

# **Montana**

## **Local Technical Assistance Program**

Work Plan and Budget

July 1, 2021 – June 30, 2022: State FY Work Plan

Includes July 1- September 30, 2022: FFY Work Plan Addendum in Appendix E

**Prepared by:**

**MATTHEW ULBERG, PE - Director**  
**LOCAL TECHNICAL ASSISTANCE PROGRAM**  
**Montana State University**  
**Bozeman, Montana**

Prepared for the

STATE OF MONTANA  
DEPARTMENT OF TRANSPORTATION  
RESEARCH PROGRAM

in cooperation with the

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

April 2021

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## Executive Summary

The Local Technical Assistance Program (LTAP) has proven value as an effective outreach program for the transportation workforce and has become a trusted resource for local agencies seeking training and technical assistance. Montana LTAP is active in regional and national initiatives and is effective in delivering quality outreach and technical assistance.

Montana LTAP's ability to transfer technology and information efficiently and effectively through courses and relationships to our rural and urban partners and customers is the primary measure of success. We strive to maintain a full calendar of training, outreach, communication, and technical assistance throughout the year. Our reach is geographically broad, covering the entire State of Montana, and deep with in excess of 50 class titles (subjects) that we regularly deliver to our customers.

This past year (Jan-September PAR reporting period only) Montana LTAP covered 47 training sessions in 52 weeks, attended by 762 total participants. Montana LTAP provided 283 hours of training, corresponding to a 35,814 Live LTAP customer contacts (not hours), and our 14 webinars produced 10,066 virtual customer contacts in a live webinar setting.

LTAP enables local transportation workers to study road fundamentals, safety, drainage, snow and ice removal, and other topics with the goal of becoming expert managers. Two particularly successful means for promoting ongoing skills are certification as a Roads Scholar (10 classes required) followed by Road Master (total of 30 classes required). Road Masters are our champions who assist with instruction during workshops.

We have continued to offer a very successful training effort through our half-hour long monthly webinars. This method saves on travel time and costs by providing requested training in a wide-reaching format. This is especially true for those in the Northeast corner of the state and Eastern Montana where it is too costly to send crew to face-to-face trainings. These recorded webinars are available to be reviewed by our customers at their convenience.

Annually, a four-day safety training is held in Helena, MT to cover all Work Zone Safety courses LTAP provides, and a Train-the-Trainer class the last day. This is called the Montana

### **LTAP Roads Scholar Program: 2,751**

Participants

2021: 22 Road Scholars Awarded, 1 Road Master.

- Total Scholars to Date: 411
- Total Road Masters Awarded to date: 16

### **Webinar Topics Calendar Year 2020:**

- Walk Arounds, Waste Oil, and Split Rim Tire
- Back Safety and Fall Prevention Basics
- First Aid Review
- Hygiene, Blood and Bodily Fluid Safety in the Workplace
- Culvert Installation, Excavation, and Inspection on Low Volume Roads
- Working Remotely and Dealing with Stress
- LTAP Safety Meeting, What's Lurking Around in the Spring
- Tire Safety
- Respirable Crystalline Silica in the Workplace
- Overview of the Road Safety Champion Program
- Chain Saw Safety
- Bridge Load Posting Program
- Confined Space Safety
- Winter Seasonal Safety and PPE
- Holiday Safety Tips for the Workplace and Home
- Work Zone Safety in the Winter

LTAP Safety Congress. January 26-29, 2021, Montana LTAP held its 19<sup>th</sup> Annual Safety Congress in Helena. At this training, Work Zone Technician, Traffic Control Supervisor, Train-the-Trainer courses were provided to individuals from the State of Montana, local agencies and private contractors. The Safety Congress brought together industry colleagues to convene in a central location. Participants typically have responsibilities for permanent signing, work zone signing, or manage overall roadway safety in work zones.

Future growth in program delivery in the coming year includes expansion of LTAP's online penetration in cooperation with the National Center for Rural Road Safety. Through the LTAP/National Rural Road Safety Center cooperative efforts, recorded webinars and new monthly webinars will add significantly to the breadth of topics available to our stakeholders.

## Introduction

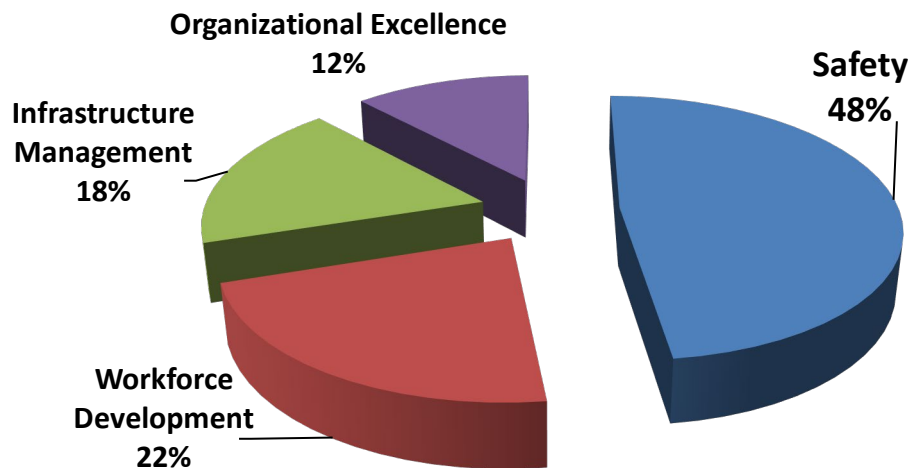
LTAP provides education and technical assistance on transportation matters to a wide variety of entities, including city and town street departments, county road departments, public works departments, elected and appointed public officials, private contractors, individuals and government transportation agencies. Through sharing and improving the distribution of transportation-related information, the program promotes efficient use of local transportation agencies scarce resources. Our vision is to improve the quality and safety of the surface transportation system through interactive relationships and information exchange. LTAP builds on long-standing relationships among partners including the Montana Association of County Road Supervisors (MACRS), Montana Association of Counties (MACo), Montana League of Cities and Towns, American Public Works Association (APWA), National Association of County Engineers (NACE) and Montana Department of Transportation (MDT).

The overarching methodology of Montana LTAP will be to:

- **Coordinate** with all stakeholders to meet training and technology transfer needs.
- **Integrate** training and technology transfer resources and services into a centralized location at LTAP.
- **Accelerate** distribution of transportation technology by:
  - Disseminate training opportunities within the LTAP program, and training provided by stakeholders and neighboring state programs.
  - Communicate current information on Federal Highway Administration mandates.
  - Share information on new resources, techniques, and methods.
  - Distribute time sensitive information to constituents.

## Mission

The mission of LTAP is guided by the four focus areas as directed by FHWA. Continuous attention to each area is vital to the success of LTAP's mission of fostering a safe, efficient, and environmentally sound surface transportation system by improving the skills and increasing the knowledge of the local and tribal transportation workforce. The four focus areas are Safety, Workforce Development, Infrastructure Management and Organizational Excellence. Each year, expenditures vary based on demand for training and assistance in each area. As a matter of budget planning, we allocate a % of our budget in each area looking back one year. **Figure 1** shows the approximate percentage of Montana LTAP's budget allocated to each of these focus areas.

**Figure 1: LTAP Focus Areas**

To achieve these objectives, LTAP is engaged in the following:

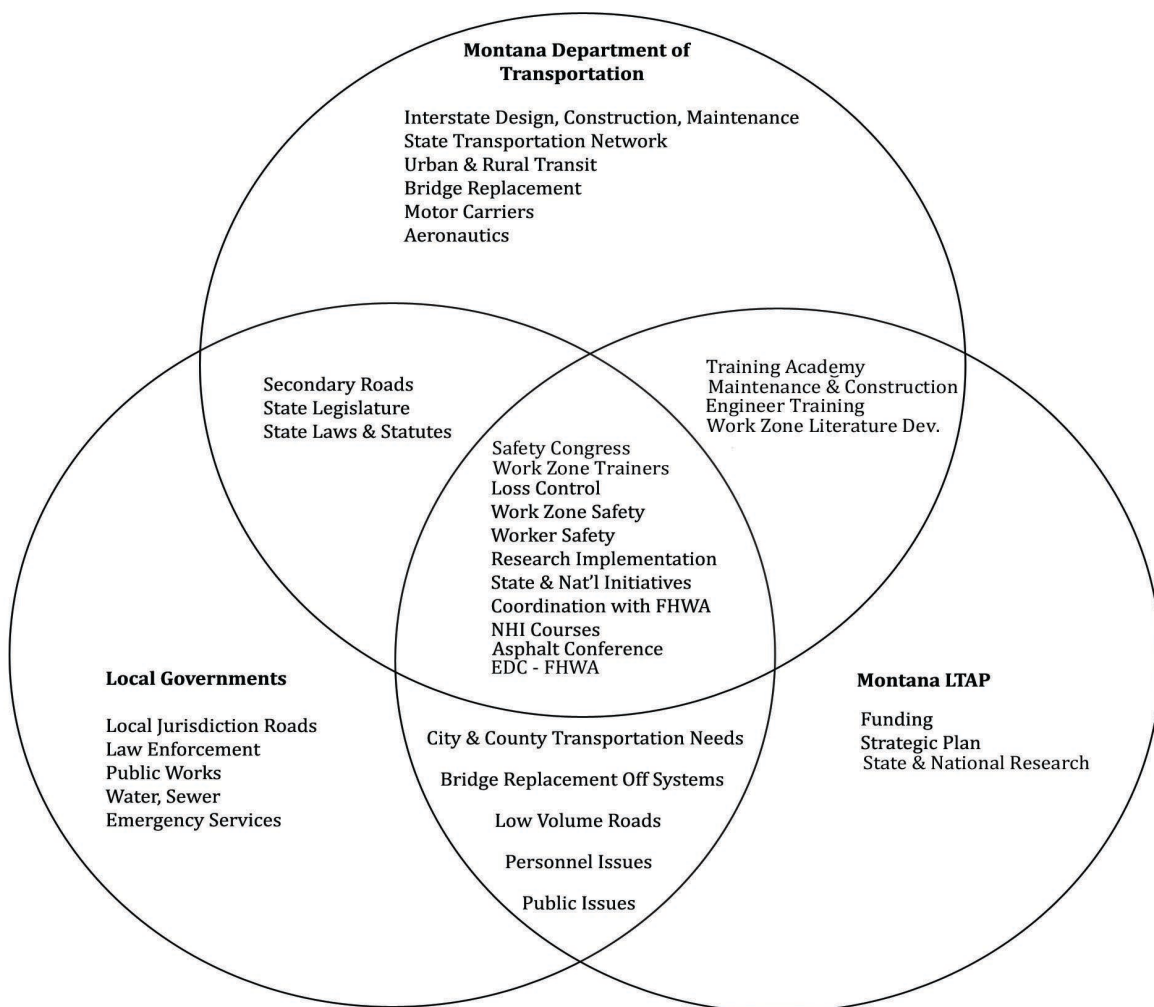
- Conducting on-site trainings and seminars and online webinars and trainings
- Coordinating conferences and meetings to deliver relevant trainings
- Administering certification programs (Road Scholar, Road Master)
- Regular face-to-face interaction with stakeholders
- Digital sharing of technology and technical information
- Email correspondence and site visits with public works agencies
- Technical assistance and on-site expertise
- Distribution of regular digital newsletters
- Transfer of technology and educational materials developed outside LTAP
- External communication through emails to a network of stakeholders
- Evaluation of program needs and content
- Activity with local, regional, and national organizations (NLTAPA, NACE, APWA, etc.) and boards that advance and support the mission of LTAP

