

# KUTC Newsletter

Spring 2003

A Local Technical Assistance Program (LTAP) of The University of Kansas Transportation Center  
In cooperation with Kansas Department of Transportation and Federal Highway Administration

An issue dedicated to money matters

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## Up in smoke

Budgets that assumed the use of demand transfer funds and healthy sales tax revenues are getting burned.

... by Ira Allen .....

Suzanne Loomis raised some eyebrows at the Kansas Chapter APWA Spring conference in April, when she presented the findings of a survey on demand transfers.

Loomis, APWA Kansas Chapter President-Elect, and City Engineer/Director of Public Works, City of Newton, looked at how many dollars of demand transfer money each of several cities in Kansas had lost. She discussed the impacts of this and other financial woes on staffing and operations. The survey also considered whether cities received local sales tax revenue.

This article will explore the issues raised by Loomis's interesting survey and some responses from participants at the APWA conference. But before we go any further, we'll describe how demand transfers work.

Newton City Manager Jim Heinicke explained demand transfers as follows: "These were statutory obligations by state government to share certain revenue streams with local governments. The legislation which set this forth 'demands' that they be

transferred," he said. [Hence the name.]

Kansas cities recently lost two funding streams: the Local Ad Valorem Property Tax Reduction Fund (wherein a certain portion of state sales tax was to be transferred to cities to keep property taxes down) and the City/County Revenue Sharing Fund (which shares with cities the funds generated from a variety of state taxes, such as on cigarettes, for example).

"The state did not reduce such taxes; they simply quit sharing them with local governments," said Heinicke.

Historically, demand transfers have been distributed to local cities and counties by a formula of population and assessed value, and have been placed in the city's general fund, which (in Newton, for example) includes fire/EMS, police, streets, engineering, parks, cemetery maintenance, administration, municipal court, and so forth. As Loomis's survey shows, reductions in demand transfers threaten the general fund in various Kansas cities.

### Survey findings

Loomis surveyed Newton, Lawrence, Salina, Winfield, Dodge City, Manhattan, Ottawa, Overland Park, Lenexa, and Wichita, each

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## Up in smoke,

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of which lost hundreds of thousands to millions of dollars in demand transfer money. She asked the following questions:

- How many dollars of demand transfers did your city lose?
- Have your departments been asked to cut your budgets? By how much?
- Have you been cutting your budget in previous years?
- Are you going to have to lay off people? How many?
- When was the last time your city had to lay off people?
- Are you hiring any new people?
- What measures is your city taking to inform the public of budget woes?
- Do you have a city sales tax?
- Are you being asked to consider contracting out services?
- What about taking over currently contracted out services?
- What measures have you taken to provide greater efficiencies in your operations?

*Budget woes.* Of the cities surveyed, Newton, Lawrence, Dodge City, Overland Park, Lenexa, and Wichita have all been asked to cut their budgets this year. Winfield expects to do so next year. Newton, Manhattan, and Wichita are the only cities that cut their budgets in previous years.

Not all the budget problems municipalities are facing stem from the lack of demand transfers. Revenue streams are also decreasing because cities are currently collecting fewer tax dollars. "People are not spending the same amount of money in a down economy [that they did previously]," Loomis said.

This holds particularly true for city sales taxes, which all of the cities surveyed have, except Newton. Sales tax ranged from 1/4 cent, to be spent on economic development in Manhattan, to 1/2 cent for property relief and 1/2 cent for Kellogg St. and

the highway system in Wichita. Before the current demand transfer situation came to a head, the Kansas League of Municipalities had already begun taking action. Or, more accurately, *bringing* action. Following then-Governor Graves's decision to use the allotment process to cut demand transfers to local governments, the League brought suit against the State of Kansas, charging that this was an improper use of this process.

The allotment process, said Kim Gully for the League, is "an extraordinary power granted to the governor in extreme financial situations to control state agencies." The key words are "state agencies," and it is on these words that the League hinged their case. Gully said, "Using that [allotment] process to take away local government funds is inappropriate, because local governments are not state agencies. The statute allowing this applies specifically to state agencies."

Unfortunately for the League, the lawsuit became moot when the Kansas Legislature returned to session and retroactively ratified the Governor's decision, making the decision to withdraw demand transfer funding official, and legal. Although the League does not take legal issue with this decision coming from the Legislature, they do deeply question its wisdom and worry about its impact on the state of services across the state.

the highway system in Wichita.

While local sales tax revenues are usually helpful in offsetting losses in other areas, cities are being hit by a one-two punch as both sales tax and demand transfer revenues drop significantly. The damage reported in Loomis's survey ranges from a loss of 266,000 dollars in Winfield (population 12,000) to about 8 million dollars in Wichita (population 310,000).

*Staffing issues.* Budget cuts could have serious consequences for employment. Many of the cities surveyed have never had to lay off workers. Others, such as Newton, Salina, and Manhattan, did so only once in the last 20-30 years.

Only Wichita laid off employees recently, losing 21 workers citywide, including 11 in public works. Newton, Overland Park, Lenexa, and Wichita all expect to lay off staff this year. Expected city-wide lay-offs range from a possible eight in Newton to 40 in Overland Park. The other cities surveyed have hiring freezes or chills for at least a year.

Only Winfield and Manhattan are hiring new employees at the

moment (although Lawrence expects to hire an Assistant City Engineer when its hiring chill thaws out).

*Contract out?* Contracting out city services is a potential money-saving idea. Newton has looked at the possibilities of contracting out various services in the past, but so far they have found it cheaper to do things in-house.

Lawrence, Salina, Dodge City, and Ottawa are not seriously considering contracting out services, although Lawrence, like Wichita, is "always evaluating" that possibility.

Overland Park is considering hiring contractors for some street maintenance, while Lenexa is thinking about contracting out seasonal construction inspections. Winfield has given the idea some thought to ease the work load for their own staff.

Manhattan is considering contracting out a variety of different services: gravel streets and alley maintenance, crack sealing, street repairs, engineering inspection, engineering services, cemetery maintenance, the park mechanic position, grounds maintenance, facility maintenance,

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# Pick up some savings by leasing heavy equipment



... by Lisa Harris . . . . .

Road department managers are always looking to save money. Sometimes that comes at a cost, though; cutting corners in the short term often creates problems in the long term. Leasing equipment is one way to get both cost-savings and fewer problems.

Riley County, Ks., leases two new skid steer loaders each year. After a year of use (about 500 hours each), the County turns in the loaders and leases new ones.

Leasing this equipment is a much better deal for Riley County than renting it. "The cost is relatively low for the County," said Rod Meredith, Assistant Director of Public Works. "You can lease a skid steer loader for less than \$5,000 per year. To rent one would cost at least \$2,500 a month," he said.

Savings do not appear as dramatic when compared with purchasing a machine; Meredith says the capital expenditures are "a wash" over time. But a closer look shows considerable advantages in terms of increased productivity and savings on maintenance.

"Older machines are in the shop more often," explained Meredith. "You are looking at some significant repair costs after three years. On the other hand, there is virtually no maintenance on a leased machine, except for oil changes. And you know you

will have the most up-to-date technology," he said.

While this kind of leasing arrangement sounds great for a road department, what's the incentive for the equipment dealer?

"The dealer gets a government discount from the manufacturer for leasing to a public road department," explained Meredith. "The dealer gets the machine back after a year, and can sell it for a reduced price to a contractor looking for a used, low-hours machine. It's good for the dealer, it's good for the County, and it's good for the Contractor," he said.

So far leasing arrangements like this are only available for skid steer loaders and backhoes. Why? "It's all tied to sales volume," said Meredith. "It only works for machines that have a high volume of sales with contractors. The arrangement has to work for the dealer," he said.

Even though Riley County leases its skid steer loaders, the County prefers to purchase special-

One city that leases backhoes is Lawrence, Ks. The City leases two backhoes, each on a 3-year lease. Their strategy is to buy the vehicle after the lease expires and maintain it for six more years. Then they typically sell it. The lease agreement contains a guarantee to purchase or lease again.

"This makes sense for us," said Tom Orzulak, Street Division Manager. We can lease for half the price of buying and we get a full warranty for three years. Another way to look at it is: One new purchased backhoe for two years equals two new leased backhoes for two years," he said.

The City of Lawrence uses two backhoes every day, on average. They have purchased extended warranties for some of their vehicles, and seek to have two backhoes under warranty at all times.

Under the warranty, the leasing company fixes the vehicle in the field. Orzulak says the City has had good luck with that arrangement. He noted that the warranty covers just about everything except tire replacement and transmission replacement.

If you have any questions about



**"It's good for the dealer, it's good for the County, and it's good for the contractor."**

ty attachments for them, rather than rent them. "That way we know we have exactly what we want—when we want it," said Meredith. The County owns a milling attachment, post hole auger, tree planting auger and power broom.

Riley County currently leases just skid steer loaders but is looking into leasing backhoes.

these leasing programs, contact Rod Meredith at Riley County at (785) 539-2981 or Tom Orzulak at the City of Lawrence at (785) 832-3031. ■

## Up in smoke,

*continued from page 2*

horticultural services, the storm water system, and levee maintenance.

Chuck Williams, Manhattan's Director of Public Works, said that they are currently putting together the scope of services for these services.

Manhattan also looked into contracting out light-duty vehicle maintenance, surveying, forestry, welding

Salina is looking for strategies not merely to weather the storm, but to prepare for the possibility that the weather patterns have changed for good—and that demand transfers will not be coming back.

services, pavement markings, code enforcement, and plans review, but found they could perform these services cheaper in-house than the private sector could.

Williams noted, "Keep in mind that this process was started before we got into the budget crisis with demand transfers, but you could certainly say we're looking at these options a little harder."

Most cities are not planning to take over currently contracted services, but Dodge City will be bringing the task of mausoleum maintenance in-house, and Salina is planning to do more right-of-way mowing without the aid of contractors.

*Public relations.* It's important to keep the community informed about their city's financial process. This can make items like sales taxes more palatable and also helps foster governmental accountability. To this end, the City of Newton has sent out satisfaction surveys enclosed with utility bills, conducted community meetings, and written articles in the newspaper to help raise public awareness of the City's budget woes. The City of Lawrence got the word out through media reporting of commission meetings. In

Salina the budget was a campaign topic in recent elections, and in other cities it has been a news item. In Overland Park, budget concerns were covered in the mayor's State of the City Address.

Only Winfield has done nothing special to inform the public of budget woes, but this makes sense, as it has not been as deeply affected by the loss of demand transfer revenue as most of the other cities surveyed.

*Operations.* The cities surveyed are taking a variety of approaches to make do with less money in operations.

Strategies include deferring or delaying equipment purchases, cutting travel funds, not hiring all the usual summer help, and conducting intra-departmental surveys to help look for efficiencies. Other approaches include:

- Combining utilities and public works into one department (Manhattan);
- Allocating more of the budget to enterprise funds, using franchise fees for wastewater, and seeking grants more aggressively (Salina);
- Eliminating curb replacement as a function of annual street maintenance (for a 500,000 dollar savings) and reducing the carry-over in their yearly budget (Lenexa); and
- Cutting overtime in half, consolidating department functions like park and fire maintenance, and increasing storm water utility rates to eliminate general fund subsidization (Wichita).

<sup>1</sup>Larry Emig, KDOT's Local Projects Bureau Chief, says that KDOT plans to follow through at least on all current commitments to local agencies.

