

Montana

Local Technical Assistance Program

Work Plan and Budget
July 1, 2014 – June 30, 2015

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FEDERAL HIGHWAY ADMINISTRATION

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Executive Summary

The Local Technical Assistance Program (LTAP) has a 30-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

2013 Montana LTAP Training Opportunities

- 2,765 Participants Attended
- 67 Training Sessions
- 13,654 Training Hours

to our rural and urban partners and customers is its primary measure of success. This past year Montana LTAP covered 67 training sessions in presentations attended by 2,765 participants. Sixty-seven training sessions were held, providing 13,657 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: 2,253 Participants
2013: 25 Road Scholars Awarded
Total Scholars To Date: 209
Total Road Masters: 9

The mission of Montana LTAP Safety Congress is to provide learning on all aspects of transportation safety. In January 2014, Montana LTAP held its 12th Annual Safety Congress in Great Falls. At this week-long 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. Also included were transportation industry professionals such as traffic control and utility companies involved with temporary traffic control issues for signing. We will include national parks and Indian reservations in our Safety Congress planning for next year. By bringing together transportation stakeholders with similar responsibilities, this event will offer a forum where all can gather to share

ideas and knowledge to provide a seamless transportation network, thereby reducing crashes on Montana’s roadways.

Another 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. These recorded webinars are available to be reviewed by our customers at their discretion.

July – June: Working with Other Agencies; Personal Safety (Hands/Back); Work Zone; County Specs; Gravel Materials; Millings; PASER; and Winter Safety.

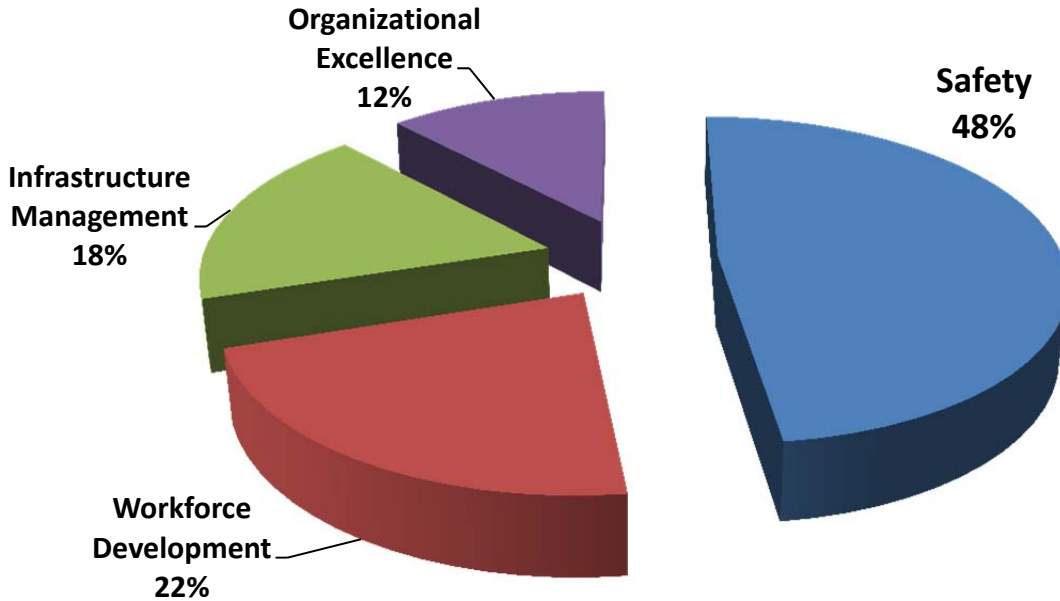
LTAP provides education and technical assistance on transportation matters to a wide variety of entities, including city and town street departments, county road departments, public works departments, elected and appointed public officials, private individuals, and other stakeholders. By sharing and 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
- **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



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.

Introduction

The oil producing areas continued to cause shifts in employment, creating current economic challenges and the need for skilled employees. Training requests, technology transfer, and implementation of best practices throughout the transportation community have been considerable and will continue to be so given the nature of the oil expansion 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 is now represented on the Oil Boom Committee and the Federal Lands Technical Advisory Selection Committee.

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. Montana LTAP staff has played key roles in the development, coordination, analysis, enhancement and day-to-day operations of transportation technology transfer.

