Kansas
Transit Reporter

April 2021

The Newsletter for Kansas Rural and Specialized Transportation Providers • University of Kansas Transportation Center

FEATURE

Effective Techniques to Reduce Transit-Driver Distracted Driving Due to Using Cellphone and Handheld Devices

By Nikhila Gunda

The U.S. Department of Transportation (USDOT) states that distracted driving "occurs when a driver undertakes any activity that diverts attention away from driving." Some common distractions include using a cellphone or other hand-held devices, talking with passengers, eating or drinking, reading, and adjusting the radio or navigation system while driving. Distracted driving is a safety and public health concern. It is important for transportation providers to develop and adopt new policies, provide education programs and enforce laws and rules that restrict the use of cellphones and other hand-held devices. This article lists some of the effective techniques adopted by various public transit agencies to reduce distracted driving due to cellphones and other hand-held devices.

Continued on page 5

FEATURE

Taking a Second Look at Tires

By Anne Lowder

Does your vehicle shake while you drive down the road? Has a tire fallen off your bus lately? You notice cracks in the sidewall, but you still have good tread – no need to worry – right? These items are often bypassed during vehicle pre-trip inspections, so now is the time to take a second look at those tires.

In December I was training at an agency and a supervisor received a text that two tires had fallen off one of the agency's buses. If this is something you do not want to see happen at your agency, it is time to expand tire pre-trip inspection beyond checking the tire pressure and tread depth. I spoke with Joe Drier, owner of Mel's Tire in Emporia, Kansas and he agrees "that a visual inspection of tires should be done every time before heading out."

In a previous article I wrote on tire safety, Tire Safety in Ten: Tire Pressure and Wear, I discussed inspecting the tire using a tire pressure and tire tread gauge. I have heard from many Kansas transit agencies that they are

Continued on page 2

INSIDE

Taking a Second Look at Tires Continued from page 1

properly checking tire pressure and tread depth. That's good news! -- and a great start. However, there is more that can be noticed in a visual inspection. This article will review a few other key things to consider when inspecting the tires on your vehicles.

IT'S ALL IN THE ALIGNMENT
Tire alignment, also known as wheel alignment, can help your tires perform properly and help them last longer. It can also improve handling and keep your vehicle from pulling in one direction or vibrating strangely on the road.

WHAT IS TIRE ALIGNMENT?
Joe Drier, owner of Mel's Tire, Emporia, Kansas stated that: "alignment is an adjustment of a vehicle's suspension which is the system that connects a vehicle to its wheels. Vehicle alignment is not an adjustment of the wheels or tires but the adjustment of the angles of the tires which effects how they contact the road."

Improper wheel or tire alignment can cause your tires to wear unevenly and can create camber wear, caster wear, or feathering or toe/heel wear. (See side bar for the definition of each). If you notice these unusual wear patterns, your vehicle should be inspected for a misalignment. Vehicle misalignment not only causes tire wear; it also creates problems for vehicle performance.

HOW DO I KNOW IF I NEED A TIRE ALIGNMENT?
"When you inspect your tires and see uneven tread wear, you need an alignment, Drier said. Other signs that an alignment is needed when the vehicle pulls left or right, the steering wheel is off center when driving straight, and the steering wheel vibrates."

DON'T FORGET ABOUT THE BALANCE
Tire or wheel balancing refers to compensation for any weight imbalances in the tire/wheel combination and is often performed in conjunction with wheel alignment. There are two basic types of tire/wheel imbalance that need correction – static and dynamic.

Drier explained, "That static balance is when the tire is spinning oblong or egg-shaped instead of in a circle and makes the tire bounce up and down. Dynamic imbalance is when you have a heavy spot that is off the midline of the wheel and makes the wheel wobble left to right. Both can happen on the same wheel. To correct the problem, have the tire balanced."

HOW TO BALANCE A TIRE?
To balance a tire, Drier said, "The technician takes the tire off the car and places it on a machine that identifies the unbalanced spot on the tire. The technician will add weights to counterbalance the wheel until it runs as straight as possible, aka 'true.' Once the wheel runs 'true,' it can then be remounted to the vehicle."

Tire balancing is essential for proper tire care for the same reason as wheel alignment: prevention of premature tread wear. Hankook, Bridgestone, and Michelin tire manufactures recommend having tires aligned and balanced every 5,000 to 6,000 miles (about twice the width of the United

Why Tire Alignment Matters

Improper wheel or tire alignment can cause your tires to wear unevenly and prematurely. Here Listed below are some specific types of tread wear attributable to misalignment:

Camber Wear. This is the inward or outward angle of the tire when viewed from the front of the vehicle. This strain of tread wear means the inside or outside of the tread is significantly more worn than the center of the tread. As its name implies, positive or negative camber causes this type of wear.

Caster Wear. Caster angle helps balance steering, stability, and cornering. Specifically, it is the angle of your steering axis when viewed from the side of your vehicle. If you have positive caster, the steering axis will tilt toward the driver. Negative caster, on the other hand, means the steering axis tilts toward the front of your vehicle.

FEATHERING. Tires are "feathered when the tread is smooth on one side and sharp on another. This is usually a sign of poor toe alignment.

HEEL/TOE WEAR. This happens when one side of your tread blocks wears down more quickly than the other in a circumferential direction. When you run your hand over the tread, it will look and feel like saw teeth when viewed from the side. Heel/toe wear could be a sign of under inflation and/or lack of rotation.

States) to maximize the tire lifespan and overall performance. Specific recommendations for tires for your vehicle can be found in the owner's manual of the vehicle.

MY TIRE CRACKS ME UP – IS THAT GOOD?

"Tire cracking," according to Drier, "is not good." "Tire cracking is dry rot and can occur due to tire age, weather/climate and if the tire has been sitting for a while with low tire pressure. Tires are made of rubber. Think about a rubber band left outside in wind, rain, hail, and sunlight for years. Then, imagine that rubber band running over asphalt every day – think it would wear out? You'd be right. Tire rubber naturally degrades over time. Being observant of cracks can help determine when it is time for new tires. "

CAN TIRE CRACKING BE PREVENTED?

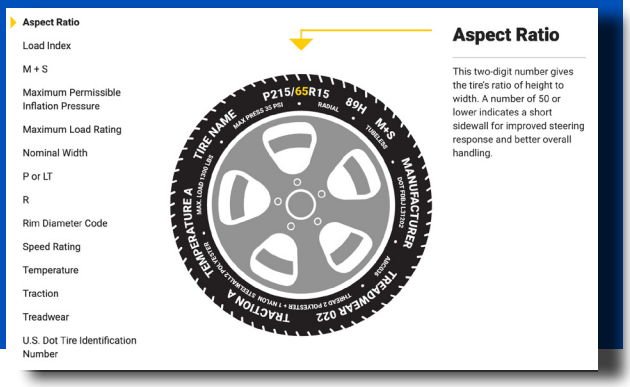
The obvious reason for tire cracking (age of the tire and weather) cannot be prevented. Drier noted, "some sidewall cracks happen because of the driver scraping the tires against the curb or leaving the vehicle parked for extended periods. Also, the chemicals in some tire cleaners may be harsher than others causing the rubber to dry out."

WHAT DO WE DO IF TIRE INSPECTION SHOWS SIDEWALL CRACKING?

Michelin Tire has the "MAST" chart that shows degrees of cracking. The chart states that superficial sidewall cracking may not be an immediate safety concern for your vehicle. More severe cracks may suggest a tire replacement for your safety, especially during the winter. Tire manufactures, such as Hankook, also recommend that if a tire is six years old or more,

DID YOU KNOW YOUR TIRES EXPIRE? THIS CHART SHOWS HOW TO READ THE MARKINGS ON YOUR TIRE.

If you want to explore an interactive tire label graphic go to NHTSA: "If tires labels could talk this what they d say. https://www.nhtsa.gov/



