The demand for transportation is growing so quickly in some small communities that transit agencies often have difficulty keeping up with demand. One solution to this problem is mobility management. This article will define mobility management, describe some of its benefits, and provide some examples of how it might work in your community.

What is mobility management? Mobility management evaluates the transit needs of a community and provides services that fit those needs. It dismisses the idea that public transit services should follow traditional urban models that rely heavily on fixed routes. Transit providers can use mobility management to complement traditional services with...
 added programs geared towards rural and suburban populations. For example, urban communities have many commuters. With mobility management, transportation agencies could provide a service that takes workers directly to their jobs and then guarantees a ride home. Another service that could provide more customized rides is a flexible route service. Instead of riders walking to bus stops, vehicles would be assigned to regions, and riders would be picked up at their houses.

Mobility management also focuses on coordinating various transit services in the community to maximize resources and provide a complete, easy-to-use service for customers. Transit services that use mobility management can look forward to some valuable benefits such as pooled funding to increase potential resources for all participating services.

Many rural communities lack a transit authority but have various public and private agencies that provide transportation. Senior centers and health care services provide para-transit for those with special needs. Human and social service departments provide transportation through Medicaid funding. In these rural areas, mobility management can be very helpful.

“Medicaid transportation providers and senior centers can create partnerships with the local agency on aging or the department of special services,” suggests James McLary, who teaches Coordinated Mobility classes for the National Transit Institute (NTI) and serves as an ambassador for United We Ride program. These agencies can coordinate their efforts and become more efficient using mobility management. For instance, it is generally more efficient to have a single vehicle pick up multiple people instead of each organization sending out their own drivers to the same location. Also, transit agencies that cooperate can provide a single phone number that allows potential riders to determine which service they are eligible for. This is much easier than calling each agency looking for a ride.

A key feature of mobility management is the inclusion of informational strategies, such as a call center with information on all transportation services—and agreements with ridesharing agencies for trip planning. Mobility management also focuses on coordinating various transit services in the community to maximize resources and provide a complete, easy-to-use service for customers.

Mobility management benefits Transit services that use mobility management can look forward to some valuable benefits. Agencies coordinating their efforts with mobility management strategies can pool their funding to increase potential resources for everyone. With increased funding, mobility managers can invest money in improved technology and communication. Transportation services that previously provided paratransit only for the elderly and people with disabilities can branch out to other groups in the community. Multiple agencies working together can increase their service area and provide rides to more people at lower costs, using fewer vehicles.

Technology is a helpful tool in mobility management Technology is an important part of mobility management. Technology helps transit agencies meet a common mobility management goal of providing information on all community transportation services from a single call center. It also helps dispatchers at these call centers keep in close contact with drivers.

Demand-Responsive Transit (DRT) software allows dispatchers at call centers to update routes and schedule pick-ups with drivers in real time. Dispatchers can also stay in contact with drivers using traditional radio or cellular communication.

Dispatchers can monitor vehicles using Automatic Vehicle Locator (AVL) technology. AVL uses Global Positioning System (GPS) technology with units mounted in vehicles to monitor their coordinates in real time. The equipment mounted in the vehicle sends a signal to a satellite that broadcasts the location of the vehicle to the DRT software at the call center.

Public transportation offices can possibly reduce the number of routes their vehicles must make by using this technology. While still relatively expensive, much of this technology has received enough widespread use that the cost has dropped significantly. In Kansas, there are two rural agencies currently testing these applications: Reno County Transportation in Hutchinson, and Developmental Services of Northwest Kansas, Inc. in Hays.
Features

MOBILITY MANAGEMENT IN A RURAL AREA

While suburban communities can access established public transportation services in nearby urban centers, many rural communities cannot. Often, the transportation services available in small towns originate in human service or health care agencies that provide paratransit for the elderly and the disabled. In Kearny, Nebraska, Good Samaritan Health Services and other health care providers recognized the need for more efficient public transportation and created the Reach Your Destination Easily Program. This program serves an eight-county area from a centralized brokerage in Kearney. The brokerage coordinates rides for each of the involved agencies using DRT software. Using a transportation brokerage and mobility management, the program covers a large area with minimal resource use.

Mobility management creates efficient operations

Mobility management is an efficient solution to complications facing the transportation industry. First, the senior population is growing and will reach an all-time high as the baby boomer generation turns 65.

“I have seen a big increase in the demand for rural transit. I expect this to increase even more as the population ages,” says McLary.

Also, despite state and federal funding increases for rural transportation, the demand for transportation in smaller communities often outstrips their resources, particularly funding from necessary local sources. Mobility management can cushion the effects of these problems by consolidating resources and increasing efficiency.

Mobility management in action

Mobility management uses similar strategies and public services in both rural and suburban communities. However, there are a few fundamental differences. In suburbs the main transportation provider is often the major transit service for a nearby urban center. For instance, the Suburban Mobility Authority for Regional Transportation (SMART) program in Detroit, Michigan, started out as a traditional fixed route service that didn’t fit the needs of the growing, surrounding communities. They decided to supplement their traditional services with programs such as a Job Express, Dial-a-Ride, and Community Transit. Job Express takes workers from fixed route bus stops straight to their jobs. Dial-a-Ride is a service that provides immediate curbside pickup. Community Transit is a service supplied and funded by SMART but operated by community members.

With this business model, SMART call-center employees act as mobility managers to coordinate the various transportation services and find rides for customers. SMART uses automatic vehicle locaters, demand-response transit software, call centers and standard radio communication to stay in better contact with their drivers, clients, and the community.

See above for a rural example of mobility management.

Mobility management is a strategy any community can use to improve its public transportation. This strategy can be particularly helpful in small communities with limited resources and a growing demand for transportation. These communities deserve improved service; mobility management can help agencies meet that need.

Sources:
SAFETEA-LU, federal transportation legislation reauthorized in 2005, requires that projects selected for funding under the Elderly Individuals and Individuals with Disabilities Program (Section 5310), the Job Access–Reverse Commute Program (JARC - Section 5316), and the New Freedom Program (Section 5317) be “derived from a locally developed, coordinated public transit–human services transportation plan.” The plan must be “developed through a process that includes representatives of public, private, and nonprofit transportation and human services providers and participation by the public.”

So, what does this new planning requirement mean for your agency?

FTA issues interim guidance for FY06 implementation and proposed strategies for FY07
On March 15, 2006, FTA issued interim guidance and proposed strategies for planning requirements for the three programs. This document is available online through FTA’s Docket Service. Go to http://dms.dot.gov, click on “Simple Search” and enter 24037 under Docket Number. The guidance, along with comments from the public, are listed here. Comments were accepted through April 21, 2006.

FY 2006, interim guidance for JARC planning requirements
JARC funding has always included a planning requirement; however, under SAFETEA-LU the funds are now distributed by formula to states and urbanized areas. Therefore, states and cities that have not previously participated in the program may now be receiving funding and will need to comply with the associated planning requirements. For existing JARC projects, existing plans may satisfy the requirements.

In areas with no current JARC plan, for FY 2006 FTA proposes that the planning partners should, at a minimum, be consulted about projects. When possible, support letters should be obtained from these partners and documented. The application describes activities that can be undertaken to reach out to stakeholders—including providers and users of service—to identify community-wide needs and to begin to inventory available resources.

FY 2007 Sections 5310 and 5317 proposed strategies
The notice for proposed requirements for creating the coordinated plan is incorporated in the same docket. Coordinated planning requirements for all three programs will be in force for FY 2007 awards.

What are the elements of a coordinated plan? FTA identifies the key elements of the coordinated plan as: 1) an assessment of transportation needs for elderly, persons with disabilities and low income individuals; 2) an inventory of available services to identify gaps and duplication, 3) strategies to address gaps, 4) identification of coordination actions to eliminate or reduce duplication; and 5) prioritization of implementation strategies.

How will this plan integrate with other existing plans? An important element of this planning activity will be the integration and coordination with existing planning efforts in each state and local community. The goal must be to get the guidance flexible enough to meet the needs of each area while furthering human service transportation coordination needs. FTA has identified some of the desired stakeholders in the process and how they define adequate outreach to these stakeholders including public and private providers, consumers and others.

Transportation coordination is the target of proposed planning requirements for Sections 5310, 5316 and 5317 programs in FY2006 and FY2007.

Is technical assistance available to assist with these plans? Yes. FTA is proposing that states can use up to 10 percent of their Section 5310 and 5317 funds to provide technical assistance, administrative and planning functions. There also are national technical assistance resources available; examples are the JobLINKS program which provides technical assistance for employment transportation and the National Rural Transit Assistance Program (RTAP) which provides training materials and other resources to rural agencies.

Brief update on Kansas “United We Ride” activities
A statewide summit on human service transportation was held in Salina on February 8 for the purpose of reviewing the action plan of the Governor’s Committee on Human Service Transportation Coordination. This plan has been under development in Kansas for the past few months. Approximately 75 individuals participated, including representatives from several state agencies, state advocacy groups, public and private providers, and consumers.
Driving under the influence... of antihistamines

by Justin Dorsey

The dangers of driving under the influence of alcohol are well known. However, do you know the dangers of driving under the influence of antihistamines? If not, this article’s discussion will help you learn how antihistamines work, how they affect driving, and how to reduce their side effects.

How do antihistamines work?
When someone has an allergic reaction, cells in the body release the chemical histamine. Histamine attaches to cells and irritates them. This irritation causes the runny nose, watery eyes, sneezing, itching, and other allergic reactions we know and hate. Although histamine seems like an unwanted nuisance, it performs an important brain function; it helps keep us alert and attentive.

To reduce allergy suffering, antihistamines were developed to stop histamine from attaching to cells.

How to reduce antihistamine side effects
Because cold season is here, many drivers will be taking antihistamines. What can be done to reduce their effects on driving? First, do not take antihistamines with alcohol. Second, ask a medical professional when to take them so that their possible drowsiness effect has worn off or is minimal by the time you drive. Finally, if taking them while on another medication, check with a medical professional about unexpected drug interaction effects.

According to Lieutenant John Eickhorn of the Kansas Highway Patrol, people tend to associate drug-related driving impairment with illegal drugs only. This is not the whole story.

Side effects from antihistamines can be debilitating—and include drowsiness, impaired thinking and reduced reaction time.

Original antihistamines were very good at this. Maybe too good. They blocked histamine from attaching to cells in our respiratory system—and brain. The result: allergy suffering was reduced, but alertness was too.

Affects on driving
Antihistamines can be divided into two groups: first-generation and second-generation. First-generation have significant side effects that reduce an individual’s ability to safely operate a vehicle. These side effects include: drowsiness, impaired thinking, and reduced reaction time. Effects can be quite dramatic. For example, separate studies from the University of Iowa and Minnesota founded that driver impairment caused by (first-generation) Benadryl was similar to impairment caused by significant amounts of alcohol. Further, the Iowa study found that drivers taking Benadryl could not accurately judge its effect on their driving.

Newer, second-generation antihistamines, often called “non-sedating” antihistamines, have drastically reduced side effects. In fact, some have no side effects. The downside is that they are generally more expensive.

Popular First-Generation Antihistamines
These typically have stronger side effects
Alka-Seltzer Plus Night-Time Cold Medicine
Benadryl Allergy
Dimetapp Cold & Allergy Elixir
Dramamine Original
Robitussin Allergy & Cough Liquid
Tavist
Vicks NyQuil

Popular Second-Generation Antihistamines
Side effects are typically milder
Allegra
Alavert
Claritin
Semprex
Zyrtec
Can a transit driver legally drive for 11 hours after being off duty for 8 consecutive hours?

by Justin Dorsey

The above question, and others, will be answered in this refresher on hours of service regulations for intrastate transit service in Kansas.

Who must comply with intrastate hours of service regulations?
The Kansas Corporation Commission (KCC) regulates intrastate hours of service for public motor carriers transporting passengers within Kansas (K.S.A. 66-1, 129). The KCC adopted the federal rules and regulations regarding hours of service that are found in 49 C.F.R. 395.5.

Intrastate passenger transportation is the transport of passengers solely within Kansas. A public motor carrier is an entity that transports passengers for hire in a motor vehicle (K.S.A. 66-1, 108.) This includes Kansas non-profit agencies providing transit service.

A public motor carrier using a vehicle designed to transport more than six passengers, including the driver, operating solely in Kansas, must comply with KCC hours of service regulations. However, if the vehicle is operated by a government entity such as the federal government, a state, a municipality, or any other political subdivision of Kansas, it is exempt from the regulations. For example, if your service is owned by your city or county government, then your agency is exempt from these regulations.

In other words, a driver can drive for a maximum of 10 hours during a 15-hour on-duty time period but must be off for a minimum of 8 consecutive hours before initial driving occurs.

Here are some examples of applying these rules:

Can a driver drive for 3 hours after being off for 7 consecutive hours? No, this will violate rule #1 because the driver will drive for more than 10 hours.

After being off for 10 consecutive hours, can a driver dispatch for 14 hours and then drive for 3 hours? No, this will violate rule #2 because the driver will drive after being on-duty for more than 15 hours.

Can a driver drive for up to 10 hours after being off for 9 consecutive hours? Yes, this complies with both rules.

Can a driver drive for 11 hours after being off for 8 consecutive hours? No, this will violate rule #1 because the driver will drive for more than 10 hours.

After being off for 10 consecutive hours, can a driver dispatch for 2 hours, repair an agency vehicle for 3 hours, and then drive for up to 10 hours? Yes, this complies with both rules.

It is important to record actual driving time, as well as time spent on any other work tasks, and time off, and to track those activities both daily and weekly.
It was an extremely productive meeting, and eight recommendations were made back to the Governor’s Committee. The prioritized list of recommendations include:

- Increase communication with local agencies across networks;
- Develop outcome measures for each goal—part of overall evaluation plan;
- Leverage, utilize, and centralize funds and/or change, update, and coordinate regulations to achieve efforts and provide better service;
- Create marketing strategies for locals on “United We Ride” efforts, e.g. county commissions;
- Seek statutory authority for Governor’s Committee on Public Transportation;
- Establish best practices and results of action steps;
- Create monetary incentives to achieve coordinated services;
- Study how to better leverage regional and local resources.

The Governor’s Committee is scheduled to meet in April to continue work on these priorities. Thanks to Marla Flentje of the Austin Peters Group for her assistance in co-facilitating the day.

Please contact Pat Weaver at the Transportation Center if you have questions about the Kansas United We Ride effort, (785) 864-2595, weaver@ku.edu, or visit the Kansas United We Ride Web site at http://www.ksunitedweride.org.

Sources:
American Academy of Allergy, Asthma, and Immunology information on Claritin and second-generation antihistamines. http://www.aaaai.org/patients/resources/patient_qa_otc_claritin.stm
Asthma & Allergy Information (on how antihistamines work). http://www.users.globalnet.co.uk/~aair/antihistamines.htm
WHATRANTI
HealthLink Medical College of Wisconsin information on antihistamines and driving performance. http://healthlink.mcw.edu/article/968785675.html

Hours of service rules apply to drivers of private vehicles.

Weekly rules
Even if a driver complies with daily regulations, he/she also must be aware of weekly regulations. If service does not operate every day of the week, a driver cannot drive after being on-duty 60 hours in any 7 consecutive days. However, if service does operate every day of the week, a driver cannot drive after being on-duty for 70 hours in any 8 consecutive days.

For example, can a transit driver drive 12 hours a day for 6 consecutive days? No.

Finally, remember that if a driver drives for more than one agency or has a non-driving side job, extra attention may be needed to ensure hours of service regulations are followed. For example, if a driver works 10 hours a week as a secretary in a doctor’s office, that time is on-duty time when evaluating hours-of-service compliance.

If you need additional information contact Dale Moore of the Kansas Corporation Commission at (785) 271-3151 or visit their Web site at http://www.kcc.state.ks.us/trans/index.htm.

Sources:

Antihistamines,
continued from page 5

story. Although illegal drugs like marijuana and cocaine impair driving, so do legal drugs like antihistamines. Further, he suggests that, if taking a drug for the first time, avoid driving until you are familiar with its side effects.

Transit drivers rely heavily on alertness and reaction time to operate their vehicle. When a driver takes antihistamines, those skills may become diminished. Therefore, if you are a driver taking antihistamines, be extra careful, ask your medical professional if taking a second-generation instead of first-generation antihistamine is possible, and report your medications to your supervisor to determine your fitness to drive.

Sources:
American Academy of Allergy, Asthma, and Immunology information on Claritin and second-generation antihistamines. http://www.aaaai.org/patients/resources/patient_qa_otc_claritin.stm
Asthma & Allergy Information (on how antihistamines work). http://www.users.globalnet.co.uk/~aair/antihistamines.htm
WHATRANTI
HealthLink Medical College of Wisconsin information on antihistamines and driving performance. http://healthlink.mcw.edu/article/968785675.html
New NTI training courses help employees identify harassment and prevent it

The National Transit Institute (NTI) has a history of helping transit agencies maintain a safe and healthy workplace through their training courses. One issue that threatens the safety of any workplace is workplace violence.

Violence in the workplace usually stems from harassment and diversity issues, according to Renee Haider, Associate Director of NTI. Therefore, Haider says that if workplace violence is to be prevented, workers and employers must be educated about harassment and diversity. NTI is offering three new courses to help deal with these issues, each of which is focused specifically on applicability to transit agencies.

“Harassment Prevention for Transit Employees” is a three-hour course that helps employees discover the impact that harassment, including violence, can have on a transit agency. The instructors make use of the participating organization’s harassment policy by discussing compliance with the policy and how to report violations. “Our goal is to help the employees understand that policy, not just from a compliance standpoint, but from how it promotes a better workplace,” says Haider.

Strategies for preventing harassment in the workplace are also discussed. “A lot of times the people doing the harassment don’t realize it’s harassment, and the people on the receiving end don’t know how to respond,” says Haider. “We try to sensitize people to their own actions.”

“Harassment Prevention for Supervisors” is a four-hour training course and includes discussion of the supervisor’s role to comply with the agency’s harassment policy, including how to receive and respond to complaints of harassment, while maintaining appropriate confidentiality.

“Supervisors have a higher level of responsibility when it comes to enforcing the organization’s harassment policy,” Haider says.

“We want people to understand each others’ differences, respect them, and focus on what pulls them together.”

Like employees, supervisors are also taught how to recognize and prevent harassment in the workplace. Harassment is often directed toward individuals with different races, genders, national origins or sexual preferences, says Haider, so understanding diversity is extremely relevant to preventing harassment. NTI’s third course in this genre, “Building Diversity Skills,” tries to accomplish this by explaining the benefits of valuing diversity. When employees create an atmosphere of friendliness and respect, the result is an increase in productivity, improved organizational efficiency, more innovativeness, stronger communication skills, and reduced workplace conflict, according to the course outline.

“It’s a compliance issue, but we’re trying to explain why they should want to comply,” says Haider. In the course, participants practice skills for acknowledging differences but respecting and dealing with them at the same time.

“Diversity” can apply to all sorts of differences, says Haider. Sometimes people without children may feel treated unfairly compared with employees who are parents. “We want people to understand each others’ differences, respect them, and focus on what pulls them together,” says Haider.

Each course is a combination of lecture, visual aids, participant interaction and learning activities.

Like all NTI courses, the harassment and diversity training courses are free of charge offered at a wide range of locations.

To request a training session, visit NTI’s Web site at www.ntionline.com to fill out a Course Request Form. For more information on these courses, contact Renee Haider at rhaider@nti.rutgers.edu.
Create a press release that gets noticed

by Laura Snyder

Sometimes you have to take the initiative to get word out to the press instead of waiting for the press to come to you. Press releases are a great tool to help you get publicity for your transit agency through the media. You know your agency and all of the important details best, so you can write it up and package it in a way that gives the media everything they need to know to write an article about your agency.

Content
What type of event warrants a press release? Anything that relates to the readers, listeners, or viewers of the media that will receive your press release. For example, if you know that the readers of a particular newspaper tend to be working professionals, consider what services they might be interested in. More specifically, you might want to report on an increase in ridership, driver training, new vehicles, new routes, new schedules, or awards and accomplishments.

Your press release, much like a newspaper article, should answer the basic journalistic questions of who, what, when, where, why and how.

While you can put a positive spin on the story in your press release, you must be truthful. The story must be current, as well, so don’t delay writing up events for the media.

Painting the picture
A press release reads much like a newspaper article. As such, it should use short sentences and paragraphs. In other words, don’t be wordy!

The first paragraph should contain the lead. This is a sentence that briefly explains the what, when, where and why of a story. It should tell the reader immediately what this story is about.

The body of a press release should explain the first paragraph in more detail. Be sure to stick to the facts. You can also include a quote or two from an appropriate person related to the story.

Layout
You can print a press release on your agency’s letterhead or plain white paper. The text should be double-spaced and printed on only one side of the paper. A release date and contact name and phone number should be at the top, followed by a headline. To signal the end of the press release, the last page should end with “-30-” or “###” centered at the bottom of the page.

Delivery and follow-up
The method of delivery for press releases varies, depending on the media avenue. Contact the radio or television station or newspaper reporter before sending the release to find out if they prefer e-mail, fax, or mail delivery.

After sending the press release, follow up with a phone call in a day or two. This will give you the opportunity to make sure the release was received. You can also offer to help with the story or answer any additional questions.

Press releases are fairly simple to write and can help your agency get free promotion from the press. So take advantage of this cost-saving tool and drum up some press coverage for your agency.

Sources:

What are repetitive strain injuries?
If you are a transit worker who spends most of your day sitting on a bus or in the office, or if you are a mechanic who uses hand tools, you might be at risk of developing a repetitive strain injury. Called musculoskeletal disorders, or MSDs, by the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA), these injuries encompass a number of more commonly known disorders, such as Carpal Tunnel Syndrome, tendonitis, and low back pain.

According to Jaye Cole, occupational therapist and director of Lawrence Memorial Hospital’s Kreider Rehabilitation Services, the term musculoskeletal refers to the soft tissues supporting the skeletal system injured by chronic overuse or misuse, including muscles, tendons, ligaments, joints, and cartilage.

Common symptoms of musculoskeletal disorders include pain, swelling, numbness, tenderness, muscle spasms, weakness, or loss of joint mobility or coordination. One single strain or sprain will not cause an MSD. You are more likely to develop an MSD over time from repetitive use and misuse.

Who is at risk?
Drivers, dispatchers, and office staff who maintain sedentary positions throughout the day are especially susceptible to MSDs in the lower back. Heavy lifting, such as assisting persons into wheelchairs, may be a contributing factor for drivers. General office staff can suffer wrist injuries from keyboard use, while dispatchers who do not use head-sets run the risk of neck and shoulder problems from frequent telephone use.

Maintenance workers and mechanics risk inflammation of the wrists and hands from using tool handles that are too short or dig into their wrists or palms. Vibration from power tools over time can cause MSDs, as can exerting extra force while lifting, pulling, pushing, or gripping a tool.

Pre-existing medical conditions and lifestyle add to work-related MSDs. Joint disease, arthritis, diabetes, gout, pregnancy, and the use of oral contraceptives increase the risk or worsen MSDs. Certain health conditions may slow the healing process. Arthritis especially “puts fuel to the fire” by contributing to an existing inflammatory process, said Cole.

Workplace effects
Improving ergonomic conditions will increase your worker productivity, boost morale, and decrease workers’ compensation premiums. The U.S. Department of Labor’s Bureau of Labor and Statistics reports that MSDs accounted for 34 percent of the injuries and illnesses that caused employees in private industries to take days off work in 2002. MSDs cost the U.S. more than $2.1 billion each year in workers’ compensation, according to the National Occupational Research Agenda.

Cole compares trying to perform a job task with an MSD to trying to drive a car with a bent axle. “You’re not going to get very far,” she said. “If you’re doing it in a position that puts a lot of stress on the joints, you’re not going to be able to keep doing that.”

What can workers do to prevent MSDs?
You can decrease the likelihood developing an MSD by getting moderate exercise, having good posture, and stretching. Cole said MSDs are more likely to result from misuse than overuse. Slouching can cause back pain for workers who spend the majority of their time sitting.

“Although you sit it a slouched position all the time, it puts stress on ligaments that hold the bones in place,” said Cole. Even worse, when you have to exert yourself to lift something heavy, like a wheelchair, your ligaments will not be as strong and you will put your body at risk of injury.

When sitting for extended periods of time, try to sit upright and tighten your abdominal muscles. Try placing a rolled up or folded a towel...
in the small of your back to prevent your body from slouching. You can also purchase lumbar pads that serve the same purpose.

Stretching is key to avoiding MSDs. If possible, Cole suggests planning stretch breaks every hour. During this break, stand up, walk around, stretch in the opposite direction of what your body has been doing, arch your back, then curl over and touch your toes. These exercises, called a Recovery Technique, send new oxygen into the muscles and prevent tightness and stiffness from building up.

**What can transit agencies do?**
Transit agencies can take some steps to make sure their workplaces are friendly to employee needs and minimize risk of MSDs. This practice, called ergonomics, is a science that fits workplace environments to individual workers. It involves redesigning equipment, work spaces, and job tasks to fit the physical capabilities of workers of all shapes and sizes to prevent injuries.

Your agency should look at bus design to see if the driver seats are comfortable, upright, and most importantly, adjustable. That way, the driver can ensure that there is a good distance from the seat to the foot pedals. The hips and knees of the driver in the seat should be at a 90 degree angle. Make sure the tilt on the steering wheel is adjustable, and the controls of the bus are within arms’ reach of the driver.

Mechanics can limit the incidence of MSDs by examining tool size and shape. Look for tools that require the least amount of grip. Thick handle surfaces on vibrating tools will decrease vibration without requiring a stronger grip. Select vibrating tools that do not blow cold air over the hands. Cold air reduces blood flow in the hands and decreases muscle strength, putting a worker at higher risk of injury.

In the office, use adjustable keyboard trays to allow height to be fitted to individual workers. Keep your wrists straight while typing. Try using a padded wrist rest and be sure to keep the keyboard flat instead of tilted. The padded rest also keeps wrists off sharp desk edges. Position your computer monitor directly in front of you so you can avoid twisting your neck. Dispatchers should use headsets or speaker phones to decrease neck and shoulder discomfort.

According to Cole, it is also important to teach workers about MSD prevention and encourage them to stretch and improve posture.

**Federal and state guidelines**
Neither the Occupational Safety and Health Administration (OSHA) nor the Kansas Department of Labor (KDOL) has an ergonomic standard. This makes it difficult to cite hazards unless injuries are actually reported, according to Rudy Leutzinger, Administrator of Industrial Safety and Health at KDOL. If there is no injury reported, inspectors can make recommendations for hazard abatements.

OSHA does have a set of ergonomic guidelines, which Leutzinger said KDOL primarily relies upon when identifying hazards.

In state, city, and county agencies, hazards can be discovered either by employee complaints or during inspections. Employees can phone in complaints to KDOL or to the Kansas Department of Administration’s Division of Personnel Services. Leutzinger said KDOL tries to perform inspections in the public sector every three to five years, but recent budget cuts have made it difficult to achieve the desired frequency of inspections. Another way KDOL discovers hazards is to monitor reports of workers’ compensation, injuries and illnesses. A high number of injuries would prompt KDOL to notify an agency and offer assistance in hazard abatement.

**Here are a few common musculoskeletal disorders and their symptoms:**

**Carpal Tunnel Syndrome** is caused by constant bending of the wrist or pressing it against a hard object, like holding a tool or steering wheel too tightly. Compression of a nerve in the wrist causes inflammation in the hands, wrists, and fingers.

**Tendonitis** is the inflammation of a tendon or the sheath-like surrounding of a tendon. It affects a variety of tendons to produce specific conditions, including:

- **Tendosynovitis**, which affects the wrist;
- **Trigger finger**, which affects the palm side of the fingers;
- **DeQuervain’s Disease**, affecting tendons in the wrist which control the thumb;
- **Epicondylitis**, including tennis elbow and golfer’s elbow; and
- **Rotator cuff tendonitis**, affecting the shoulder and upper arm.

**Low back pain** is caused by frequent or incorrect lifting, pushing, pulling, bending, or reaching.
City or county agencies can be penalized under KSA 44-636 for $25 to $100 per hazard per day, but Leutzinger said KDOL has never assessed penalties. He said they are more concerned with getting the hazard corrected within the required 60 days. “As long as they do that, we don’t see any reason to penalize or fine,” he said.

In the private sector, OSHA’s hazard penalties run up to $7,000 for serious violations and up to $70,000 for willful, repeated violations, but inspectors may reduce fines depending on the good faith of a business owner or the size of the business.

OSHA issues citations under its General Duty Clause, which states that an employer has an obligation to “furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.”

Private companies with less than 250 employees may request a consultation with KDOL’s 21(d) Consultation Project. The service is free and confidential.

The 21(d) Consultation Project also oversees OSHA’s Safety and Health Achievement Recognition Program (SHARP), which helps employers work with their employees to develop workplace safety programs. First, an agency must request a consultation. KDOL performs the consultation, during which KDOL assesses an agency’s hazards, trains employees, and usually helps write a safety and health plan. Finally, before entering the SHARP program, injury and illness rates for the business must be below the national average for the business’s particular industry.

No citations are issued during the consultation. After completing the consultation, SHARP program participants receive a two-year exemption from OSHA’s General Schedule Inspections. For more information on the SHARP program, contact Rudy Leutzinger at (785)296-4386 or Rudy.Leutzinger@dol.ks.gov.

Resources on repetitive strain injuries

The sources below also contain much more detailed information than we have space for here. All are available on-line:

Center for Disease Control: Ergonomics
http://www.cdc.gov/od/ohs/Ergonomics/ergohome

Kansas Department of Labor: Workers Compensation Industrial Safety and Health Section

Kansas Legislature: Kansas Statute No. 44-636
http://www.kslegislature.org/cgi-bin/statutes/index.cgi

National Occupational Research Agenda. Musculoskeletal Disorders of the Upper Extremities
http://www.cdc.gov/niosh/nrmusc.html

National Transit Institute Musculoskeletal Disorders Hazard Fact Sheet

U.S. Department of Labor: Occupational Safety and Health Administration: Consultation: Free On-Site Safety and Health Services
http://www.osha.gov/dcsp/smallbusiness/consult.html

U.S. Department of Labor: Occupational Safety and Health Administration: Ergonomics: Enforcement
http://www.osha.gov/SLTC/ergonomics/enforcement.html

U.S. Department of Labor: Occupational Safety and Health Administration: Ergonomics: FAQs
http://www.osha.gov/SLTC/ergonomics/faqs.html

U.S. Department of Labor: Occupational Safety and Health Administration: OSHA Facts Sheet: OSHA Inspections

U.S. Department of Labor: Lost-Worktime Injuries and Illnesses: Characteristics and Resulting Time Away From Work, 2002
http://stats.bls.gov/news.release/osh2.nr0.htm

Washington State Department of Labor and Industries: About Ergonomics
http://www.lni.wa.gov/Safety/Topics/Ergonomics/default.asp
A new technology system can significantly improve the quality of service your agency provides. However, purchasing the wrong system—or purchasing the right system or components at the wrong price—can be very costly. By discussing tips to follow and pitfalls to avoid this article will help your agency purchase the correct system.

Identify the problems the technology can address
The first step to purchasing a technology system is to identify the problem you intend the technology to address. Define the problem specifically. This accomplishes two things: First, it makes it easier to write detailed system specifications and requirements. Second, it makes it easy to measure how successfully the system fixed the problem. For example, slow and inaccurate trip processing is a specific problem technology can address. Success would be measured by comparing the speed and accuracy of trip processing before and after system installation.

How to find a technology vendor
Finding a vendor to address your specific needs takes some legwork. Here are a few ideas for getting started:
- Contact transit agencies for a list of vendor(s) from which they have purchased systems
- Contact state transportation departments for vendor lists and/or recommendations
- Search transit publications for vendor advertisements
- Place a request for proposal (RFP) in transit publications and
- Attend intelligent transportation systems (ITS) conferences.

Once your agency has identified possible vendors, the next step is to choose the product to purchase. One way to accomplish this is to request product demonstrations. This will allow your agency to meet vendors, see their products, and ask questions based on demonstrations.

Ensure that staff who will use the system are at the demonstrations. During the demonstrations take note of system characteristics such as ease of screen navigation, ease of inputting data, and ease of retrieving data. Also, ask vendors for a list of agencies that have bought similar systems. Contact these agencies and ask questions such as:
- Does your system do what the vendor advertised it would?
- Was training effective?
- Was the vendor responsive to inquiries after system installation?
- Would you purchase another system from the vendor?

Bottom line: educate yourself on vendors, products, and costs.

Pitfalls to avoid
Avoid having too few and/or the wrong people in your agency decide the system requirements. Include all future users in system requirement discussions. For example, don’t assume one dispatcher will have the same ideas/needs as another dispatcher. Speak with them both.

Don’t forget about customization charges. Technology systems are purchased as either generic or customized. Most likely the system your agency will purchase will have to be customized. Make sure quotes include customization charges.

Similarly, don’t forget training and on-going technical support costs. According to the Transit Cooperative Research Program, quality training and technical support can often add up to 50 percent of total project costs. Also, ask if your agency will have to upgrade its computers and/or internet connec-

A technology system typically includes:
- software
- hardware (computers, cables, monitors, etc.)
- training
- technical support and maintenance

An example is an automated vehicle location (AVL) system.

by Justin Dorsey
Technology system, continued from page 13

activity, and get an estimate for that. Likewise, don’t underestimate the difficulty and length of time it will take for employees to become proficient using the system. This is especially true for employees with little computer experience.

How to reduce post-installation problems
Proper planning will help your agency avoid post-installation problems. Proper planning includes explaining to staff how the system will affect their individual responsibilities. Management should make arrangements to temporarily relieve those learning the system. It is critical that staff become adequately trained, in a real world environment, using your own data. Finally, your agency should have a worse case scenario plan. For example, what will happen if the system crashes?

Thoughtful technology purchases can significantly improve your agency’s ability to serve its clients. We hope this article’s tips and pitfalls will help you get started in identifying the right technology at the right price.

A list of transit technology vendors can be found on page 88 of: http://tb.org/publications/tcrp/tcrp_rpt_76.pdf.

Sources:
- North Carolina State University, Department of Civil Engineering, Small Urban and Rural Advanced Public Transportation Systems, 1999. Sections 1 & 5.

Harassment awareness, continued from page 8

Sources:
- “Free Harassment Prevention Training” flier, National Transit Institute.
- “Harassment Prevention for Transit Employees and Supervisors” 2006 course description and outline, National Transit Institute.
Resources Order Form

Use this order form to order the resources listed here.
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.

**Publications and videotapes**

- **Repetitive Strain Injuries: Musculoskeletal Disorders**
  A fact sheet defining injuries that result from chronic overuse or misuse: repetitive strain injuries and cumulative trauma disorders. Lists the effects of musculoskeletal disorders, prevention strategies, and legal requirements and professional guidelines for preventing musculoskeletal disorders.

- **Give 'Em the Facts: Prescription and Over-the-Counter Drug Abuse**
  Provides information on common medications and how they affect behavior. Especially useful for safety-sensitive work.

- **Technology in Rural Transit: Linking People With Their Community**
  Provides rural transit systems with tools to implement rural Intelligent Transportation System (ITS) applications to help improve their ability to link people with their community. Identifies and documents transit agencies that illustrate best practices in technology implementation to advance rural transit.

**Online resources**

- **http://spider.apta.com/lgwf/leadership/mobility_management/seattle_draft.pdf**
  This PDF toolkit will help you get started organizing mobility management in your community.

- **http://www.ugpti.org/pubs/pdf/DP171.pdf**
  This collection of case studies shows how mobility management can improve your community.

- **http://www.nhtsa.dot.gov/people/injury/old-drive/Medications/images/%20Medications%202005.pdf**
  This document describes some of the effects medication can have on driving ability.

- **http://home.clara.net/ruegg/****
  The Repetitive Strain Injuries Information Page includes information on recognizing the signs of RSI, how to treat it, and how to avoid it,—as well as a forum.

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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.

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

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- 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

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

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