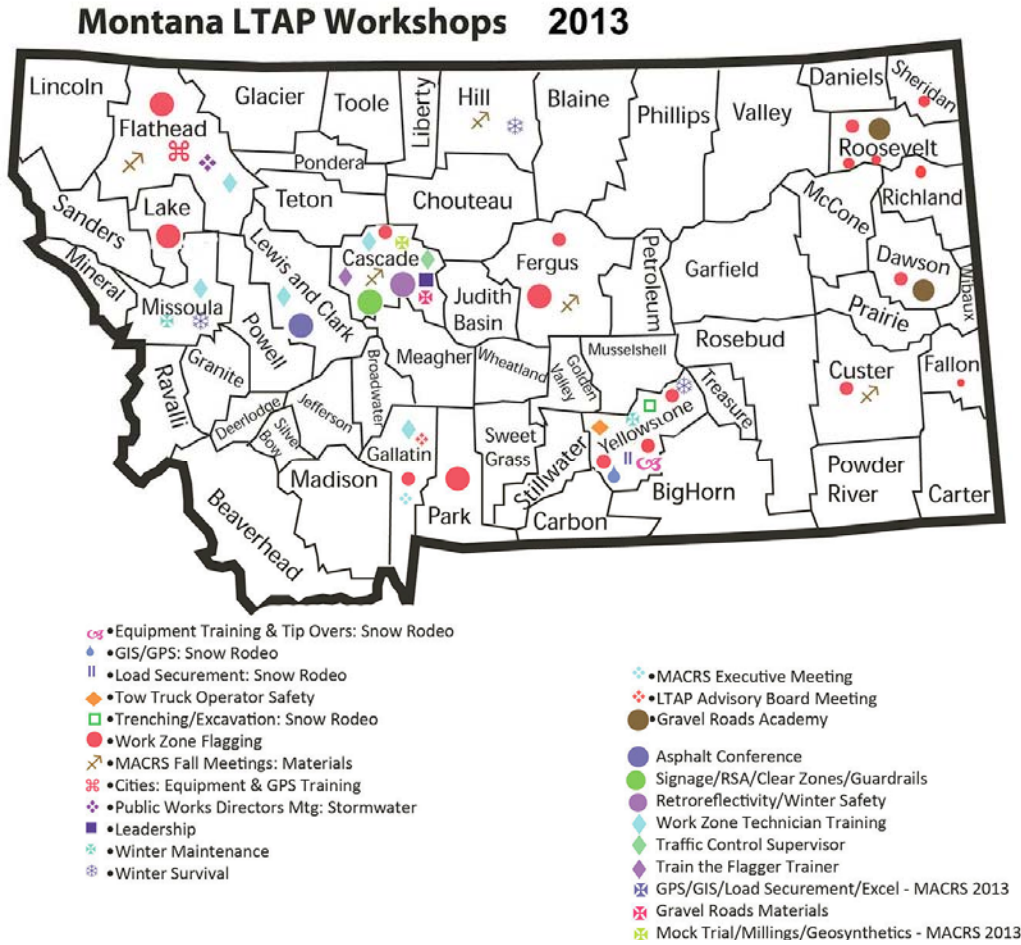


Figure 1: Montana LTAP 2013 Workshop Map

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 2.

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

Requirement Sieve	Aggregate Base Course Percent Passing	Gravel Surfacing Percent Passing
1"	100	100
3/4"	80-100	80-90
1/2"	68-91	60-80
No. 4	46-70	50-70
No. 8	34-54	37-60
No. 40	13-35	13-35
No. 200	3-12	4-18
Plasticity Index	0-6	4-12

Figure 2: Montana LTAP Gradation Specifications

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.

There are currently nine 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 teaching with instructor during a course of their expertise.

Figure 3 illustrates the various topics of interest for Montana LTAP, local government agencies and MDT. The overlapping areas show interests in common.