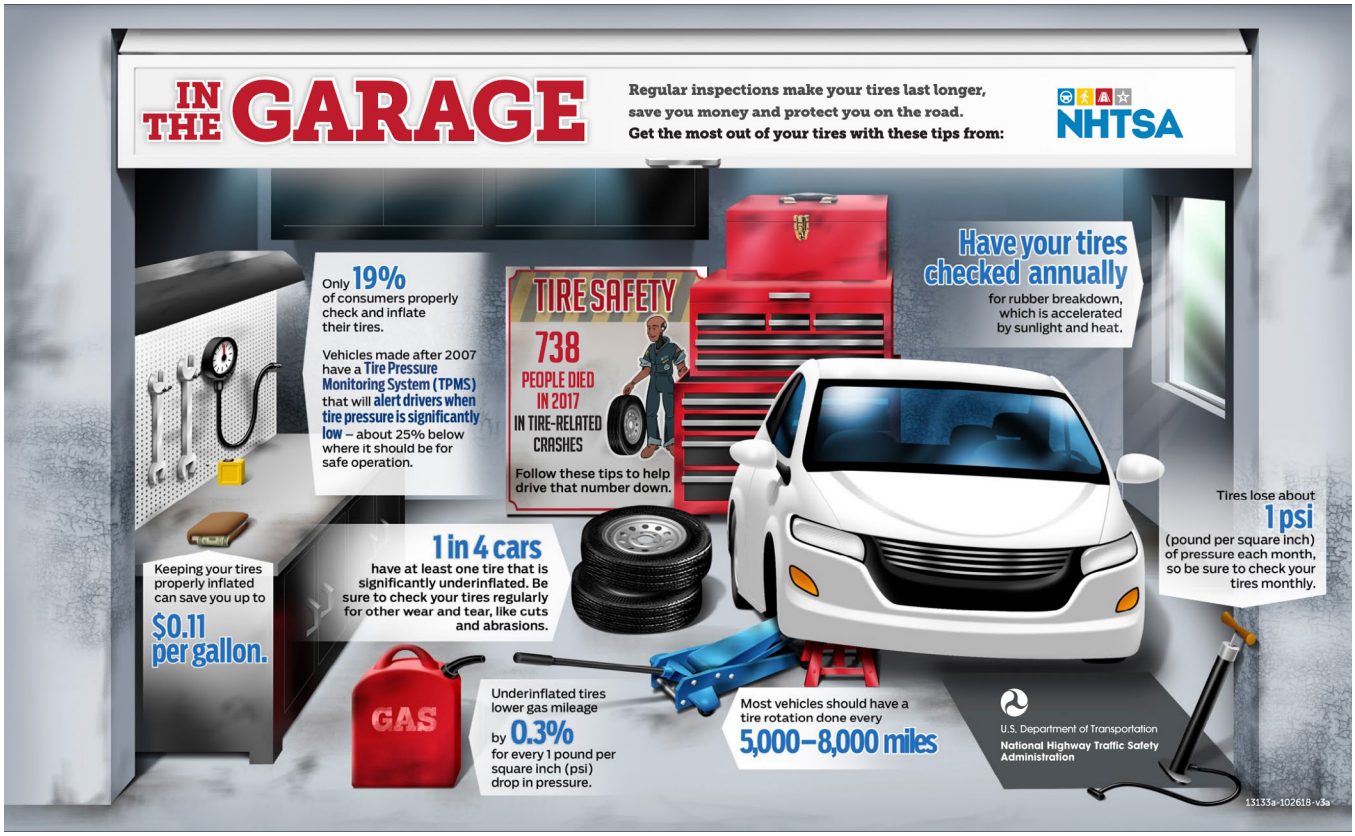


Figure 1 - NHTSA Poster In the Garage

you need a new tire especially if you have excessive tire cracking. Dry rot, on any part of the tire, is a safety issue. Drier explained, "Inspect your tires frequently! Keeping healthy tires on your vehicle will help to prevent blowouts and flats. Be a safe and smart driver."

IT'S REALLY ALL ABOUT THE LUG NUTS

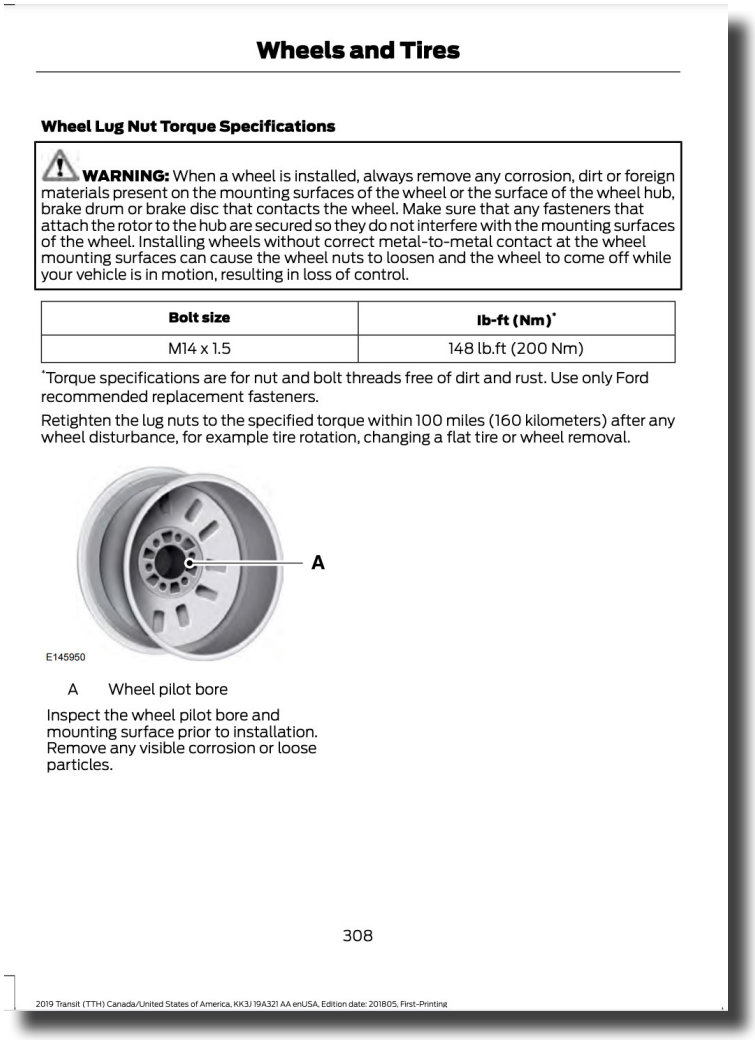
WHY DO LUG NUTS COME LOOSE?

Wheels come off when the wheel nuts holding the wheel to the vehicle become loose. Drier noted, "There can be a number of reasons why a wheel nut can become loose which include over and under torquing of the lug nuts, thermal contractions, containments in the threads of the lug nuts and excessive braking."

According to It Still Runs article on What Causes Lug Nuts to Keep Coming Loose? over torquing stretches the threads and can result in cracked or cross-threaded nuts and cracked wheels. Under torquing can cause the nut to settle then it cannot be re-torqued. A second condition called thermal contractions occurs when the different metals of the tire wheels and lug nuts expand and contract due to weather conditions. Tire wheels are made of aluminum alloy and tire lug nuts are made from steel. These two different metals expand causing thermal contractions that loosen the lug nuts even if mounted at factory specifications. (Tire mounting specifications can be found in the vehicle owner's manual). Third, is "non-flat mating surfaces." This is where tire wheels are bent and damaged, worn, or misshaped bolt holes or poor bolt and stud quality which causes a mismatch or bad match were the lug nut cannot tighten down correctly. Fourth, contaminants such as dirt, sand, rust, metal burrs, and paint on mating surfaces can create "false torques." Finally, excessive braking can result in elevated temperatures (especially among heavy vehicles) causing the wheel bolts to expand and contract as the temperatures vary. This causes the wheel nut to come loose.

ARE YOU MISSING LUG NUTS?

"If lug nuts are loose or missing," according to Drier, "the forces that the tire is under from cargo, road vibration, cornering etc. are redistributed to the other lug nuts causing them to loosen as the wheel force changes. Finally, the stress on just one or two lug nuts



Wheels and Tires

Wheel Lug Nut Torque Specifications

WARNING: When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of control.

Bolt size	lb-ft (Nm)*
M14 x 1.5	148 lb.ft (200 Nm)

*Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.

Retighten the lug nuts to the specified torque within 100 miles (160 kilometers) after any wheel disturbance, for example tire rotation, changing a flat tire or wheel removal.

A Wheel pilot bore

Inspect the wheel pilot bore and mounting surface prior to installation. Remove any visible corrosion or loose particles.

308

2019 Transit (TTH) Canada/United States of America, KK3J 19A321 AA enUSA, Edition date: 201805, First-Printing

Figure 2 - 2019 Ford Transit Owner's Manual (pg 308)

can cause the nut or bolt to fracture and the wheel to fall off the vehicle."

Other damage that loose and missing lug nuts cause is side loading as the tire rubs against the hub, bending of the studs due to fatigue, enlarging of the holes due to friction and finally wheel separation if not detected early.

SUMMARY

Your tires are a safety feature and should not be overlooked. Tires are more than just a piece of rubber that's round and rolls. Tires are a piece of advanced engineering that support the weight of your vehicle and helps to stop your vehicle. Vehicles that are out of alignment, are not balanced, have cracking sidewalls and lug nuts that are loose or missing results in dangerous situation for you, your passengers, and others driving on the road that could lead to tire blowouts or tire separation. Good tire maintenance and daily inspections of your tires are your prevention tools that will alert you to tire problems.

Sources

Drier, Joe. (2021, March 19). Mel s Tire Emporia. personal. Interviewed by Anne Lowder.
Ford. (2020, September 28). 2019 Ford Transit Connect Lug Nut Torque Specs: Wiki Auto. Sparky Express. https://www.sparkyexpress.ca/blogs/auto-blog/2019-ford-transit connect-lug-nut-torque-setting.
Ford Motor Company. (2018, August). 2019 TRANSIT Owner s Manual. Ford Service Content. https://www.fordservicecontent.com/Ford_Content/Catalog/owner_information/2019-Ford-Transit Owner-Manual-version-1_om_EN-US_En-CA_08_2018.pdf.
Glennon, J. C. (2021). Wheel and Hub Failures. http://www.crashforensics.com/wheelandhubfailures.cfm.
Hankook US. (2021). Technical Manual. Hankook US. http://www.hankooktire.com/us/truck-bus/supports/technical-manual.html.
Holmes, C. (2019, January 10). What Causes Lug Nuts To Keep Coming Loose? It Still Runs. https://itstillruns.com/causes-nuts-keep coming-loose-6148073.html.
NHTSA. (2021). In the Garage Infographic. NHTSA.gov. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13133a-english_garage_infographic_102618_v3a_tag.pdf.
NHTSA. (2021). National Highway Traffic Safety Administration. https://www.nhtsa.gov/equipment/tires#topic-maintenance.
Normark Industries. (2007). Loose Wheel Nuts - Causes and Effects, News Articles. http://www.normarkindustries.com/CausesEffects.htm.

FEATURE

Effective Techniques to Reduce Transit-Driver Distracted Driving Due to Using Cellphone and Handheld Devices

Continued from page 1

Lockboxes for Driver Cellphones in Wyandotte County, Kansas

A new innovative technique to avoid distracted driving due to cellphone devices has been recently adopted by Unified Government Transit (UGT) that serves Wyandotte County and Kansas City, Kansas (Hurst, 2021). This technique requires the driver to turn off their cellphone, lock it in a pouch, and stow it in a secure location out of driver's view prior to operating any transit vehicle. To unlock this pouch and use the cellphone, the driver must park his or her vehicle in a safe location, place the vehicle in park, turn off the vehicle's engine and remove the key from the ignition.

How Yondr Pouch works: To create phone-free spaces a company called Yondr designed a pouch that phones can be locked in during work hours and can only be unlocked with a tap on a magnetic base (as shown the picture below).

At UGT, drivers are required to turn off or put their cellphone in silent mode and lock it in a Yondr pouch prior to operating any UG bus or vehicle. Magnetic unlock bases

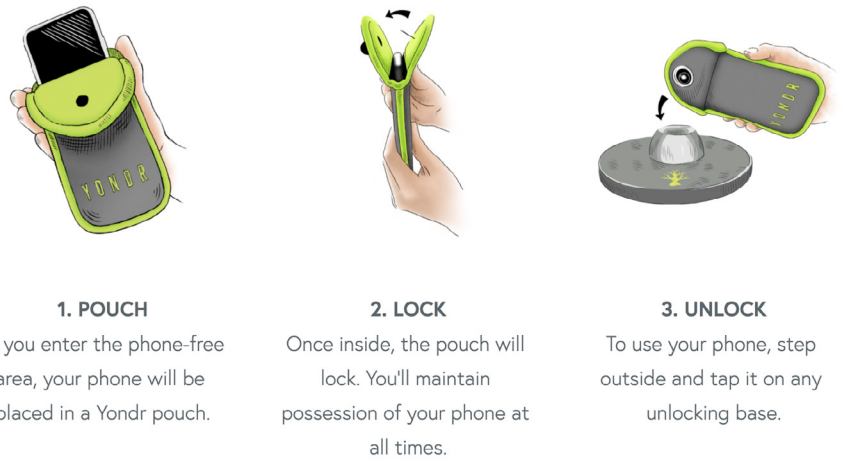


Figure 1 - How to use Yondr Pouch, https://www.overyondr.com/howitworks

are mounted to the exterior of all the transit vehicles. For convenience, these unlock bases are also placed in the employee breakroom and Fleet Center office complex. These devices can help to ensure drivers are not using cellphones while operating a transit vehicle. For more information on Yondr pouches, please visit their website ("Yondr", 2021).

Develop Educational and Training Programs

Providing educational and training programs on distracted driving due to cellphones and other handheld devices allows an agency or an organization to strengthen their knowledge and take necessary actions about distracted driving and its impact on public

Figure 2 - Distracted Driving Flyer, NY Transit

safety. Agencies including the New York Department of Transportation (NYDOT) and Florida Department of Transportation (FDOT) developed and provided driver training and educational programs about the dangers and consequences of transit distracted driving that would help the drivers to understand and follow the transit distracted driving policies while operating an agency vehicle.

Curbing Transit Operator Distracted Driving Training

Course by FDOT: This is a training course developed by FDOT and US DOT's Transportation Safety Institute (TSI) and produced by the University of South Florida's (USF) Center for Urban Transportation Research in 2015. It is a computer-based training program for transit agency staff and drivers to understand the impact of distracted driving along with education on agency's policies and procedures on transit distracted driving, as well as relevant state laws and regulations. A guide to understanding and developing this type of training program can be found online with some examples.
Awareness Programs and Campaigns: NYDOT and Public Transportation Safety Board (PTSB) along with the New York Public Transit Association developed "Don't Drive Distracted" posters for the public transit industry. These posters are free of charge to all public transit agencies in New York state and are required to be hung in break rooms and common areas to remind bus operators and all employees on the dangers of distracted driving.

Install Cameras on Buses

In the mid-2000s, many public transit agencies in the US began experimenting with video recorder technology by installing cameras on buses. (Litschi, 2011). Cameras are now widely accepted for on-board safety and security purposes. These cameras ensure the effectiveness of transit agency's distracted driving policies and helps agencies track/evaluate driver cellphone usage while operating vehicles. Cameras can also be used to investigate cases of rider complaints regarding a driver's distracted driving.

Use Strict Enforcement

Most public transit agencies in US have strict protocols for drivers who violate their established distracted driving policies. Having an effective enforcement plan for drivers

Following are the progressive disciplinary actions taken by UGT of Wyandotte County, Kansas when an employee or driver fails to adhere transit distracted driving policies:

- *1st offense: Three days suspension without pay*
- *2nd offense: Five days suspension without pay*
- *3rd offense: Termination*

who fail to adhere to policies will help in identifying misalignment between driver actions and the agency goals. These measures could help the agency stay on the right side of the law. Kansas transit agencies are highly encouraged to develop and implement a disciplinary action policy for their agency to reduce the issues related to transit distracted driving due to cellphones.

Add Crash Avoidance Technology to Transit Vehicles

The vehicle manufacturing industry is currently developing systems to help drivers avoid crashes. These systems are known as crash avoidance technology which typically use a variety of infrared, radar, and global positioning system (GPS) devices that can help warn drivers of potential collisions (School Buses and Driver Distraction Public School, 2014). In addition, these technologies can also provide alerts, reports and driving footage that can help to evaluate the driver's distracted driving.

Conclusion

There is no single solution to eliminate driver distraction. Transit agencies should pursue a combination of the techniques, such as those identified above, in addition to strict enforcement of policies to help in eliminating transit distracted driving and enhance safety.

Acknowledgements

I would like to thank Ryan Hurst, who is the program coordinator at UGT of Wyandotte County and Kansas City in Kansas, for his time and sharing information on the new policies of transit distracted driving adopted by UGT. His valuable insights on this topic have contributed immensely to this article.

New Jersey state law enacted in 2011 prohibits the use of wireless telephone and electronic devices by any bus or light rail operator involved in providing public transportation services to the public. According to the New Jersey Transit (NJT) Bus Operations Policy, drivers failing and/or violating the rules and policies in a three-year period are subjected to the disciplinary actions as follows:

- *1st offense: 'A recorded 15-day suspension, to consist of 5-day actual suspension to be served starting immediately as per Hourly Agreement, Field Salary Agreement and GOB Clerical Agreement at Sections 1.B.4(h) ("gross disregard of safety rules") with remaining days to count as an administrative suspension.'*
- *2nd offense: 'A recorded 30-day suspension, to consist of 15-day actual suspension to be served starting immediately as per Hourly Agreement, Field Salary Agreement and GOB Clerical Agreement at Sections 1.B.4(h) ("gross disregard of safety rules") with remaining days to count as an administrative suspension.'*
- *3rd offense: Discharge from employment.*

Sources

Distracted Driving Laws, Education and Enforcement | US Department of Transportation. Transportation.gov. (2015). Retrieved 14 April 2021, from https://www.transportation.gov/mission/health/distracted-driving-laws-education-and-enforcement.
How to Reduce Distracted Driving for Your Fleet. Samsara.com. Retrieved 19 April 2021, from https://www.samsara.com/guides/distracted-driving.
Hurst, R. (2021). Program Coordinator, UGT Wyandotte County (N. Gunda, Interviewer)
Litschi, M. (2011). Video-Based Driver Risk Management Systems: Evaluating Effectiveness at Improving Transit Safety. Mineta Transportation Institute, San José State University.
STHO. Improving Transportation Safety [Image]. Retrieved 14 April 2021, from https://www.astho.org/Programs/Health-in-All-Policies/Environmental-Health-in-All-Policies/Improving-transportation-safety/.
United Educators. (2014). School Buses and Driver Distraction Public School [Ebook]. Retrieved 7 April 2021, from https://www.ue.org/uploadedFiles/Schools%20Buses%20and%20Driver%20Distraction%20Public%20School.pdf.
Yondr. Yondr. (2021). Retrieved 20 April 2021, from https://www.overyondr.com/

Verbal De-Escalation Training Resources

By Connor Mountford

Does your transit agency need training on how to de-escalate tense or potentially dangerous situations? If so, the following references could help:

Bert Nash Community Mental Health Center: Bert Nash, based in Lawrence, provides mental health first aid training in a virtual setting. Mental Health First Aid trains people on how to recognize potential crisis situations and respond appropriately. Both public and private classes are offered. The class consists of an individual 2-hour learning session and a 4-hour Zoom session with a mental health first aid instructor. For more information, visit the Bert Nash website.

Community Transportation Association of America: CTAA provides free training for transit drivers and supervisors on conflict management and de-escalation. Find the training here.

Crisis Prevention Institute: The Crisis Prevention Institute provides training and technical resources on verbal intervention, nonviolent crisis intervention, and dementia capable care. Training is offered in both virtual and in-person formats. For more information, check the CPI website.

Florida Transit and Safety Operation Network: The Florida Department of Transportation and the Florida Transit Safety and Operations Network have partnered to offer a course in conflict resolution techniques for transit operators. This course trains operators to identify situations that can cause passenger frustration, identify ways to reduce stressors, interpret and communicate agency policy in difficult situations, and defuse stressful situations. The course does require registration. Registration instructions can be found at this link. For more information visit the FDOT website.

Mental Health First Aid USA: Mental Health First Aid USA provides training to help assess situations where someone may be experiencing a mental health crisis and teaches skills to help you respond appropriately. Courses are available with a variety of specializations, including workplace, rural, and older adult specialization courses. For more information, visit the Mental Health First Aid website.

National Rural Transit Assistance Program: The National Rural Transit Assistance (NRTAP) Program provides training and resources on a variety of topics including management, operations, and ADA compliance. In 2018, NRTAP produced a training series titled "Problem Passengers: Managing Difficult Passengers & Situations Learner's Guide." This training includes six modules and takes approximately two hours to complete. It is available on NRTAP's website. For more information contact NRTAP.

De-Escalation Resources at a Glance

MENTAL HEALTH FIRST AID

Bert Nash Community Mental Health Center	Bert Nash
Mental Health First Aid	Mental Health First Aid

VERBAL De-Escalation

Community Transportation Association of America	CTTA
Crisis Prevention Institute	CPI
Florida Transit and Safety Operation Network	FDOT
National Rural Transit Assistance Program	NRTAP
National Transit Institute	NTI
New Mexico Department of Transportation	NMDOT
Transit Cooperative Research Program	TCRP

National Transit Institute: The National Transit Institute provides training in a variety of areas related to transit and offer courses on violence and harassment prevention for employees and supervisors. For more information, visit the NTI website.

New Mexico Department of Transportation: The New Mexico Department of Transportation provided a training session in 2020 on "Handling Conflict and De-Escalation Skills for Transit Drivers & Supervisors". A recording of the training is available on YouTube and the training manual is available here.

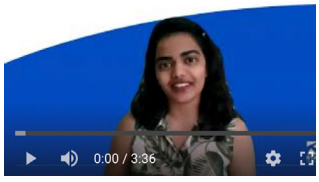
Transit Cooperative Research Program: The Transit Cooperative Research program is a federally funded program that conducts cutting edge research on everything related to transit. One of the program's recent reports focuses on strategies for reducing assaults against transit operators. The report includes a threat assessment protocol, risk protocol, example countermeasures, and examples from transit agencies. Find the report here.

Sources

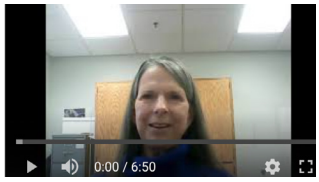
Bert Nash. (n.d.). Mental Health First Aid. Retrieved from Bert Nash: https://bertnash.org/mental-health-first-aid-program/
Community Transportation Association of America. (n.d.). Conflict Management and De escalation for Transit Drivers and Supervisors. Retrieved from Community Transportation Association of America: https://ctaa-training-and-certification.myshopify.com/products/conflict-management-and-de escalation-for-transit drivers-and-supervisors
Crisis Prevention Institute. (n.d.). Find Training. Retrieved from Crisis Prevention Institute: https://www.crisisprevention.com/Training-and-Events
Flordia Transit Safety and Operations Network. (n.d.). THE ART OF DEFUSING CONFLICT: DE-ESCALATION TECHNIQUES FOR TRANSIT OPERATORS. Retrieved from Flordia Transit Safety and Operations Network: https://ftson.org/the-art of-defusing-conflict/#:~:text=The%2090%2Dminute%20The%20Art,how%20best%20to%20handle%20difficult
Mental Health FIrst Aid USA. (n.d.). Find A Course. Retrieved from Mental Health FIrst Aid: https://www.mentalhealthfirstaid.org/take-a-course/find-a-course/
National Rural Transit Assistance Program . (n.d.). Problem Passengers: Managing Difficult Passengers & Situations Learner's Guide. Retrieved from National Rural Transit Assistance Program : https://www.nationalrtap.org/Resource Center/Advanced-Search/fid/110
National Transit Institute. (n.d.). Workplace Safety. Retrieved from National Transit Institute: https://www.ntionline.com/course-listing-program-area-workplace-safety/
Transportation Resource Associates; Countermeasures Assessment and Security Experts. (2018). Tools and Strategies for Eliminating Assaults Against Transit Operators. Transit Cooperative Research Program.

Introducing 'Kansas RTAP Peer Spotlight'

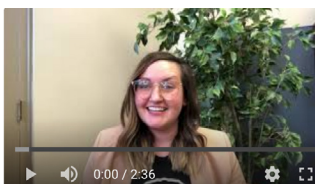
In March 2021, Kansas RTAP has launched a new pilot program called 'Kansas RTAP Peer Spotlight' on KUTC's YouTube Channel. The goal of this program is to facilitate conversations virtually and share experiences, views, thoughts and provide solutions to the issues and problems, commonly faced by the transit agencies and professionals in day-to-day life. Each month a new video will be uploaded in the channel and if you would like to be part of this program, please contact Nikhila Gunda at gundanikhila@ku.edu. Make sure to subscribe to the KUTC Channel for more informative and interactive topics developed by Kansas RTAP.



Introducing 'Kansas Peer Spotlight'



March 2021 Reno County Area Transit



April 2021 Special Edition - Hiring Transit Drivers during COVID 19 by OCCK Transportation

April 2021 - Kansas Mobility Manager, Michelle Griffin

Assistive Technology for Kansans: Better Access with Better Technology

By Nikhila Gunda

Many riders served by transit in Kansas have disabilities that require the use and support of mobility devices, telecommunication equipment, or other independence support. Having access to this equipment, and training in its use, allows riders to be more successful in accessing transit with more safety and comfort. Assistive Technology for Kansans (ATK) provides technical training, assistance and solutions on disability devices that can help people hear, see, live, learn and work better in their day-to-day life. This training is also available to transit agency drivers and staff to help them understand how the technology works and how to help riders who use it on their vehicles. A combination of information from ATK Director, Sara Sack, and the ATK website, this article introduces ATK to Kansas public transit agencies that are unfamiliar with ATK services.

What is Assisted Technology for Kansans (ATK)?

ATK is a statewide technology program that helps people with disabilities and health conditions of all ages with the assistive technology (AT) to carry out their daily functions and performance basic activities with ease and comfort. This program serves individuals of all ages that includes, but not limited to, seniors, infants and toddlers, students, working age adults, farmers with disabilities, active-duty soldiers and veterans with disabilities, individuals with vision and hearing loss, and other persons with disabilities and chronic health conditions. This program serves across all 105 counties and has six regional AT Access Sites. These regional site offices are located in Oakley, Salina, Topeka, Garden City, Wichita, and Parsons. AT Specialists and experienced staff are available at each of these regional sites to provide information and services on meeting individual AT needs. Contact information for all the regional offices can be found online at the ATK website.

ATK in 2018

As of 2018, ATK had served 1,652 Kansans with disabilities and health conditions and/or service providers by providing more than 3,356 assistive technology services. More information about ATK can be found their website - http://atk.ku.edu/

What does ATK do?

ATK provides four core services:

Device Demonstration
ATK has devices to demonstrate in the areas of vision, hearing, speech communication, computer access, daily living tasks, mobility, vehicle modifications, environmental modifications, recreation and sports, and learning, organization and memory. They advise scheduling device demonstrations in advance. Because each of the regional AT Access sites has different inventory, devices may need to be transferred from one location to the other. Rhonda Etter, AT Specialist, is featured in a "See and try a device" video – ATK Device Demonstration.

Short-Term Equipment Loan
ATK has equipment for short-term loan so people with disabilities or health conditions, service providers, employers, educators and others can determine if a device meets their needs. Equipment can be borrowed from the ATK Equipment Loan System for up to four weeks. To learn more about the loan process, borrowing equipment, and searching the ATK Loan System inventory, please visit ATK Device Loan Inventory.

AT Reuse
ATK provides quality used devices through two efforts: the KEE Reuse program and donations. The KEE Reuse Program (formerly known as - Kansas Equipment Exchange) is a partnership between the Kansas Health Policy Authority and ATK. Through KEE Reuse, eligible Kansans can get quality, refurbished durable medical equipment such as manual and power wheelchairs, patient lifts, electric and semi-electric hospital beds, shower chairs, communication devices and other health devices. ATK accepts donations of durable medical equipment for KEE Reuse but other assistive technology devices can be donated to the ATK Reuse program. ATK partners with local and regional loan closets across the state to help Kansans with disabilities access a wide range of equipment. Some of the available KEE Reuse Equipment List can be found online.

Funding Assistance
It is important to consider possible funding options to rent or loan the device that satisfies the requirements and needs of an individual. ATK staff will work with the individual or organization to review available public and private funding resources, identify the ones most likely to fit in that situation, and assist in completing applications and submitting required funding documentation. ATK has experience working with a variety of public and private funding sources such as

Kansas Rehabilitation Services, Kansas Medicaid, Infant Toddler Services, public education, Medicare, Veterans Affairs, private health insurance, Rural Housing Grants, Friends of Man, etc. In addition, ATK also works with the Kansas AT Loan Program, also known as K-Loan, that offers flexible preferred rate financial loans for assistive technology devices and services. This loan may be used to pay the partial or full amount of the required assistive technology. More about the K-Loan program can be found online.

Changes due to COVID-19

Due to COVID-19, ATK consumer services and activities are online only and is conducting limited face to face services in some counties. Staff will serve Kansans over the telephone (1-800-KAN-DOIT or 1-800-526-3648) and through use of distance technology like zoom, email, phone, skype, or other online options. Service delivery methods may vary based on health concerns in Kansas.

Other ATK Projects and Services

In addition to the above four core services, ATK also provides some additional programs and projects that are integral part of the array of ATK services. Some of the ATK projects include iCanConnect, Jerry Vogel AT Fund, My Health Matters, and 2016 Fire Safety. More information is available on their website.

Kansas Telecommunications Access Program (TAP)

The Kansas Telecommunications Access Program (TAP) is an equipment distribution program. The purpose of the program is to provide specialized telephones and other telecommunications devices to Kansans with disabilities who can't use traditional home telephones. Based on a state law, the program receives funds through the Kansas Universal Service Fund (KUSF) and is regulated by the Kansas Corporation Commission (KCC). ATK began to manage Kansas TAP in May 2014. The management office is located in Parsons and each of the regional AT Access Sites and the affiliate office assist with applications and provide demonstrations. More information on the availability of the equipment, demonstrations centers, types of applications and Kansas Relay services is made available on the ATK KS TAP website.

How can Kansas Public Transit Agencies use ATK services?

A wide variety of trainings and information assistance are provided by ATK for individuals and organization/agency groups related to the assistive technology services. Trainings include but not limited to learning about specific equipment related to specific AT category or need (such as vision, memory, communication, learning disabilities), education accommodations, strategies for implementation and others. Drivers and staff trained in using assistive technology devices could help the agency to accommodate and provide transit service for more riders with disabilities and health conditions with more safety, comfort and ease. This helps the transit agency to be more inclusive by expanding their services to all the types of peoples in the community. This could help the transit agency better serve as a mode of transportation for the residents during emergencies.

How to pay or fund ATK technology devices?

ATK financial assistance opportunities may vary from case to case. Typically, ATK staff works with the individual or agency to identify possible public and private funding resources and assistance and assistance with applying for funding, if needed. Also, the Kansas AT Loan Program (K-Loan) may be used to partially or fully fund the required assistive technology. Gaye Calhoon, Information and Referral Specialist, explains funding options in this video – Funding Q & A.

Conclusion

For a safe and independent community life for people with disabilities and health conditions of all age groups, assistive technology that helps in carrying out their daily life is provided through a statewide technology program called Assistive Technology for Kansans (ATK). ATK services can be used by Kansas public transit agencies to help them to provide more reliable service and a comfortable experience for riders with disabilities and health conditions. Please visit ATK website (http://atk.ku.edu/) for more information.

Acknowledgments

I would like to thank Sara Sack, ATK Director, for her time and providing information about ATK and its services that can help Kansans to live and travel with more safety and independence.

Sources

Sara Sack (2021), Director of Assistive Technology for Kansas, (Nikhila Gunda, Interviewer)
Assistive Technology for Kansans. Retrieved 4 April 2021, from http://atk.ku.edu/.

Text Messaging Systems Allow for Improved Communication between Agencies and Customers

By Connor Mountford

It is 2021 and expectations for service delivery have never been higher. One way that transit agencies can up their service delivery game is by providing text message alerts to passengers. Text alerts are not new, but in a world dominated by smartphones, they can provide a useful and convenient method for passengers to stay ahead of service changes. Right now, you might be asking yourself, what exactly are text messaging systems? How do they work? Does my agency need one? This article will provide you with the answers to these questions and highlight a few agencies that have implemented this service.

Text Messaging Systems for Transit – the Basics

Text messaging systems allow transit agencies to directly communicate service changes to customers. These services usually involve a transit agency contracting with a vendor who provides mass messaging software (a few popular vendors include Alert Media and Text Marks). Once an agency has the necessary software, they can establish codes that passengers can text to the agency to subscribe to the service. Once a passenger is subscribed, they will be able to receive messages from the agency. Agencies can send messages on any subject, but they typically reserve mass messaging for service changes or emergency alerts (Schweiger, 2011).

Case Study: Kansas City Area Transit Authority

In 2019, the Kansas City Area Transit Authority (KCATA) partnered with Alert Media to launch two new text messaging services: "RideKC Notify" and "See Something, Text Something." RideKC Notify operates like a typical text messaging system; passengers are provided with a phone number and a list of codes that correspond to KCATA routes (Johnson, 2021; Weilert, 2021). Passengers then choose the routes they ride most often and text the code to the number provided. Once subscribed, they will receive messages on service changes, route delays, emergency weather, and policy changes. If a passenger decides they no longer want to receive messages, they simply text back 'STOP' to the number they are receiving messages from. Today, RideKC Notify has nearly 3,000 unique subscribers (Weilert, 2021).

In addition to RideKC Notify, KCATA implemented an innovative service to allow passengers to report issues via text message called "See Something, Text Something". This service allows passengers to text (the same number they receive updates from) with issues related to service delivery including suspicious activity, crimes, or code of conduct violations. These reports are then forwarded to the appropriate staff member (Johnson, 2021; Weilert, 2021).

Case Study: OCCK Inc.

While large systems like KCATA have had a text messaging alert system in place for years, similar services can be provided at a smaller scale. A great example of this is OCCK Inc. in Salina, Kansas. As the frigid winter weather engulfed our state this past year, bus delays and operational changes became more frequent. The last thing OCCK Inc. wanted to do was leave their passengers out in the cold. So, they decided to work with Dial My Calls to implement a text messaging alert system to make it easier to communicate with passengers in the future (Griffin, 2021).

The system allows passengers to opt in to receive text message alerts from OCCK Inc. The alerts will be used to communicate bus delays and other operational changes. Users can opt out at any time. OCCK Inc. is currently in the process of finalizing the system and getting it operational. They plan to advertise the new service through their typical venues – press releases, social media, and word of mouth (Griffin, 2021).

When to Implement a Text Messaging System

Text messaging systems are more commonly found in fixed route agencies, allowing passengers to see service changes for the routes they ride most often. If your agency operates fixed route services, providing text messaging systems can be a convenient way for your agency to communicate service changes to frequent passengers. While text messaging systems are less common in demand response agencies, they may still benefit from having another form of communication with passengers. If your agency is unsure of whether to pursue a text alert system, ask your passengers!

Sources

Griffin, M. (2021, March 10). Mobility Manager. (C. Mountford, Interviewer)

Johnson, D. (2021, March 25). Vice President of Planning, KCATA. (C. Mountford, Interviewer)

Schweiger, C. (2011). Use and Deployment of Mobile Device Technology for Real-Time Information. Transit Cooperative Research Program.

Text Marks. (n.d.). Text Marks. Retrieved March 25, 2021, from https://www.textmarks.com/industries/sms-text-messaging-or-transit/

Weilert, R. (2021, March 25). KCATA. (C. Mountford, Interviewer)

What to Know about Accessible Power Lifts

By Anne Lowder

Lifts on public transportation vehicles have a list of safety requirements that must be adhered to before operation. On December 27, 2002, the Federal Motor Vehicle Safety Standards (FMVSS), in conjunction with Department of Transportation (DOT) under the Americans with Disabilities Act (ADA), established FMVSS No. 403 (platform lift systems for motor vehicles) and FMVSS No. 404 (platform lift installations in motor vehicles). The standards were created to regulate the safety of vehicles that have lifts installed and the safety of the operations of the lift. This article will discuss the guidelines that agencies must follow under FMVSS No. 403 and 404, plus ADA guidelines.

Figure 1 - Lift Training; Photo provided by Anne Lowder

Required Safety Features for Public Lifts

The DOT label

The lift must have a label with the words "DOT—Public Use Lift" as certification of compliance with the requirements specified in paragraph 49 CFR.571.403 S6(b)(1). The Public-Use sticker is placed on one of the lift arms (usually the right arm). The label includes the lift manufacture, a DOT model number, serial number, pump code, cylinder type and manufacture date.

Rated Load of Lifts

The standard lift capacity for a public-use wheelchair lift is 600 pounds or the manufacturer's lift capacity rating. What this means is if your lift is rated at 600, 800 or 1,000 pounds, it must lift that amount, maximum. It is good to check your lift's ability by placing a container of water on the lift for the lifts rated pounds (600, 800 or 1,000 pounds) and see if it will lift the container of water.

Unobstructed Platform Operating Volume

All wheelchair lift platforms must measure at least 30 inches wide by 48 inches long under minimum guidelines from ADA.

Threshold Warning Signal

The lift has visual and audible warning signals at the entrance (threshold) from the platform of the lift into the interior of the bus. The two warning systems must activate if the lift is one inch below the entrance into the bus. The system is designed to warn people that the lift is not at floor level of the bus and stepping in further may cause a person to fall. The visual warning system is a flashing red beacon activated by stepping on the plate between the lifting arms or breaking a photocell beam between the lifting arms. The audible warning signal is activated in the same manner as the visual warning signal. The audible alarm must be as loud as somewhere between an alarm clock and a power tool; in the range of 500 Hz and 3000 Hz.

Interlock Safety System and Outer and Inner barriers

The interlock safety system integrated into the lift operations requires that the emergency brake must be engaged to prevent movement of the vehicle while the lift is being used. Someone just pressing on the brake will not let the lift deploy or fold.

The lift platform has two plates (outer barrier and inner barrier) that close as the lift goes up. The plates have sensors in them that must connect and lock in place for the lift to continue to move. If the wheelchair keeps the plates from closing completely the lift will not work. The outer barrier is used as a ramp for wheelchair loading and unloading at ground level and to help keep the wheelchair on the platform while the lift is operating. The inner barrier serves as the bridge plate that covers the gap between the lift platform and the vehicle floor and prevents the wheelchair from rolling into the space between the lift and the vehicle.

Handrails

The lift has a handrail located on each side of the lift. It is a best practice, under Q'Straint's Wheelchair Securement Basics 101, to ask the passenger to hold onto the handrails or put their arms and hands in their lap. You also want any passenger who rides the lift while standing to hold onto the handrails and not their walkers or canes.

Platform Markings and Edge Guards

The lift must have visible marked edges on the platform which includes the edge of the lift and the outer and inner barriers. The lift is black, and the visible marked edges are bright yellow. Edge guards are the 3-inch edges of the platform that

extend from the outer barrier to the inner barrier of the lift.

Control Panel Switches
The hand-held attendant's pendant control is connected to the pump module and is equipped with two rocker switches, (UNFOLD, FOLD, and DOWN, UP). If the pendant control is in working order it will light up. Reasons for it to not light up could be that the emergency brake is not set, the lift has sagged off its sensors and needs to be folded or the inner and outer barrier plates are not locked in place.

Backup (manual) Operation
The lift can be run manually if there is a mechanical problem with the lift and it cannot be power operated. To run the lift manually, grab the handle from the back of the lift tower in the interior of the bus. The handle has two notches on it that are placed into the pin halfway down on the lift. Turn the handle a ¼ of a turn to the lift. This will deploy the lift. You must manually stop the lift at floor level by turning the handle a ¼ of a turn to the right. Board your passenger and then turn the handle a ¼ of turn to the left. Once the passenger has been de-boarded from the lift you must fold the lift by pumping it back up. Pumping the lift is the same as pumping a hydraulic car jack. Insert the handle into the jack part of the lift tower and being pumping until the lift is completely stowed.

Operations Counter
Why is paying attention to the operations counter on your lift important? The answer is that keeping track of the number of times your lift cycles decides when maintenance needs to be done on the lift. The ADA requires that you keep your lifts maintained so you do not have a situation where you cannot provide service to a passenger who uses a wheelchair because the lift is broken. Braun and Ricon's recommended maintenance schedule is every 750 cycles. Actual maintenance requirements will vary, depending on the amount of use and exposure to conditions that affect equipment wear and tear. According to the Braun Operator's Manual "Preventive maintenance and longevity of your lift revolve around 2 key factors, lubrication, and inspection.".

Lift Operating Procedures
The lift (Braun and Ricon) operating procedures can be found in manufacturers' operating manuals and best practices in industry standards from Q'Straint Wheelchair Securement Basis 101 and CTAA PASS (Passenger Assistance Safety and Sensitivity) training. These are general guidelines for lift operations. Your operators should always follow your agency's policies and procedures.

Lifts are potentially hazardous equipment and must be maintained and operated properly. Operators should take considerable caution and awareness when operating a lift. The vehicle operator should be the only person operating the lift. For instances, do not let the passenger or a personal care attendant run the lift.

Prior to operating your wheelchair lift
Operating the Braun and Ricon powerlifts involves several steps before the lift is deployed. The steps include: (1) stop the van on level ground, (2) put the vehicle into park, (3) set the emergency brake, and (4) activate your emergency flashers. Make sure that, before deploying the lift, there are no obstacles that your lift would hit. Having all your operators doing the same thing each time before deploying the lift reduces the risk of injury to operators and passengers.

Deploying the Lift
To deploy the lift, the operator should first open and secure the lift doors from outside of the vehicle. Before opening the doors make sure that the area is clear of pedestrians and obstacles. Greet your passenger as they approach and ask them if they need assistance. For instance, the passenger may be able to roll themselves onto the lift platform. It is your job, as an operator, to help your passenger if they are having difficulty. Finally, board your passenger onto the lift platform (under ADA it is the passenger's choice to board forward facing or outward facing) and raise the lift to floor level of the bus.

Steps to Lift Operations and Boarding a Wheelchair Onto your Bus

- Be certain the wheelchair fits safely on platform.
- Secure the wheel locks to keep the wheelchair from moving while on the lift platform or have the passenger power off the chair.
- Ask the passenger to hold the handrails or put their hands on their lap.
- Operate the lift from the ground. Stand on the ground with one hand holding the wheelchair and one hand operating the controls.
- Raise the platform only a couple inches.
- Check the front safety barrier to be certain it is locked.
- Raise the lift platform to the vehicle floor level.
- Place the lift controls in a secure location with one hand, while holding the wheelchair with the other.
- Release the wheel locks and guide the chair into the vehicle.
- Reach in and lock one wheel.
- Never leave a wheelchair on the platform unattended.
- When boarding, guide the wheelchair in.
- When exiting, draw the wheelchair out.
- Be sure to use the occupant restraint belt mounted to the handrails if your wheelchair is so equipped.
- Be sure that the power is turned off on any powered wheelchair BEFORE raising or lowering the lift.

Safety Precautions for Wheelchair Lift Operation

Should the Passenger Facing Outward or Inward?
Ricon and Braun recommend "that passengers always face outward when riding the lift platform.

If the passenger is facing inboard, they cannot visually confirm that the lift has been raised. Operators and passengers should not rely on a threshold warning device (audible or other) to confirm that it is safe to exit vehicle. The threshold warning device could be inoperative or unheard." Ricon and Braun's owner's manual also states that, "If the passenger that uses a wheelchair faces into the vehicle while on the wheelchair lift, it would be very easy for that person to lean back and fall off the lift. It is much safer for the passenger to be backed onto the wheelchair lift, the weight of the combined passenger/wheelchair is placed where the lifting arms are located, not on the end of platform.

If the weight is at the end of the platform, the platform will dip more severely making much easier for the passenger to fall backwards off the lift." Although the manufacturers recommend boarding outward facing, The ADA permits a passenger to board in either direction.

The Lift is a One Person Only Rider
Both Braun and Ricon stress that the lift is intended for one person at a time, either sitting in a wheelchair or standing. The lift attendant should not ride on the platform with passenger. Something could go wrong, such as the passenger accidently heading the wrong direction in powerchair and knock into the operator. There is no room for the operator to move their feet and could fall backwards. In this situation the operator would surely fall off the lift. Also, if the operator is on the lift, extra weight is added to the lift, and in total may very well exceed the lift manufacturer's maximum weight capacity. It is safer for the operator and the passenger if the operator is standing on solid ground while boarding the passenger.

In Sum
Your passenger's safety and your operator's safety are affected by your agency's policies, procedures, and training. Good policies following the guidelines set out by FMVSS No. 403 and 404 will ensure that your vehicles and your lifts are of standard operating condition. Establishing operator procedures from industry best practices (Braun and Ricon Owner's manual, CTAA PASS and Q'Straint Wheelchair Securement Basics 101 and ADA) for operators to operate the lift and interact with passengers. Finally, training is important so that your operators are knowledgeable and consistent with wheelchair lift operations.

Sources

Department of Transportation. (2010) Code of Federal Regulations Title 49 Part 571. https://www.govinfo.gov/app/details/CFR-2010-title49-vol6/CFR-2010-title49-vol6-sec571-403/summary
National Highway Traffic Safety Administration. (2012). Federal Motor Vehicle Safety Standards; Platform Standards for Motor Vehicles; Platform Lift Installations in Motor Vehicles. https://www.federalregister.gov/documents/2012/04/05/2012-8138/federal-motor vehicle safety-standards-platform-lifts-for-motor vehicles-platform-lift-installations
Ricon A Wabtec Company. (2012). Titanium Line S-Series and K-Series Dot _ Public Use Lifts. https://www.wabtec.com/uploads/outlinedrawings/Ricon-Titanium-Line-S-Series-and-K-Series-DOT-Public-Use Wheelchair-Lifts-Operator-Manual.pdf

Five More Ways to Increase Kansas Rural Riders

By Nikhila Gunda

The purpose of this article is to provide strategies for local entities to encourage access to public transportation services and/or assistance for their local community residents. This article is the continuation of a series that started in our Winter 2020 Newsletter edition. These strategies were gathered from various local transit resources and lessons from interviews with Kansas Mobility Managers.

In addition to the five strategies mentioned in the previous article, here are five more ways that could potentially add more rural riders to your local transit system:

Microtransit is an Option

The U.S. Department of Transportation (USDOT) defines microtransit as 'a privately owned and operated shared transportation system that can offer fixed routes and schedules, as well as flexible routes and on-demand scheduling. The vehicles generally include vans and buses.' (Whitaker & Derk, 2018) Currently, microtransit has become a popular solution for areas that are underserved or lack access to fixed route public transit (Phillips, 2021). So, Kansas rural transit agencies can consider microtran-

What is Demand-responsive transit?

"Transit that operates in response to calls or requests from riders. A reservationist or automated system receives the request and then dispatches a vehicle to pick up riders and take them to their destinations. These vehicles do not operate on a fixed route or fixed schedule and typically pick up several passengers at different locations before taking them to their respective destinations," (Joel, 2019).

What is Microtransit?

"Shared public or private sector transportation services that offer fixed or dynamically allocated routes and schedules in response to individual or aggregate consumer demand, using smaller vehicles and capitalizing on widespread mobile GPS and internet connectivity," (Joel, 2019).

RIDE Wilson, North Carolina

Similar to many other small communities in Kansas, the city of Wilson in North Carolina has a population under 50,000 and faces challenges of having an inefficient bus network with fixed routes and schedules, resulting in hour-long waits between buses. In September 2020, the city partnered with VIA, one of the leading microtransit technology providers, to launch a new program RIDE, an on-demand service covering more areas and significantly reducing waiting time at the same cost as before. This new service provided curb to curb rides for people with limited mobility and was easier to access that helped to meet their personal needs. Federal Transit Administration (FTA) recognized this program as the future of rural transportation and awarded $250,000 to expand the program.

sit as an option to serve a group of people or specific areas having similar needs and travel requirements. This could potentially help in reducing the operation costs and increase service effectiveness. Demand-response transportation (DRT) services, typically pick-up and drop-off passengers in locations based on their needs, are more dominant in Kansas rural areas as they are less densely populated with longer travel distances. Microtransit can be alternate option to DRT if there are sufficient number of riders traveling frequently in the same region or location. This could be a cost-effective and transit efficient option to traditional DRT services.

Leverage Local Financial Incentives

For riders, using transit has proven to be a cheaper mobility option than owning a personal vehicle. Even then, some riders may need additional financial incentives to be convinced to take transit. Community partnerships and fare free transit service are successful practices in providing financial incentives in rural areas. It can be challenging for rural transit agencies to adopt zero-fare service permanently, but some are successful with the implementation of a new revenue source or establishing a community tax that is dedicated to transit service. Some common and useful strategies include discounted fares, free rides, fare programs, and trip subsidies by employers. A temporary zero-fare service can encourage residents to try transit and may potentially shift their everyday travel to transit.

Bloomington, Indiana

A special promotion/campaign called "Here's the Scoop" that aimed to address Saturday ridership decline was offered by Bloomington Transit in Indiana. Promotion included lowered cash fares from $0.75 cents to $0.10 cents each Saturday in the month of July and riders were given a free ice-cream coupon at a local ice cream store. During this promotion, agency estimated a 20-25% increase in Saturday ridership. (TCRP Report 50, 1999)

Improve Marketing and Create Awareness

Marketing and outreach are important to building public awareness and increasing public knowledge about available transportation options in the community. It is crucial for residents to know that transit service exists in their community, and it can meet their needs. Due to limited funding and competing demands, transit agencies aren't able to focus and prioritize investments in promotions and printing

Figure 1 - OCCK Transit Marketing Flyer

materials. To increase ridership and create awareness about local community transportation options, marketing and outreach through branding, education and outreach can be adopted by the transit agencies.

- Branding is a way to build a positive relationship with current riders and help attract more by developing name recognition, easily identifiable vehicles and stops, signage, and promotional materials. It is important that the brand is welcoming and appealing as it the introduction to the transit system and leaves an impression. A strong brand can also help to build additional partnerships in the community.

  Douglas Rides, Douglas County, Oregon
  In 2012, Douglas County Special Transportation was renamed and branded as Douglas Rides. Eight providers joined together to form one brand, Douglas Rides. This merge conveyed that it was public transportation for everyone and eliminated the misconception that the service was only for a specific group of people. With rebranding efforts and service changes, Douglas Rides has increased its ridership from 30,000 rides in 2012 to 100,000 in 2018.

- Education and Outreach is a strategic approach that helps the community to be informed about their available transit options. A variety of mediums such as public meetings, booths at local events, mailers, social media, and travel training programs help to reach the wider audience in the community.

  Travel Training Program (Riverside, California)
  Travel training programs teach potential transit riders how to navigate and understand public transportation and help older adults and people with disabilities to travel with confidence. Once such program, called Freedom to Go, was started in 2012 by the Riverside Transit Agency (RTA) in California. This program was a free service available to older adults and people with disabilities who want to learn how to safely and independently use the transit system. According to a report published in 2014, 74% of participants continued to ride fixed-route transit after the training program and RTA has experienced $342,000 in dial-a-ride costs savings.

- It can be costly for rural transit agencies to invest time and resources in branding and marketing. To tackle this problem Kansas RTAP can help rural transit agencies in developing and distributing marketing materials across the targeted rural service areas. Kansas RTAP has developed materials that Kansas transit agencies can use to promote their service. Additionally, National RTAP has a toolkit for agencies to use in developing their own materials: https://www.nationalrtap.org/Toolkits/Marketing-Toolkit/Welcome.

  Washington Department of Transportation (WSDOT)
  In a survey of transit providers conducted by WSDOT, it was found that rural transit providers wanted to improve their public engagement and marketing skills. In response to this need, WSDOT developed and supplied training sessions, both one-on-one and in groups, about marketing for small and rural transit agencies.

Evaluate your transit routes and services

Transit agencies and other transportation providers in rural communities generally serve targeted markets or needs. To be effective and impactful, these providers should evaluate their services and conduct periodic evaluations through comprehensive service analysis or short-term transit plans. Most agencies do not have the staff to conduct these evaluations and analysis, so state DOTs often support or manage rural transit planning efforts by setting performance targets and measures. This helps providers to find areas that could be enhanced. Overall, transit service planning helps to improve the efficiency and effectiveness of transit services, especially for areas with low population densities and dispersed land uses.

Factors such as convenience and service reliability influence service quality and consumer choices, which are essential in attracting and keeping riders. Hence, it is important to analyze and evaluate transit services from time to time. Strategies like adopting shared service delivery, flex routes, and app-based demand response services can create a positive impact on ridership. Adjusting services to satisfy community requirements from time to time can be among the most effective strategies to attract riders and improve service productivity.

Middle, Vermont
Addison County Transit Resources (ACTR) in Central Vermont partnered with local and regional transportation agencies to offer a variety of services including commuter services, regional services, local fixed routes, and demand-response services, based on the transit needs of their area identified in their comprehensive analysis. In addition, ACTR also made new partnerships with local colleges and neighboring areas that helped to significantly increase the ridership and stature in the community. (Innovative Rural Transit Services, 2011)

Coordinating with Kansas Transportation Organizations and Agencies

Collaboration and coordination can help Kansas rural transit agencies extend the reach of resources through improved resource management. In addition to Kansas Mobility Managers, some of the major transportation organizations and agencies that can help rural transit agencies- including staffing, training, funding or capital – are KDOT Office of Public Transportation, the Coordinated Transit Districts (CTD), Kansas Rural Transit Assistance Program (RTAP), and the local FTA Office. Working together and seeking assistance from these organizations

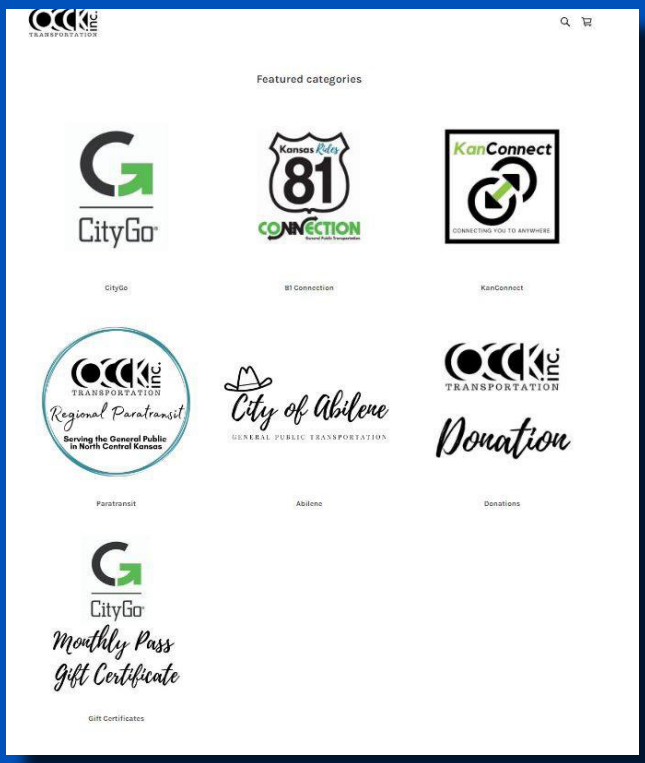


Figure 12- OCCK Transpirtation Services Across North Central Kansas

OCCK provides local and regional transportation services to the general public, seniors, and persons with disabilities, through a variety of programs in more than 14 counties in Kansas. Some of the highlights of OCCK programs and services are listed here:

- With funding from KDOT and City of Salina, OCCK operates and manages fixed route and other transit services as CityGo.
- Similar to Salina, OCCK also provides demand-responsive transit for the City of Abilene in Kansas.
- OCCK provides regional paratransit, origin-to destination, on-demand services for the general public throughout North Central Kansas, including passengers with disabilities and seniors.
- In contract with KanCare Providers, OCCK provides non-emergency medical transportation (NEMT) throughout Kansas.
- OCCK started a new program called KanConnect that plans to connect regions of rural Kansas through public transportation options. As part of this program, a new regional route was offered between Abilene and Salina since June 25, 2020.
- In addition to the above-mentioned services and programs, OCCK offers programs like KANcycle, Airport Shuttle Services, Discounted Taxi Rides and other transportation services throughout the North Central Kansas.

For more information on OCCK transportation services and their partnerships with other transportation organizations can be found on their website.

responsibilities, please go through Chapter 1 of Kansas Transit Manager Handbook that was developed by Kansas RTAP and is available on their website.

Conclusion

Employing the strategies identified in this article will help to grow ridership for your transit agency. Five more strategies were discussed in the previous Winter 2020 newsletter and can be found online.

Acknowledgments

I would like to thank Kansas Mobility Managers Mike Wilson and Michelle Griffin for their time and valuable insights on this topic which contributed immensely to this article. Also, Kansas RTAP Director, Lisa Koch, for assisting and providing some ideas resourceful for Kansas rural transit agencies.

Sources

Transport Canada. (2009, April). Improving Travel Options in Small & Rural Communities . https://www1.publichealthgreybruce.on.ca/Portals/0/Topics/HealthyCommunities/Conference/Active_Trans/Resources/Improving_Travel_Options_for_Small_and_Rural_(Industry_Canada).pdf.
Whitaker, B., & Derk, M. (2018). BEST PRACTICES AND MARKETING TO INCREASE RURAL TRANSIT RIDERSHIP AND INVESTMENT [Ebook]. NCHRP Transportation Research Board. Retrieved 25 April 2021, from http://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP20-65(73)_FR.pdf.
Shaheen, S., Cohen, A., & Zohdy, I. (2016). Shared Mobility: Current Practices and Guiding Principles. Washington DC: U.S. Department of Transportation, Federal Highway Administration. Retrieved from https://ops.fhwa.dot.gov/publications/fhwahop16022/fhwahop16022.pdf
Phillips, S. (2021). How Do We Move Older Citizens in Rural Areas Using New Technologies? | National Center for Mobility Management. National Center for Mobility Management. Retrieved 7 April 2021, from https://nationalcenterformobilitymanagement.org/how do we move older citizens-in-rural-areas-using-new-technologies/.
Jeremy Mattson (2012), Travel Behavior and Mobility of Transportation-Disadvantaged Populations: Evidence from the National Household Travel Survey, Upper Great Plains Transportation Institute; at www.ugpti.org/pubs/pdf/DP258.pdf.
TCRP Report 50. (1999). A Handbook of Proven Marketing Strategies for Public Transit [Ebook]. Retrieved 25 March 2021, from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_50-a.pdf.
Innovative Rural Transit Services. (2011). [Ebook]. Retrieved 21 March 2021, from https://www.actr vt.org/assets/tcrp_syn_941.pdf.
Joe,I V. (2019). Microtransit or General Public demand Response Transit Services: State of the Practice. Washington, DC: The National Academics Press. https://doi.org/10.17226/25414
Griffin, M. (2021). Kansas Mobility Manager. (N. Gunda, Interviewer)
Wilson, M. (2021). Kansas Mobility Manager. (N. Gunda, Interviewer)

Kansas RTAP Training Update

By Anne Lowder

Still COVID 19, Still Limited Training
Kansas RTAP, as most other business across Kansas, is serving customers on a limited basis. We provide in-person training to small groups of attendees, with social distancing and mask wearing. Kansas RTAP also provides modules for on-line training.

How to Request KS RTAP In-Person Training
In-person trainings can be requested by an agency for driver training. Contact me directly (Anne Lowder alowder@ ku.edu) to request this training. Due to the limited availability of Enterprise Rental (only open on Tuesday in my area), I can do trainings on Wednesday and Thursdays. Request have been coming in. I have completed 10 in-person trainings and have 15 more trainings scheduled as of this writing.

I am focusing the in-person trainings on KS RTAP Defensive and Distracted Driving and updates for best practices from Q'Straint's Basic 101 Wheelchair Securement.

On-Line Training Still Available
In response to travel and training restrictions due to COVID-19, Kansas RTAP is also providing e-learning to temporarily meet KDOT guidelines for operator training. The program is described at https://kutc.ku.edu/online-training. To receive a Kansas RTAP Certificate, the driver would complete the trainings listed in one of the three modules and then email the certificates to alowder@ku.edu.

KS RTAP Approved Trainers (ATs) Are Providing Some Training
ATs are currently training. Most are training only within their own agency. You may check on the Blackcat calendar to see if any ATs in your CTD have scheduled a training available to your drivers.

Additional Recommended Resources and Conferences

FTA COVID-19 Resource Tool updated 3-12-21
https://www.transit.dot.gov/regulations-and-programs/safety/fta-covid-19-resource-tool

Training Webinars

- **National Transit Institute**
  Webinar: Business Writing –Write it Right
  April 28, 2021 2 pm Eastern
  May 26, 2021 2 pm Eastern
  June 16, 2021 2 pm Eastern
  https://www.ntionline.com/webinars/

- **Federal Transit Administration**
  National RTAP Peer Roundtables and Chats: Climate Change and Transit Twitter Chat
  April 20, 2021
  Learn about TACL: The Transportation Technical Assistance Coordination Library
  August 11, 2021
  https://www.transit.dot.gov/events

- **National Center for Mobility Management: NCMM**
  Archived Webinars on many topics.
  https://nationalcenterformobilitymanagement.org/webinars/

- **Easterseals Project Action Consulting**
  Live, pre-recorded and archived.
  For a full list go to:
  https://www.projectaction.com/courses-and-schedule/webinars/

Conferences

- **CTAA s EXPO**
  November 7 – November 11, 2021
  Richmond, VA
  https://ctaa.org/about expo-2021

- **Small Urban Network (SUN) Conference**
  August 9 – August 12, 2021
  Missoula, Montana
  https://ctaa.org/sun/

Greetings from RTAP Director

By Lisa Koch

Happy Spring, Kansas Transit Colleagues! I have been looking forward to warm weather for months. I have some road trips planned, one of which will have me camping at several state parks in western and central Kansas. I love our beautiful state!

This issue brings you a variety of topics, from tips on how to maintain your tires to ideas for enforcing your "no cellphone policy." We hope these are helpful as you manage your system. What other challenges are you having? We can help

provide ideas and present in an article or via training. Let me know at kolisach@ku.edu - we are here for you.

In the next month, we will be developing a training calendar of topics for the transit managers and leaders. This will include having new manager trainings provided online several times a year. We will also provide trainings on topics related to communication, leadership, and other management techniques. To get this information, please make sure you are on our email distribution list. Go to www.ksrtap.org and sign up on the Kansas RTAP email list.

Thank you for the essential service you provide to Kansans. Enjoy the newsletter!

SHARE!

If you know individuals who would like to receive our newsletter, please have them go to: www.ksrtap.org and sign up for the Kansas RTAP email list. There is a box to check to request electronic notification of each new issue of the TransReporter. Back issues are available at our website in the newsletter archives section.

Kansas
Transit Reporter

The Kansas Transit Reporter is an educational and technology transfer newsletter published quarterly by the University of Kansas Transportation Center (KUTC). The newsletter is free to rural and specialized transit providers and others with an interest in rural and specialized service.

The Kansas Transit Reporter is co-sponsored by the Federal Transit Administration under its Rural Transportation Assistance Program (RTAP) and the Kansas Department of Transportation. The purposes of the 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.

KU THE UNIVERSITY OF KANSAS Transportation Center
RTAP KANSAS RURAL TRANSIT ASSISTANCE PROGRAM
DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA