Keeping it Simple in Eudora

By Norm Bowers, P.E.

The City of Eudora has implemented a simple pavement management approach that might be a reasonable management approach for other small communities.

Since the 1980s there has been a lot of talk about the need for pavement management to properly manage and take care of our streets and roads. “Asset management” is the new term for this, and reflects the need to manage all our assets, not just streets. The Federal Highway Administration even has a special unit that promotes asset management and is a good resource for more information. See http://www.fhwa.dot.gov/infrastructure/asstmgmt/.

Although there are recognized benefits to asset management, in Kansas it has seldom been implemented in communities with less than 20,000 in population. Larger communities are more likely to have a technical staff and financial resources to implement management systems. But smaller communities have the same issues as the larger communities, yet they lack office staff and technical expertise to develop and maintain a management system.

The major obstacles to implementing an asset management system have been the same for both small and larger communities: 1) Cost of the software, 2) Learning the software, 3) Time and effort involved in the collection of initial inventory and other needed information. Then there is the issue of ongoing maintenance of the management system. The effort to maintain and effectively utilize such a system is more.

Continued on page 2

New Winter Maintenance Training CDs

By Lisa Harris

This new training package covers the gamut of winter maintenance activities. You can choose the sections that are relevant to your operations.

It’s been awhile since we’ve received new training material on winter operations to offer to LTAP customers. That has changed with the arrival in Kansas of hundreds of sets of a new national training package. It was developed by the American Association of State Highway and Transportation Officials (AASHTO) in cooperation with other organizations, including local-agency partners APWA and NACE.

Each set has nine CDs that contain videos and publications on proper winter maintenance techniques. Topics range from high-tech RWIS (remote weather information systems) to proper plowing techniques and how to maintain equipment.

See page 12 for more specific information on each of the CDs, and how to order a set.

Continued on page 12
problematic at a small agency where it is likely that only one person knows how to operate the system and keep it current. If that one person quits or retires, the successor will likely not understand the system and might not know it exists. For that reason a management system for a small community needs to be easily understood and be simple to maintain.

There may be a solution available for smaller communities: Consider the City of Eudora, Kansas. Eudora is a growing city with a population of 6,000 located on K-10 Highway between Lawrence and the Kansas City metro area. The city maintenance program was to chip seal older streets at 3 year intervals and crack seal the newer hot mix streets. Records were kept on a color-coded city map. The street department consisted of two people and some summer help.

Eudora has a city administrator who is charged with properly managing city operations. It is not unusual for a city administrator to stay just three years with a city, and that has been the case with Eudora. In 2009 Eudora hired a new city administrator, John Harrenstein. At that time, the city council was concerned that the street system was not being maintained properly—but how would a new city administrator know? He didn't even know how many miles of street the city maintained.

It was obvious to Harrenstein that what he lacked to evaluate the street network was data. A color-coded map is nice to keep track of what has been accomplished, but a map cannot tell you if you are doing the right thing, or reveal the condition of the streets.

Harrenstein contacted me for advice on how to proceed. My advice was: “Keep it simple.” The more complicated the system, the more likely it will fall into disuse if there is staff turnover. For software, I recommended using an Excel spreadsheet. Excel is fairly powerful if set up properly, but the big advantage of Excel over a database application is that almost all agencies have someone that can use Excel. Excel does not scare people like database applications.

For a pavement rating system, the simplest model I’ve found is the PASER system developed by the University of Wisconsin. PASER is a 10 point system that is easy to understand. It’s also easy to train people to do the ratings, and it’s fast, as it is basically a windshield survey.

The city first considered doing the initial inventory and rating with city staff, but due to time constraints and being uncomfortable with the process of properly rating the streets, they decided to contract the work. In addition to the pavement rating, the city was interested in the condition of the curbs & gutters and a tabulation of the amount of sidewalk in the city. The city also wanted an outside consultant to look at the street maintenance program to see if the three year chip seal schedule was appropriate.

The initial inventory involved measuring the width and length of each street, and rating the condition of the pavement and curbs. Old aerial photos and construction plans were used to determine the approximate construction year. Aerial photos were available for each decade back to 1935. The city has had good construction plans since 1991. Sometimes the date on the subdivision plat was used for the road construction date. Maintenance records were available back to 2006, and those records were used to determine the last rehabilitation date.

Knowing the pavement type is important, as each type has a different maintenance strategy and schedule. For Eudora’s inventory, the pavement type was determined based on construction plans, if available; otherwise the construction year and type of surface distress gave a good indication of the pavement type. The pavement types that were the most difficult to differentiate were chip seal from hot mix asphalt if the hot mix had been chip sealed later for maintenance.
An Excel workbook was developed that included the following worksheets:
- Street, curb & gutter, and sidewalk inventory, by block.
- Definitions describing the abbreviations and terminology.
- Budget history including cost drivers and material costs.
- Checklist to document annual maintenance of system.
- Pre-defined charts that display key data.

The inventory worksheet is a listing of all the street segments (blocks) with their physical characteristics: pavement type, pavement rating, curb rating, and maintenance history. So for any block it is easy to see what was done to the street and the year it occurred. With budget history, costs, and the street inventory in the same workbook, all the data is there to produce a variety of reports, such as work accomplished by year, budget vs work accomplished, budget vs cost by year, and pavement condition by year.

Eudora’s simple management program also has an instruction manual that explains the street system and how to use and maintain the data. This manual includes the history of street construction standards for Eudora, the major pavement types, definitions, and most importantly how to maintain the overall system, and the data within it, so it stays current and effective.