## Future prospects

Suzanne Loomis said, "Anytime cities are forced to look at lay-offs, it is a severe situation. For public works departments, it is especially important, because we are dealing with aging infrastructure nationwide. How can we maintain this infrastructure adequately with fewer staff and fewer dollars? Levels of service will have to decrease and this will only lead to problems in the future, due to less preventative maintenance now."

Loomis went on to say that loss of demand transfers and local sales taxes are not the only issues. State sales tax revenue is also down [from which KDOT receives some of its funds.] "KDOT may be forced to cut their budgets, which will ultimately impact all our local budgets.<sup>1</sup> Special highway fund transfers could also be in jeopardy. This is a complex issue for local municipalities," she said.

One idea to lesson the sting of a loss of demand transfer money is to use demand transfers for special projects instead of allocating them to the operating budget or general fund. This idea is very much in line with Salina's standpoint on the issue. Salina is looking for strategies not merely to weather the storm, but to prepare for the possibility that the weather patterns have changed for good. They think demand transfers may be "gone forever," said Shawn O'Leary, Salina's Director of Engineering and General Services.

Cities around the state are feeling pinched already, but have also developed a wide array of coping strategies. Communication between cities will be vital in spreading effective strategies throughout the state, helping our cities to adapt to changing financial circumstances. Share your good ideas through forums like APWA roundtables (see page 14 for when they are scheduled) and also through the LTAP e-mail discussion group. You can sign up to participate in the discussion group by going to the LTAP link at [www.kutc.ku.edu](http://www.kutc.ku.edu). ■

# Remove salt and sand with underbody wash

For a quick and easy way to remove salt and sand build-up from beneath snow removal vehicles and equipment, try the underbody wash. It's effective and lightweight, rolls easily under vehicles, and helps prevent corrosion and wear and tear on parts.

The underbody wash was constructed by the City of Ankeny Public Works Department staff. They built it using one-inch PVC pipe, lawnmower wheels, and pressure nozzles. The wash is 105 inches long and 48 inches wide; it has two cross tubes with 15 pressure nozzles. The nozzles are adjusted to spray in various directions. The water pressure is generated by a gas-powered water pump.

For more information about the underbody wash, contact Dennis Guillaume, (515) 965-6481.

[Editor's note: The underbody wash is one of several winning innovations from the "Better Mousetrap" competition at the Iowa Maintenance Training Expo in September 2002.

For information about other winning "mousetraps," see CTRE's website: [www.ctre.iastate.edu](http://www.ctre.iastate.edu). Click on "Popular Links."

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*The underbody wash was demonstrated by Dennis Guillaume, City of Ankeny, Iowa, at the Iowa Maintenance Training Expo in September 2002.*



# Maintaining your equipment can cost or save you money. It's your choice!



... by Mark Polifka, shop foreman,  
Ellis County (Ks.) Public Works . . .

**M**aintenance on your equipment or vehicle is vitally important for keeping your machine running. Over the life of your machine it will save you a big chunk of change. Here are some very simple things we do At Ellis County Public Works to make maintenance easy as well as cost-effective.

## Sample the oil

As part of our vehicle maintenance services we oil-sample all compartments every 500 hours of driving time and the engine every 250 hours. We look for wear-metals, dirt, water or fuel in the oil. This helps us catch a problem early and fix it before it becomes a major problem. Knowing the type(s) of contaminants gives you an idea of what needs attention. Otherwise it's more or less guess-work.

We send our oil samples out and receive the results by e-mail. I personally make it a point to look at the results of each oil sample—about 300 samples per year. It's a pretty accurate diagnostic tool.

In the past, our county would oil-sample only new vehicles until the

## Sample PM Kit specifications for a 140H Series motorgrader

### 250 hour kit (PM1)

1-1R0739 engine oil filter

1-SOS oil sample (engine)

1-6V3542 coolant additive

Check if you have extended life (red) or the green antifreeze and add the additive only to the green.

### 500 hour kit (PM2)

1-1R0739 engine oil filter

1-1R0750 fuel filter

1-8H2778 primary fuel filter canister gasket

5-SOS oil sample (engine, tandems, hyd. and trans.)

1-4L9564 crank case breather seal

1-1R0722 hydraulic oil filter

1-6D9157 hydraulic filter cover seal

1-7D1195 hydraulic filter retainer seat seal

1-1R0719 transmission filter

1-2S8439 transmission filter seal

1-3J1907 transmission filter drain plug seal

2-5P3863 transmission suction screen cover seal

### 1000 hour kit (PM3)

1-1R0739 engine oil filter

1-1R0750 fuel filter

1-8H2778 primary fuel filter canister gasket

5-SOS oil sample (engine, tandems, hyd. and trans.)

1-4L9564 crank case breather seal

1-1R0722 hydraulic oil filter

1-6D9157 hydraulic filter cover seal

1-7D1195 hydraulic filter retainer seat seal

1-1R0719 transmission filter (change trans. oil)

1-2S8439 transmission filter seal

1-3J1907 transmission filter drain plug seal

2-5P3863 transmission suction screen cover seal

1-7M8485 transmission drain plug seal

1-2A3398 differential drain plug gasket

1-8V9258 air dryer refill kit

1-9G5127 transmission breather

1-9X2205 fuel tank cap filter kit

Ellis County also has P.M. Kit for 2000 hours for this vehicle. We add this disclaimer to our lists: *This list was compiled only to assist in doing maintenance. Always refer to the machine's maintenance manual when performing maintenance on this machine.*

warranty ran out, because the dealer required it. The older vehicles that really needed oil-sampling weren't getting it. Vehicles would get attention when they started to make noise or things stopped moving—and repairs at that stage are expensive. We've changed that. Now we oil-sample every vehicle in the shop on a regular basis.