LTAP plays a unique part in transportation education. The National LTAP program has undergone some recent changes, and we are working with FHWA to finalize revisions to the national LTAP strategic plan. Through FHWA Center for Local Aid Support (CLAS), the National LTAP program direction is being re-shaped. A national needs assessment was completed, and from this assessment, we anticipate some programmatic changes. Montana LTAP has answered a pressing need for transportation training and technical assistance at the local level, where resources are limited and the ability of FHWA and MDT to interface with local agencies and provide services is limited. Montana LTAP's capacity to provide face-to-face, hands-on training enables members of the transportation workforce to learn valuable information from our instructors and provides them with opportunities to discuss issues and share solutions with their peers. This technology transfer program is soundly grounded in the practice of sharing knowledge on current or recent trends in the industry, new technology and best practices. In many instances, LTAP is the primary source of professional development for the transportation staff of local governments.

To provide technical transportation training to local road agencies, local public works agencies, public officials, city, county and other municipal employees and engineers and the Montana Department of Transportation, LTAP will continue to be an easily accessible, central source for current state of the practice transportation information, technology transfer, relevant, high-quality course information, stakeholder coordination and technical outreach assistance. The Montana LTAP Program is flexible and meant to accommodate the local needs of our stakeholders. LTAP works in conjunction with outside entities to provide the resources and training topics that are identified as needs through observation, discussion and statistical evaluation of available data and constituent requests.

**Figure 2** illustrates the various topics of interest that intersect with Montana LTAP training topics and those training topics requested by local government agencies and MDT. The overlapping areas show interests in common and help focus the areas where LTAP can be most effective.

**Figure 2: Stakeholder Intersection of Interests**





Montana LTAP's role in responding to training requests, technology transfer needs and implementation of best practices throughout the Montana transportation community has been considerable and will continue to grow based on its strategic approach to increase its impact in Montana for the benefit of our stakeholders. The need will continue to grow due to retirement rates and the number of new employees in Montana. Our partnerships with Montana Department of Transportation, FHWA, National Highway Institute and others previously mentioned will allow us to better meet those needs.

Montana LTAP's ability to transfer technology and information efficiently and effectively to our rural and urban partners and customers is the primary measure of success. Our MT LTAP staff have played key roles in the development, coordination, analysis, enhancement, and day-to-day operations of transportation technology transfer. Many Montana counties have engaged with LTAP through technical training and field visits to learn better methods of gravel road maintenance. Knowledge gained about the use of good materials, techniques and stabilization has resulted in significant environmental and material operational cost savings.

### **Montana LTAP Spotlight: Montana LTAP Roads Scholar Program**

One particularly successful means for promoting ongoing skills development at the local and tribal levels is the Road Scholar and Road Master programs, which recognize staff for reaching competency levels through training and development of transportation expertise.

The underlying approach is to provide curricula that enable local transportation workers to study road fundamentals, safety, temporary traffic control, drainage, snow and ice removal, and other topics with the goal of becoming expert road managers. The courses help participants develop professionalism and advance their careers.

Montana LTAP continues to work with the following workforce-development-focused learning institutions:

- MSU-Bozeman
- MACRS
- Montana League of Cities and Towns
- MACo
- APWA
- NACE
- MSU-Bozeman
- North Central Region LTAPs
- Flathead Valley Community College
- Montana Tech, Butte
- Tribal Transportation Agencies
- Montana Safety Fest
- TLN

### **Montana LTAP Professional Staff**

Montana LTAP currently has three staff members (2.75 FTE) with the potential to involve WTI technical (graphics) specialists and/or a Montana State University work-study student to assist

on various projects as need dictates. This is a cost-effective structure and requires very little administrative burden beyond what is needed to administer the program.

**Matthew Ulberg, P.E. Director (1.0 FTE)**

Matt provides organizational leadership and technical expertise in a variety of engineering-based and technical areas. He brings a broad range of educational training and field-delivered programs to the LTAP program. He works well with local city, county, and state entities throughout the state of Montana, and directs the work of the LTAP program, including all on-site trainings and technical assistance.

**Melissa Schaak (1.0 FTE)** recently joined LTAP as a Program Coordinator II. Melissa manages the LTAP main office, provides training coordination for statewide workshops and meetings, provides program management in conference planning and develops communications and outreach for Montana LTAP.

Melissa grew up on a farm and ranch in eastern Montana and graduated from Montana State University in 2007 with Bachelor of Science Degrees in Business Marketing and Agricultural Business. She has worked at MSU for 11 years, previously in the Counseling & Psychological Services Office as the Medical Records Administrator, in Professional Development and Training as the Training Program Manager, and most recently in the Office of the President and Office of Legal Counsel.

**Shawna Page, Professional Trainer, Training Program Coordinator (0.75 FTE)**

Training Program Coordinator and Professional Trainer at Montana LTAP, Shawna has over 30 years of experience in private and public-sector construction, safety training and program coordination. Shawna delivers a large portion of our LTAP-sponsored Safety training, including Traffic Control Supervisor, Work Zone Technician, Flagger Certification (including Re-Certification), Pilot/Escort Operations, Asbestos Awareness and Lead Contractor Supervisor, Hazardous Waste trainings, MSHA Part 46, OSHA and first aid/CPR Trainings.

## **Program Development**

### **Customer Needs Assessments**

The transportation workforce is constantly changing, and it is critical Montana LTAP monitors the current and future needs of transportation providers. Road supervisors are retiring, and new operators need technical and safety training for equipment operation. To keep up with these changes, a formal Needs Assessment will be conducted in the spring of each year. Montana LTAP monitors the needs of transportation providers through a variety of methods. In order to fulfill our mission, information is gathered from the LTAP Advisory Board, our LTAP Needs Assessment, various survey questionnaires, personal interviews, and injury insurance reports to gain a broad scope of the education technology transfer needs of our workforce. The LTAP training and resources offered in the following year generally reflects the results from the needs assessment and the requests made by its partners and customers.

Methods of Needs Assessments conducted over the past year include:

### Questionnaires and Surveys

- Workshop Evaluations
- Hard Copies of Needs Assessment Surveys Gathered at District Meetings
- Advertising in the digital newsletter to request specific training

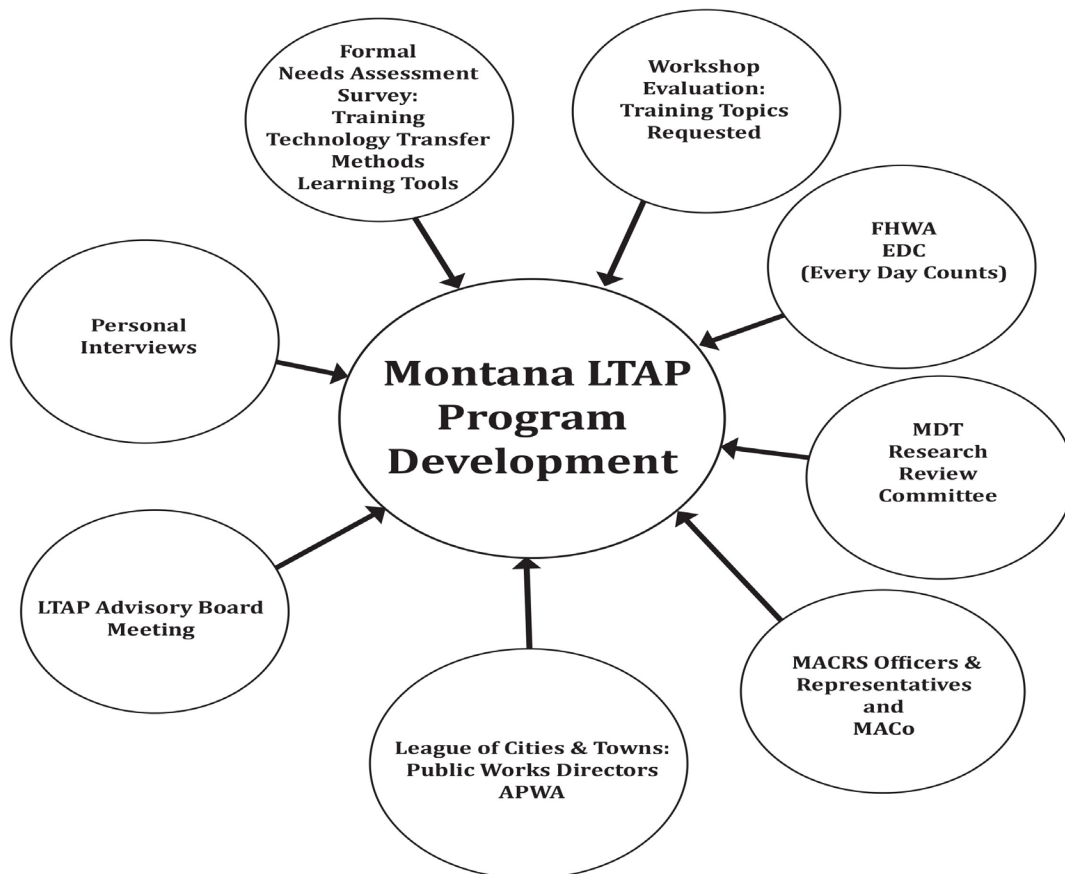
### Key Contact Informational Interviews

- Personal Interviews with City Transportation Officials and County Road Constituents at MACRS and other trainings and conferences
- Interviews with Vendors at regional and national meetings
- Interviews with LTAP Directors and staff from other states
- Contact and communication with Federal and State-level subject experts
- Contact and communication with National Centers of Excellence at WTI

### Group Assessment Methods

- Semi-Annual Meetings with MACRS Officers and District Representatives
- Annual MACRS Conference
- League of Cities & Towns Conference with Public Works Directors
- LTAP Advisory Board Meeting

**Figure 3: Program Inputs**



Through analyzing the information gained through conducting these assessments, LTAP can develop programs that best meet customers' needs. On the following page, **Figure 3** illustrates the variety of information gathered and put into action.

