



Pennsylvania Department of Transportation's Local Technical Assistance Program (LTAP)

December 1, 2005 – November 30, 2010

Contract 354R22

Final Report

(Data reported December 1, 2005 – October 31, 2010)



PENNSYLVANIA STATE ASSOCIATION OF TOWNSHIP SUPERVISORS

November 30, 2010

Mr. Louis Ferretti, LTAP Program Manager
Bureau of Planning and Research
Commonwealth of Pennsylvania
Department of Transportation
400 North Street, 6th Floor
Harrisburg, PA 17120

Dear Mr. Ferretti:

On behalf of the officers, members and staff of the Pennsylvania State Association of Township Supervisors (PSATS), we are pleased to submit the Pennsylvania Department of Transportation's (PennDOT) Local Technical Assistance Program (LTAP) final report for the period beginning December 1, 2005 and ending November 30, 2010. Since the final report must be submitted by the contract end date, this report presents details describing activities through October 31, 2010. All tasks delivered during the month of November 2010 will be included in an addendum.

With PSATS as the primary contractor, the LTAP Team includes the experience and dedication of Pennoni Associates, Inc., Print Solutions Inc., and the Dering Consulting Group. For nearly five years, PSATS and its partners have successfully managed and delivered LTAP services on behalf of PennDOT to thousands of municipal officials and employees across the Commonwealth. During this current contract period, we have proven our effectiveness and familiarity with PennDOT's expectations for the LTAP, we have developed excellent working relationships with PennDOT and countless municipal road and bridge supervisors and workers, and we have established an unparalleled network of staff, processes, and procedures to deliver LTAP goods and services designed to improve workforce development. As a partner to PennDOT, we have helped raise the value of the PA LTAP through the development of a strategic plan, the shaping of new safety programs (local safe roads and walkable communities), the implementation of improved evaluations and the successful use of new training delivery methods (webinar).

As always, PSATS has enjoyed the opportunity to work with the Bureau staff, the Planning Partners, and our workshop attendees, who all play a role in moving the program forward.

Sincerely,

David M. Sanko
Executive Director

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TASK 1: ASSESS/UPDATE/DEVELOP COURSES

Assessment and Gap Analysis of Existing Curriculum Update Existing Courses, Identify Courses, and Develop New Courses

The Pennsylvania Department of Transportation's (PennDOT) Local Technical Assistance Program (LTAP) was awarded to the Pennsylvania State Association of Township Supervisors (PSATS), with the contract start date of December 1, 2005. PSATS led the LTAP Team, which originally included Pennoni Associates, Inc., B.T. Harder Inc., and Print Solutions to deliver a solid course curriculum. As course materials were transferred from the previous contractor, the Pennsylvania State University (PSU), the evaluation and assessment began. The transition was complete in March 2006 and the assessment continued in earnest.

Once the assessment of all available materials was complete, a report was provided by Pennoni Associates that detailed the various levels of readiness of each course. It became clear most course materials were not ready for delivery in their current condition and the updates would take longer than initially anticipated. The report presented to PennDOT listed all courses transferred, if materials were available, and the assessed level of readiness of each course. Once approved by PennDOT, this became the road map by which the LTAP Team proceeded with course updates throughout Year One. (See Attachment 1A)

During this time, it was determined a process was necessary to designate that a course was indeed ready for presentation. A plan was developed, presented to PennDOT, approved and implemented in January 2007. The plan reported in Year One, includes the steps by which a course is approved – development, internal team review, dry run with PennDOT representatives and potential users and, finally, a pilot. This process is currently in use for all new courses developed for LTAP and any courses which have gone through any extensive updates.

Another thorough assessment began in Year Two, with a significant review of all courses in order to reinstitute quizzes for the purpose of the Roads Scholar Program. Objectives were identified and confirmed for all courses and a pre and post quiz was developed. The quizzes were implemented in June 2008. In the beginning of Year Four, the LTAP Team transitioned the B.T. Harder evaluation portion of the contract to Dering Consulting Group (Dering). With the analytical oversight of Dering, the course objectives were refined and analysis was performed on the level and effectiveness of quiz questions in gauging knowledge gained. The quiz results are discussed under Task 10. Additionally reported under Task 10 is the significant overhaul of the evaluation process that began during Year Three of this contract.

Continued course assessment and gap analysis revealed the need for support materials in the form of a video to provide the attendees a more hands-on experience. It was discussed with PennDOT and agreed that although technical assistance/field visits were an option, they are not always feasible. Funding was provided by the Bureau of Planning and Research, PennDOT to produce two videos to fill the instructional need - Bridge Maintenance and Joe's Ride to Work. Members of the LTAP provided technical expertise during the production to ensure the correctness of the material presented. Each continues to be incorporated into a number of maintenance courses.

A library of VHS tapes has been available for instructors, and although still relevant, the use of a VHS is not convenient. Instructors reviewed the library of tapes and the following tapes relevant to current instruction have been converted to DVD, allowing these to be more easily incorporated into the course delivery.

Video Conversions

- 1 New Direction in Sign Management
- 2 Roadway Safety Features
- 3 FHWA - Intersection Safety "red light green light"
- 4 Red Light Green Light
- 5 Making Safer Roads
- 6 Local Government on Trial, Part 1 The Background
- 7 Local Government on Trial, Part 2 The Trial
- 8 PANA Uplink - Keystone Healthy Routes
- 9 Where does the road go?

As reported throughout the course of this contract, LTAP Team members performed course audits – attending a course to evaluate the materials, the instructor presentation, continuity of the LTAP message, and the reaction of all attendees. The audits provide a process by which continuous improvement is attained. The LTAP Team performed the following twenty-five (25) class audits throughout the five-year contract period, which represents a sampling of courses and instructors:

| Class Date | Workshop | Instructor(s) |
|-------------------|------------------------------------|---------------------------|
| 6/7/2006 | New Signing & Work Zone Rules | Mark Hood |
| 7/1/2006 | Asphalt Roads | Sam Gregory |
| 7/5/2006 | Work Zone Traffic Control | Mark Hood |
| 7/12/2006 | Equipment & Worker Safety | Sam Gregory |
| 7/26/2006 | Traffic Signs | Pat Wright |
| 8/30/2006 | Engineering & Traffic Studies | Mark Hood |
| 9/22/2006 | Posting & Bonding | Mark Hood |
| 10/26/2006 | Roadway Safety Improvement Program | Pat Wright |
| 11/1/2007 | Unpaved & Gravel Roads | Sam Gregory |
| 11/2/2007 | Equipment & Worker Safety | Sam Gregory |
| 11/8/2007 | Work Zone Traffic Control | Pat Wright/Jason Shura |
| 11/11/2007 | Traffic Signs | Pat Wright |
| 4/24/2008 | Managing Utility Cuts | Steve Barber/Alan Leonori |
| 4/28/2008 | Roadway Safety Improvement Program | Pat Wright |
| 5/15/2008 | Asphalt Roads | Al Leonori |
| 5/18/2008 | Roadside Vegetation | Sam Gregory |
| 6/10/2008 | Drainage | Sam Gregory |
| 11/26/2008 | Bridge Maintenance | Jason Shura |
| 1/7/2009 | Asphalt Roads | Al Leonori |
| 1/13/2009 | Road Surface Management | Sam Gregory |
| 2/10/2009 | Posting & Bonding | Ron Brown |
| 4/2/2009 | Geosynthetics | Sam Gregory |
| 4/7/2009 | Risk Management/Tort Liability | Mark Hood |
| 5/27/2009 | Work Zone Traffic Control | Al Leonori |
| 9/22/2009 | Traffic Signals | Earl Armitage |

As reported, contract Years One and Two included a significant amount of time and effort from the LTAP team in assessing all the available courses and ensuring the information presented was the most up-to-date and relevant. This effort proved to be invaluable by providing a strong foundation for the LTAP curriculum. Beginning in Year Three the LTAP Team implemented a continuous improvement process by which each course is updated. This includes a strong collaboration with various departments within PennDOT. The appropriate PennDOT staff are asked to review all revisions and make recommendations for approval. If a change in regulation, an updated Publication, a new product, etc., is implemented, the related course is updated accordingly.

Of particular interest to the LTAP Team are the overall attendee evaluation results of the course content provided under Task 10. Attention has been paid to the comments made by attendees. Does the course meet the stated objectives? Do the evaluations prove there is actual learning going on? Have the attendees increased their knowledge of the particular topic being presented?

There are two examples (Stormwater Management as well as Risk Management and Tort Liability) of course updates that are a direct result of attendee's course evaluations. After discussion with PennDOT, it was agreed to divide each into two separate courses – a half-day for the road crew and 1 ½ hour presentation for the elected official. Additionally, the legal administrative portions of the Risk Management and Tort Liability workshop were removed in order to focus the course on the needs of the road crew. Since both courses have previously been through the approval process and revisions represent a “re-packaging” of each, it was determined an additional pilot would not be necessary. The first offering of each revised course will serve as the pilot.

Year Five has brought the Marcellus Shale Drilling activity to the forefront. Many Planning Partners in our Northern Tier Region expressed a need for training focused on local road maintenance issues resulting from drilling activities. Others requested assistance in preparing their communities for the inevitable that will occur once the drilling comes to their region. After extensive review and consultation with PennDOT staff, the LTAP expert team recommended a revision to the current Posting and Bonding course in order to add specific details to address the Marcellus Shale issues. This approach has been approved and instructors are currently working on the updates, which will be ready for review early 2011.

Early Year One, it became apparent a formal process by which LTAP would certify instructors was needed. A plan was developed, approved by PennDOT and implemented early in Year Two of the contract. The LTAP Team was fortunate to have a number of seasoned instructors in place and most were grandfathered into the program. They were then the resource used for future instructor certification. All new instructors observe a seasoned instructor present the course in which they are to be certified, team teach with the seasoned instructor and then present the course independently while observed by the seasoned instructor. This process, although difficult to schedule has resulted in a list of professional experts representing the LTAP and ultimately PennDOT as they meet with Pennsylvania's municipalities. Each LTAP course has at least one certified instructor. Attachment 1B provides the list of certified instructors participating in the LTAP.

Throughout the contract period, the LTAP Team identified the need for additional courses to be added to the LTAP curriculum. Although funding resources were limited, PennDOT found funding sources outside of the LTAP to provide for new course development. Once developed, they are delivered

through the LTAP. The following new courses were introduced:

Americans with Disabilities Act: Requirements for Municipal Transportation Facilities (course currently under development, will be delivered 1st Qtr 2011)

Asset Management

Common Sense Solutions to Intersection Problems

Geosynthetics

Pavement Markings: How to Apply and Maintain Them (course currently under development, will be delivered 1st Qtr 2011)

Principles of Paving

Project Estimating Using Mathematical Principles

Road Surface Management

Roadside Safety Features

Stormwater Management

Traffic Calming

Traffic Signals

Of special note was the development of Asset Management, Geosynthetics and Traffic Signals that presented the opportunity for collaboration between the LTAP instructors and the University of Pittsburgh. The University developed the courses with the LTAP instructors providing technical guidance, particularly in making sure the objectives met the needs of our audience – local municipal officials. After delivering three pilot sessions of the Asset Management course, it was determined not to be appropriate for the typical LTAP audience.

There is always the need for new topics to be introduced to the LTAP curriculum. And as a result, the LTAP instructors continue to update a list of recommended additions to our toolbox of courses. As funding is made available, each of the following should be considered for development.

| Potential New Course Ideas | | |
|--------------------------------------|--|--------------------------------------|
| Access Management | Potential new course. Proposal submitted in 2007 | |
| Low Cost Safety Improvements | Course idea. Based on local safe roads and NHI course. | |
| Guiderail Installation/Repair | Course idea. Based on PennDOT Publication33 and FHWA-SA-08-002. | |
| How to Read Plans | Course idea. | |
| ITS/Incident Management | Course idea. | |
| Pedestrian Safety | Course idea. Based on walkable communities and safe routes to school work. | |
| Road Safety Audits | Course idea. Based on PennDOT RSA process. | |
| Safe Driving for Municipal Employees | Course idea. Based on PennDOT Training. | 2011? |
| Surveying Basics | Course idea. | |
| 2009 MUTCD Update Blitz | Course idea – Video Conference | Pending PennDOT Review of MUTCD 2009 |

PLEASE NOTE: as mentioned, all courses are continuously updated. A CD containing all the available LTAP course presentations is included with this report, along with a current list of all available LTAP classes (Attachment 1C).

ASSESSMENT:

The complete overhaul and the current process of continuous updates of all the LTAP courses has resulted in a top quality, up-to-date training program focused on improving the maintenance and safety of Pennsylvania's local roads.

