



MISSOURI  
**S&T**

# CENTER FOR TRANSPORTATION INFRASTRUCTURE AND SAFETY



**Missouri Local Technical Assistance Program  
at Missouri University of Science and Technology**

## **Annual Progress Report**

by

Heath Pickerill



**NUTC  
ETT220**

**A National University Transportation Center  
at Missouri University of Science and Technology**

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# Table of Contents

|  |   |
|--|---|
| Annual Progress Report: January – December 2008.....           | 1 |
| Appendices.....  | 7 |
| Appendix A: LTAP Committees                                    |   |
| Appendix B: LTAP Partnerships                                  |   |
| Appendix C: 2008 Training Sessions Summary                     |   |
| Appendix D: “Show Me” Road Scholar Program Course Descriptions |   |
| Appendix E: Road Scholar Program Registered Agencies           |   |
| Appendix F: Summary of Evaluations                             |   |



Missouri Local Technical Assistance Program  
at Missouri University of Science and Technology

## **ANNUAL PROGRESS REPORT**

January – December 2008

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**Deliverables:**

The deliverables required of the LTAP contract consist of 6 tasks, which are outlined, in detail below.

**Task A - Compile and Maintain a Mailing List**

**Goals for Task A:**

- Maintain the current data base to insure a realistic customer base is being reached;
- Increase the number of addresses included in our mailing list by a minimum of 15% each year.

**Progress to date:**

| <b>MISSOURI LTAP MAILING LIST COMPARSION</b> |             |             |             |
|--|-------------|-------------|-------------|
|  | <b>2006</b> | <b>2007</b> | <b>2008</b> |
|  | Per quarter | Per quarter | Per quarter |
| Mailing list total                           | 3,677       | 4,633       | 4,150       |
| Clean up from prior year                     | 1,184       | 445         | 483         |

- Mailing list is still continually being updated to purge outdated addresses, while adding new contacts to our database. We started the clean-up process in September 2006 and finished in December 2007. We did another clean-up in summer 2008.

**Task B - Publish a Quarterly Newsletter**

**Goals for Task B:**

- Maintain the size of the newsletter at a minimum of 12 pages;
- Expand the size of the newsletter as needed to provide relevant and timely information to our customer base;
- Increase newsletter circulation by a minimum of 15% over 2006 levels.

**Progress to date:**

| <b>MISSOURI LTAP NEWSLETTER COMPARSION</b> |             |             |             |
|--|-------------|-------------|-------------|
|  | <b>2006</b> | <b>2007</b> | <b>2008</b> |
|  | Annual      | Annual      | Annual      |
| Circulation Total                          | 18,328      | 18,532      | 17,500      |
| Return %*                                  | 5%          | 4%          | 4%          |

\*Approximate % based on returns per quarter

- The circulation total decrease for 2008 is due to the mailing list clean-up, as well as the decrease in production order amounts;
- Throughout 2008 we maintained the newsletter at 16 pages;
- In summer 2008, we added a new enhancement, the MoDOT connection, which focuses on states issues;
- Circulation is reflected in our mailing list total due to the continuous clean-up process.

## Task C - Provide Technology Transfer Materials

### Goals for Task C:

- Distribute timely and relevant publications to our customer base at conferences, meetings, and through our partners.
- Provide a Media Center Coordinator to coordinate library services, maintain relevant technical information, and improve response time to client requests.
- Continue a cooperative relationship with our MoDOT ambassadors in order to improve the promotion of Missouri LTAP services and the distribution of technical information.

### Progress to date:

| <b>MISSOURI LTAP TECHNOLOGY TRANSFER MATERIALS COMPARISON</b> |             |             |             |
|---|-------------|-------------|-------------|
|   | <b>2006</b> | <b>2007</b> | <b>2008</b> |
|   | Annual      | Annual      | Annual      |
| Materials Distributed   | 4,491       | 4,887       | 5,467       |
| Technical Assists*  | 1,088       | 1,438       | 20%**       |

\*Includes letters, phone calls, emails and face-to-face meetings

\*\*Measured by percentage of quarterly time spent on technical assists.

- Distribution of materials per quarter:
  - 1<sup>st</sup> – 992 publications at no charge
  - 2<sup>nd</sup> – 510 publications at no charge
  - 3<sup>rd</sup> – 589 publications at no charge
  - 4<sup>th</sup> – 3,376 publications at no charge
- Kristi Barr, Program Coordinator, serves as the media coordinator for Missouri LTAP. The position reclassification request, which included these duties, was approved in September 2008.
- An Advisory Committee meeting was held with Advisory Committee members on March 20, 2008 and November 5, 2008. It was agreed by the committee to meet twice a year (see attached notes for more detail). Guidance was provided at both meetings and is being implemented.
- The Ambassadors' meeting was held December 3 & 4 (see attached notes for more details). We feel the ambassadors understand their role with LTAP and how important their connection with the counties is in helping us reach our customers. We agreed on action items that they could do to help initiate the counties and local agencies involvement. We also discussed ways we can continue to strengthen their relationship with LTAP.

