

## 2009 LTAP Peer Exchange Report

## Hosted by the Puerto Rico Local Technical Assistance Program





#### **Invited LTAP Centers:**

Indiana, Kentucky, Louisiana, and New Hampshire









Sheraton Old San Juan, San Juan, Puerto Rico June 3, 2009

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#### Introduction

The Puerto Rico Local Technical Assistance Program (PR-LTAP) hosted a Peer Exchange on June 2-3, 2009 in San Juan, Puerto Rico. The purpose of this activity was to have a conversation and discussion with representatives of other LTAP Centers to share and exchange ideas on new products, processes, and procedures, including innovative management skills, to assist in improving the quality and effectiveness of our program. The timing of the Peer Exchange was adequate, particularly in this era of economic hardship, in which LTAP Centers have developed strategies to be more innovative in the search of alternate sources of funding to administer the training and technology transfer programs without sacrificing the level of quality. In addition, other topics of interest were related to the delivery of information using new technological advancements of online training, such as video conferences and webinars and the use of partnerships. The Peer Exchange also provided the opportunity for federal, state and local agencies representatives to identify their current needs and present innovative ideas based on how to address them considering the present economic scenario. The LTAP Centers from the states of Indiana, Kentucky, Louisiana, and New Hampshire participated of this exchange activity. The four LTAP Centers are university-based centers, similar to the PR-LTAP Center, which is located at the University of Puerto Rico at Mayagüez. The list of center participants and state and federal officials that participated at the Peer Exchange are shown in Table 1.

The information discussed during the Peer Exchange that was provided by the representatives of the Center was complemented with information available in each Center's website. The Internet address for the four LTAP Centers participating in the Peer Exchange is:

- Indiana LTAP, Purdue University: <a href="http://rebar.ecn.purdue.edu/LTAP/home">http://rebar.ecn.purdue.edu/LTAP/home</a>
- Kentucky LTAP, University of Kentucky: <a href="http://www.kyt2.com">http://www.kyt2.com</a>
- Louisiana LTAP, Louisiana State University: <a href="https://www.ltrc.lsu.edu/ltap">https://www.ltrc.lsu.edu/ltap</a>
- New Hampshire LTAP, University of New Hampshire: <a href="http://www.t2.unh.edu">http://www.t2.unh.edu</a>

Table 1. List of Participants of the PR-LTAP Peer Exchange 2009

Participant	Position, Center / Agency
Patsy Anderson	Director, Kentucky LTAP Center
Benjamín Colucci	Director, Puerto Rico LTAP Center
Unwanna Dabney	Community Planner, Virginia Division, FHWA
Alberto Figueroa	Deputy Director, Puerto Rico LTAP Center
Charlie Goodspeed	Principal Investigator, New Hampshire LTAP Center
John Habermann	Program Manager, Indiana LTAP Center
Clark Martin	Affiliates Program Team Leader, FHWA
Miguel Santini	Executive Director, PR Traffic Safety Commission
Marie Walsh	Director, Louisiana LTAP Center

#### **Discussion**

Miguel Santini, Executive Director of the Puerto Rico Traffic Safety Commission and President of the PR-LTAP Advisory Board, gave the welcome to all participants in the PR-LTAP Peer Exchange. Santini talked about the importance of the peer exchange activities to allow the sharing of experiences and the discussion of potential improvements in the delivery and efficiency of training programs, particularly those activities associated with traffic safety issues. He brought up his recent experience during the 2009 Strategic Highway Safety Plan Peer Exchange, held in Chicago, Illinois, on April 29 – May 1, 2009; in which the discussion was associated with integration strategies associated to safety plans, safety data integration strategies, and the participation of agencies, such as LTAP Centers, in the promotion of safety activities, among other topics.

Dr. Alberto Figueroa, Deputy Director of the Puerto Rico LTAP Center, continued the meeting with a presentation that included the center profile and general description of the Puerto Rico-LTAP Center. The presentation included an overview of the major activities performed by our Center, our challenges, success stories, new developments and strategies to provide training and technology transfer, and other significant details related to the Center. **Appendix 1** includes a copy of the PR-LTAP presentation made and offered to the participants.