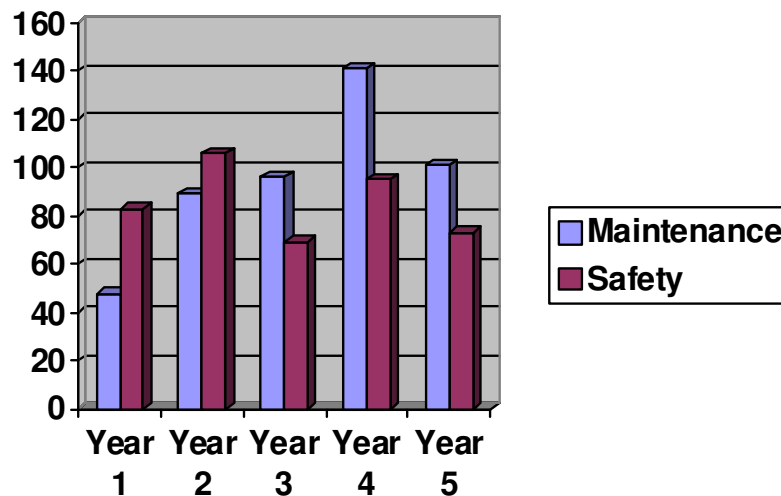
The addition of the above mentioned courses has increased the diversity of offerings, providing a well rounded program which meets the needs of all municipalities – large or small, urban or rural.

The instructor certification process has ensured the continuity of the LTAP message and ensured each course attendee is provided the same level of instruction no matter who is instructing the class.

The majority, if not all, of the evaluations received from course attendees, shows a high rating for course material relevant to their daily work and each of the instructors as extremely knowledgeable and helpful. This is more fully reported under Task 10.

TASK 2: COORDINATE AND MANAGE TRAINING

As reported throughout the contract period, PSATS staff coordinated and managed the logistics to conduct maintenance and safety training throughout Pennsylvania. A total of 901 training sessions have been delivered with over 15,000 customers receiving training. Attachment 2A maps the counties where LTAP training was held throughout this contract. LTAP training has reached 64 of 67 counties by host site, and 1,712 municipalities through attendance. The following chart shows the difference between the number of safety and maintenance training sessions delivered per contract year.



The original contract required the use of three satellite locations (or fixed-site locations) as venues for training. The following lists those locations and the number of training sessions scheduled at each during Years One and Two of this contract:

- Cranberry Township Public Works Center, Butler County – 22 sessions of which 6 were cancelled
- PSATS Training Center, Cumberland County – 27 sessions of which 5 were cancelled
- Macungie Institute, Lehigh County – 25 scheduled of which 7 were cancelled

A member of the PSATS team evaluated each site. Each facility was found to meet the needs of both instructors and participants. Each location was easy to access and provided the necessary classroom equipment to present the courses. The original plan for this contract was to hold 20 courses in each of the fixed sites. It was determined during Year One that 20 courses were too many. It was presented to PennDOT and approved that the total held at each fixed site be decreased from 20 to 10. This allowed the LTAP to schedule courses in more communities across the Commonwealth meeting the needs of the Planning Partners and others requesting training. Throughout Year Two the use of the satellite locations became an even larger deterrent to providing the flexibility need to meet all the requests for training. The LTAP Team recommended, and PennDOT approved, that the use of the satellite sites be discontinued throughout the remainder of the project contract period.

As time progressed, the process used to coordinate and manage training went through various changes. For example, the MPO/RPO needs assessment, although valuable in the early stages of the program, was discontinued. The Planning Partners and the LTAP Team found the survey to be inflexible, not allowing

for reaction to a new request based on activity in a specific region. The timing of the survey proved to be challenging in scheduling season specific courses such as Winter Maintenance. Additionally, each Planning Partner was held to a finite number of courses in their service area. This did not allow some regions to meet the need of their customers.

During contract Year Three, the process by which courses are scheduled was formalized. The process has kept all involved current with response time. It is recognized that in order to meet the needs of our customers (those requesting courses and planning courses), we must stay flexible. There are a number of variables that cause the scheduling timeframe to be longer than planned. Instructors are on the road for long periods of time and unable to respond immediately, Planning Partners unable to schedule locations far enough in advance, vacations, etc. are just a few issues encountered.

The flexibility has resulted in a closer coordinating relationship with Planning Partners significantly decreasing the amount of lag time between the request and the course scheduling. In conjunction with website enhancements made throughout Year Four, the primary benefit has been less complaints regarding course scheduling from all involved – customers, Planning Partners and instructors.

The appropriate LTAP Team members conduct weekly (or as needed) calls with instructors to review the current schedule in order to ensure no course request “falls through the cracks.”

A new approach to course scheduling began during Year Three. Specific communities have requested 10 courses be scheduled in one location in order to provide the public works employees the opportunity to acquire the Roads Scholar designation. The following communities have been involved in this process:

- Philadelphia - 13 *received certification to date*
- Southern Chester County - 8 *received certification to date*
- York County - 7 *received certification to date*
- Caln Township & Upper Uwchlan Township – 5 *received certification to date*
- Ferguson Township – *Complete with 11 designated Roads Scholars*

The LTAP Roads Scholar program has grown significantly since the first year of this contract. Over 2,500 quizzes were administered during Years Four and Five of the program. There are 1,995 people actively enrolled in the program, each in a different stage of approval. A total of 83 individuals received the Roads Scholar designation during the five years of this contract period. Attachment 2B lists those individuals.

Throughout the contract, PSATS staff maintained the training scheduled in the LTAP website database. The database was used to monitor registration numbers. If registration numbers were less than 10, additional marketing efforts (fax alerts) have been used to increase the number of registrants. If appropriate, Planning Partners were notified to provide additional support to assure the course received the highest level of promotion.

During contract Years One through Three, if a class did not meet the minimum of 10 registrants, the course was normally cancelled. However during Years Four and throughout Year Five, courses with less than 10 were considered on a case-by-case basis and occasionally the decision was to hold the class. Two schools of thought are the basis for these decisions: (1) a number of the locations are communities that rarely take advantage of LTAP services and seven interested attendees in such an area are important

to the overall LTAP mission; and (2) smaller class size is considered a ‘pro-active’ tech assist, providing one-on-one instruction which is extremely effective.

