Assessing Transit Needs in Rural Areas
What are the needs now? What will they be in the future?

By Pat Weaver & Kirk Raymond

According to the decennial census, 736,157 individuals lived in rural communities in Kansas in 2010. As Kansas rural transit agencies work to reconfigure service to more regional service, a new guide series developed by Easter Seal’s Project Action and other partners may be useful to rural agencies in assessing the need for new transportation services. This article explains rural growth trends in the United States, identifies high priority transportation needs for rural groups, and provides examples of community assessments and gap analysis studies pertaining to rural transportation.

Stop at RR Crossings? Evacuate Before Fueling? Answers here

Here we provide answers to two questions asked frequently by transit agencies. I put these two questions to Trooper J. L. Riedel of the Kansas Highway Patrol.

Are operators of transit vehicles required to stop at a railroad crossing?
Answer: When a vehicle meets the definition of a commercial bus and requires a passenger endorsement on the driver’s license, it would be required to stop at a railroad crossing. Basically any bus/van/shuttle vehicle that meets the definition of a commercial motor vehicle that has the ability to transport 16 or more occupants (including the driver) must stop at all railroad crossings. These vehicles must stop no closer than fifteen (15) feet and no further than fifty (50) feet from the nearest rail of the railroad crossing. The operator must listen through an open door or window and look in both directions to determine...

Continued on page 2

INSIDE

Basics of customer service for drivers . . . . . . . . . . . . . . . . Page 4
Marketing integrated transit services . . . . . . . . . . . . . . . . . . . . . . Page 7
Kansas training: What’s new in 2013? . . . . . . . . . . . . . . . . . . . . . Page 10
Distracted driving can cause “inattention blindness” . . . . . . . . Page 12
Transit safety: Many parts, one objective . . . . . . . . . . . . . . . Page 12
Upcoming conferences . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 13
Resources . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 15
Training and more conferences . . . . . . . . . . . . . . . . . . . . . . Page 16
Assessing transit needs in rural areas

Project Action's Rural Transportation Topic Guide Series provides information to assess needs and also describes emerging trends with economic, social, and transportation-related data on rural America. The first installment of the series, “Assessing the Need for New Transportation Service in Rural Communities,” identifies trends in rural America which include:

- A growing population of rural residents,
- Significant population of people with disabilities living in rural areas, and
- Significant retirees in locations with limited transit.

The guide states that: 27 percent of U.S. population are rural residents, 11 million people with disabilities live in rural areas, and 38 percent of rural residents live in areas with no public transportation. Immigration is also listed as an emerging trend in the United States. How can this information benefit your transit agency?

What the Guide contains

The emerging trends identified in the Guide indicate that there will be a greater demand on transit agencies to provide services in rural locations. The Guide identifies examples of plans and programs that are addressing those trends, including the Adirondacks Community Empowerment Plan. That plan identifies the following characteristics of older adults and customers with disabilities:

**Older adults need:**
- Varied types of transportation options
- Public transportation to senior centers, adult day services, groceries, faith centers, and cultural events
- Enclosed bus stops with seating and timetables

**Customers with disabilities have:**
- Limited funding or restrictions on how funding is used
- Limited trip purposes
- Limited days and hours of service

Transit agencies that are aware of these trends can help mitigate gaps in service.

**Steps for assessing rural transit needs in Kansas**

The first step in assessing the need for more transportation service is identifying existing transportation services and providers. In Kansas, some of the preliminary work has already been done. SAFETEA-LU required

---

*Sources*


---

The State of Kansas regulates which vehicles need to stop at railroad crossings.

Stop at RR crossings? Evacuate before fueling? Continued from page 1

whether it is safe to cross.

This rule does not apply to abandoned or unused tracks or railroad tracks that are marked as “tracks out of service” by a sign. Kansas Statue 8-1553. Source: http://kansasstatutes.lesterama.org/Chapter_8/Article_15/8-1553.html

*Are passengers required to exit the vehicle while it is fueling?*

Answer: Kansas School Bus regulation #91-38-7(i) requires a school bus to be empty of students/passengers when refueling. This does not apply to non-school bus vehicles; however Trooper Riedel can see where some agencies may exercise the same practice. For instance, agencies making a long road trip and needing to re-fuel before reaching their destination might have a policy to have their customers exit the vehicle. http://www.ksde.org/Default.aspx?tabid=273.

What’s the safety issue here? A resource from Southern Illinois University states that a fire can be created by static buildup due to the driver or a passenger entering or leaving a vehicle or even sliding across the seat during fueling.

If a fire does occur, act quickly but don’t panic. Do not remove the nozzle from the gas tank. Rather, back away from the vehicle and immediately tell the attendant at the station so he or she can operate the emergency shut-off switch to the fueling station and access a fire extinguisher.

---

Sources

each recipient of Section 5311 funds to develop a Coordinated Public-Transit Human-Service Plan. In Kansas, those plans were developed at the regional CTD level and needs were identified through community surveys and public meetings. The existing service in each district was documented in an inventory along with the demographics of the district.

The next step completed by the CTDs was to identify gaps, or needs that were not being met, in transportation service in their region.

As Kansas transit regions continue in their evolution, it will be important to revisit and update transit service gaps for each region. The sidebar at right provides two examples from the Guide about how other agencies are approaching this task.

