TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): _	<u>NDDOT</u>			
INSTRUCTIONS: Project Managers and/or research project inve- quarter during which the projects are active. F each task that is defined in the proposal; a per the current status, including accomplishments during this period.	Please provide a centage compl	a project schedule statu etion of each task; a col	s of the research activities tied to ncise discussion (2 or 3 sentences) of	
Transportation Pooled Fund Program Project #		Transportation Pooled Fund Program - Report Period:		
(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)		□Quarter 1 (January 1 – March 31)		
TPF 5(333)		□Quarter 2 (April 1 – June 30)		
		□Quarter 3 (July 1 – September 30)		
			✓ Quarter 4 (October 1 – December 31)	
Project Title:				
Transportation Learning Network				
Name of Project Manager(s):	Phone Num	ber:	E-Mail	
Clayton Schumaker	701-328-690	6	cschumaker@nd.gov	
Lead Agency Project ID:	Other Project	ct ID (i.e., contract #):	Project Start Date:	
TPF5(333)	17-314-0800		10/1/2015	
Original Project End Date:	Current Project End Date:		Number of Extensions:	
	9/30/2020		00	
Project schedule status:	1			
✓ On schedule ☐ On revised schedule	☐ Ahead of schedule ☐ Behind schedule			
Overall Project Statistics:				
Total Project Budget	Total Cost to Date for Project		Percentage of Work Completed to Date	
			NA	
Quarterly Project Statistics:				
Total Project Expenses	Total Amount of Funds		Total Percentage of	
and Percentage This Quarter	Expende	ed This Quarter	Time Used to Date	
		\$73,040.45	NA	

Project Description:

The Transportation Learning Network (TLN) was developed to serve the transportation interests of the region and complements the efforts of its various members. It provides access to information and expertise not readily available to transportation professionals in the region. TLN identifies schedules, distributes and warehouses technology transfer for its member state DOTs.

Vision: To excel on a national basis as a premier transportation training organization that serves as a model for other states.

Mission: TLN provides quality and cost-effective customer-driven technology transfer utilizing alternative platforms that meet the needs of the state, county, city, tribal and private transportation professionals.

Staff develop a list of technology transfer presentations based on priorities determined by the 4-state members of the Transportation Learning Network; they write descriptions, identify presenters, and schedule presentations. There are monthly meetings of the programming committee consisting of members from the 4-state DOTs. The committee approves identified topics and TLN staff move forward with announcing the events and putting into place a registration process.

Following is a list of technology transfer presentations delivered via video conferencing or webinar during this reporting period and the number of participants.

PRESENTATIONS OCTOBER THROUGH DECEMBER 2015

Presentation Title	Date Delivered	Delivery Method	# Attended
PE Exam for Civil Engineers	Sept/Oct 2015	Webinar	12
Preventing Runovers and Backovers	10/29/2015	Video Conf	218
John Maxwell: Sometimes You Win, Sometimes you Learn	10/28/2015	Video Conf	69
ATSSA Traffic Control Technician	11/2/2015	Video Conf	178
Implementation of Low Temperature Tests for Asphalt Mixtures	11/16/2015	Webinar	37
Erosion Control Options	11/30/2015	Video Conf	163
Math for Survey and Construction	12/9/2015	Video Conf	89
Pipe Jacking for Culverts and Storm Sewers	12/15/2015	Video Conf	170
Joint Detailing for Improved Performance of Double Tee Bridge Systems - MPC Research Project	12/17/2015	Webinar	35
			TOTAL = 971