The cancellation rate of LTAP courses throughout the contract was held to an average of 8 %, a respectable percentage based on PSATS’ experience with other training programs. It is always difficult to determine why a course is cancelled, however anecdotal explanations are offered. Although cancellations are tracked by the website, rescheduled classes are not. It is conceivable that a number of the classes cancelled were rescheduled at a different time. Low enrollment can be a direct result of the location. A number of our Planning Partners have had difficulty getting attendees for the courses they have requested. Planning partners have experienced staff turnover, which has played a role in the cancellation rate. A few new employees were not sure of their role in marketing and the low registration was a result. Additionally, it is always the goal of the LTAP Team to provide a diverse geographic coverage across the Commonwealth, so sporadic attendance is possible.

ASSESSMENT

The coordination between the LTAP Team, PennDOT LTAP staff, Planning Partners and other community representatives requesting training became a crucial piece of the LTAP success very early on in the program. As a result, the process was put through a series of continuous improvements.

The current process of coordinating and managing training has been in place since Year Three and followed through into Year Five. Requests originating with the PennDOT staff are forwarded to the LTAP Team and then the coordination process begins. Additionally, requests come directly to the LTAP Team and they have the approval to move forward with the request after the PennDOT staff is notified. This has allowed for a more immediate response to requests.

“I appreciate and learn a lot from your training courses. Keep up the excellent work!”
Thank you,
D. Myers, East Berlin Borough

The improved and flexible process by which the LTAP Team coordinates and manages training has resulted in ALL requests for training being fulfilled.

TASK 3: PROVIDE MAINTENANCE TRAINING

In Years One and Four, a total goal of up to 550 maintenance courses was established for the LTAP Team to work toward. Throughout the contract period, 475 maintenance courses were scheduled. Although the goal was not reached, it is important to recognize that every request for training was satisfied. The demand was met with everyone receiving the courses they needed.

The following is a list of maintenance courses delivered through the LTAP:

- Asphalt Roads: Common Maintenance Problems: (Half Day)
- Bridge Maintenance & Inspection: (Full Day)
- Drainage: (Full Day)
- Geosynthetics: (Half Day)
- Managing Utility Cuts: (Half Day)
- Principles of Paving: (Full Day)
- Posting and Bonding of Local Roads: (Half Day)
- Project Estimating Using Mathematical Principles: (Full Day)
- Road Surface Management: (Full Day)
- Roadside Vegetation Control: (Full Day)
- Stormwater Management: (Full Day)
- Unpaved and Gravel Roads Common Maintenance Practices: (Half Day)
- Winter Maintenance: (Full Day)

Attachment 3A maps the counties where LTAP held maintenance courses were held in Year Five. Courses were held in 47 of 67 counties.

As required by the contract, Pennoni Associates maintains a library of PennDOT Strike Off letters, which identify when PennDOT formally approves changes in the transportation maintenance specifications, and to use this information in the updating of courses. Pennoni staff reviews each of the letters to determine their relevance to the LTAP project. Appropriate staff are notified and sent a copy of a letter that might affect a course for which they are responsible.

An example of how this process benefitted the LTAP is the recent incorporation of Strike Off Letter 470-10-03 dated June 24, 2010, titled Storm Water Facility Maintenance Responsibility relating to Highway Occupancy Permits (HOPs) into the Stormwater Management course. Additionally, the letter was used as an information piece for LTAP staff responsible for the implementation of a webinar addressing this issue.

As reported under Task One, the LTAP Team provides at least one certified instructor for each maintenance course.

Review of Recent Updates to PennDOT Drainage Policies - Webinar

The Pennsylvania Department of Transportation (PennDOT) on June 24, 2010 released policy regarding who can be a Highway Occupancy Permit (HOP) applicant for stormwater facility modification or construction within Commonwealth right-of-way. In order to coordinate this information with municipalities, the LTAP contract was selected as the means for delivery.

The webinar discussed certain categories of HOPs involving: driveways, surface drainage, subsurface facilities connected to existing drainage facilities that accommodate the roadway, and construction of new stand alone subsurface facilities, and specifically who PennDOT will issue a HOP to under each category.

This live broadcast provided an opportunity for audience participation through questions and comments made either through email or direct phone call to the webinar team. A total of four (4) sessions were delivered; October 5, October 8 and two (2) on October 15, 2010. During the entire delivery (including all sessions), a total of 403 connections were made to the live streaming Webinar, training an estimated 740 people

ASSESSMENT

The demand for each course remained relatively consistent throughout the contract period. An exception to this trend worth mentioning is the Posting & Bonding of Local Roads and Drainage courses. The increase of Marcellus Shale drilling activities affected the requests for these workshops in Years Three and Four, with 81% of the Posting & Bonding courses held in the northern half of the state. As noted under Task 1, the LTAP Team responded to the demand for road maintenance training in local municipalities by researching the drilling-specific material, which will be included in the Posting & Bonding course.

Winter Maintenance remains the most requested maintenance course, representing 26% of all maintenance requests and over 7% of all workshops requested. Roadway maintenance is the primary expenditure and activity in local municipal agencies. The roadways the residents drive each day are the most visible evidence of how the municipality is serving the community. The maintenance of the roadway and the associated drainage systems are among the most important functions for the municipality to perform. This authenticates the importance of the LTAP training on proper maintenance to local municipalities.

The current list of available maintenance courses provides the LTAP audience with a diverse group from which to choose. Each has been kept up to date. Although the demand for courses was met, the Team recommends a course listing that will be provided to all customers, through the newsletter mailing. The list will contain the title, certified instructors for that course and a course description. Some of our customers have computer access issues so a list of this type will provide a better understanding of what is available, without needing the website. If approved, this will be printed in the first quarter newsletter of 2011.

TASK 4: PROVIDE MAINTENANCE-RELATED TECHNICAL ASSISTANCE (TECH ASSIST)

As has been reported throughout this contract period, the one-on-one technical assistance provided through the LTAP program is highly successful. The number of requests for information, research and on-site visits has been consistent throughout Years One through Four. Requests for maintenance technical assistance has slowed in Year Five, however the value of the assistance has consistently been evaluated as excellent. In Years One and Four, goals were established for the LTAP Team to work toward:

| Project Progress | Cumulative Total Required | Cumulative Total Complete* |
|---|---------------------------|----------------------------|
| On-Site Tech Assists Years One – Three | 150 | 73 |
| On-Site Tech Assists Years Four – Five | 150 | 49* |
| Phone & Research Tech Assists Years Four - Five | 150 | 93* |

*Note: Data from the month of November 2010 is not included in these figures.