### **Formal Needs Assessment Survey (conducted in 2021)**

The needs assessment survey was sent out electronically, delivered in hard copy at conferences and workshops, and mailed to city and county employees. Telephone interviews were also conducted. Following is a summary of the survey results. Subjects were rated 1-5 by attendees and given weighted averages accordingly.

## ***LTAP Workshop Needs***

### **Focus Area: Worker Safety**

Top 3 Responses

- Shop Safety
- Winter Survival
- Back Safety/Slips/trips/falls, First Aid

### **Focus Area: Work Zone/Highway Safety**

Top 3 Responses

- Flagger/Emergency Management and Signing
- Work Zone Technician
- Work Zone Traffic Control

### **Focus Area: Infrastructure Management**

Top 4 Responses

- County Road Standards
- Gravel Road Maintenance & Design
- Culvert Placement & Trenching/Cattle Guards (tied)
- Winter Operations and Safety

### **Focus Area: Workforce Development**

Top 3 Responses

- Dump Truck Safety
- Loader Operations
- Load Securement

### **Focus Area: Organizational Excellence**

Top 3 Responses

- MACRS Conference
- Personal Assessments/ Personnel Management (tied)
- Leadership/ Legal aspects of Public Rights of Way (tied)

## **Needs Assessment Results and Interviews (2021)**

### **I. MDT Research Review Committee**

1. N/A

### **II. League of Cities and Towns: City Transportation Officials**

1. Asphalt Repair and Maintenance
2. Work Zone Safety
3. Personal Safety
4. Leadership
5. Liabilities/Safety Audits
6. AASHTO Design Elements/ MUTCD Signing

### **III. LTAP Advisory Committee (Listed from most votes to least)**

1. N/A

### **IV. MACRS Officers and Representatives and MACRS Training Requests**

#### **Spring Training Requests**

1. County Road Standards
2. Equipment/Loader and Dump Truck Safety
3. Grader training
4. Load Securement
5. Leadership

#### **Fall Training Requests:**

1. County Road Standards
2. Culverts & Trenching
3. Leadership
4. Winter Maintenance

#### **Annual Conference Requests:**

1. Culverts and Bridges
2. FEMA
3. DES - Procurement
4. Asphalt Topics
5. Virtual Gravel Pit Permitting

### **V. Federal Highway Administration**

1. Every Day Counts (EDC) initiatives
2. Vision Zero
3. Build a Better Mousetrap

### **Other Inputs: Training Topics Requested**

The LTAP survey is designed for participants to select more than one topic. These topics are rated from most frequently selected to least:

- Winter Survival
- Back Safety
- First Aid
- Emergency Management and Signing
- Work Zone Technician
- Work Zone Traffic Control
- County Road Standards
- Gravel Road Maintenance & Design
- Culvert Placement & Trenching & Cattle Guards
- Winter Maintenance
- Dump Truck Safety
- Heavy Equipment Operations
- Load Securement
- Technical Leadership
- Summer Survival
- Chlorides for Gravel Roads
- MSHA Part 46
- HAZMAT
- Weed Mowing
- Safety Audits
- OSHA 10/OSHA 30
- Surveying/Math

### **Leveraging Capabilities and Partnerships: LTAP Program Growth**

Due to the increase in flexibility and availability of online trainings and coursework, it is anticipated that some of these opportunities will expand the course curriculum for the Roads Scholar and Roads Master programs. In addition, many new courses are currently under development at LTAP that leverage the professional experience of its Program Coordinator, Shawna Page, and that of its Director, Matt Ulberg. The new courses shadow courses developed and used in the Roads Scholar and Roads Master programs at other state LTAPs, including North Dakota, South Dakota, Nebraska, Indiana, Connecticut and Ohio. The courses will be tailored to meet the needs of Montana stakeholders before being fully integrated into the Montana program.

### **NEW/Continued: OSHA 10 and OSHA 30**

LTAP Professional Field Trainer, Shawna Page has completed necessary training and experience to become an OSHA 10 and OSHA 30 trainer. She has over 20 years of experience training OSHA Safety classes. Shawna is working on a draft of a model Road Supervisor's Manual. Leveraging this expertise and experience, LTAP now offers these topics to municipalities throughout Montana. These are solid basic worker safety trainings are relevant to every labor classification, and are an added training that Montana LTAP now provides. Shawna has been

invited to teach the OSHA 10 class in North Dakota on an annual basis to share her knowledge with another LTAP.

**NEW: Road Grader Field Training** (Completed one season of trainings)

Montana LTAP has committed the time and resources necessary to become a qualified field trainer for the operation and daily walk-around inspection of road graders. We have offered 1 full season of hands-on training and plan to continue to offer this in the future to meet demand.

**NEW: Updated Gravel Roads Maintenance and Standards Class**

**NEW: (2018-current): Standard Operating Procedures (SOP) Manual**

**NEW: MSHA Part 46 new miner and Refresher**

**NEW: Safety 365 (see below)**

## **Partnerships**

Looking forward, the need for workforce development, safety training, technology transfer, and implementation of best practices throughout the transportation community will be considerable. Partnerships with MDT, FHWA, WTI, The National Highway Institute, and other national transportation partners will allow LTAP to better meet those needs.

The LTAP work plan includes partnering with other content providers for low-cost and no-cost solutions to meet the needs of our customers.

## **Western Transportation Institute**

As part of its continuing efforts to leverage the capabilities, resources and opportunities at MSU-Bozeman and within the Centers housed at the Western Transportation Institute (WTI), Montana LTAP has adopted cooperative attitudes with multiple training, technology transfer and research entities. This will allow Montana LTAP access to an unprecedented amount of research and practical training resources.

One partnership that LTAP is currently beginning, is the partnership with the National Center for Rural Road Safety (Safety Center), which is one of the Centers of Excellence housed within the organization of WTI.

The Safety Center training program is a multi-disciplinary, collaborative effort to accelerate knowledge transfer from training to implementation. The Safety Center has designed their work plan to include a variety of training methods (e.g., videos, webinars, in-person trainings, summits), topics and audiences that include:

**Safety 365 – A Safety Workshop for Local Governments**

Length: 8-hour course

Audience: Local/rural maintenance supervisors

Instructors: Keith Knapp and Nicole Oneyear, InTrans

This one-day workshop focuses on processes for incorporating safety into all aspects of local and rural road projects, and on making safety a priority through inclusion in the traditional decision-making process—365 days a year. The course stresses the importance of road safety and illustrates how it can be integrated into rural/local transportation project development at all stages: planning, design, construction, implementation, operations, and maintenance.

### Roadside Safety Basics for Local Agencies

Length: 6-hour course

Audience: Local agency maintenance/engineering staff

Instructors: Frank Julian, FHWA and Keith Knapp, InTrans

This course provides the basics of roadside safety. The roadside safety problem in the United States is defined and countermeasures to keep vehicles on the road are discussed. The provision of a recovery area is also described, including discussions of clear zone and objects within it. The course also covers the basics of drainage features and sign supports and is concluded with a short discussion of barrier basics.

### Maintaining a Safer Roadway

Length: 4-hour course

Audience: Maintenance staff and supervisors

Instructors: Keith Knapp (Iowa LTAP, InTrans and Renae Kuehl)

Maintaining a Safer Roadway – Local agency maintenance forces are in the best position to be the “eyes and ears” of the road when it comes to identifying safety issues. This session will focus on maintenance safety solutions that local maintenance forces can implement on a daily basis to address safety issues related to elements such as shoulder drop-offs, right-of-way obstructions, striping and signing, guardrails, mowing, sweeping, patching, drainage, winter maintenance, etc.

The **Rural Road Safety Center at WTI** provides a compilation of upcoming rural road safety trainings and conferences from multiple sources to your inbox bi-weekly, referred to as Training E-Blasts.

The Rural Road Safety Center has developed and conducts trainings on many topics related to rural safety. The page provides an archive (in both pdf and streaming format) of the trainings created by the Safety Center.

## **LTAP Work Plan within the 4 LTAP Program Focus Areas**

The Montana LTAP work plan and program are derived with consideration of local training needs, as well as, the input provided by stakeholders, customers and funding organizations. Federal initiatives such as Every Day Counts (EDC) and Vision Zero are made a part of everyday operations and trainings that are delivered to stakeholders through scheduled workshops around the State. LTAP’s stakeholders provide input through the annual training needs assessment, MACRS District representatives, LTAP Advisory Board and other direct communications with its trainers, staff and Director. Incorporating 1-on-1 interviews and the



needs assessments helps LTAP draw out needs that are specific to current state of the practice. The resulting proposed training program described in the next section is in the context of FHWA's prescribed program areas. The topics mentioned in each of the four focus areas are listed in order according to requests—most requested topics are first, least requested topics appear last.

