

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT):           NDDOT          

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.*

<b>Transportation Pooled Fund Program Project #</b> <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i>  TPF 5(333)		<b>Transportation Pooled Fund Program - Report Period:</b> <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input checked="" type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> Transportation Learning Network			
<b>Name of Project Manager(s):</b>	<b>Phone Number:</b>	<b>E-Mail</b>	
Clayton Schumaker	701-328-6906	cschumaker@nd.gov	
<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b>	<b>Project Start Date:</b>	
TPF 5(333)	17-314-0800	10/1/2015 (New Federal ID)	
<b>Original Project End Date:</b>	<b>Current Project End Date:</b>	<b>Number of Extensions:</b>	
	9/30/2020	0	

Project schedule status:

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 and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
	\$144,343.37	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 technology transfer 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; topics are researched, descriptions written, presenters identified, negotiate presenter contracts 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.

The majority of presentations occur between October and April due to the construction season in the 4-states served by this program. During summer months, the staff and program committee members identify and prioritize technology transfer topics.

During this reporting period, there were live webinars and video conference presentations; as well as recorded presentations and online modules. ***Due to COVID-19, the TLN program developed and delivered on-demand training for work-from-home situations.*** In addition, there was an increase of module and recorded presentation use.

Presentation Title	Delivery Method	Date	# Attended
MPC-369 Research	webinar	4/1/2020	14
Principles of Construction Contracting	webinar	4/2/2020	129
Managing Teleworking Employees	webinar	4/2/2020	261
Asphalt Burns and Roadway Safety Elements	webinar	4/3/2020	140
Pavement Surface/Vehicle Interaction	webinar	4/15/2020	121
Ethics: The Road All Engineers Must Follow	webinar	4/16/2020	190
Principles of Contract Negotiation	webinar	4/16/2020	67
Principles of Contract Negotiation (re-run)	webinar	4/22/2020	116
Noxious Weed Control	webinar	4/22/2020	128
MPC 18-367	webinar	4/23/2020	14
Determining a Contractor's Entitlement to a Time Extension Due to COVID-19	webinar	5/5/2020	132
Seismic Repair/Retrofit of Cast-in-Place or Precast Columns of Reinforced Concrete Bridge Piers	webinar	5/12/2020	57
TOTAL			1369

Self-Paced Module Title	# Completed
Materials Testing: Reducing Aggregate Samples	21
Handling and Storage of Reinforcing Steel	4
Materials Testing: Sieve Analysis of Fine and Coarse Aggregates	24
Materials Testing: Wash Test	22
Materials Testing: Lightweight Pieces in Aggregate	19
TC3 Advanced Self-Consolidating Concrete	4
TC3 Basic Construction Surveying	4
Road Safety 365: A Safety Course for Local Governments – Module 1: The Need for Road Safety	1
Bridge Construction Inspection: Heavy Equipment	5
Introduction to NDDOT Construction Automated Records System (CARS)	6
Materials Testing: Introduction to the Soil-Moisture Density Relationship	13
Materials Testing: Rubber-Balloon Test	16
Materials Testing: Speedy Moisture Test	11
Materials Testing: Proctor Test Short Version	6
Materials Testing: Proctor Test	19
Materials Testing: Sand Cone Test	9
Materials Testing: Microwave and Oven Methods of Drying Soils	13
Seal Coat Module 1: Pavement Preservation, Handbook, Design, & Pay Items	5
Seal Coat Module 2: Aggregate Requirements & Binders	1
Seal Coat Module 3: Construction Details, Pavement Markings, Fog Sealing, & What's New	2
TC3 Aggregate Sampling Basics	13
TC3 3D Engineered Models for Construction Series: Introduction to 3D Engineered Models for Highway Transportation (Module 1)	1
TC3 3D Engineered Models for Construction Series: Surveying and 3D Engineered Models (Module 2)	1
TC3 3D Engineered Models for Construction Series: 3D Engineered Models in Highway Design (Module 3)	1
TC3 3D Engineered Models for Construction Series: Applications of 3D Engineered Models in Highway Construction and Quality Assurance (Module 4)	1
TC3 AASHTO T 308: Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method	4
TC3 AASHTO T 312: Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor	3
TC3 AASHTO Designation: T209	6
TC3 AASHTO Designation: T283	3
TC3 AASHTO Designation: T30	3
TC3 AASHTO Designation: T166	7
TC3 AASHTO Designation: R60	8
TC3 AASHTO Designation: T309	7
TC3 AASHTO Designation: T119	7
TC3 AASHTO Designation: T121	8
TC3 AASHTO Designation: T152	8
TC3 AASHTO Designation: T23	8