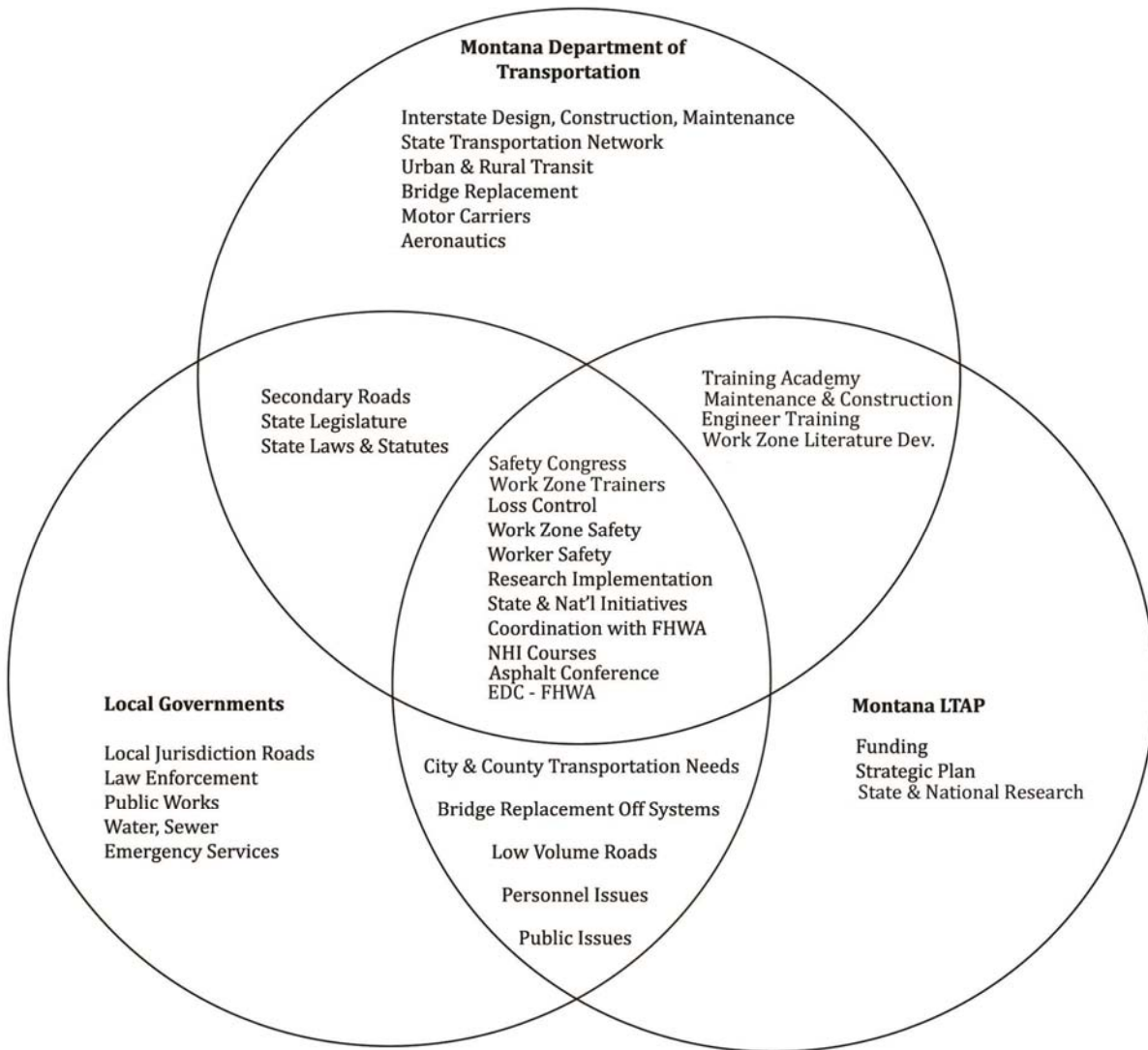


Figure 3. Stakeholders Intersection

Partnerships

Montana LTAP conducted the following team projects:

- Eli Cuelho, P.E., Western Transportation Institute Research Engineer, requested information from Montana LTAP for a Minnesota proposal regarding Best Practices for Gravel Roads.
- 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).

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 nine 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 twelve 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.

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 2014. 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 4 illustrates the variety of information gathered and put into action.