Throughout the contract period, all maintenance technical assistance demand has been met, as a result of the diverse technical expertise found within the LTAP Team.

Maintenance technical assistance has been far reaching throughout Pennsylvania. Attachment 4A maps the counties where maintenance related tech assists have occurred during Year Five. Assistance has been provided via phone, email and mail. A number of assists are on-site – a technical expert visits with the municipality to determine the actual problem needing attention. All tech assists have provided guidance so municipalities can perform their own maintenance or prepare their own repair plans to address specific issues. Throughout the contract, a total of 403 maintenance tech assists were performed in 61 of the 67 counties. Although this number is lower than the goal projected, it is worth noting maintenance technical assistance was performed on demand as required by the agreement.

A list of all maintenance tech assists provided during the contract period can be downloaded using the LTAP website (www.ltap.state.pa.us), therefore a paper copy has not been provided.

A review of the specific categories reveals that two maintenance tech assist categories consistently remained the top two requested throughout this contract:

Posting & Bonding - 30% of all maintenance tech assists requested, and
Drainage - 12% of all maintenance tech assists requested

It's evident from the category titles that transportation infrastructure is a priority among local municipalities. With the rapid expansion of natural gas drilling across the northern tier and western portions of the state, efforts by municipalities to protect their roadway assets from excess maintenance due to heavy haulers have subsequently increased. Many municipalities rely on the expertise of the LTAP technical experts to provide assistance in the proper and legal procedures for posting weight limits on local roads and working with heavy haulers through excess maintenance agreements so that haulers pay for their fair share of damages. Procedures for inspecting roads, conducting engineering and traffic studies so roads can be posted, working with excess maintenance agreements, and issuing permits for heavy haulers to haul in excess of weight limits are leading topics to be addressed.

PSATS is responsible for making sure all requests are met in a timely fashion and closed to the satisfaction of the requesting municipality. The standard procedure (including timelines) as described in the LTAP agreement was followed as closely as possible. The ultimate goal for this procedure is to close each request to the satisfaction of the requesting municipality. Technical assistance evaluation is discussed under Task 10, however, it is clear an overwhelming majority of municipalities using this assistance are highly satisfied with the quality of the technical expertise and the service provided.

The “pro-active” tech assist was implemented in Year Four. The pro-active assist is used in order to expand the user base by reaching communities not typically taking advantage of the LTAP services. A “pro-active” lends itself to a situation when a class will be canceled due to low registration numbers. An instructor encourages the community to hold the meeting so a brief instruction period can be held and the community is provided more one-on-one assistance. This form of assistance was implemented to reach those communities where class registration numbers do not meet the minimum registration number (10) that allow us to hold the class session. Some municipalities in rural Pennsylvania have part-time employees who cannot easily take the time to attend training sessions.

As required, a copy of all technical assistance correspondence is filed by PSATS and available by request.

ASSESSMENT:

It is clear from the evaluations described more fully in Task 10 that technical assistance is very useful to those municipalities taking advantage of the free service. Many smaller communities with minimal annual budgets have particularly found this service to be beneficial. With the decline of requests in Year Five, additional promotion of this program should be considered. It is recommended a letter with a copy of the Technical Assistance brochure be mailed to the Chief Elected Officer of each municipality, the decision maker. The letter will explain the service, provide some real examples of how other communities have benefited. With this information going directly to the decision maker, it will increase the awareness and increase requests in 2011.

TASK 5: PROVIDE SAFETY TRAINING

In Years One and Four a total goal of up to 550 safety courses was established for the LTAP Team to work toward. Throughout the contract period, 426 safety courses were scheduled. Although the goal was not met it is important to recognize that every request for training was satisfied. The demand was met with everyone receiving the courses they needed.

Attachment 5A maps the counties where LTAP held safety courses during Year Five. Courses were held in 35 of 67 counties.

The following is a list of safety courses delivered through the LTAP:

- Common Sense Solutions to Intersection Problems: (Full Day)
- Engineering and Traffic Studies: (Full Day)
- Equipment and Worker Safety: (Half Day)
- Risk Management and Tort Liability: (Half Day)
- Roadside Safety Features: (Full Day)
- Roadway Safety Improvement Program: (Full Day)
- Temporary Traffic Control: (Half Day)
- Traffic Calming: (Full Day)
- Traffic Signs: (Full Day)
- Traffic Signals: (Full Day)

As required by the contract, Pennoni Associates maintains a library of PennDOT Strike Off letters, which identify when PennDOT formally approves changes in the transportation maintenance specifications, and uses this information in the updating of courses. Pennoni staff reviews each of the letters to determine their relevance to the LTAP project. Appropriate staff are notified and sent a copy of a letter.

As reported under Task One, the LTAP Team provides at least one certified instructor for each safety course.

ASSESSMENT

Temporary Traffic Control (formerly Work Zone Traffic Control) remains the most requested course, representing 36% of all safety requests and 16% of all workshops requested. Equipment & Worker Safety is the second most requested safety training course, representing 17% of all safety sessions requested. Every municipal public works crew, no matter how large or small, has to perform work on or near public roadways. When performing this work, they need to set up temporary traffic control to protect themselves and the motoring public. Therefore, this training is paramount for any public works department. So, while some municipalities hire engineers and don't want the engineering and traffic studies class and others don't want to be involved in a traffic calming program so don't need the class, Temporary Traffic Control is applicable to every public works department and is critical for their employee's safety. The same can be said for the Equipment & Worker Safety course.

The current list of available safety courses provides the LTAP audience with a diverse group from which to choose. Each has been kept up to date. Although the demand for courses was met, the Team recommends a course listing that will be provided to all customers, provided through the newsletter. The

list will contain the title, certified instructors for that course and a course description. Some of our customers have computer access issues so a list of this type will provide a better understanding of what is available, without needing the website. If approved, this will be printed in the first quarter newsletter of 2011.

LOCAL SAFE ROADS AND WALKABLE COMMUNITIES PROGRAMS

In addition to safety training and safety tech assists (discussed under Task 6), the LTAP provides the Local Safe Roads Communities (LSRCP) and Walkable Communities (WCP) Programs. The purpose of these programs is to reduce vehicular and pedestrian traffic fatalities on local roadways.

Administratively, the PSATS LTAP Team monitors the programs and performs the administrative data entry in logging of the low cost safety recommendations from each report into the LTAP database online. Information and status of both programs is reported to the PennDOT LTAP staff who report the information quarterly to the PennDOT Bureau of Highway Safety and Traffic Engineering. A full assessment and report on these programs is included in Attachment 5B.