Through this process the City was able to develop facts and data to manage their street system. The city learned that they had 30.84 center-line miles of street, 41.56 miles of curb, and 90,000 ft. of sidewalk. City officials thought they had only two types of streets: full depth hot mix and chip seal. The inventory found that there were quite a few hot mix streets with rock base that were being chip sealed too often.

A number of other important things became apparent when they looked at the entire street network as a whole. The streets were in relatively good condition, but the curb condition indicated that a curb replacement program should be considered. Some curbs were showing premature deterioration at joints, probably due to poor aggregate in combination with salt used for deicing. The city is considering cutting back on salting, and upgrading the specification for curbs in new subdivisions.

The street system mileage has almost doubled since 1990. The newer streets are all hot mix pavement that has needed little maintenance, but the budget had not been increased to allow for overlay of the new streets when needed. The three year chip seal cycle was too frequent, and the city is considering going to four years, with the cost savings going to more extensive patching to smooth the streets.

Some interesting data is shown in the accompanying charts. Pavement types were divided as shown in Figure 1. The pavement condition was tabulated and is shown in the Figure 2. Ninety three percent of the streets were rated good or excellent. Most small cities would be satisfied if their streets rated this high.

The city did not have a curb replacement program and the inventory showed quite a lot of curb in poor and bad condition as shown in Figure 3.

Figure 4 shows the amount of work accomplished for the past five years. The previous city manager did not believe in chip sealing, so no rehabilitation work was performed for three years. This kind of chart will be updated annually as new data is entered into the spreadsheet.

The city had good enough records on construction dates of hot mix streets that a performance curve (Figure 5) was developed to determine the optimum time for rehabilitation.

Continued on next page
Issues With an Aging Workforce

By Lisa Harris

Baby boomers are at, or getting near, retirement age, but many are not retiring. The Bureau of Labor Statistics (BLS) forecasts that, by 2014, the number of workers over 55 will grow to 20 percent of the labor force, up from the 15 percent it is today. Many baby boomers haven’t saved enough to kick back full time in retirement and will continue to work to meet basic expenses. But others say they plan to continue working—even if it means cutting back on the hours—because they want to be engaged in their fields.

The BLS reported that, rather than retiring outright, over 50 percent of older workers are in transitional or “bridge” jobs. The BLS predicts that, as this trend continues, traditional retirements will be the exception rather than the rule.

In a research study conducted by the New-York based Conference Board in 2005, researchers found that most employers say they hire for ability and willingness to work, and consider their older workers reliable, settled, compassionate and honest. Some say they’re “hiring wisdom” when hiring older workers. However, some job skills are not as easily performed due to physical changes that accompany aging.

This article will describe some aspects of aging that can affect job performance, and how to work around those realities to retain or hire good employees who would like to work beyond the traditional retirement age.

Physical effects of aging

Here are some aspects of aging that may affect public works employees. Please note that these are generalizations based on research, and not all of these will apply to a particular employee. Each individual ages differently. But this list

Not familiar with PASER? The acronym stands for Pavement Surface Evaluation and Rating, and it is a simple system for tracking the condition of your roads and streets. PASER helps you evaluate your roadway surfaces and plan repairs.

Common defects are described and illustrated with photos. A surface rating system links type, number and severity of defects with the type of maintenance needed.

PASER has six different versions covering:

• asphalt
• sealcoat
• gravel
• unimproved roads
• concrete
• brick and block

All six manuals can be downloaded for free at http://tic.engr.wisc.edu/Publications.lasso

Pavement management Continued from page 3

Note that the condition fell off rapidly after 17 years (1993) and this indicates the need for an overlay at 17 year intervals.

In summary, the City of Eudora now has a complete inventory of their streets with condition ratings. They can now track how much work is accomplished and the condition of their streets. Rather than rely on hunches and impressions, city officials now have data on which to base their decisions.

A simple program like this is not for everyone; some larger public works agencies need the power and functionality of software specifically design for asset management. But if your city or county is interested in taking a simple approach, consider Excel and the PASER rating system.

About the author: Norm Bowers teaches some courses for Kansas LTAP, works part time for Kansas Association of Counties as Local Road Engineer, and does private consulting. Norm is retired Johnson County Engineer and has been involved in pavement management for 19 years. Norm can be contacted at norm@bowerscivil.com.

Pavement Surface Evaluation and Rating

PASERManual

Asphalt Roads

Rating

10

Rating

4

Rating

7

Rating

1

www.istockphoto.com
gives you things to consider.

- **Loss of strength.** On average, a person’s physical strength decreases about 25 percent by age 65.
- **Decrease in aerobic capacity.** At age 60 an individual will have only 60-70 percent of maximum aerobic power as a 20 year old. This means an older person will get winded more easily under exertion.
- **Decreased ability to handle shift work.** Resistance to the special stresses of night work declines with age. Under such conditions older persons may be less adaptable and more easily tired.
- **Decreased ability to regulate body heat through sweat and water retention.** This may make older workers more susceptible to heat stroke.
- **Decreased reaction time.** It may take a little longer for an older worker to remember things or learn things.
- **Chronic health conditions.** With advancing age comes an increase in chronic health conditions that could affect an employee’s ability to do certain jobs. These include arthritis, high blood pressure, and obesity. Nationally, obesity has been increasing, especially among older men, according to the AARP.

Over one-fifth of people between the ages of 55 and 64 report some limitation in activity due to chronic conditions, a figure that rises to nearly one-third for people ages 65 to 74.

- **Vision impairments.** Eyes are complex structures, and several kinds of changes affect vision over time. The eye’s lens thickens over time and muscles controlling the size of the pupil are not as responsive. These changes can cause decreased ability to focus, see in conditions of low visibility, adjust to changes in light conditions, and distinguish colors in the blue-green and red regions.

