



Transportation Curriculum Coordination Council (TCCC)

Addressing Challenges in
Construction, Maintenance and
Materials Workforce Quality

WASHTO 2010

Bismarck, North Dakota



What is the TCCC?

- The TCCC is a Federal/State/Industry partnership that supports the training of the highway construction personnel.
- The goals of the TCCC are to:
 - Develop and maintain a national curriculum for various transportation disciplines
 - Identify training and certification requirements
 - Coordinate/facilitate training efforts
 - Provide a quality training course



Why Do You Need the Transportation Curriculum Coordination Council?



What the TCCC has accomplished...

Core Curriculum
National Training Database
ILT and WBT



National Training Database

- National Interest:
 - TCCC, NTTD, LTAP
 - AASHTO, TRB, ITE
- Locating existing training from a wide variety of disciplines within construction and maintenance
- Assist in gap analysis for new course development



National Transportation Training Resource

Supporting the Development of the Transportation Workforce

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SEARCH BY TCCC TECHNICAL CATEGORY

Select a single term in any one or more dropdowns to return all related resources.

Please select a Technical Category...
Please select a Subject Area...
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Please select a Skill Level...
Please select a Competency...

In the Hot Mix

- 3/18/10: 1,500 LTAP and TTAP resources added to NTTR.
- Now Available: 700+ New Management and Operations (M&O) Resources
- Want to Contribute a Lot of Resources? Use XML to Quickly Upload All Your Resources!
- Advanced Search capability now available.
- Feedback Form is available.
- NTTR Database Resource Count: **2669** Contributed by **140** organizations

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No resources currently exist on the topics you identified.



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KEYWORD SEARCH

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SEARCH BY TCCC TECHNICAL CATEGORY
Select a single term in any one or more dropdowns to return all related resources.

Materials
PCC Pavement Field Testing
Sampling/Testing
All Levels
Explains proper sampling and testing techniques relevant to components of PCC

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RESOURCE TITLE	1 resources found that match your criteria	ORGANIZATION(S)	LENGTH
TCCC Basic Materials for Highway and Structure Construction and Maintenance - WEB-BASED		DOT NHI	3.50 days





Instructor Led Courses

- Geotechnical Inspector Certification Program
 - Drilled Shafts
 - Driven Piling
- Maintenance Academy
- Transportation Construction Quality Assurance
- NHI has a number of others available in several areas



Web Based Training

- Developed as a joint effort of TCCC and NHI
- Good Interactive Courses
- Widely Used Nationally and Internationally
- Money Saving
- Less Time Consuming



TCCC Trainings Shared with States

- TCCC
 - TCCC trainings are all available for free
 - Provide the published trainings for internal state LMSs, state intranets, and other state training needs
 - Distributing these trainings directly to the states guarantees that potential participants within those states can access training
 - Questionnaire that provides us with important information about their state's technical requirements, contact information, and needs
- States
 - Supply quarterly participation numbers and update trainings when we provide new versions



Total Participants Training Numbers

Course Number	Training Name	NHI Totals	State Totals	Totals
FHWA-NHI-131110	Pavement Preservation Treatment Series	657		
FHWA-NHI-131110A	Introduction to Pavement Preservation	79		
FHWA-NHI-131110B	Materials	94		
FHWA-NHI-131110C	Crack Sealing & Filling, and Joint Sealing	77		
FHWA-NHI-131110D	Localized Pavement Repair	47		
FHWA-NHI-131110E	Chip Seals	59		
FHWA-NHI-131110F	Fog Seals	44		
FHWA-NHI-131110G	Slurry Seals	35		
FHWA-NHI-131110H	Micro-Surfacing	53		
FHWA-NHI-131110I	Thin Functional HMA Overlay	40		
FHWA-NHI-131110J	Ultra Thin Bonded Wearing Courses	44		
FHWA-NHI-131110K	Selecting the Right Treatment	45		
FHWA-NHI-131117	Basic Materials for Highway and Structure Construction	680	409	1089
FHWA-NHI-131121	Construction of PCC Pavements	125	60	185
FHWA-NHI-131122	Portland Cement Concrete Paving Inspection	149	100	249
FHWA-NHI-131126	Pavement Preservation Series	96	8	104
FHWA-NHI-131126A	Preventive Maintenance and Pavement Preservation Concepts	74	19	93
FHWA-NHI-131126B	Concrete Pavement Evaluation	77	37	114
FHWA-NHI-131126C	Slab Stabilization and Slab Jacking	81	25	106





Total Participants Training Numbers

Course Number	Training Name	NHI Totals	State Totals	Totals
FHWA-NHI-131126D	Partial-Depth Repairs	99	10	109
FHWA-NHI-131126E	Full-Depth Repairs	105	14	119
FHWA-NHI-131126F	Retrofitted Edge Drains	56	8	64
FHWA-NHI-131126G	Load Transfer Restoration	38	9	47
FHWA-NHI-131126H	Diamond Grinding and Grooving	70	9	79
FHWA-NHI-131126I	Joint Resealing and Crack Sealing	76	13	89
FHWA-NHI-131126J	Strategy Selection	46	8	54
FHWA-NHI-131127	Concrete Series	159	39	198
FHWA-NHI-131128	Test Self-Consolidating Concrete	35	2	37
FHWA-NHI-131129	HMA Paving Field Inspection	83		83
FHWA-NHI-131130	Advanced Self-Consolidating Concrete	28	3	
FHWA-NHI-134069	Ethics Awareness for the Transportation Industry	759	4942	5701
FHWA-NHI-134071	Improving the Daily Diary	622	593	1215
FHWA-NHI-134072	Math Module	607	1193	1800
FHWA-NHI-134074	Bolted Connections	184	25	209
FHWA-NHI-134075	Hardened Concrete Properties - Durability	265	68	333
FHWA-NHI-134078	GPS Technology	621	188	809
FHWA-NHI-134081	Plan Reading	1304	267	1571
FHWA-NHI-134084	Fundamentals of Materials Used for Concrete Pavements	296	98	394
FHWA-NHI-134085	Incompatibility in Concrete Pavement Systems	179	53	232





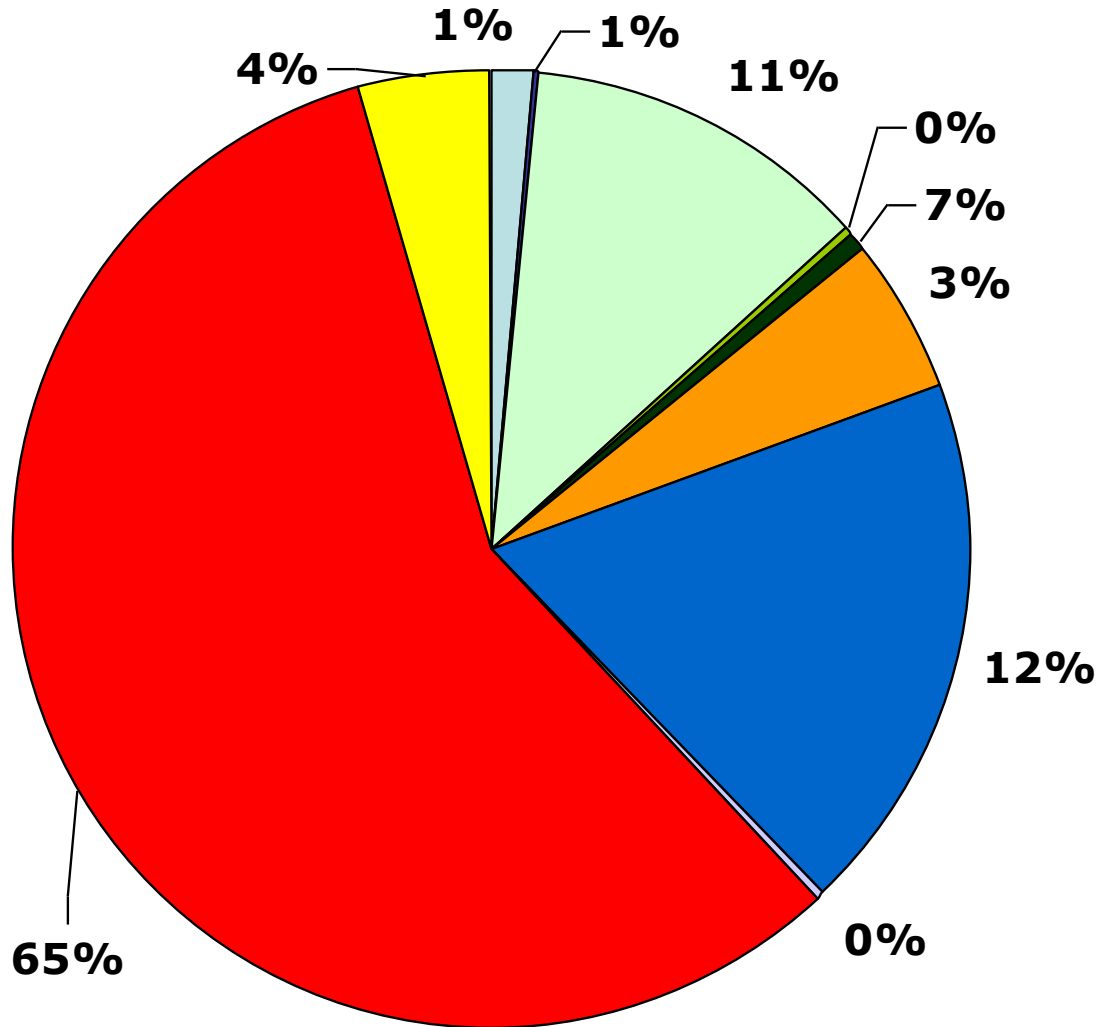
Total Participants Training Numbers

Course Number	Training Name	NHI Totals	State Totals	Totals
FHWA-NHI-134087	Mix Design Principles	289	72	361
FHWA-NHI-134095	Early Age Cracking	145	101	246
FHWA-NHI-134096	Basics of Cement Hydration	131	47	178
FHWA-NHI-134097	Fresh Properties	73	60	133
FHWA-NHI-134098	Construction of Concrete Pavements	91	72	163
FHWA-NHI-134100	QCQA for Concrete Pavements	90	52	142
FHWA-NHI-134101	Design of Pavement	122	80	202
FHWA-NHI-134102	Troubleshooting for Concrete Pavements	65	61	126
FHWA-NHI-134106	Basic Construction Surveying	285	69	354
FHWA-NHI-134107	Recognizing Roadside Weeds	3		
FHWA-NHI-380098	Maintenance of Traffic for Technicians	154	10	164
FHWA-NHI-380099	Maintenance of Traffic for Supervisors	130	2	132
FHWA-NHI-381001	Safety Orientation	45		
FHWA-NHI-381002	Safe Use of Hand and Power Operated Tools	0		
FHWA-NHI-381004	CDL General Knowledge	2		
FHWA-NHI-381005	CDL Air Brakes	2		
Totals		9766	8826	17284



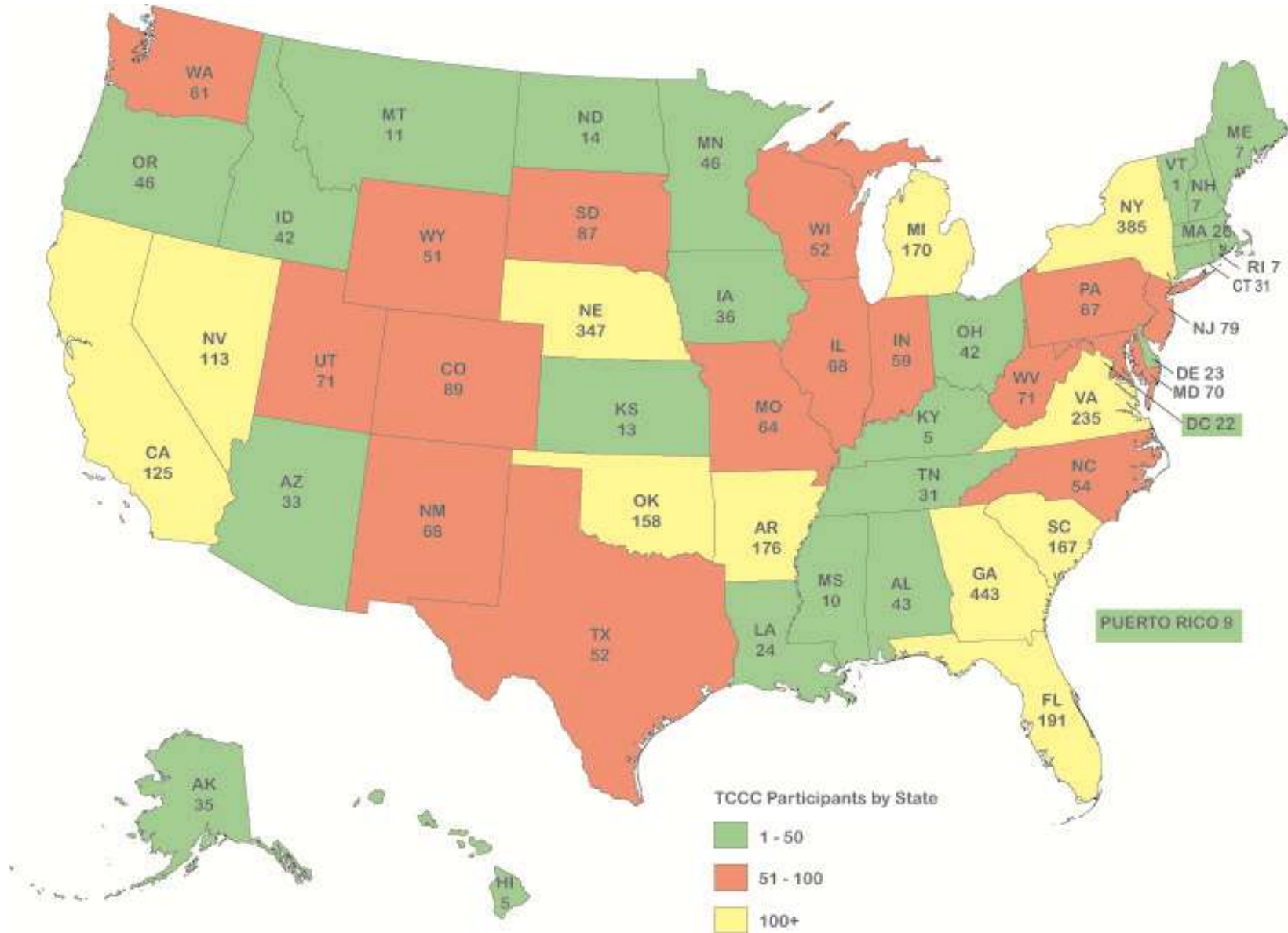
NHI Website Training Numbers – Participants by Industry Type

- ACAD**
- INTL**
- LG**
- MPO**
- FG**
- Other**
- Private**
- RPA**
- SG**
- OFG**



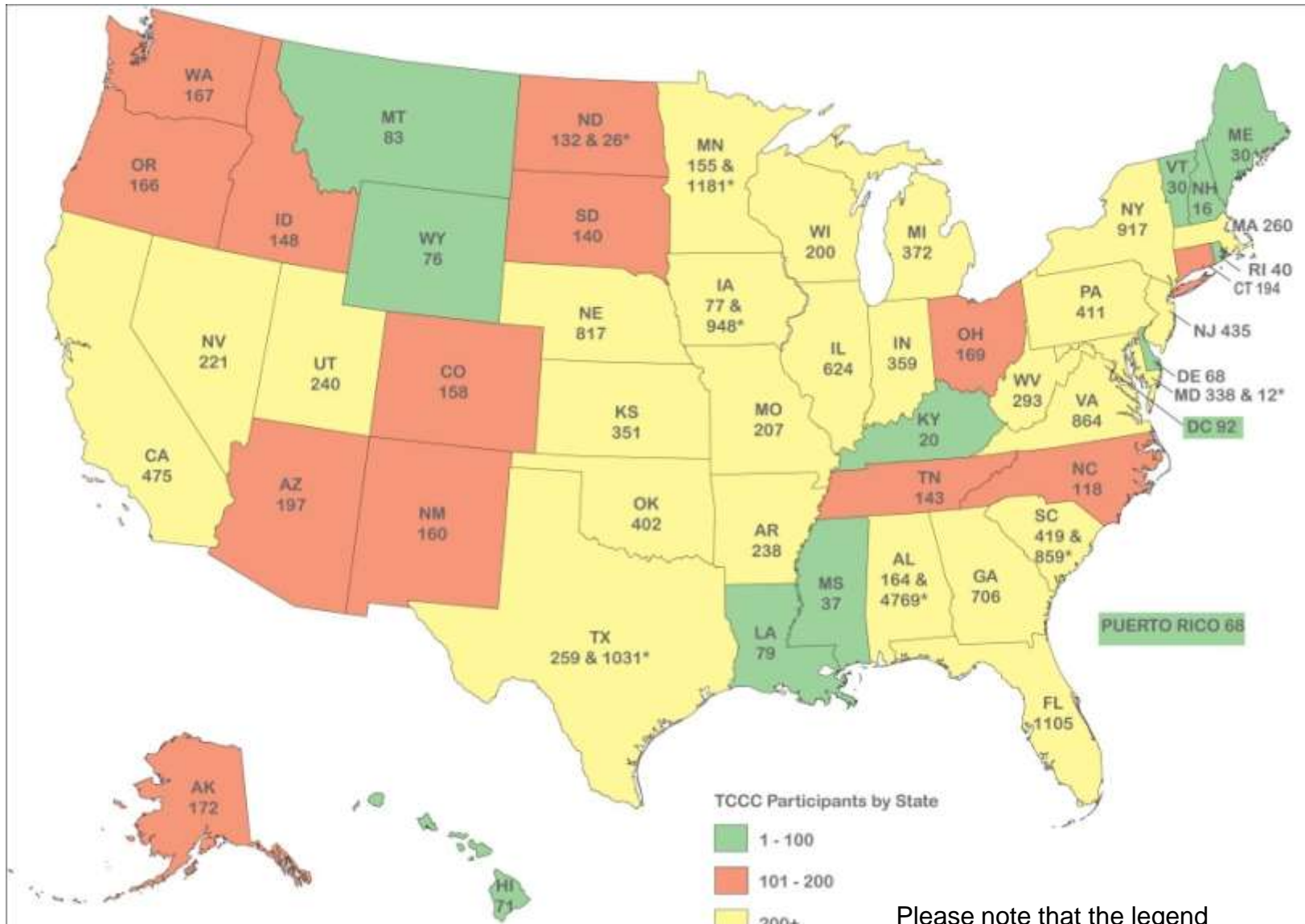


2009 NHI Website Participants by State





2010 NHI Website Participants by State



TCCC Participants by State

- 1 - 100
- 101 - 200
- 200+

* TCCC shares trainings with these States for LMSs and Intranet training needs

Please note that the legend has doubled since 2009



Training Development In Progress

- FHWA-NHI-131129 HMA Paving Inspection
- FHWA-NHI-134105 Pipe Inspection
- FHWA-NHI-134107 Roadside Weeds
- FHWA-NHI-381102 Hand and Power Tools
- FHWA-NHI-381103 Basic Carpentry Tools
- FHWA-NHI-381104 CDL General Knowledge
- FHWA-NHI-381105 CDL Air Brakes
- FHWA-NHI-381106 CDL Pre-Trip Inspection



Training Updates In Progress

- Review Courses Every Two Years
- FHWA-NHI-134081 Plan Reading
 - New modules to full version
 - New one hour topic-driven modules to be launched with update



Training Development On Deck

- Roller Compacted Concrete
- Flagger Training
- CDL Pre-Trip Inspection
- Maintenance of Drainage Features for Safety
- HMA SuperPave
- Bridge Inspection
- Many More Under Consideration



Training Topics in Discussion

- Site Manager
- Intermediate Survey
- Geotechnical
- Earthwork
- Transportation Project Management
- Environmental Factors in Construction and Maintenance
- Use of Asphalt Emulsions for Pavement Preservation
- Maintenance Safety Videos



How to Access

- All TCCC web based courses are free
- Access through NHI website
- NHI site now changed to single login

Future Training Delivery Opportunities

- Mobile Training
 - Definition: Training provided to participants on a mobile device, i.e. a cell phone, iPOD, etc.
- Mobile Training Development
 - Varied formats (mp4, swf)
 - Adobe and Microsoft platforms for development
- Need to identify good candidate(s) for mobile delivery
 - What is the best target audience?
 - What types of devices are people using?
 - What kind of training is needed?





Future Opportunities



Supporting TCCC

How can State Partners Support TCCC:

- Provide financial support to Pooled Fund (TPF – 5(209))
- Volunteer for Technical Panels for Course Development
- Contribute a course to the NTTR that you or your state/organization has developed
- Become a Subject Matter Expert (SME) in your area(s) of expertise



For Information

For more information, visit:

www.nhi.fhwa.dot/tccc

Or contact:

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Thank You

**Learn something today
It will pay dividends tomorrow**

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