This approach also helps us with budgeting. We can tell when a vehicle is going to be needing some major repair work, and can plan ahead for it.

We hold an annual all-day training session for our employees on maintenance and safety, and that includes a review of oil-sampling. This helps keep them informed about the benefits of good preventative maintenance.

If you do not have an oil sample program, you will be "money ahead" to start one. The cost of a major failure adds a minimum of another 50 percent to the total cost of a repair. Oil sampling can prevent you from getting to this point. The cost of sampling is minimal compared with the cost of a major failure. Money saved through oil sampling can help pay for components to be monitored and overhauled before a major failure.

### Efficient oil system in shop

Our shop's oil system is a very important part of our preventive maintenance program. We use a bulk oil system with tanks, pumps, reels, and a metering system. It makes filling oil in our equipment easy and neat. The operator can set the meter for exactly how much oil the compartment needs.

There are many vendors that will help set up these different types of oil systems and kits. Each shop should evaluate what is best for them.

### Catch it early

Whenever any machine is in the shop our mechanics give it a once-over review and repair anything needed.

This cuts back our breakdowns and down-time in the county and keeps the machine running efficiently.

### PM Kits

In our shop, each machine has a maintenance schedule of what needs to be covered. We have incorporated a P.M. Kit\* with a written-out preventative maintenance schedule for most all of our equipment. We have the vendors make up boxes with everything needed, or we assemble them ourselves. Each box includes all filters, gaskets, o-rings, oil samples, and anything else to complete the service.

We have typed out what is needed for each kit for each particular machine, including the part numbers

and the oils that need to be changed. This way the operator can follow it and know where each o-ring, gasket and filter will go.

This process makes our preventive maintenance service go smoothly. We do not need to wonder if everything was checked or changed because the operator has everything needed to complete the service. There should be no parts brought back from the kit.

I have written up the P.M. Kit lists for most of our equipment. (See an example page 6.) I would be happy to share this information. If you would like a copy of the lists or if you have any questions, please call me at (785) 628-9455 or email me at mark@ellisco.net. ■

## Save money on concrete work

Are you spending critical dollars setting up, tearing down, and discarding wooden forms in sidewalk and other concrete construction projects? The City of Palm Beach, Fla., found a solution that allowed them to substantially reduce their sidewalk maintenance costs. With this new technology, nails are not required, and neither is no toe-nailing.

Using end connectors, flexible boards are snapped together with cam locks to form a smooth seam and can be pulled apart just as easily.

This new product is made by Plastiform Company of flexible high-density polyethylene (HDPE). It is durable, lightweight, provides quicker setup and teardown, cleans easily and is reusable. It adapts easily to radii work and curb and gutter projects.

Palm Beach has reduced labor costs by more than 50 percent using Plastiform products. Much of their form stock has been used more than 100 times and still has plenty of life.



*Forms are flexible and can be easily removed.*

Plastiform products can be ordered directly from the company. Call (800) 358-3007 to order a free sample kit. Visit [www.plastiform.com](http://www.plastiform.com) for more information.

For questions about Palm Beach's experiences using Plastiform products, call Jim Proce at (321) 952-3437. ■

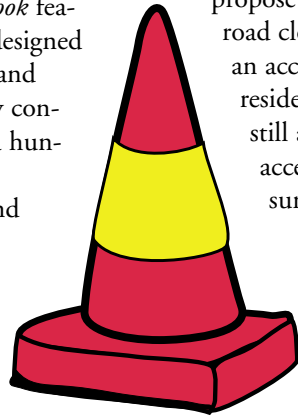
*Information courtesy of the Florida LTAP's Product Demonstration Showcase Program. Visit their excellent website at [www.pdshowcase.org](http://www.pdshowcase.org).*

\* preventative maintenance kit

# Work Zone Best Practices Guidebook includes money-saving ideas

... by Geneva Jacobs .....

The Federal Highway Administration's *Work Zone Best Practices Guidebook* features best practices that are designed to save lives, reduce injuries and enhance mobility in highway construction work zones. Over a hundred transportation agencies, associations, organizations and industries from around the United States shared their knowledge and information in the creation of this guidebook.



throughout the construction period, it will be noted in the contract's special provisions. If closure is not noted in the contract, the contractor may propose a schedule for a brief road closure if it will result in an acceptable B/C ratio. Area residents and businesses are still allowed local traffic access during the road closure period.

Maricopa County adopted this practice as a means of lowering costs for both the county and the travelling public.

The greatest benefits for this road closure practice include quicker project completion and higher safety for both the road workers and the public. This practice can be implemented on both rural and urban public roads.

### Design and construction in a single department

Previously in Phoenix, Ariz., each of the City's departments (water, sewer, street) designed their own improvements. This resulted in neighborhoods being torn up on as many as three separate occasions to construct a single project. Now the Street Transportation Department designs and constructs municipal water and sewer lines within the street right-of-way. By bringing all the work under one department, only one contract is required. This saves the City both time and money.

Implementing this practice has created less disruption and inconvenience to the neighborhoods and has eliminated trenching through new pavement to adjust City utilities.

In addition, the City implemented a penalty for all private utilities

The following information is included for each work zone best practice in the guidebook:

- where it was implemented;
- description of the best practice and reasons for adopting it;
- benefits gained;
- location(s) and type(s) of projects where this practice/policy is most applicable/effective;
- contacts for further information.

Several of the best practices in the guidebook offer ideas that can save construction time. And as the saying goes: "Time is money." Here are some examples.

### Road closure program uses benefit cost analysis

Maricopa County, Ariz., has a road closure program where a benefit/cost (B/C) study is completed prior to construction. Results of the study determine where road closures will be permitted during the construction phase.

Traffic volumes, project duration and necessary detour length are part of the analysis.

If the B/C study indicates that it is advantageous to close the roadway

### Mark your calendar

"MINK3"

October 14-15, 2003  
in St. Joseph Missouri

MINK3 is an annual conference for county engineers and federal highway officials. It provides an opportunity to discuss FHWA programs and local issues one-on-one.

MINK stands for Missouri, Iowa, Nebraska, and Kansas—the four states the conference will encompass.

The conference will be held at the Historic Riverfront Hotel at St. Joseph, Missouri. Registration is \$30 and the room is \$55 plus tax per night.

For more information, and to register online, go to: [web.umn.edu/~mltrc](http://web.umn.edu/~mltrc)

that trench through new pavements.

This best practice is effective on all streets and highways.

### Quality improvement team

Another best practice implemented by Phoenix is their City-organized consultant and contractor quality improvement team. The team recommends ways to build projects quicker, better, cheaper and safer. Members of trade organizations representing contractors and consultants were brought together when this project began 13 years ago. They met to address the impact of local street construction on neighborhoods and schools. To be more responsive to the public's needs, these organizations evaluated the obstacles to getting projects completed quicker, safer and with less expense.

After the team completed their research, the City invited representatives from other cities to come to Phoenix and review and refine the

recommendations.

Phoenix has benefited from this best practice through savings in construction dollars because projects could be built faster. In addition, relations were improved between the citizens, city and the construction/consultant groups.

### Meet and coordinate

The Chicago Department of Transportation (CDOT) works hard to sequence, coordinate, and schedule projects to minimize motorist delay and community disruption. Projects that have the greatest impact on traffic are discussed in routinely-held internal coordination meetings between the Bureaus of Traffic, Highways and Bridges. CDOT discusses the upcoming construction season's major projects and maps out coordinated project-letting schedules to meet their goals in minimizing motorist delay and maintaining acceptable levels of mobility and safety.

A major benefit of establishing this practice is the construction cost savings that are related to enhanced project coordination. This practice would be effective in any location.

### Where to obtain the guidebook

The *Work Zone Best Practices Guidebook* can be downloaded from <http://ops.fhwa.dot.gov/wz/wzguidbk/about.htm>. Click on "View Document" at the bottom of the page. If you do not have Adobe Acrobat, you can install it for free by following the directions from the above website.

### Source

*Work Zone Best Practices Guidebook*, Federal Highway Administration, 2000. ■

# New peer to peer program

## Here's a no-cost way to get advice on the correct use of traffic control devices and the MUTCD.

[This information was provided by Gary Rosewicz, Marshall County Engineer and FHWA Local Road Coordinator for Kansas.]

With more than 1,000 pages of standards, guidelines, and options, the *Manual of Uniform Traffic Control Devices* (MUTCD) can be overwhelming.

FHWA frequently receives requests for assistance from State and local agencies. In response, FHWA is starting a new service designed to help public agencies effectively apply traffic control devices and the MUTCD. It's called the "Peer-to-Peer for Traffic Control Devices" Program, or P2P TCD for short.

The P2P TCD program offers a no-cost and easy way for practitioners to receive assistance from other practitioners. The program is designed to:

- provide short-term assistance in matters related to traffic control devices;
- address specific technical issues in the MUTCD;
- spark dialogue and foster networking among professionals in the transportation community; and
- help create optimized traffic performance and improved road safety, nationwide.

### How does it work?

Local, regional, or state transportation agencies request assistance by email or

calling a toll-free number and describing their needs to the national P2P TCD coordinator. Based on recommendations made by FHWA headquarters, the coordinator matches transportation professionals who are experienced and knowledgeable in the relevant technical area. The peer, in turn, will contact the requester to

work out the details of the assistance.

The peer's assistance is intended to be short-term and will address specific technical issues. The peers understand that the scope of their assistance is limited to providing assistance with the application of the MUTCD,



*The coordinator matches transportation professionals who are experienced and knowledgeable in the relevant technical area.*

and not to interpretations of the MUTCD or FHWA policy.

Quarterly activity reports will be posted on the MUTCD web site (<http://mutcd.fhwa.dot.gov>) to document all P2P TCD requests nationwide—and their resolutions.

If you need additional information, please feel free to contact Steve Foust at the FHWA Topeka division office at (785) 267-7299. Additional information can be found at the MUTCD national web page at <http://mutcd.fhwa.dot.gov>. ■

*Adapted from an article by Jeffrey F. Paniati, FHWA.*

# Qualification Based Selection: In these tight financial times, why bother?

... by Ira Allen and Geneva Jacobs . . .

Qualification Based Selection (QBS) is more or less the standard method for choosing consultants for state and local project design (and is mandated by law for federal projects). Some road departments, however, may prefer the traditional price bidding model for design services. Or perhaps they are unclear about exactly what QBS is. In this article we'll take a look at how QBS works, discuss some of its advantages and disadvantages, and see how it stacks up against the price bidding model.



client will generally end up with the cheapest consultant, but is by no means guaranteed the best work.

With QBS, Brian Waltman, a Professional Engineer with Kirkham Michael, said, "I don't know that it gives you the best price, but I would say you get the best *value* for your price, because you get the most competent firm to do your work."

Mike Novak, City Engineer for Lenexa, KS, agreed that the selection of consulting services should not be based solely on fee: "Engineering costs are only part of the total project cost. Many times excellent design not only produces the desired project, but also gives the most cost-effective result."