The four primary focus areas as dictated by FHWA are Safety, Infrastructure Management, Workforce Development and Organizational Excellence. The following section discusses how Montana LTAP is meeting the mission of LTAP in these four focus areas.

### **Focus Area: Safety**

Safety is a primary concern in every part of the surface transportation system, including local, Tribal, State and Federal government partners, as well as the private and commercial sector. Consequently, nearly **half of the LTAP budget** is allocated to this area. The focus area of Safety includes highway safety and worker/workplace safety. The following proposed course topics will be taught to cover the safety focus area:

- OSHA 10
- OSHA 30
- Traffic Control: Permanent Signing
- Worker Safety: Hand and Back Safety
- Sign Training and Sign Vandalism
- Shop Safety
- Equipment Safety – Loaders, Heavy Trucks, Dump Trucks, Backhoes
- Work Zone Flagging
- Work Zone Technician
- Work Zone Traffic Control Supervisor
- Winter Survival
- Roadside Design
- Loss Control
- Rural Safety Review

A large part of our safety program is our **Annual Safety Congress** held in Helena, MT each winter. LTAP held the 19<sup>th</sup> Annual Safety Congress, January 2021, in Helena. These classes are offered as an alternative to the highly costly and seldom available ATSSA trainings that cover the same material. Montana LTAP has achieved ATSSA Trainer certification and offers these classes at 10% of the cost of ATSSA training classes. The classes offered include, comprehensive Work Zone trainings covering Work Zone Technician and Traffic Control Supervisor, as well as a Train-The-Trainer to become a Montana LTAP Certified Flagging Instructor. Discussion of FHWA initiatives such as Every Day Counts (EDC), Vision Zero, and the Rural Road Safety Plans and Road Safety Audits are also a part of each LTAP Roadway Safety training.

In partnership with MDT, a certification program focused on work zone safety has been established. LTAP administers the Montana Work Zone Safety Certification program, and has

established a reciprocity agreement with the transportation departments of Washington, Oregon, and Idaho to provide three levels of work zone training:

1. Work Zone Flagger
2. Work Zone Technician
3. Traffic Control Supervisor

Montana LTAP plans regular trainings throughout the State to fulfill the need for flagger certifications. In the Statewide Safety training workshops, the importance of seatbelts and danger of distractive driving crashes are strongly reinforced. Main contributors to rural highway crashes include hand-held cell phone use, distracted drivers and drunk drivers. Individual worker safety is a frequent topic and is covered through a variety of trainings that focus on safely operating equipment and being aware of the safety of other workers in the work zone, along with backing up safely, pilot car operations, trench and excavation safety, equipment loading and securement and specific equipment safety training.

### **Focus Area: Infrastructure Management Focus Area**

The Infrastructure Management Focus Area includes gravel road design and maintenance, asphalt, dust control, county road standards, culverts, bridges and storm water management. The needs assessment survey lists these course topics from this area as a high priority. Education for road surface management and safety features are provided in the League of Cities and Towns meeting and MACRS Fall District meetings. LTAP can then assist city and county road departments on methods of conducting road audits and inventories of road systems. One method of choice is the use of the **PASER** method. PASER is the **PA**vement **S**urface **E**valuation and **R**ating system developed by the University of Wisconsin-Madison Transportation Information Center. The system is also available for unpaved roadway surfaces and is useful for creating a roadway inventory that is associated with a condition rating.

Montana LTAP offers a variety of other trainings and technical assistance in this focus area as well. Following is a list of proposed courses to be covered under infrastructure management:

- Gravel Roads: Materials, Equipment, Design, Construction, DCP, Maintenance, Drainage
- Asphalt Pavement Repair and Maintenance
- Asphalt Patching: Best Practices
- Asphalt: Warm Mix Asphalt
- Asphalt: Cold In-Place Recycled Asphalt Pavements
- GIS/GPS
- Roadway Drainage for Construction and Maintenance Personnel
- Construction Techniques
- Winter Maintenance
- Roadside Design and Management
- Preconstruction and Design
- Asphalt Management
- Road Dust: Dust Abatement BMPs
- Culvert: Installation and Maintenance
- Bridges
- Right of Way

- County Road Standards
- Chip Seal/Asphalt
- PASER (PAvement Surface Evaluation and Rating)
- Storm Water Management

Montana LTAP will focus on developing strategies to maximize the performance of local government infrastructure while minimizing any negative effects on financial and human resources.

The key solution in bringing the roads up to a higher level of service is Montana LTAP providing training for the workforce who maintains and constructs these roads. Continued strategic training will improve road quality and assure economic stability for Montana.

### **Focus Area: Workforce Development Focus Area**

LTAP provides training to the transportation workforce at an affordable cost to local governments. The needs assessment surveys indicated these topics as high priority selected course topics for this focus area:

- MSHA Part 46 Training and Refreshers
- Motor Grader Operator
- Dump Truck Safety
- Gravel Pit Safety
- Liability
- Materials Training
- Asphalt Training
- Snow Rodeo Training
- Signing
- Cattleguard Installation and Maintenance
- Forklift and Skid-steer
- Loader Safety
- Trenching
- Winter Maintenance
- Community Preparedness
- Surveying
- Weed Mowing

LTAP has a good relationship with Flathead Valley Community College, Montana Tech, Salish-Kootenai College, and Montana Safety Fest (Montana Department of Labor and Industry) to further workforce development. Each of these agencies has a program to prepare participants to enter the construction industry. It is hoped these partnerships will assist and encourage those students intending to enter the transportation workforce.

The Roads Scholars and Road Masters are valuable assessment and progress monitoring tools that ensures recognition for those that regularly attend and participate in trainings. This also serves to communicate both the need and the value of the training for continued education. This continuity assures progressive and continual development of the workforce.

Montana LTAP participated in the Motor Grader Operator (MGO) Train-the-Trainer in Nebraska in May 2019. Montana LTAP now offers hands-on-training for Motor Grader classes to meet the demand of our customers. We also plan to continue to offer certifications for wheel loader, backhoe, skid steer, forklift, dump truck and other equipment as demand is communicated.

### **Focus Area: Organizational Excellence**

Throughout the fiscal year, professional development is a key focus for LTAP personnel as they become better equipped to efficiently transfer technology and information to stakeholders. By providing training for staff and evaluating training successes, the organizational excellence focus will be met.

To promote organizational excellence within the constituencies we serve, several leadership courses will be offered again this coming year. The Montana LTAP Roads Scholar Program prepares local government personnel for better performance and leadership responsibility.

The following organizational excellence activities, courses and assessments are proposed for this focus area:

- Guest speaking engagements at ND LTAP, ND NACE, and MSU-Bozeman
- Activity: Participation in TRB Committee on Low-Volume Roads (AFB30)
- Training: Leading when you are not in charge
- Training: Leadership Behaviors
- Training: Employee Supervision and performance reviews
- Activity: Employee Supervision and performance reviews
- Activity: Needs Assessment
- Activity: Program Assessment Report (PAR)
- Activity: Regular attendance of NACE, Regional NLTAPA, National NLTAPA and Regional LTAP Meetings
- Training: Creating a Road Supervisor SOP Manual

Other activities that promote Organizational Excellence are described below:

- The LTAP program is developed to meet the four focus areas and coordinated to meet the communicated priorities obtained through the “Annual LTAP Needs Assessment” and from national training requirements passed down to the LTAPs from FHWA. This program is presented to the Advisory Board annually for its review input. This process assures a team effort in fulfilling training needs and that LTAP is responsive to the National and local inputs it receives.
- The Director meets annually with the League of Cities and Towns Public Works Conference Committee to review the LTAP program, assess training needs, and discuss training requests.
- Montana LTAP coordinates with Rocky Mountain APWA Division members for the Snow Rodeo event to provide leadership and/or safety training for the first day. The hosting city street department or county road department organizes and coordinates the Snow Rodeo competition on the second day with direct LTAP involvement and support.
- The Director meets annually with the Montana Association of County Road Supervisors to review training requests. LTAP participates and assists with developing an agenda for

the MACRS annual conference, along with collecting annual dues, invoicing, and conference coordination for this organization.

**STIC Grant:** Montana LTAP has successfully applied for a STIC grant and will be implementing a new Learning Management System this summer. We plan to work with ESX (software) to implement a LMS that is used by many other LTAPs with great success. This is noted in our budget, as the State-portion of the matching funds will be assigned to our State Gas Tax funding source.

## **Library Resources and Distance Learning**

Over the past several years, FHWA resources available on the web, our LTAP webinars and YOUTUBE videos on the internet have provided other training opportunities identified by the needs assessments. Montana county road departments generally have at least one if not two safety meetings per month for crew members and use materials and resources available to them. Our library of videos and DVDs is getting further out of date and is not an effective resource.

The Montana LTAP monthly safety webinars (web-based) and other long-distance learning programs are filling this need to a large extent. We maintain online our recorded webinars for use by anyone accessing our website. We provide these monthly morning safety webinars based on requests from its constituents and through the regular LTAP Needs Assessments. These monthly webinars help some with our shrinking travel and training budgets. This method of training is becoming more popular to LTAP constituents for their monthly safety meetings. LTAP webinars can be accessed anytime on the LTAP website at:

<http://www.montana.edu/ltap/resources/webinars/index.html>

Many of Montana's counties such as Missoula, Beaverhead, Park, Stillwater, Daniels, Sheridan and Richland County have all expressed approval of this method of training. Many counties use the recorded webinars, and specifically appreciate the recorded webinars for on demand viewing during their scheduled monthly safety meetings. Being in the farthest northeast corner of Montana, Sheridan County usually has many (up to sixteen) crew members watching monthly webinars. This provides a time for all participants to gather and discuss issues and possible solutions.

Montana LTAP is also sending out notifications of new Tailgate Talks as they are reviewed and vetted. These are a brief printable resource for short safety awareness meetings through the NLTAPA website. These are great field and office guides for keeping crews safe and cover a multitude of subjects.

We are considering increasing our online learning delivery, but we understand that many of our customers are unable to participate due to internet bandwidth and technology adoption issues. Data security and policy issues also are barriers for some customers.