## Task D - Provide Information Services

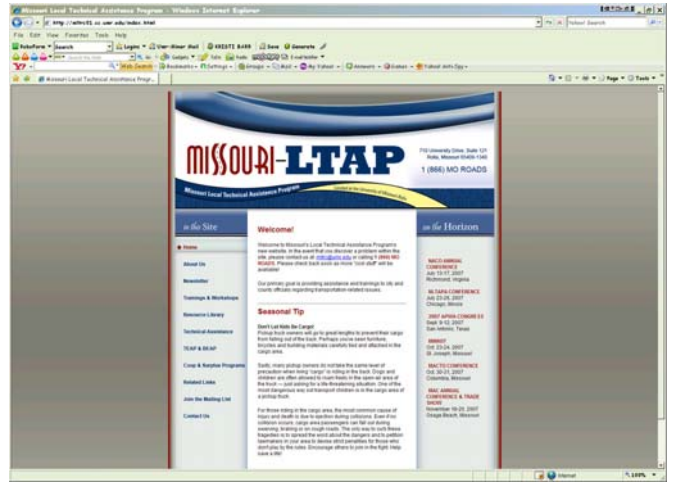
### Goals for task D:

- Maintain the Missouri LTAP Web Page to include dynamic capabilities;
- Provide improved response time through increased staffing;
- Increase advertisement of the cooperative and surplus equipment purchasing program.

### Progress to date:

- In May 2007, the webpage was approved and went live. We have since had approximately 21,000 hits. The webpage includes a more user-friendly look and easier surfing approach.

- On-line registration was due to be implemented by 2008. We have had to postpone the implementation due to the upgrades in the server as a result of the University's name change, as well as the backlog in the IT Department. We have outsourced the problem to the University of Missouri system in Columbia who is working hard to resolve the issues and complete our on-line registration capabilities.
- A new Administrative Assistant began on January 1, 2008 along with a part-time student during the summer 2008 and fall 2008. Our response time has improved with the new hires.
- Advertisement of the cooperative and surplus equipment purchasing program has increased through the newsletter. There are currently 291 local agencies enrolled in the cooperative purchasing program. 243 of the technical assists for 2008 were cooperative and surplus equipment related.



## Task E - Conduct and/or Arrange Seminars and Workshop Training Sessions

### Goals for Task E:

- Establish a Core Curriculum of at least eight topics for the following professional levels:
  - Field/Entry level
  - Technical/Professional
  - Mid and Senior Management
- Establish an instructor base to support the core curriculum topics at each level.
- Build an in-state instructor portfolio. Utilize the LTAP Clearinghouse National Instructor Base until the portfolio is fully developed. Work with national and in-state partners to promote partnered training whenever possible. APWA's Click, Listen and Learn web based training is one example of available training resources.
- Increase delivered workshops and training sessions by 50% over FY 2006 levels.

### Progress to date:

- A core curriculum of training courses was established in fall 2006. This has become the foundation of our training. We created a 12-month calendar in January 2008 and had great success with the number of attendees. A 12-month calendar has been created for 2009 (see attached schedule).
- The Missouri "Show-Me" Road Scholar Program was deployed in summer 2008. The core curriculum courses were an integral part of the courses outlined for the Road Scholar Program. The Road Scholar Program allows us to broaden the types of trainings we offer and recognize those individuals who attend and therefore take an interest in their future personal and professional development. There was and continues to be constant interaction with the partners who participated in the development of the program. This has allowed us to have all of the interested organizations involved throughout the process of developing and finalizing the structure of the program. The partnering organizations signed a partnership agreement in effort to pledge their support to Missouri LTAP for the Road Scholar Program (see attached example of a partnership agreement). More information on the Road Scholar Program is available in the section labeled *Road Scholar Program*.
- Our instructor portfolio has increased dramatically over the 2006 levels. We continue to add instructors to our portfolio (see attached list).
- We have continued to partner with the MoDOT Safety Team to assist in the logistics for partnered training. We participated in the Blue Print Coalition for Safety Conference



planning. In addition, Missouri LTAP gave three presentations on various programs at the conference.

