



Kansas Trans Reporter

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Measure twice, cut once

by Ira Allen

The old saw is particularly true in transit, where the good folks who manage agencies often see cutting routes or service as tantamount to hewing off their own arm, or at least one of their toes. As Matthew Kaufman discussed in a previous article on stretching dollars, one of the best choices an agency can make, finan-



cially and in terms of human resources, is to improve its self-assessment. This article describes seven "vital signs" developed by the Maryland Transportation

Administration (MTA) to help agencies measure their effectiveness as transit providers. By measuring more accurately, fewer cuts may need to be made, and those few may do more good.

Vital signs

The seven vital signs, or service indicators, outlined by MTA

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Online transit accessibility checklists

by Courtney Hansen

There's a new online tool that provides users with the information and checklists needed to assess whether elements around and in transit facilities comply with accessibility guidelines developed by the U.S. Architectural and Transportation Barriers Compliance Board, known more commonly as the Access Board. The online system was developed under contract from the Easter Seals' Project ACTION.

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Measure once, cut twice

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address three issues:

- Are services delivered using resources most efficiently (doing things right)?
- Is the manner of delivery the most effective possible (doing the right things)? and
- Are resources being used most efficiently to deliver the most effective services (doing the right things right)?

Measuring your agency's performance according to these areas of concern should give you a good idea of what changes you can and should make to streamline your system.

Suggestions for improving your agency's productivity and efficiency fall into three broad categories: cutting, reorganizing, and marketing/public relations. By assessing which of the vital signs are weak in your agency, and which are strong, you can get a clearer picture of how to go about meeting financial goals without cutting service.

Following is a self-check you can use to see where your agency's operations might be streamlined. For these vital signs, we have suggested solutions that fall into three general categories: 1) cutting, 2) reorganizing, and 3) marketing/public relations.

1. Operating cost per hour: *total operating cost divided by vehicle hours of service.* A variety of factors, including high labor costs, administrative overhead and an older fleet's extensive maintenance needs, can play into a high operating cost per hour. Inefficient scheduling is also a prime suspect, as it often results in extra deadhead time (vehicles operating without passengers) and relief driver

hours. Some possible solutions include coordinating vehicle maintenance with other agencies, using more part-time drivers, introducing new computer software to cut administrative costs (perhaps like the accounting software discussed in our April 2004 issue), and reexamining scheduling practices. If, however, a high operating cost per hour doesn't seem to be a problem at your agency, read on.

2. Operating cost per mile: *total operating cost divided by vehicle miles of service.* If you have high operating costs per mile, but not per hour, the culprit is likely to be a low operating speed. This can usually be attributed to

some combination of traffic congestion, long layover times, and inefficiently placed bus stops. The solution here, of course, is to find a way to speed things up. Consolidate low-use stops and work with your local traffic engineers to take advantage of intersection timing when deciding where to place bus stops. Consider policy changes for reducing dwell times, such as implementing more efficient farebox technology and/or shorter wait times for demand-response trips.

3. Operating cost per passenger trip: *total operating cost divided by total passenger boardings.* High operating costs can affect this ratio, as in all of these cost-related performance measures,

but once you've looked into that, the most common cause of high operating costs per passenger trip is low ridership. As discussed often in these pages, an effective public relations and marketing program is one of your best bets for increasing ridership. Safe, reliable and high-quality service is equally important, though. Of course, all this can drive up your operating cost, but that can be counterbalanced by additional revenue and improving labor productivity in other areas. Consider increasing labor productivity through incentive programs or assigning marketing or cleaning activities to existing staff during paid "down times."

4. Farebox recovery ratio: *(fare revenue plus passenger donations), divided by total operating cost.* In addition to resulting from high operating costs, a low farebox recovery ratio tends to hinge on low farebox receipts, itself usually due to either poor collection or too-low fares. Increase ridership if possible, fares if necessary, and train drivers to ensure all fares get collected.

5. Local operating revenue ratio: *(fare revenue plus all donations, advertising, contracts, and other local revenue sources), divided by total operating cost.* Once you've dispensed with high operating costs as the cause of a poor revenue ratio, look to local financial support for transit. What can you do to increase local support? Sell interior, exterior, and bus "wrap" advertising, seek additional contract opportunities, and nose about in the community for interest in public/private partnerships. Make sure local government officials and other decision-makers understand the benefits of public transit and their role in helping to make those benefits possible. Again, a lot of this falls under the heading of public relations.

6. *Passenger trips per hour: total passenger trips or boardings, divided by service hour.* This is a key productivity indicator for transit agencies. Low ridership levels and/or a high number of unproductive service hours usually lie behind low passenger trips per hour. Your options? Increase ridership or reduce unproductive service hours. Restructure services to cut down on deadhead time; consider cutting service along unproductive (very low density) routes or during lower ridership times (such as nights and weekends).

7. *Passenger trips per mile: total passenger trips divided by service miles.* Again, low ridership levels may be the culprit here, but you may also be spending a lot of vehicle mileage on less productive service. Can you eliminate any trips where no riders are carried? Can you reconsider your agency's route structure?

As you probably noticed, suggestions for improving your agency's productivity and efficiency fall into three broad categories: cutting, reorganizing, and marketing/public relations. By assessing which of the vital signs outlined above are weak in your agency, and which are strong, you can get a clearer picture of how to go about meeting financial goals without cutting service. Of course, it may be unavoidable in the end, but odds are, there's some other action you can take to cut costs, improve efficiency or raise money. We've given some suggestions here, but the hard part—figuring out what will work best for your agency and how to implement that—is up to you.

