**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.*

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| **Transportation Pooled Fund Program Project #**  *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)*  TPF 5(333) | | **Transportation Pooled Fund Program - Report Period:**  □Quarter 1 (January 1 – March 31)  □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):**  Clayton Schumaker | **Phone Number:**  701-328-6906 | | **E-Mail**  cschumaker@nd.gov |
| **Lead Agency Project ID:**  TPF 5(333) | **Other Project ID (i.e., contract #):**  17-314-0800 | | **Project Start Date:**  10/1/2015 (New Federal ID) |
| **Original Project End Date:** | **Current Project End Date:**  9/30/2020 | | **Number of Extensions:**  0 |

Project schedule status:

✓On schedule □ On revised schedule □ Ahead of schedule □ Behind schedule

Overall Project Statistics:

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| --- | --- | --- |
| **Total Project Budget** | **Total Cost to Date for Project** | **Percentage of Work**  **Completed to Date** |
|  |  | NA |

***Quarterly*** Project Statistics:

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| --- | --- | --- |
| **Total Project Expenses**  **and Percentage This Quarter** | **Total Amount of Funds**  **Expended This Quarter** | **Total Percentage of**  **Time Used to Date** |
|  | $105,451.55 | NA |

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| **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. The summer months are when the program staff and committee members identify and prioritize technology transfer topics.

The following were delivered as a webinar or video conference during this reporting period. In addition to live presentations, there are over 100 online self-paced modules available. Full descriptions are available on the TLN website at [www.translearning.org](http://www.translearning.org).

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| --- | --- | --- | --- |
| **Presentation Title** | **Delivery  Method** | **Date** | **# Attended** |
| Transcending Challenges with a Relentless Focus on Workplace Experience Innovation | video conf | 10/9/2018 | 35 |
| Job Safety Analysis | webinar | 10/16/2018 | 26 |
| Autonomous Vehicle Strategies for Transportation Agencies | webinar | 10/18/2018 | 25 |
| Building Trust, Credibility, & Respect | video conf | 10/24/2018 | 35 |
| Communicating with Diplomacy & Tact | video conf | 10/25/2018 | 31 |
| Lean Mental Models and Problem Solving: Turning Organizational Deficiency to Efficiency | video conf | 10/302018 | 22 |
| Vampires at Work: Handling Difficult People and Conflict | video conf | 10/30/2018 | 32 |
| Snow Fences | video conf | 10/31/2018 | 52 |
| The Art & Science of Communication | video conf | 11/1/2018 | 23 |
| Structural Fibers in Thin Concrete Overlays | webinar | 11/5/2018 | 29 |
| Personnel and Equipment Detection on Construction Projects | webinar | 11/7/2018 | 12 |
| Autonomous Truck Mounted Attenuators (TMA) | webinar | 11/14/2018 | 34 |
| Non-Destructive Testing (NDT) of Concrete | webinar | 11/15/2018 | 57 |
| Knowing the Rules and Doing Your Homework (Environmental Series) | webinar | 11/16/2018 | 13 |

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| **Presentation Title** | **Delivery  Method** | **Date** | **# Attended** |
| Fiber-Reinforced Concrete for Structure Components | webinar | 11/29.2018 | 28 |
| Temporary Measures during Construction (Environmental Series) | webinar | 11/30/2018 | 22 |
| Roundabouts – Single-Lane High Speed Rural Solutions for High Crash Locations | webinar | 12/3/2018 | 67 |
| Pavement Preservation Peer Review (EDC-4) | video conf | 12/5/2018 | 129 |
| Dewatering (Environmental Series) | webinar | 12/7/2018 | 20 |
| Implementation Guidance for Accelerated Bridge Construction in SD | webinar | 12/11/2018 | 21 |
| Self-Consolidating Concrete for Prestressed Bridge Girders | webinar | 12/12/2018 | 16 |
| Cracking & Debonding of a Thin Reinforced Concrete Overlay | webinar | 12/17/2018 | 19 |
| Local Road Surface Selection Tool | webinar | 12/19/2018 | 29 |
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|  |  | **TOTAL** | **777** |