## How does QBS work?

Waltman broke down the QBS process for us. Following is his explanation of the various stages:

- 1) The public agency sends out a request for proposals for a specific project, usually stating the criteria and explaining how consultants will be selected. [The agency provides a score sheet of sorts].
- 2) Consultants put together packages of information designed to maximize their attractiveness while remaining honest. [The process runs smoothest when the city clearly outlines its expectations; in many cases that alone will let consultants know if they are qualified to do the project, and whether applying is worth their time.]
- 3) The city "scores" the applications, and establishes a number of points below which applications will not be considered. This creates a short list of qualified applicants.

4) The city calls the short-listed consulting firms for interviews.

Frequently, only the project manager and maybe the design engineer—not the entire project team—is asked to come to the interview. Set criteria are generally reviewed ahead of time, as in the application process.

5) Following interviews, the city ranks the firms from first to last, and at this point begins fee negotiations with the top-ranked firm.

6) If they cannot reach a mutually acceptable fee with the top firm, the city moves on to the next, and so on, until a settlement has been reached and a consultant found. In today's economy this last step is rarely necessary, as the weak market gives cities a little trading advantage. But there have been times in the past when cities couldn't negotiate settlements with any of their top three firms.

## Who uses QBS?

In the Kansas City area, Waltman said about half of his clients use straight QBS, while the other half include a request for a fee in their initial calls for proposals.

Dan Stack, Civil Engineer II for the City of Overland Park, noted that although "professional engineering ethics say [QBS] is how we should be selecting people,...I don't think a lot of people follow it around here."

That's not to say, of course, that anyone is deliberately or blatantly disregarding standards. Rather, many cities mandate that consultants include a fee in their proposals. Stack said, "I don't know that that's 'true' QBS. I believe that a lot of cities in Missouri do it that way, and some here in Kansas, too."

*continued on page 13* ►

## KDOT Korner

# New revolving fund will help local agencies

... by Lisa Harris . . . . .

For several years now the State of Kansas has had two revolving loan funds coined the "Clean Water/ Dirty Water" funds. These programs make low-cost loans to local governments and water districts for improvements to drinking and storm water systems. Soon Kansas will have a similar program for local transportation system improvements.

The new program, called the Kansas Transportation Revolving Fund (no catchy nickname yet), will loan money to local governments in Kansas seeking to construct or repair roads and bridges. State financial assistance like this can help some local governments, especially smaller ones, obtain a lower bond rate than they could on their own.

Similar transportation loan funds are available in 29 other states. The Kansas program was created using some of those programs as models. Legislation enabling the creation of such a fund in Kansas was passed in 1999.

Here are some frequently-asked-questions to give you more information about the program.

*Who is eligible to apply?* Any political subdivision that has the authority to own and operate its own roads. Local governments will identify their own needs and submit their own projects.

*What types of projects are eligible?* New construction or improvements to roads, bridges, or culverts. Chip seals, overlays, widening a street or bridge, raising a roadbed to reduce flooding,



culvert repair, and purchasing right-of-way are just a few examples. Each project must be designed by a licensed professional engineer.

Sidewalk construction or repair is not eligible unless it is incidental to a road or bridge project.

Transit, rail, and aviation projects are not eligible.

*Do projects have to be on the State Highway System?* No. Projects can be off the State System, on paved or gravel roads.

*Where does the funding come from?* Funding comes from the State Highway Fund. KDOT hopes to supplement the fund with federal dollars in the future.

*Will the projects be evaluated?* No. "We're not going to be in the business of evaluating the worthiness of each project," said Dale Jost, KDOT Chief of Fiscal Services. "But each project will be reviewed by KDOT's Planning Office to assess impact on the State Highway System. If the project is

found to have a detrimental effect on the State System, the project will likely be denied funding.

*Are there any restrictions on amount of funding?* No funding limits have been set at this time. Funding is at the discretion of the Secretary of Transportation.

*When do the loans need to be paid back?* It depends on the project. Each loan is offered for the life of the project, as determined by a licensed engineer. So, for example, a loan for a chip seal might be for about 5 years and a loan for a new bridge deck might be for 20 years.

*What is the status of the program?* At the time we went to press, the Kansas Transportation Revolving Fund program was listed in the *Kansas Register* and was open for public comment. The State Legislature's Rules and Regulations Committee still needs to review the regulations. A public hearing is scheduled for August 19 in Topeka, at the Docking State Office Building, 7th floor. The program will likely go into effect this coming Fall.

*How can an agency apply for a revolving loan?* Ask for an application after the regulations process is complete. Local governments will be notified by KDOT when the program is up and running.

*Where can I get more information?* Call Evelyn Fitzpatrick, Transportation Revolving Fund Manager, at (785) 296-4782; [evelyn@ksdot.org](mailto:evelyn@ksdot.org) ■

## A Leg Up

# Transportation Enhancement program update

... by Lisa Harris .....

The last time we wrote about KDOT's Transportation Enhancement (TE) Program, things were not looking good for local governments. A good chunk of the program's money was slated to be used for a major pedestrian tunnel project in Topeka rather than several projects around the state, as is normally the case. The tunnel project was deep-sixed, however, due to an increase in estimated costs. This freed the TE funds for other projects, most at the local level.

The Transportation Enhancement Program provides federal funds for projects that enhance the accessibility and beauty of the transportation system. Forty-eight projects were recently funded for fiscal years 2004-2005, out of 93 applications. Total cost for the selected projects is \$23.5 million. A minimum of 20 percent of the cost of the project must come from the applicant.

"The funding works out to roughly a 50/25/25 three-way split [pedestrian-bicycle/historical/scenic], which is what we're going for," said Harold Benoit, Chief of KDOT's Office of Engineering Support.

Two of the communities that received funding have subsequently turned it down. One is Marysville, which was planning to build a pedestrian pathway. (See next page.)