TC3 Basic Materials for Highway Structure Construction (Introduction)	2
TC3 Basic Materials for Highway Structure Construction (Module 1)	2
TC3 Basic Materials for Highway Structure Construction (Module 2)	2
TC3 Basic Materials for Highway Structure Construction (Module 3)	2
TC3 Basics of Concrete	6
TC3 Best Practices for High Friction Surfaces (Module 1)	1
TC3 Best Practices for High Friction Surfaces (Module 2)	1
TC3 Best Practices for High Friction Surfaces (Module 3)	1
TC3 Best Practices for High Friction Surfaces (Module 4)	1
TC3 Best Practices for High Friction Surfaces (Module 5)	1
TC3 Bolted Connections (Introduction)	1
TC3 Bolted Connections (Module 1 / Topic 1)	1
TC3 Bolted Connections (Module 1 / Topic 2)	1
TC3 Bolted Connections (Module 1 / Topic 3)	1
TC3 Bolted Connections (Module 1 / Topic 4)	1
TC3 Bridge Cleaning	3
TC3 Bridge Construction Inspection Safety	2
TC3 Bridge Preservation Guide (Module 1)	2
TC3 Bridge Preservation Guide (Module 2)	1
TC3 CDL Series: Air Brakes (Pt 1)	1
TC3 CDL Series: Air Brakes (Pt 2)	1
TC3 Change Orders, Claims, and Dispute Resolutions	3
TC3 Chip Seal Best Practices (Introduction)	2
TC3 Chip Seal Best Practices (Module 1)	2
TC3 Chip Seal Best Practices (Module 2)	2
TC3 Chip Seal Best Practices (Module 3)	1
TC3 Chip Seal Best Practices (Module 4)	1
TC3 Chip Seal Best Practices (Module 5)	1
TC3 Chip Seal Best Practices (Module 6)	1
TC3 Clean Water Act Compliance During Construction (Section 404) (Module 1)	1
TC3 Clean Water Act Compliance During Construction (Section 404) (Module 2)	1
TC3 Compaction Technician Basics (Fundamentals)	2
TC3 Compaction Technician Basics (Nuclear Density )	2
TC3 Compaction Technician Basics (Testing)	2
TC3 Concrete Series: Basics of Cement Hydration	3
TC3 Concrete Series: Construction of Concrete Pavements	3
TC3 Concrete Series: Design of Pavement	2
TC3 Concrete Series: Early Age Cracking	3
TC3 Concrete Series: Fresh Properties	4
TC3 Concrete Series: Fundamentals of Materials Used for Concrete Pavements	4
TC3 Concrete Series: Hardened Concrete Properties - Durability	5
TC3 Concrete Series: Incompatibility in Concrete Pavement Systems	3
TC3 Concrete Series: Mix Design Principles	4
TC3 Concrete Series: QCQA for Concrete Pavements	3