- Conferences we have attended for 2008:
  - Transportation Research Board (TRB), January
  - CCAM Training Conference, February
  - TEAM Conference, March
  - NACE, Portland, OR, April
  - APWA Mid-America Regional Conference, May
  - Region 7 Conference, June
  - NLTAPA Conference, July
  - APWA Congress, September
  - MML Annual Conference, September
  - MINK7, October
  - Blueprint Coalition for Safety Conference, October
  - MACTO, October
  - Missouri APWA Conference, November
  - MAC Conference, November
  - Dust Control Conference, San Antonio, TX, November
- Meetings we have attended regularly in 2008:
  - Blueprint Coalition Regional Meeting
  - Infrastructure Subcommittee Meeting, every other month
  - Regional RPC Tac Meetings, vary monthly
  - APWA Education Committee On-line Meeting, scheduled monthly
  - MoDOT Safety Team Committee Meeting, quarterly
  - FHWA Office of Safety's Roadway Departure Web Conference, quarterly

| <b>MISSOURI LTAP TRAINING COMPARISONS</b> |                |                 |                |
|---|----------------|-----------------|----------------|
|   | <b>2006</b>    | <b>2007</b>     | <b>2008</b>    |
|   | 01/01-12/31/06 | 04/01-12/31/07* | 01/01-12/31/08 |
| Number of Trainings                       | 40             | 49              | 61             |
| Number of Attendees                       | 897            | 916             | 1,883          |

\*2007 Based on a 9-month calendar. Received LTAP contract 2/12/07 to proceed.

### **Task F - Evaluate Effectiveness of Program**

#### **Goals for task F:**

- Continue to evaluate the effectiveness of the program through course evaluations and other customer feedback;
- Seek guidance on center operations from the Advisory Committee and the MoDOT Ambassadors;
- Review membership on the Advisory Committee to ensure that it reflects our customer base;
- Finalize hiring actions to bring center staffing up to an acceptable level to provide the best-possible customer support within available funding.

#### **Progress to date:**

- Evaluation forms are distributed to all course attendees (see attached evaluation summary). Input from the evaluation forms is used to improve future training.
- We held an Ambassadors' meeting on December 3 and 4, 2008 (see attached notes). Six of the districts were represented. We updated the ambassadors on the MO LTAP Program and budget, as well as briefed them on the new programs that we have or will be implementing. The Ambassadors provided great feedback and guidance for LTAP's growth. The Ambassadors continue to give valuable input and provide an important link to the local agencies in their respective districts.

- At our last Advisory Committee meeting, we discussed the make-up of the group, and the consensus was the group is well represented across the state. However, suggestions were made on other individuals who could represent a new segment of our customer base. These suggestions will be explored and possibly be considered to replace a few members who have not been active. The committee
- All hiring actions have been finalized. The staff now includes a full-time director, program coordinator, administrative assistant and a part-time outreach/training coordinator and student worker.



## APPENDIX A: LTAP Committees

### **Infrastructure Subcommittee:**

- Producing an RSA Brochure to disseminate at conferences, meetings, and to our mailing list on the benefits of the RSA
- Producing a “Don’t Cut the High Tension Cable Barrier” and creating a “traveling talk” to work in conjunction with the hybrid vehicle meetings, to get the word out about how to treat a barrier cable in an accident situation
- Working with MoDOT, MARC, and FHWA to get pin mapping information on high crash areas easily accessible to the locals
- Received a grant from FHWA to do a Road Safety Assessment pilot program. Boone County has volunteered to be the pilot county. Working with MoDOT safety team to pull the RSA team members together. RSA planned to be performed by March of 2008 and the implementation to be finished by June 2008

### **Blueprint Coalition Regional Committee:**

- Working with the Southeast region to provide educational materials on buckling up and safety seatbelts
- Aided in the regions fight for the primary seatbelt law
- Working with the Highway Patrol, Troop I, to bring the teen program “21 days” to the Phelps County High Schools. “21 days” is an intense program that works with the school, local media relations, and the coalition to implement the “Buckle UP” concept

### **APWA Education Committee:**

- On-line committee to begin in January; will aid in the educational courses that LTAP and APWA can bring to the locals



## APPENDIX B: LTAP Partnerships

### **Missouri Association of Counties (MAC):**

- Partner in the Road Scholar Program
- Displayed articles in their newsletters
- Present at their yearly meeting, which included a display booth

### **County Commissioner's Association of Missouri (CCAM):**

- Presented a training session at the annual training in March 2007
- Scheduled to present another training session in March 2008
- Attended regional meetings to promote LTAP

### **Missouri Association of Councils of Government (MACOG):**

- Partnered with Doug Hermes, State Planner, to promote LTAP at the monthly MACOG meetings
- Scheduled to attend January's meeting of Executive Directors
- Close relationship with MRPC-Meramec Regional Planning Commission; Executive Director, Richard Cavender, member of the Advisory Board. Scheduled to attend January's TAC meeting at MRPC
- All RPC's on mailing list and training mailing list