TASK 6: PROVIDE SAFETY-RELATED TECHNICAL ASSISTANCE

As has been reported throughout this contract period, the one-on-one technical assistance provided through the LTAP program is highly successful. The number of requests for information and research and on-site visits has been consistent throughout Years One through Four. Requests for safety technical assistance has slowed in Year Five, however the value of the assistance has consistently been evaluated as excellent. In Years One and Four, goals were established for the LTAP Team to work toward:

| Project Progress | Cumulative Total Required | Cumulative Total Complete* |
|---|---------------------------|----------------------------|
| On-Site Tech Assists Years One – Three | 150 | 150 |
| On-Site Tech Assists Years Four – Five | 160 | 157* |
| Phone & Research Tech Assists Years Four - Five | 500 | 352* |

*Note: Data from the month of November 2010 is not included in these figures.

Throughout the contract period, 1,448 safety technical assists were performed in 60 of the 67 counties. All safety technical assistance demand has been met, evidence of the diverse technical expertise found within the LTAP Team.

Safety technical assistance has been far reaching throughout Pennsylvania. Attachment 6A maps the counties where safety related tech assists have occurred during Year Five. Assistance has been provided via phone, email and mail. A number of assists are on-site – a technical expert visits with the municipality to determine the actual problem needing attention. All tech assists have provided guidance so municipalities can provide safer roads in their community – the ultimate goal.

A list of all safety tech assists provided during the contract period can be downloaded using the LTAP website (www.ltap.state.pa.us), therefore a paper copy has not been provided.

A review of the specific categories reveals that two safety tech assist categories consistently remained the top two throughout this contract:

Traffic Signs - 25% of all safety requests

Engineering & Traffic Studies - 15% of all safety requests

The number of traffic sign tech assists is most likely due to the approaching federal deadlines for establishing an assessment or management method to comply with FHWA's minimum maintained traffic sign retroreflectivity standards. Engineering and traffic studies requests are most likely from customer who have taken the Engineering & Traffic Studies workshops and are now applying what they have learned in the classroom to actual scenarios in the field. They want to ensure that their studies are done properly according to the existing regulations.

PSATS is responsible for making sure all requests are met in a timely fashion. The standard procedure as described in the LTAP agreement was followed as closely as possible. The ultimate goal for this procedure is to close each request to the satisfaction of the requesting municipality. Technical assistance evaluation is discussed under Task 10, however, it is clear an overwhelming majority of municipalities using this assistance are highly satisfied with the quality of the technical expertise and the service provided.

The “pro-active” tech assist was implemented in Year 4. The pro-active assist is used in order to expand the user base by reaching communities not typically taking advantage of the LTAP services. A pro-active assist lends itself to a situation when a class will be canceled due to low registration numbers. An instructor encourages the community to hold the meeting so a brief instruction period can be held and the community is provided more one-on-one assistance.

As required, a copy of all technical assistance correspondence is filed by PSATS and available by request.

ASSESSMENT:

It is clear from the evaluations described more fully in Task 10; technical assistance is very useful to those municipalities taking advantage of the free service. Many smaller communities with minimal annual budgets have particularly found this service to be beneficial. With the decline of requests in Year Five, additional promotion of this program should be considered. It is recommended a letter with a copy of the Technical Assistance brochure be mailed to the Chief Elected Officer of each municipality, the decision maker. The letter will explain the service, provide some real examples of how other communities have benefited. With this information going directly to the decision maker, it is anticipated that by increasing the awareness, the requests will increase in 2011.

TASK 7: PROVIDE MARKETING AND PROMOTION

Marketing and promotion of the LTAP has been approached in a number of different ways throughout the contract – beyond printing brochures and other marketing pieces. LTAP Team members have always been requested to participate in special events to offer their experiences and expertise. The following are just a few such events:

- Participation in Federal Highway Administration's (FHWA) Roadside Safety Features
- Tri-County Boroughs Association – Retroreflectivity
- Provide an update and report on Pennsylvania's Strategic Highway Safety Plan dial progress for 2009
- Participated in call discussing Accelerating Safety Activities Program (ASAP - a FHWA grant program) grant money for Pennsylvania
- Compile roadside safety feature issues for FHWA guide rail installation and maintenance training and participated in the training
- PSATS Annual Education Conference and Trade Show – LTAP Display
- Participation in Transportation Research Board's webinar on Managing Pavement Marking Retroreflectivity
- Participation in FHWA Crash Seminar
- Participate in FHWA webinar on 2009 Manual on Uniform Traffic Control Devices (MUTCD)
- PennDOT Publication 408 – traffic signals review
- Review and comment on revised PennDOT Publication 191

A Pennsylvania Bulletin Announcement was released by PennDOT on Saturday October 9, 2010, inviting local governments to submit applications under the Automated Red Light Enforcement (ARLE) Transportation Enhancement Grants Program [40 Pa.B. 5874]. Approximately \$7 million (statewide) will be available in calendar year 2011 for congestion and safety related projects. Projects identified within the LTAP such as the Local Safe Roads Communities Program and Walkable Communities Program (LSRC/WCP) are also eligible for ARLE funding. The LTAP Team was asked to provide additional marketing efforts of this new annual funding opportunity. In response, a mailer was sent to all municipalities November 12, 2010. In addition to the mailer, an email announcement was sent on November 10, 2010, to all municipalities who received LSRC/WCP reports.