Adapted from "Transit System Vital Signs" in the *Maryland RTAP Update* (Fall 2003). ▲

On-line checklists,
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The checklists draw on knowledge gained from the assessment of more than 500 transit stations regarding ADA compliance. Checklists for bus pads and shelters are also included, and those for additional elements may be added at a later time.

The opening instructions for performing assessments provide a description of the system and instructions for conducting field assessments of transit facilities. A user may follow the step-by-step process described in these instructions or follow a "Go Directly to Checklists" link.

The checklists contain numerous pictures of accessibility elements—photographs taken in actual transit

facilities—to help the user understand the accessibility specifications.

This system provides a tool that can be used by transit riders and transit professionals alike to better understand the Access Board's accessibility guidelines and to evaluate transit facilities to make them accessible to all users.

Suggestions are welcomed, and contact information is provided online.

To visit the Online Transit Facility Accessibility Assessment System, go to:
www.keystationsurvey.org.

Source: *Project Action Update*, Winter 2003/2004. ▲

Dealing with difficult situations

Adapted from New Jersey's *The RTAP Rap*, Spring/Summer 2003.

The CTAA's Professional Dispatching and Scheduling Program provides the following suggestions for dealing with difficult situations with customers:

- Do not take the customer's remarks or anger personally. Stay calm and try to relax.
- Recognize that many paratransit consumers have problems that affect their social behavior or feel helpless because of their circumstances. They would benefit from patience and guidance.
- Put yourself in the other person's position. Have empathy for his or her situation. Say "I am sorry you have been inconvenienced."



- Avoid an argument at all costs. It is important to be friendly and helpful, but firm.

- Never tell a customer that he or she is wrong. Listen to her concern and show respect for her point of view.
- Do not make excuses and never place blame.
- Let the customer talk and be attentive to the real problem. Move to the point. Steer the conversation to closure, and repeat information to summarize your understanding of the problem. This shows the customer that you have listened to his concern.

- Encourage the individual to present ideas for a solution, and let her buy into the solution. If the suggested solution is unrealistic, calmly explain why and suggest alternative ways to deal with the issue. ▲

Drug and alcohol Q & A— off the clock, and more

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 by Pat Weaver

The Federal Transit Administration's Drug and Alcohol Testing web site provides some good assistance in interpreting some of the drug and alcohol testing regulations.

The following scenarios are two samples of questions recently posed to FTA for interpretation.

Does "off the clock" mean no drug testing?

Scenario: A driver is returning to the garage at the end of the day. She has completed her route and there are no passengers on board. In fact, she is even off the clock (the driver's pay ends at the last drop off). En route back to the shop she is in an accident that results in the vehicles being towed from the scene. The driver states that since she was not "on the clock" getting paid, she should not receive a post accident drug test. Is the driver correct?

Response from FTA's Mike Redington: No, the driver is incorrect and should have been post-accident tested.

Being "on-the-clock" is not a condition for post-accident testing; the performance of a safety-sensitive functions is a condition for post-accident testing. The definition of Part 655.4 states: "Safety-sensitive function means"... "(1) Operating a revenue service vehicle, including when not in revenue service."

Random testing on a scheduled day off

Scenario: On Thursday in a given week, the supervisor of a safety sen-

sitive employee selected for testing is notified that the employee has been randomly selected for a drug test tomorrow (Friday). The supervisor indicates that the employee will not be available that it is his/her regular day off. If the employee is allowed to and can work on his/her regular day off (Friday), should he or she be sent for the random drug test?

Response from FTA's Mike Redington: A valid excusal from random drug testing can result if an employee is not on duty (has a regular day off) the day of the scheduled test. Excused employees must be drug-tested when they are on duty provided the employee returns before the next random selection list is generated.

If a safety-sensitive employee is on duty (even on a day that would typically be a day off) and is notified of selection for random drug test, that employee must proceed immediately to the collection site.

However, in order to ensure that the random testing process is "unannounced and unpredictable" an employee should not be required to report for duty on what would otherwise be a regular day off, solely for the purpose of being randomly drug tested.

Part 655.45 on random testing states: "(g) Each employer shall

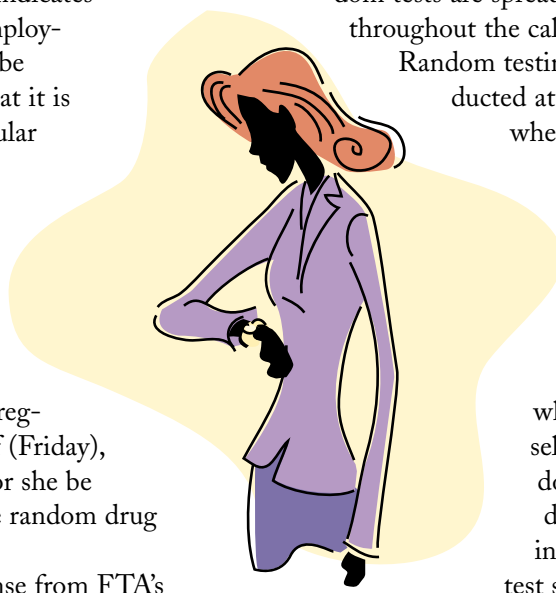
ensure that random drug and alcohol tests conducted under this part are unannounced and unpredictable, and that the dates for administering random tests are spread reasonably throughout the calendar year.

Random testing must be conducted at all times of day when safety-sensitive functions are performed.
 (h) Each employer shall require that each covered employee who is notified of selection for random drug or random alcohol testing proceed to the test site immediately.

If the employee is performing a safety-sensitive function at the time of the notification, the employer shall instead ensure that the employee ceases to perform the safety-sensitive function and proceeds to the testing site immediately."

For questions specific to the Kansas Transit Drug and Alcohol Testing Program, contact Sandy Flickinger, KDOT Drug and Alcohol Testing Coordinator at (785) 368-7091 or email sandyf@ksdot.org.