### **Missouri Chapter of American Public Works Association (APWA):**

- Partner in the Road Scholar Program
- Relationship with John Buckwalter, Education Director of Missouri Chapter, and Kensey Russell, 2008 MO Chapter APWA President, to assist in the logistics of the Basic Supervision certification course offered by APWA. Will allow us to use their material and offer their certification program in more locations to more LTAP customers.
- Buying the Click, Listen & Learn CD's to include in our library

### **Management Develop Institute (MDI):**

- Heath completed the full Supervisor's Bootcamp course; 2 sessions-8 days total
- Supervisory and managerial course offered by MDI will be used to deliver these types of courses to our customers
- Working to tap into other resources and other courses that would be beneficial to our Road Scholar Program Level II Tier

### **Missouri Municipal League (MML):**

- Partner in the Road Scholar Program
- Member of the league
- A resource to help increase in our mailing list

### **MoDOT Safety Team:**

- Partnering, as a team, on doing training sessions. Worked with them to do the Horizontal Curve Safety Training sessions in Springfield and Chesterfield

### **MoDOT District Ambassadors:**

- Understand their role and importance in bringing the knowledge of LTAP to the local agencies in their district
- All have agreed to be our liaison for the counties

## 2008 ANNUAL PROGRESS REPORT

- Agreed to provide us the information of the demographics in their area to better aid in getting the appropriate training in their district

### **Advisory Committee:**

- Having more frequent meetings than in previous years to aid in bringing the best possible plan to the local agencies
- They provide great feedback and suggestions, as well as critique in the areas we need to improve

### **MoDOT LTAP Program Administrators:**

- Provide valuable input on areas we need to focus
- Provide great resources to aid in bettering our relationship with the locals
- Attend meetings, LTAP National and local, to be a part of the team effort, as well as provide great input at the meetings

### **Missouri Association of County Transportation Officials (MACTO):**

- LTAP staff member serves as Executive Director
- Partner in the Road Scholar Program
- Provide important link to maintenance crews and others at the local level

### **Missouri Association of Public Entity Risk Management Fund (MOPERM):**

- Often require the local agencies that they underwrite for insurance, to take training to avoid raising their rates
- They are very receptive to partnering in order to take advantage of existing MO LTAP training
- They are also interested in partnering with MO LTAP to develop new training that their customers could benefit from taking



## APPENDIX C: 2008 TRAINING SESSIONS SUMMARY

| DATE OF TRAINING | TITLE OF TRAINING                  | LOCATION                         | NUMBER ATTENDED |
|------------------|------------------------------------|----------------------------------|-----------------|
| January 15, 2008 | When to Pave a Gravel Road         | Joplin, Dist. 7 Training Rm      | 6               |
| January 15, 2008 | Culvert Installation & Maintenance | Joplin, Dist. 7 Training Rm      | 4               |
| January 16, 2008 | WZS & Flagger Training             | City of Bolivar Fire Station     | 14              |
| January 29, 2008 | Flagger Training                   | Rolla, Havener Center            | 15              |
| Feb. 7, 2008     | Why Work Zone Safety               | Jeff City, Co. Comm Mtg          | 25              |
| Mar. 5, 2008     | WZS & Flagger Training             | Hannibal Dist 3 Training RM      | 13              |
| Mar. 6, 2008     | WZS & Flagger Training             | Macon, Comfort Inn               | 14              |
| March 12, 2008   | WZS & Flagger Training             | New Madrid                       | 41              |
| March 13, 2008   | Worker Safety Training             | Rolla, Havener Center            | 16              |
| March 13, 2008   | WZS & Flagger Training             | City of Chesterfield             | 31              |
| Mar. 17, 2008    | WZS & Flagger Training             | Maryland Heights                 | 31              |
| March 18, 2008   | WZS & Flagger Training             | Maryland Heights                 | 26              |
| March 18, 2008   | WZS & Flagger Training             | Holden City Hall                 | 42              |
| March 19, 2008   | WZS & Flagger Training             | Maryland Heights                 | 22              |
| March 19, 2008   | WZS & Flagger Training             | St. Joe, Dist. 1 Training Room   | 9               |
| March 20, 2008   | WZS & Flagger Training             | St. Charles County               | 25              |
| March 25, 2008   | WZS & Flagger Training             | Joplin, Dist. 7 Training Rm      | 27              |
| March 26, 2008   | Worker Safety Training             | Rolla, Havener Center            | 21              |
| March 26, 2008   | WZS & Flagger Training             | Platte County Resource Ctr       | 16              |
| April 1, 2008    | Do's & Don'ts of SCA               | Hannibal, Holiday Inn            | 15              |
| April 8, 2008    | WZS & Flagger Training             | Jeff City, Cole Co. Fire Station | 10              |
| April 9, 2008    | Culvert Installation & Maintenance | Jeff City, Cole Co. Fire Station | 21              |
| April 11, 2008   | WZS & Flagger Training             | Warrensburg Mo                   | 24              |
| April 15, 2008   | Culvert Installation & Maintenance | Maryland Heights                 | 18              |
| May 6, 2009      | Proper use of Signs                | Springfield Area, Greene Co.     | 15              |
| May 7, 2008      | Culvert Installation & Maintenance | Cape Girardeau Extension Ctr     | 8               |
| May 27, 2008     | Tractor Mower Safety Training      | Springfield Area, Greene Co.     | 25              |
| June 9, 2008     | Tractor Mower Safety Training      | Maryland Heights                 | 23              |
| June 10, 2008    | Worker Safety Training             | New Madrid                       | 11              |
| July 16, 2008    | WZS & Flagger Training             | City of Ozark                    | 19              |
| October 8, 2008  | Snow & Ice Control                 | Macon Comfort Inn                | 22              |
| October 9, 2008  | Snow & Ice Control                 | Hannibal - Dist 3 Training Rm    | 4               |
| October 13, 2008 | Work Zone Safety & Flagger         | Lamar                            | 25              |
| October 14, 2008 | Snow & Ice Control                 | St. Joseph Dist 1 Training Rm    | 6               |
| October 15, 2008 | Snow & Ice Control                 | Platte County Resource Ctr       | 18              |
| October 14, 2008 | NACE Update-Reauthorization/Bridge | MINK8-St. Joseph                 | 46              |

