successfully complete the final assessment. Plan to complete each assessment attempt in one sitting. If the assessment is left unattended or untouched for approximately 25 minutes, the assessment will close out and be graded "as is", and an attempt will be counted.

**Image Description**  
Box containing module title for Module 0: Welcome and Introduction.

**Image Description**  
Box containing module titles in the following order:  
Module 1: Introduction to Bridge Maintenance  
Module 2: Bridge Maintenance Management  
Module 3: Bridge Anatomy  
Module 4: Bridge Mechanics  
Module 5: Concrete Basics  
Module 6: Maintenance of Bridge Ancillary Features

**Image Description**  
Arrow graphic.

**Image Description**

4 Minutes 18 Seconds Remaining

Sequence

- Module 0: Welcome & Introduction
- Module 1: Introduction to Bridge Maintenance
- Module 2: Bridge Maintenance Management
- Module 3: Bridge Anatomy
- Module 4: Bridge Mechanics
- Module 5: Concrete Basics
- Module 6: Maintenance of Bridge Ancillary Features

End-of-Course Assessment

Back Next

Slide 10 / 15 | Playing

00:31 / 01:08

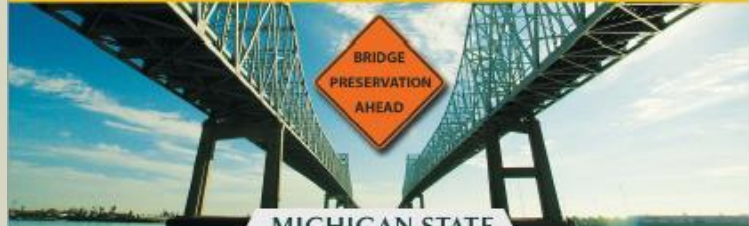
CC





# NCPP Training

## BRIDGE PRESERVATION TRAINING FOR LOCAL AGENCIES



Ed Welch

Ed Welch is the former Bridge Maintenance Engineer for New Hampshire DOT. He currently serves as the Bridge Preservation Engineer for the AASHTO TSP-2 Program.

MICHIGAN STATE  
UNIVERSITY



Pete Weykamp



Pete Weykamp is the former Bridge Maintenance Engineer for New York State DOT. He currently serves as an Independent Consultant working on several national training initiatives.

### TRAINING TOPICS

Sessions will be tailored to specific audiences. These sessions will include but will not be limited to:

- ☒ Washing and Sealing
- ☒ Concrete Repair
- ☒ Structural Steel Protection
- ☒ Joint Maintenance/Repair
- ☒ Asset Management Systems

### ABOUT US

NCPP @ MSU has expanded the training that they are offering to Local Agencies by including Bridge Preservation Training. Understanding the need for training and the development of Municipal Programs specific to the preservation of the Non State Owned Bridges is vital to the overall condition of the country's 608,000 Bridges. It is emphasized in this training that an effective/balanced Bridge Preservation Program includes all aspects of Preservation, including Reactive and Proactive Maintenance.

### WHY CHOOSE US

Between the two instructors, they bring more than seventy years of experience in maintaining and preserving bridges. These gentlemen know and regularly communicate with the national community of Bridge Preservation Practitioners, including: State Bridge Maintenance Engineers, Suppliers, Consultants, Contractors, FHWA Division Engineers, and Academia.



**CALL US TODAY**  
(517) 432 - 8220

(517) 432 - 8220  
ncpp@egr.msu.edu

top2bridges.pavementpreservation.org  
2857 Jolly Road Okemos, MI 48864

NCPP: Bridge Maintenance

Adjustable to needs

Location options

Currently 5 modules

“Building Towards Bridge Preservation”

“Preventative Maintenance”

“Expansion Joints

“Concrete Repair”

“Bridge Preservation Workshop”

MICHIGAN STATE  
UNIVERSITY





# NCPP Bridge Maintenance Training



Training Level: Basic to Intermediate

Fee: < \$2,000 per class

Length: 1 day or adjustable

NCPP Customer Service: (517) 432-8220

[ncpp@egr.msu.edu](mailto:ncpp@egr.msu.edu)



# TSP2 Website



## TSP2 BRIDGE PRESERVATION VIDEO LIBRARY

BRIDGE LIBRARY

TSP2 HOME

NCPP HOME

ASSET MANAGEMENT

CORROSION MITIGATION

DECK PRESERVATION














DESIGN

JOINTS & BEARINGS

# TSP2 Website (cont.)

## JOINTS & BEARINGS

### JOINTS

PRESENTATION TITLE	PRESENTER	DATE	PDF
 <a href="#">Bridge Joint Performance in Northeastern States</a>	Scott Civjan	May-16	
 <a href="#">Bridge Joint Performance in California</a>	Tony Brake	May-16	
 <a href="#">Industry Perspective on Bridge Expansion Joints</a>	John Manning, Philip Benevides, Matthew Keilson	May-16	
 <a href="#">Small Movement Joint Maintenance</a>	Mark Croarkin	Sep-15	
 <a href="#">Small Movement Expansion Joints: Performance &amp; State of Practice in the Northeast</a>	Tripp Shenton	Apr-14	
 <a href="#">Joint Sealing For Small Span Bridge Decks</a>	Joseph Becker	Apr-14	
	Irene N		





# Agency Sponsored Training



## Bridge Maintenance Academy 2012

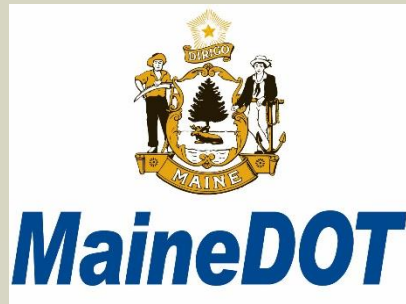
A Process Oriented Approach to  
Healthy Bridge Systems



MICHIGAN STATE  
UNIVERSITY



# Welcome..... a workshop on Bridge Maintenance



A  
workshop  
presented  
by the  
**Maine  
Local  
Roads  
Center**

**Ben Foster**

**MaineDOT Ass't Bridge Maintenance Eng'r**

10/24/2016

MICHIGAN STATE  
UNIVERSITY

# Agency Manuals

## Maine Municipal Bridge Maintenance Manual



Submitted to  
**MaineDOT**

Submitted by  
**T.Y. Lin International**  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04150

**November 19, 2010**

## FUNDAMENTALS OF BRIDGE MAINTENANCE AND INSPECTION



**NEW YORK STATE DEPARTMENT OF TRANSPORTATION**  
OFFICE OF OPERATIONS  
OFFICE OF TRANSPORTATION MAINTENANCE





# Industry Technology Demonstrations

---



---

MICHIGAN STATE  
UNIVERSITY



# FHWA Sponsored Training



MICHIGAN STATE  
UNIVERSITY





# Program Level Training



MICHIGAN STATE  
UNIVERSITY



# Enhancing Capabilities







# References & resources

- NHI
- NCPP
  - Regional Bridge PPs
- Agencies
- LTAP
- Industry
- Associations
- Demonstrations





# Review

- A variety of means to provide training
- Various types of training
- Provided resources to support training initiatives
- Contact information for formal training







# QUESTIONS? COMMENTS?

Peter Weykamp, P.E  
[peterweykamp@outlook.com](mailto:peterweykamp@outlook.com)

MICHIGAN STATE  
UNIVERSITY