ONLINE MODULES OCTOBER THROUGH DECEMBER 2015

ATSSA: Safe Installation and Removal of Temporary Traffic Control Devices 1 ATSSA: Work Zone Safety Performance Measures 1 Bridge Construction Inspection: Inspector Safety 1 Handiling and Storage of Reinforcing Steel 1 Materials Testing: Aggregate Sampling 4 Materials Testing: Introduction to the Soll-Moisture Density Relationship 3 Materials Testing: Introduction to the Soll-Moisture Density Relationship 3 Materials Testing: Introduction to the Soll-Moisture Density Relationship 3 Materials Testing: Microwave and Oven Methods of Drying Soils 2 Materials Testing: Proctor Test 3 Materials Testing: Proctor Test 4 Materials Testing: Proctor Test 5 Materials Testing: Reducing Aggregate Samples 1 Materials Testing: Reducing Aggregate Samples 1 Materials Testing: Sand Cone Test 1 Materials Testing: Sand Cone Test 1 Materials Testing: Sand Cone Test 1 Materials Testing: Sieve Analysis of Fine and Coarse Aggregates 1 Materials Testing: Seven Moisture Test 1 Personal Protective Equipment 2 TC3 Advanced Self-Consolidating Concrete 1 TC3 Basic Materials for Highway Construction: Introduction 2 TC3 Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling 1 TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basics of Cement Hydration 1 TC3 Can Sampling 1 TC3 Can Seath Seat	Title	# Completed
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Handling and Storage of Reinforcing Steel Materials Testing: Aggregate Sampling Adaterials Itesting: Introduction to the Soil-Moisture Density Relationship Materials Testing: Lightweight Pieces in Aggregate Materials Testing: Microwave and Oven Methods of Drying Soils Materials Testing: Proctor Test Materials Testing: Proctor Test Short Version Materials Testing: Reducing Aggregate Samples Materials Testing: Reducing Aggregate Samples Materials Testing: Rubber-Balloon Test Materials Testing: Sand Cone Test Materials Testing: Sueve Analysis of Fine and Coarse Aggregates Materials Testing: Seve Analysis of Fine and Coarse Aggregates Materials Testing: Speedy Moisture Test Materials Testing: Speedy Moisture Test Materials Testing: Wash Test Personal Protective Equipment 12 TG3 Advanced Self-Consolidating Concrete 13 TG3 Basic Materials for Highway Construction: Introduction 14 TG3 Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling TG3 Basic Materials for Highway Construction: Hot Mix Asphalt Basics 13 TG3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 14 TG3 Basic Sof Cement Hydration 15 TG3 Chip Seal Best Practices: Design 16 TG3 Chip Seal Best Practices: Design 17 TG3 Design of Pavements and Subgrades/Bases 17 TG3 Early Age Cracking 17 TG3 Fresh Concrete Pavements 17 TG3 Fresh Concrete Properties 17 TG3 Incompatibility in Concrete Pavement Systems 18 TG3 Incompatibility in Concrete Pavement Systems	ATSSA: Work Zone Safety Performance Measures	1
Materials Testing: Aggregate Sampling Materials Testing: Introduction to the Soil-Moisture Density Relationship 3 Materials Testing: Lightweight Pleces in Aggregate 2 Materials Testing: Proctor Test Materials Testing: Proctor Test 3 Materials Testing: Proctor Test Short Version 1 Materials Testing: Reubior-Balloon Test Materials Testing: Reubior-Balloon Test 1 Materials Testing: Stand Cone Test 1 Materials Testing: Sond Cone Test 1 Materials Testing: Sond Cone Test 1 Materials Testing: Solve Analysis of Fine and Coarse Aggregates 1 Materials Testing: Speedy Moisture Test 1 Materials Testing: Speedy Moisture Test 1 Materials Testing: Speedy Moisture Test 1 Materials Testing: Orstone Test 1 Materials Testing: Orstone Test 1 Materials Testing: Speedy Moisture Test 1 Materials Testing: Speedy Moisture Test 1 Test Advanced Self-Consolidating Concrete 1 Test Advanced Self-Consolidating Concrete 1 Test Basic Materials for Highway Construction: Introduction 2 Test Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling 1 Test Basic Materials for Highway Construction: Hot Mix Asphalt Basics 1 Test Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 Test Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 Test Bolted Connections 1 Test Bolted Connections 1 Test Seal Best Practices: Design 1 Test Solip Seal Best Practices: Introduction 1 Test Solip Seal Best Practices: Introduction 1 Test Sell Best Practices: Design 1 T	Bridge Construction Inspection: Inspector Safety	1
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Materials Testing: Microwave and Oven Methods of Drying Soils Materials Testing: Proctor Test Materials Testing: Proctor Test Short Version Materials Testing: Reducing Aggregate Samples Materials Testing: Rubber-Balloon Test Materials Testing: Rubber-Balloon Test Materials Testing: Sand Cone Test Materials Testing: Sieve Analysis of Fine and Coarse Aggregates Materials Testing: Speedy Moisture Test Materials Testing: Speedy Moisture Test Materials Testing: Speedy Moisture Test Materials Testing: Wash Test Personal Protective Equipment 2 TC3 Advanced Self-Consolidating Concrete 1 TC3 Basic Materials for Highway Construction: Introduction 2 TC3 Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling 1 TC3 Basic Materials for Highway Construction: Hot Mix Asphalt Basics 1 TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basics of Cement Hydration 1 TC3 Constructions 1 TC3 Constructions 1 TC3 Construction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Fresh Concrete Properties 1 TC3 Fresh Concrete Properties 1 TC3 Fresh Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems	Materials Testing: Introduction to the Soil-Moisture Density Relationship	3