## **Additional Services**

Montana LTAP responds to specific requests and special needs of various organizations. Most of these activities fulfill a local need that is met through training, distribution of resources and applied research.

1. APWA Annual Snow Rodeo and Equipment Training – technical training and equipment safety training for city and county road employees.
2. MACRS – annual spring conference and fall district training meetings
3. Montana League of Cities and Towns Conference – fall public works meeting and training
4. Safety Congress –January traffic control work zone training
5. MDT Work Zone Safety Committee Meetings – Discuss work zone manuals, instructors, test format, training methods and needs, as well as new FHWA programs and mandates
6. Asphalt Conference – partner with Asphalt Institute for annual Montana Asphalt Conference
7. NEW: Montana LTAP Asphalt Pavement Repair and Maintenance Training
8. MDT's telecom sites and TLN (Transportation Learning Network) – long distance learning
9. FHWA EDC (Every Day Counts) initiatives are included in training offerings and webinars

## **Future Initiatives**

We have made a lot of progress or completed last year's initiatives including:

- Coordinated/planned and delivered trainings at the 19th Annual Safety Congress, January, 2021
- Continued our cooperative training and information program with North Dakota LTAP to better serve eastern Montana
- Solidified partnership with the National Rural Roads Safety Center and are working to leverage the partnership to better serve LTAP customers
- Worked to improve training program content and delivery coordination and cooperation between LTAP, MDT and FHWA
- Complete formal Needs Assessment for 2020/21
- Encouraged many small urban areas to develop pavement management programs in preparation for applying for federal funding – Currently working with Ravalli County
- Annual planned/tentative workshop schedule for 2020-2021 (Appendix F)
- Continued with LTAP's leadership and coordinating role with MDT and the Work Zone Safety Committee
- Continue development of the MT LTAP Model Road Supervisors Manual

We also worked on improving many trainings, including:

- Leadership and self-assessment of strengths: How strength-based decision making will help you in your career
- Continued to support counties in their annual training needs including
  - MSHA Part 46 new miner
  - MSHA refresher
  - OSHA 10

The following are some of the initiatives Montana LTAP will continue to pursue this year:

- 1) Coordinate and plan January 2022 Twentieth Annual Safety Congress.
- 2) Continue and expand upon the cooperative program with North Dakota to better serve Eastern Montana
- 3) Continue to Solidify partnership with the National Rural Roads Safety Center and leverage the partnership to better serve LTAP customers
- 4) Work to improve training program content and delivery coordination and cooperation between LTAP, MDT and FHWA
- 5) Complete formal Needs Assessment for 2021/2022
- 6) Continue to encourage all small urban areas to develop pavement management programs in preparation for applying for federal funding
- 7) Prepare tentative workshop schedule for 2021/2022 (Appendix E)
- 8) Continue to invest in LTAP's role with MDT and the Work Zone Safety Committee
- 9) Continue activity with National and Local TIMs initiatives
- 10) Continue partnering with MDT to assist in research initiatives
- 11) Participate and attend National and Regional meetings of NLTAPA and NACE
- 12) Provide new and relevant content in support of the annual MACRS conference

## Budget

The following budget provides the basis for Federal, State and University funding of Montana LTAP from July 1, 2021 through June 30, 2022. Expenditures reflect an estimate of last year's expenses and projected goals for the program during the 2020–2021 State fiscal year. The budget extension to meet the FFY guidelines will follow similar % allocation. The allocation percentages have been averaged over the past 10 years and are approximate.

As the work progresses, it may be necessary to move monies among the tasks and expense categories however, the total program amount will not be exceeded. Salaries stated are estimates, and annual escalations for longevity, raises, etc. are assumed to be included into the budget as they are realized. The University reserves the right to provide cost of living increases based on provisions from the Montana Legislature. **Table 1** shows a breakdown of total costs according to the four focus areas. This does NOT include the added budget item of the STIC Grant, as it is a separate line item and will be accounted for in our quarterly reports and budget separately. **Table 2** breaks down the budget by funding source, and includes the STIC grant, lays out our Gas Tax funding-based match of 25%, and the IDC associate with the STIC Grant. This LMS will be reported with our efforts under the Center Excellence category.

FHWA would like budgets and workplans to follow Federal Fiscal Year (Oct 1-Sept 30), and as such, prorating the budget moving ahead to September 30<sup>th</sup>, 2022 using the FFY 4<sup>th</sup> quarter estimates for 2021 is a reasonable estimate to project the budget to the end of the Federal Fiscal Year. LTAP funding is generally determined by these sources, and expenditures have a recurring quarterly pattern. Our income varies year-to-year, and these funds allow us to exceed our funded budget by a small amount, possibly \$30,000 or so, averaged annually. This also allows us to be adaptable, and flexibly in our expenditures for items like printing, office equipment, travel and other activities.

**Table 1. Breakdown of Budget by Focus Area**

<b>Focus Areas</b>	<b>Salary/ Benefits</b>	<b>Prof. Services</b>	<b>Travel</b>	<b>Supplies/ Comm.</b>	<b>Minor Equip</b>	<b>Subtotal</b>	<b>IDC's</b>	<b>Total</b>
Safety – 48%	\$ 132,397.20	\$ 3,773.59	\$ 2,400.00	\$ 2,304.00	\$ 976.81	\$ 141,851.60	\$ 40,548.40	\$ 182,400.00
Infrastructure Management – 18%	\$ 49,648.95	\$ 1,415.10	\$ 900.00	\$ 864.00	\$ 366.30	\$ 53,194.35	\$ 15,205.65	\$ 68,400.00
Workforce Development – 22%	\$ 60,682.05	\$ 1,729.56	\$ 1,100.00	\$ 1,056.00	\$ 447.70	\$ 65,015.32	\$ 18,584.68	\$ 83,600.00
Organizational Excellence – 12%	\$ 33,099.30	\$ 943.40	\$ 600.00	\$ 576.00	\$ 244.20	\$ 35,462.90	\$ 10,137.10	\$ 45,600.00
<b>TOTAL COSTS</b>	<b>\$ 275,827.50</b>	<b>\$ 7,861.65</b>	<b>\$ 5,000.00</b>	<b>\$ 4,800.00</b>	<b>\$ 2,035.01</b>	<b>\$ 295,524.17</b>	<b>\$ 84,475.83</b>	<b>\$ 380,000.00</b>



**Table 2. Breakdown of Budget by Source**

2021-2022 Montana LTAP Budget	FHWA	GAS TAX REVENUE	STIC Grant	MDT SPR	TOTALS
<b>SALARIES (includes benefits)</b>					
Matthew Ulberg, Director	\$ 103,334.16	\$ 41,000.00		\$ 16,821.51	\$ 161,155.67
Melissa Schaak, Program Coordinator	\$ 5,290.00	\$ 37,000.00		\$ 6,721.85	\$ 49,011.85
Shawna Page, Field Training Coordinator	\$ 2,900.00	\$ 2,400.00		\$ 50,015.47	\$ 55,315.47
M. Ulberg, STIC GRANT (MATCHING FUNDS)		\$ 1,000.00			\$ 1,000.00
M. Schaak, STIC Grant - LMS (MATCHING FUNDS)		\$ 5,000.00			\$ 5,000.00
WTI Communications and Graphics Staff		\$ 6,000.00			\$ 6,000.00
WTI – Director		\$ 2,000.00			\$ 2,000.00
WTI – Admin Staff		\$ 2,500.00			\$ 2,500.00
<b>Subtotal: Salaries + Benefits</b>	<b>\$ 111,524.16</b>	<b>\$ 96,900.00</b>	<b>\$ -</b>	<b>\$ 73,558.83</b>	<b>\$ 281,982.99</b>
<b>PROFESSIONAL SERVICES</b>					\$ -
Conference Speakers, Workshop Trainers		\$ 8,000.00			\$ 8,000.00
Printing Expenses		\$ 4,100.00		\$ 1,000.00	\$ 5,100.00
<b>STIC Grant - Learning Management System</b>			\$ 24,000.00		\$ 24,000.00
<b>TRAVEL</b>		\$ 6,000.00		\$ 2,200.00	\$ 8,200.00
<b>WORKSHOP SUPPLIES</b>		\$ 4,000.00			\$ 4,000.00
<b>MINOR EQUIPMENT</b>		\$ 1,000.00			\$ 1,000.00
<b>Subtotal: Direct Costs</b>	<b>\$ -</b>	<b>\$ 23,100.00</b>	<b>\$ 24,000.00</b>	<b>\$ 3,200.00</b>	<b>\$ 50,300.00</b>
<b>TOTAL (Salaries + Benefits + Direct Costs)</b>	<b>\$ 111,524.16</b>	<b>\$ 120,000.00</b>	<b>\$ 24,000.00</b>	<b>\$ 76,758.83</b>	<b>\$ 332,282.99</b>
Indirect Costs (34.5% FHWA, 25% Gas Tax, 25% MDT SPR)	\$ 38,475.84	\$ 30,000.00	\$ 6,000.00	\$ 3,200.00	\$ 77,675.84
<b>GRAND TOTAL</b>	<b>\$ 150,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 79,958.83</b>	<b>\$ 409,958.83</b>

## **Appendix A: History**

### **Montana LTAP History**

Since its beginning in 1982, the Local Technical Assistance Program was first called “RTAP” for Rural Technical Assistance Program. We became “LTAP,” Local Technical Assistance Program, in 1991 as the Intermodal Surface Transportation Efficiency Act (ISTEA) widened the program’s scope to include urban areas with populations over 50,000. At this time, the Tribal Technical Assistance Program (TTAP) was also created. Together, these programs helped local agencies build, maintain, and operate America’s transportation system by delivering targeted training and technical assistance to local and tribal governments.

Montana LTAP officially began in January 1983 at Montana State University—one of the first ten university sites selected to house this program. Funding support for the program is provided by the Federal Highway Administration (FHWA), the Montana State Legislature (gas taxes from cities and counties), the Montana Department of Transportation (MDT), and Montana State University (MSU).