Source: Federal Transit Administration Drug and Alcohol Testing Website: <http://transit-safety.volpe.dot.gov/Safety/DATesting.asp> ▲



Use and abuse of caffeine

by Pat Weaver



Caffeine can be an effective alertness booster if used properly. It can be a short-term measure to be used until more substantial changes in personal and work habits can be made.

Heightened alertness occurs within 15 to 20 minutes of consuming caffeine. Medium to light users of caffeine will experience enhanced alertness for five to six hours. In high-level users the feeling will last up to four hours.

Depending on the individual's caffeine adaptation, as little as 32 milligrams of caffeine, equivalent to the amount in a weak cup of tea, can produce increased alertness. The response to caffeine varies significantly by individual.

The table at right provides the caffeine content of popular beverages.

The times when caffeine use is appropriate might include:
—Midway through the night shift on the first or second day of the work week. The first two nights of the work week are most difficult if you slept at night on your days off.

Caffeine content of common beverages and food

<i>Food</i>	<i>Serving Size</i>	<i>Milligrams of Caffeine</i>
Coffee		
Regular*	8 oz.	80-150
Decaffeinated	8 oz.	5
Tea		
Brewed**	8 oz.	9-50
Decaffeinated	8 oz.	3-9
Herbal (fruit)***	8 oz.	0
Iced	12 oz.	22-70
Chocolate		
Hot cocoa	8 oz.	5-8
Milk chocolate	1 oz.	1-15
Dark chocolate	1 oz.	5-35
Soft Drinks		
Coca-Cola	12 oz.	46
Pepsi	12 oz.	38
Dr. Pepper	12 oz.	41
Surge	12 oz.	51
Mountain Dew	12 oz.	55
Jolt	12 oz.	71
Sprite	12 oz.	0
7-Up	12 oz.	0

* Depending on roast, method, and whether served with creamer, etc.

** Depending on time steeped and type of tea leaves.

*** Most fruit or herbal tea contains no caffeine; with some exceptions.

Source: "Toolbox for Transit Operator Fatigue," *TCRP Report 81*, National Academy Press, 2000.

—Mid-afternoon when the afternoon dip in alertness is significant due to inadequate nighttime sleep.

Caffeine is not a good ongoing strategy for maintaining alertness. There is just no good substitute for improving sleep/wake routines, nutritional habits and work schedules. Caffeine is a drug, and its use carries certain risks. Tolerance develops when caffeine is used on a regular basis, requiring higher doses to stay awake, which can cause nervousness

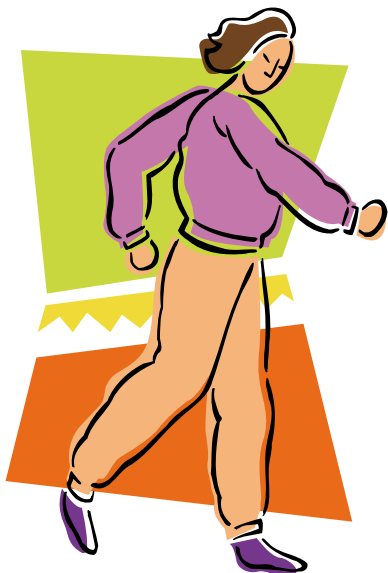
and shaking. Moreover, when coffee is the source of caffeine, consuming it in large quantities brings the risk of gastrointestinal problems. Severe headaches can result from an abrupt cessation in caffeine use. Breaking a caffeine habit requires a gradual tapering in usage.

Source: "Toolbox for Transit Operator Fatigue," *TCRP Report 81*, National Academy Press, 2000. ▲



Health promotion programs

by Courtney Hansen



Healthcare costs are rising for both employers and employees, and surprisingly, 10 percent of all employees account for 80 percent of these costs. This ten percent—the people who are at the highest risk for conditions like diabetes, high cholesterol, and heart disease—are the focus of a rising trend to implement health promo-

Healthier employees mean fewer missed work days.

tion programs at the workplace.

The general goal of these programs is to help improve the health of those with the highest health risks while maintaining the health of those at a lower risk. Improving employee health is especially important in transportation, where being in good health allows a driver to drive safely and be able to effectively assist passengers if needed.

In 2003, the Utah Transit Authority received a state award for its work in improving employees' health. The UTA is implementing a new program called "PACE," which stands for Participation, Activity, Commitment and Evaluation. The program is in response to increasing medical premiums due to the UTA's aging workforce of mostly sedentary employees. PACE allows UTA employees to earn up to \$250 a year for medical expenses through participation in various health improvement activities, in addition to baseline health screening. Physical activity incentives include rewarding employees for participating in two or more 5K or 10K races, two or more bike races, a charity walk, or a seasonal sports activity. Employees can also design their own three-month exercise programs. For more information, contact Debbie Smart at UTA at dsmart@uta.cog.ut.us.

Program goals

Before progress can be made either with individual employees or with a staff, current health must be assessed. Employees cannot, of course, be forced to participate in health assessments, but tying participation to the ability to receive benefits can help increase involvement. These assessments may give an employee a personal reason to continue participation in the program, and will also give your agency a better idea of employee health.

Once each person's overall health has been determined, employees should be educated on being and staying healthy. Information on reasonable lifestyle changes will be much more useful to employees than the health fads that come and go. Additionally, providing employees with fun, interactive, non-threatening activities, such as a walking or cycling group, can improve health; participating in these activities with other employees will make them much more enjoyable.