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Materials Testing: Proctor Test Short Version Materials Testing: Reducing Aggregate Samples 1 Materials Testing: Rubber-Balloon Test Materials Testing: Sand Cone Test Materials Testing: Sand Cone Test Materials Testing: Sleve Analysis of Fine and Coarse Aggregates 1 Materials Testing: Speedy Moisture Test Materials Testing: Speedy Moisture Test Materials Testing: Wash Test 1 Personal Protective Equipment 2 TC3 Advanced Self-Consolidating Concrete TC3 Basic Materials for Highway Construction: Introduction 2 TC3 Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling TC3 Basic Materials for Highway Construction: Hot Mix Asphalt Basics 1 TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basics of Cement Hydration 1 TC3 Chip Seal Best Practices: Design 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Canstruction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Estincs in the Transportation Industry: Module 1 1 TC3 Fresh Concrete Properties 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems	Materials Testing: Microwave and Oven Methods of Drying Soils	2
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TC3 Advanced Self-Consolidating Concrete TC3 Basic Materials for Highway Construction: Introduction 2 TC3 Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling TC3 Basic Materials for Highway Construction: Hot Mix Asphalt Basics 1 TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basics of Cement Hydration 1 TC3 Bolted Connections 1 TC3 Chip Seal Best Practices: Design 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Construction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Findamentals of Materials Used for Concrete Pavements 1 TC3 Findamentals of Materials Used for Concrete Pavements 1 TC3 Hundamentals of Materials Used for Concrete Pavements 1 TC3 Hardened Concrete Properties 1 TC3 Inproving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems	Personal Protective Equipment	2
TC3 Basic Materials for Highway Construction: Basics of Aggregate Inspection and Sampling TC3 Basic Materials for Highway Construction: Hot Mix Asphalt Basics 1 TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basics of Cement Hydration 1 TC3 Basics of Cement Hydration 1 TC3 Chip Seal Best Practices: Design 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Construction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Ethics in the Transportation Industry: Module 1 TC3 Fresh Concrete Properties 1 TC3 Fresh Concrete Properties 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems		1
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TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics 1 TC3 Basics of Cement Hydration 1 TC3 Bolted Connections 1 TC3 Chip Seal Best Practices: Design 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Construction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Ethics in the Transportation Industry: Module 1 TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems		1
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TC3 Bolted Connections 1 TC3 Chip Seal Best Practices: Design 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Construction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Ethics in the Transportation Industry: Module 1 1 TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems	TC3 Basic Materials for Highway Construction: Portland Cement Concrete Basics	1
TC3 Chip Seal Best Practices: Design 1 TC3 Chip Seal Best Practices: Introduction 1 TC3 Construction of Concrete Pavements 1 TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Ethics in the Transportation Industry: Module 1 1 TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 Basics of Cement Hydration	1
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TC3 Design of Pavements and Subgrades/Bases 1 TC3 Early Age Cracking 1 TC3 Ethics in the Transportation Industry: Module 1 1 TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 Chip Seal Best Practices: Introduction	1
TC3 Early Age Cracking 1 TC3 Ethics in the Transportation Industry: Module 1 1 TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 Construction of Concrete Pavements	1
TC3 Ethics in the Transportation Industry: Module 1 1 TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 Design of Pavements and Subgrades/Bases	1
TC3 Fresh Concrete Properties 1 TC3 Fundamentals of Materials Used for Concrete Pavements 1 TC3 GPS Technology 1 TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 Early Age Cracking	1
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TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 Fundamentals of Materials Used for Concrete Pavements	1
TC3 Hardened Concrete Properties 1 TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1	TC3 GPS Technology	1
TC3 Improving the Daily Diary 1 TC3 Incompatibility in Concrete Pavement Systems 1		1
TC3 Incompatibility in Concrete Pavement Systems 1	·	1
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TC3 Math Module: Intro	3
TC3 Math Module: Mathematics	3
TC3 Mix Design Principles	1
TC3 Pipe Installation, Inspection, and Quality: Basic Pipe Type	1
TC3 Pipe Installation, Inspection, and Quality: Bedding	1
TC3 Pipe Installation, Inspection, and Quality: Foundation	1
TC3 Pipe Installation, Inspection, and Quality: Introduction	2
TC3 Pipe Installation, Inspection, and Quality: Placement	1
TC3 Plan Reading: Bridge Plans	2
TC3 Plan Reading: County Plans	2
TC3 Plan Reading: Culvert Plans	1
TC3 Plan Reading: Erosion & Sediment Control Plans	1
TC3 Plan Reading: Grading Plans	1
TC3 Plan Reading: Highway Plan Reading Basics	1
TC3 Plan Reading: Right-of-Way Plans	2
TC3 Plan Reading: Traffic Control Plans	1

TOTAL = **72**

Significant Results:

Identifying and delivering technology transfer needs of the DOTs in Montana, North Dakota, South Dakota and Wyoming.

These presentations were broadcast through video conferencing or webinars. This program can reach many individuals to bring significant opportunities to increase knowledge without the need to travel great distances.

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

None encountered.