The major topics that were initially outlined for the Peer Exchange are shown in **Appendix 2**. The discussion of ideas and dialogue between the participants was initiated with a short presentation about the profile and general characteristics of each one of the participant centers. The information from each Center was directed toward the description of at least three main priority areas of their activities. The following section presents a summary that includes the main contributions, by Center in the order of presentation that resulted from the dialogue and discussion of ideas generated by the participants in the Peer Exchange.

#### **Kentucky LTAP**

The major highlights, activities, new ideas and/or programs performed by the Kentucky LTAP (KY-LTAP), presented by the Center Director, Patsy Anderson, are summarized below:

- 1. The KY-LTAP emphasizes training and technology transfer activities in four programs that are oriented toward work-zone traffic control, such as flagging procedures, work zone design and management skills, among others.
  - The KY-LTAP Work Zone Training Certification Program is supported by Kentucky Specifications that require contractors in their bidder's qualifications to comply with the work zone safety training.
  - The KY Work Zone Traffic Control Employee Qualification Program has been developed to meet this need and includes three courses: Basic Work Zone Traffic Control and Flagger, Work Zone Traffic Control Technician and Work Zone Traffic Control Supervisor. Additionally, the Cabinet has authorized highway construction contracting companies to teach flaggers employed by them, using trainers approved by the Cabinet. The Flagger Instructor Training Course has been developed to meet the needs of the Cabinet and the highway industry.
  - The qualifications require that a work zone technician and work zone supervisor to be present in the work zone area during the entire project time. These positions are apart from the project inspector position. A main issue was identified with the flagger turnover that experience contractors.
- 2. The KY-LTAP Center experienced a Train-the-Trainer seminar, preparing the material on a specific topic, and contracting an external source to present it. This external source has legal responsibilities and must sign a disclosure indicating the scope and purpose of the training. The exams used for the Work Zone Certification Programs are developed by ATSSA-trained Professional Engineers. A three exam process on job description, responsibilities and qualifications is required. The Center supervises that the curriculum for each training course is followed strictly and on time.

- 3. The Center offers a Roads Scholar and Road Master program. The Roads Scholar Program provides basic knowledge on maintaining local roads and streets and courses related to personnel management, safety, and road surface management. The Roads Scholar Program is composed by six (6) required courses and three (3) optional courses. These courses are focused on administrative, asset management, road safety, among other topics. The Road Master Training Program is an additional level of training beyond the Roads Scholar Program and requires seven more days of training. The purpose is to provide a higher level of technical information and is targeted toward those individuals who want to become Managers or State Superintendents. The job description for these positions requires the Road Master qualification to be allowed to apply. Road Masters must complete the Roads Scholar Training Program and complete the Road Master's four required courses and three optional courses.
- 4. The participants of training activities incurred in a fee, \$70 for public officials per day and \$80 for private participants.
- 5. The KY-LTAP shared the importance of the Steering Committee to assist in the design of the training programs. The members of the Steering Committee are appointed by legislation, which includes six to seven members that represent the private, state, and federal stakeholders. A remark was made about the effect of not having an active committee or advisory board.
- 6. The Center has meetings with each County Administration in the state to promote the LTAP program and to have the commitment from the KY Department of Transportation.
- 7. The sources of funding of the Center include the KY Legislature, KY DOT, and 1/90 of the State Sales Tax. In addition, by being associated with the University of Kentucky, which is a Land Grant Public-Serving University, the Center is not required to pay overhead charges to the university.
- 8. The center newsletter includes articles associated with hot topics in Kentucky that are identified from local newspapers and also deals with national issues and strategies and ideas that are promoted by FHWA, AASHTO, ARTBA, etc.