|                          |                                     |                               |             |
|--------------------------|-------------------------------------|-------------------------------|-------------|
|                          | Inspection                          |                               |             |
|                          | Roller Compacted Concrete           | MINK8-St. Joseph              | 46          |
|                          | Future of Asphalt Pavement          | MINK8-St. Joseph              | 46          |
| <b>October 15, 2008</b>  | FHWA Emergency Relief Program       | MINK8-St. Joseph              | 46          |
|                          | FEMA Process                        | MINK8-St. Joseph              | 46          |
|                          | Grappling with Risking Fuel Costs   | MINK8-St. Joseph              | 46          |
|                          | Retroreflectivity                   | MINK8-St. Joseph              | 46          |
| <b>October 16, 2008</b>  | Snow & Ice Control                  | Joplin, Dist. 7 Training Rm   | 14          |
| <b>October 20, 2008</b>  | Snow & Ice Control                  | Jackson Co Road Dept          | 34          |
| <b>October 20, 2008</b>  | Equipment Operation & Worker Safety | Jackson Co Road Dept          | 32          |
| <b>October 23, 2008</b>  | Defensive Driving                   | Gasconade Co Rd Dept          | 12          |
| <b>October 29, 2008</b>  | Pavement Preventative Maintenance   | Springfield after MACTO Conf. | 6           |
| <b>October 29, 2008</b>  | Pavement Structures                 | MACTO-Springfield             | 152         |
|                          | Pavement Preservation               | MACTO-Springfield             | 152         |
| <b>October 30, 2008</b>  | Road Stabilization with Additives   | MACTO-Springfield             | 152         |
|                          | What's New in Trucks                | MACTO-Springfield             | 152         |
| <b>October 30, 2008</b>  | Snow & Ice Control                  | Springfield Area, Greene Co.  | 17          |
| <b>November 10, 2008</b> | Defensive Driving                   | Cass County                   | 18          |
| <b>November 17, 2008</b> | Defensive Driving                   | Maryland Heights              | 14          |
| <b>November 18, 2008</b> | Snow & Ice Control                  | Maryland Heights              | 47          |
| <b>November 19, 2008</b> | Snow & Ice Control                  | St. Charles County            | 19          |
| <b>November 24, 2008</b> | Snow & Ice Control                  | University City               | 17          |
| <b>November 25, 2008</b> | Defensive Driving                   | University City               | 13          |
| <b>December 2, 2008</b>  | Worker Safety Training              | Maryland Heights              | 22          |
| <b>December 2, 2008</b>  | Defensive Driving                   | Platte County Resource Ctr    | 8           |
| <b>December 4, 2008</b>  | Worker Safety Training              | Greene County                 | 12          |
| <b>December 8, 2008</b>  | Snow & Ice Control                  | Carthage                      | 47          |
| <b>December 9, 2008</b>  | Worker Safety Training              | Cape Girardeau Extension Ctr  | 16          |
| <b>December 11, 2008</b> | Defensive Driving                   | Jefferson City                | 15          |
|                          |                                     | <b>TOTAL ATTENDEES</b>        | <b>1955</b> |



## APPENDIX D: “Show Me” Road Scholar Program Course Descriptions

### Level I

**Core Courses:** (Required of all participants)

#### **Communication Skills**

The course will cover verbal communication. It will be an interactive course where those attending will exhibit their ability to communicate. Those attending will be presented with the best methods of communicating with those around them, which include their superiors, fellow workers, the people they are supervising, media and most of all the general public.