**ONLINE MODULES OCTOBER THROUGH DECEMBER 2018**

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| **Title** | **# Completed** |
| Introduction to NDDOT Construction Automated Records System (CARS) | 1 |
| Materials Testing: Introduction to the Soil-Moisture Density Relationship | 1 |
| Materials Testing: Microwave and Oven Methods of Drying Soils | 1 |
| Materials Testing: Proctor Test | 1 |
| Materials Testing: Proctor Test Short Version | 1 |
| Materials Testing: Rubber-Balloon Test | 1 |
| Materials Testing: Sieve Analysis of Fine and Coarse Aggregates | 2 |
| Materials Testing: Speedy Moisture Test | 1 |
| Materials Testing: Wash Test | 1 |
| Personal Protective Equipment | 1 |
| Road Safety 365: A Safety Course for Local Governments – Module 1: The Need for Road Safety | 2 |
| Seal Coat Module 1: Pavement Preservation, Handbook, Design, & Pay Items | 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 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 Advanced Self-Consolidating Concrete | 1 |
| TC3 Aggregate Sampling Basics | 1 |
| TC3 Basic Construction Surveying | 8 |
| TC3 Change Orders, Claims, and Dispute Resolutions | 2 |
| TC3 Concrete Series: Construction of Concrete Pavements | 1 |
| TC3 Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures | 1 |
| TC3 Construction Inspection of Structures Series: Subsurface | 1 |
| TC3 Construction Inspection of Structures Series: Subsurface | 1 |
| TC3 Construction Inspection of Structures Series: Subsurface | 1 |
| TC3 Construction Inspection of Structures Series: Subsurface | 1 |
| TC3 Construction Inspection of Structures Series: Subsurface | 1 |
| TC3 Construction Inspector Orientation | 2 |
| TC3 Construction Inspector Orientation | 2 |
| TC3 Construction Inspector Orientation | 2 |
| TC3 Earthwork Series: Earth Materials as Engineering Materials | 1 |
| TC3 Earthwork Series: Site Preparation | 1 |
| TC3 Ethics Awareness for Engineers: Code of Ethics | 1 |
| TC3 Ethics Awareness for Engineers: Conflicts of Ethics | 1 |

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| **Title** | **# Completed** |
| 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 Flagger Training | 4 |
| TC3 Flexible Pavement Preservation Treatment Series: Chip Seals | 1 |
| TC3 Full Depth Reclamation (FDR): Module 1 | 1 |
| TC3 GPS Technology | 1 |
| TC3 Improving the Daily Diary | 2 |
| TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP: Module 1 | 1 |
| TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP: Module 2 | 1 |
| TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP: Module 3 | 1 |
| TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP: Module 4 | 1 |
| TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP: Module 5 | 1 |
| TC3 Inspection of Concrete Pavement Repair, Jointed and CRCP: Module 6 | 1 |
| TC3 Maintenance of Traffic for Technicians: Introduction | 1 |
| TC3 Maintenance of Traffic for Technicians: Module 1 | 1 |
| TC3 Maintenance of Traffic for Technicians: Module 2 | 1 |
| TC3 Maintenance of Traffic for Technicians: Module 3 | 1 |
| TC3 Maintenance of Traffic for Technicians: Module 4 | 1 |
| TC3 Maintenance of Traffic for Technicians: Module 5 | 1 |
| TC3 Maintenance Training Series: Roadside Vegetation Management | 1 |
| TC3 Maintenance Training Series: Shaping and Shoulders | 1 |
| TC3 Math Basics Series For Highway Technicians: AREA | 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 NEPA Overview Series: Determining Transportation Needs | 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 Plan Reading: Bridge Plans: Bridge Plan Reading | 2 |
| TC3 Plan Reading: County Plans: County Plans | 3 |
| TC3 Plan Reading: Culvert Plans: Culvert Plans | 3 |
| TC3 Plan Reading: Erosion and Sediment Control Plans | 2 |
| TC3 Plan Reading: Grading Plans | 4 |
| TC3 Plan Reading: Highway Plan Reading Basics | 1 |
| TC3 Plan Reading: Right-of-Way Plans | 2 |
|  |  |
| **Title** | **# Completed** |
| TC3 Plan Reading: Traffic Control Plans | 2 |
| TC3 Roller Compacted Concrete Pavements: Module 1 | 1 |
| TC3 Safe Use of Basic Carpentry Tools: Module 1 | 1 |
| TC3 Safe Use of Basic Carpentry Tools: Module 2 | 1 |
| TC3 Safe Use of Basic Carpentry Tools: Module 3 | 1 |
| TC3 Trenchless Technology: Applications Part 1 | 1 |
| TC3 Understanding Materials Testing for Inspectors: Asphalt | 2 |
| TC3 Understanding Materials Testing for Inspectors: Concrete | 1 |
| TC3 Understanding Materials Testing for Inspectors: Introduction | 1 |
| TC3 Understanding Materials Testing for Inspectors: Soil/Aggregates | 1 |
| TC3 Warm Mix Asphalt: Module 1 | 1 |
| TC3 Warm Mix Asphalt: Module 2 | 1 |
| TC3 Warm Mix Asphalt: Module 3 | 1 |
| TC3 Warm Mix Asphalt: Module 4 | 1 |
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|  | **120** |

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| **Significant Results:**  Identifying and delivering technology transfer needs of the DOTs in Montana, North Dakota, South Dakota and Wyoming. Presentations are broadcast through video conferencing or webinars; and on-line 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. |