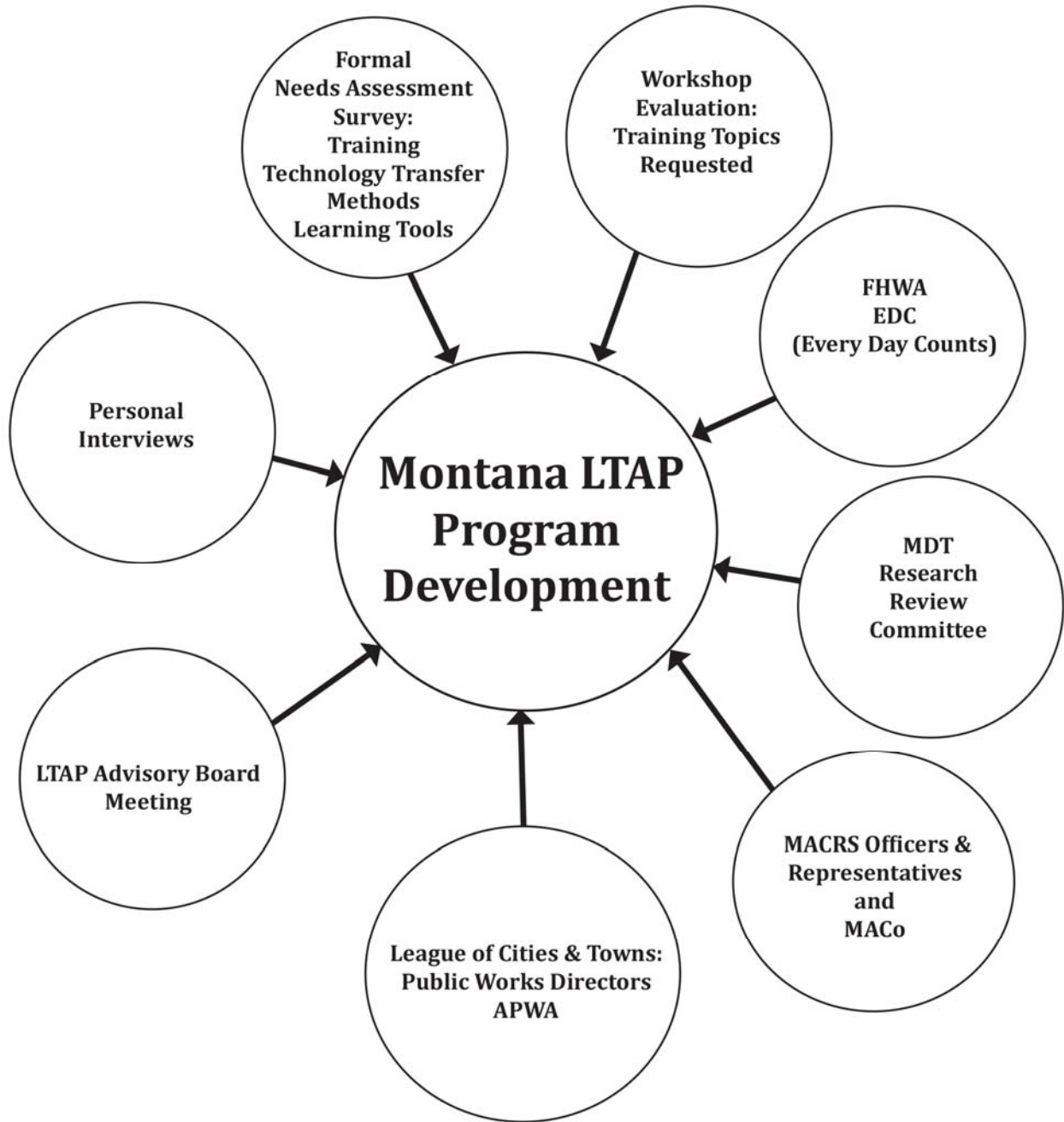


Figure 4. Program Development

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)
- Sign Retroreflectivity
- Emergency Management Signing

Focus Area: Infrastructure Management

Top 4 Responses

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

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

- Technical Leadership
- Crew Supervision
- Motivation

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

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
Signing
Cattle Guards
Summer Survival
Dust Control
Loader Safety
Dump Truck Safety
Surveying
County Road Standards
Winter Survival
Weed Mowing
Surveying
Work Zone
Trenching
Forklift
Community Preparedness
MUTCD – Signing
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. With the 11th Annual Safety Congress held in January 2013, Pierre Jomini, Safety Management Engineer, provided in-depth Safety training. 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 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. All needs assessment surveys in this plan outline this area as a priority and course selection aims at providing appropriate course material. The safety area focus includes worker and workplace safety and highway safety. Examples include roadside design, rural safety reviews, work zone technician safety, flagging certification, traffic control supervisor certification, training the flagger trainer, sign training and sign vandalism, and permanent signing traffic control.

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:

- Winter Survival
- 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
- Roadside Design
- Loss Control
- Rural Safety Review

LTAP will initiate the 13th Annual Safety Congress, a week-long event, January 2015, in Great Falls. Topics have been selected from needs assessment survey 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.

It is important to note unpaved roads, which are the most underfunded infrastructure in Montana (76 percent of roadways in Montana are unpaved), affect industries like agriculture, timber, mining, and tourism, and the expansion of communities. County commissioners report they receive more constituent calls regarding roads than on any other topic. The PASER (**PA**vement **S**urface **E**valuation **R**ating) system was used for collection of county road condition reports. Roads were evaluated on a scale from 1 to 10, with 10 being a new road. The PASER study indicated the average condition of Montana's unpaved roads was 4.5. This coming year efforts will be made to update PASER numbers to determine how roads have changed, particularly in oil producing counties.