Nationally, LTAPs have proven to be the most effective way to reach local agencies and update, train, educate and assist these local agencies. LTAPs bring FHWA and State DOT knowledge, as well as current state of the practice and state of the science practices and technology to the local level. It is estimate that for every \$1 spent on LTAP, more that \$8 is saved by the local agency. Worker Safety, Workforce development are wo key focus areas as we move into a large generational shift in the highway and roadway workforce. LTAP is uniquely positioned to assist in training and assisting in this transition.

Appendix B: Program Assessment Report

2020 LTAP/TTAP Program Assessment Report  
Center Name: Montana Local Technical Assistance Program  
Reporting Period: January 1, 2020 to September 31, 2020

FHWA is changing to a Federal Fiscal Year reporting year, and as such, this report reflects only nine months of LTAP activities. Also, due to the formatting requirements from FHWA for the Program Assessment Report, this information is a summary of the main sections of interest to this work plan. Digital copies of the full PAR Excel spreadsheets are available upon request.

Hosted Conferences (COVID-19 pandemic cancelled most)

Calendar Year	State	Name of Conference	Total # of Conference Sessions	Total # of Local Agencies Attended	# of Local Agency participants	# of Tribal participants	# of State agency participants	# of Consultant participants	# of Total Attendees
2020	MT	MMACRS - CANCELLED	0	0	0	0	0	0	0
2020	MT	Montana Asphalt Conference - Cancelled	0	0	0	0	0	0	0
2020	MT	Montana Safety Congress - Helena, MT (Day 1)	1	4	5	0	1	2	8
2021	MT	Montana Safety Congress - Helena, MT (Day 2)	1	4	5	0	1	2	8
2022	MT	Montana Safety Congress - Helena, MT (Day 3)	1	4	5	0	1	2	8
2023	MT	Montana Safety Congress - Helena, MT (Day 4)	1	4	5	0	1	2	8

Technical Assistance

Calendar Year	State	Describe the problem or challenge requiring technical assistance.	How was TA provided?	Program Area	Name of Agency Receiving Assistance	Describe Outcome - How was the challenge or problem resolved?
2020	MT	Northern Cheyenne Tribe - Regional Security and flagger certification training	Written Correspondence	Public Administration & Quality	Northern Cheyenne Tribe	Performed an on-sit review of security concerns, tribal welfare, and health needs, and provided flagger certification training.
2020	MT	JJ Nelson - Safety MGR at Knife River, Flagging Training	Written Correspondence	Construction & Maintenance	Public Agency Contractor	Call with public agency contractor to help support Safety program and training needs. We provided training, and information on State and Local requirements.
2020	MT	Timberline Creek Road Maint. Assn, In Gallatin Co.	One on one on-site visit	Construction & Maintenance	Gallatin Co. Road Association	Provided technical information and materials analysis on-site for construction related and materials quality related concerns. Project was successful.
2020	MT	Sleeman Creek Road Association - Speed Monitoring, good gravels, drainage management	One on one on-site visit	Infrastructure Management	Missoula County -Road Association	LTAP provided technical information and materials analysis on-site for construction related and materials quality related concerns.
2020	MT	NPS - Yellowstone NP Flagger and Traffic Control assistance request	One on one on-site visit	Roadway Safety	Yellowstone National Park	Fielded a request for flagger training and specific discussion on Tribal Security and COVID concerns. We responded with a specific closed training for their security staff and assisted them in their pursuit of a reservation closure methodology for roads accessing the communities of concern.
2020	MT	NPS - YNP Winter Maintenance and Winter Safety/Survival	One on one on-site visit	Worker Safety	Yellowstone National Park	Reviewed and revised training materials to specifically address YNP needs and scheduled in-person training for YNP staff.
2020	MT	NPS - YNP Snowplow and Winter Operations - request for information, training and technical assistance	One on one on-site visit	Construction & Maintenance	Yellowstone National Park	Reviewed and revised training materials to specifically address YNP needs and scheduled in-person training for YNP staff.
2020	MT	Request to assist the National Rural Safety Center with the Rural Road Safety Champion Program development and delivery	One on one on-site visit	Construction & Maintenance	National Rural Safety Center	Assisted RRSC in developing and piloting and delivering the Rural Road Safety Champion Program, ultimately helping to deliver the pilot in Missoula, MT.
2020	MT	MACRS 2020 Planning and cancellation	Written Correspondence	Public Administration & Quality	Montana Association of County Road Supervisors	Prepared a full program for LTAP hosted training and MACRS event prior to cancellation
2020	MT	MACRS 2021 Planning and support	Phone Call	Public Administration & Quality	MACRS	Providing ongoing support for MACRS conference as requested.
2020	MT	City of Ennis - Traffic Control training and Demonstration Project Support	One on one on-site visit	Work Zone Safety	City of Ennis	Provided training and assistance for day-of-event traffic control for MDT/MSU research program that involved on-stie traffic control to pain temporary pavement markings in downtown Ennis, MT

2020	MT	City of Wolf point PWD - Excavations Safety Info and Training	Phone Call	Worker Safety	City of Wolf Point	Responded to a need for safety training by developing a special class to address the City's specific needs. Class was delivered to all relevant City crew members.
2020	MT	City of Missoula Street Department training program assistance - Laborer's Union Certification requirements	Phone Call	Worker Safety	City of Missoula	Responded to a request for specific certificate trainings needed to ensure contract compliance with the City of Missoula and the labor union. We crafted multiple classes and delivered these to them at their headquarters.
2020	MT	City of Missoula/Garden City Compost - Laborer's Union Certification requirements	Phone Call		City of Missoula	Responded to a request for specific certificate trainings needed to ensure contract compliance with the City's composting facility and the labor union. We crafted multiple classes and delivered these to them at their headquarters.
2020	MT	City of Havre - Excavation Safety and confined space TA, training	Phone Call	Worker Safety	City of Havre	Responded to a request for specific excavation and confined space trainings needed, as they had experienced a lost-work injury and their insurance, and the State was very concerned. We worked to establish training compliance with the City's staff. We crafted multiple classes and delivered these to them at their location.
2020	MT	Ravalli Co. Road Improvements, Stevensville, MT - Middle Burnt Fk.	One on one on-site visit	Infrastructure Management	Ravalli County	Over the course of a few weeks, LTAP provided technical information and materials analysis on-site for construction related and materials quality related concerns.
2020	MT	Fergus Co. - CaCl2 Aqueous solution inquiry	One on one on-site visit	Construction & Maintenance	Fergus County	Reviewed with the county common processes and procedures when aqueous CaCl can be used and how to mix and apply in large volumes.
2020	MT	Prairie Co. Gravel Specifications and Sieve order specs.	Phone Call	Pavement & Materials	Prairie County	Provided technical information and materials specifications as well as sampling procedures and sieve sizes necessary for on-site evaluation for roadway materials quality related concerns. Project was successful.
2020	MT	Ravalli County - Troyer Crushing, Stevensville/Ravalli Co. - PI incorporation for Ravalli Co.	Phone Call	Pavement & Materials	Ravalli County	Provided technical information and materials specifications as well as sampling procedures and sieve sizes necessary for on-site evaluation for roadway materials quality related concerns. Successful interaction.
2020	MT	Stillwater Co. Road Department Mark Schreiner - Signing and Guardrail	Phone Call	Construction & Maintenance	Stillwater County	Provided technical information and materials specifications and standard drawings for question regarding guardrail installation, end treatments and length of need.
2020	MT	Valley County - Cherry Creek Rd. Stabilization	Phone Call	Pavement & Materials	Valley County	Provided technical information and materials specifications as a material recommendation for emulsified asphalt use on their roadway that was severely raveling. Overall, recommendations were followed, and road performance is much improved.
2020	MT	Ravalli Co Road Dept - Asphalt Roads - improvements prioritization	Phone Call	Pavement & Materials	Ravalli County	Responded to a request for specific PASER evaluation methodology and Pavement preservation techniques. Currently working with the County to establish maintenance and repair protocol and prioritization strategies based on PASER ratings.

2020	MT	Ravalli Co. Pavement management and preservation	Phone Call	Infrastructure Management	Ravalli County	Responded to a request for specific Pavement preservation and evaluation techniques. Currently working with the County to establish maintenance and repair protocol and prioritization strategies based on PASER ratings.
2020	MT	APWA Partnerships - Snow Rodeo Planning/Cancellation	Written Correspondence	Public Administration & Quality	APWA/MACRS	Prepared a full program for LTAP hosted training and Snow Rodeo event prior to cancellation

Trainings Delivered

Year	Calendar Year Quarter	State	Training Type	Session Title	Program Area	Length (hours)	Local Agencies Attended	Local Agency	Tribal	State	Consult-ant	Contractor
2020	1st	MT	Face to Face	Work Zone Tech in Helena	Work Zone Safety	8	3	4		1		1
2020	1st	MT	Face to Face	Traffic Control Supervisor in Helena	Workforce Development	8	3	4		1		1
2020	1st	MT	Face to Face	Traffic Control Supervisor in Helena	Workforce Development	8	3	4		1		1
2020	1st	MT	Face to Face	Flagging Train the Trainer: Helena	Workforce Development	6	1	1		1		1
2020	1st	MT	Face to Face	Flagging: Bozeman	Work Zone Safety	6	6	14			2	5
2020	1st	MT	Face to Face	Flagging in Butte at Highland College	Work Zone Safety	6	0	0			2	22
2020	1st	MT	Face to Face	Flagging: Kalispell	Work Zone Safety	6	0	0			2	10
2020	1st	MT	Face to Face	First Aid at Crow Tribe	Work Zone Safety	8	1	0	12			
2020	1st	MT	Face to Face	Flagging at Crow Tribe	Work Zone Safety	6	1		17			
2020	1st	MT	Face to Face	Traffic Control Supervisor in Bozeman	Workforce Development	16	1	2				
2020	1st	MT	Face to Face	MSHA Refresher in Cut Bank	Workforce Development	8	1	23				6
2020	1st	MT	Face to Face	Flagging: Missoula	Work Zone Safety	6	1	25				
2020	1st	MT	Face to Face	Traffic Control Tech. in Missoula	Work Zone Safety	8	1	23				
2020	1st	MT	Face to Face	Flagging: Fort Benton	Work Zone Safety	6	1	5				1
2020	1st	MT	Face to Face	Flagging: Bozeman	Work Zone Safety	6	1	9				4
2020	1st	MT	Face to Face	Traffic Control Supervisor in Bozeman	Workforce Development	8	1	2				
2020	1st	MT	Face to Face	Traffic Control Supervisor in Bozeman	Workforce Development	8	1	2				
2020	2nd	MT	Face to Face	Flagging Class: Online Refresher	Work Zone Safety	6	1	0				12
2020	2nd	MT	Face to Face	Flagging Class: Online Refresher	Work Zone Safety	6	1	4		3		3