Benefits

While the primary aim of a health promotion program is often to lower

healthcare costs and workman's compensation claims, the health benefits to employees are a major part of the equation. Wellness programs can reduce high-risk behaviors such as smoking, sedentary lifestyles, excessive alcohol use, and not using seat belts. These programs also aim to decrease exterior health risks such as carcinogens and unsafe job procedures. In addition to improving the health and lives of employees, wellness also allows for fewer missed workdays, resulting, in some cases, in more pay for employees.

In addition to lowering health care costs, a health promotion program has one other big advantage, particularly for smaller employers. Healthier employees mean fewer missed workdays, which means less time and money spent trying to catch up on lost productivity. Without a doubt, improved physical health within a company—a considerable advantage in itself—means improved financial health as well.

Source: "Transit Operator Health and Wellness Programs," *TCRP Synthesis 52*, Transportation Research Board, 2004. ▲

Transportation brokers can save you time, money and hassle

by Courtney Hansen

Transportation brokerage programs provide a lifeline to citizens who depend on human services transportation to meet their daily needs. Whether a Medicaid recipient needs transportation services to get to the doctor, or someone with financial challenges catches the bus to get to work, or a person with disabilities uses transportation to participate in the community, a brokerage can help individuals who need transportation services lead more productive lives.

Today, successful brokerage programs are gatekeepers, making sure agency costs are reduced and clients receive the most efficient and appropriate mode of transportation to meet their needs. More and more, communities are beginning to rely on brokers to coordinate human services transportation and provide an efficient and cost-effective service from trip schedule to drop-off.

The broker acts as the administrator and can be responsible for all facets of the trip including:

- registration information for eligible individuals;
- contracting for transportation with private for-profit and private not-for-profit operators;
- making reservations, scheduling, dispatching, and maintaining equipment;
- driver training and vehicle procurement;

- risk management and providing quality assurance;
- agency billing and record keeping;
- providing reimbursement to operators;
- maintaining insurance.

Using brokerage in Oregon

In the early 1990s, Medicaid clients in Oregon who needed public transportation to medical appointments were forced to make other



arrangements. The state simply could not provide transportation. Resources were limited and coverage for outlying areas of the state was nonexistent.

Oregon is a large rural state where a single non-emergency trip could average 50 miles. Although the transportation program at the time used a combination of volunteers and local transit providers, the system remained costly due to fuel expense and vehicle maintenance.

In addition, Oregon was unable to maintain affordable costs due to the length of trips and the large number of participants.

Witnessing the success of neighboring Washington state, Oregon decided to adopt a brokerage

model to control costs, assure access for eligible recipients and deliver high-quality service for its Medicaid clients.

The Oregon Office of Medical Assistance Programs began a brokerage program for three of the state's most populated counties in 1992. Due to the use of combined-purpose rides offered to persons with disabilities, Medicaid clients, the general public, and in some cases school children, the state increased overall access by 22 percent. In the program's first month, 47,000 rides were provided. By the end of the first year, the state averaged over 60,000 riders per month. The cost per ride dropped as well. In 1991, prior to using a brokerage system, the cost was \$7.98 per ride. The cost in 2003 under the Oregon model was \$6.20 per ride.

Today, Oregon provides over three million rides and estimates a total savings of over \$11 million annually for the Medicaid program. The state has expanded its brokerage model to 16 other counties using four additional transportation providers. Nearly half the state is serviced by brokers. Oregon continues to provide access to its clients and anticipates making the program available statewide by 2006.

For more information, visit www.fta.dot.gov/ccam.

Source: *Human Services: Transportation Brokerage Programs*, National Consortium on the Coordination of Human Services and the Coordination Council on Access and Mobility, 2003. ▲

Getting the most out of your volunteers



by Courtney Hansen

A volunteer program can be valuable assets to an agency, but the world of volunteers can be complex. Volunteers may come in the form of interns, who work unpaid or for academic credit, or as youth or adult volunteers whose work is purely optional and charitable. Having this variety of volunteers can complicate the process of employing their efforts, but with a little organization, your agency can effectively coordinate this important asset.

Interns vs. volunteers

While college internships are traditionally found in fields such as medicine, students now look for internships in many fields. While some interns do work for financial compensation, the majority of students work for academic credit or simply for the opportunity to gain valuable real-world experience.

The world of interns is beginning to grow outside the realm of college-level work, as well. Today's students are increasingly intent on getting their foot in the door early; many high school students, and even those in lower grades, look for ways

Designing volunteer projects

There are four main elements to a good volunteer project. First, it needs to be flexible, or able to be completed within a variety of schedules. Second, it must be simple enough that an inexperienced volunteer can complete it and so that, third, the volunteer can receive supervision that is not too much of a burden on supervisors. Finally, the project should be transferable to other volunteers should the need arise.

Once a project has been designed with these criteria in mind, the coordinating office or staff member should keep a list of project descriptions for future use. This should aid in helping you find work for future volunteers.

to "try out" working in a potential field. In addition to younger volunteers, adults are another group of volunteers to add to the mix.

While the line between "interns" and "volunteers" seems to offer the

nated through a single location, that location's staff can maintain a list of jobs and their descriptions, making it easier to match volunteers to different areas of the agency. In addition, this makes the agency more attrac-

Organizing the efforts of volunteers through a volunteer office or designated staff person is an ideal way to make the process effective and efficient.

former group more prestige and weight, this line is one that deserves a little blurring. In both cases, individuals offer you valuable service for little more than appreciation. So regardless of what you call them, all volunteers deserve adequate orientation, training, supervision, and recognition.

A coordinated effort

Organizing the efforts of volunteers through a volunteer office or designated staff person is an ideal way to make the process effective and efficient. A volunteer coordinator should be responsible for screening volunteers, assigning jobs, and orienting, evaluating, and recognizing volunteers.