Time: 4 hours

#### **Work Zone Safety & Flagger Training**

The course will cover Work Zones - the when, where and how, as set forth in the Manual on Uniform Traffic Control Devices (MUTCD). Those attending will be instructed on the proper set-up for traffic control in various situations that may be encountered during construction and maintenance of urban and rural streets and highways.

The attendees will also be instructed on how to manage the traffic at a construction and/or maintenance site. The course will cover proper apparel to be worn and the equipment that is approved for use in the MUTCD. The course will also cover the best locations for flaggers to be stationed, proper hand signals and how best to move traffic through different construction and maintenance sites. Participants may be tested on their abilities and issued a document verifying their attendance at the course.

Time: 4 hours



### **Workplace, Equipment and Job Site Safety**

The course will cover safety procedures around the workplace by highlighting some of the most dangerous activities employees experience, as well as some of the more mundane and overlooked areas of safety. The intent is to increase safety awareness of workers in order to increase job satisfaction, decrease worker turn over, improve the quality of work, decrease insurance claims and reduce loss of work time. It will examine various topics, such as types of personal protective equipment, proper lifting, slips trips and falls, confined space entry, trenches & excavations lock out/tag out, blood borne pathogens, using Material Safety Data Sheets (MSDSs) along with some defensive driving skills.

Time: 4 hours

## **Level I**

**Elective Courses:** (Required to complete 5)

### **Bridge Incident Inspection**

What do you look for when a truck hits one of your bridges or maybe the bridge has been underwater for a week? This course will take you through a process that will let you do a cursory inspection of your bridges to insure that they are safe to allow traffic to use them.

Time: 4 hours

### **Bridge Management and Maintenance**

This course discusses the advantages of having a good bridge maintenance program. It will provide you with the information needed to develop a system, what to look for when reviewing your bridges and many different types of maintenance solutions.

Time: 4 hours

### **Culvert Design and Drainage**

This course will cover the importance of culverts in the proper design of roads and the various types of culverts on the market today. The course will cover where to use a drainage structure and what type to use. It will go into proper sizing of culvert and determining lengths required for new and replacement culverts.

Time: 4 hours

### **Culvert Installation and Management**

Most road maintenance people will say, I can dig a trench and drop a tube in it and cover it up. But do they have any idea of what size pipe to use, what is the best method of installation and do they think to check on the culverts after it is installed. Proper installation of new culverts and the importance of a good management system for all drainage structures within a local agency

The class will point out some best practices in doing all these things and more

Time: 4 hours

### **Defensive Driving**

We all know how to drive but what about the other guy? This course trains, those in attendance what to watch for and how to react. It covers situations that occur on the road everyday and encourages everyone to watch out for that other vehicle. Attendees will learn to anticipate the other driver's actions.

Time: 4 hours

### **Gravel Road Maintenance**

The course will cover the proper maintenance of gravel roads. It will stress the importance of using the correct aggregates, proper grading methods and the use of various dust control methods and stabilization processes. The safety of the traveling public will be stressed.

Time: 4 hours

### **Materials Inspection**

The course will discuss the importance of use the proper materials in road construction and maintenance and how best to get those materials. It will cover some of the more popular test used to guarantee the material being purchased meet the requirement set up for them. There will be a discussion on writing specifications and bidding materials.

Time: 4 hours

### **Motor Grader Training**

This course will instruct those attending on good grading practices. Those attending will be advised the various ways to set a grader to perform different functions with a grader. They will also be shown some of the best methods of grading roads and cutting ditches. Proper maintenance of the machine will be stressed along with operator safety and the safety of the traveling public. One should have a general knowledge of the operation of a grader before attending the class.

Time: 4 hours

### **Preventive Pavement Maintenance**

With the ever increasing demand for better roads and the decreasing revenues agencies need to look at methods of extending the life of their pavements. This course will study the various methods available to give life to your roads. You will learn about the equipment and materials available and how best to apply the modern techniques to your highway system. You will also be advised of the merits of developing a Pavement Management System.

Time: 4 hours

### **Signing and Pavement Marking**

The course covers sign pavement marking warrants, proper installation, value of a good inventory and management system and the new federal requirement on retro reflectivity standards.

Time: 4 hours

### **Snow and Ice Control**

The course will cover the need for advanced planning, keeping the public informed, types of equipment available, various chemicals available and when to use them, plowing techniques and above all stress safety of the worker and the traveling public.

Time: 4 hours

### **Traffic Signal Maintenance**

Traffic signals are becoming more common everyday and like everything mechanical they must be maintained. This course will cover some of the common maintenance problems that occur with signals. It will cover the different types of signals and how they function. It will also look at traffic control when working on signals.

