

PennDOT Local Technical Assistance Program

# MOVINGFORWARD

**FALL 2009** 

**ALSO IN THIS ISSUE** 

Planning Organizations

New Web Site......2

Improved Training...... 2

Spreader Calibration......3

Partners...... 5

Do's and Don'ts......7

A quarterly review of news and information about Pennsylvania local roads.

The lowdown on curb ramps

# Curb Ramps Help Make Communities Accessible to People with Disabilities

# An article for LTAP's Moving Forward

Curb ramps are a small but important part of making sidewalks, street crossings, and pedestrian routes within the public right-of-way accessible to people with disabilities. As part of an overall pedestrian accessibility design, curb ramps are essential for ensuring that individuals with disabilities can travel freely through their communities. This article takes a look at curb ramps within the context of the Americans with Disabilities Act (ADA) and provides information on how your community should approach the issue.

#### **ADA Law**

The Americans with Disabilities Act of 1990 is a civil rights statute that prohibits discrimination against people with disabilities. Under the implementing regulations for Title II of the ADA, state and local governments are prohibited from discriminating when providing services, programs, and activities. Designing and constructing pedestrian facilities in the public right-of-way that are not usable by people with disabilities may constitute discrimination. Section 504 of the Rehabilitation Act of 1973 includes similar prohibitions in the conduct of federally funded programs.

The requirements of ADA include:

- 1. New construction must be accessible and usable by persons with disabilities
- 2. Alterations to existing facilities, within the

- scope or limits of a project, must provide usability to the maximum extent feasible
- Existing facilities that have not been altered shall not deny access to persons with disabilities

# Local Governments' Obligation to Install Curb Ramps

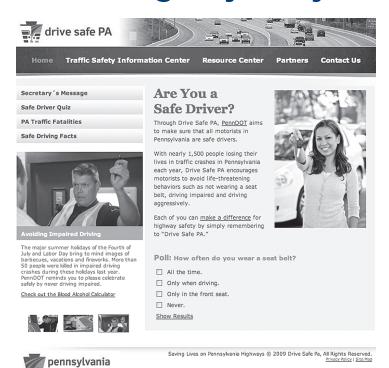
Access to civic life by people with disabilities is a fundamental goal of the ADA. To ensure that this objective is met, Title II of the ADA requires local governments to make sure that people with disabilities are able to take part in and benefit from municipal programs, services, facilities and events. Municipalities can ensure this access through a self-evaluation of their facilities, programs, and services to pinpoint what must be modified or relocated to comply with the ADA.

## **Updating Curb Ramps and Other Pedestrian Facilities**

When streets and roads are newly built or altered, ramps must be constructed wherever curbs or other barriers prevent access from a pedestrian facility. Similarly, when sidewalks or walkways are built or altered, they must contain curb ramps or sloped areas at intersections with streets or roads. Resurfacing is an alteration and curb ramps must be installed where pedestrian paths have been altered. Minor maintenance projects, such as filling in potholes or any other routine maintenance that does not disturb or modify pedestrian use, are not considered alterations.

continued on page 4

### New Web Site Designed to Enhance Highway Safety



Motorists have greater access to highway safety resources through a new traffic safety Web site, DriveSafePA.org, unveiled recently by PennDOT.

The site is part of PennDOT's new highway safety campaign, Drive Safe PA, which aims to save at least 100 or more lives on Pennsylvania highways each year.

DriveSafePA.org offers information and tips on these highway safety areas: aggressive driving, bicycle/pedestrian, child passenger safety, heavy trucks, engineering infrastructure, impaired driving, mature drivers, motorcycle safety, school bus safety, seat belts, work zones and young drivers. Each of these areas is highlighted as part of an interactive quiz that allows motorists to test their highway safety knowledge.

In addition, the Web site contains educational resources, including videos, radio public service announcements and traffic safety brochures. Recently enacted traffic safety laws such as the "Steer Clear" law and wiper and headlights law are also included on the site.

DriveSafePA.org will include a monthly update on Pennsylvania traffic fatalities in an effort to emphasize the number of tragic losses that could be prevented by simply remembering to Drive Safe PA.

For more information on how you can make a difference for highway safety, contact the PennDOT Press Office at RA-penndotpress@state.pa.us. •

A Conversation with Doug Roth, the Outgoing Chair of the LTAP Advisory Committee

# Improved Training, Strategic Planning Highlight Term

by Amy Bobb, PSATS

Doug Roth had been a road department employee at Penn Township in Butler County for about 10 years when he was asked to become the road superintendent in 1992 after several employees left for various reasons.