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
- 25th 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, and Opportunity Link 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 of our November 2013 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
- Improved & Upgraded Leadership Courses
- 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
2. Beware the Bite (Electrical Safety)
3. Heat Stress
4. Your Responsibilities as a Dump Truck Driver
5. Defending Your Safety Zone (Back Protection)
6. Operating Guide: Motor Grader
7. Motor Grader Operation – Part III and PMA
8. Blading Unpaved Roads
9. Loader Operation – Part I
10. Transport Trailer Safety
11. Right of Way Mowing Safety
12. It Always Happens to the Other Guy (Equipment Safety)

Distance learning methods include 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. In April 2014, we provided a national gravel roads webinar with nearly 500 participants in attendance. 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.

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 – an event that is hosted by a city or a county providing technical training and equipment safety training for city and county road employees.
2. MACRS – the annual spring conference hosted by the MACRS organization and coordinated through the Montana LTAP office providing topics for county road supervisors, county road employees, county commissioners, and transportation-related vendors.
3. Montana League of Cities and Towns Conference – this fall event occurs annually and Montana LTAP coordinates the agenda for the public works officials. LTAP also presents a safety topic or several topics in conjunction with MTLCT's specific agenda at this conference.

4. Safety Congress – generally held in January is an opportunity for city street, county road, and state employees to participate in work zone training, traffic control supervisor certification and various worker safety training during the three-day event. In 2015, topics scheduled include Work Zone Technician certification, TCS certification, Highway Safety Improvement Plan Overview, MUTCD Signing Overview, Safety Reviews, and Intersection Field Review.

5. MDT Work Zone Meeting – Montana LTAP along with the Montana FHWA representative meet with MDT personnel in developing various work zone manuals as well as determining how to transfer FHWA mandates.

6. Asphalt Conference – Montana LTAP partners with the Asphalt Institute to coordinate and plan an asphalt conference covering topics of Thin Lift and Dense Graded Overlays, Binder Grading, Hamburg Rut Tester, Chip Sealing, Paving Operations and Asphalt Compaction and Hot Topics. The audience includes county road departments, city street departments, MDT employees, and private sector workers.

7. Montana LTAP provides statewide work zone training coordination.

8. Montana Department of Transportation’s Training Engineer has provided various TLN (Transportation Learning Network) and NHI (National Highway Institute) telecom live sessions available through MDT’s telecom sites and Montana LTAP has passed these notices on to county and city listservs.

9. Montana FHWA has coordinated the EDC (Every Day Counts) dynamic webinars with MDT and Montana LTAP insuring local governments have the opportunities to participate in these important webinars being offered by FHWA.

Future Initiatives

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

1. Coordinate and plan January 2015 Twelfth Annual Safety Congress.
2. Evaluate our cooperative agreement with MDT and the Work Zone Program.
3. Formal Needs Assessment will be accomplished for 2015.
4. Encourage all small urban areas to develop pavement management programs in preparation for applying for federal funding.
5. Prepare tentative workshop schedule for 2014-2015 (Appendix F).

Budget

The following budget provides the basis for Federal, State and University funding of Montana LTAP from July 1, 2014, through June 30, 2015. Expenditures reflect an estimate of last year's expenses and projected goals for the program during the 2014–2015 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.

Focus Areas	Salary/ Benefits	Prof. Services	Travel	Supplies/Comm	Minor Equip	Subtotal	IDC's	Total
Safety – 48%	112,652.53	4,560.00	2,559.07	2,400.00	480.00	122,651.60	35,748.40	158,400.00
Infrastructure Management – 18%	42,244.70	1,710.00	959.65	900.00	180.00	45,994.35	13,405.65	59,400.00
Workforce Development – 22%	51,632.41	2,090.00	1,172.91	1,100.00	220.00	56,215.32	16,384.68	72,600.00
Organizational Excellence – 12%	28,163.13	1,140.00	639.77	600.00	120.00	30,662.90	8,937.10	39,600.00
TOTAL COSTS	234,692.77	9,500.00	5,331.39	5,000.00	1,000.00	255,524.16	74,475.84	330,000.00