Olsson Associates is currently under contract with KDOT’s Office of Public Transportation to work with providers in rural communities to help implement regional service. Updating needs and gaps in service is an important element of reconfiguring the regions, along with the organizational and financial aspects of regionalization. As a transit manager, be sure to review past plans and identify trends in your own community. For more information on the continuing move toward regionalizing in Kansas, contact KDOT transit manager Joshua Powers at joshuap@ksdot.org.

In sum

As the organizational and operational structure of transit changes in Kansas to become more regional, it is important to understand the unique service needs of each region. The recommendations provided in this Easter Seals guide series may be helpful in identifying existing and emerging needs.

For more information, visit Project Action’s Rural Transportation Topic Guide Series webpage at http://www.projectaction.org/ResourcesPublications/RuralTransportation.aspx. At present, two documents are posted: the Series’ introduction and “Assessing the Need for New Transportation Service in Rural Communities.” More guides are being developed. Easter Seals' Ken Thompson said that new postings for the series are forthcoming and will be tied into the new funding changes in MAP-21 and updates of Americans with Disabilities Act (ADA) requirements.

Examples of Assessing Emerging Rural Trends

**Rural New York.** The Rural Transportation Topic Guide Series highlights the Adirondacks Tri-Lakes Regional Community Empowerment Action Plan (2010) as a prime example of assessing emerging trends in rural transportation. The region used community-based planning to address the transportation needs of their aging communities, and customers with disabilities.

The effort was strengthened by community involvement from the early stages. A task force reviewed guidelines from other communities related to infrastructure, accessibility, walkability, and pedestrian safety, plus results from interviews and public surveys to complete their action plan. According to the Guide, the Adirondack plan is a model for other communities on how to identify the relevant customers and get involvement early for a gaps and needs assessment.

The Adirondacks plan provides specific suggestions for rural communities to serve the needs of customers with disabilities, stating that communities can contribute by “coordinating transportation services, establishing a voucher program where eligible individuals purchase trips, and by offering volunteer driver programs where volunteers are reimbursed by a transportation provider or other agency.”

**Rural Connecticut.** Another example of transit gap assessment is the Locally Coordinated Public Transit-Human Services Transportation Plan for the State of Connecticut (2007). This plan was highlighted in the Guide for using statewide surveys to obtain information on gaps and identifying services. The gaps were organized in five categories:

- Information and awareness,
- Geographical,
- Temporal,
- Passenger service, and
- Service quality.

The Connecticut plan reported on survey results showing access to transportation, “extends beyond the vehicle or the bus stop.” Using the five categories above in an assessment of new or expanded services may be useful to your agency or region.

Sources

- Thompson, Ken. Phone Interview. May 23, 2013.
- U.S. Census Bureau, Decennial Census. 2010.
What Every Driver Needs to Know: Basics of Customer Service

By Anne Lowder

Transit managers wear many hats. There is a different hat for managing grants, working on the budget, handling customer complaints, providing supervision, reviewing maintenance records, coordinating routes and working with city or county commissioners. Where does your driver’s training hat rank among all of those?

As a manager, your driver’s training hat needs to be Number One. Remember, your drivers are the people from your agency the public sees every day, and the people they rely upon for their safety. They expect your drivers to be professional trained.

A driver has several hats, too

First, the professional driver must provide a safe ride which is the combination of proficient defensive driving skills, efficient top-to-bottom vehicle inspections (pre-trip, on-route and post-trip), competent use of the lift, ability to operate and use all safety equipment on the vehicle, and ability to drive in a variety of road conditions.

Aside from the technical aspects of the job, the driver must respect the customer and honor the customer’s desire and right to be treated fairly and honestly.

My driver drives well, but…

As manager, you may know how you can train a driver to drive the bus, but what about customer service?

Every driver needs to know what providing excellent customer service looks like and feels like. Basically, excellent customer service in transit is no different than excellent customer service received at a bank, restaurant, or anywhere else. The customer wants to feel valued, appreciated and well cared-for. Training a driver to become a professional driver is giving him or her the tips and strategies to provide consistent and excellent customer service.

Peter Schauer of Peter Schauer Associates provided some great guidance on the importance of a comprehensive driver training program and its relationship to agency customer service at the CTAA Expo in June 2011. Learn more about what makes for a great driver training program by looking at what he shared about the Rhode Island Paratransit Authority (RIPTA) program.

Sympathy vs. empathy

Schauer said the customer service component of RIPTA’s training includes two keys to providing excellent customer service as a professional transit driver: 1) knowing the difference between sensitivity and empathy and 2) controlling the “lizard brain.” (See the sidebar on page 6 for a description of lizard brain.)

RIPTA’s trainers explain to the drivers the difference between sympathy and empathy. The mark of a professional driver is to be empathic without being sympathetic. Sympathy is feeling sorry for someone. Empathy is understanding someone’s feelings. RIPTA’s driver’s handbook teaches the skills to be empathic to customers while still following agency guidelines.

The object of excellent customer service is safe, high quality, uniform service. Professional quality customer service requires behavioral training about empathy vs. sympathy that is applied uniformly by every agency employee. Will all riders appreciate the uniformity? No. A professionally-run transit service, though—one that consistently follows agency policies, ADA guidelines and safety regulations—conveys professionalism to the customer and that will be appreciated.

To illustrate an example of when uniformity is needed, here is something I often hear when I am out in field. An agency has curb-to-curb service. Joel and Susan have both been trained and understand curb-to-curb service. Yet, Joel always walks Mrs. Martin beyond the curb.
to her door. Then one day Susan fills in for Joel and provides the “actual” curb-to-curb service. Mrs. Martin becomes upset with Susan—for following the policy. And that’s not fair. The service Joel provides should be the service Susan provides, and visa versa; no more, no less.

**RIPTA training levels**

The Rhode Island Public transit Authority (RIPTA) breaks down their training into levels of proficiency: gold, green, pink, and blue. Each level of training provides the driver with strategies for providing excellent customer service. Because some essential work of a driver is performed independent of supervision, drivers need to learn how to interpret and apply agency policies when on the road. RIPTA’s gold out-of-service training level start with an in-depth review of the agency’s driver’s handbook that contains the agency’s policies and regulations. The handbook specifies what, how and which services are to be provided by the transit system. It tells the operator what rules and policies the customers must follow, as well as what rules the driver must follow. Gold training also includes a thorough review of the vehicle, lift, GPS equipment, and more.

RIPTA’s second tier is the green out-of-service level, presented by a knowledgeable driver. In addition to being able to drive and use the equipment properly, the trainee is verified as being ready for full service after successfully undergoing a series of challenging scenarios to elicit correct behavioral choices (demonstrating lizard brain control). A critical factor in behavior control is prior knowledge about the way things are supposed to be done and to practice the correct behavior.

The final levels of the RIPTA training include the pink level for how to use a manifest, and the blue in-service training level with an experienced driver on board as the trainee operates the bus and lift with passengers.

**Say YES to continuing education**

RIPTA also holds annual refresher and certification trainings and ongoing special topics trainings. Continuing education, at team meetings or monthly training sessions, allows professional operators opportunities to discuss and practice situations in a classroom setting that possibly could happen on a route.

Schauer said the goal of continuing education is to provide the operators with “concerted control.” Concerted control is making a driver accountable for his or her actions by providing a blueprint to make good decisions. Working with your drivers to use their thinking brain requires them to visualize, talk, hear other drivers and practice scenarios to sharpen and retain their empathy skills. Adults learn by using their senses, and the more senses involved in a training session, the better the adult will understand and connect with the learning objective.

**What the customer really wants**

A professional driver needs to give your customers what they want, within **continued on page 6**
Customer service  Continued from page 5

Do you have a lizard brain?

What is a lizard brain? Think of the human brain as having two parts. The big part of the brain is the “thinking brain.” The smaller part of the brain, the hypothalamus or the “lizard brain,” coordinates hormonal and behavioral rhythms such as fight or flight and getting a mate. Everyone has a lizard brain, and too often, in stressful situations people react using that part of their brain, with less than desirable results. The goal for a professional driver is to stay in the thinking brain.

An important step to that end, suggested in Dinosaur Brains: Dealing with All Those Impossible People at Work by Albert Bernstein and Sydney Craft Rosen, is to remember that there is always time to stop and think. No one is going to get angrier if you say, “Wait a minute, I need to think before I answer.” Another tip is to ask yourself: “What do I want to happen?” Think the situation through carefully.

Other tips are to keep a soft voice and validate the customer’s request by paraphrasing or summarizing the customer’s statement. Use phrases such as: “If I understand correctly…” or “I hear you saying…” (and then repeat what they have just said). Or you can say “I have heard you identify these three concerns (name them) that frustrate you about how we…”

A professional driver has the ability to stay in the thinking brain if properly trained, and with thorough knowledge of the agency’s services, policies, and regulations—and the reasons for them.

Your professional drivers need training

What does every driver need to accomplish the basics of customer service? In sum, it starts with solid training. Schauer says that no driver should be left behind. Drivers should be trained on what they should know. A professional driver needs to provide a safe and comfortable ride. A driver should know the limits of providing assistance to riders. A driver needs to know that an important part of being a professional driver goes beyond the technical skills of operating the bus and equipment to providing professional customer service. A driver should have the resources and support materials for all of the above. Your professional drivers need an agency handbook that outlines the policies and regulations of your transit agency.

Past Kansas TransReporter articles (e.g. October 2006 and April 2009) provided ideas on how to recruit, compensate and retain good drivers. Professional drivers are not born, they are trained. Your drivers need the training that makes them a professional. Now that’s top hat.

Quiz Answers (see page 5): 1= Safe, High Quality and Uniform; 2= B and C; 3= Senses & Practicing; 4 = C; 5=D; 6=D
As the cost of paratransit service continues to grow, many transit agencies are considering integrating their demand-response service with traditional fixed-route service to encourage, to the extent possible, greater utilization of fixed route services. This integration allows the paratransit service to connect passengers from their origin to the fixed-route service and/or from the fixed-route service to their final destination.

In many cases, this type of transit integration is advantageous to both the transit agency and the passenger in terms of cost, level of service, and route expansion, and complies with the accessibility requirements of the Americans with Disabilities Act (ADA).

To successfully deviate from the traditional model of separate services, a high level of transit agency coordination, community participation, and marketing techniques are required. This article summarizes work done in a Transit Cooperative Research Program (TCRP) Synthesis Report (#76) titled “Integration of Paratransit and Fixed-Route Transit Services.” It defines integrated services, provides some notable examples of such services, and describe the marketing techniques used to promote these services by agencies that offer operate both demand-response and fixed-route service.

What are “integrated services?”

An agency that offers “integrated services” refers to one that has departed from the traditional model of separate fixed-route and complementary paratransit services by seeking a variety of ways to integrate services, including the provision of paratransit feeder services, community buses or circulators, connectors, fixed-route fare incentives, and route deviation.

The most common form of integrated service is the traditional ADA paratransit feeder service. For riders able to ride fixed-route service for at least some of their trips, the ADA allows transit agencies to limit trip offerings to a feeder service where individuals are transported from their origins to the fixed-route service and/or from the fixed-route service to their final destinations.

In many cases, this level of transit integration is advantageous to both the transit agency and the passenger. A survey conducted as part of the TCRP Synthesis 76 revealed that transit agencies are motivated to explore integrated services by cost savings accrued from shorter trips in addition to promoting the independence of their paratransit registrants.

Typically, most the infrastructure required for the conversion to integrated services already exists and no significant equipment purchases are necessary. Low up-front costs allow transit agencies to extend demand-response service into low-density markets or substitute a portion of demand-response service for fixed-route service. This typically reduces operating costs and increases the level of service by improving the capacity to accommodate trip requests and expanding the mobility options for riders who typically might use only complementary paratransit services.

Getting over the hump

Problem: One of the biggest challenges to implementing an integrated system is support from current paratransit riders. According to Steve Fittante, director of the Middlesex County (N.J) Department of Transportation, the challenge is convincing the riders to leave a one-vehicle paratransit trip for a transfer trip to a fixed-route service. Those riders may have limited experience with fixed-route transit, and the integration of services can make riders uncomfortable. This concern is echoed by other transit agencies, with numerous agencies having identified as a top priority the need to educate riders about integrated services.

Solution: One strategy to overcome concerns by current paratransit riders is to offer travel training programs. Paratransit Inc. in Sacramento, CA has been a leader in mobility training, offering a program that promotes independent travel for current paratransit riders. The nonprofit organization educates riders how to get to or from fixed-route stations, the specific stations in their area, and how to identify landmarks for navigation. The goal of the Americans with Disabilities Act (ADA) of 1990 is to promote the independence, integration, and self-sufficiency of people with disabilities. It requires that complementary paratransit services be provided to eligible elderly and disabled riders who are not able to fully utilize fixed-route transit service because of a disability.

Integrating fixed-route and paratransit services is congruent with the principles of the ADA. Many localities have made this conversion to increase efficiency and cost-effectiveness.
Marketing integrated transit services  Continued from page 7

The Metro Hopper initially met with resistance on a number of fronts, but resulted in an 86 percent increase in ridership and a 64 percent reduction in costs in fewer than three years.

Mandatory feeder programs generally do not market feeder service to transit ridership, but rather explain in their service brochures that service to paratransit-eligible riders may require a transfer to fixed-route service. ACCESS in Pittsburgh took this a step further by providing information about the integrated services in an eligibility determination letter, a follow-up telephone call, a fact sheet, and through a personal trip planning service offered to the eligible rider.

following services:
- Basic one-on-one training (10 hours or less)
- Intensive one-on-one training (More than 10 hours)
- Group training

The mobility training program has been shown to be very effective in deferring trips from paratransit to fixed-route and other services. Other agencies took notice. A mobility training contract was awarded to Paratransit Inc. by Spokane Transit's board in 2006, running through 2011. During this five year span, the program accounted for 131,090 deferred or avoided paratransit trips for a total cost avoidance of over $2.3 million. Travel training educates users on the nuances of fixed-route transit, and helps the user gain travel independence, subsequently reducing costs for the transit agency.

Promoting integrated services

In addition to travel training, various marketing strategies have been employed to educate riders and gain support for integrating services. Agencies that use integrated services are generally very proactive in publicizing their services, with strategies ranging from brochures and web-based information to partnerships with local businesses and unique branding. Here are a few examples:

In Colorado, the Denver RTD has teamed with local municipalities to advertise their Call-N-Ride program through utility bills, schools, libraries, and recreation centers. The resulting marketing campaign is projected to increase ADA paratransit customers 200 percent.

In Pittsburgh, PA, local transportation management associations conduct an extensive marketing campaign to promote The Elder Express, a paratransit service available to seniors and individuals with disabilities that connects to fixed-route service. The service is $3.00 per day and is routed through an area of Pittsburgh that has a high concentration of elderly residents. Eligible patrons are seniors 65 years and older who live in the 15217 zip code area. The service will drop off passengers at key nearby locations, including areas with access to the fixed-route service for trips outside of the service area. Originally funded through a federal grant, the service is now self-sustaining in part to an extensive public outreach promotion. The service was marketed through special free days and partnerships with local businesses to provide discounts to riders.

In California’s Central Valley, the San Joaquin Regional Transit District (RTD) has transitioned to a deviated fixed-route service nicknamed “The Hopper.” The Metro Hopper serves popular destinations throughout the Stockton city limits. Each bus can deviate from its normal route a distance of up to one mile to accommodate ADA-certified passengers. Because of this added flexibility, the Metro Hopper replaces two dial-a ride services and county fixed-route services during Hopper service hours, in the areas covered by the Hopper.

The Hopper initially met resistance from customers, stakeholders, and its funding partners due to initial capital costs. However, in part due to an extensive marketing campaign, the service has seen an 86 percent increase in ridership and a 64 percent reduction in costs in fewer than three years.

The Hopper service is distinguished from regular bus routes through a unique numbering system and color-coded routes printed in schedules and maps. “Freddie the Frog” was branded as the mascot, and the service was promoted through print, radio, web, direct mailer, schedules, brochures and outreach events. Since the Hopper’s inception in 2009, the agency’s paratransit cost per trip has gone down from $47.00 to $29.50 and the average number of passengers per hour has increased from 2.2 to 4.25. The San Joaquin RTD received the Compass Award from the Transportation Marketing and Sales Association for the Hopper marketing campaign in 2010.
Infectious Disease Awareness and Prevention training developed by the National Transit Institute will be held on October 2, 2013 in Garden City and October 3 in Wichita by a National Transit Institute trainer. The training is designed to provide accurate information on a variety of infectious diseases to which transit employees may be exposed on the job. Participants will learn how these diseases are spread and how to best protect themselves against infection. They will also review recommended procedures to follow for handling and disposing of infectious waste and for disinfecting and decontaminating themselves, equipment, and facilities in the event of an exposure. Classes are available to sign-up for on the web at http://www.ksrtap.org.

Sources


• Phone Interview: Maxine Horn, AgeWell Pittsburgh, April 22, 2013.

• Phone Interview: Phil McGuire, Paratransit Inc., April 26, 2013.


Kansas Training: What’s New in 2013?

By Anne Lowder

Kansas RTAP provides driver and managerial training on a number of different subject areas. This year we added two classes to our most popular training series (the driver training classes) and we will offer an additional class taught by a trainer from the National Transit Institute. See details below.

Crisis Communication for Transit Employees is a Kansas RTAP class developed by the National Transit Institute. Its focus is looking at effective communication—whether your drivers are making decisions during a catastrophic event or handling a mundane instance such as a prolonged service delay. The training equips frontline and supervisory transit personnel with the skills and techniques they need to communicate effectively within their agencies and with passengers throughout a crisis to enable successful response and recovery. See page 16 for dates and locations for this class.

Evacuation Techniques for Individuals with Disabilities and the Elderly is a Kansas RTAP hands-on course focusing on vehicle evacuation developed by Metro Transit in St Louis, MO. Because vehicle evacuations do not occur very often, operators are not always prepared to “think in the emergency mode” when it does happen. This training examines the process of evacuations, including how to identify hazards and evaluate the best way to conduct an evacuation, how to stay calm, and how to evaluate options for helping non-ambulatory or visually impaired passengers so that all passengers can be safely evacuated from the vehicle. See page 16 for dates and locations for this class.

Infectious Disease Awareness and Prevention training developed by the National Transit Institute will be held on October 2, 2013 in Garden City and October 3 in Wichita by a National Transit Institute trainer. The training is designed to provide accurate information on a variety of infectious diseases to which transit employees may be exposed on the job. Participants will learn how these diseases are spread and how to best protect themselves against infection. They will also review recommended procedures to follow for handling and disposing of infectious waste and for disinfecting and decontaminating themselves, equipment, and facilities in the event of an exposure.

Classes are available to sign-up for on the web at http://www.ksrtap.org.
Imagine an experienced pilot attempting to land an airplane on a busy runway. He pays close attention to his display console and carefully watches the airspeed indicator on his windshield to make sure he does not stall, yet he does not see that another airplane is blocking his runway!

You’d think an attentive pilot would notice the airplane. However, in a study by Haines (1991), a few experienced pilots training with in-flight simulators proceeded with their landing when a clearly-visible airplane was blocking the runway and it was too late to avoid a collision. Makes you glad for air traffic controllers!

This is an example of what psychologists call “inattention blindness” or IB for short. (Mack & Rock, 1998). IB is the failure to see a highly-visible object in your direct line of sight when your attention is elsewhere. IB may account for many vehicle crashes.

Here’s another example of IB, this time with real-life consequences involving a transit vehicle. In 2012 a DART van slammed into the back of a sedan, leading to a five-vehicle wreck on the Dallas North Tollway. Investigators are still looking into the crash, but a preliminary report from DART reveals the van’s driver, a paratransit operator for 11 years, failed to control his speed and wasn’t paying attention. Watch at http://www.youtube.com/watch?v=xpwF_gN7zZU.

What is this? It is a bad idea to talk on a cell phone (or listen to your passengers talk on their cell phones), text, or even thinking about your grocery list while driving. Most people assume the human eye functions like a camera and you see whatever is in front of you by merely opening your eyes and looking. Perhaps this is why events like the van and the airplane crash scenarios seem so astonishing. However, minor instances of IB occur every day, such as when you pass by a friend without seeing her, or can’t find your car keys when they are right in front of you.

**The Problem**

**United States.** In 2011, 3,331 people were killed in crashes involving a distracted driver, up from 3,267 in 2010. In addition, 387,000 people were injured in motor vehicle crashes involving a distracted driver, down from 416,000 injured in 2010. Eighteen percent of injury crashes in 2010 were reported as distraction-affected crashes. (NHTSA, 2012).

**Kansas.** In Kansas, 431 people were killed in 2010 and over 21,000 injuries resulted from car crashes (all causes), and almost 20 percent of those were due to inattention. This percentage is comparable to the national average. A Kansas Department of Transportation report, 2010 Accident Stats, shows that most crashes occurred in good weather, on dry road surfaces and where the road is straight and level.

Further, Kansas statistics from 2008 to 2009 show a 25 percent increase in the number of crashes with distracted driving as the reason. This may be an underestimation of the real problem in Kansas. However, even if the statistics are conservative, the trend is troubling.

**What’s going on?**

What “other” things do you do while driving? Text? Adjust your radio? Talk with passengers? Talk with your dispatcher? Use GPS technology? These distractions can lead to inattention blindness. Any mental task, such as just thinking about what to make for dinner, can also reduce available attention.

Our inability to multi-task was illustrated by a study in which observers watched a video of a group of people in white and black shirts passing basketballs to each other. The observers were instructed to count how many times the white team passed the ball. After 30 seconds of observation and while the balls are still in play, a gorilla walks across the screen for approximately four seconds. The results indicated that only 21 percent of the observers actually noticed the gorilla, or in other words 75 percent of the observers had inattention blindness. (Daniel Simmons, Trends in Cognitive Sciences, Vol. 4, No. 4, April 2000). Most of the observers’
attention was devoted to one task, and they did not see what was right in front of them. See the video at http://www.youtube.com/watch?v=IQQmdoK_ZfY.

Multitasking is valued in today’s culture, and our desire for increased productivity makes it tempting to do other tasks (such as your passenger list or agency paperwork) besides driving while behind the wheel. However, multitasking is a myth. Human brains do not perform two tasks at the same time. Instead, the brain handles tasks sequentially, switching between one task and another. Brains can juggle tasks very rapidly, which leads us to believe we are doing two tasks at the same time. In reality, the brain is switching attention between tasks, performing only one task at a time.

Multitasking can bring risks when unexpected driving hazards arise. Under most driving conditions, drivers are performing well-practiced, automatic driving tasks. For example, without thinking about it much, drivers slow down when they see yellow or red lights, and activate turn signals when intending to make a turn or lane change. These are automatic tasks for experienced drivers. Staying within a lane, noting the speed limit and navigation signs, and checking rear- and side-view mirrors also are automatic tasks for most experienced drivers. During the vast majority of road trips, nothing bad happens. But that also can lead a driver to feel a false sense of security when driving.

A driver’s response to a sudden hazard, such as another driver’s errant behavior, a disruptive passenger, or animals or objects in the roadway, is often the critical factor between a crash and a near-crash. When a driver is multi-tasking, the ability to process the information slows, and he or she is much less likely to respond to an unexpected hazard in time to avoid a crash.

**We know it’s dangerous, but we do it anyway!**

Why do we do things that distract us while we are driving? One reason is that we do not think our own behavior (cell phone use, texting or checking the manifest) poses a safety risk. AAA surveyed drivers and found that 83 percent of the respondents thought using cell phones is a “serious” or “extremely serious” problem, but over half of the respondents did not believe that their cell phone use was a problem.

The other reason is the “pleasure center” theory of researchers James Olds and Peter Milner in 1954. More recently, in 2010, neurologist Michael Seyffert showed that multi-tasking (texting and cell phone use) stimulates the “pleasure center” in our brains by releasing the chemical dopamine. Dopamine delivers a sense of pleasure to an individual so that he or she is motivated to repeat the behavior. Read more at an article titled “Cell Phone Addiction” posted at http://www.accenthealth.com/Patients/Feature-Detail/240/.

**So what can be done?**

The first thing you can do is get into the habit of putting your phone on silent while driving.

Second, download a mobile app that will send an automatic reply to someone calling you, such as: “I can’t respond. I am driving.”

AT&T DriveMode is one example of a free app available to Android and Blackberry users. This app automatically sends a customized reply to incoming texts. It also disables all incoming and outgoing calls and Web browsing. Users manually enable the app before driving.

DriveSafe.ly is another app available for $3.99 per month. Instead of shutting down communications entirely, this app reads text messages and emails out loud in real time, including shortcuts like LOL, and sends an auto response. You can even choose whether to have texts read to you with a male or female voice, based on the gender of the text sender. However, be cautious about using this type of app, because it can be a distraction in itself.

There are also apps that detect motion such as “The Drive First” app from Sprint that sends calls to voicemail and silences email and text alerts when a vehicle reaches 10 mph. Finally, enforcement of laws and education about the dangers of distracted driving need to be ongoing to change behaviors. It is well known fact that when it comes to things like impaired driving, speeding, and not using safety belts, even when people are aware of the risks, they may not readily change behaviors to reduce the risks.

**Summary**

Most drivers are not aware that their minds cannot really multi-task. At any given time, a person’s working memory is limited in the amount of information it can hold and the number of operations it can perform. The risky behaviors of pushing that capacity to its limit by texting, talking on a cell phone, eating,—or doing anything but driving while driving—need to stop. Understanding what’s happening on the road only 35 percent of the time is not what anyone can call responsible driving.

**Sources**

Transit Safety: Many Parts, One Objective

By Erik Berg & Jon Moore

KDOT strives to keep vehicle procurement guidelines up-to-date with safety standards. Kelly Broxterman, public service administrator for KDOT’s Transit Division, said, “We write our specifications to get the best quality products. Most vendors tell us that our safety specs are some of the best they’ve seen.” Broxterman said some other states have modeled their safety specs on KDOT’s.

Broxterman said Kansas doesn’t experience many transit crashes, in part because of KDOT’s rigorous safety standards. The specs were written to conform to the Federal Motor Vehicle Safety Standards (FMVSS). Among the safety equipment KDOT has spec’d are integrated 3-point seatbelts in certain vehicles, a driver’s shield to minimize interference and distraction by passengers, and slip-resistant floors. She said KDOT routinely asks vendors to update KDOT on the newest safety technologies coming onto the market, and KDOT reviews new safety technology to see how it performs before mandating it in vehicles.

When passengers board transit vehicles, they expect reasonable fares, quick and efficient service to their destinations, and perhaps the chance to relax on the way. They don’t expect the shock and pain of being involved in a crash. Even though avoiding crashes is a primary concern of a transit agency, action to reduce risk is sometimes reactive rather than proactive — action is put off until it’s too late. What can be done now?

A report on bus occupant safety by the Transit Cooperative Research Program (TCRP Synthesis 18) identified typical causes of crashes and suggests some specific steps you can take. This article will provide a bit of background on the most common types of crashes and a few of the solutions suggested.

The numbers

According to FTA’s Rural National Transit Database (NTD) that tracks incidents for Section 5311 transit agencies, there were 283 major incidents nationally in 2011 for just under 1,650 agencies. Ten fatalities and 261 injuries were reported (http://www.ntdprogram.gov, Rural NTD Safety Data, 2011).

No major incidents, fatalities or injuries were reported for Kansas’ 90 rural transit agencies in that period, but there were six injuries (and no fatalities) for Kansas urban transit agencies. While low injury and fatality records are great news for Kansas, all agency personnel, from the director to the driver and mechanic should be on constant alert to make sure that safety for the passenger, the driver and the community are of the highest priority.

What were some of the causes of the incidents for transit agencies?

The authors of TCRP’s Synthesis 18: Bus Occupant Safety found that one-third of passenger injuries for one large transit agency occurred during boarding and alighting, and an additional one-fourth occurred while the bus was stopped. For a smaller agency in the study, the greatest percentage of collisions occurred between vehicles, followed by collisions at intersections.

Of crashes where people were injured, over 30 percent occurred on-board the vehicle. In New York State, the authors found that over 30 percent of crashes were caused by transit drivers, while 27 percent were caused by equipment failures (data supplied by New York State Public Transportation Safety Board). In

continued on page 14

Sources

If you are interested in Geographic Information Systems applications for transit, a conference planned for October 16-17, 2013 in Washington, D.C. may be just the ticket. The objectives of the conference include:

1) providing GIS transit professionals an opportunity to learn from peers and industry experts (vendors, researchers, and practitioners),
2) discussing emerging trends in geospatial analysis and transit informatics,
3) demonstrating the use of GIS data to improve transit efficiency and effectiveness, and
4) providing a forum for public-private discussions about practical applications of new technologies.

The conference is co-sponsored by the Federal Transit Administration, and jointly organized by the National Center for Transit Research (NCTR), the Transportation Research Board (TRB) and Urban and Regional Information Systems Association (URISA).

Don’t miss this unique conference for transit planners, managers, researchers and GIS industry experts. For more information, visit the conference website at: http://www.urisa.org/gis_transit.

Free “Contact Builder” Web App Available to Rural Agencies

By Pat Weaver

National RTAP in the Cloud’s free Contact Builder is a web-based application that allows organizations to create, manage, and send messages to contact lists. For organizations using cumbersome spreadsheets and listservs for their electronic communications, the Contact Builder web app allows administrators to easily and efficiently manage both their contacts and their electronic message campaigns in the same tool.

What are the features?

• User-friendly administrative interface
• Featured message function that allows website visitors to view previously sent messages
• Statistics for each message campaign including the open rate and bounce back information
• Basic templates to visually enhance your emails
• Ability to allow visitors to your website to self-subscribe to various types of notifications
• Ability to send messages with images, hyperlinks and attachments
• Tweet a highlight from your email without leaving the Contact Builder platform

Patti Monahan, executive director of National RTAP, says: “Contact Builder is the perfect tool for managing email communications with a customer group. If you maintain a contact list of riders, transit association members, or Section 5311 transit providers, consider using this latest National RTAP in the Cloud web app to make emailing newsletters, updates, and other messages simpler and more effective.”

To access the Contact Builder web app, as well as the full suite of National RTAP web apps, go to http://www.nationalrtap.org and create a National RTAP Cloud account for your organization. This product is available to use free of charge.

For more information, contact Shannon Greenwell at (781) 404-5013 or sgreenwell@nationalrtap.org

“GIS in Transit” Conference Planned

If you are interested in Geographic Information Systems applications for transit, a conference planned for October 16-17, 2013 in Washington, D.C. may be just the ticket. The objectives of the conference include:

1) providing GIS transit professionals an opportunity to learn from peers and industry experts (vendors, researchers, and practitioners),
2) discussing emerging trends in geospatial analysis and transit informatics,
3) demonstrating the use of GIS data to improve transit efficiency and effectiveness, and
4) providing a forum for public-private discussions about practical applications of new technologies.

The conference is co-sponsored by the Federal Transit Administration, and jointly organized by the National Center for Transit Research (NCTR), the Transportation Research Board (TRB) and Urban and Regional Information Systems Association (URISA).

Don’t miss this unique conference for transit planners, managers, researchers and GIS industry experts. For more information, visit the conference website at: http://www.urisa.org/gis_transit.

The 2013 Transit Midwest Conference will be held August 4-8 at the InterContinental Kansas City at the Plaza in Kansas City, Missouri. This joint conference represents the state transit associations of Kansas, Missouri, Nebraska and Iowa, along with the Federal Transit Administration. This educational and networking event is focused on current issues facing public transportation and will feature a range of state and national presenters. It will also be a forum for Region 7 advocacy and legislative strategy development to the U.S. Congress and the Administration.

Along with the annual meetings of each of the transit associations, a number of technical and educational sessions will be held on topics including successful grant-writing, performance measurement for mobility managers, customer service, Medicaid non-emergency medical transportation, and much more. Any transit agency personnel, policymakers, board members, government agencies, and suppliers will benefit from attending this conference. For more information and registration, visit the conference website at http://www.cabllc.com/TransitMidwest2013/general.htm.
Transit safety Continued from page 12

over 60 percent of cases where drivers were the cause of crashes, failure to drive defensively was the cause. The leading causes of equipment failures were brake failure, followed by electrical failure.

What are some solutions?
As part of TCRP’s Synthesis 18, the authors surveyed transit agencies to learn about their safety practices and what areas of safety they sought to improve. Here are some of their findings:

Driver training programs. Most of the transit providers surveyed had driver training programs, with most of those programs focusing on defensive driving. Most agencies also had programs to reward drivers for good safety records. All had procedures to be followed by supervisors and drivers in the event of an accident, and all maintained crash and safety records.

Safety incentive programs for drivers were offered by 25 of 27 responding transit agencies. Incentives included bonuses, dinners/banquets, and/or award ceremonies. These benefits for drivers may both increase passenger safety and employee satisfaction.

Customer safety programs. Customer education or training programs were used often among those surveyed. The most common type of program was designed for school children, providing anything from coloring books with safety messages to on-site presentations including a demonstration ride on the bus. Other tools include a video and teacher’s guide explaining how to safely ride a bus, taking care of public equipment, and how to pay a fare. For the general public, many agencies offered pamphlets and posters to educate passengers about safety features and safe rider behaviors.

Safety management programs. Many agencies surveyed also had a system-wide safety plan with policy statements that guide decision-making so that safety is a priority in each decision.

In one example, 16 safety functions were identified to support the health and safety of both employees and customers. The plan called for a committee to help support the importance of safety issues including staff members from multiple departments of the transit agency. The committee coordinated all safety-related activities, made suggestions for safety improvements, reviewed accidents, and participated in operator ride checks.

Vehicle improvements. Some agencies surveyed addressed safety by making vehicle improvements. For example, transit vehicles have large blind spots. Without proper mirrors or cameras, drivers can’t see embarking passengers who are behind vehicle doors, or other pedestrians or vehicles that may be near or behind the transit vehicle. Better mirrors, improved positioning of mirrors, and camera systems featuring multiple cameras to show side- and rear-views outside the vehicle show great promise for overcoming blind spot problems.

Further assistance
The U.S. Department of Transportation and its Federal Transit Administration have sponsored the development of resources to help provide transit providers with the education and resources to improve system safety.

The Transit Bus Safety and Security Program, an FTA initiative, offers a web-based road map for continuous improvement of the safety, security, and emergency preparedness of transit systems. Their website offers agencies who become members a voluntary self-assessment of the agency’s system safety and security. The Program includes working groups, State DOT orientation seminars, workshops, and access to the FTA’s Project Team. The FTA team performs on-site assistance when requested. The Program stresses that its road map is not a compliance-based standard, but merely a voluntary way for transit providers to get the assistance they need to improve safety for their passengers. To access the resources of this program, visit http://bussafety.fta.dot.gov.
PUBLICATIONS and TOOLS

Circular 4702.1B. The Federal Transit Administration has revised its Title VI Circular to help transit agencies better understand FTA requirements and provide better guidance on how compliance can be achieved. Federal Transit Administration. June 1, 2013. Available for download at http://www.fta.dot.gov/civilrights/12328.html

Analyzing Driver Behavior Using Data from the SHRP2 Naturalistic Driving Study. The Strategic Highway Research Program (SHRP 2) has released a project brief that describes how Naturalistic Driving Study (NDS) data can be searched. The brief also provides an overview of three SHRP 2 projects that are analyzing NDS and Roadway Information Database data to develop real-world safety countermeasures Transportation Research Board. June 5, 2013. http://www.trb.org/Main/Blurbs/169021.aspx


Planning for Transportation After Medical Services. This new resource, a brochure, helps patients and their caregivers talk to physicians and health care providers about their transportation needs. Developed by the AMA and Easter Seals, the guide offers tips and questions for patients to consider when evaluating their transportation options, as well as resources for finding and securing appropriate transportation assistance. Available in English or Spanish language versions. Download the English version at http://www.ama-assn.org/resources/doc/public-health/transportation-guide.pdf, or
  ❑ Order English version in hard copy. Fill out and fax order form below.
  ❑ Order Spanish version in hard copy. Fill out and fax order form below.

UPCOMING CONFERENCES


See more conferences on page 16.

ORDER FORM

A few of our above resources are available in hard copy for readers who do not have internet access. These resources have a checkbox at the end of the listing. Check the item(s) you would like to receive and fill out the form below. Fax to (785) 864-3199.

Name_________________________________________ Title_________________________________________

Agency_________________________________________ Phone_____________________________________

Street Address___________________________________ E-mail address_____________________________

City____________________ State__________________ Zip + 4____________________
The Kansas TransReporter is an educational and technology transfer newsletter published quarterly by the Kansas University Transportation Center (KUTC), under the umbrella of KU’s Transportation Research Institute. The newsletter is free to rural and specialized transit providers and others with an interest in rural and specialized service.

The Kansas TransReporter 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 RTAP 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.

July 2013, Volume 26, Number 3. Copyright © Kansas University Transportation Center. All rights reserved.

Reproduction of material appearing in the Kansas TransReporter requires written permission.