Once the low man in a

five-member department, he was now in charge of a two-man crew in desperate need of upgraded equipment, new road maintenance techniques, additional trained staff, and improved public perception.

"I suddenly realized that I never had any official training and was really in the dark about road maintenance and safety," he says. "Many of the neighboring townships offered assistance and helped me out initially, but what I really needed was formal training. That's when I saw a flyer about LTAP and its training program."

Roth, who is now a Penn Township supervisor and its director of public works, began taking training classes through LTAP and within three years had become a Road Scholar II. Over the next decade and a half as the township's road department became more professional, his association with LTAP deepened. Not only does he continue to take training classes, but he became a member of the LTAP Advisory Committee in 2003, serving as the committee's chair for the past two years.

As he prepares to step down as chair at the end of 2009, the Pennsylvania State Association of Township Supervisors caught up with Roth and asked him to reflect on LTAP and his term as Advisory Committee chairman.

### How does your township use LTAP services?

"We have made it a requirement for the members of our three-man road crew to attend training courses. They are currently required to take 16 hours of training, or two full days, a year. We also had an LTAP engineer come to our township and help us with a tech assist. We have a bad bend in a road where motorists have continued to run into the guiderail and into a ditch despite signs we've installed warning them to slow down. We wanted to make sure the signs were installed correctly to help reduce accidents and avoid liability issues. As a result of the tech assist recommendations, we have changed the location of the signs, added some signs, and painted a white fog line along the outside of the road bend."

# What are you most proud of accomplishing as chair of the Advisory Committee?

"The Advisory Committee members worked with PennDOT and PSATS last year to develop a strategic plan for LTAP. Together, we developed a strategy that we believe will carry us into the future. As partners on LTAP, representatives of the various groups sat down in a room and identified our strengths, weaknesses, opportunities, and threats. We shared our views for the future, reviewed recent state and federal guidelines on transportation issues that affect us, and defined the roles of each of the groups represented at the table. This information will help us to lay a path to the future, and it is the meeting that I am most proud of chairing. Since this strategic planning session, we have all worked even better together, and LTAP has been strengthened as a result."

# Why is LTAP important and how does it help local governments?

"LTAP helps municipalities deal with the demands of the transportation system and shows them different ways to perform their duties. It identifies potential liability issues and problems related to roadways and addresses how to fix and prevent future problems. Because LTAP provides updates on new technologies, municipalities are made aware of what is available out there and what can help them. LTAP helps to keep local officials and staff informed so that they can do their road work safely and more efficiently."

### What do you see for the future of LTAP?

"The future of LTAP looks good. I go to a lot of training and am always impressed by the caliber of LTAP's instructors. There are a lot of new classes focusing on such issues as bridges and traffic lights, and many of the older courses have been upgraded. Attendance is up, and given the current economic and budget constraints, I expect LTAP's free training will become even more popular. Finally, the Advisory Committee has a good blend of municipal people who can evaluate classes and make good decisions about LTAP's future."

# What advice do you offer municipalities about LTAP?

"If you have never attended an LTAP training course in the past or if you haven't for a long time, you should give it a try. They're really good. My advice is to go to these classes yourself or send your staff. Even if you sit there and know 90 percent of what they are teaching you, 10 percent of it will be new information that you will find very useful. And, the best part of all, it's free.

"Don't forget, too, that you can request that LTAP training be brought to you. Get together with your neighboring municipalities, and as long as you can guarantee at least 10 attendees, you can have the class at your own municipal building. I've taken a lot of classes over the years, and I frequently see the same faces at them. It would be nice to get some new people there."

### Do you have any other parting thoughts?

"I'd like to thank everyone involved in LTAP from PennDOT, Penn State, and PSATS to all the people who have been associated with the Advisory Committee over the years. LTAP is a great service that municipalities should take advantage of, and I look forward to staying actively involved with LTAP in the future."

## Spreader Calibration Reduces Salt Use, Saves Money

## Winter Road Maintenance courses now include a hands-on calibration demonstration

Municipal road employees will learn how to save on winter salt by attending an LTAP Winter Road Maintenance class, which now includes an actual demonstration of how to calibrate a salt spreader. The hands-on demonstration has been added to the upcoming training to accommodate the recent interest expressed by municipal road crews who wanted to learn how to properly calibrate a salt spreader and thus reduce unnecessary salt use.

In the past, the winter training classes covered calibration in the classroom, and LTAP instructors offered to demonstrate the process on an actual spreader if any municipalities wanted to pursue a tech assist at their building. Few, if any, municipalities ever took advantage of that offer, says Sam Gregory, a municipal transportation specialist for LTAP.

But then last winter, municipalities saw the price of salt increase from around \$30 per ton to \$90 to \$100 per ton. Suddenly, municipal officials and road employees started paying attention to what LTAP instructors have been telling them for years: Calibrating a spreader may be able to help reduce the amount of salt a municipality uses, which consequently would save on winter road maintenance expenses.

"With the huge spike in salt prices, municipalities were beginning to question whether they were using too much salt," says George Marcinko, LTAP senior advisor. "Calibration tells them what to put down, depending on the weather, the road conditions, and the time of year. In these tight financial times, calibration makes sense."

Gregory began demonstrating calibration on an actual spreader at a number of requested tech assists and at some of the Winter Road Maintenance training sessions he taught last winter. He says that road employees are amazed to see how much salt they are actually using.

"I will ask them how much salt they think they are applying based on what they believe their salt spreader typically discharges," he says. "They usually will tell me something like 200 pounds per mile. Then, I will calibrate what they are, in fact, using. In every case, they are applying more like 700 to 800 pounds of salt per mile. Few storms ever need that much salt, and with the increased cost of salt, these municipalities are wasting both money and material."

In February, the city of Philadelphia received what Gregory calls a "proactive tech assist," a new approach LTAP is offering that combines excerpts from training courses with actual field demonstrations to meet the specific needs of the municipality requesting the technical assistance. Through two half-day sessions that included a hands-on demonstration, he trained 54 equipment operators, mechanics, supervisors, and trainers on how to calibrate a spreader and the importance of calibration.

"In the classroom, I taught the theory behind chemical and antiskid use and how to calibrate equipment," he says. "Then, we went out

#### Curb Ramps Help Make Communities Accessible to People with Disabilities

continued from page 1

At existing roads and sidewalks that have not been altered, local governments may choose, but are not required, to construct curb ramps at every point where a pedestrian access route intersects a curb. Alternative routes to buildings that make use of existing curb ramps may be acceptable as long as the alternate route distance is only marginally longer.

One way to ensure the proper integration of curb ramps throughout a municipality is to develop a transition plan that sets a series of milestones for curb ramps. Milestones, which are progress dates for meeting curb ramp compliance, should occur on a regular basis throughout the course of the transition plan. Priority should be given to walkways serving government buildings and facilities, bus stops and other transportation services, places of public accommodation, and business districts.

Local governments may also want to establish an ongoing procedure for installing curb ramps upon request in both residential and nonresidential areas that are frequented by individuals with disabilities. In setting milestones and in implementing a curb ramp transition plan for existing sidewalks, a municipality may have to limit the actual number of curb ramps installed in any given year depending on the types of alterations and available funds.

Sometimes, full compliance of the standards is technically infeasible for a municipality.

However, all new construction projects must be designed and constructed to the maximum extent possible so that compliance with the ADA is achieved and documented. Any design decisions that may be open to interpretation should also be documented.

### **Ensuring Compliance**

Now that you know some of the basic ADA requirements for providing curb ramps at pedestrian crossings, you can assess whether your municipality is in compliance with these requirements. Here are some steps to take:

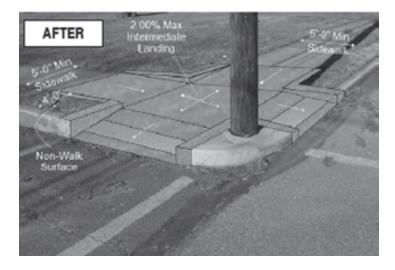
- Assess the extent to which your municipality has complied with ADA requirements for providing curb ramps at pedestrian crossings and transportation stops. This can easily be documented on a municipal map.
- After conducting an assessment to determine where ADAcompliant curb ramps are needed, prioritize the locations. Input from the public and the ADA community may be helpful.
- Make a long-range plan to provide curb ramps in locations that need them. Take available resources into consideration, and be realistic in your goals.
- Establish written procedures for soliciting and receiving input on the accessibility of pedestrian crossings and transportation stops from people with disabilities.
- Develop a written policy to ensure that anytime a street, road, or highway is constructed or altered, ADA-compliant curb ramps are provided at any intersection with curbs or other barriers that deny access.
- Develop a written policy to ensure that all newly constructed or altered sidewalks and walkways have ADA-compliant

- curb ramps where they intersect a street, road, or highway. This includes mid-block pedestrian crossings and public transportation stops.
- Review the designs for curb ramps and detectable warnings to ensure that they are ADA-compliant. Use PennDOT's Roadway Construction Standards – Curb Ramps and Sidewalks (RC-67M), and work with PennDOT employees when possible.
- Ensure that private developers comply with the accessibility requirements as deemed appropriate by the municipality.

Without the required curb ramps, sidewalk travel in urban areas is dangerous, difficult, and in some cases impossible for people who use wheelchairs, scooters, and other mobility aids. Curb ramps allow people with mobility impairments to gain access to the sidewalks and to pass through center islands in streets. Without curb ramps, these individuals are forced to travel in streets and roadways where they are put in danger or are prevented from reaching their destination.



Possible Solution - Install Type 6 with intermediate landing.



#### Spreader Calibration

continued from page 3

to the parking lot and actually ran through a calibration on a spreader. I demonstrated the procedure to use to determine how many pounds per mile they should be putting down."

Domenic Marcellino, Philadelphia's training center supervisor, says the employees who were trained had a hard time believing they were applying that much salt until they saw the actual demonstration.

"We could see the biggest difference in the manual spreader," he says. "The calibration and demonstration showed us that we were applying up to four times as much salt as we should have."

The supervisors then took the training they received and taught their individual crews how to calibrate their spreaders, and within a few weeks, the entire city was applying the newly learned calibration numbers to save on salt use.

Gregory recommends calibrating spreaders at the beginning of each winter season. Each spreader must be calibrated on its own using the type of material that will be employed. The same models of equipment can vary widely at the same setting, and different materials spread at different rates of speed.

Once the calibration is determined, the employee must assess the amount of salt to distribute for each storm based on time of year and average daily temperature, severity of storm, traffic conditions, and regional weather factors. Usually, less salt is applied at the beginning and ends of the snow season when temperatures are warmer and snowfall is typically lighter, says Gregory. As the winter progresses and it becomes colder, the amount of salt to apply per mile is normally increased depending on the type of storm and the road conditions.

"If you don't calibrate your equipment, you're just making a wild guess on how much material is actually coming out the back of your truck," he says.

#### What is Calibration?

Calibration of spreaders is simply calculating the pounds of salt per mile discharged at various spreader control settings and truck speeds. This is done by first counting the number of auger or conveyor shaft revolutions per minute at a certain spreader control setting and measuring the salt discharged in one revolution.

These two numbers are multiplied together to obtain the amount of salt discharged in one minute for a certain control setting. Next, this amount is multiplied by the number of minutes it takes to travel one mile. You now have the amount of salt discharged in one mile.

An example follows:

- 30 Number of auger/conveyer shaft revolutions per minute for a specific control setting
- 7 pounds Amount of salt discharged in one revolution (weighed on a scale)
- 30 x 7 pounds = **210 pounds**
- This is the amount of <u>salt discharged in one minute</u> at a certain control setting.
- 3 minutes Number of minutes it takes truck to travel one mile (speed of 20 mph)
- 210 pounds x 3 minutes = **630 pounds/mile**

This is the amount of salt discharged in one mile.

Perform this calibration at various spreader control settings and for different truck speeds so that you can accurately determine how much salt you are distributing for each control setting. By changing the spreader control setting and/or your truck speed, you can adjust how much salt you are distributing on the roadway to accommodate weather and road conditions.

Source: The Snowfighter's Handbook, published by the Salt Institute, 1999.

### Pennsylvania Municipalities and Metropolitan Planning Organizations Natural Partners

More alphabet soup! That's was the reaction during a Newly Elected Officials training class when the presentation started about MPOs and regional planning. In fact, the next question that came up was, "So what are Metropolitan Planning Organizations, anyway?" Based on the interest of this individual and many others it might be a good idea to share the questions and the answers to them for other municipal officials who might have similar questions.

# So what are Metropolitan Planning Organizations, anyway?

Metropolitan Planning Organizations or MPOs are intended to be a forum in which local elected officials, in cooperation with the representatives of the state departments of transportation and transit operators, determine the best mix of transportation investments to meet a prescribed area's needs. Created by Congress in 1970, MPOs are charged with transportation planning for specifically-designated areas. They usually encompass metropolitan areas but may include more than one area or even cross state boundaries. For example, the Delaware Valley Regional Planning Commission in southeastern Pennsylvania includes Bucks, Chester, Delaware, Philadelphia and Montgomery Counties in Pennsylvania as well as four counties in New Jersey.

continued from page 5

### Where do you find MPOs?

Any urbanized area above 50,000 in population is required by federal law to have an MPO. There are approximately 339 MPOs across the country. Some MPOs are stand-alone organizations, while others are housed within larger organizations such as councils of governments or county planning agencies. There are 17 MPOs in Pennsylvania. To find the MPO in your area, visit the Association of Metropolitan Planning Organizations' website at www.ampo.org or contact the Local Technical Assistance Program (LTAP) at 1-800-FOR-LTAP.

#### What do MPOs do?

The planning process requires MPOs to create a 20-year, long-range transportation plan for a designated geographic location and a three-year Transportation Improvement Plan (TIP). The long-range plan is updated as needed, and the TIP is updated every two years. Updates include a review of current activities and may provide the opportunity for consideration of new projects. In addition, MPOs in Pennsylvania may provide services to municipalities such as the distribution of county liquid fuels or they can help connect municipal officials with state and federal government programs such as transportation enhancements, scenic byways or LTAP.

### Where do municipalities fit in?

Municipal governments are at the core of the MPO decision making process. The voting members of an MPO generally include representatives from the central city or borough along with surrounding boroughs and townships. For example, the Coordinating Committee of the Centre County MPO includes representatives from State College Borough as well as College, Harris, Patton, Ferguson and Halfmoon Townships.

Pennsylvania started a truly unique arrangement with MPOs throughout our state several years ago to assist with marketing LTAP and with scheduling LTAP classes in areas that had traditionally been under served by LTAP. Today, many MPOs and Rural Planning Organizations or RPOs assist with bringing LTAP services to as many local government officials as possible throughout our state.

### Why are Rural Areas Treated Separately?

If your borough is in a rural part of our state and you live in an area below 50,000 in population, you are covered by a Rural Planning Organization also known as an RPO or by an independent county planning agency that has many of the same responsibilities as an MPO. There are 6 RPOs in Pennsylvania and one additional unique regional economic development organization named SEDA-COG that operates much like an RPO. Institutional arrangements and transportation issues can be very different in rural areas than in metropolitan areas with populations of over 50,000. In metropolitan areas, the responsibility for planning lies with designated Metropolitan Planning Organizations. Rural areas in our state face transportation issues of a different nature than those encountered in metropolitan areas. While urban areas are largely focused on air quality and congestion relief rural areas may be more focused on economic

development and mixed uses or roadways.

What's important is that every Pennsylvania municipality has a regional or county-wide, designated planning agency that can assist with making our roads and streets smoother and safer.

## When and how should you contact an MPO or RPO?

MPOs and RPOs must provide citizens and other interested parties with "reasonable notice of and an opportunity to comment" on long-range transportation plans and the official regional Transportation Improvement Plan or TIP. This means you are entitled to advance notification of changes in either plan. You are also entitled to participate in the planning process and any public outreach activities organized by the MPO or RPO to get citizen input. How can you make your views known?

- Attend and speak at your local MPOs/RPOs public meetings.
- Write letters to your MPO.
- Arrange one-on-one meetings with key MPO members and staff.

Timing can be critical, so contact your MPO or RPO and find out the status of the long-range plan and the TIP. Hearings are often scheduled to deal with proposed additions to the plans. Ask for a schedule of future hearings and opportunities to comment on the plans. Find out the requirements for presenting your views or suggestions for additional projects.

If you choose to speak at a hearing, work with coalition partners and community supporters to prepare your remarks. Ask them to attend TIP or long-range plan hearings where additional projects will be considered. If possible, include letters of endorsement from your public works director, borough engineer, other elected officials, and your borough residents of the areas where improvement is needed. This lets MPO and RPO leaders know that your project has community support.

Even if you don't have a specific project in mind, MPOs and RPOs are important institutions to contact. They are constantly dealing with projects that affect the future of your community. Your borough may be affected by a project being considered by a MPO or RPO. For example, your local government may propose a major upgrade to a street that would connect your community with the neighboring area, and it will supposedly take the pressure off some of other local roads. As a community leader, you might have both positive and negative concerns about the upgraded street. Getting plugged in to the MPOs or RPOs planning process is one of the best ways to learn about the merits and potential impacts of a proposed project. It's also an effective way to express your views.

Also, your MPO or RPO can get you better connected with LTAP and other PennDOT programs that could really benefit your community in the long run. Maybe you can't afford to send your entire street crew to LTAP training classes that are held many miles away but you could host a training series right in your municipality.

You have nothing to lose and every thing to gain by getting better connected with your MPO or RPO. Why not call them today?

# Upcoming Workshops

### To Register: PHONE: 1-800-FOR-LTAP (367-5827) WEB SITE: www.ltap.state.pa.us

This represents some of our scheduled courses. Look for updates on the Web site.

August 25, 2009 **Crawford County Bridge Maintenance** 

Vernon Township Building 8:00 AM - 2:00 PM

August 26, 2009 **Montour County Stormwater Management** 

Mahoning Township 8:00 AM - 3:00 PM

8:00 AM - 3:00 PM

September 11, 2009 **Centre County Road Surface Management** Patton Township

September 11, 2009 **Carbon County Traffic Signs** 

Lehighton Recreation Center 8:00 AM - 3:00 PM

September 16, 2009 **Bucks County** Risk Management/ **Tort Liability** TMA Bucks, Bensalem

September 17, 2009 **Delaware County Traffic Signs** 

8:30 AM - NOON

Upper Chichester Township 8:00 AM - 3:00 PM

September 17, 2009 **Cambria County** Winter Maintenance

PA Highlands Community College 8:00 AM - 3:00 PM

September 22, 2009 **Columbia County Traffic Signals** Bloomsburg Town Hall 8:00 AM - 3:00 PM

September 23, 2009 **Blair County** Winter Maintenance Ramada Inn, Altoona

8:00 AM - 3:00 PM

September 24, 2009 York County Winter Maintenance Penn Township 8:00 AM - 3:00 PM

September 30, 2009 Lackawanna County Winter Maintenance PennDOT District 4-0 Office, Dunmore 8:00 AM - 3:00 PM

### Congratulations to the following Roads Scholar recipients:

Christopher Flory, East Cocalico Township

John Paden, Borough of Lemoyne

Clair Kingston, Catawissa Borough

William Rhine Jr., East Lampeter Township

### The Do's and Don'ts of Liquid Fuels Funds

How to spend Liquid Fuels Funds continues to be a source of questions from many local municipalities. In an effort to make sure the correct information is available, the next few issues of "Moving Forward" will include a series of articles to ensure you are spending liquid fuels funds properly and are not putting your community at risk of repaying the state!

At any time, if you have questions regarding the use of liquid fuels funds, do not hesitate to call your District Municipal Services Office or find what you need at www.dot.state.pa.us.

**Bob Garrett, PennDOT Municipal Liaison** 

### **Liquid Fuels Allocation Formula**

According to Craig Reed who is the Director of PennDOT's Bureau of Municipal Services, municipalities can plan on receiving their annual liquid fuels allocations from the state on the first business day of April each year. "My staff works toward the timely disbursement of these funds every day of the year," Reed said. He explained that, "Municipalities that are using the new dotGrants

system can pretty much be assured of an accurate and timely payment. While municipalities are not required to use this system, it does nearly guarantee that payments will be correct and on time."

Reed was asked how the funds are allocated to the municipalities. He stated that, "Half of the funds are based on the municipality's local road mileage and the other half is based on the municipality's population using the latest decennial census figures. Simply stated, the more miles of roads and streets your municipality maintains and the more people that live in your community the more funding you get."

The actual Liquid Fuels allocation is derived from six separate sources. These include:

- 20% of the 11.5 cents of the state's retail gas tax
- 20% of the 35 mills of the state's wholesale gas tax
- \$5 million authorized by Act 68 of 1980
- 12% authorized by Act 26 of 1991
- 12% or 38.5 mills authorized by Act 3 of 1997
- \$30 million allocated by Act 44 of 2007



PennDOT Local Technical Assistance Program

400 North Street, 6th Floor Harrisburg, PA 17120





#### **LTAP Contact Information:**

400 North Street, 6th Floor Harrisburg, PA 17120 1-800-FOR-LTAP (367-5827) Fax: (717) 783-9152

Email: ltap@state.pa.us Web site: www.ltap.state.pa.us



PennDOT Local Technical Assistance Program

8

#### The Do's and Don'ts

continued from page 7

This chart graphically shows the total amount of liquid fuels funds allocated over the past few years:

