

# **Montana**

## **Local Technical Assistance Program**

Work Plan and Budget  
July 1, 2016 – June 30, 2017

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## Executive Summary

The Local Technical Assistance Program (LTAP) has a 32-year proven track record as an outreach program for the transportation workforce and has become a trusted resource for local agencies seeking training and technical assistance.

Montana LTAP's ability to efficiently and effectively transfer technology and information through courses and relationships

### 2015 Montana LTAP Training Opportunities

- **3,967 Participants Attended**
- **73 Training Sessions**
- **281 Training Hours**
- **12,940 Participant Hours**

to our rural and urban partners and customers is its primary measure of success. This past year Montana LTAP covered 73 training sessions in presentations attended by 3,967 participants. With regards to training hours, Montana LTAP providing 281 hours of training and 12,940 participant hours of training.

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

Roads Scholar Program: 2,687 Participants  
2015: 31 Road Scholars Awarded  
Total Scholars To Date: 289  
Total Road Masters: 15

The mission of Montana LTAP Safety Congress is to provide learning on all aspects of transportation safety. A very successful training effort is through our half hour, monthly webinars. This method saves on travel time and costs by providing requested training in an electronic 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 discretion.

Keys to Intersection Safety & Liability/Clear Zone Safety; Gravel Pit/Trenching Safety; Public Relations; Winter Maintenance; Forklift Safety; Front End Loader Safety; Work Zone Flagging and Certification; Road Stabilization; Weed Mowing Safety & Mobile Operations; ABC's of First Aid; Leadership and Being a Leader

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In January 2016, Montana LTAP held its 14<sup>th</sup> Annual Safety Congress in Great Falls. At this training event, most safety topics covered were relevant to State and Local transportation providers. The Safety Congress brought together like-minded people to convene in a central location. Participants came from cities, counties and state departments who have responsibilities for permanent signing, work zone signing, or are in charge of overall roadway safety.

Pavement Surface Evaluation and Rating System (PASER), for both paved and unpaved roads, has been implemented with Local Governments for ten years now. In 2008, all 56 counties participated in an LTAP-sponsored rating of all county roads.

An effort is currently underway to re-evaluate all local roads. This has assisted counties in making application for Federal Lands Access Program (FLAP) funds. The cities have used this rating system to access small urban funding. In some cases LTAP has worked with Local Governments to prepare a complete pavement management system for these purposes.

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 individuals, and other stakeholders. By sharing and improving the distribution of this 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, Montana Association of Counties, Montana League of Cities and Towns, American Public Works Association, National Association of County Engineers, and Montana Department of Transportation. The overarching methodology of Montana LTAP will be to:

- **integrate** services and resources into a centralized location;
- **coordinate** among all stakeholders; and

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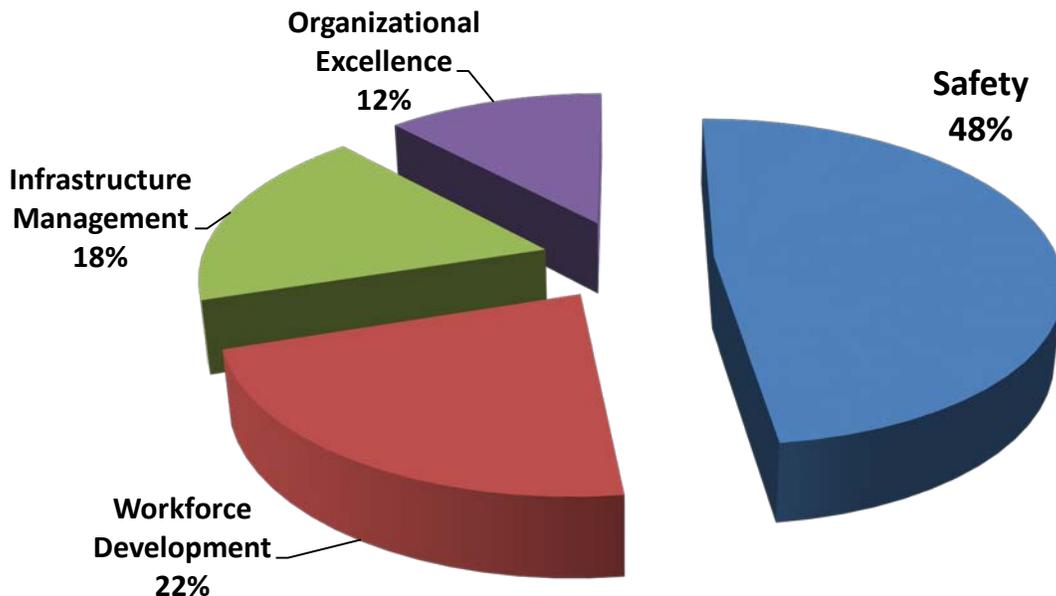
•**accelerate** distribution of transportation technology by moving Federal Highway Administration mandates, new transportation resources, and information into the hands of constituents.

Four focus areas are 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:

- Workforce Development**
- Organizational Excellence**

- Safety**
- Infrastructure Management**

### Four Focus Areas



**Figure 1: Four Focus Areas**

The tasks engaged in by LTAP to achieve its objectives are seminars and training sessions, information sharing and on-site technical assistance, quarterly newsletters, transfer of technology materials, external communication, and evaluation. The above figure shows the percentage of its budget Montana LTAP allocated to each of these focus areas.

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## Introduction

Training requests, technology transfer, and implementation of best practices throughout the transportation community have been considerable and will continue to be so given 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.

LTAP plays a unique part in transportation education. This national program's development has answered a pressing need for transportation training and technical assistance at the local level where resources are limited. 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 all about sharing knowledge and best practices. In many instances LTAP is the primary source of professional development for the transportation staffs of local governments.

In order to provide technical transportation training to local road agencies, public works agencies, public officials, county and municipal engineers, and the Montana Department of Transportation, LTAP will continue to be an easily accessible, central source for:

- Transportation Information**
- Technical Assistance**
- Coordination and Outreach Assistance**

Montana LTAP's ability to efficiently and effectively transfer technology and information through courses and relationships to our rural and urban partners and customers is its primary measure of success. See Figure 2 for the diversity and training areas covered in the state. Montana LTAP staff has played key roles in the development, coordination, analysis, enhancement and day-to-day operations of transportation technology transfer.

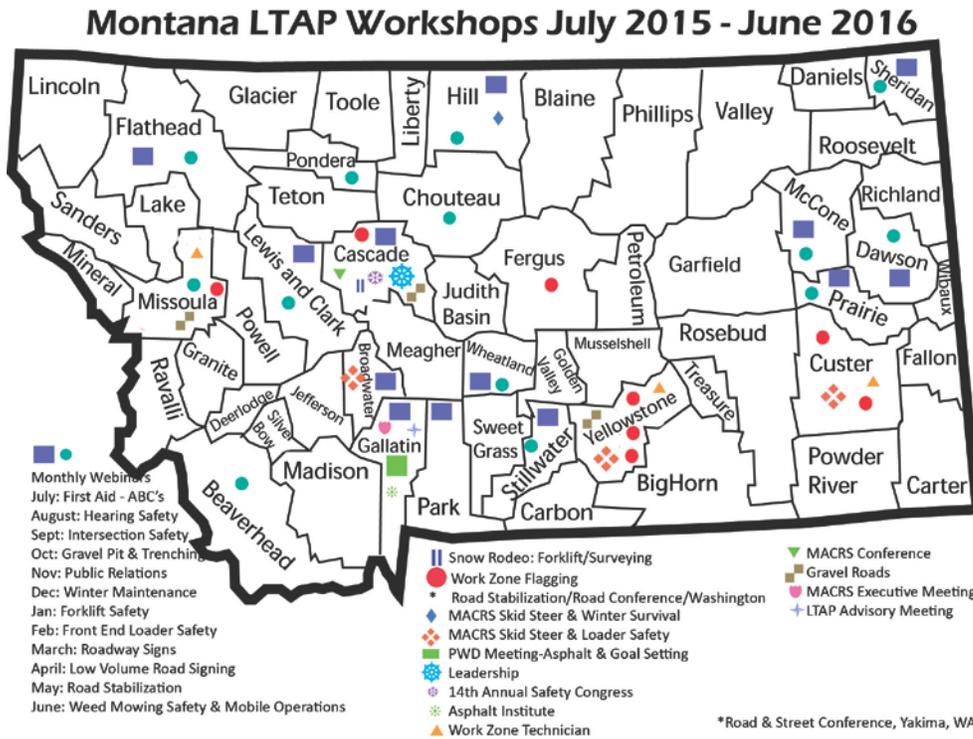


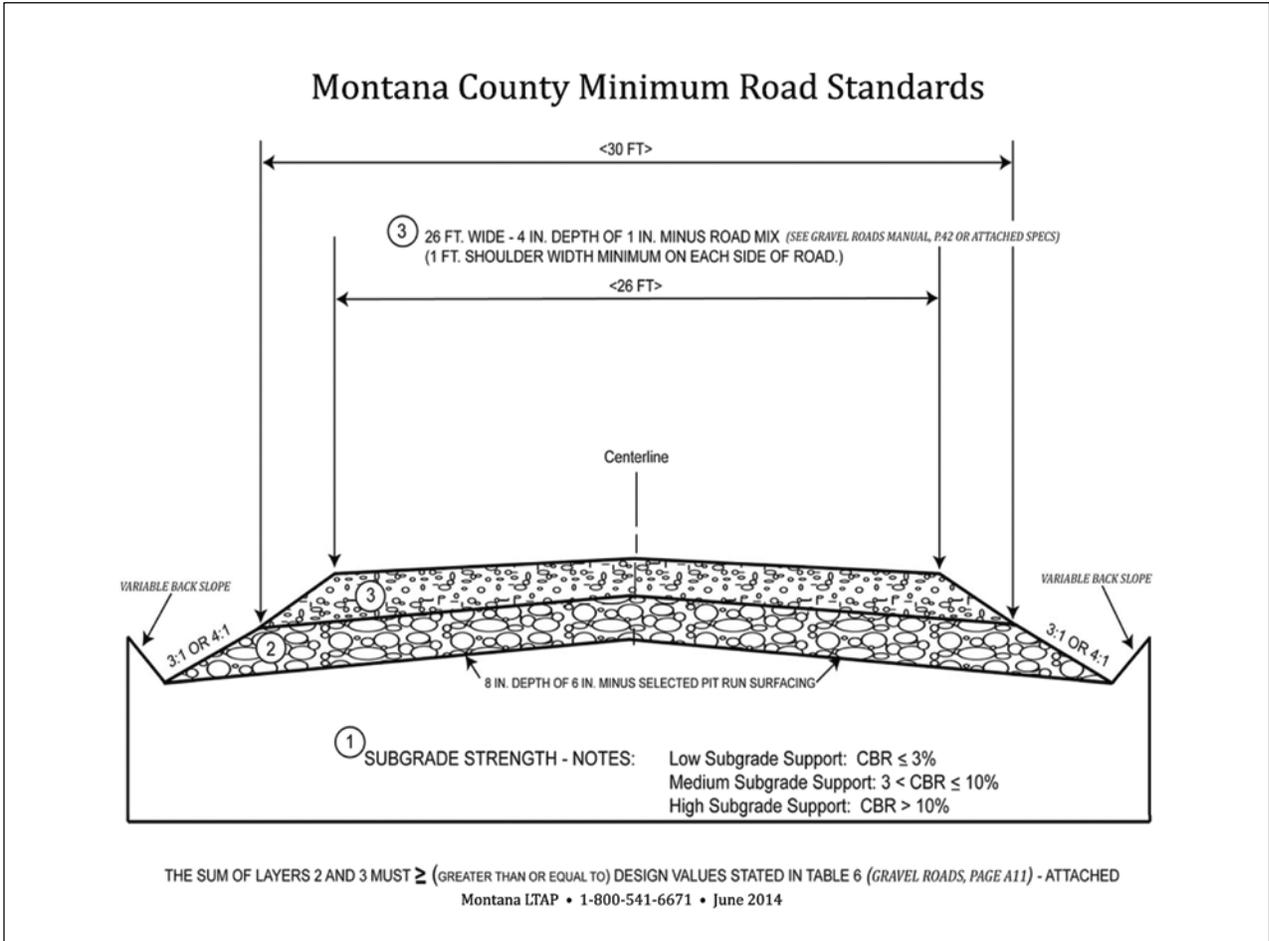
Figure 2: Montana LTAP 2015 Workshop Map

Many Montana counties have learned better methods of gravel road maintenance. Through use of good materials, techniques and stabilization many counties grade roads once or twice a year rather than the six to eight times in the past as indicated below in Table 1 and Figure 3.

| Cost Savings |          |               |          | Materials Lost |          |                                |            |
|--------------|----------|---------------|----------|----------------|----------|--------------------------------|------------|
| Reshaping    | Per/Year | Cost to Treat | SubTotal | Tons           | Cost/Ton | SubTotal                       | Total Cost |
| \$375/mile   | 8 Times  | \$0           | \$3,000  | 1,000          | \$11.50  | \$11,500                       | \$14,500   |
| \$375/mile   | 1 Time   | \$4,000       | \$4,375  | 300            | \$11.50  | \$3,450                        | \$7,825    |
|              |          |               |          |                |          | Possible Savings Treating Road | \$6,675    |

Based on Resources From:  
 Richland County Road Dept. Montana  
 Larimer County, Colorado Study  
 Steven V. Jenkins Gravel Roads Study

Table 1. Cost Savings/Materials Lost Chart



**Figure 3: Montana LTAP Minimum Road Standards**

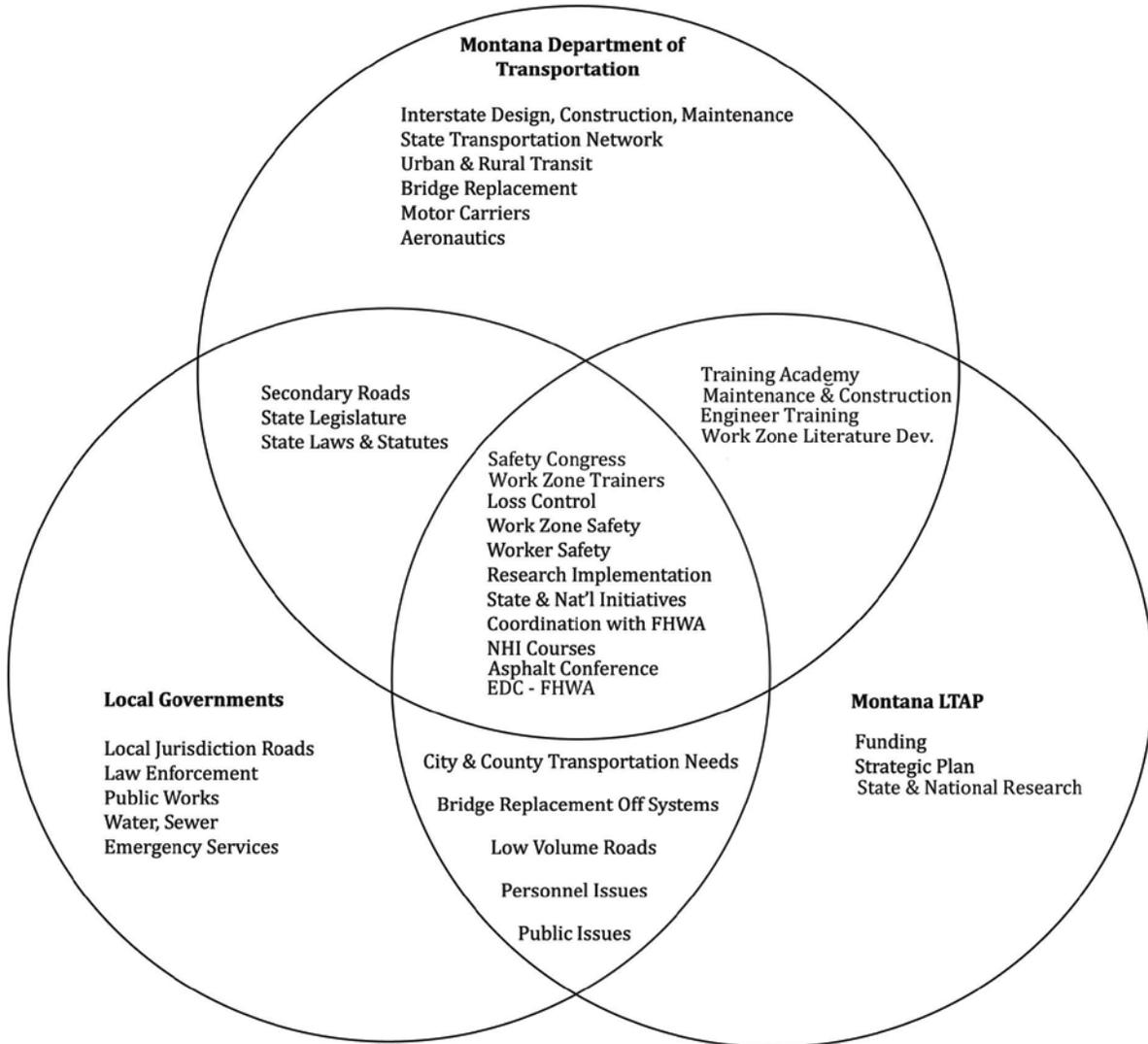
One particularly successful means for promoting ongoing skills development at the local and tribal levels is the Roads Scholar and Road Master programs, which recognize staff for reaching competency levels through training and development of transportation expertise.

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.

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There are currently fifteen Road Masters who successfully participated in thirty classes, including certification in Forklift, Motorgrader, Work Zone Technician, Traffic Control Supervisor course; holding a MACRS position as officer or committee representative; and team teaching with instructor during a course of their expertise.

Because Montana LTAP cannot teach all, Figure 4 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.



**Figure 4. Stakeholders Intersection**

### ***Partnerships***

Montana LTAP conducted the following team projects:

- Nicholas Ward, Ph.D., professor in the Mechanical and Industrial Engineering Department at Montana State University and Western Transportation Institute Research Engineer, conducts research for the Center for Health and Safety Culture. The Center is comprised of an interdisciplinary team of researchers and practitioners from across North America dedicated to using science to address social issues. The mission of the center is to improve health and safety and increase livability through cultural transformation (<http://www.westerntransportationinstitute.org/centers/culture>). Montana LTAP is involved in providing assistance.
- Partnered with North American Salt on Gravel Roads Courses for Montana and western states.

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

- Flathead Valley Community College
- Salish-Kootenai College
- Miles City Community College
- MSU – Northern at Havre
- Opportunity Link and Fort Belknap Community College (covering an 11-county region in north central Montana that includes three Indian reservations and the Little Shell Chippewa Tribe).
- Montana Safety Fest

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## Qualifications and Experience

### *Professional Staff*

Currently there are three full-time staff members at Montana LTAP with one or two Montana State University work-study students assisting on various projects as need dictates.

- ***Steven V. Jenkins, P.E.***

Director of Montana LTAP, Steve has over 30 years of experience in working with local and tribal governments in roadway design, transportation planning, materials, research, and hydraulics. **He provides a broad range of educational programs to bring training and technical assistance** to local city, county, and state entities throughout the state of Montana (Appendix C).

- ***Genevieve Houska, B.S.***

Administrative Associate and Conference Coordinator, Montana LTAP, Genevieve has 18 years of experience in private and public sector accounting along with ten years of travel planning and conference coordination experience. **She provides the LTAP office with expertise in accounting and budget planning, and coordinates almost 70 workshops and conferences per year for the program.**

- ***Michele Beck, B. A.***

As Montana LTAP's Graphic Designer, Michele brings to the table over 30 years of creative visual experience. In addition to her graphic design experience, she taught adult education for three years and understands the needs of adult students. **Michele's fourteen years of experience at Montana LTAP developing and designing safety training programs for the transportation workforce provides her with an in-depth knowledge of this broad field.** She served on the National LTAP Communications Committee for two years and presents at the National LTAP Conference and LTAP Region 7 meetings. She has served two years on National LTAP Association's Safety Workforce Group as Communications Liaison.

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## Program Overview

### *Customer Needs Assessments and Program Development*

Our transportation workforce is constantly changing, and it is critical Montana LTAP monitor the current and future needs of transportation providers. Skilled employees are migrating to eastern Montana to oil impacted counties. To keep up with these changes, a formal Needs Assessment will be conducted again in 2016. 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, Needs Assessment Survey (Appendix D), various survey questionnaires, personal interviews, and injury insurance reports to gain a broad scope of the education technology transfer needs of our workforce. Offered training and resources reflect requests made by our partners and customers.

Methods of Needs Assessments conducted over the past year:

•**Questionnaires and Surveys:**

Workshop Evaluations  
Electronic Version of Needs Assessment Survey on Our Website  
Hard Copies of Needs Assessment Surveys Gathered at District Meetings

•**Key Informant Interviews:**

Personal Interviews with City Transportation Officials and County Road Constituents

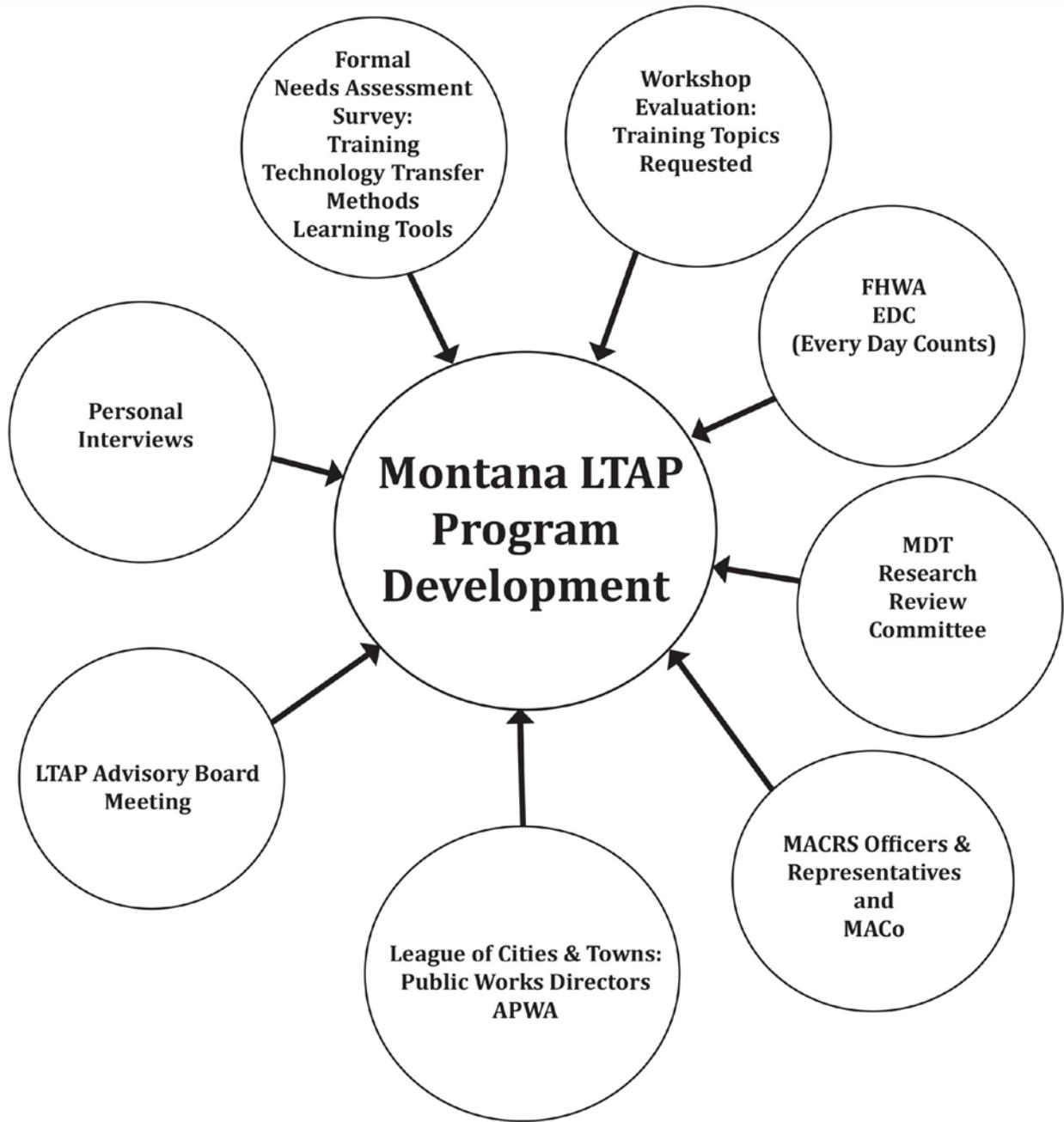
•**Group Assessment Methods:**

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

•**Mapping**

Roads Scholar Map  
Annual Training Workshop Map

By analyzing these assessments, LTAP is able to develop programs that best meet customers' needs. On the following page, Figure 5 illustrates the variety of information gathered and put into action.



**Figure 5. Program Development**

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## ***Summary of Program Development Input***

### **I. Formal Needs Assessment Survey**

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

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

##### **Top 3 Responses**

- Winter Survival
- Back Safety
- Slips, Trips, & Falls

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

##### **Top 3 Responses**

- Work Zone Certifications (Flagging & Work Zone Tech)
- Emergency Management Signing
- Sign Retroreflectivity

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

##### **Top 4 Responses**

- Gravel Road Maintenance & Design (Materials Focus/Gravel Pits)
- Winter Maintenance
- County Road Standards
- Culvert Placement & Trenching

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

##### **Top 3 Responses**

- Driving Safety/Dump Truck Safety
- Excavation & Loader Safety
- Load Securement  
(Requesting Expert Equipment Operators, innovations, and new products)

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

##### **Top 3 Responses**

- Crew Supervision
- Motivation
- Technical Leadership

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## II. MDT Research Review Committee

- Urban Issues
- Pavement Management (Small Urban Areas) - PASER
- Work Zones

## III. League of Cities and Towns: City Transportation Officials

- Asphalt
- Work Zone Safety
- Personal Safety/Personnel Issues
- Liabilities/Safety Audits
- AASHTO Design
- Stormwater Drainage Issues

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

- 1) Worker Safety (PPE)
- 2) Gravel Roads
- 3) Work Zone Safety
- 4) General Safety in Work Areas
- 5) Personnel Issues
- 6) Asset Management

## V. MACRS Officers and Representatives and MACo

### ***Spring Training Requests:***

- 1) Gravel Roads Design and Maintenance
- 2) Summer Survival
- 3) Work Zone Technician

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

- 1) Motivational Speaker/Leadership
- 2) Employee Issues/Ethics
- 3) Personal Liabilities for Road Personnel
- 4) Gravel Pits & Reclamation
- 5) Roadway Management
- 6) Gravel Road Stabilization

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

- 1) Large Truck and Loader Safety
- 2) Gravel/Materials and Gravel Pit Safety
- 3) Winter Maintenance and Anti-Icing

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## VI. Federal Highway Administration

- 1) Every Day Counts Initiative (EDC)

## VII. Workshop Evaluation: Training Topics Requested

Survey is designed for participant to select more than one topic. These topics are rated from most frequently selected to least:

|                          |                        |
|--------------------------|------------------------|
| Chip Seal/Asphalt        |                        |
| Technical Leadership     |                        |
| Winter Maintenance       |                        |
| Gravel Roads             | Surveying              |
| Signing                  | County Road Standards  |
| Cattle Guards            | Winter Survival        |
| Summer Survival          | Weed Mowing            |
| Dust Control             | Surveying              |
| Loader Safety            | Work Zone              |
| Dump Truck Safety        | Trenching              |
| Skid Steer               | Forklift               |
| CDL Truck Driving Safety | Community Preparedness |
| Plan Reading             | MUTCD – Signing        |
| Part 46 Safety Training  | Safety Audits          |

Over the next decade, the need for training, technology transfer, and implementation of best practices throughout the transportation community will be considerable. Our partnerships with MDT, FHWA, National Highway Institute, and other national transportation partners will allow us to better meet those needs.

The LTAP work plan is derived with consideration of all input provided by customers and funding organizations. Federal initiatives such as Work Zone safety, Sign Retroreflectivity and Asset Management are presented at workshops. Stakeholders provide input through the Advisory Board and other direct requests. Customers and all others provide input through the needs assessments. Interviews and the needs assessments are prioritized according to the topics requested. The resulting proposed training program is described in the next section of this document 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.

## Four Focus Areas

### *Safety Focus Area*

In previous meetings with MDT upper management, work zone safety was requested. Montana LTAP's planned training fulfills this request and also meets the needs assessment surveys' priority requests as indicated on previous pages 10 - 12. LTAP has partnered with MDT and 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. Work Zone Traffic Control Supervisor

In these and other workshops, the importance of seatbelts and danger distractive driving crashes are strongly reinforced. Main contributors to those crashes include hand-held cell phone use, distracted drivers, and drunk drivers.

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 the LTAP budget** is allocated to this area.

Training in this specific area will focus on safety, which includes highway safety and worker/workplace safety. The following proposed course topics will be taught to cover the safety focus area:

- 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

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LTAP will initiate the 15<sup>th</sup> Annual Safety Congress, January 2017, in Great Falls. Topics have been selected from needs assessment surveys and include:

- Work Zone Technician
- Traffic Control Supervisor Certification
- Signing and Clear Zones
- Safety Audits
- Sign Retroreflectivity
- Driving Behavior
- Worker and Personal Safety Topics:  
Hand Safety, Back Safety and Winter Survival

Federal initiatives such as Every Day Counts, Toward Zero Deaths, and the Rural Safety Audits will be covered during this week's courses.

### ***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. On pages 10 and 11, the needs assessment surveys list 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, in particular using the PASER method, PAVement Surface Evaluation and Rating. Following is a list of proposed courses to be covered under infrastructure management:

- Gravel Roads: Materials, Equipment, Design, Construction, DCP, Maintenance, Drainage
- Asphalt: Cold In-Place Recycled Asphalt
- GIS/GPS
- Construction Technique
- Winter Maintenance
- Preconstruction and Design
- Asphalt Management
- Dust Control
- Culverts
- Bridges
- Right of Way
- County Road Standards
- Chip Seal/Asphalt
- League of Cities and Towns:  
Public Works Directors Agenda
- PASER (PAVement Surface  
Evaluation and Rating)
- Storm Water Management
- Warm Mix Asphalt

Montana LTAP will focus on developing strategies to maximize the performance of local governments' 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.

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

LTAP provides training to the transportation workforce at an affordable cost to local governments. The needs assessment surveys on pages 10 through 12 indicated these as high priority selected course topics for this focus area:

- Motor Grader Certification
- Dump Truck Safety
- Gravel Pit Safety
- Liability
- Materials Training
- Asphalt Training
- 25<sup>th</sup> Snow Rodeo Training
- Signing
- Cattleguards
- Forklift
- Loader Safety
- Trenching
- Winter Maintenance
- Community Preparedness
- Surveying
- Weed Mowing

LTAP has partnered with Flathead Valley Community College, Miles City Community College, MSU Northern, Salish-Kootenai College, Opportunity Link and Montana SafetyFest 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 a method of providing training for continued education also. This continuity assures progressive development of our workforce.

### ***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 our stakeholders. By providing training for staff and evaluating training successes, our organizational excellence focus will be met.

Promoting organizational excellence within the constituencies we serve, several leadership courses will be offered again this coming year based on class evaluations from our December 2015 Leadership course that was very well received. Roads Scholar Programs prepare local government personnel for better performance and leadership responsibility. The following organizational excellence courses and assessments are proposed for this focus area:

- Work Ethics
- Crew Supervision
- Needs Assessments
- Center Assessment Report

Other activities that promote Organizational Excellence are described below:

- The Director meets annually with the League of Cities and Towns Public Works Conference Committee to review topic requests and to prepare an agenda for its yearly conference.
- Montana LTAP coordinates with Rocky Mountain APWA Division members the Snow Rodeo event to provide safety training for the first day. The city street departments and county road departments organize and coordinate the Snow Rodeo competition on the second day.
- The four focus areas are developed from all needs assessments presented to our Advisory Board, and from national training requirements passed down to the LTAPs from FHWA. This process assures a team effort in fulfilling training needs.

## **Library Resources and Distance Learning**

Audiovisual materials provide other training opportunities identified by the needs assessments. The majority of counties have at least one if not two safety meetings per month for crew members and use these videos and DVDs for meeting topics. The majority of videos checked out from our library database deal with Roadway Safety and Worker Safety.

The following is a list of the videos most frequently checked out:

- |   |  |
|---|--|
| 1. Slips, Trips, and Falls                      | 8. Blading Unpaved Roads                                     |
| 2. Beware the Bite (Electrical Safety)          | 9. Loader Operation – Part I                                 |
| 3. Heat Stress                                  | 10. Transport Trailer Safety                                 |
| 4. Your Responsibilities as a Dump Truck Driver | 11. Right of Way Mowing Safety                               |
| 5. Defending Your Safety Zone (Back Protection) | 12. It Always Happens to the Other Guy<br>(Equipment Safety) |
| 6. Operating Guide: Motor Grader                |  |
| 7. Motor Grader Operation – Part III and PMA    |  |

Distance learning methods include Montana LTAP monthly safety webinars and other long-distance learning programs (See Appendix E). This past year LTAP provided monthly morning safety webinars based on requests from constituents and through the needs assessments. These monthly webinars will continue to be provided due to constituents' shrinking travel budgets. This method of training is becoming more familiar to our constituents and therefore providing a greater service with our webinars recorded and available at any time for their review. Larger counties such as Missoula County, Sheridan County, and Richland County have all expressed their approval of this method of training. Missoula County appreciated the recorded webinars so they could arrange to view them on their time during their scheduled monthly safety meetings. Being in the farthest northeast corner of Montana, Sheridan County usually has sixteen crew members watching our monthly webinars. This provides a time for all participants to gather and discuss issues and possible solutions. Another eastern county is Richland County who had twenty-seven crew members available to view recent webinars. This has proven to be an affordable method for learning due to vast distances to get to face-to-face training.

## **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 Meeting – Work zone manuals/instructors/training and FHWA mandates
6. Asphalt Conference – partner with Asphalt Institute
7. MDT’s telecom sites and TLN (Transportation Learning Network) – long distance learning
8. FHWA EDC (Every Day Counts) dynamic webinars
9. Montana LTAP Distance Learning Flagger Course

## **Future Initiatives**

Following are five initiatives Montana LTAP proposes to pursue this year:

1. Coordinate and plan January 2017 Fifteenth Annual Safety Congress.
2. Evaluate our cooperative agreement with MDT and the Work Zone Program.
3. Formal Needs Assessment will be accomplished for 2016.
4. Encourage all small urban areas to develop pavement management programs in preparation for applying for federal funding.
5. Prepare tentative workshop schedule for 2016-2017 (Appendix F).

## **Budget**

The following budget provides the basis for Federal, State and University funding of Montana LTAP from July 1, 2016, through June 30, 2017. Expenditures reflect an estimate of last year's expenses and projected goals for the program during the 2016–2017 state fiscal year. As the work progresses, it may be necessary to move monies among the tasks and expense categories; however, the total amount will be adhered to. Salaries stated are estimates. The University reserves the right to provide cost of living increases based on provisions from the Montana Legislature. Table 2 shows a breakdown of total costs according to the four focus areas. Table 3 breaks down the budget by funding source.

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| <b>Focus Areas</b>              | <b>Salary/<br/>Benefits</b> | <b>Prof.<br/>Services</b> | <b>Travel</b> | <b>Supplies/Comm</b> | <b>Minor<br/>Equip</b> | <b>Subtotal</b>   | <b>IDC's</b>     | <b>Total</b>      |
|---------------------------------|-----------------------------|---------------------------|---------------|----------------------|------------------------|-------------------|------------------|-------------------|
| Safety – 48%                    | 113,883.47                  | 0.00                      | 0.00          | 0.00                 | 0.00                   | 113,883.47        | 33,556.37        | 147,439.84        |
| Infrastructure Management – 18% | 42,706.30                   | 0.00                      | 0.00          | 0.00                 | 0.00                   | 42,706.30         | 12,583.64        | 55,289.94         |
| Workforce Development – 22%     | 52,196.59                   | 0.00                      | 0.00          | 0.00                 | 0.00                   | 52,196.59         | 15,380.00        | 67,576.59         |
| Organizational Excellence – 12% | 28,470.87                   | 0.00                      | 0.00          | 0.00                 | 0.00                   | 28,470.87         | 8,389.09         | 36,859.96         |
| <b>TOTAL COSTS</b>              | <b>237,257.23</b>           | <b>0.00</b>               | <b>0.00</b>   | <b>0.00</b>          | <b>0.00</b>            | <b>237,257.23</b> | <b>69,909.10</b> | <b>307,166.33</b> |

**Table 2. Breakdown of Budget by Focus Area**

|  | FEDERAL HIGHWAY<br>ADMINISTRATION | GAS TAX<br>REVENUE Sec. 15-<br>70-101 (1(b.))<br>MCA | MDT SPR          | TOTALS            |
|--|-----------------------------------|--|------------------|-------------------|
| <b>Salaries</b>  |                                   |  |                  |                   |
| Steven V. Jenkins, Director                              | 86,654.36                         |  | 19,179.36        | 105,833.72        |
| Genevieve Albert, Accounting Tech/Conference Coordinator |                                   | 30,548.26  | 8,037.74         | 38,586.00         |
| Michele Beck, Graphics/Librarian                         |                                   | 30,548.26  | 8,037.74         | 38,586.00         |
| M & G Benefits   |                                   | 18,903.48  | 4,973.76         | 23,877.24         |
| <b>S Jenkins Benefits</b>                                | 24,869.80                         |  | 5,504.47         | 30,374.27         |
| <b>Subtotal: Salaries/Benefits</b>                       | <b>111,524.16</b>                 | <b>80,000.00</b>                                     | <b>45,733.07</b> | <b>237,257.23</b> |
| <b>Professional Services</b>                             |                                   |  |                  |                   |
| Conference Speakers, Workshop Trainers                   |                                   |  |                  | 0.00              |
| Printing Expenses  |                                   |  |                  | 0.00              |
| <b>Travel</b>  |                                   |  |                  | 0.00              |
| <b>Supplies/Communications</b>                           |                                   |  |                  | 0.00              |
| <b>Minor Equipment</b>                                   |                                   |  |                  | 0.00              |
| <b>Subtotal: Direct Costs</b>                            | <b>0.00</b>                       | <b>0.00</b>  | <b>0.00</b>      | <b>0.00</b>       |
| <b>TOTAL (Salaries/Benefits, Direct Costs)</b>           | 111,524.16                        | 80,000.00  | 45,733.07        | 237,257.23        |
| Indirect Costs (34.5% FHWA, 25% Gas Tax, 25% MDT SPR)    | 38,475.84                         | 20,000.00  | 11,433.27        | 69,909.10         |
| <b>GRAND TOTAL</b>                                       | <b>150,000.00</b>                 | <b>100,000.00</b>                                    | <b>57,166.34</b> | <b>307,166.33</b> |

**Table 3. Breakdown of Budget by Source**

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## Appendix A: History

### Montana LTAP History

Begun 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 help 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).

Over the past 10 years alone, the LTAP and TTAP centers have achieved the following results:

- They conducted more than 60,000 training events.
- More than 1.5 million local transportation professionals attended LTAP and TTAP training.
- Participants logged more than 9 million hours of training.
- Nearly half of all LTAP and TTAP training included content related to highway and worker safety.
- Centers distributed more than 2 million technical publications and resources in response to requests from local and tribal agencies.
- Local transportation agencies saved an estimated \$8 for every \$1 LTAP spent on information and training.

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## Appendix B: Center Assessment Report

### 2015 LTAP/TTAP Center Assessment Report

Center Name: **Montana Local Technical Assistance Program**

Reporting Period: **January 1 to December 31, 2015**

#### Section One: Center Operations

*Does your Center have an up-to-date succession plan? Provide examples of what you are doing in this area that others may learn from. These could include: creating and/or implementing a strategic plan; identifying the capabilities of your Center and its staff through a skills inventory or resource mapping exercise; and making better use of your advisory board or similar body. If you do not have a succession plan, what training and/or technical assistance do you need from the national program to help you meet this challenge? How can we best connect you to succession planning efforts in other Centers?*

Because the Montana Department of Transportation requires us to provide an annual Work Plan, we have become very adept at lining out program goals and successes in the three focus areas of safety, infrastructure management, and workforce development. For example, in the safety area our Work Zone Safety program continually is honed to match the MUTCD manual as it receives updates and modifications. Our strong partnership with MDT continues to keep work zones conformed across the state so the traveled way is consistent and safe. Our safety programs involving large equipment and shop safety are taught throughout the state to lower accidents and remind personnel to be safe and stay safe. With gravel roads one of our most attended classes, our design model of Montana County Minimum Road Standards is being used by county road departments through the state. Materials are being understood as are specifications being established by county road departments to insure they are receiving not only the correct road materials but also the right amount of tonnage. In the workforce development category, our program continually updates our leadership course that focuses on the all important aspect of communication.

We provide direct efforts to requests and take the training to their door. The squeaky wheel does get the grease. This is not to say we jump and run at each request, but rather gather informational requests per five districts in Montana then train in a central locale for that specific district.

As indicated earlier in the PAR, we are continually updated and gather new information from research and other avenues to provide the most recent training possible.

*Have you identified the knowledge, skills and/or abilities that your staff requires for your Center to be successful? What is your Center doing to provide ongoing professional development opportunities that attract, retain and retrain a quality workforce? What training and/or technical assistance from the national program would help you in those areas?*

Due to the limited size of our Center, three employees, our ongoing professional development opportunities consist mostly of webinars that provide information on databases (Excel and Access), Photoshop and InDesign and Illustrator.

When our budget allows for us to attend the National LTAP/TTAP Conference, the technical training at those sessions help tremendously as we can then network with others to either help or ask questions of how different technical programs work for them. We sincerely appreciate the efforts of NLTAPA in providing technical sessions to further our education on various software and ways to provide training. For example last year was extremely helpful on marketing and website development.

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## Section Two: Center Financial Planning

*The national program is considering a significant effort to commission the LTAP/TTAP Clearinghouse team to build a national virtual library function on behalf of the 58 Centers. The purpose of the proposed national virtual library would reduce the administrative burden faced by Centers, and provide more up-to-date resources and content in a way that continues to promote the Centers themselves as the service provider. Would your Center use this capability? If so, to what extent would you find this valuable? What would be the impact of this effort on operations within your Center? If not, what are your concerns regarding the library, and what features and functionality would you need for a virtual library to be more attractive to your Center?*

A national virtual library would be helpful for online, electronic use. Our constituents still will continue to check out DVD's and videos for their safety meetings. However, I have recently been checking on YouTube for streamed videos but the quality is sometimes lacking. If you could get quality streamed videos, it would be very helpful. Especially more updated equipment videos regarding operation and safety would be a bonus.

Most of our publications in our library has links and is available electronically so we would be happy to share it. I also check with the National Transportation Library and RIP and TRID when researching topics. If you are considering plugging into those I would just watch out for duplication of efforts. Maybe other centers are not aware of these electronic libraries.

Again the biggest help would be streamed videos on all kinds of safety topics.

*Currently, the Clearinghouse operates a resource database on LTAP.org. Designed to be the comprehensive set of LTAP/TTAP materials, the goal was to facilitate center-to-center sharing of training courses, instructors, and marketing materials across LTAP/TTAP while avoiding the need to "reinvent the wheel." However, this tool is underutilized by Centers, in part because Centers do not populate it with their resources. What are the major issues or concerns you may have with the resource database? Do you have any suggestions to improve the resource database or its functionality, including changes to its design, content and accessibility? What types of things would be most valuable to you if they were available in the database? Finally, are you currently sharing course material from your Center in the database? If not, why not?*

The main concern at this time is the resource database is out of date and does not seem to be current. The design seems easy enough to navigate.

For us, quality streamed videos in the right format would be a bonus as the cost per safety video is costly.

One thing we have found is the use of our monthly safety webinars that is accessible to everyone on our website. We are sincerely grateful to the Clearinghouse for access to the Adobe Pro Connect and recording of these webinars. Our constituents use them for their safety meetings. Anyone is welcomed to use these recordings. We understood we are sharing courses and instructors in the database.

## Section Three: Overall Program and Center Assessment

*Provide a qualitative assessment of your overall efforts to improve and expand the work of your Center over the past year. Address the overall "state of the program" from the perspective of your Center. Include your perceptions of how your Center performed during the year, the impact your work may have had on both LTAP/TTAP and its customers, and the extent to which the level of attention towards and/or interest in LTAP/TTAP changed in your state or tribal area. Include as much specific information as possible, and share both challenges as well as successes.*

Our quality of training has improved. Our training modules are shorter and more precise. This may have been influenced somewhat by the pechakucha session at the 2014 Boise National conference. The other influence was money. Road and street departments have tightened up their budgets and they are no longer able to send employees for two-day training sessions. In response to that request, we have shortened some of our

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modules and filled the gaps through our safety webinars and in our newsletters. Our state of the program could be described as another successful year as we continue to grow on our past successes. We have had a few less attendees in some classes due to travel and budget restrictions but we responded to more direct requests for assistance, and billed them for it.

The one major issue for training in Montana is that we are geographically challenged. If one were to try and cross the state from one corner to the other, it would take over 13 hours. Consequently through webinars and telephone exchanges, answers were given. When a face-to-face training was needed, we were careful to group training efforts in the west and in the east at strategic centrally located cities or towns.

As earlier mentioned our monthly safety webinars have included requested topics such as forklift safety, skid steer operation, gravel road materials, hand and back safety, public relations, leadership and communication issues, load tie downs, winter maintenance, keys to intersection safety and liability, and gravel pit and trenching safety. All these topics were brought to us through our Advisory Committee, constituent requests, and Montana Department of Transportation. By having the webinars recorded, all are able to access these modules on their time.

Another specific indicator for our success is the continuance of those seeking to attain a Roads Scholar Level I and the Road Master Level II. This program is a continuum for those coming into the transportation field seeking to know more and perpetuating a safety culture attitude, while being rewarded for their efforts. Several of our recent Road Masters had this to say about our program: "The knowledge gained through the LTAP trainings and at the annual MACRS conference has provided a base for my growth of knowledge in this field of work. Without Steve Jenkins and his staff, we would be less successful in delivering our crucial services to the citizens of Flathead County," Dave Prunty, Flathead County Road and Bridge Public Works. "Montana LTAP provides valuable training, education and expert advice for all counties in Montana. This helps us provide a high level of service to the taxpayers of our great state. Thank you LTAP!" Doug Nisbet, Lewis and Clark County

Through our partnerships, Montana LTAP is acknowledged as a key transportation safety entity in providing assistance to local governments.

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## Appendix C: Staff

### Steven V. Jenkins, P.E.

#### Education

B.S. Civil and Environmental Engineering, Utah State University, 1983

M.E. Geotechnical Engineering, Utah State University, 1985

#### Work Experience

May 1994 – present

Director, Montana Local Technical Assistance Program and Native American Technology Transfer Center

- Directing all training activities including course preparation, teaching, new technologies, webinars, assisting all levels of government
- Directing Montana Flagger Training Program and MDT Maintenance Traffic Control Training

October 1990 – April 1994

Director, Utah Technology Transfer Center

- Managing all aspects of technology transfer in Utah: proposals, work plan, budget, newsletters, training, library assistance, corresponding with all local governments and professional organizations, UDOT and FHWA.

July 1989 – October 1990

Roadway Design, Project Design Engineer, Utah Department of Transportation

- Assisted as project design engineer on various crucial projects including Panguitch Main Street, Manti Main Street, 2100 South 300 West Salt Lake City, Black Smith Fork River Bridge, Jordanelle, Railroad Projects, etc. Assigned to coordinate design activities with local governments.

July 1987 – July 1989

Transportation Planning, Local Government Aid, Utah Department of Transportation

- Assisted the local government engineer in administering the Federal Aid Secondary program. All bridge replacement projects off system for local governments. B and C fund administrator.

January 1986 – July 1987

Research, Materials and Research, Utah Department of Transportation

- Principal investigator on “Pipe Culvert Durability” and “Seasonal Load Restriction” research duties.

June 1983 – September 1984

Hydraulics, Roadway Design, Utah Department of Transportation

- Reviewed hydraulic design for replacement bridge structures after the floods of 1983 – 1984.

June 1983 – September 1983

Thistle, Utah, Utah Department of Transportation

- Inspector of drainage pipe placement and backfill. General Surveying.

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## Prospects / Reports / Publication

Author – Flagger’s Handbook, Montana 2004

Author – Guidelines for Temporary Traffic Control, Montana 2005

Author – Guidelines for Temporary Traffic Control, Montana 2010

Preparing and Teaching “Winter Maintenance” courses: These courses include all aspects of preparation for winter, equipment preparation, anti-icing, deicing with the use of chemicals, sanding, salting, and effective plowing. This course has been taught in many of the Western states.

Winter Survival Training: This course has been taught for over ten years in many areas of the country. It describes how to travel and survive in extreme cold and hazardous environments.

Snow Rodeo: This training and competition have been hosted by LTAP for fifteen years. Participants learn effective winter maintenance and equipment operations.

Assemble and teach course “Risk Management for Montana.”

Prepare and teach “Safety Management for Local Governments.”

Prepare and administer Work Zone Flagging course for Montana; certified thousands of students over a fifteen-year period on Work Zone Safety Signing and Flagging.

National Association of County Engineers: update and rewrite manuals for Procurement, Public Awareness and Support, and Drainage and Storm Water Design.

“School Zone Safety” training video for Montana in conjunction with the Department of Justice Highway Traffic Safety Division.

“School Zone Safety” training video in conjunction with Utah Department of Transportation. Assisted local officials in learning the new laws for safe school zones and training crossing guards.

FHWA technical panel to establish training for “Pavement Management for Local Governments.”

FHWA technical panel to establish training for “Culvert Management,” “Bridge Management,” “Hydraulic Design” and “Storm Water Design.”

Currently teach workshops on: Sign Management System, Road Surface Management System, Gravel Road Maintenance and Safety Features for Local Roads and Streets.

Prepared and taught WZTC Level I for Technicians.

Prepared and taught WZTC Level II for Supervisors.

Assisted Forest Service in design, signing and bridge aspects of training.  
Assisted Forest Service in court cases regarding signing; implemented a sign inventory program throughout Utah, Idaho, and Montana.

Assisted FHWA and MDT; implemented a sign management program.

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Assisted MACo (Montana Association of Counties), Montana League of Cities & Towns, MACRS (Montana Association of County Road Supervisors), APWA, ATSSA, NACE; developing and conducting annual meetings.

Assisted MACRS to become Affiliate Members of NACE.

Developed MACRS organization from just several counties as members to include all 56 counties and implemented bringing county commissioners to annual conference and present on panels.

Currently developing webinar system for weekly safety meetings in Montana.

Extensive use of distance learning on EdNet System at MSU, reaching 14 locations with over 1,000 participants.

Developed PASER (Pavement Surface Evaluation and Rating) presentation for MACRS and established data base collection of all counties road ratings.

Initiated Roads Scholar Program criteria, Level I and II, for Montana, developing Access database tracking system.

Developed Road Safety Reviews reporting system for county road departments.

Wrote and directed safety movie, *The Will to Survive*, focusing on winter survival techniques and documentary comments from Rulon Gardner, Olympic Gold Medalist, and Dr. Ken Kamler, mostly known for his Mt. Everest publications and author of *Surviving the Extremes*.

Wrote and directed leadership movie, *Let Nature Be Your Guide*, with award-winning leadership speaker, D.J. Vanas.

Wrote and directed gravel roads maintenance video, *Basics of a Good Road*, with Flathead County Road Supervisor Ovila Byrd.

## **Professional Licenses / Societies**

Professional Engineering Licenses for Utah and Montana

International Municipal Safety Association

- Certification for WZTC and Signing

American Traffic Safety Services Association

- Work Zone Technician Certification
- Work Zone Supervisor Certification

Member of following organizations:

- American Public Works Association
- National Association of County Engineers
- ATSSA
- IMSA

Certified Work Zone Instructor for Flagging  
for Work Zone Technician & Traffic Control Supervisor

- Montana
- Washington
- Oregon
- Idaho

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## Appendix D: Needs Assessment

2014 Formal Needs Assessment for Montana LTAP

### LTAP Workshop Needs

Subjects were rated 1-5 by attendees and given weighted averages accordingly.

#### Focus Area: Worker Safety

##### Top 3 Responses

- Winter Survival
- Back Safety
- Slips, Trips, & Falls

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

##### Top 3 Responses

- Work Zone Certifications (Flagging & Work Zone Tech)
- Emergency Management Signing
- Sign Retroreflectivity

#### Focus Area: Infrastructure Management

##### Top 4 Responses

- Gravel Road Maintenance & Design (Materials Focus/Gravel Pits)
- Winter Maintenance
- County Road Standards
- Culvert Placement & Trenching

#### Focus Area: Workforce Development

##### Top 3 Responses

- Driving Safety/Dump Truck Safety
  - Excavation & Loader Safety
  - Load Securement
- (Requesting Expert Equipment Operators, innovations, and new products)

#### Focus Area: Organizational Excellence

##### Top 3 Responses

- Crew Supervision
- Motivation
- Technical Leadership

**LTAP Workshop Information**

Are Montana LTAP Workshops cost affordable?

- Yes: 98%
- No: 2%

**LTAP Website Information**

Is the Montana LTAP Website easy to navigate?

- Yes: 64%
- NA: 32%
- No: 4%

**LTAP Library Information**

Have you or your agency received material from the Montana LTAP Library?

- Yes: 46%
- Unsure: 16%
- No: 38%

**LTAP Newsletter Information**

Do you read Montana LTAP's newsletter "LTAP Matters"?

- No: 43%
- Yes: 57%

What type of articles would you like in "LTAP Matters"?

- Worker Safety: 41%
- Workforce Development: 21%
- Infrastructure Management: 26%
- Organizational Excellence: 9%
- Highway Safety: 3%

What types of local topics would you like to see?

- Local Road/Highway Projects: 55%
- Laws/Regulations: 39%
- Budget/Costs: 38%
- Technical Articles: 35%
- NA: 9%

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## LTAP Listserv Information

Are you a subscriber to the Montana LTAP Listserv?

- No: 69%
- Yes: 31%

## LTAP Demographic Information

What is your job description?

- Road Crew: 59%
- Road Superintendent/Foreman/Supervisor: 21%
- Public Works Director: 7%
- Commissioner: 3%
- City/Town/County Engineer: 2%
- Other: 8%

How many years of work experience do you have?

- 20 + years: 31%
- 4-6 years: 20%
- 0-3 years: 13%
- 15-19 years: 15%
- 10-14 years: 15%
- 7-9 years: 6%

What is the population of your city?

- Under 4,000: 33%
- 4,000-10,000: 41%
- 10,000-15,000: 6%
- 15,000-30,000: 1%
- 30,000-45,000: 5%
- 45,000 and above: 14%

How many miles of road does your city/county maintain?

- Under 250: 6%
- 250-500: 19%
- 500-750: 10%
- 750-900: 21%
- 900-1,150: 12%
- 1,150-2,000: 29%
- 2,000 and above: 3%

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## LTAP Methods for Providing Technology Transfer

Subjects were rated 1-5 by attendees, and given weighted averages accordingly.

### Top 4 Responses

- Face-to-Face: Workshops/Conferences/Hands-On Demonstrations/ Technical Visits
- Personal Communication
- Videos/DVDs, Newsletters (Electronic)
- Distance Learning (Webinars)

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## Appendix E: Distance Learning Lessons

Eleven safety meeting webinars were held via Adobe Connect through the National LTAP Clearinghouse at Montana LTAP:

- Back Safety & Slips, Trips, and Falls
- Electrical Safety
- Road Stabilization
- Weed Mowing Safety & Mobile Operations
- ABC's of First Aid
- Noise Safety, Protect Your Hearing
- Keys to Safer Intersections & Reduced Liability
- Trench Safety and Gravel Pit Concerns
- Public Relations
- Winter Maintenance
- Forklift Safety
- Front End Loader Safety

Other distance learning programs used and available for use:

- 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.

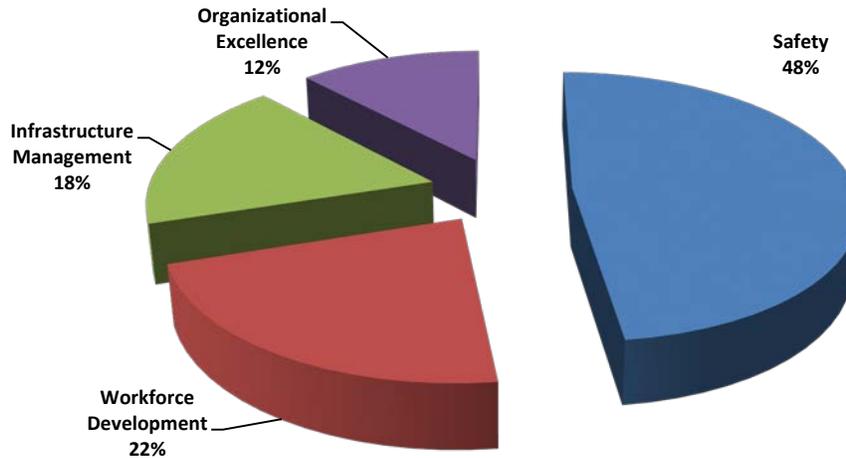
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## Appendix F: 2016-2017 Montana LTAP Tentative Workshop Schedule

|                                  |  |
|----------------------------------|--|
| Sept 7-Sept. 8, 2016: Helena     | Snow Rodeo & Equipment Safety:   |
| October 4, 2016:                 | MACRS Fall District Meeting:   |
| October 5, 2016: Missoula        | League of Cities and Towns (Oct. 5, 6, 7) – Public Works Directors Meeting<br>Various PWD Concerns   |
| October 6, 2016:                 | MACRS Fall District Meeting:   |
| October 11, 2016:                | MACRS Fall District Meeting:   |
| October 12, 2016:                | MACRS Fall District Meeting:   |
| October 13, 2016:                | MACRS Fall District Meeting:   |
| November 16, 2016: Lewistown     | MACRS Leadership (8:00am – 12:30pm)  |
| November 16-17, 2016: Lewistown  | MACRS Planning Meeting   |
| January 23-24, 2017: Great Falls | 14 <sup>th</sup> Annual Safety Congress:<br>Jan. 23 – am: Work Zone Technician<br>Jan. 23 – pm: Traffic Control Supervisor<br>Jan. 24 – Traffic Control Supervisor |
| Feb. 28, 2017: Helena            | Asphalt Institute Conference: Pavement Design, Construction, & Maintenance   |
| March 13, 2017: Missoula         | Work Zone Flagging   |
| March 14, 2017: Great Falls      | Work Zone Flagging   |
| March 15, 2017: Miles City       | Work Zone Flagging   |
| March 16, 2017: Billings         | Work Zone Flagging   |
| March 17, 2017: Billings         | Work Zone Flagging   |
| March 27, 2017: Great Falls      | MACRS 37 <sup>th</sup> Annual Spring: Pre-conference   |
| March 28-30, 2017: Great Falls   | MACRS 37 <sup>th</sup> Annual Conference, Heritage Inn   |
| May 2, 2017:                     | Gravel Roads Maintenance & Design  |
| May 3, 2016:                     | Gravel Roads Maintenance & Design  |
| May 4, 2016:                     | Gravel Roads Maintenance & Design  |
| May 9, 2017: Great Falls         | Work Zone Flagging   |
| May 10, 2017: Havre              | Work Zone Flagging   |
| June 6, 2017: Bozeman            | Work Zone Flagging   |
| June 7, 2017: Bozeman            | MACRS Executive Meeting  |
| June 8, 2017: Bozeman            | LTAP Advisory Board Meeting  |
| June, 2017                       | National LTAP North Central Region   |

## Appendix G: Needs Assessment Survey Topics in 2016-2017 Workshop Schedule

### Four Focus Areas



#### Infrastructure Management

Sept. 7 & 8, 2016  
Snow Rodeo:

Oct. 5, 2016:  
League of Cities and Towns: Road Management

Feb. 28, 2017  
Asphalt Conference:

May 2, 3, 4, 2017  
MACRS: Gravel Road Maintenance and Design

#### Workforce Development

Sept. 7 & 8, 2016  
Snow Rodeo: Equipment Safety

Jan. 23-24, 2017:  
Safety Congress: Roadway Safety

March 27 – 30, 2017:  
MACRS Spring Conference: Motivational Speaker, Leadership, Ethics

#### Organizational Excellence

Oct. 5, 2016  
League of Cities and Towns: Goal Setting

Nov. 16, 2016: LTAP Leadership Course

November 16-17, 2016:  
MACRS Planning Meeting

June 7, 2017: MACRS Executive Meeting

June 8, 2017: LTAP Advisory Board Meeting

June, 2017:  
National LTAP North Central Meeting

#### Safety

**Worker Safety:**  
Oct 4, 6, 11, 12, 13, 2016:  
MACRS Fall Meetings:

Jan. 23-24, 2017:  
Safety Congress: Work Zone Technician, Work Zone Traffic Control Supervisor, & Roadway Safety

March 13, 14, 15, 16, 17, 2017:  
Work Zone Flagging, Work Zone Tech

May 9, 10, 2017:  
Work Zone Flagging, Work Zone Tech

June 6, 2017:  
Work Zone Flagging, Work Zone Tech

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## Appendix H: Summary of Work Tasks

The following six 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: facilities rental and necessary equipment, supplies, and meals and coffee breaks (when meals are an integral part of a conference or meeting). Montana LTAP presented webinar safety meetings that have and will continued to be used for safety meetings for all constituents. Topics in 2016/2017 will include Part 46 personal safety training, load securement, truck driver safety, winter survival, winter maintenance, snow plow driver training, gravel specification and pit development, crew supervision, and PASER plan and project selection.

**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 and transportation sites.

**3. Quarterly Newsletter:** The LTAP electronic newsletter provides current articles each quarter to Montana LTAP's audience. Articles are gathered from a variety of sources

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including various transportation partnerships Montana LTAP has developed. A lead article demonstrates local expertise in one of the four focus areas each quarter. Announcements of the latest DVDs and publications available are issued each quarter. The training calendar announces regional and national training opportunities in addition to LTAP's local workshops and all of LTAP's partners.

**4. Transfer of Technology Materials:** Funding will be directed to producing publications and DVDs, and on transferring to DVDs from our VHS collection, which contains material that supports in-house training opportunities. The library presently contains over 550 videotapes, 920 publications, 135 sets of software, and 98 DVDs. Links are provided under the Library heading on our website to additional resources for researching transportation topics. Montana LTAP will continue to provide webinar links for further training opportunities. At training sessions, 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 e-mail requests, address change notices, and conference attendees. With technological advances, LTAP is finding electronic communication via e-mail 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

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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) and CAR (Center Assessment Report, 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.