Benoit says that funds freed-up from cancelled projects may or may not be awarded to other communities. "We usually absorb funds from cancelled projects back into the program," he said. "But if a significant number of projects back out, we may

## TE projects awarded for FYs 2004-2005

### *Historical*

**Brick street restoration** in Emporia, Troy, Madison, Topeka and Goodland; **Bridge restoration** in Salina; **Train depot restoration** in Chanute and Manhattan; **Historic building restoration** in Waterville, Sedan, and Wellington; and three projects of the Kansas State Historical Society: **restoring a State Historic Site**; **restoring the Fort Hays guardhouse**; and **digitizing photographs** for an historic properties inventory database.

### *Scenic/Environmental Projects*

**Streetscape improvements** in WaKeeney, Garden City, Anthony, Dighton, Jetmore, Parsons, Hutchinson, and Topeka; improved trailhead and parking lot on a bicycle trail in Wichita. Also, the Kansas Department of Wildlife and Parks will receive funding for construction of a **visitors center** at Cheyenne Bottoms.

### *Pedestrian/Bicycle*

**Multi-use paths** in Topeka (2 projects), Olathe (2 projects), Overland Park, Lindsborg, Haysville, Marysville, Wichita (4 projects), Dodge City, Garden City, Mulvane, Lenexa, Syracuse, Augusta, and the Prairie Band of Pottawatomie Reservation; **rail trail projects** in Ottawa and Iola; a **pedestrian and bicycle bridge** in Emporia; **two Lewis and Clark-related pedestrian projects** in Atchison; and a **conversion from a rail-banked right of way to a multi-use path** between Welda and Iola (a Kansas Department of Wildlife and Parks project).

consider funding some of the projects that weren't awarded funds during the initial round."

Next spring KDOT will solicit a new round of Transportation Enhancement applications for Fiscal Years 2006-2007.

Benoit emphasized the importance of a carefully-prepared application. "Some of the applications we received last time were not well-prepared and did not receive a high ranking," he said.

KDOT will be offering assistance in applying to the TE Program

through a workshop and one-on-one consultation by phone. For more information, call Harold Benoit or Kaye Jordan-Cain at (785) 296-7940. Take advantage of this assistance and your project might just be a winner.

### **Sources**

KDOT Press Release 03-065, June 2, 2003, available at [www.ksdot.org](http://www.ksdot.org).

"City turns down trails proposal," *Marysville Advocate*, June 12, 2003. ■

Marysville, Ks., learned the hard way that getting neighborhood support for a pedestrian trail is critical. The City applied for Transportation Enhancement funds from KDOT for a concrete path that would have linked two parks with schools and businesses. The project got off to a good start: It was spearheaded by the City's Trails Committee, consultants were hired to develop a trails master plan, and a public meeting was held with Secretary of Wildlife and Parks (and former governor) Mike Hayden, as a guest speaker. The group even sponsored a city-wide logo contest for the trails.

But when the TE funds were awarded, Marysville turned them down. What happened? Some of the residents adjacent to the project didn't want a trail near their homes, and the City Council voted with them.

More than 175 people packed a City Council meeting where the Council voted 7-0 to decline funding. One of the concerns was the width of the path and that trees and landscaping might have to be removed to construct it.

It was a classic NIMBY situation, said Rick Shain, city administrator. We'll have more about this story in the next issue of the *KUTC Newsletter*.

### Quality Based Selection,

*continued from page 10*

#### QBS advantages/disadvantages

Waltman and Stack agree on the greatest advantage of QBS: as Waltman put it, "You get the most competent firm to do your work." Both also noted problems with this approach, however.

"Most of the consultants know that—good times or bad—[governments are] going to pay a certain price for a given project. So they [consultants] don't have to lower their prices [during hard times]; they just

end up specializing in certain areas of design, which makes competition lopsided for certain projects at times.

Stack also mentioned QBS's effects on competition: Because firms with experience—especially local experience—are favored in the selection process, "it limits competition somewhat, and creates a Catch-22 situation if you haven't worked for [our department] before."

We don't want to give the impression that QBS is heavy with disadvantages and perhaps not really all that worthwhile. The prime advantage—that you get the most qualified people

"QBS can save a city money because the consultants know what they are doing and therefore require less supervision by the city." —Dan Stack, Overland Park

have to justify their expenses," Stack explained.

From the consultant's perspective, Waltman said, the system almost forces smaller consulting firms into niche marketing to compete with the big companies who "have one guy that's an expert on just about anything." That means that more firms

to do your design—spills over into a variety of areas. For example, Stack said, "[Because] we normally get a consulting firm that has done something before for a city like ours or one around the area, they're going to be more efficient." For example, they know how to deal with the local utilities and what kind of PR is effective

in the community.

Stack said, "Of all our projects, QBS-wise, design is only half of it. The other half is looking at people's yards and fences, and talking with them. So we like to have people that know the area." QBS helps select for specific criteria like that—and in a way that price-bidding simply cannot.

QBS can also be cheaper because, said Stack, "The better they are at their job, the less supervision on our part is required," which means the city itself can run more efficiently.

On the question of price, Waltman had this to say: "In reality, price does matter, but you would hope that you get the best possible firm for a price that's not astronomical." This is a hope that QBS usually fulfills.

QBS satisfies both client-agencies and consultants. Waltman said, "I think it's an excellent way to select," and Stack concurred, saying, "It works well for us [in Overland Park]. It really helps to hire somebody that knows what they're doing."

Novak said that he has been relatively successful using QBS for all types of projects in Lenexa. He also believes it's a two-way street, in that all of the consultants who have been involved in Lenexa's QBS process seem reasonably satisfied with the opportunity it offers.

#### Sources

<http://www.kce.org/qbs/qbs.html>;

[http://www.msaia.org/qbs\\_info.html](http://www.msaia.org/qbs_info.html);

<http://ascenh.org/committees/qbs.asp> (ASCE New Hampshire Section);

"*Selection and Use of Consultants*" Speaker Handouts, presented at the APWA Videoconference, August 19, 1998. ■

# Reviews

... by Lisa Harris .....