Course availability and descriptions are made available through the LTAP website and the LTAP newsletter. Additionally, each monthly issue of the *Pennsylvania Township News* provided a list of scheduled workshops. LTAP staff also provided Question and Answer (Q&A) information for each edition of the News. The following lists the actual questions posted during Year Five.

| 2010 Q&A Schedule for Township News | |
|-------------------------------------|--|
| January | I heard that PennDOT LTAP just unveiled a free sign inventory and management resource. How do I learn more about it and obtain a copy? |
| February | We understand that LED traffic lights have problems in snow and ice storms. What should townships be aware of with these traffic signals? |
| March | We heard that the federal Manual on Uniform Traffic Control Devices was going to be updated. When will the revised version be released? |
| April | Who is responsible for installing stop signs on local roads that intersect with state roads? |
| May | What is an engineering and traffic study? Who can conduct an engineering and traffic study? |
| June | Can you tell me if Clearview font will be required on all street name signs and whether all caps will be allowed on street name signs in the future. |
| July | Our township would like to begin a sign inventory and management program. Do you have any tools that can help us? |
| August | May a township submit an MS-965 form (Actual Use Report of State Funds) that has a negative equipment balance? |
| September | What are the allowable uses of liquid fuels funds for curbing projects? |
| October | What are the requirements for flagger certification and training? |
| November | What are the triangle markings I see near pedestrian crossing locations? |
| December | Our township has seismic testing trucks that are going to be using township roadways. Are they subject to the posting and bonding requirements? |

The Pennsylvania State Association of Boroughs (PSAB) continues to provide a link between their website and the LTAP website. PSAB, Pennsylvania State Association of Township Commissioners (PSATC) and Pennsylvania League of Cities and Municipalities (PLCM) were invited to use any “Moving Forward” articles to print in their respective newsletters. No association accepted the offers.

In Year One, an LTAP brochure was designed and printed to promote LTAP services throughout Pennsylvania. The brochure has been used across the Commonwealth to promote the program. Planning Partners are provided copies to use in their promotional activities; the LTAP Advisory Committee also uses the brochure; it is distributed during the local government County Conventions and any other special event LTAP staff attends. Instructors also distribute the brochure to communities where they are teaching or providing technical assistance.

Year Four brought a change in the PennDOT LTAP logo. The new logo was designed through the contract and approved by PennDOT. During this transition, the LTAP style guide was created in order to solidify a set of graphic standards used by the LTAP Team and the Planning Partners. An updated version of the LTAP marketing brochure was produced in 2009, which allowed for the change in logo, addition of testimonials, and an updated list of courses. This marketing piece was distributed to each municipality.

Copies of new and revised brochures developed throughout the contract have been provided in previous reports. Each brochure was sent to all our customers, either in a single mailing or included in a quarterly newsletter mailing. The following course brochures were developed and continue to be used to market the LTAP program:

- Asset Management (no longer being used)
- Geosynthetics
- Stormwater Management
- Roadside Safety Issues
- Common Sense Solutions to Intersection Problems
- Project Cost Estimating
- Americans with Disabilities Act: Requirements for Municipal Transportation Facilities
- Pavement Markings: How to Apply and Maintain Them

Specific programs within the LTAP project warranted specific promotional pieces in order to target those in need of the services. The following lists those specific program brochures, which are currently used. Each has been provided to PennDOT in previous monthly reports. (The Roads Scholar and Technical Assistance brochures were distributed to each municipality, roadmaster, public works director, as well as to all Pennsylvania Senate and House of Representative members.)

- Local Safe Roads Community Program
- Roads Scholar Program
- Technical Assistance Program
- Walkable Community Program

The PSATS staff drafted a letter for the PennDOT Secretary signature to send to all newly designated Roads Scholars. The letter recognizes the accomplishment by each designee. PSATS provides the information to PennDOT with each new Roads Scholar.

Beginning in Year Three, a letter was drafted to all state legislators in order to promote the valuable LTAP services. The purpose was to bring LTAP to the attention of the Legislators and their staff so they would recommend the services to their constituents. Road issues are a major concern to municipalities and they regularly call their representative for assistance. This has become an annual mailing, which has directly resulted in requests for technical assistance.

In Year Five, an LTAP Brochure and 2009 Accomplishments Brochure was mailed to the Planning Partners management stressing the importance of the program to their communities and thanking them for their support. Each Planning Partner designates a staff member to assist with the marketing and promotion of LTAP.

At the end of each year of the contract (2007, 2008, 2009 and 2010) Annual Accomplishments brochures have been developed and distributed to:

- LTAP Centers
- All Planning Partners
- Included in all LTAP information packets

Information packets have been developed and are made available during appropriate exhibits and conferences, or meetings to promote LTAP activities and services. The packets include:

- LTAP Brochure
- Recent Technical Sheets
- Recent “Moving Forward” Newsletters
- Website information
- Current Course Schedule
- Accomplishments Brochure
- LTAP Pen/Pencil
- LTAP Tablet

PSATS LTAP staff developed an Elected Officials Outreach Plan to incorporate a number of activities throughout the contract. The main focus of the activities in the plan is to make relevant training accessible to more elected officials and to assure the elected officials are made aware of the LTAP training activities. As part of this initiative, each year PSATS staff attends Township County Association meetings and makes presentations to the elected officials in attendance. As part of the overall presentation, LTAP is discussed, describing the program and encouraging training attendance and taking advantage of the technical assistance. Sixty-six conventions are visited annually.

A floor and table model display was created during Year One to promote LTAP at exhibit shows in conjunction with conferences and meetings of various municipal associations and other appropriate venues:

- Pennsylvania State Association of Borough’s Annual Meeting
- Pennsylvania Council of Government’s Annual Meeting
- Pennsylvania State Association of Township Supervisors Annual Conference
- American Public Works Association’s Regional Meeting
- Pennsylvania League of Cities’ Annual Meeting
- Pennsylvania State Association of Township Commissioners Annual Meeting

ASSESSMENT:

Each year a marketing plan was developed that represented what the original scope of work required. As the program evolved, it was apparent the marketing had to be more targeted. As a result specific program and course brochures were produced. One on one activity (participation in FHWA, BPR, BHSTE activities) is extremely valuable to the program by displaying the expertise and overall experience of the LTAP Team members. There is no question the value of the program goes beyond our immediate customers and is demonstrated by the continued and growing requests for the PA LTAP input to PennDOT staff and FHWA.

It is recommended the approach used to promote LTAP during Years Four and Five continue:

- Participation in special events
- New course brochures
- Use of the LTAP Brochure, Tech Assist Brochure and Roads Scholar Brochure
- Targeted mailings to outside constituents such as the Legislature and Planning Partner Management

TASK 8: PROVIDE PROGRAM COMMUNICATION

Newsletter and Technical Information Sheets

During this contract period, a newsletter and technical information sheet production process has been established. Both newsletter articles and tech sheet ideas are gathered from multiple sources including, updated Department and Federal policies and regulations, state and regional activities and hot topics (such as Marcellus Shale), and items stemming from repeat customer requests. In addition to PennDOT's Bureau of Planning & Research, other Bureaus, Planning Partners, and the LTAP Advisory Committee members are solicited for topics as well as written articles.

The approval process for articles and tech sheets has been streamlined. An article is drafted and submitted to PennDOT for review. Once a final approval has been received, articles are gathered for a specific newsletter issue and submitted for production. The draft layout is reviewed and approved by PSATS LTAP staff, and then sent to PennDOT for final approval before mailing.

Beginning with the Summer 2006 issue, quarterly newsletters were produced and mailed during each contract year. During Year Five, four (4) quarterly newsletters were produced and mailed to all LTAP customers:

1. Spring 2010 – Time to Order Roadsalt for Next Winter
2. Summer 2010 – Record Low Number of Deaths on State, Local Roads in 2009
3. Fall 2010 – When to Use Stop Signs in Alleys
4. Winter 2010 – LTAP Advisory Committee Tours Marcellus Shale Drilling Operation

A hard copy and electronic copy of each newsletter produced throughout the contract has been provided to PennDOT LTAP Staff. An electronic copy has also been distributed to the LTAP Advisory Committee members, appropriate PennDOT staff, FHWA staff, and other LTAP/TTAP centers. Each newsletter produced during this contract can be downloaded from the LTAP website. **Attachment 8A** includes copies of each newsletter mailed during Year Five.

In addition to the quarterly newsletter, tech sheets were updated and developed throughout the contract. A copy of each was provided with each annual report and can be downloaded from the LTAP website. During Year Five, a number of Tech Sheets were reviewed, updated and newly developed. All LTAP clients received a copy of each new and revised Tech Sheet during the year.

Revised Tech Sheets

- # 3 – Pennsylvania Develops Strategies for Decreasing Tort Liability
- # 4 – Protect Your Community From Tort-Liability Suits
- #44 – Why Are Hard Hats Essential?

New Tech Sheets

- #141 – Smart Transportation
- #142 – CDL Driver Qualification Files
- #143 – Concrete Estimating
- #144 – CDL Post-Accident Testing
- #145 – Roadside Tree Care
- #146 – Chainsaw Safety

Inactive Tech Sheets – These tech sheets were moved to inactive status: 21, 22, 25, 34, 49, 61, 75, 86, 97, 110, 122

Electronic copies of the newsletters and the tech sheets were provided to the LTAP Administrator to post copies on the LTAP website.

Attachment 8B provides the most current inventory of available Tech Sheets.

Informational Library

PennDOT LTAP is currently maintaining the Information Library.

TASK 9: DEVELOP AN ANNUAL ACTIVITY ASSESSMENT WORK PLAN

At the end of Years One through Four, an assessment of activities under each Task within the Scope of Work has been provided. Where needed, recommendations for new or revamped activities have been noted under each task.

An assessment of Year Five activities has been incorporated under each task.

TASK 10: EVALUATE CUSTOMER SERVICE

Customer evaluation and program assessment are imperative tools in maintaining program integrity and usefulness. As such, B.T. Harder evaluated the program through November of 2007. Dering Consulting Group, Inc. (Dering) assumed those duties in 2008. Dering began their evaluation by assessing the forms and procedures used. The demographic and follow-up contact information collected previously remained the same, however questions regarding course content, instructor evaluation topics and overall course data were reviewed and streamlined in order to gain usable data to help analyze the value of the program. Each quarter, Dering has provided a report, which was submitted electronically to PennDOT LTAP, as well as BHSTE.

The final evaluation report of this contract follows as **Attachment 10A**.

TASK 11: PROVIDE SUPPORT SERVICES

Throughout the contract period, the PSATS team provided the necessary support services to effectively meet PennDOT's requirements and needs for the LTAP initiative. Although there have been a few new staff members, a core group has been with the program for the last three years:

Carol L. Kilko – Contract Manager
Tina Holtzman – Assistant Program Manager
Jill Wawrzonek – Training Support Specialist

Each of the activities described within this report are assigned to one or more of the above staff members. Additional staff within the PSATS team is utilized when their particular skills are needed.

Examples of activities are as follows:

- Regular conference calls with PennDOT staff
- Meeting notes provided
- Customer account updates on the website
- Website enhancement recommendations
- Testing of website enhancements
- General information requests presented through the website
- Planning Partner meetings
- Strategic Planning Meetings
- Presentations during County Conventions of Township and local officials

As part of our role in supporting the LTAP Advisory Committee, PSATS LTAP staff attended all scheduled Committee Meetings. In addition to attendance, presentations were delivered on current and future program activities. For each of the following meetings, notes were provided to the PennDOT LTAP staff.

June 2006
September 2006
May 2007
September 2007
April 2008
September 2008
December 2008
October 2009
May 2010
September 2010

During the May 2010 meeting, three subcommittees were created and the members were assigned. The first conference calls were held during the last quarter of this reporting period. A goal of two conference calls between full Advisory Committee meetings has been established. These three subcommittees are:

- a. Promotion and Communications
- b. Workshop Development
- c. NLTAPA Programs

The NLTAPA Programs subcommittee discussed the National LTAP Build a Better Mousetrap Competition. It was determined that our LTAP would participate in the program. The following annual timeline was established:

- Initial announcement: Winter Newsletter, email or fax alert by 2nd Friday in November
- Follow up email/fax: January
- Cutoff for entries: 2nd Friday in February
- Judges select winner: 3rd Friday in March
- Announce winner: during Spring Annual Conference of winner's municipal Association

With this established timeline, the initial announcement booklet was created and approved by PennDOT LTAP. The booklet has been distributed to each municipality, and a copy is being provided as **Attachment 11A**.

TASK 12: PROVIDE REPORTS

Monthly progress and task reports have been provided to PennDOT. Copies of each monthly report for Years One through Four have been provided to PennDOT. A CD is included with this report, which contains copies of each monthly activity report for Year Five.

Each month an invoice was prepared and submitted which included expenses for PSATS, Pennoni Associates, DCG, Inc. and EL Messner.

Each year the PSATS staff provided information to PennDOT LTAP (as directed by PennDOT LTAP) for the quarterly BHSTE safety reports. PennDOT's Bureau of Planning and Research then compiles a full report of activities to submit to BHSTE. During Year Five, reporting information was provided:

- January 2010
- April 2010
- July 2010
- October 2010

PSATS LTAP staff also provided LTAP activity information yearly as requested by PennDOT LTAP for their annual submission of the PAR/CAR reports. During Year Five, reporting information was provided in January 2009.

TASK 13: ARRANGE BACKGROUND CHECKS

The PSATS team provided background checks for all employees, including subcontractors, who have access to the Commonwealth's IT facilities.