TC3 Concrete Series: Troubleshooting for Concrete Pavements	3
TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (Module 2)	1
TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (Module 3)	1
TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (Module 4)	1
TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (Module 5)	1
TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (Module 6)	1
TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (Module 7)	1
TC3 Construction Inspector Orientation (Module 1)	3
TC3 Construction Inspector Orientation (Module 2)	2
TC3 Construction Inspector Orientation (Module 3)	2
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 1)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 2)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 3)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 4)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 5)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 6)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 7)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 8)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 9)	1
TC3 Construction of Mechanically Stabilized Earth (MSE) Walls (Module 10)	1
TC3 Construction of PCC Pavement Series: Curing, Sawing, and Joint Sealing (Module 1: Preventing)	2
TC3 Construction of PCC Pavement Series: Curing, Sawing, and Joint Sealing (Module 2: Sawing)	2
TC3 Construction of PCC Pavement Series: Curing, Sawing, and Joint Sealing (Module 3: Jt Sealing)	3
TC3 Construction of PCC Pavement Series: Paving Process (Module 1)	3
TC3 Construction of PCC Pavement Series: Paving Process (Module 2)	2
TC3 Construction of PCC Pavement Series: Paving Process (Module 3)	1
TC3 Construction of PCC Pavement Series: Paving Process (Module 4)	2
TC3 Construction of PCC Pavement Series: Paving Process (Module 5)	2
TC3 Construction of PCC Pavement Series: Paving Process (Module 6)	2
TC3 Construction of PCC Pavement Series: Paving Process (Module 7)	2
TC3 Construction of PCC Pavement Series: Production (Module 4)	1
TC3 Construction of PCC Pavement Series: Production (Module 5)	1
TC3 Construction of PCC Pavement Series: Production (Module 6)	1
TC3 Construction Safety: Electrical Safety	1
TC3 Construction Safety: Fall Protection	1
TC3 Construction Safety: Personal Protective Equipment (PPE)	2
TC3 Construction Safety: Scaffolding Safety	1
TC3 Construction Stormwater Field Guide Training (Module 1)	1

TC3 Construction Stormwater Field Guide Training (Module 2)	1
TC3 Construction Stormwater Field Guide Training (Module 3)	1
TC3 Construction Stormwater Field Guide Training (Module 4)	1
TC3 Construction Stormwater Field Guide Training (Module 5)	1
TC3 Critical Path Method (CPM) Scheduling	2
TC3 Earthwork Series: Earth Materials as Engineering Materials	2
TC3 Earthwork Series: Excavation (Introduction)	5
TC3 Earthwork Series: Excavation (Module 1)	5
TC3 Earthwork Series: Excavation (Module 2)	5
TC3 Earthwork Series: Excavation (Module 3)	5
TC3 Earthwork Series: Excavation (Module 4)	5
TC3 Earthwork Series: Fill Placement (Introduction)	4
TC3 Earthwork Series: Fill Placement (Module 1)	3
TC3 Earthwork Series: Fill Placement (Module 2)	1
TC3 Earthwork Series: Fill Placement (Module 3)	2
TC3 Earthwork Series: Fill Placement (Module 4)	2
TC3 Earthwork Series: Grades and Grading (Module 1)	1
TC3 Earthwork Series: Site Preparation	3
TC3 Environmental Predecessor Series: Air Quality	1
TC3 Environmental Predecessor Series: Archaeology	1
TC3 Environmental Predecessor Series: Community Impact Assessment	1
TC3 Environmental Predecessor Series: Noise	1
TC3 Environmental Triggers Series: Archaeological	1
TC3 Environmental Triggers Series: Biological Resources	1
TC3 Environmental Triggers Series: Community Impacts	1
TC3 Environmental Triggers Series: Hazardous Materials	1
TC3 Environmental Triggers Series: Noise Assessment	1
TC3 Environmental Triggers Series: Water Resources	1
TC3 Ethics Awareness for Engineers (Conflicts of Ethics)	1
TC3 Ethics Awareness for Engineers (Ethics and Safety)	1
TC3 Ethics Awareness for Engineers (Fraud)	1
TC3 Ethics Awareness for Engineers (Impact of Ethics)	1
TC3 Ethics in the Transportation Industry	2
TC3 Flexible Pavement Preservation Treatment Series: Chip Seals	4
TC3 Flexible Pavement Preservation Treatment Series: Crack Sealing and Filling	4
TC3 Flexible Pavement Preservation Treatment Series: Fog Seals	5
TC3 Flexible Pavement Preservation Treatment Series: Introduction to Pavement Preservation	3
TC3 Flexible Pavement Preservation Treatment Series: Localized Pavement Repairs	3
TC3 Flexible Pavement Preservation Treatment Series: Materials	3
TC3 Flexible Pavement Preservation Treatment Series: Micro-Surfacing	2
TC3 Flexible Pavement Preservation Treatment Series: Selecting the Right Treatment	4
TC3 Flexible Pavement Preservation Treatment Series: Slurry Seals	5
TC3 Flexible Pavement Preservation Treatment Series: Thin Functional HMA Overlay	2