- **Hearing impairments.** Hearing loss with age is well known. With the frequency of 3000 Hz as a standard, loss of hearing averages 10 decibels at age 50 and increases to 35 decibels at age 70.

### Ways to include older workers in your work setting

Some of the above age-related aspects can be mitigated by the employee with diet and exercise, certain medications, and assistive devices such as hearing aids. But for some people, limitations will remain. As the AARP points out: The fact that people report less than excellent health or some limitation in activity does not mean they are incapable of doing any work. How do employers take advantage of the wisdom, experience and work ethic of older workers and create a work environment that gets the most out of these employees and encourages them to stay? Answer: By being more flexible.

**Create different work schedules.** In an article in the Des Moines Register, Richard Doak suggested creating more jobs that offer part-time, flex hours and seasonal employment, so seniors can work “but still take in their grandkids’ Little League games or make a snowbird trip south.”

**Modify responsibilities.** You can reduce risk of injury to an older worker by modifying their responsibilities to account for the job performance issues outlined above. Each individual is different. Get to know what aging-related conditions your employee may be experiencing, and adjust his or her duties accordingly. For example, you might keep an employee who needs more visual contrast away from work situations where visibility is poor, such as plowing in blizzard conditions or working outside at night.

**Pair younger employees with older employees.** Many employers seek to develop ways for older workers to pass their knowledge and skills on to younger workers. Some pair older and younger workers. Older workers benefit by getting a helping hand for more strenuous work tasks.

**Provide training.** The aging workforce is not just an issue in the United States. The European Union (EU), in its annual Labor Progress Report for 2006, listed the creation of employment policies to get people into work as one of four high priorities. The EU proposed that, to help increase employment rates and to finance pensions and health care for an ageing population, EU member-states should adopt a life-cycle approach to employment, with people of all ages offered the support they need. It promotes “active ageing,” with more training for those over 45, along with financial incentives for prolonging working lives and use of part-time work.

When your older workers need to transition to different kinds of job responsibilities in your agency, provide training so that they may do so. And give them a little extra time for the training, if they need it.

**Modify the work environment.** Some suggestions: Set your computer programs to default to a larger font, if needed. Increase illumination in work areas—up to twice as high for workers over 50. Some private companies have set up a Casual Worker Program that allows them to hire or reemploy workers who would receive limited benefits.

### In sum

Many valuable employees will want to work past their retirement years. Make that work for you! By being flexible in how you approach work schedules and work responsibilities, within reason of course, you can have the benefits of the expertise and work ethic of older workers and provide them with the extra income or opportunities to contribute that they are seeking.

For more information, see the sources for this article.

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**Sources:**
Kansas Road Scholar and LTAP Training Q&A

By Kristin Kelly, KS LTAP Training Coordinator

W e at Kansas LTAP want to provide you with the best training possible. Here are some answers to frequently asked questions about our training program and how it works.

Why should I become a Road Scholar? The Road Scholar Program is an easy way to gain recognition for your and/or your staff’s efforts to improve your performance through training. It may be training you are participating in already; the Road Scholar Program “packages” it and provides a certificate of completion from the Kansas County Highway Association (if you work for a county, township or Tribe) or from the American Public Works Association Kansas Chapter if you work for a city. Some jurisdictions have created incentive programs for gaining a certificate (e.g. promotions, raises, or other incentives). Whether or not you participate in the Road Scholar Program, you still receive a certificate for each training course you attend, adding to your knowledge and improving your job skills.

How do I become a Kansas Road Scholar? The application form is available online at http://www.ksroadscholar.org or you may contact me at (785) 864-2594 to request a form. Simply complete the form and submit the $35 application fee. This is required for all three levels. Level I and III application forms and fees should be sent to me at the KU Transportation Center, 1530 W. 15th Street, 2160 Learned Hall, Lawrence, KS 66045. Level II applications and fees should be sent to Sarah Meyer at KAC, 300 SW 8th, 3rd Floor, Topeka, KS 66603.

How long do I have to complete a Road Scholar level? You have six years from your application date to complete all required classes within each level. Classes that are taken three years prior to the application date will also count toward your program requirements.

How often are classes offered? Road Scholar Level I classes sponsored by LTAP are offered annually, with the exception of Risk and Liability Issues which is offered every other year. Each Level I class is generally offered at three locations per year. Road Scholar Level III classes sponsored by LTAP are offered on a 2 year rotation with the exception of an elective course which is offered annually. Classes are listed on the Kansas Road Scholar Master calendar at http://www.ksroadscholar.org. Additional training is normally offered every other year unless there is a high demand.

When are classes offered? We know that the summer months are a busy time for you. LTAP classes are rarely offered during the summer months (June to August). All Road Scholar Level I, (Technical Skills) classes, targeted to the maintenance crews, are offered from January to April and October to December. We try our best to offer all our classes during the winter season, however, occasionally we may see the need to offer a Road Scholar Level III (Executive Development) class outside the winter months.

How are class locations chosen? We are sensitive to keeping your travel costs for training to a minimum. We try to offer each class on a rotating base across the state. If it’s not offered one year in your area, it will be offered again the next time in a location closer to home. If you know of a facility training room in your region that would work well for LTAP training please contact me at kbkelly@ku.edu or (785) 864-2594.

Can my agency host an LTAP workshop? In many cases—yes—and we would be pleased to explore the possibility with you! However, we will need to work with you in advance of developing our annual training calendar to see if your location is feasible for the particular class you are interested in. We try to spread our training around the state. Training calendar preparations for the following year begin in September. You will need to have a room that will hold at least 35 people comfortably with tables and chairs. To gain the benefit of exchange of information with participants from other agencies, we ask that the class remain open to participants from surrounding agencies. Please contact me if you are interested in hosting a workshop.