If volunteer efforts are coordi-

tive to volunteers, because they don't need to hunt down contacts for specific volunteering interests. Schools can refer all their interns to one office. Each volunteer that comes through the office can be matched with the most appropriate job available, and can also be reassigned quickly if necessary.

Orientation is an important part of training a volunteer. A designated volunteer coordinator can make sure volunteers receive an overview of the agency, a process that allows volunteers to understand the function and importance of their work.

As volunteers complete their work, a coordinator is also the best bet for organizing the process of

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Market your way to the “outside”

by Nancy Johnson

Marketing is fun and challenging and can be accomplished with the most elaborate budget or on a shoestring. Most of us in Kansas are familiar with the shoestring variety, but whether marketing costs a little or lot, there's still a fundamental purpose: let your clients know how you can meet their needs.

Planning your marketing strategy requires a process to map where you presently are and where you want to go and how best to get there in the most cost-efficient manner. That process includes clearly defining your audience, setting goals and then building your strategy to reach outside your agency to attract new riders.

Define your audience. Who do you want to reach? If you know your riders are senior citizens, why would you advertise on the children's page of the newspaper, or MTV? The better you define your audience the easier the map is to develop.

Goal-setting. Goals are quantifiable and defined, e.g. “increase adult ridership by five percent between the 2nd and 3rd quarter.” Specifically defining the goal gives you a true measurement of the effectiveness of your strategies.

Developing strategies. The strategies you develop define how are to reach the goals. A strategy is the specific step you will take. Here are some examples of strategies that several Kansas agency managers shared with the emphasis on low-cost or no-cost options that could be carried out by just about any transit agency.

1—Paint the buses in a unique pattern to increase recognition and

awareness of service (Emporia).

2—Sell 20 percent of bus advertising to raise additional funds (Emporia).

3—Have a booth at the back-to-school expo to inform students and parents of the fixed routes and their accessibility to the schools (Topeka).

4—Have nine free ride days promoting the different benefits for the bus riders (Lawrence).

5—Develop a rider newsletter informing riders of any changes in the transit system (several).

6—Work with an employer, informing them of the benefits their employee receives by riding the bus.

Managing a marketing program

It's important to be realistic in terms of money and time. The tendency is to develop too many projects for too many audiences in too little time and for too much money. Here are some good tips:

—Simple is good. You do not have to reinvent the wheel with every campaign. What has worked in the past? Can you build on it or simply continue it?

—Have a written plan. Writing down ideas allows you and your board/staff to see what needs to be accomplished and how it will be accomplished.

—Involve all parties. If a goal is to increase student ridership, ask students to assist you. Ask them how best to reach the audience. Senior citizens are a wonderful source and have lots of advice.

—Details are everything. Another advantage of a written plan is it allows you to see the holes. If you are planning an event, what are all the details needed to accomplish the goal? What are your contingency plans? What if you lose electricity?

What if the caterer doesn't show up? —Quality does not mean expensive; but image-building has to be quality. As the old adage goes, “You only get one time to make a good impression.” With today's desktop publishing and programs such as Powerpoint, even the novice can publish a brochure or develop a slide show.

—Do not forget: the biggest sellers are your employees. Shirts, cups, and lunch bags give you the opportunity to advertise the transit system.

Sponsoring a softball team or bowling team is fairly inexpensive but gets your name out to the public. And, the most important factor is their attitude and professionalism doing their job. They create “word of mouth” marketing every day. Keep them informed and well trained.

—Remember, marketing gurus are the biggest “thieves” you have ever met. Join the club. If it works at another transit, another organization or another town, steal it, make it better and reap the benefits.

—Evaluate. This is the most important step and one that is often not completed. Did the program meet the goals? What do you want to do different next year? What do you want to do the same? What was the cost ratio?

Marketing is your way to the outside. Enjoy it, have fun with it and see its benefits. ▲

Nancy Johnson [formerly Denning] is Director of Marketing and Planning of Topeka Transit, Topeka, Kansas. Ken Barrows (Emporia), Karin Rexroad (Lawrence) and Lisa Loeb (Hutchinson) contributed strategies used in their systems at the recent Leadership and Quality Service seminar held in Wichita, KS, August 24-25, 2004, hosted by the Kansas Rural Transit Assistance Program.

Designing safe and accessible bus stops

by Courtney Hansen

At its most basic, a bus stop consists of a sign to inform drivers and riders of the location of the stop and a landing area where riders board and get off the bus. With a few extra considerations, though, the basic bus stop can become much more than this: It can become a safe, inviting, and functional part of your transportation program.

The basics

Before adding new features to a bus stop, some basic pieces must be in order. The bus stop sign should be close enough to the road so that bus drivers can see it, but far enough away that side mirrors can clear it. It may be useful to position the sign to line up with the front of the bus when the passenger door is aligned with the landing area. If the sign is attractive and well-maintained, it can even serve to market your services.

The landing area should be a solid, level, non-slip surface, about five by eight feet, that is free of obstructions and is accessible to the bus. This allows riders to safely wait for and enter and exit the bus.

Improving comfort

One highly visible way to improve comfort at a bus stop is to add a shelter. High activity and proximity to key locations such as shopping centers or hospitals are good reasons to add a shelter. Shelters require considerable investment for installation and maintenance, however, so the decision to build a shelter is often

driven by finances.

There are a few ways to ease the expense of purchasing and maintaining a shelter at a bus stop. One is to implement an “adopt-a-stop” program, in which local volunteers maintain the stop as a community service project. Another solution is to allow local companies to use advertising space on the shelter in exchange for money or services.

If you decide that you do want to install a shelter, make sure that it satisfies ADA accessibility requirements. For instance, doorways should be at least 32 inches wide, and any lights should be uniform and placed to minimize glare on signage in the shelter. Additional information on accessibility requirements can be found at www.access-board.gov/adaag/html/adaag.htm. The bus stop should also allow those using it to see approaching buses clearly while protecting them from wind, sun, and bad weather.

Other, less expensive ways of adding comfort to a bus stop exist as well. Seating and trash receptacles can be added at stops where passengers may have to wait for long periods of time. Route information can be posted at bus stops, allowing new riders to inform themselves during the wait.



KUTC

This bus shelter of the “T” service in Lawrence, Kansas, has a bench, protects riders from the elements, and is easily accessible from the sidewalk.

Improving safety

While customers certainly benefit from added comfort at a bus stop, adding to the safety of the stop should be a priority. This can be done by making sure passengers are protected from traffic, while still at a comfortable distance from the road, or adding lighting to stops that are used at night. It is also a good idea to reassess bus stop locations from time to time, as changing traffic conditions, additional development, and route changes may make a stop no longer safe or necessary.

For more information, a Transit Cooperative Research Program publication titled *Guidelines for the Location and Design of Bus Stops* is available at http://trb.org/news/blurp_detail.asp?id=2597.

Source: “Designing Safe and Accessible Bus Stops,” *Maryland RTAP Update*, Winter 2003-04. ▲

Volunteer management,

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evaluation, if needed for volunteers and interns. For example, schools may need documentation on the student intern's work; if the school has several students volunteering at the agency, using a coordinator for this makes the process more effective for both parties involved. In addition, recognition becomes much more effective and uniform when done by a volunteer coordinator.

Keep good records

A volunteer coordinator can also help assure your agency is keeping adequate records on your volunteers. Such records are vital for a number of reasons. Records will help your agency assess how much time is spent training and working with volunteers, how many hours of work they have done, and help you define how effective they have been.

Additionally, records of employees, even unpaid ones, can be necessary for insurance considerations such as liability and accidents.

Interns who would like to remain as volunteers after the termination of the internship will also benefit from records kept in a volunteer office. This allows for an easier transition between "intern" and "volunteer" since the records are all kept in the same place.

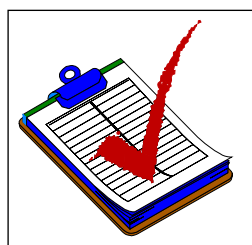
Having a volunteer office or designated staff person greatly improves both internal and external volunteer relations. Your program will be stronger, more integrated, and more useful, which may even attract a higher caliber of volunteer.

Source: "What's the Difference?—Using student interns and volunteers," *The NonProfit Times*, March 1, 2004. ▲

Check your driver training program

by Pat Weaver

Have you wondered whether your driver training program includes all the elements necessary to ensure safety of your passengers and your equipment?



Information provided in the *Transit Safety and Security Prototype Approach* developed by the Colorado DOT provides some qualifications against which to measure your driver hiring and training program. The guidelines are divided into

three categories: 1) qualifications when hired, 2) initial training, and 3) ongoing supervision and training. See below. Does your training program measure up?

The *Transit Safety and Security Prototype Approach* does not provide guidance on number of training hours for each topic but, in many cases, there are existing programs which dictate the length of training for the topic. You should be able to match the topic with the needs and relevancy to your agency to determine how much time is necessary to cover the topic.

To order a copy of the *Transit Safety and Security Prototype Approach*, available on CD, see page 15. ▲

Suggested driver training elements

Driver qualifications upon hire

- Physical requirements; able to perform the tasks of the job
- Valid driver's license in the state for the appropriate vehicle (CDL if required)
- Good driving record
- Demonstrated vehicle operating skills
- Passes criminal record check
- Knowledge of English
- Verbal communication skills
- Ability to perform simple math
- Reasonable knowledge of the service area
- Ability to read basic maps
- Road test given by designated agency representative
- Written driving skills test
- Pre-employment drug and alcohol testing

Initial driver training

- Agency policies and procedures
- Federal and state guidelines and regulations
- Pre- and post-trip inspections
- Vehicle familiarization
- Basic operations and maneuvering
- Special driving conditions
- Backing
- Bad weather
- Boarding and alighting passengers
- Defensive driving course
- Passenger assistance training
- On-road training

Ongoing supervision and training

- Training; refresher/retraining
- Evaluation
- Routine motor vehicle record checks
- Annual physical examination
- Safety meetings
- Seat-belt usage
- Discipline
- Recognition
- Preventable accidents/injuries
- Emergency procedures (weather-related, vehicle breakdown, passenger illness and injury, vehicle accident, violence)



Identifying community needs using GIS

by Pat Weaver



As a transit agency manager, you probably are asked periodically to document that your services meet the needs of your community and your passengers. These requests may come from funding sources, community stakeholders, advisory groups or even your own board of directors. They may come when you propose service expansion, recommend a budget increase or, in bad economic times, make a case for maintaining existing service.

How do you answer those questions? How do you know who your potential customers are and how best to serve them? And can you quantify those responses? There are some technology tools, such as Geographic Information Systems (GIS), that may help you. The following article provides a description of a project conducted in 2002 in which the Lane Transit District (LTD) in Florence, Oregon, was able to access comprehensive data from a Geographic Information System through a cooperative agreement between LTD and the Lane Council

of Governments (LCOG).

Florence is a small retirement community of around 7,300 people on the Oregon coast about 60 miles west of Eugene. A high number of older residents have moved to the area within the last ten years. The transportation service that had been offered—a taxi voucher program—had far exceeded its limits and was providing a low level of service to a limited number of participants at a relatively high cost. The goal of the project was to learn about the current and potential riders' behavior and demographics.

A planning grant composed of FTA Section 5311 funds and Oregon's Special Transportation Fund gave LCOG the resources to conduct a study of the needs in and around the City of Florence.

LCOG has a history of managing GIS data throughout Lane

LCOG had to make special maps that could be used for public involvement that applied shading instead of points to protect the confidentiality of the information.

County; they maintain data for Lane County government, Lane Transit District (LTD), the City of Eugene, City of Springfield and many of the smaller communities and local jurisdictions within the county. LCOG has provided coordinated access to information and shared the information throughout the County. During the course of the project LCOG worked on contract on behalf of the transit district to oversee a network of services designed to meet the needs of older people and people

with disabilities residing within Lane County.

The project involved the creation of geographic layers mapping senior and disabled populations, food stamp use and low-income housing within a targeted rural area of Lane County. LCOG also surveyed existing riders for their origins and destinations as well as their frequency of use. To conduct the mapping, LCOG used their in-house expertise while being advised by a local stakeholder committee and City of Florence staff.

There were several problems with the information developed from the GIS maps. Some of the issues were technical while others had to do with implementation of the mapping service.

When beginning the creation of new geographic layers for rural areas, source data is often in a form that

needs significant revisions or updating. Extra time and staff resources are usually needed to clean the data and prepare it for analysis; and that was true for this project.

LCOG also had to satisfy privacy requirements for using Oregon Department of Human Services data that provided locations of people who received services from service agencies—either due to income, age or disability. The area for which the maps were developed is a small community where people and residences

are well known to each other. When information is portrayed on a map used for public discussion, people can often identify who might be receiving services. Adding to the implementation time, LCOG had to make special maps that could be used for public involvement that applied shading instead of points to protect the confidentiality of the information. Further, the information on the maps limited the specificity of information that could be applied to meet a specialized population's needs.

With the data provided through the GIS findings, a service design was developed to serve those already getting the limited taxi service that had been available to avoid any loss of service for those riders. The new service also incorporated a different mode of delivery that could include more riders at about the same annual cost by setting up a type of service route. Service went from a predominantly senior and disabled service to a general public service but it targeted specific locations where people on low-incomes, seniors and people with disabilities were most likely to need to go.

Local surveys were planned to identify changes that might give seniors and disabled persons better access to the service. Six months after implementing the local "circulator" route, a "deviated-route" service was initiated to address some of the concerns that were discovered in the start-up phase of the project.

LCOG recommends evaluating existing resources in your community, region, or state before investing in technology or a project. They suggest considering the type of information you need along with determining which organizations may have it. Such an approach fosters the development of new relationships and partnerships that will certainly bene-

fit the community.

The implementation process, especially the needs survey, allowed the community to identify needs, protect service for seniors, low income and disabled citizens, and make system design changes to make the service more accessible to the general public. Transportation discussion within Lane County was broadened, resulting in a transit system that continues to pay attention to the community's needs.

For more information about Lane County Transit or Lane Council of Governments, go to www.ltd.org or www.lcog.org.

Adapted from *Technology in Rural Transit: Linking People with Their Community Transit*, ITS Case Studies, by Harvey, Hathaway and Melchiorre; January 2002. FTA Report # FTA-MA-99-0356-01-1, www.hdm.com/static/its/toc.html. ▲

Minnesota's 511 service adds transit service information

Kansas began its 511 traveler information system in January of this year. The system now provides weather reports and road construction information, but what else is possible? Here's an example from Minnesota.

Motorists and other users of the Minnesota Department of Transportation (MnDOT) statewide 511 system can get information about any of the 67 transit providers across the state of Minnesota.

"This is part of our continuing effort to make the 511 system more useful to the traveling public," said Nick Thompson, manager of MnDOT's 511 system.

To access the transit service while you are in Minnesota, dial 511 on your regular phone or cell phone and ask for transit from the main menu, then follow the voice prompts

to the city of your choice. Ultimately, you get a description of the transit provider you have selected, a phone number and the option to directly transfer your call to the provider from 511. If you are outside of Minnesota, you can see how this system works by calling 800-657-3774; ask for "transit" from the main menu.

MnDOT first offered their 511 service in July, 2002. The system allows people to either dial 511 or use a computer to click to the 511mn.org website to get road condition information about traffic conditions, construction-related bypass and detour information and weather-related updates. The transit information currently is not available on the 511 website, but they are working on that and anticipate adding that service to the website within a year.

Source: *ITS America*, August 9, 2004, www.itsa.org. ▲



Rural Transit Conferences and Workshops

... 2004

Service Excellence for Local Government
 October 5
 Salina, KS
 Contact: KAC
 Phone: 785-272-2585
 www.kansascounties.org

Improving Driving and Passenger Assistance Skills
 October 5—Garden City
 October 6—Wichita
 October 7—Emporia
 October 12—Manhattan
 October 13—Pittsburg
 October 14—Topeka
 (Register for Event)
 Contact: Rose Lichtenberg,
 Phone: 785-864-2594
 www.kutc.ku.edu

Service Excellence for Local Government
 October 19
 Hutchinson, KS
 Contact: KAC
 Phone: 785-272-2585
 www.kansascounties.org

Improving Driving and Passenger Assistance Skills
 October 21
 Olathe, KS
 Contact: Johnson County Transit
 Phone: 913-782-2210
 Email: lauri.henry@jocoks.com

16th National Rural Public and Intercity Bus Transportation Conference
 October 24-27
 Roanoke, VA
 Contact: Elaine Lynch,
 Community Transportation Association of Virginia
 Phone: 540-562-3900 x 200
 www.ctav.org/trb/

Preparing Your 2005-2006 Kansas 5311/5310 Funding Application: A Workshop for Kansas Transit Managers
 November 3—Topeka
 November 4—Wichita
 Contact: Rose Lichtenberg,
 Phone: 785-864-2594
 www.kutc.ku.edu

Editor's Note:
 To include meetings or workshops in our calendar, send information to:
 Kansas Trans Reporter, KUTC,
 1530 W. 15th St., Room 2160,
 Lawrence, KS 66045.
 Email: weaver@ku.edu



Calculate your Sleep Debt

The Sleep Debt Index (SDI) is based on the Epworth Sleepiness Scale, a scientifically-developed tool for assessing sleep debt and resulting sleepiness. Drivers can use the SDI to help judge their own levels of alertness and sleep debt.

To evaluate your overall daytime sleepiness and related sleep debt, take the following SDI self-evaluation test.

Sleep Debt Test

How likely are you to doze off or fall asleep in the following situations? Score yourself using the following scale:

- 0 = Would never doze off
- 1 = Slight chance of dozing
- 2 = Moderate chance of dozing
- 3 = High chance of dozing

- Sitting and reading
- Watching TV
- Sitting inactive in a public place (e.g., a theater or a meeting)
- As a passenger in a car for an hour without a break
- Lying down to rest in the afternoon when possible
- Sitting and talking to someone
- Sitting quietly after a lunch without alcohol
- In a car, while stopped for a few minutes in traffic

Total Score

Evaluate your total score:
 0-5 Slight or no sleep debt

- 6-10 Moderate sleep debt
- 11-20 Heavy sleep debt
- 21-24 Extreme sleep debt

If your score is 21 or you should seek medical advice. If your score is 5 or less, you do not have a serious sleep debt but it is probably worthwhile for you to examine your personal work and sleep patterns and determine where changes are possible that will reduce your sleep debt and improve your alertness. If your score is between 6 and 20, you should develop a plan for making changes in your lifestyle.

Source: Gertler, Popkin, Nelson and O'Neil, *Toolbox for Transit Operator Fatigue*, TCRP Report 81, Transportation Research Board, 2002, p. 58. ▲

Resources Order Form

Use this order form to order the resources described here. Feel free to keep the publications. **Send the order form to:** KUTC Lending Library, 1530 W. 15th Street, Room 2160, Lawrence, KS 66044. Or fax the form to 785/ 864-3199.

Resources

- Transit Safety and Security Prototype Approach.** Colorado DOT, 2002. This resource, available on CD, is described on page 11.
- Volunteer Drivers—A Guide to Best Practices.** Washington State Agency Council on Coordinated Transportation. Also available online at www.wsdot.wa.gov/Transit/vdg/. This publication provides the framework for developing and maintaining volunteer driver programs.
- Technology in Rural Transit: Linking People with Their Community.** U.S. DOT, Federal Transit Administration Federal Highway Administration, January 2002. This publication is also available at www.hdm.com/static/its/Guidebook.pdf.
- Participation, Activity, Commitment, Evaluation (PACE): UTA's Wellness Program.** A sample employee wellness program from the Utah Transit Authority.
- Reasonable Suspicion Referral for Drug and Alcohol Testing—Leader's Guide and Reasonable Suspicion Training for Supervisors.** This videotape is also available for order at: <http://transit-safety.volpe.dot.gov/Safety/datesting/ReasonableSuspicion.asp>.

Useful Web sites

- Funded Transit ITS Case Studies.**
<http://www.hdm.com/static/its/cstoc.html>
If you're in the middle of an ITS project, or thinking about starting one, this web site provides some good general information and contacts.
- Federal Transit Administration Drug and Alcohol Testing Website**
<http://transit-safety.volpe.dot.gov/Safety/DATEsting.asp>. Provides online publications, rules and regulations and questions related to the transit drug and alcohol testing program.
- FTA Drug and Alcohol Regulatory Discussion Group**
<http://transit-safety.volpe.dot.gov/Safety/BBS/default.asp>
A bulletin board system that allows transit agencies to submit questions for interpretation of the rules and receive answers from FTA or others.
- ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)**
<http://www.access-board.gov/adaag/html/adaag.htm>. On-line publication of the existing ADAAG provisions.

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Agency Phone

Street address Email address

City State Zip + 4 Date materials needed

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Kansas Trans Reporter

The *Kansas Trans Reporter* is an educational publication published quarterly by the Kansas University Transportation Center. The newsletter is distributed free to rural and specialized transit providers and others with an interest in rural and specialized service.

The *Kansas Trans Reporter* is co-sponsored by the Federal Transit Administration under its Rural Transportation Assistance Program (RTAP) and the Kansas Department of Transportation. The purposes of the program are to: 1) educate transit operators about the latest technologies in rural and specialized transit; 2) encourage their translation into practical application; and 3) to share information among operators.

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For a free subscription to the *Kansas Trans Reporter* or to contact one of our faculty or staff, call toll-free **800/248-0350** (in Kansas) or **785/864-2595** (outside Kansas). Send correspondence to *Kansas Trans Reporter*, Kansas University Transportation Center, 1530 W. 15th Street, Room 2160, Lawrence, KS 66045. Send e-mail messages to Patricia Weaver at weaver@ku.edu or Lisa Harris at LHarris@ku.edu. Visit our web site at **www.kutc.ku.edu**

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Address incorrect?

Send us the inside form with your corrected address, or fax your changes to 785/864-3199.

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Other services



In addition to publishing the *Kansas Trans Reporter*, the Kansas RTAP program offers a variety of other educational services. Following is a partial list of these services:

- Publication dissemination
- Technical assistance
- Telephone consultation
- Training development
- Web site
- Program planning assistance
- Video lending library
- Computer database searches
- Referral services
- E-mail discussion group

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Kansas RTAP staff

Assistance can be obtained by contacting a *Kansas Trans Reporter* staff person at the numbers or address above.

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Editor Lisa Harris
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Co-sponsored by the Kansas DOT  and the Federal Transit Administration 

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