Table 2. Breakdown of Budget by Focus Area

	FEDERAL HIGHWAY ADMINISTRATION	GAS TAX REVENUE Sec. 15-70-101 (1(b.)) MCA	MDT SPR	TOTALS
Salaries				
Steven V. Jenkins, Director	84,829.34		17,219.45	102,048.79
Genevieve Albert, Accounting Tech/Conference Coordinator		27,990.23	8,235.16	36,225.39
Michele Beck, Graphics/Librarian		27,990.23	8,235.16	36,225.39
Student Labor			500.00	500.00
Benefits	23,820.07	24,019.54	11,853.59	59,693.20
Subtotal: Salaries/Benefits	108,649.41	80,000.00	46,043.36	234,692.77
Professional Services				
Conference Speakers, Workshop Trainers			2,000.00	2,000.00
Printing Expenses			7,500.00	7,500.00
Travel	2,874.75		2,456.64	5,331.39
Supplies/Communications			5,000.00	5,000.00
Minor Equipment			1,000.00	1,000.00
Subtotal: Direct Costs	2,874.75	0.00	17,956.64	20,831.39
TOTAL (Salaries/Benefits, Direct Costs)	111,524.16	80,000.00	64,000.00	255,524.16
Indirect Costs (34.5% FHWA, 25% Gas Tax, 25% MDT SPR)	38,475.84	20,000.00	16,000.00	74,475.84
GRAND TOTAL	150,000.00	100,000.00	80,000.00	330,000.00

Table 3. Breakdown of Budget by Source

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.

Appendix B: Center Assessment Report

2013 LTAP/TTAP Center Assessment Report

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

Reporting Period: **January 1 to December 31, 2013**

Section One: Center Operations

In the last few years, the national program has focused on increasing Center activities in the safety focus area through a joint effort with NLTAPA. Based on your experience implementing the Joint Safety Program, how would you assess the need for a similar emphasis on the infrastructure management focus area? What would the possible successes and challenges be in your state or tribal area?

Montana LTAP activities are considerable and multifaceted including Work Zone, Personal Safety, Roadway safety through signing, safety reviews, and law enforcement. These are based on needs, requests of users, and data driven. The targeted improvement indicated through Safety Audits need to be funded. The HSIP program could be directed more to local government. This combined with the Pavement Management (PASER) we implement and the small urban funding could yield more infrastructure benefits.

From your perspective, what are the pressing local training, technical assistance and technology transfer needs in the infrastructure management focus area?

Pavement Management: Teaching and how to apply improvements
 Safety Audits: Focus on improvements
 Signing Practices: Enhance roadways and reduce risk

What is the most important product, service or supporting effort you need from FHWA – regardless of focus area – to increase your impact on local roads in your state or tribal area? What training or service topics are your locals requesting that you are challenged to provide due to lack available of resources?

During the last year, local road agencies have requested more information and need engineering-based training regarding pavement in order to provide safety improvements on local roads.

The other area of need is funding. If FHWA could facilitate sources of funding, how to apply, and the process of receiving, it would be an immense help to the struggling local government agencies.

Section Two: Center Financial Planning

What is the total annual operating budget of your Center?

\$330,000

What is the percentage of your total annual operating budget that represents non-Federal share funding from your state DOT?

54% of our budget is non-Federal funds.

Does your Center receive any additional Federal monies that you apply to Center operations (e.g. not a pass through)?

\$80,000 State SPR funding

What percentage of your total annual operating budget represents non-Federal share funding from non-DOT sources? What are these additional sources and how much is received from each?

\$100,000 State Gas Tax implemented as state law as support to our program. Registration fees are a significant contribution.

During 2013, FHWA increased the annual base funding to LTAP/TTAP Centers from \$140,000 to \$150,000. How has this additional funding been integrated into your Centers' budget and work plan?

Partially incorporated during 2013, with more in 2014

If your Center received an overmatch in funding, did the additional allocation from FHWA impact this overmatch; and, if so, to what degree?

The increase has been appreciated. This funding was mainly used to support cost of living increases overdue to three employees.

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, and include your perception of how your Center performed during the year and what impact your work may have had on our customers and the Program. Include as much specific information as possible, and share both challenges as well as successes.

The training areas improved and expanded this past year included small urban pavement management, safety reviews, PASER, gravel road training, Roads Scholar program, and Leadership. Our relationship with our state DOT continued to improve with information being shared on winter maintenance and work zone flagging inquiries. In keeping communication lines opened with Montana FHWA, we kept our workforce informed about the EDC dynamic webinars.

Due to requests from MDT's Research Review Board, we focused on assisting pavement management (PASER) for small urban areas including the City of Sidney (due to oil development issues), City of Glendive, Yellowstone County, and City of Hamilton. In addition to these trainings, we had our work study student do a road rating of Sidney streets and then meet with the Sidney Public Works Director to concur on ratings. Our safety reviews were held in various counties using neighboring county employees to complete *worksheets* on different sections of roadways where crashes took place. By providing the initial review, counties could then share personnel to conduct additional reviews.

It has been ten years since our last assistance to county road departments to perform PASER evaluations of their gravel roads. In teaching the PASER module, counties could figure where to spend their road dollars by keeping annual inventories of their roads. They learned where they were going to keep maintaining good roads because it costs less. We have begun to gather PASER data this past fall to update the accumulative inventories of Montana county roads. This will be an ongoing project into next year.

With the oil impacts on county roads in eastern Montana, we took our gravel roads training to three eastern sites and provided the latest in gravel road design and materials on those hard-hit county roads.

Our Roads Scholar program has expanded to Road Masters this last year. There has been an increase in requested courses in order to meet the four core classes required to attain roads scholar level one. Because a number of eastern and centrally-located counties have lost their employees to the oil fields, we are noticing new employees being added to our program daily. The interest has increased both in Level I and in those attaining a Road Masters, equating to more attendance at training events. These presentations addressed the four focus areas and were available for teaching based on our needs assessment surveys. One of the core requirements was our Leadership presentation. This course not only provided information on personnel training but also discussed how to retain personnel through a variety of social means. One of the top goals was to learn how to communicate and how to listen. As discussed in the PAR, we reviewed our thirty-six training presentations and updated information along with interesting new graphics. These modules were then available for our training events.

In conclusion, our success as a center comes from a close connection with our constituents through face-to-face workshops, meetings, and events. Partnerships were essential to stretch the budget to provide events such as our Snow Rodeo, the MACRS Spring Conference, and the Asphalt Institute Conference. Our continual reaching out through webinars, email announcements, newsletters, training brochures, and personal letters has provided us with a true sense of what the transportation workforce required in order to do their job to the best of their abilities. And that job was and will always be keeping our roadways safe for all.

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.

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.

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*.

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

Appendix D: Needs Assessment

2013-2014 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)
- Sign Retroreflectivity
- Emergency Management Signing

Focus Area: Infrastructure Management

Top 4 Responses

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

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

- Technical Leadership
- Crew Supervision
- Motivation

LTAP Workshop Information

Are Montana LTAP Workshops cost affordable?

- Yes: 97%
- No: 3%

LTAP Website Information

Is the Montana LTAP Website easy to navigate?

- Yes: 59%
- NA: 38%
- No: 3%

LTAP Library Information

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

- Yes: 59%
- Unsure: 29%
- No: 12%

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%

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: 75%
- Road Superintendent/Foreman/Supervisor: 15%
- Public Works Director: 1%
- Commissioner: 3%
- City/Town/County Engineer: 3%
- Other: 3%

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%

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
- Newsletters
- Videos/DVDs
- Distance Learning (Webinars)

Appendix E: Distance Learning Lessons

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

- Heat Stress and Heat Stroke
- Gravel Specifications and Pit Development
- Winter Survival
- Snow Plow Driver Training
- Communication and Dealing with the Public
- PASER 5 Year Plan Project
- Back Safety for Heavy Equipment Operators
- Work Zone Safety
- Road Side Management: Mowing and Weeds
- New MUTCD Regulations

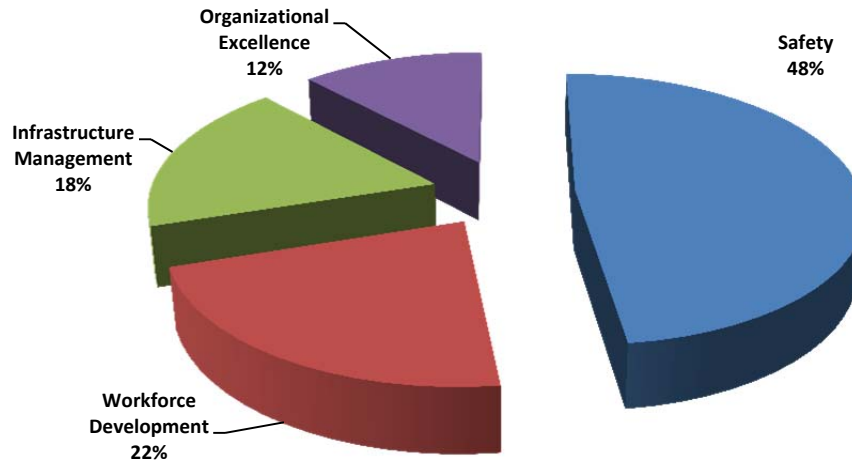
Other distance learning programs used and available for use include MDT's GoToMeetings and their connection with TLN (Transportation Learning Network) live training sessions and NHI's training sessions to MDT's telecom sites in Montana, National LTAP Clearinghouse's Adobe Pro Connect, and a variety of 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 F: 2014-2015 Montana LTAP Tentative Workshop Schedule