Where can I access a training calendar? An annual calendar is inserted in the Fall edition of the Kansas LTAP Newsletter. The calendar outlines the training planned for the entire next year. You also may access the most up-to-date workshop listings anytime online at http://www.ksltap.org. Click on “View LTAP Calendar.” You can also access the Kansas Road Scholar calendar at http://www.ksroadscholar.org. This “Master Calendar” displays the frequency of each class required under the Road Scholar Program for each of the three levels, when the last offering for each requirement was offered, and when the next offering is scheduled to take place.

How do I register for a class? You may register online, by mail, or by fax. To ensure your registration is received early, it is best to register online at http://www.ksltap.org. Click on “View LTAP Calendar,” find the class you wish to attend and click on “Register to Attend.” Complete the form and hit the submit button. A confirmation will be emailed to you. You may also complete a registration form and fax to (785) 864-3199 or mail to KU Transportation Center, 1530 W. 15th Street, 2160 Learned Hall, Lawrence, KS 66045. If you submit a registration form by mail or by fax, a confirmation will be sent approximately two weeks prior to the date of the workshop, usually by email.
Do I need to send in the registration fee will my registration form? No. You may choose to have your agency billed or have the payment to follow. It is best to not delay when submitting your registration to guarantee a spot in the class. We are working on accepting credit cards for class registration and hope to have that option available in the near future to simplify your accounting.

In what order do I have to take Road Scholar classes? Road Scholar classes may be taken at any time, and in any order. However a program level certificate will not be awarded until all required courses are completed in each program. (You will, however, receive our customary individual certificate for each course attended shortly after you attend the class.)

Why does LTAP cancel classes sometimes? We do not like to cancel classes and this is always the last resort. However, if the enrollment does not reach at least 12 people we are unable to hold the class.

Do you have a cancellation policy? Yes, to help us avoid unexpected expenses. To ensure we have enough food for lunch for our attendees, we are required to submit a guaranteed number in advance and are charged accordingly. Therefore if you are unable to attend, you must cancel within 48 hours (in writing) prior to the start of the workshop or you will be charged the registration fee.

Do you offer Webinars? We periodically advertise Webinars offered by APWA, the LTAP/TTAP Clearinghouse, and other Webinars of potential interest. We have not yet converted any of our LTAP courses into Webinars and have asked our Advisory Committee for guidance on which would have the most promise for this format. In general, for Level I Road Scholar classes, we believe that more hands-on and face-to-face discussions with personnel from other organizations is extremely valuable. Distance learning continues to be an emerging area, with technology improving all the time. We continue to work on solutions to keep training travel costs as low as possible.

If you have any other questions about the Kansas Road Scholar program or Kansas LTAP training, please contact me at any time—Kristin Kelly, Training Coordinator—at kbkelly@ku.edu or (785) 864-2594.

Congratulations to Kansas Road Scholar Graduates

From left, Joe Collins, Riley County, Mark Jones, Butler County, and Dale Pfannenstiel, Trego County pose with their certificates shortly after receiving them at the Fall 2010 Kansas Road Scholar Award Ceremony for counties. Collins and Jones each received a Level II certificate and Pfannenstiel received a Level III certificate.

It’s been awhile since we printed the names of Kansas Road Scholars in this newsletter. There’s quite a long list of graduates since 2007. Here are the graduates 2008 to present, along with the cities and counties that invested in their training. Congratulations to all of these Kansas Road Scholars!

FALL 2010

Level I Graduates

Name                      County
Rob O’Bryan               Cowley
Kevin Augustine           Hays
Kyle Leiker               Hays

Level II Graduates

Name                      County
Eula Hutton               Allen
Kim Riebel                Allen
Scott Reeder              Allen
Mitchell Garner           Allen
Jeremy Hopkins            Allen
Mark Jones                Butler
Marty Morehead            Johnson
Joe Collins               Riley
Robert Kraus              Sedgwick

Level III Graduates

Name                      County
Raymond Klamm             Johnson
Dale Pfannenstiel         Trego

SPRING 2010

Level I Graduates

Name                      County
Mitch Gardner             Allen
Jeremy Hopkins            Allen
Eula Hutton               Allen

Continued on next page
Road scholar graduates 2008-2010  Continued from page 7

Scott Reeder .......................... Allen
Kim Riebel ............................ Allen
Jason Brown .......................... Ellis
Darren Williams ....................... Barton
David Dirks ............................. McPherson
Dwight Hopp ........................... McPherson
Robert Bever ........................... Montgomery
Douglas Marshall ..................... Saline
Larry Brock ........................... Saline
Carol Crough .......................... Saline
Phillip Nuesser ......................... Stafford

Name                                         City
Richard Mason ........................ Burlington
Kevin Boyce ............................ Burlington
Kyle Sulzman .......................... Hays
Mark Windholz .......................... Hays
Ray Hamilton ........................... Ottawa
Brian Beery ............................. Spring Hill
Blair Thompson .......................... Spring Hill

Level III Graduates
Name                                         County
Jeff Welton ............................ Butler

Level III Graduates
Name                                         County
Jeff Welton ............................ Butler

Level II Graduates
Name                                         County
Roger Nelson ............................ Riley
Jim Taylor .............................. Riley

Level II Graduates
Name                                         County
Randy Blehm ............................. Meade
Mark Painter ............................. Meade

Level II Graduates
Name                                         County
Rick Clark  ................................ Butler
Martin Bolmer ........................... Ford
John Thomas  ................................ Jefferson
James Rice  ................................ Miami
Ralph Stewart ............................ Reno