2020	2nd	MT	Face to Face	Flagging Class: Online Refresher	Work Zone Safety	6	1	0				7
2020	2nd	MT	Face to Face	Flagging: Billings 2 classes	Work Zone Safety	6	1	7	10			2
2020	2nd	MT	Face to Face	Flagging: Miles City 2 classes	Work Zone Safety	6	1	12	5			
2020	2nd	MT	Face to Face	Flagging: Yellowstone Park	Work Zone Safety	6	1	7				
2020	2nd	MT	Face to Face	Flagging: Billings	Work Zone Safety	6	1	3	3			
2020	2nd	MT	Face to Face	First Aid: Missoula	Worker Safety	8	1	30				
2020	2nd	MT	Face to Face	Flagging: Missoula	Work Zone Safety	6	1	24				
2020	2nd	MT	Face to Face	First Aid: Missoula	Worker Safety	8	1	28				
2020	2nd	MT	Face to Face	Flagging: Missoula	Work Zone Safety	6		31				
2020	2nd	MT	Face to Face	Missoula: Equipment Safety/Walk-around	Worker Safety	3	1	25				
2020	2nd	MT	Face to Face	Missoula Snowplow Ops/Don't crowd the plow	Construction & Maintenance	3	1	25				
2020	2nd	MT	Face to Face	Missoula: Equipment Safety/Walk-around	Worker Safety	3	1	23				
2020	2nd	MT	Face to Face	Missoula Snowplow Ops/Don't crowd the plow	Construction & Maintenance	3	1	23				
2020	2nd	MT	Face to Face	Flagging: Hamilton	Work Zone Safety	6	1	16				
2020	2nd	MT	Face to Face	Forklift Training: Bozeman	Workforce Development	6	1	17				
2020	3rd	MT	Face to Face	Flagging Class: Butte	Work Zone Safety	6	1	22				
2020	3rd	MT	Face to Face	District Meetings-Glasgow: Gravel Roads	Construction & Maintenance	3	1	27				
2020	3rd	MT	Face to Face	District Meetings-Glasgow: Silica/Working in Traffic/Work Zones	Worker Safety	3	1	27				
2020	3rd	MT	Face to Face	District Meetings-Miles City: Gravel Roads	Construction & Maintenance	3	1	24				
2020	3rd	MT	Face to Face	District Meetings-Miles City: Silica/Working in Traffic/Work Zones	Worker Safety	3	1	24				
2020	3rd	MT	Face to Face	Flagging: Ennis	Work Zone Safety	6	1	3				4
2020	3rd	MT	Face to Face	District Meetings-Fort Benton: Gravel Roads	Construction & Maintenance	3	1	9				
2020	3rd	MT	Face to Face	District Meetings-Fort Benton: Silica/Working in Traffic/Work Zones	Worker Safety	3	1	9				
2020	3rd	MT	Face to Face	Forklift Training: Hamilton	Workforce Development	5	1	16				

2020	3rd	MT	Face to Face	Flagging: City of Missoula	Work Zone Safety	6	1	23				
2020	3rd	MT	Face to Face	Work Zone Tech: MSLA City	Work Zone Safety	8		8				
2020	3rd	MT	Face to Face	Flagging: Lame Deer	Work Zone Safety	6	1	0	30			
2020	3rd	MT	Face to Face	Flagging: City of Billings	Work Zone Safety	6	1	7				
						<b>283</b>	<b>54</b>	<b>592</b>	<b>77</b>	<b>7</b>	<b>6</b>	<b>80</b>
2020	1st	MT	Online	Webinar: Walk Arounds, Waste Oil, and Split Rim Tire	Worker Safety	0.5	25	86				
2020	1st	MT	Online	Webinar: Back Safety and Fall Prevention Basics	Worker Safety	0.5	22	77				
2020	1st	MT	Online	Webinar: First Aid Review	Worker Safety	0.5	15	56				
2020	1st	MT	Online	Webinar: Hygiene Blood & Bodily Fluid Safety Webinar	Worker Safety	0.5	7	33				
2020	1st	MT	Online	Webinar: Culvert Installation, Excavation, and Inspection on Low Volume Roads	Infrastructure Management	0.5	35	118				
2020	2nd	MT	Online	Webinar: Working Remotely and Dealing with Stress	Public Administration & Quality	0.5	10	43				
2020	2nd	MT	Online	Webinar: What's Lurking Around in the Spring	Worker Safety	0.5	11	46				
2020	2nd	MT	Online	Webinar: Tire Safety	Worker Safety	0.5	12	47				
2020	2nd	MT	Online	Webinar: Hand and Power Tools	Worker Safety	0.5	7	34				
2020	2nd	MT	Online	Webinar: Respirable Crystalline Silica in the Workplace	Worker Safety	0.5	6	30				
2020	2nd	MT	Online	Webinar: Road Safety Certificate Program	Workforce Development	0.5	9	39				
2020	3rd	MT	Online	Webinar: Chain Saw Safety	Worker Safety	0.5	2	19				
2020	3rd	MT	Online	Webinar: MDT Bridge Load Posting Program	Infrastructure Management	0.5	18	65				
2020	3rd	MT	Online	Webinar: Confined Space Safety	Worker Safety	0.5	5	26				
						<b>7</b>	<b>184</b>	<b>719</b>				



## **Appendix C: LTAP Staff**

**Matt Ulberg, PE – Director (1.0 FTE)**

**Melissa Schaak - Program Coordinator (1.0 FTE)**

**Shawna Page -Field Training Professional (0.75 FTE)**

## Appendix D: Distance Learning Lessons

Sixteen online webinars were held via Adobe Connect through the WTI assistance:

- Walk Arounds, Waste Oil, and Split Rim Tire
- Back Safety and Fall Prevention Basics
- First Aid Review
- Hygiene, Blood and Bodily Fluid Safety in the Workplace
- Culvert Installation, Excavation, and Inspection on Low Volume Roads
- Working Remotely and Dealing with Stress
- LTAP Safety Meeting, What's Lurking Around in the Spring
- Tire Safety
- Respirable Crystalline Silica in the Workplace
- Overview of the Road Safety Champion Program
- Chain Saw Safety
- Bridge Load Posting Program
- Confined Space Safety
- Winter Seasonal Safety and PPE
- Holiday Safety Tips for the Workplace and Home
- Work Zone Safety in the Winter

Other distance learning programs used and available for use:

- National Center for Rural Roads Safety online resources
- MDT's GoToMeetings
- MDT's connection with TLN (Transportation Learning Network) live training sessions
- NHI's training sessions to MDT's telecom sites in Montana
- National LTAP Clearinghouse's Adobe Pro Connect
- Webinars from NHI, FHWA, and other LTAPs

Montana LTAP provided Montana FHWA dissemination of Every Day Counts Dynamic Webinar information for their events and will continue to work with them for future EDC webinars.

## Appendix E: 2021-2022 Montana LTAP Draft Workshop Schedule

(rev. 4/20/2021)

### JUNE 2021 (end of SFY 2021)

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
June	NLTAPA Conference Committee Planning
June (TBD): Missoula	Flagger Certification Class
June (TBD): Butte	Flagger Certification Class
June (TBD): Missoula	Flagger Certification Class
June (TBD): TBD	MACRS trainings (replaces Spring Trainings)
June (TBD): TBD	MACRS trainings (replaces Spring Trainings)
June (TBD): TBD	MACRS trainings (replaces Spring Trainings)

## SFY 2021-2022

### JULY 2021

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
July xx: TBD	MACRS trainings (replaces Spring Trainings)
July xx: TBD	MACRS trainings (replaces Spring Trainings)
July xx: TBD	Equipment training
July xx: TBD	IDIQ Trainings
July	NLTAPA +NTTD Annual Meeting

### AUGUST

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
August (TBD):	Motor Grader Operator training

### SEPTEMBER

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
Sept xx : Helena	APWA Operator Excellence & Equipment Safety Training (snow rodeo)
Sept. xx: Helena	Winter Maintenance and Safety/ Load Securement
Sept xx: (TBD)	National Tribal Roads Conference

### OCTOBER

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
October x: Great Falls	MACRS Training (Leadership)
October x: Great Falls	MACRS Planning Meeting

October (TBD)	League of Cities and Towns, Public Works Directors Meeting
October x: (up to 8 locations TBD)	MACRS Fall District Meeting: (Subjects TBD)
	<u>Likely locations: Kalispell, Shelby, Helena, Bozeman, Billings, Miles City, Sidney, Glasgow</u>
TBD	On-Demand Subjects
Regional Roads Conference – Sioux Falls, SD or Rapid City, SD	

## NOVEMBER

Nov. x-x	NLTAPA Exec Com. Retreat Columbus, OH.
NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings

## DECEMBER 2021

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings

## Calendar Year 2022

### JANUARY 2022

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
January x-x: Washington, DC	TRB <b>Annual Meeting</b> , Walter E. Washington <b>Convention</b> Center
January xx-xx: Helena	19 <sup>th</sup> Annual Safety Congress:
Jan. 2x – Work Zone Technician	
Jan. 2x – Traffic Control Supervisor	
Jan. 3x – Traffic Control Supervisor	
Jan. 3x – Train the Trainer	

### FEBRUARY 2022

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
Feb/March: TBD	Asphalt Conference
Feb/March: TBD	MDT Construction Meeting with Contractors

### MARCH 2022

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
March xx: Kalispell	Work Zone Flagging
March xx: Great Falls	Work Zone Flagging
March xx: Bozeman	Work Zone Flagging