Time: 4 hours

### **Paved Road Maintenance**

The course will cover some of the best practices used to maintain the various types of paved roads. Various materials available for patching pot holes, cracks and low areas will be discussed. Some of the different equipment available for maintaining paved roads will be highlighted. There will be discussion of setting up a Pavement Management System to track maintenance efforts and to aid in decisions as to when to rebuild a road. Above all the safety of the worker and the traveling public will be stressed.

Time: 4 hours

### **Attend a public works or traffic conference**

Register and attend various educational sessions provided at one of the many conferences held throughout the state that is transportation or public works related. Credit for only one elective course can be earned by attending a conference while completing the Road Scholar Program. The conference must be approved by the Road Scholar partnership committee to earn credit. Examples include the Annual Traffic & Safety Conference of Missouri, County Commissioners Association of Missouri (CCAM) annual training session, Missouri Municipal League (MML) annual conference, Missouri Association of County Transportation Officials (MACTO), or the Missouri Chapter of American Public Works Association (APWA) state conference.

**Attend an external non-LTAP training class**

Register and attend an external training class hosted by an agency other than LTAP. Credit for only one elective course can be earned by attending an external training class while completing the Road Scholar Program. The course must be approved by the Road Scholar partnership committee to earn credit.



## Level II

**Core Courses:** (Required of all participants)

### **Managing Employee Performance**

Not everyone is suited to perform every task in your workplace. The purpose of this session is to enable you to assess the abilities of your workers and to assign them in the areas where they can contribute the most to your agency.

Time: 4 hours

### **Supervisory Communication Skills**

Being able to communicate with your workers is very important. This course will present the many different techniques available to let your workers know you care about them and how to develop a relationship that ensures top performance from everyone.

Time: 4 hours

### **Roadway Safety Fundamentals**

This course introduces the critical relationships between roads, the roadside, roadway user behavior, and safety. Participants will learn about basics of road safety, solving traffic safety problems, traffic control devices, roadways, improving roadside safety, intersections, and railroad grade crossings.

Time: 4 hours

## Level II

**Elective Courses:** (Required to complete 5)

**Asset Management and Cost Accounting**

**Bridge & Culvert Hydraulics**

This course will cover what information is required for the proper sizing of culverts and bridges. It will where and how to attain the information needed and the various computer programs available to use the information. It is advisable for those attending to have knowledge of math and some computer skills if they wish to gain anything from the session.

Time: 4 hours

**Community and Media Relations**

This course will cover the importance of good public relations. It will stress the importance of have a good relations with the media and how best to attain and maintain that relationship. The session will cover some ways of communicating with the public, through mailings, websites, group meetings and simply talking to them.

Time: 4 hours

**Enhancing Cooperative Work Relationships**

**Human Resource Management**

This course will cover the importance of using employees in jobs best suited for them. It will give those the attending the ability to identify the personal skills of individuals and certain personality traits. Participants will be instructed in the importance of assigning the right people and the correct number of people to various job assignments. Proper hiring procedures will also be covered and sexual harassment in the work place will be touched on.

Time: 4 hours

**Innovative Financing**

This class will cover where the MONEY is and how to get it. The course will give an overview of various grant programs available to finance local transportation improvements. Participants will be enlightened on the different funding options available to do specific projects, say bridges, sidewalks, trails etc.

Time: 4 hours

**Intergovernmental Relations**

This course will cover the importance of having a good relationship with other government agencies. In today's world of funding shortages it is more important than

ever to work with other agencies to eliminate duplication of services. The course will suggest ways of communicating with other agencies and at what level those communications work best.

Time: 4 hours

### **Legal Aspects of Supervision**

### **Project Planning and Management**

#### **Rural Roads Safety Assessments**

This course will take you through the road safety assessment process. It will show the benefits of performing them and where best to apply the process. Those attending will be taken through the process and learn what steps are essential in the program. Time will be spent discussing what to look for when doing a road safety assessment.

Time: 4 hours

### **Traffic Design**

### **Traffic Signal Installation**

#### **Attend a public works or traffic conference**

Register and attend various educational sessions provided at a national conference that is transportation or public works related. Credit for only one elective course can be earned by attending a conference while completing the Road Scholar Program. The conference must be approved by the Road Scholar partnership committee to earn credit. Examples include the National Association of County Engineers (NACE) annual conference or the American Public Works Association (APWA) Congress.

#### **Attend an external non-LTAP training class**

Register and attend an external training class hosted by an agency other than LTAP. Credit for only one elective course can be earned by attending an external training class while completing the Road Scholar Program. The course must be approved by the Road Scholar partnership committee to earn credit.