9. The KY-LTAP has a Safety Circuit Rider program, supported by the KY-DOT (Kentucky Transportation Cabinet). Among the duties of the Safety Circuit Rider, the program will continue to focus on crashes involving roadway departure, reduction of fatal crashes, collisions at intersections, and the reduction of pedestrian crashes and fatalities. The Safety Circuit Rider works closely with the Kentucky Transportation Cabinet's Division of Traffic and Operations and their Highway Safety Corridor Program and provide information through training, materials and advice for accepted countermeasures to identified problems. The Rider meets with elected officials, road and street crews and local law officials to determine ways to alleviate hazards. Locals are referred to their respective Kentucky Transportation Highway District Office or to the consulting engineering industry for specific engineering assistance. The Safety Circuit Rider also presents Low-Cost Safety Improvements for Rural Roads in workshops and has been collecting transportation data or statistics on high crash locations, to analyze, assess and audit, and to provide ideas on maintenance issues.

#### **New Hampshire LTAP**

Charles Goodspeed, Principal Investigator of the New Hampshire LTAP Center (NH-LTAP), emphasized on issues related to the integration of resources, and the ideas presented are summarized below:

- 1. The NH-LTAP Center has served regularly as a liaison between the state agencies and the local municipalities helping to integrate resources between agencies.
- 2. The Center has been evaluating and experiencing new innovative funding and/or incentives, in this era of economic crisis, for the money issues. Example of this innovative ideas to solve the money issues are:
  - o Preparation or creation of tax maps-based location with state information that can be useful for Police activities and roadway maintenance and improvements.
  - Prepared a list of asset management and inventory of signals, signs, and accidents, among others.

- Working with private sector on parking lots, qualifying green contractors, managing the Mutual Aid Program that includes fire and power agencies, and involved student body in promoting the importance of transportation.
- o The Mutual Aid Program for Public Works is the first statewide program developed in the United States. The Mutual Aid Program is aimed to help those most affected by a natural disaster. The program is a network of municipalities that assist one another during emergencies through partnering agreements and a protocol for requesting and receiving aid. Inventories are shared with each member of the program. This includes access to trucks, graders, personnel, building inspectors, water and wastewater operators and many more resources. The program has been successful in helping numerous communities repair and restore damaged infrastructure.
- 3. The Center participates on basic research studies involving graduate students of the University of New Hampshire, which are paid thru SPR funds.
- 4. The Center has developed software platforms and databases (MEMS/RSMS) with the interaction of GPS and computers to be used on police vehicle.
- 5. The NH-LTAP Center has a Roads Scholar Program. The program has four recognition levels, with specific subject area coverage. At each level, awards and certificates are presented; names are published in an annual Roads Scholar Directory and newsletter, with an article and portrait for Master Roads Scholars; official letters are mailed to Selectmen and Supervisors; and press releases are sent to local newspapers.
- 6. The Advisory Board for the NH-LTAP Center is composed of representatives of local municipalities and officials from FHWA, the Department of Public Works, and the Department of Transportation.
- 7. The Center carries out networking meetings with focal groups with stakeholders, outside of their typical training activities, to assess the effectiveness of their program. In these meetings, stakeholders are asked about various issues related to the center and its activities.

#### **Indiana LTAP**

Mr. John Habermann, the Program Manager of the Indiana LTAP (IN-LTAP), distributed sample copies of various publications made by the Center that have been a success among their stakeholders. A list of the publications and a photo of their cover are shown in **Appendix 3**. The highlights on the Center activities are summarized below:

- 1. The publication number INLTAP-RP-1-2009 entitled *Directory of Indiana State, County, City and Town Officials*, is published annually by the IN-LTAP, and is free of charge. This publication compiles the contact information from all the agencies and officials responsible for road and street works.
- 2. The Center has also worked in Special Projects by creating publications that are published each two years. Copies of three such publications were made available: Administration and Management of Local Roads and Streets, Needs Assessment for Local Roads, and Highway Revenues, Distributions and Expenses.
- 3. The Advisory Board of the IN-LTAP Center is composed of 20 members that includes representatives from the Indiana Association of County Commissioners, the Indiana Association of Cities and Towns, Purdue Faculty of Civil Engineering, the Joint Transportation Research Program, the Executive Board of the Indiana Association of County Highway Engineers and Supervisors, the Indiana Street Commissioners Association, the Indiana Association of County Commissioners, the Executive Board of the Indiana Association of City Engineers, INDOT, plus Ex Officio members representing a broad facet of the Indiana local transportation network.
- 4. The Center LTAP Newsletter includes information about their Road School program and information on their partners.
- 5. The Center uses its website as an important link with their stakeholders to provide technical information and promote the center activities. The traffic of visitor to the website is monitored using Google Statistics which provides statistics related to the number of hits associated with the particular website areas. This tool helps the Center

- to identify which sections of the website are being visited most frequently and assess the quality and efficiency to target improvements to the different website sections.
- 6. The Center has collaboration of the Information Technology (IT) Department at Purdue University to use their laptops at the Center seminars and experiment with new computer technology for their presentations.
- 7. The Center has been involved in Speed Monitoring and Assessment Studies with the Indiana State Police. The State Police identifies highway segments of interest thru the state to target the speed studies. The Center is in charge of collecting and analyzing the data and reports the results of the analysis and speed trends.
- 8. The Center has a program of lending equipment to counties and local governments to be used for training purposes and for conducting their own transportation studies. The Center provides the training related to the use of the equipment, the preparation of transportation studies and the analysis of the data to develop the technical skill of transportation officials in Indiana countries.
- 9. The Center talked about the importance of having transportation-knowledgeable staff. During the interviews with potential employees, the Center requests the preparation of a presentation to all the applicants to verify the level of detail of technical knowledge they have.

#### Louisiana LTAP

Mrs. Marie Walsh, Director of the Louisiana LTAP Center (LA-LTAP), talked about the major activities that the Center is involved, emphasizing in safety, and they are summarized below:

 After the Katrina Hurricane, the LA-LTAP Center has focused its training seminars on Safety for Public Respondents and Public Events, in conjunction with the Office of Emergency Preparedness, and such activities are held every other year. Other popular courses are associated with "Train the Trainer" sessions dealing with the operation of heavy equipment, such as Chain Saw Safety, Master Trainer in Backhoe Operations,

- Cleaning of Ditches, among other courses. The Center collects a daily fee of \$25 to participants to cover the seminar registration and lunch. Seminars are presented and repeated in different counties of the state through a calendar year.
- 2. The Center has sponsored the PTOE Refresher Course for and has offered the ITE Certification Exam in previous occasions.
- 3. The Center activities have a major focus toward safety analysis and the evaluation of cost effective crash countermeasures. The Center has a Local Roads Safety Program and collaborates in the Implementation of the Highway Safety Plan for the State of Louisiana. As part of the Local Roads Safety Program, the LA-LTAP Center has been involved with providing technical assistance to locals and collecting local data to carry out safety analyses. The Center hired a traffic safety engineer that is involved in the safety analysis. The major focus safety areas are the identification of black spots in local roads and intersections, roadway departure crashes, and road safety audits, among others.
- 4. The Center also has three (3) part-time traffic engineers, hired by the LA-DOT, to assist on road safety audits and the identification of low cost safety treatments for crashes associated with intersections and roadway departure.
- 5. The LA-LTAP Center has also provided assistance to local governments in soliciting federal funding in safety-related programs, such as the HRRR and HSIP programs.
- 6. The LA-LTAP Center has also established a The Roads Scholar Program that gives local transportation personnel the opportunity to improve their road and bridge maintenance skills. Participants in the program learn proven techniques as well as how the latest technologies and innovations can be applied to their particular maintenance problems. Participants who complete the program acquired basic knowledge of road maintenance, work zone safety and worker safety. A certificate is awarded upon completion of the program.
- 7. The Center has being successful in the use of webinars provided by FHWA, ITE, APWA, etc. as part of their training and technology transfer activities. The Center has a room

- available with Internet connection and phone line to be able to invite their stakeholders and participate in the webinars.
- 8. In order to assess the quality and effectiveness of their program, the Center hired a consultant to perform an evaluation using telephone interviews and electronic forms filled by stakeholders.