Level II Graduates
Name                                         County
Justin McCurdy ............................ Ottawa
Steve Donahoo ............................ Ottawa
Chad Bentley ............................. Ottawa

Level II Graduates
Name                                         County
Dan Pfannenstiel .......................... Ellis
Gary Thoma  ................................ Jefferson
Tom Brannan ............................. Norton
Doug Byarlay  ............................. Riley
Larry Gassmann ............................ Riley
Gilbert Terrell ............................. Riley
Dennis Cooley ............................. Saline
Robert Gluckman .......................... Saline
Raymond Klam ............................ Saline
Jerry Petters .............................. Saline

Level II Graduates
Name                                         County
Jo Ann Nowatzke .......................... Ottawa

Level II Graduates
Name                                         County
Mike Craft  ................................ Butler
John Hughley ............................. Butler
Bryan Nolan  ................................ Butler
Dustin Tosh  ................................ Butler
Lueke Willhite ............................ Butler

Level II Graduate
Name                                         County
John Weseloh ............................. Woodson

Level III Graduates
Name                                         County
Sandy Krider  ................................ Labette
A Bicycle Advisory Board Can Be a Strong Partner in Planning Road Improvements

By Lisa Harris

Every community has bicyclists, and cities need to be proactive to effectively meet bicyclists’ needs for safe and convenient travel. The first step is to gather information about how bicyclists travel and what facilities they may want to see in the future. An excellent way to gather that information is through a designated bicycle advisory committee. In this article we’ll look at two such groups in Kansas, and how they are helping their cities’ public works departments plan and develop better bicycle facilities.

A tale of two cities

Two cities in Kansas with a fair number of bicyclists are Lawrence and Manhattan—home to the state’s two largest university campuses—the University of Kansas and Kansas State University. Each of these cities has a bicycle advisory committee (BAC) that reports directly to the city commission.

Manhattan BAC. Manhattan’s BAC advises City staff on the creation of bicycle routes and helps to establish priorities for bicycle facilities in the area. The BAC makes its recommendations to the City Commission consistent with policies and objectives in the City’s Bicycle Master Plan.

The committee also plans and promotes community cycling activities to promote health, safety and recreation. Members review proposals from potential partners for joint programs and assist in coordinating joint activities and with fund raising.

The committee has nine members appointed by the mayor and approved by the city commission. Each member has a three year term. Manhattan’s BAC membership includes designated stakeholders from the county health department, K-State, law enforcement, the area school district, and the business community.

Staff liaison to the BAC, Peter Clark (from public works), said that all public improvement plans go before the BAC for their recommendations for both bicycle (and pedestrian) travel.

The committee’s work is reported to the community through an annual report. Some accomplishments from the 2009-2010 report:

• The committee held a joint session with the city’s Urban Area Planning Board. The boards discussed a number of issues including: potential certification of Manhattan as a bicycle friendly city; the role Manhattan could play in a regional quad-state trail system; identification of bicycle routes throughout the city for both share the road and separated facilities; the need for better east-west connectivity; effective bike rack placement (for possible including in a development code change); and developing a coordinated effort that looks at multi-modal issues between pedestrians, bicyclists and public transit.

• The committee spent several work sessions identifying top priority projects to accommodate bicyclists and pedestrians in Manhattan, including two connections to the Linear Trail, a railroad crossing, increased bike racks/bike parking, signage, funding for education/encouragement activities, improvements to a major arterial, and sidewalks along Fort Riley Boulevard.

• The committee also identified having a permanent bicycle coordinator at a top priority. The annual report said “Creating a half-time position would provide the support necessary to prepare the application to become a Bicycle Friendly Community, as well as assist in securing available state and federal funding for bicycle and pedestrian programs.”

Lawrence BAC. Like Manhattan’s BAC, Lawrence/Douglas County’s Bicycle Advisory Committee provides input on the city’s road improvement plans and makes recommendations for the addition of bicycle facilities. The committee advises both the City and the County. The BAC also is charged with bicycle safety and awareness education of motorists and non-motorists, updating and overseeing the distribution of the city’s biking map, promoting bicycle awareness, and keeping up to date on current trends, programs, and facilities outside the local area.

Sources:
• Manhattan Bicycle Advisory Committee 2009-2010 Annual Report. City of Manhattan, KS.
A significant source of road funding available to counties and many cities in Kansas is the Federal Aid Program. It is administered by the Kansas DOT for the Federal Highway Administration. Local Aid funds are appropriated by KDOT to each local public agency, or “LPA,” using a formula. These funds are to be used only for major construction and rehabilitation projects—and only on designated federal aid routes. A 20 percent local match is required. Projects are programmed as part of the LPAs 5-year plan.

While Federal Aid funds significantly help counties (and cities >5,000 pop., not in Metro Areas) with major road projects, many other types of projects fall outside the scope of what the Federal Aid Program will fund. That has been a source of frustration to LPA road officials in Kansas, who, if given a choice, would rather spend that money on much-needed maintenance—for roads, bridges, culverts, curb and gutter, sidewalks and signs. Also, they would prefer to not be restricted to spending funds on federal aid routes, but rather use them wherever the need is the greatest—on any road.

Federal aid funds can be traded for state funds, with many fewer strings attached for how they are spent.

A new choice

Now local governments have a choice. With KDOT’s new federal fund exchange program, there are two ways to tap into an LPA’s federal aid allocation:

1) The customary way: The local government uses the federal funds with a 20 percent local match for major construction projects on federal aid routes. The projects need to meet federal fiscal controls and they have strong oversight from KDOT. State-approved contractors typically are hired to do these projects. KDOT lets these jobs and collects the local match immediately after letting.

2) The new option: The local government exchanges its federal funds with KDOT for state funds, on a reimbursement basis. The state will reimburse up to 90 percent of the local government’s federal aid allocation for local projects, as costs are incurred. Exchanged funds can be used for construction or maintenance projects anywhere they are needed. The projects are under local control, with minimal state oversight. Work can be done by contractors or the LPAs own employees.

How it works

First, an LPA decides the projects it will complete in a given year with the exchanged funds, and outlines them in an agreement with KDOT, with estimated costs and completion dates. LPAs will pay for those projects up front and then will submit expenses to KDOT, with invoices and a reimbursement form. Expenses can be sent at any interval the LPA chooses; however, KDOT will only process requests of $1,000 or more. Once each reimbursement request is received by KDOT, the expenses will be reviewed and approved, a check will then be issued to the LPA within a few weeks.

Questions about the program

What are the advantages to an LPA in exchanging federal funds for state funds? When federal funds are exchanged for state funds, the state funds can be used for a wider range of types of projects, including maintenance of roads, signs, culverts, and bridges. Those projects may not require the extensive engineering (and costs) associated with federal aid projects. And some things that could not be paid with federal funds for federal aid projects (e.g. ROW acquisition and utility relocation) can be paid with the funds received in an exchange.

Another advantage in exchanging the funds is that the local government may be able to avoid some restrictive federal provisions, such as Buy America (for steel), NEPA documentation, and others, depending on the type of project.

Are there any disadvantages? The program pays 90 cents on the dollar, so fewer real dollars are available. But because many maintenance projects require less engineering and inspection than typical Federal Aid projects, the money goes farther.

LPAs will need to be on the ball about following state requirements in letting their jobs. These requirements

Sources:
• Ron Seitz and JR McMahon. Personal interviews. October 18, 2010.
are not new, but since KDOT will not be letting the local jobs, the LPA will be responsible for obtaining permits, acquiring ROW, etc., when needed.

• Which tasks require an engineer?

In 2005 KDOT published a K-TRAN report on road-and-bridge related tasks that require a licensed engineer (or supervision by a licensed engineer) and those tasks that don’t. That information is available on a quick-reference card available from Kansas LTAP (see page 15). KDOT is using this card to guide decisions about whether an engineer is needed for a given task. If after consulting the card you still have a question about whether part of your project needs to be conducted by an engineer, call KDOT’s Bureau of Local Projects for a determination (785-296-3861).

KDOT will spot-check projects for proper use of engineering when engineering is required. If projects are completed without proper engineering, KDOT will meet with the agency with the hope of reaching an understanding about the importance of proper engineering to the state and also to the local agency, for safety and to avoid the possibility of a non-engineer’s judgement being called into question in a lawsuit.

• Is pre-approval from KDOT needed for each project? Pre-approval is not needed, but the project must be one of the many types eligible for reimbursement. For instance, funds can’t be used to purchase salt and sand for winter maintenance. Consult KDOT’s Federal Fund Exchange Guidelines for eligible projects (see sources, below left).

• The program allows LPAs to trade funds with each other. Why would a local agency want to trade their own local funds to receive federal aid funds? This allows LPAs to help each other out. If an LPA has a federal aid construction project in the works, they will need to meet federal requirements anyway. If they plan to spend more than the required 20 percent local match, they could trade some of the extra local match to another LPA and receive federal dollars in return. The donor agency would just need to make sure that they have at least 20 percent local funds available to match the new increased federal dollar amount.

Local exchanges are not restricted to the 90 cents on the dollar exchange rate; local agencies can decide their own rate.

• Can funds be carried over and accumulated for larger projects? Yes. State funds received in an exchange can be accumulated for up to three years and sometimes longer—if you have a plan and the state has cash-flow.

• Can the funds be used for maintenance on gravel roads? Yes, it’s up to the LPA to decide which of their roads need the funding the most. Most LPAs will probably use the funds on asphalt roads, though, as maintenance on those roads usually costs more and benefits more citizens.

• What if the LPA does not have funds up-front to send for reimbursement? The LPA would need to finance the project, for example with temporary notes.

• Is the use of in-house labor and equipment eligible for reimbursement? Yes, it is. This has changed as a result of input KDOT received at training sessions around the state. KDOT will now reimburse for labor and equipment time on projects done by the LPA forces. This is consistent with the way KDOT has handled Federal Aid projects in the past.

Some comments about the program

JR McMahon, Road and Bridge Department Director for Miami County, said the Federal Aid program has been primarily used by counties in Kansas as a bridge replacement program and many counties had difficulty coming up with the 20 percent match. He sees several significant opportunities with the new Fund Exchange Program:

1) Tasks that locals have had to pay for under the Federal Aid program can be reimbursed with the fund exchange, including preliminary engineering, ROW acquisition and utility relocation.

2) The new program provides an opportunity for LPAs to fund transportation aspects of economic development projects. For example, funds could pay for construction for a road to a new business park—something that could bring in additional tax revenue. McMahon sees this as a big advantage over, for example, re-building a bridge when it is not really needed.

3) If your county is in the preservation mode, the fund exchange can be used to give the “best bang for the buck” on your asphalt roads, chip seals, and even sidewalks.

4) LPAs will be able to upgrade signs to meet the new federal guidelines in the Manual on Uniform Traffic Control Devices (MUTCD) for retroreflectivity and letter size and height.

McMahon said: “This new program is going to make commissioners, road supervisors and county engineers think harder about where they are going to spend their road dollars. We all need to think creatively to make the best decisions for the community—that’s our responsibility. When used correctly, this [new fund exchange] is a big deal.”