March 29, 2021: Great Falls  
**March 30- April 1: Great Falls**

MACRS 40<sup>th</sup> Annual Spring: Pre-conference LTAP Training  
**MACRS 40<sup>th</sup> Annual Conference, Heritage Inn**

## **APRIL 2022**

NLTAPA:  
 3<sup>rd</sup> Tuesday  
 TBD  
 April 1x: Billings  
 April 1x: Miles City  
 April 1x: Glendive  
 April 1x: Glasgow  
 April? 2021:

Conference Calls  
 MT LTAP Webinar: TBD  
 IDIQ Trainings  
 Work Zone Flagging  
 Work Zone Flagging  
 Work Zone Flagging  
 Work Zone Flagging  
 NACE Annual Meeting (NLTAPA)

## **MAY 2022**

NLTAPA:  
 3<sup>rd</sup> Tuesday  
 TBD  
 May x: (6-7 locations TBD)  
 May 2021 (Virtual)  
 May (TBD)  
 Work Zone (on demand)  
 Traffic Control Supervisor (on demand)

Conference Calls  
 MT LTAP Webinar: TBD  
 IDIQ Trainings  
 MACRS Spring District Meeting: TBD  
 Regional Meeting: LTAP North Central Region  
 Flagger (on demand)

Traffic Control Technician (on demand)

## **JUNE 2022**

NLTAPA:  
 3<sup>rd</sup> Tuesday  
 TBD  
 June x: Bozeman  
 June xx: Bozeman  
 June xx: Bozeman  
 June (TBD)  
 Work Zone (on demand)  
 Traffic Control Supervisor (on demand)

Conference Calls  
 MT LTAP Webinar: TBD  
 IDIQ Trainings  
 Work Zone Flagging  
 MACRS Executive Board Meeting  
 LTAP Advisory Board Meeting  
 Flagger (on demand)

Traffic Control Technician (on demand)

## **End of STATE Fiscal Year**

## **Addendum: July-September SFY 2021-2022 (to end of FFY)**

### **JULY 2022**

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
July (TBD)	Equipment training
July (TBD)	IDIQ Trainings
July	NLTAPA +NTTD Annual Meeting
July (TBD)	Flagger (on demand)
Work Zone (on demand)	
Traffic Control Supervisor (on demand)	Traffic Control Technician (on demand)

### **AUGUST 2022**

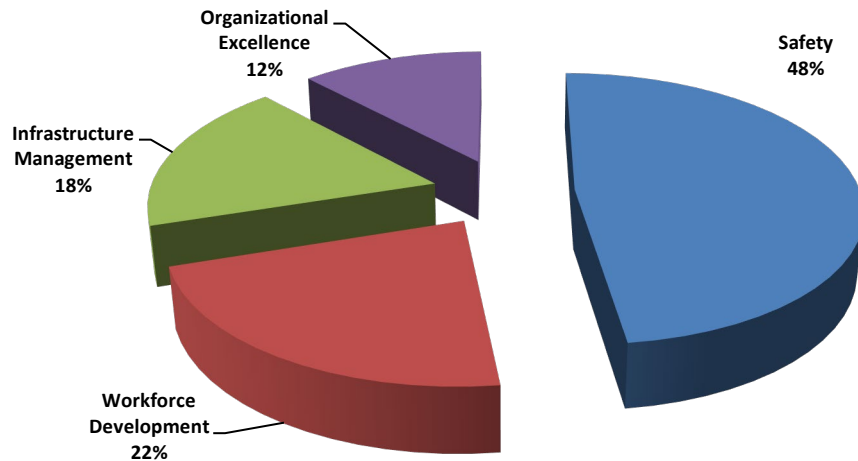
NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
August (TBD):	Equipment Safety Trainings
Flagger (on demand)	
Work Zone (on demand)	
Traffic Control Supervisor (on demand)	Traffic Control Technician (on demand)

### **SEPTEMBER 2022**

NLTAPA:	Conference Calls
3 <sup>rd</sup> Tuesday	MT LTAP Webinar: TBD
TBD	IDIQ Trainings
Sept xx : Helena	APWA Snow Rodeo & Equipment Safety Training
Sept. xx: Helena	Winter Maintenance and Safety/ Load Securement
Sept 15-18: (Location???)	National Tribal Roads Conference

## Appendix F: Needs Assessment Survey Topics

### Four Focus Areas



#### Infrastructure Management

Sept. 9 – 10, 2019  
Snow Rodeo: Equipment Safety

Sept 23, 2019  
League of Cities and Towns: Road Management

Feb. 21, 2020  
Asphalt Conference:

May 5 - 21, 2020  
MACRS: Gravel Road Maintenance and Design

#### Workforce Development

Sept. 9 – 10, 2019  
Snow Rodeo: Equipment Safety

Jan. 27 - 30, 2020  
Safety Congress: Workzone Safety

March 30 – April 3, 2020  
MACRS Spring Conference: Motivational Speaker, Leadership, Ethics

#### Organizational Excellence

Sept 23, 2018  
League of Cities and Towns  
Public Works Directors Meeting

Nov. 6, 2020: LTAP Leadership Course

November 6 - 7, 2020  
MACRS Planning Meeting

May 26 – 28, 2020 LTAP Regional Meeting

June 10, 2020: MACRS Executive Meeting

June 11, 2020: LTAP Advisory Board Meeting

#### Safety

**Worker Safety**  
October 8 - 23, 2019  
MACRS Fall District Meetings

Jan. 27 - 30, 2020  
Safety Congress: Work Zone Technician, Work Zone Traffic Control Supervisor, & Train the Trainer

March 10, 11 12, 2020  
April 14, 15, 16, 17, 2020  
Work Zone Flagging, Work Zone Tech

June 9, 2020  
Work Zone Flagging, Work Zone Tech

## Appendix G: Summary of Work Tasks

The following seven technical assistance work tasks were assigned by FHWA when LTAP was first created. Although each LTAP operates to meet its specific customers' needs, all were given these specific directives to fulfill each quarter. As electronic methods of communication and training are developed, Montana LTAP has progressively evolved to stay abreast with the most effective means of transportation technology distribution.

1. **Seminars/Training Sessions:** Training sessions provided by Montana LTAP are guided by the needs requested from our constituents. For meetings, conferences and training sessions, the following summarizes allowable costs under this agreement: travel costs, facilities rental and necessary equipment, supplies, meals, and coffee breaks (when meals are an integral part of a conference or meeting).

We team with industry partners to produce specialized trainings such as the Asphalt Conference, Asphalt Repair and Maintenance class, Legal issues for County Road Supervisors, FHWA Safety Center offerings and NHI courses as relevant. Montana LTAP presented webinar safety meetings that have and will continued to be used for safety meetings for all constituents.

2. **Information and On-Site Technical Assistance:** The LTAP program will continue to contract individuals who can offer expertise in a variety of subject areas and on-site technical assistance. LTAP will continue to update and develop listservs to enhance communication and share timely, pertinent information with all other transportation entities. Present listservs include Montana Association of County Road Supervisors (all 56 counties), Montana Association of Counties (all county commissioners), League of Cities and Towns (public works directors, mayors, and local city officials), and Montana Department of Transportation (employees). Our toll-free line has proven a useful tool for clients as has our website providing training opportunities and links to other libraries, newsletters, timely training communications through the list serv and partners websites.
3. **Digital Newsletter:** The LTAP electronic newsletter provides current articles regularly distributed to Montana LTAP's audience. Articles are gathered from a variety of sources including various transportation partnerships Montana LTAP has developed. Generally, a lead article demonstrates local expertise in one of the four focus areas each quarter. Announcements of the latest Webinars, DVDs and publications available as appropriate are issued each quarter. The training calendar announces regional and national training opportunities in addition to LTAP's local workshops and training available through LTAP's partners.
4. **Transfer of Technology Materials:** Funding will be directed to maintaining our recorded webinars, producing webinars, publications and DVDs. Montana LTAP will continue to provide webinar links for further training opportunities. At training sessions, printed handouts are provided so participants can update their colleagues on the information discussed at the workshops.



5. **External Communication:** Montana LTAP maintains a mailing list composed of the county road workforce, city and street constituents, county commissioners, public works directors, MDT employees, U.S. Forest Service personnel, and various private transportation entities. Its development originated from the transportation workforce requesting training notifications, library information, quarterly newsletters, and technology research. Throughout the year the list is updated by phone and email requests, address change notices, and conference attendees. With technological advances, LTAP is finding electronic communication via email and our website is becoming more widely used by our audience. It also provides immediate notification.
6. **Evaluation:** Evaluations will continue to be collected at each workshop following the Kirkpatrick level I format to assess our training effectiveness. These evaluations indicate how training courses are valued as well as what is not effective. Over the past years our instructors and course content always scored favorably, in the 90th percentile. There is an area on the evaluation form where participants can express workshop needs. This information is tabulated and presented to the MACRS Executive Committee and the League of Cities and Towns when determining future training direction. Montana LTAP's quarterly report also summarizes the work progress within each of the four focus areas and is sent to the Montana LTAP Advisory Board members and WTI. The annual Advisory Board meeting allows direct input into LTAP's future planning. The FHWA reports of PAR (Performance Assessment Report) in Appendix B, provide overall accomplishments and activities, highlights and challenges faced by Montana LTAP over the contract period. These reports are also discussed at the Advisory Board meeting.

## 7. Future Classes (Potential)

Potential Training Class	Sponsor	Partners
Asbestos Awareness	LTAP	
Asphalt Recycling and Pavement Preservation	LTAP	MDT
Asphalt Maintenance and Repair (2021)	LTAP	Industry, MDT, Asphalt Inst.
Inspector Testing for Flexible Pavements, Advanced Structures, Compaction Testing and Traffic Work Zones	LTAP	MDT
PASER Pavements evaluation and management	LTAP	
Signing Installations and MUTCD Basics	LTAP	MACRS
Tort Liability and Risk Management	LTAP	MDT                      MACo
Traffic Signs & Pavement Markings	LTAP	MDT
Bridge Inspection Refresher Training	MDT	FHWA                      NHI?
Highway Safety Manual (HSM) Focused Training Class	MDT	FHWA
Designing for Pedestrian Safety	WTI	