



TRANSPORTATION POOLED FUND  
PROGRAM

## TECHNICAL SUMMARY

### Mn/DOT Technical Liaison:

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### TOTAL STATE CONTRIBUTIONS

TO DATE:

\$1,197,404

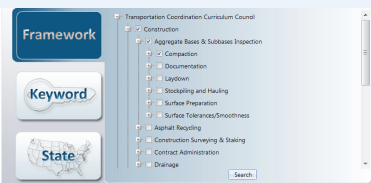
### Mn/DOT CONTRIBUTIONS

TO DATE:

\$75,000

### PARTICIPATING STATES:

CA, ID, IA, MI, MN, MO, NY, OK, SC, TX



Search Results 75 resources found that match your criteria

RESOURCE TITLE	ORGANIZATION(S)	LENGTH
Alternative Contracting	DOT 184	3.50 days
Analysis of PMS Data for Engineering Applications	DOT 184	3.50 days
Approval for Federal-Aid Highway Programs	DOT 184	3.50 days
Approval Review for Federal-Aid Highway Programs	DOT 184	3.50 days
Bridge Construction Inspection	DOT 184	3.50 days

Through its National Transportation Training Resource website, the TCCC provides a continually expanding, searchable database of training products available nationwide.



## RESEARCH SERVICES

OFFICE OF POLICY ANALYSIS,  
RESEARCH & INNOVATION

# Pooling Our Research: The Transportation Curriculum Coordination Council

## Why a Pooled Fund Study?

Building and maintaining the nation's highways require that agency and industry employees be well-trained and qualified. However, because of attrition and an aging workforce, there is a serious shortage of trained and experienced personnel. Further, since 2000 the law has required that all states receiving federal highway funding ensure the quality of their construction projects by training and certifying their highway construction inspectors, technicians and engineers.

To help agencies meet these workforce requirements without duplicating each other's efforts, the Transportation Curriculum Coordination Council was established in 2000 to create a training curriculum that draws from and consolidates resources from across the nation. The TCCC is a partnership between the FHWA and its National Highway Institute, AASHTO, five regional training and certification groups representing 46 state transportation agencies, and private industry. The five-year pooled fund study TPF-5(046) was established in 2002 to support the TCCC, and in 2009 TPF-5(209) was funded to continue the TCCC's efforts.

## What is the Pooled Fund Study's Goal?

The objective of the TCCC is to support states' training and certification of transportation agency personnel by developing a national core curriculum and training materials for various transportation disciplines.

## What Have We Learned?

The TCCC has developed a Core Curriculum Matrix composed of five program areas—Construction, Materials, Maintenance, Safety and Employee Development—and core competencies for a wide variety of disciplines within each subject area. The Matrix was developed with input from field practitioners, managers and industry representatives in several states, and includes training courses that agencies can use at no cost. Minnesota joined this pooled fund effort at its inception in 2002 to provide input on curriculum development using its own pre-existing training program so that the TCCC's activities would closely reflect Mn/DOT needs.

The Matrix is designed to be the most inclusive and comprehensive Web-based training resource available to the transportation community today. By using the Matrix, states can draw on a body of knowledge and training materials that are flexible enough to be adapted to their particular needs rather than developing individual training modules on the same subject. Agencies benefit from cost savings and the opportunity to share knowledge and training courses among states, and personnel benefits from broader opportunities for training and advancement.

Among the TCCC's [training resources](#) available through its partnership with the National Highway Institute are these recently developed courses:

- [Construction Inspection, Workmanship and Quality](#), which is designed to help trans-

### TPF-5(209):

*Transportation Curriculum Coordination Council. This effort helps states train and certify personnel through national core curriculum and training materials for various transportation disciplines, providing the most comprehensive Web-based training resource available to the transportation community today.*

*continued*

*"Through the TCCC, Mn/DOT was able to network with other agencies experiencing training issues as well as influence the development of TCCC courses to better suit Minnesota's needs."*

—Cathy Betts,  
Technical Certification  
Specialist, Mn/DOT Office  
of Construction and  
Contract Administration

*"The TCCC offers a suite of trainings to supplement our courses, allowing us to meet federal regulations on training and certification in the most efficient and cost-effective way possible."*

—Deb Fick,  
Research SP&R  
Administrator, Mn/DOT  
Research Services

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Through its partnership with the National Highway Institute, the TCCC helps states offer courses in flexible, blended-learning formats that include self-study portions along with instructor-led and group activities. It also sponsors conferences on training issues such as the recent Future of Training and New Technology conference in Austin, Texas.

portation professionals involved in the inspection of highway construction projects improve their understanding of the factors that contribute to high-quality products.

- [Bridge Construction Inspection](#), which is designed to give bridge construction inspectors a basic knowledge of bridge construction procedures, an awareness of the problems that can arise during construction and how these factors will impact the safety and service life of the structure, and an understanding of the inspections that should be performed to confirm fulfillment of the construction contract.
- [Pavement Preservation Online Guide and Training](#), which will provide participants with an introduction to the Pavement Preservation online guide created by Caltrans and the National Center for Pavement Preservation. The guide covers basic pavement preservation concepts as well as information about specific treatments to extend the life of asphalt pavements.

## What's Going On Now?

TCCC [courses currently under development](#) include:

- Inspection of Bridge Rehabilitation, which will present innovative and state-of-the-art bridge rehabilitation technologies and procedures for a broad array of structural elements, including bridge decks, girders, piers and abutments.
- Maintenance Leadership Academy, which will provide intensive training for individuals rising to supervisory maintenance positions. Topics are expected to include pavement preservation, weather-related maintenance, maintenance management, equipment and personnel management, and project planning and selection.
- Environmental Factors in Highway Construction, which will familiarize construction teams with environmental concerns to be addressed as part of construction operations.

## What's Next?

[Upcoming training courses](#) include Highway Maintenance Quality Assurance for State and Local Agencies, Understanding Benchmarking and Performance Measures, QA Specifications Development and Validation, and Structural Bolting. Other recently identified training needs include embankment inspection, basic earthwork for inspectors, placement and testing of self-consolidating concrete, and inspection of pipe installation. The Matrix is designed to be a living document that will grow as the program evolves; it will be updated periodically as new disciplines, course materials and technologies emerge.

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*This Technical Summary pertains to the ongoing Pooled Fund TPF-5(209), Transportation Curriculum Coordination Council, continuing the project initiated under TPF-5(046). Details of this effort can be found at <http://www.pooledfund.org/projectdetails.asp?id=435&status=4>, <http://www.pooledfund.org/projectdetails.asp?id=299&status=6> and <https://fhwaapps.fhwa.dot.gov/tccc/>.*

*For more than 25 years, FHWA's Transportation Pooled Fund Program has been providing state DOTs and other organizations the opportunity to collaborate in solving transportation-related problems. The TPF Program is focused on leveraging limited funds, avoiding duplication of effort, undertaking large-scale projects and achieving broader dissemination of results on issues of regional and national interest.*