Norm Bowers, Local Roads Engineer for the Kansas Association of Counties, calls the program a win-win for counties and KDOT. “The counties have flexibility to affect some cost savings, and KDOT ends up with additional federal funds.”

Ron Seitz, Chief of KDOT’s Bureau of Local Projects, said the biggest benefit to locals in this program is that they will be able to develop their projects in the way that best meets their needs and the needs of their system. Seitz said many local agencies have requested more flexibility with the funds allocated to them. This program provides that.

Conclusion

The new federal fund exchange program really is a whole new way of doing business using federal fund allocations. Any Local Public Agency can benefit from using the program. State oversight is minimal, and the advantages to local agencies are substantial.

KDOT’s Bureau of Local Projects has posted detailed information on the program at its Web site, http://www.ksdot.org/burLocalProj/default.asp. Local Projects has already conducted classes on the topic statewide and will give presentations at its district meetings in the Spring. There is even a youtube video that describes the program. http://www.youtube.com/watch?v=fCRkDgj03Xg.

If you are an LPA, be sure you are educated about this new program so you can take advantage of it.
New winter maintenance training  Continued from page 1

The new winter maintenance training package contains the following topics, divided among the different CDs in the set:
• Equipment maintenance (2 hours)
• Proper plow techniques (2 hours)
• Deicing (4 hours)
• Blowing snow mitigation (3 hours)
• Winter maintenance management (2 hours)
• Performance measures for snow and ice control operations (4 hours)
• Anti-icing / RWIS (24 hours) [yes, 24!]
• Selecting snow & ice control materials to mitigate environmental impacts (2 hours)

What if you don’t have several hours to devote to training? No problem. Each CD is divided into multiple sub-topics and you can pick and choose which to learn at any given time, within what’s possible for your schedule or your crew’s available time for training.

Along with being flexible with your work schedules, this computer based training is designed to be self-paced, accommodate multiple learning styles, provide consistency in training within your organization, and be available any time as a refresher.

We hope you will find this new training set useful and helpful to you and your staff. We’d appreciate your feedback!

To order a set of the nine CDs, turn to page 15.


Guide Outlines Local Funding Options  By Matthew Barnett & Lisa Harris

Every year KDOT updates a guide with a series of fact sheets describing potential funding and technical assistance opportunities for local governments. The current field guide lists over 20 programs, shown below.

Several programs are designed to assist with funding transportation safety improvements. Each fact sheet contains information on an individual program, including main points, how to apply, local match required, and the likelihood of funding.

Programs currently listed:
• Bridge Replacement and Rehabilitation
• Surface Transportation Program (STP)
• Highway Safety Improvement Program (HSIP)
• High Risk Rural Roads (HRRR)
• STP-Safety-Railroad
• Congestion Mitigation / Air Quality (CMAQ)
• 402 Safety Program (includes TEAP safety studies and TASK safety training)
• Technology Transfer #1 (Kansas LTAP services)
• Transportation Enhancement
• Geometric Improvements
• KINK 1-R Resurfacing
• Economic Development
• Transportation Revolving Fund
• Rural Highway / RR Crossing Surfacing
• RR Grade Separation Program
• Special City/County Highway Funds
• City Connection Link Maintenance
• Corridor Management
• ITS Set-aside
• KS Airport Improvement Program
• Technology Transfer #2 (NHI courses and K-TRAN research)
• Emergency Relief Program
• Safe Routes to Schools

KDOT’s new Fund Exchange Program will be added to the guide in the coming months.

Are you aware of all these programs? Do you know whether your city or county would be eligible for them? If not, consult the guide and find out. KDOT has made it easy for you by having all the basic information on these programs in one place.

To access a copy of the guide, go to KDOT’s Web site at http://www.ksdot.org, and Click on “Doing Business with Us” on the left-hand column. Then click on “Information for Local Governments” and click on “Resource Information.” You will find the Field Guide there, under “Opportunities for Partnership with Local Units of Government.”

While you are at KDOT’s local government resource page, check out the other useful links found there, including maps, crash statistics at the local level, county and city contacts, and some KDOT policies of interest to local governments.

Source: KDOT. 2010.
Cell Phone Use Reimbursement

By Lisa Harris

Sedgwick County’s Finance Department determined that itemizing calls would be cost-prohibitive, so the county adopted a different approach. They now have their employees who use a cell phone for county business buy their own cell phones and cell phone plans. Employees are then reimbursed by the county for business use.

Rather than itemize each call, once a year each employee meets with his or her supervisor to review the employee’s cell phone statements and determine what percentage of the minutes was for business. This percentage is then used to calculate a monthly payment to the employee in the following year—assuming no major changes take place in job responsibilities re: using a cell phone use for county business.

An added benefit to the new approach is that employees can purchase their phones with the carrier of their choosing, and take advantage of family plans.

 IRS rules originally spurred a change in how Sedgwick County pays for work-related cell phone use.

About five years ago, Sedgwick County reviewed and revised their cell phone policy to ensure compliance with IRS regulations. The IRS defined cell phones and other wireless communication devices as “listed property,” which means an employee, in order to have a legitimate business expense, had to document each phone call as business or personal. If a business call, the employee needed to document the business purpose of the call for the use to be considered non-taxable. Personal use was considered taxable.

Troy Bruun, Sedgwick County’s Deputy Chief Financial Officer, said that the process has worked well for the county, and they plan to continue it even though the IRS has recently—again—changed its rules about taxing cell phones and their use. The IRS no longer considers cell phones listed property, which eliminates the requirement for documenting personal and business calls on a county-owned phone.