TC3 Flexible Pavement Preservation Treatment Series: Ultra-Thin HMA Bonded Wearing Course	1
TC3 Fundamentals of Geosynthetic Materials (Module 1)	1
TC3 Fundamentals of Geosynthetic Materials (Module 2)	1
TC3 Fundamentals of Geosynthetic Materials (Module 3)	1
TC3 Fundamentals of Geosynthetic Materials (Module 4)	1
TC3 GPS Technology	4
TC3 Guardrail Series: Guardrail Basics	3
TC3 Guardrail Series: Installation and Inspection of New Guardrails (Module 1)	1
TC3 Guardrail Series: Installation and Inspection of New Guardrails (Module 2)	2
TC3 Guardrail Series: Maintenance and Repair (Module 1)	2
TC3 Guardrail Series: Maintenance and Repair (Module 2)	2
TC3 High Visibility Garments	1
TC3 HMA Paving Field Inspection	3
TC3 Hot In Place Recycling (HIR) (Module 1)	1
TC3 Hot In Place Recycling (HIR) (Module 2)	1
TC3 Hot In Place Recycling (HIR) (Module 3)	1
TC3 Improving the Daily Diary	3
TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP (Module 1)	2
TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP (Module 2)	3
TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP (Module 3)	2
TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP (Module 4)	3
TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP (Module 5)	3
TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP (Module 6)	2
TC3 Inspector Training for Cold In Place Recycling (CIR) (Introduction)	1
TC3 Inspector Training for Cold In Place Recycling (CIR) (Module 1)	1
TC3 Inspector Training for Cold In Place Recycling (CIR) (Module 2)	1
TC3 Inspector Training for Cold In Place Recycling (CIR) (Module 3)	1
TC3 Intelligent Compaction (Construction)	3
TC3 Intelligent Compaction (Data Analysis)	4
TC3 Intelligent Compaction (Inspection)	4
TC3 Intelligent Compaction (Introduction)	5
TC3 Intelligent Compaction (Quality Control)	3
TC3 Introduction to e-Construction	2
TC3 Maintenance and Tort Liability	1
TC3 Maintenance of Drainage Features for Safety (Module 1)	1
TC3 Maintenance of Drainage Features for Safety (Module 2)	1
TC3 Maintenance of Traffic for Supervisors	1
TC3 Maintenance of Traffic for Technicians	1
TC3 Maintenance Stormwater Field Guide Training (Module 1: Intro)	1
TC3 Maintenance Stormwater Field Guide Training (Module 2: Roadside)	1
TC3 Maintenance Stormwater Field Guide Training (Module 3: Facilities)	1
TC3 Maintenance Training Series: Base and Subbase Stabilization and Repair	1
TC3 Maintenance Training Series: Basics of Work Zone Traffic Control	4
TC3 Maintenance Training Series: Cultural and Historic Preservation	1