## Highway Design Handbook for Older Drivers and Pedestrians

380 pages, FHWA, October 2001. This handbook provides transportation professionals ideas for coping with safety considerations presented by older drivers and pedestrians. We featured an article about this handbook in our Fall 2001 issue and noted that copies were available from FHWA. Now we also have copies at Kansas LTAP to distribute for free. We are offering this book and the one below as a set.

## Guidelines and Recommendations to Accommodate Older Drivers and Pedestrians

86 pages, produced by FHWA, October 2001. This is a condensed version of FHWA's *Older Driver Highway Design Handbook*, published

in 1998. It contains recommendations and implementation guidelines only, and was developed for use in a workshop on the topic. This workshop was held in Kansas this past March.

This document's introduction says: "Consistent with the full *Handbook*, this document incorporates new research findings and technical developments and extensive feedback from State, county and municipal engineers who reviewed and applied the 1998 publication. It includes guidance on how and when to implement the recommendations."

The document also contains codes that indicate, at a glance, the relationship of each recommendation to standard design manuals such as the *MUTCD* and AASHTO's *Green Book*.

## Basic Traffic Control for Utility Operations

50 pages, produced by ATSSA and

FHWA, 2002. This slim, laminated booklet is an excellent guide for utility companies in setting up temporary traffic control. It describes typical work zone configurations and how to find answers that may come up while working at a job site. It is based on the *Manual of Uniform Traffic Control Devices (MUTCD)* and requirements of the American with Disabilities Act.

We at Kansas LTAP are so impressed with this booklet that we recently sent a copy to most of the utilities in the State. To order your own copy(s), see page 15.

## State of Kansas Traffic Control Handbook for Flaggers

17 pages, produced by KDOT, 1996 edition. Every truck at a work zone should have one of these in its glove compartment. The handbook provides basic information for safe flagging in an easy-to-read format. ■

# Calendar

See our web site for even more calendar listings. Go to [www.kutc.ku.edu](http://www.kutc.ku.edu) and click on "Training."

### ... 2003 .....

\*\*July 30  
Click, Listen and Learn: Salt Brine—Breaking the Ice and Snow Bonds on Your Pavement

\*August 11-15  
KDOT Traffic School: Design in Lawrence, KS

August 24-27  
American Public Works Association Annual Congress in San Diego, CA  
Register on-line at [www.apwa.net](http://www.apwa.net)

August 24-27  
Institute of Traffic Engineers (ITE) Annual Meeting and Exhibit in Seattle, WA  
Register on-line at [www.ite.org](http://www.ite.org)

September 3-4  
KDOT Snow Expo in Salina  
Call Mark Karolevitz at 785/296-3661

\*October  
Gravel Road Maintenance 5-6 sessions in KS

\*October 1—Wichita  
\*October 2—Lawrence  
Environmental Justice: Implementation and Application

October 11-14  
Kansas League of Municipalities Fall Meeting in Topeka, KS  
call 785/354-9565

October 14-15  
MINK 3 in St. Joseph, MO  
Call Gary Rosewicz at 785/562-5349

\*October 27-31 (tentative dates)  
Snow & Ice Control

November 13  
APWA Roundtable Discussion in Dodge City  
Call Tony DeCicco at 316/268-4087

November 23-25  
Kansas County Association Fall Meeting in Overland Park, KS  
Call Rod Meredith at 785/539-2981

For information on calendar items indicated with a \* or to suggest a topic for an LTAP workshop, contact: Rose Lichtenberg, LTAP Training Coordinator, 785/864-2594, [rosemary@ku.edu](mailto:rosemary@ku.edu).

\*\*To register for the APWA/LTAP "Click Listen and Learn" workshops, call Ashley Gann at (816) 472-6100 ext. 3511. Cost is \$150 per site.

If your agency would like to host an LTAP gravel road maintenance session this Fall, call Rose Lichtenberg at (785) 864-2594.

# Free Resources

Check off your selections, fill in the bottom portion, and return this form to:

KUTC Materials Request, 1530 W. 15th St., Room 2011, Lawrence, Kansas 66045  
or fax to 785/864-3199

## CD .....

One CD per lending request. Two week lending period.

- Asphalt Pavement Maintenance Guide on CD**  
by Minnesota Local Technical Assistance Program (LTAP).

## Publications .....

You are free to keep these unless otherwise noted.

- Guidelines and Recommendations to Accommodate Older Drivers and Pedestrians**, packaged with **Highway Design Handbook for Older Drivers and Pedestrians**  
Both published by FHWA, 2001.
- Basic Traffic Control for Utility Operations**  
Published by ATSSA and FHWA, 2002.
- State of Kansas Traffic Control Handbook for Flaggers**  
Published by KDOT, 1996.

## Equipment .....

Available free—for loan to local highway agencies. Call us at (785) 864-5658 to arrange time period needed for loan. There could be a waiting list for these items.

- Jamar Technologies, Inc. (DB-400) Turning Movement Counter Board**  
A basic model for recording turning movements at intersections. The board is is lightweight and comes with its own case.
- Jamar Technologies, Inc. (TDC-8) Turning Movement Counter Board**  
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.

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\*For all international requests, the requester must pay postage. We will notify you of the postage cost and will send materials after receiving payment.

# Kansas LTAP

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The Kansas Local Technical Assistance Program (LTAP) is an educational, research and service program of the Kansas University Transportation Center (KUTC), located in the University of Kansas School of Engineering. Its purpose is to provide information to local and county highway agencies and transportation personnel by translating into understandable terms the latest technologies in the areas of roads, highways and bridges.

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