Although this change means the reason for revising the county’s cell phone practice is now moot, Bruun said at this point it would create headaches for the employees and the county to change back to the way they did it before—with the county owning the phones. The employee would either need to change phones to a county phone or transfer their personal number to the county. If the employee transferred their personal number, they would lose the benefits of their family plan, if they have one. Also, the county would have to pay 100 percent of the hardware costs to purchase phones and accessories when they only pay for the business portion today. So for now, the county will stay with its current reimbursement program for business use.

If you have a question about Sedgwick County’s program, contact Troy Bruun at 316-660-7591.

Sources:

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In sum

A bicycle advisory committee is an effective way to get information that can help you advance your infrastructure and safety goals and help bicyclists have safer and more enjoyable travel in your community. Having a BAC appointed by elected officials will immediately make decision makers aware of the board and its importance while also educating them on the importance of bicycling issues. An official advisory committee cannot be easily disbanded or ignored when the decision makers change. Having an official committee also helps make sure the right people are at the table to work on bicycling issues—people with expertise, who are team players, and can work on behalf of the whole community.

For more information on forming a bicycle advisory committee, see the sources for this article on page 9.
WHAT’S NEW

By Lisa Harris

See download/ordering information on next page.

Winter Roadway Maintenance Computer-Based Training (CBT)

A package of nine CDs that provide video training and documents on a variety of winter maintenance topics. AASHTO, 2010. For more information, see article on page 1.

PASER-Gravel

On page 4 we described the PASER manuals developed by the University of Wisconsin for rating the condition of roads and planning for maintenance. All are downloadable at the link provided in the article. We have hard copies of the gravel roads PASER manual for road departments without computer access.

MINK 2010 Presentations

This CD includes Powerpoint presentations from the “MINK” regional local roads meeting in September 2010 in St. Joseph, MO. Topics cover roadway safety, the safety edge technology, “de-paving” roads back to gravel, reauthorization of the highway bill, asset management for local agencies, implementation of state strategic highway safety plans, utility checklists from Nebraska’s LPA program, a heads-up on changes in the 2009 MUTCD, and geosynthetics for mitigation in road projects.

ROAD SAFETY CLASSES PLANNED

Two road safety classes are planned for this Spring. Road Safety Assessment (RSA) will be offered in May in Dodge City. This class covers how to conduct RSAs to identify specific ideas for addressing safety problems that include engineering and/or law enforcement solutions. Traffic Impact Studies, to be held in Topeka in May, will cover how to estimate the traffic impacts of new developments. See above for specific dates and registration information.

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FREE ROAD & BRIDGE RESOURCES

Check off your selections, fill in the bottom portion, and return this form to:
Kansas LTAP Materials Request, 1530 W. 15th St., Room 2160, Lawrence, Kansas 66045 or fax to 785/864-3199

TRAINING GUIDES & REPORTS
You are free to keep these unless otherwise noted. Or you can download at the links provided.

Winter Roadway Maintenance Computer-Based Training
❑ request the set

PASER Gravel Roads Manual
or ❑ request a hard copy

MINK 2010 Presentations
1 CD. See description on page 14.
❑ request the CD

Road and Bridge Tasks in Kansas
This is the laminated card that shows which road and bridge related tasks require professional engineering, mentioned in our article on KDOT’s fund exchange (on page 10). If your agency will participate in the fund exchange, you will need this card for reference. Kansas LTAP and KCHA, April 2007.
❑ request the card

EQUIPMENT
We offer turning movement counter boards for loan to local highway agencies. Email mgivechi@ku.edu to arrange a loan. There could be a waiting list for these items.

❑ Turning Movement Counter Board DB-400, Jamar Technologies, Inc.
A basic model for recording turning movements at intersections. The board is lightweight and comes with its own case.

❑ Turning Movement Counter Board TDC-8, Jamar Technologies, Inc.
Can be used to do turning movement counts, classification counts, gap studies, stop-delay studies, speed studies, and travel time studies. The board is lightweight and comes with its own case.

Our resource catalog of free reports and training videos is searchable online. Visit http://www.ksltap.org. Click on the “Lending Library” to search the catalog.

REQUEST FORM
❑ send materials indicated ❑ address correction ❑ add to newsletter mail list ❑ send Road Scholar Program brochure
❑ send 2009 Kansas LTAP Resource Catalog of free training videos and publications ❑ add to LTAP email discussion list

Name ___________________________________________ Phone number _____________________________

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*For requests outside the United States: After receiving your request, we will notify you of the postage cost and will send materials after receiving payment for postage.
Let us at the Kansas LTAP help you find the answers to your transportation-related questions.

Kansas LTAP, 1530 W. 15th St. #2160, Lawrence, KS, 66045. Call 785/864-5658 (fax 785/864-3199) http://www.ksltap.org

The Kansas Local Technical Assistance Program (LTAP) is an educational, technology transfer and service program of the Kansas University Transportation Center (KUTC), under the umbrella of the KU Transportation Research Institute. Its purpose is to provide information to local government highway departments and their personnel and contractors by translating into understandable terms the latest technologies in the areas of roads, highways and bridges.

The Kansas LTAP Newsletter is published quarterly and is free to counties, cities, townships, tribal governments, road districts and others with transportation responsibilities. Editorial decisions are made by Kansas LTAP. Engineering practices and procedures set forth in this newsletter shall be implemented by or under the supervision of a licensed professional engineer in accordance with Kansas state statutes dealing with the technical professions.

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KUTC Executive Director .......................Pat Weaver
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Manager of Communications & Outreach........Lisa Harris
Contributors.................................Norm Bowers, Kristin Kelly, Matthew Barnett