TC3 Maintenance Training Series: Outdoor Advertising	1
TC3 Maintenance Training Series: Pavement Preservation Program	1
TC3 Maintenance Training Series: Roadside Vegetation Management	2
TC3 Maintenance Training Series: Roadway Drainage	2
TC3 Maintenance Training Series: Shaping and Shoulders	1
TC3 Maintenance Training Series: Thin HMA Overlays and Leveling	1
TC3 Maintenance Training Series: Underground Storage Tanks	1
TC3 Materials Testing: Reducing Aggregate Sampling	7
TC3 Math Basics for Construction Inspectors	3
TC3 Math Basics for Maintenance Technicians	1
TC3 Math Basics for Materials Technicians	1
TC3 Math Basics Series For Highway Technicians (Area)	1
TC3 Math Basics Series For Highway Technicians (Arithmetic)	1
TC3 Math Basics Series For Highway Technicians (Decimals)	1
TC3 Math Basics Series For Highway Technicians (Fractions)	1
TC3 Math Basics Series For Highway Technicians (Mean)	1
TC3 Math Basics Series For Highway Technicians (Order of Operations)	1
TC3 Math Basics Series For Highway Technicians (Percentages)	1
TC3 Math Basics Series For Highway Technicians (Ratios)	1
TC3 Math Basics Series For Highway Technicians (Slope)	1
TC3 Math Basics Series For Highway Technicians (Unit Conversions)	1
TC3 Math Basics Series For Highway Technicians (Volume)	1
TC3 Math Module	5
TC3 NEPA Overview Series: Determining Transportation Needs	1
TC3 PCC Pavement Preservation Series: Concrete Overlays	3
TC3 PCC Pavement Preservation Series: Concrete Pavement Evaluation	2
TC3 PCC Pavement Preservation Series: Diamond Grinding and Grooving	2
TC3 PCC Pavement Preservation Series: Full-Depth Repairs	2
TC3 PCC Pavement Preservation Series: Joint Resealing and Crack Sealing	2
TC3 PCC Pavement Preservation Series: Load Transfer Restoration	2
TC3 PCC Pavement Preservation Series: Partial-Depth Repairs	2
TC3 PCC Pavement Preservation Series: Preventive Maintenance and Pavement Preservation Concepts	2
TC3 PCC Pavement Preservation Series: Retrofitted Edge Drains	2
TC3 PCC Pavement Preservation Series: Slab Stabilization and Slab Jacking	3
TC3 PCC Pavement Preservation Series: Strategy Selection	2
TC3 Personal Protective Equipment (PPE)	1
TC3 Pipe Installation, Inspection, and Quality (Introduction)	1
TC3 Pipe Installation, Inspection, and Quality (Module 1)	1
TC3 Pipe Installation, Inspection, and Quality (Module 2)	1
TC3 Pipe Installation, Inspection, and Quality (Module 3)	1
TC3 Pipe Installation, Inspection, and Quality (Module 4)	1
TC3 Pipe Installation, Inspection, and Quality (Module 5)	1
TC3 Plan Reading: Bridge Plans	6



TC3 Plan Reading: County Plans	2
TC3 Plan Reading: Culvert Plans	2
TC3 Plan Reading: Erosion and Sediment Control Plans	2
TC3 Plan Reading: Grading Plans	2
TC3 Plan Reading: Highway Plan Reading Basics	3
TC3 Plan Reading: Right-of-Way Plans	4
TC3 Plan Reading: Traffic Control Plans	3
TC3 Portland Cement Concrete Paving Inspection (Introduction)	3
TC3 Portland Cement Concrete Paving Inspection (Module 1)	2
TC3 Portland Cement Concrete Paving Inspection (Module 2)	3
TC3 Portland Cement Concrete Paving Inspection (Module 3)	3
TC3 Portland Cement Concrete Paving Inspection (Module 4)	1
TC3 QA: Collecting Data Through Sampling	8
TC3 QA: Frequency Tables and Histograms	3
TC3 QA: Introduction to Quality Assurance Programs	8
TC3 QA: Introduction to Quality Assurance Specifications	2
TC3 QA: Introduction to Variability	2
TC3 Recognizing Roadside Weeds	2
TC3 Revegetation During Construction	1
TC3 Roller Compacted Concrete Pavements (Module 2)	1
TC3 Roller Compacted Concrete Pavements (Module 3)	1
TC3 Roller Compacted Concrete Pavements (Module 4)	1
TC3 Roller Compacted Concrete Pavements (Module 6)	1
TC3 Safety Orientation (Module 1)	1
TC3 Safety Orientation (Module 2)	1
TC3 Shop Drawings (Concrete Structure)	2
TC3 Shop Drawings (Introduction)	3
TC3 Shop Drawings (Steel Structure)	3
TC3 Superpave for Construction (Module 1)	2
TC3 Superpave for Construction (Module 2)	2
TC3 Superpave Mix Design Process and Analysis (Module 1)	2
TC3 Superpave Mix Design Process and Analysis (Module 2)	2
TC3 Testing Self-Consolidating Concrete	2
TC3 Thin Polymer Bridge Deck Overlay Systems	2
TC3 Understanding Materials Testing for Inspectors (Asphalt)	1
TC3 Understanding Materials Testing for Inspectors (Concrete)	1
TC3 Understanding Materials Testing for Inspectors (Introduction)	1
TC3 Understanding Materials Testing for Inspectors (Soil/Aggregates)	2
TC3 Warm Mix Asphalt (Module 1)	1
TC3 Warm Mix Asphalt (Module 2)	2
TC3 Warm Mix Asphalt (Module 3)	2
TC3 Warm Mix Asphalt (Module 4)	2
TC3/SICOP Winter Maintenance Management	1
TOTAL	792