#### **Puerto Rico LTAP**

After the presentation and dialogue generated by the representatives of the participating Centers, the discussion was geared toward the involvement of the Puerto Rico LTAP (PR-LTAP) in other activities besides the training program and technical assistance activities identified at the beginning of the meeting. The PR-LTAP Director identified the following activities or potential collaborations:

- The PR-LTAP is interested in encouraging the reactivation of the American Public Works
  Association (APWA) in Puerto Rico. The activation of this organization in Puerto Rico will
  promote the continuous improvement of skills of transportation officials in state and
  local governments.
- 2. The Center has collaborated in special research projects that deal with safety issues in the island. Examples of such collaborations include a study performed by the Center Directors related to motorcycle safety and the impacts to local roads in Puerto Rico, and providing suggestions toward engineering, education, and enforcement strategies that could help reduce related crashes and fatalities.
- 3. The Center is also studying new funding sources and opportunities. Examples of such would be the translation, to Spanish, of technical documents, among others.

#### **Questionnaire Analysis**

As part of the process of planning and coordinating the Peer Exchange meeting, a questionnaire was developed and sent to all the Centers invited to participate in the exchange. The responses to the questionnaire from all the participants are included in **Appendix 4**.

The major highlights of the responses are summarized below, for each of the question included in the questionnaire:

#### I. Technology Transfer

- Centers are "clearinghouses" or points of contact of transportationrelated information for local officials
- Create technology transfer activities that stakeholders will perceive as training opportunities, not necessarily "classroom opportunities"
- Generate Road Research Ideas to involve faculty members and students
- Have a user friendly website with update information
- Major link between University, Local Governments, and State Governments
- Presence in local agency association and professional association meetings

#### II. Partnerships

- Participation in meetings and collaboration with local agency associations and professional associations
- Provide resources, funding, newsletter articles, or seminar speakers
  - National associations APWA, TRB, ITE, NACE
  - Local associations
- Partnerships with private industry partners provide instructors and informational booths at events

#### III. New Legislation

- Perform and conduct studies relevant to locals that could serve as basis for new legislation
- Report of center accomplishments to Congress Members and State Legislature

#### IV. Training Resources

Trainer fees vary based upon skill level and complexity of materials presented

- Variety of trainers from private sector, DOT officials, professional speakers, faculty, consultants, or retired transportation officials
- Seminar programs are developed using planning committees and/or center staff personnel. Topics are identified based on local issues and needs, requirements from regulatory agencies (FHWA, DOT's) and from national associations (APWA, ITE), talks with local officials and other LTAP centers.
- Establishment of formal curriculums for Road Scholar Programs
- Continuing Education Credits vary from credits for only central events to certificates of participation.
- Research activities include assistance to researchers by developing publications and newsletter articles, assisting in training development for the implementation of research results, fund viable projects related to signals, sign retro-reflectivity, maintenance and construction of bridges, winter maintenance, etc.

#### V. Funding

- Sources of alternate funds, besides FHWA/LTAP and DOT could include
  - Seminar registration fees
  - Conference fees
  - Publication sales (Transportation Directories)
  - o Special projects and research projects
  - Host university (in-kind, rescind overhead costs)
  - Private sector sponsors

#### VI. Evaluation & Marketing

- Tools for the evaluation of training activities and effectiveness of the program varies from e-mail surveys, activity exit surveys, annual customer surveys, seminar 6-month follow-up surveys, word of mouth, and letters to LTAP from customers. Centers are looking for better and more efficient methods to accomplish this task.
- Staff evaluations are performed annually based on formats designated by the respective universities

#### VII. Advisory Board

· Quarterly meetings with advisory board.

#### **Conclusions**

The PR-LTAP Peer Exchange was a practical and effective process that allows us with timely knowledge on funding, research, product development, technology transfer management and integration issues. The activity also provided us the opportunity to share

among the participants information about good practices, innovations and past experiences. The dialogue that was developed during this activity served to identify target areas for improvement for the PR-LTAP Center.

The PR-LTAP Center has a broad base of stakeholders that includes both local governments and state transportation officials. The current condition and extension of the highway network in the Commonwealth of Puerto Rico, in addition to the current share of the responsibilities for the operation and maintenance of the roadway infrastructure between state and local governments establish the need for the Center to serve both populations to attend their training needs. The success stories, the program activities and the experience of the PR-LTAP Center, demonstrated throughout its 23 years of operation, gave an extensive overview to the representatives of the other Centers and other invitees in the Peer Exchange.

The main target areas that were identified for potential enhancements and improvements to the PR-LTAP program are:

- Incorporate an official member in the Advisory Board that directly represents the local governments (city major, director of municipal public works, etc.) that could provide current training needs and potential technology transfer activities for the benefit of that population.
- Partnerships have proven to be very effective and provide benefits to the Center's activities. A target area is to identify new partnerships with local professional associations and private industries in the island to better identify training needs and resources that could be used by the PR-LTAP Center. Potential associations that could be targeted for partnerships could include the Puerto Rico Institute of Civil Engineers, the Puerto Rico Association of General Contractors, etc. This type of partnership will be useful to promote the Center activities, identify speakers and trainers, as well as locations and training opportunities.
- An additional target area is to establish formal partnerships with municipal consortiums.
   The focus of the partnerships is to identify specific training needs and technology transfer activities for specific regions in the island. In addition, these partnerships will

serve to increase the promotion of the Center activities and promote the participation of local transportation and government officials. The Commonwealth of Puerto Rico is divided into 12 municipal consortiums. The Center has previously worked directly with municipal consortiums to identify and provide specific training sessions. This strategy will enhance the current agreement between the PR-LTAP Center and the Office of the Commissioner of Municipal Affairs (OCAM, by its acronym in Spanish) to promote PR-LTAP training activities to local and municipal officials.

- Promote to Puerto Rico transportation agencies formal requirements for training hours/credits for work zone personnel, and other safety programs such as Roads Scholar or Roads Master, and the establishment for the qualification of bidders in roadway construction projects. The PR-LTAP Center could serve as the official training center, providing a formal curriculum and training schedule, and the offering of work zone safety certifications, such as flagger operations, work zone supervisors and technicians for public officials and personnel from private contractors.
- Modify the typical training program to incorporate the opportunities for having shorter training sessions, having more repetitions of the same course in different locations, and provide training using flexible hours and schedule (nighttime, weekends, etc.) to increase the coverage and accessibility to stakeholders.
- Diversify the sources of funding for the PR-LTAP Center by promoting the development
  of special short-term research projects or transportation studies that could involve
  center personnel (faculty, students or technicians).

### Appendices List

- 1. Appendix 1: Puerto Rico LTAP Center Presentation
- 2. Appendix 2: Outline List of the Major Discussion Topics
- 3. Appendix 3: Cover Pages of the Publications provided by the Indiana LTAP Center
- 4. Appendix 4: Participants' Responses to Questionnaire

# Appendix 1: Puerto Rico LTAP Center Presentation

## **Appendix 2:**

## Outline List of the Major Discussion Topics

- 1. Technology Transfer Issues
  - a. Relation with stakeholders
  - b. Relation with DOT/Univ./Municipalities/
- 2. Partnerships
  - a. Local
  - b. Private Sector
  - c. Nat./Int. Organizations
- 3. New Legislation
- 4. Training Resources
  - a. Trainer's fee
  - b. Technology
  - c. Seminar Program
  - d. Credits
  - e. Research
  - f. Special Projects

## **Appendix 3:**

## Cover Pages of the Publications provided by the Indiana LTAP Center



# Appendix 4: Participants' Responses to Questionnaire