Sept 3-Sept. 4, 2014: Billings	Snow Rodeo & Equipment Safety: Culvert Installation & Drainage Basics; Motorgrader
October 6, 2014: Butte	MACRS Fall District Meeting: Winter Safety
October 7, 2014: Polson	MACRS Fall District Meeting: Winter Safety
October 9, 2014: Helena	MACRS Fall District Meeting: Winter Safety
October 8, 2014: West Yellowstone	League of Cities and Towns (Oct. 8, 9, 10) – Public Works Directors Meeting Various PWD Concerns
October 14, 2014: Glendive	MACRS Fall District Meeting: Winter Safety
October 15, 2014: Billings	MACRS Fall District Meeting: Winter Safety
November 12, 2014: Great Falls	MACRS Leadership (8:00am – 12:30pm)
November 12 -13, 2014: Great Falls	MACRS Planning Meeting
December 3, 2014: Miles City	Leadership
January 26-29, 2015: Great Falls	12 th Annual Safety Congress: Jan. 26 – am: Work Zone Technician Jan. 26 – pm: Traffic Control Supervisor Jan. 27 – Traffic Control Supervisor Jan. 28 – Roadway Safety Jan. 29 – Truck Driving Safety
Feb. 4, 2015: Helena	Asphalt Institute Conference: Pavement Design, Construction, & Maintenance
March 16, 2015: Butte	Work Zone Technician
March 17, 2015: Great Falls	Work Zone Technician
March 18, 2015: Havre	Work Zone Technician
March 19, 2015: Billings	Work Zone Technician
March 20, 2015: Billings	Work Zone Flagging
March 31, 2015: Great Falls	MACRS 35 th Annual Spring: Pre-conference
March 31-April 2, 2015: Great Falls	MACRS 35 th Annual Conference, Heritage Inn
May 6-7, 2015: Conrad	Gravel Roads Maintenance & Design
May 18-19, 2015: Glasgow	Gravel Roads Maintenance & Design
May 20-21, 2015: Miles City	Gravel Roads Maintenance & Design
May 12, 2015: Miles City	Work Zone Flagging
May 13, 2015: Glendive	Work Zone Flagging
May 14, 2015: Wolf Point	Work Zone Flagging
June 2, 2015: Bozeman	Work Zone Flagging
June 3, 2015: Bozeman	MACRS Executive Meeting
June 4, 2015: Bozeman	LTAP Advisory Board Meeting
June, 2015	National LTAP Region 7

Appendix G: Needs Assessment Survey Topics in 2014-2015 Workshop Schedule

Four Focus Areas



Infrastructure Management

Sept. 3 & 4, 2014
Snow Rodeo: Culvert Installation & Drainage Basics/Motorgrader Safety

Oct. 8, 2014
League of Cities and Towns: Stormwater Issues

Feb. 4, 2015
Asphalt Conference: Pavement Design, Construction, and Maintenance

May 6-7, 18-19, 20-21, 2015
MACRS: Gravel Road Maintenance and Design

Workforce Development

Sept. 3 & 4, 2014
Snow Rodeo: Dump Truck Safety

Jan. 26-29, 2015
Safety Congress: Truck Driving and Roadway Safety

March 31-April 2, 2015
MACRS Spring Conference: Motivational Speaker, Leadership, Ethics

Organizational Excellence

Oct. 8, 2014
League of Cities and Towns: Leadership

Nov. 12, 2014: LTAP Leadership Course

November 12-13, 2014:
MACRS Planning Meeting

December 3, 2014: LTAP Leadership

June 3, 2015: MACRS Executive Meeting

June 4, 2015: LTAP Advisory Board Meeting

June, 2015:
National LTAP Region 7 Meeting

Safety

Worker Safety:
Oct 6, 7, 9, 14, 15, 2014
MACRS Fall Meetings: Winter Safety

Jan. 26-29, 2015
Safety Congress: Work Zone Technician, Work Zone Traffic Control Supervisor, Truck Driving Safety & Roadway Safety

March 16, 17, 18, 19, 20, 2015
Work Zone Flagging, Work Zone Tech

May 12, 13, 14, 2015
Work Zone Flagging, Work Zone Tech

June 2, 2015
Work Zone Flagging, Work Zone Tech

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 2014/2015 will include heat stress and heat stroke, winter survival, snow plow driver training, gravel specification and pit development, communications and dealing with the public, and PASAR 5 year 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 newsletter provides current articles each quarter to Montana LTAP's audience. Articles are gathered from a variety of sources 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 95 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

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.