Recorded Presentation Title	# Completed	Recorded Presentation Title	# Completed
Asphalt Maintenance	8	CDL Updates	2
Asphalt Density	3	Work Zone Training Plan	3
Heavy Equipment Prev Maint	6	JM Sometimes You Learn	2
Heavy Equipment	7	Highway Pipe Install	1
Hydraulic Systems	9	Erosion Control Options	1
Autonomous Vehicle Strategies	2	Creative Problem Solving	1
Autonomous TMA	3	Managing Teleworking Emp	1
Pipe End Treatments	1	JM How to be Real Success	1
Roundtable Snow and Ice	8	Trenching Safety	1
Snow Fences	4	Working from Home	4
Seal Coat Workshop	1	Emotional Intelligence #1	2
Asphalt Burns	1	Emotional Intelligence #2	3
Rumble Strips	2	Emotional Intelligence #3	3
Job Safety Analysis	1	Full Depth Reclamation	2
Backing Safety	11	High Strength Bolt	1
Load Securement	1	Pavement Pres. Cross Stitching	2
Preventing Runovers/Backovers	1	First 3 Rules	2
Guardrail Repair	9	Deterioration Concrete Pave	2
Roundabouts	1	Conflict Resolution	1
Sliplining	1	Understanding Const Cont	2
Attitudes. Choices. Opportunities	9	Pavement Mgmt HIP	2
Cracking the Team Code	7	Pavement Mgmt CIR	2
Art of Delegation	5	Electrical Plan Reading	2
Managing Yourself in Time	7	Math for Survey	1
Embracing Change	8	Project Mgmt	1
Geosynthetic Reinforced	2	Pipe Jacking	1
Coaching and Counseling	1	Pile Driving	1
How do I Respond	1	Detention Ponds	4
Hiring Smart	1	Developing a Presence	1
Wildlife Part 1	2	Soil Nailing	1
Wildlife Part 2	2	SWPPP	2
Wildlife Part 3	2	Smart Work Zones	1
Maintaining a Safer Roadway	3	Ultra High Pref Concrete	1
Silica Dust	3	Reinforced Concrete Pipe	1
Basic Sign Install	11	CPM - Cocontract Admin	1
PPE	6	Aerial LiDAR	1
Tractor Mower Safety	8	Public Speaking	1
Pavement Striping	2	PCCP Uurban Joint Layout	1
Departure Crashes	1	ADA in Temp Work Zones	2
Public Land Survey Part 1	1	Contract Neg. - Change Orders	1
Public Land Survey Part 2	1	Designing, Building Curb Ramps	2
Dewatering	5	Roadway Fatigue	1
Handling Hazardous Mat	3	Asphalt Recycling	2
Ethics	4	Pavement Mgmt: Micro-Surface	1
Ethics Eng/Bus	1	Pavement Pres. - Fog Seal	1
Intelligent Work Zones	1	Pavement Pres. - Cape Seals	1

Intelligent Compaction	2	Pavement Pres. - Every Day	1
Basic Construction Survey	3	High Friction	1
Pavement Surface/Interaction	3	Confined Space	1
Tier IV Regeneration	1	Pipe Repair	1
Tier IV Regeneration/DEF	1	Concrete Manholes	2
Welding 101	1	Fiber Reinforced Concrete	1
It's Not About the Drones	2	Nature Tales	1
Noxious Weeds	2		
TOTAL			273

**Significant Results:**

Identifying and delivering technology transfer needs of the DOTs in Montana, North Dakota, South Dakota and Wyoming. Live presentations are broadcast through video conferencing or webinars. The majority of these presentations are recorded and available for playback on the TLN learning management system. Along with the recordings, there are self-paced modules available 24/7. 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.