## APPENDIX E: ROAD SCHOLAR PROGRAM REGISTERED AGENCIES

| Contact Person                  | First Name | Title                       | Address                              | City             | Zip   | Phone        | # Registered |
|---------------------------------|------------|-----------------------------|--------------------------------------|------------------|-------|--------------|--------------|
| <b>Julia Maples</b>             | Julia      | Admin. Assist.              | 100 W Church Street,<br>Room 100     | Ozark            | 65721 | 417-581-2112 | 5            |
| <b>Ben Cooper</b>               | Ben        | Public Works<br>Director    | PO Box 40                            | Bland            | 65014 | 573-821-6143 | 1            |
| <b>Rick Shuler</b>              | Rick       |                             | PO Box 9                             | Bolivar          | 65613 | 417-326-2489 | 2            |
| <b>Brent Abrams</b>             | Brent      | Public Works<br>Director    | 950 N 5th Street                     | Festus           | 63028 | 636-937-6646 | 11           |
| <b>Greg Hayes,<br/>P.E.</b>     | Greg       | City Engineer               | PO Box 130                           | Fulton           | 65251 | 573-592-3161 | 2            |
| <b>Tim Herrman</b>              | Tim        | Public Works<br>Supt.       | 4000 NE 76th                         | Gladstone        | 64119 | 816-436-5442 | 10           |
| <b>Donald Hopkins</b>           | Don        | Superintendent              | PO Box 36                            | Moscow<br>Mills  | 63362 | 636-299-2559 | 1            |
| <b>Larry Martin</b>             | Larry      | Public Works<br>Director    | 205 N 1st Street                     | Ozark            | 65721 | 417-581-2407 | 1            |
| <b>Nick Ashbach</b>             | Nick       | Street Supt.                | 221 N. Main Street                   | Republic         | 65631 | 417-732-3400 | 7            |
| <b>Craig Noblitt</b>            | Craig      | Street Maint.<br>Supervisor | 1111 W Chestnut<br>Expressway Bldg 5 | Springfield      | 65802 | 417-864-1478 | 16           |
| <b>Dan Germann</b>              | Dan        | Parks & Street<br>Supt.     | PO Box 196                           | Vienna           | 65582 | 573-422-3932 | 1            |
| <b>Dave Kraleman</b>            | Dave       | Supt. Of Streets            | 200 E Fourth Street                  | Wentzville       | 63385 | 636-639-2060 | 11           |
| <b>James Martin<br/>Doughty</b> | James      | Superintendent              | 137 E Main                           | Drexel           | 64742 | 816-419-4914 | 1            |
| <b>LaDon<br/>Atkinson</b>       | Ladon      | Supervisor                  | 119 E Park                           | Bowling<br>Green | 63334 | 573-324-3902 | 1            |
| <b>Greg Horton</b>              | Greg       | Superintendent              | 102 N Missouri St.                   | Potosi           | 63664 | 573-779-3360 | 1            |
| <b>Gary<br/>Scheipeter</b>      | Gary       | Supt. Of Public<br>Works    | 10 North Bemiston                    | Clayton          | 63105 | 314-290-8540 | 8            |
|                                 |            |                             |                                      |                  |       | <b>TOTAL</b> | <b>79</b>    |





## APPENDIX F: SUMMARY OF EVALUATIONS

|  |   |
|--|---|
| <i>Overall the workshops were:</i>     | 43.41% Good<br>41.95% Excellent<br>3.41% Fair<br>.39% Poor  |
| <i>Speaker presented the material:</i> | 74.34% Very Well<br>13.85% Well Enough<br>.49% Not Well   |
| <i>The information presented is:</i>   | 66.93% Very Valuable<br>20.69% Somewhat Valuable<br>.59% Not Valuable   |
| <i>Learned of the workshop:</i>        | 30.73% Fellow Worker<br>24.98% Newsletter<br>6.05% Flyer<br>16.59% from Workplace<br>.49% Other<br>3.61% MoDOT Staff  |
| <i>Work for:</i>                       | 51.80% City/Municipality<br>25.17% County<br>7.22% Townships<br>.29% MoDOT<br>.00% Engineering<br>.49% Road District<br>1.76% Other   |
| <i>Primary Responsibility:</i>         | 57.27% Maintenance Worker<br>12.88% Crew Chief/Foreman<br>6.34% Superintendent<br>1.95% Administrator<br>2.05% Other<br>.78% Fire Chief/Fire Department<br>.39% Presiding Commissioner<br>Safety Coordinator<br>.29% Operator<br>Law Enforcement<br>Senior Sign Technician<br>Heavy Equipment Operators<br>.20% Electrical Utility<br>Highway Department<br>.10% City Engineer<br>Road Work Crew<br>Environmental<br>Lineman<br>Assistant Foreman<br>Park Caretaker<br>Trash Man<br>Grounds man<br>Electrical & Signs Department<br>Gardner<br>Mechanic |