Kansas TransReporter

FEATURE

Governance Choices for Coordinated Transit

By Matt Baker

Which governance structure is best for your regional coordination effort?

Coordinating transit services between jurisdictions and various transit agencies provides numerous benefits in terms of cost-effectiveness and efficiency. But without an effective system of cooperative governance in place, these benefits can be elusive. A variety of governance models have emerged in transit systems around the country, supporting more effective coordination of transit services. It is crucial to choose or create a model that provides the benefits your coordination effort is seeking.

Transit providers seeking a governance model in Kansas should first look to Kansas statute law, which allows a fair degree of leeway for establishing governance for coordination

MANAGEMENT

New RTAP Resources for New and Experienced Transit Managers

By Anne Lowder

In our newsletter we provide information and resources on current topics in transit and try to anticipate your questions along the way—but we know we don't capture them all. Now Kansas RTAP has another way to provide answers to your questions. Two documents have been posted at our Web site to point you in the right direction.

New and experienced managers can find questions answered under a new resource titled "Frequently Asked Questions (FAQs)." For instance, maybe you are new to transportation and are asking: "Where do I start?" The answer is there. This resource also cover topics for experienced managers such as policy development, program development and training.

We also have a new link titled "Helpful Resources for Transit Managers."

Browsing the resources you will

INSIDE

efforts. The tool most applicable for these efforts is the interlocal agreement. With the ongoing implementation of the Kansas Department of Transportation's initiative to create a new business model through regional transit, such a tool is more important than ever. And even without KDOT's initiative, the benefits of coordination should convince individual transit providers that even a self-initiated coordination program is worth the effort. The substantial operating, managerial, and funding benefits that coordination provides are simply too good to pass up.

Governance models

The primary elements of governance are board structure, agency financing, and cost allocation. The models that follow have been used across the United States in one form or another. Some transit providers choose elements from several models to create a one suited to their region's unique governing and financial needs.

The mechanism by which almost all local coordination must take place in Kansas is the interlocal agreement. Such an agreement must explicitly outline a governing structure such as a joint board or individual administrator.

1) Regional Transit Authority (RTA). These statutorily-authorized agencies are organized by municipal and county governments. Policy decisions are generally made by a board whose members include county and city elected officials, school board members, university administrators, private transit providers, etc., within the service area. Municipalities and counties served are guaranteed voting representation while other stakeholders may only have ex-officio representation. Because an RTA is a state-enabled agency, it has access to more potent funding streams; usually a property tax. For instance, Bay City, Michigan's Bay Metropolitan Transit Authority (www.baymetro.org) levies a 0.75-mil property tax and is authorized to levy up to a five-mil tax. In so doing, an RTA takes some of the funding burden off individual municipalities. As independent government entities, many RTAs, such as

South Central Transit (http://www.southcentraltransit.org) of Centralia, Illinois, also benefit from being exempt from paying fuel and property taxes. While an RTA is the most effective regional coordination measure, because it is expansion of government it is also the most politically difficult to create.

2) **Regional Transit Coordinating Council (TCC).** The primary difference between a TCC and an RTA is that a TCC is not a policy-making body. It also lacks the ability to create its own funding. Rather, TCCs such as Ottawa County Transit Agency (OCTA) (www.octapublictransit.org) of Oak Harbor, Ohio, are generally an advisory board for pre-existing transit agencies, usually represented by their general managers or directors. Operations are generally left to the individual private and municipal providers. In OCTA's case, the TCC was formed with a lead coordinating agency and several partner human service agencies.

The primary power of the TCC is coordination. Even still, because its lacks its own funding, individual member-providers can block coordination efforts using the power of the purse. The TCC is a relatively easy introductory model for coordinating transit services in a region because the actual power remains in the hands of member-providers.

3) **Joint Powers Agency (JPA) & Joint Powers Board (JPB).** A JPA coordinates services between counties and/or municipalities—it does not involve private stakeholders such as nursing homes, hospitals, or churches. A JPA can do whatever its member-providers are legislatively enabled to do. A JPA can operate transit but it cannot create its own funding mechanism. In Fort Dodge, Iowa, the Mid-Iowa Development Association (MIDAS) (www.midascog.net) operates numerous

Sources

- 2008 Medicaid Transformation. Kansas Health Policy Authority. January 2009. http://www.khpa.ks.gov/medicaid_transformation/download/2008/KHPA_2008_Medicaid_Transformation.pdf
- Weaver, Pat and Ron Straight. Innovative Medicaid Transportation Programs Rely on Partnership: A Look at What They've Done. Kansas Trans Reporter, January 1996.

	Regional Transit Authority	Regional Transit Coordinating Council	Joint Powers Agency	Joint Powers Board	Private Not-for-Profit	Private Stock Corporation
GOVERNANCE						
Policy level representation for city/county	+	—	+	+	possible	possible
Policy level representation for other stakeholders	possible	possible	—	possible	possible	possible
Policy input for city/county	+	+	+	+	possible	possible
Policy input for other stakeholders	+	+	+	+	possible	possible
Regional perspective	+	better	+	+	possible	possible
POWERS & FUNCTIONS						
Construct, operate, and maintain transit	+	+	+	+	+	+
Construct, operate, and maintain other modes	+	possible	possible	—	+	+
Condemn property and issue bonds	possible	+	+	—	—	—
CREATION						
Method of creation	legislation	agreement	agreement	agreement	agreement	incorporation
TAXING & REVENUE AUTHORITY						
Potential for new funding	possible	—	—	—	—	—
Reduce reliance on city/county general funds	possible	—	—	—	possible	possible
EXPENDITURE & FUNDING OBLIGATIONS						
Primary control	board	agencies	board	board	board	board
Secondary control	agencies	n/a	agencies	agencies	n/a	n/a
WITHDRAWAL						
Permits withdrawal	difficult	n/a	+	+	n/a	+
Method of withdrawal	legislation	n/a	agreement	agreement	n/a	stock sale

Key : **+** : strength **—** : weakness

Figure 1. Advantages and Disadvantages of Governance Models.

Adapted from the Charlottesville-Albemarle Regional Transit Authority Plan, Thomas Jefferson Planning District Commission, Charlottesvillle, Va., 2008. Nelson/Nygaard Consulting Associates.

transit services for its member cities and counties as well as a school district and various human service agencies. MIDAS relies on service contracts with its client jurisdictions and agencies for funding since it cannot levy a tax to fund itself.

JPAs may be hindered in their coordination efforts because they cannot involve key outside stakeholders who, depending on the region, may be a crucial part of providing transit services. To get around this limitation, some regions have set up JPBs which are substantially like JPAs but include private non-governmental stakeholders in the organizational scheme. Much like a TCC, the JPB is only an advisory body with no actual power of its own. Whatever decisions a JPB makes must be carried out by its member jurisdictions and private operators.

4) Private Not-for-Profit Agency. An alternative to public governance, the non-profit organization allows experienced transportation-providing human service organizations to take the lead in coordination efforts. Non-profits' boards can include government officials and private citizens. Funding generally comes from state and federal transportation grant programs. Much like a TCC, JPA or JPB, a non-profit organization (that as a 501(c)(3) corporation) requires no enabling legislation.

While substantially free of government involvement, a non-profit must tailor its services to grant providers in order to obtain grant funds. In the case that the non-profit is the outgrowth of a human service agency, this tailoring of services is less of an issue since these agencies commonly have previous experience tailoring services to

Governance choices, *Continued from page 3*

receive grant funds. For instance, Missouri's OATS, Inc., (www.oatstransit.org) was formed specifically to facilitate transit for the elderly. OATS relies on Federal Transit Administration Section 5310 (Transportation for Elderly Persons and Persons with Disabilities) grants to fund this service.

5) Private Stock Corporation. Another model of private ownership—a stock corporation—can be owned by either private or public stockholders or by a combination of both. The stock of JAUNT, Inc., of Charlottesville, Virginia (www.ridejaunt.org) is wholly owned by its member jurisdictions. Even though JAUNT is owned by public entities, the corporation itself remains private and operates like any incorporated business. Seats on JAUNT's board of directors are apportioned based on stock ownership. And, because it is private, the board can add jurisdictions by agreeing to issue additional stock. Funding is provided by member jurisdictions eligible for state and federal grants and through service contracts with public and private agencies.

Kansas provisions for coordination

The State of Kansas has specifically provided for a transportation authority in the Topeka region and a statute also allows the City of Wichita to own a transit system. However, the mechanism by which almost all other coordination must take place is the interlocal agreement. Such an agreement permits local governments to "make the most efficient use of their powers by enabling them to cooperate with other localities, persons, associations and corporations on a basis of mutual advantage and thereby to provide services and facilities in a manner and pursuant to

forms of governmental organization that will accord best with geographic, economic, population and other factors influencing the needs and development of local communities." (K.S.A. § 12-2901 et seq.).

Kansas law allows cities and counties to coordinate with other local governments and private persons and corporations to provide numerous public services. While transit coordination or "transportation" or "transit services" are not expressly authorized, they are also not expressly prohibited. In fact, cooperation regarding economic development, which certainly pertains to transit, is specifically allowed.

Interlocal agreements must explicitly outline a governing structure such as a joint board or an individual administrator.

As for financing, the interlocal entity may issue bonds. The Kansas interlocal agreement resembles a regional transit authority designation without the necessity of specific enabling legislation.

In sum

Any coordination effort is multi-faceted. Between governance structure, operating efficacy, funding reliability, and countless other details, choosing the right setup can be difficult. However, if each facet is examined individually, an appropriate approach can be identified. Cooperative coordinated regional transit can put your agency or coordination effort on the path to more efficient and cost-effective transit services.

To find out more about regional transit governance, go to http://www2.ku.edu/~kutc/pdffiles/KDOT_Regional_Transit_Pilot_Study/11-05-10-KUTCGovernanceModelsWhitePaper.pdf ●

M A N A G E M E N T

New transit resources from RTAP, *Continued from page 1*

find links to federal, state, academic and technical web sites of interest to transit professionals. These links include federal programs such as the Bureau of Transportation Statistics (helpful for grant writing) and other online resources for transportation safety, trade associations and organizations concerned with improving transportation.

Included in this list is our own Kansas Rural Transportation Assistance Program at http://www.ksrtap.org. KS RTAP is the place to find these FAQs and Resources, as well as other services for local transit

agencies. From the KS RTAP home page, look to the left column and click "Links" to find the FAQs and Resources.

Have a resource or question we missed? Let me know at alowder@ku.edu.

Anne Lowder is a transit trainer with Kansas RTAP. ●

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New and experienced transit managers can now find even more information relevant to their jobs at the Kansas RTAP Web site at http://www.ksrtap.org.

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Answers to Your Drug and Alcohol Questions

By Cheryl Fisher

We at the Kansas Department of Transportation (KDOT) often receive questions from transit agencies about drug and alcohol subjects. One question is about the difference between the Federal Transit Administration's (FTA) drug and alcohol training and driver's training provided by the Kansas Rural Transit Assistance Program (RTAP). Another question we often receive is when and how to do post-crash drug and alcohol testing for drivers. We'll provide answers in this article.

KDOT often receives questions about which types of crashes require post-crash testing of the driver.

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Question: Are FTA's drug and alcohol training and RTAP's driver's training interchangeable?

Answer: No. These are separate training programs. You cannot count one for both training programs when both are required.

According to CFR 49 Part 655, drug and alcohol employee training is mandated for all employees in safety-sensitive positions, and must include 60 minutes of training on the effects of drugs and alcohol in the workplace. This training is conducted online through TMHC Services, Inc.

Supervisors must complete FTA's "Alcohol and Other Drugs at Work" and "Reasonable Suspicion" modules to meet the required training for supervisors. The trainee must answer all questions throughout the sessions to be able to print a certificate of completion when finished. KDOT requires this training (both modules) to be completed every 2 years for all employees and supervisors in safety-sensitive positions. KDOT requires all 5311 providers who are in the Kansas Drug and Alcohol Pool to conduct this training and send a copy of all employee and supervisor training certificates to Cheryl Fisher, KDOT's Drug and Alcohol Program Manager, as well as a copy of the current roster of employees and supervisors in safety-sensitive positions. Certificates must also be maintained in the employees' and supervisors' drug and alcohol personnel files.

We are often asked why RTAP's driver's training, a one-day class that includes some drug and alcohol subject matter, cannot count towards the FTA requirement for drug and alcohol training. The answer is the RTAP training does not meet the one-hour time requirement for drug and alcohol training; the RTAP section that briefly mentions drugs and alcohol is not an hour long. Also, the RTAP training does not include the two hours required for all supervisors who have the authority to make reasonable suspicion determinations when they are needed.

However, like FTA's drug and alcohol training, RTAP training is required every two years for drivers, and certificates must be kept in the drivers' employee files.

Question: When is post crash testing required by KDOT?

Answer: There are three scenarios or thresholds for which an agency must complete a drug/alcohol test after a crash using a **DOT** Custody and Control Form. These are:

1. A fatality occurred as a consequence of the crash. The transit provider must always test the driver.

2. The crash resulted in disabling damage to a vehicle that necessitates that the vehicle be towed away from the scene of the accident. If the driver is not deemed at fault for the crash, then you do not have to test the driver. If your driver is at fault or you cannot determine who was at fault, you must test the driver.

3. A crash that results in an injury in which a person has to be treated IMMEDIATELY, not a day later, away from the scene of the accident. If the driver is determined to be not at fault for the accident then you do not have to test the driver. If your driver is at fault or you cannot determine who was at fault, you must test the driver.

Note: If your agency has an "always test policy" but the crash does not meet one of the above three thresholds for testing, you can test the driver but be sure to use the **Non-DOT** Custody and Control Form.

If you have any questions about post-crash testing, contact TMHC Services, Inc., to discuss whether testing is required. After your call, document which of TMHC Services' designated employer representatives you spoke

To access FTA's training offered by TMHC Services Inc., follow these instructions: Go to http://www.tmhcservices.com and click on training. On the training page find the link Online Individual Online Training 24/7/365, click this on the link and a new page will open that has a login and drop down box. Use the drop-down box to select the session you wish to view. The password is the same for both sessions: Tmhc321! [The exclamation point is part of the password.] Follow the instructions and be sure your computer's sound is enabled and speakers are on.

Tribes Benefit from Federal Transit Funding

By Erik Berg

Access to jobs and services on Indian reservations has improved through additional federal investment in rural tribal transportation systems.

Native American tribes relegated to reservations in remote parts of the country in the 19th Century fought poverty and a lack of opportunity due in part to their isolated geography. Today the introduction of dedicated federal transit funding, both in yearly surface transportation funding appropriations and with the recent American Recovery and Reinvestment Act, is helping tribal nations to connect their members to the medical care and job opportunities they need most.

Tribal nations and transit

According to the US Bureau of Indian Affairs (BIA), the US has 1.9 million American Indians and Alaskan Native citizens among recognized tribes. The BIA works with the nation's 564 federally-recognized tribes through 12 regions. Tribes in the Central United States are served by the Great Plains Region (15 tribes and nations), Southern Plains Region (17 tribes and nations), and the Eastern Oklahoma Region (17 tribes and nations). These tribes vary from tens of thousands of tribal members for some of the largest nations to just a few hundred on rural reservations.

The need for transit options on tribal lands is real, as the editors of *Community Transportation* magazine found during a recent issue dedicated to tribal transit. As their series of reports showed, the health care needs of tribal nations are similar to most other rural communities, while senior care is the fastest growing need.

However, federal economic data shows that the average unemployment among tribal nations is 75 percent. This high level of unemployment prevents many tribal citizens from affording personal vehicles, caused in part by, and reinforcing the isolation of, many native communities. As the magazine reported, "tribal transit leaders place public transportation at the top of their lists."

Until recently states were solely responsible for issuing transit funds to tribal nations, but historically the mechanics of this has been somewhat murky and problematic. Prior to the 2005 passage of the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU), the federal government issued tribal funding to states, and tasked them with reissuing the funds to tribes that applied for Section 5311 appropriations. The federal government recognizes certain tribal nations as governing bodies, but similar recognition has not been as forthcoming at the state and local level, which made relations and funding considerations more strained. With the passage of SAFETEA-LU, these relations improved thanks to a new, dedicated funding stream for tribal transit.

Tribal transit and SAFETEA-LU

The passage of SAFETEA-LU fundamentally changed the tribal transportation funding process. For the first time in federal transportation funding, tribal transportation received a dedicated funding stream from the Section 5311 formula program for "Other than Urbanized Areas." The federal government set aside $45 million, to be issued in increasing increments over the course of five years. This funding came in addition to the prior allocations included in state transportation funding; tribes could receive dedicated funding directly from the federal government, while still eligible to apply for funding from the Section 5311 program administered at the state level by the state DOTs.

Lorna Wilson, director of the Tribal Transit Program at the US Federal Transit Administration (FTA), explained how the system works.

"(The program) has been very successful," Wilson said, "We have 130 tribal grantees nationally receiving funds for planning or implementing transit systems. Once granted, funds are available for three years, and so far we've only had one tribe give the money back because they couldn't implement their system. That's very important to us at FTA."

Sources

- "Frequently Asked Questions – Tribal Transit Provisions of SAFTEA-LU," Federal Transit Administration: http://www.fta.dot.gov/documents/FAQ_Tribal_Transit_Program.doc.
- "Department of Transportation, Federal Transit Administration, Public Transportation on Indian Reservations Program, Tribal Transit Program Under the American Recovery and Reinvestment Act of 2009," The Federal Register, Vol.74, No. 52, Monday, March 23, 2009: http://www.fta.dot.gov/documents/E9-6271.pdf.
- "FTA Selects 100 Projects for Tribal Transit Funding," Federal Transit Administration, http://www.fta.dot.gov/news/news_events_10912.html.
- Nations In Transit issue, Community Transportation magazine, http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=155&z=5.
- Prairie Band Potawatomi Nation Transit Program. http://www.pbpindiantribe.com/transit.aspx.

The Prairie Band Potawatomi experience

The Prairie Band Potawatomi Nation of Kansas operates a general public transit system, and is typical of many Great Plains tribes. The tribe created Prairie Band Potawatomi Nation Transit in 2003 to serve a population of 1,238 in need of transportation to health care, shopping, and job opportunities.

According to Micki Martinez of the Nation's public works department, the system operates three wheelchair-accessible minivans and a backup 12-passenger van on a demand-service basis, first-come, first-served.

"We operate from 8 AM to 4:30 PM," Martinez said, "but our casino has three shifts, so it would be good for us to have something [in the future] to serve them all. We also have a lot of people who come from Topeka to work and for entertainment at the casino."

The tribe is the largest in Kansas, and the only one operating a dedicated transit system. The system has been a recipient of SAFETEA-LU funds for several years, and received $360,000 in operating funds from the FY 2009 Federal appropriation.

Of the tribes in the Central US, the tribes of Oklahoma were the largest beneficiaries from the FY 2009 SAFETEA-LU funding appropriation. Oklahoma tribes received a total of $3.19 million last year to fund planning studies for new transit systems, for operations expenses, and to purchase new vehicles and equipment. The tribes of Nebraska, South Dakota, Kansas, and North Dakota also received funding, with the smallest allocation going to North Dakota tribes at $234,000. Nationally, 61 tribal applicants were awarded $15 million in transit funds for FY 2009, out of 81 applicants that requested $28 million.

ARRA-aided tribal transit

The Prairie Band Potawatomi (PBP) Nation and many other Great Plains tribes received an added boost last year in the form of the American Recovery and Reinvestment Act (ARRA). Funding from ARRA was awarded by following the SAFETEA-LU process of grant applications, with the stipulation that awarded funds could only be used for capital expenditures. The applications were rated, and 39 were selected to receive a total of $17 million; the program received 71 ARRA grant applications for a total of $54 million.

The tribes of North Dakota fared well in receiving ARRA grant funding. Two tribes there received a combined total of $811,000 to build new transit maintenance facilities, purchase wheelchair-accessible vehicles, and build transit shelters.

The tribes of Oklahoma once again received the greatest share of funding for Great Plains tribes; they were awarded $1,703,121 in grants to purchase vehicles, upgrade facilities, and acquire Intelligent Transportation System (ITS) equipment.

Keeping the nations moving

The FTA Tribal Transit Program and ARRA grant funding are making a big difference in the level of service American Indian tribes receive. Using their $186,417 ARRA grant, the Prairie Band Potawatomi Nation will replace one of their wheelchair-lift vans and their old maintenance vehicle, and will conduct servicing and maintenance on their other vehicles.

"There was a lot of support for us from the State and Federal Transit Administration," said Micki Martinez, of the PBP Nation's motor vehicle department. "We have a good rapport with the Kansas Department of Transportation, and they and FTA were able to answer all of our questions and help us through the process."

Another Kansas tribe, the Kickapoo, received Section 5311 funds in FY 2009, and will use it for a transit planning study for the tribe.

Lorna Wilson of the FTA Tribal Transit Program reports that nationally 450 tribes are eligible to receive funds from SAFETEA-LU's Section 5311(c) program; in FY 2009 approximately 130 applied for funding. "That's great, but we need to do more outreach," said Wilson, "There are still many tribes that haven't even heard about the program. There are still tribes in remote parts of the country that need to know about it. Some just need a van service, and some need larger transit systems."

The SAFETEA-LU transportation bill reached the end of its 5-year life in FY 2009, and tribal leaders and federal transit officials are working with Congress to ensure Tribal transit funding continues in the next surface transportation funding authorization. Wilson said that FTA publishes notices in Spring for tribal funding applications for the upcoming fiscal year, so tribal leaders should watch the *Federal Register* and http://grants. gov for them. Tribal transit funding is here to stay, making vital connections for America's first nations.

For more information on tribal transit throughout the United States, consult the sources for this article — on page 6.

Prairie Band Potawatomi Nation Transit Program

A driver for Prairie Band Potawatomi Nation Transit stands proudly beside his van.

with, the determination that was made, and the threshold that the accident met.

Question: What else should an agency do in the event of a crash?

1. Complete KDOT's three-page Accident Report Form and send it to the KDOT Drug and Alcohol Program Manager. This is required of all crashes.

2. Notify your agency's KDOT Program Consultant of the crash.

3. If you make the determination that testing is required, you must test for both alcohol and drugs.

4. Your agency must cease trying to test for alcohol after 8 hours and for drugs after 32 hours. After these timeframes testing is inconclusive.

5. Document, document, document.

For more information on these and other drug and alcohol subjects, contact Cheryl Fisher, KDOT Drug and Alcohol Program Manager, at (785) 368-7091 or cherylfi@ksdot.org. ●

MARKETING

Baby Boomers and Rural Transit

By Nick Pappas

By 2050, one in five Americans will be considered elderly as the 65+ population doubles to 80 million. While a majority of this increase will be in suburban communities adjacent to major metropolitan areas, a good number of small and rural areas will be equally impacted. A growing concern among the "baby boom" generation centers on the availability of transit to support their independent lifestyles as they age. However, small or rural communities may not have the capacity to meet this need. Is your transit agency prepared to absorb this upcoming demand? By understanding the trends in population as well as the attitudes of the elderly (or soon-to-be elderly) regarding transit, your agency can be better prepared to meet the needs of your community.

National trends

According to the U.S. Census Bureau, the period of fastest growth among the elderly will occur between 2010 and 2030 as the baby boom generation enters their elderly years. During this period, the number of elderly will grow by an average of 2.8 percent annually. This is in contrast to the average annual growth rate of this age group of 1.3 percent over the past 20 years. Add to that the following facts that more elderly women are living alone

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(due to the life expectancy discrepancy between men and women), that the poverty rate increases with age, and that the elderly as a group are becoming more racially and ethnically diverse (a sign of relative transit dependence), and it becomes apparent that the need for transit will likely increase over the next two decades for this segment of the population.

State trends

As the nation ages, Kansas is expected to follow suit. Between 2010 and 2030, the elderly population will increase by 4 percent. Although the counties most impacted are Johnson and Miami (Figure 1), a fair number of rural counties are also

expected to have substantial increases in their elderly populations. The counties expected to have an increase above 5 percent during this 20-year period include Butler, Douglas, Franklin, Harvey, Jackson, Jefferson, Johnson, Leavenworth, Linn, Miami, Osage, Pottawatomie, and Sedgwick. While all of the urbanized counties already have public transit in place, this projection could be significant for rural counties such as Jackson and Miami, where much more transit service may be required.

Boomers' and seniors' travel behavior and attitudes of toward transit

As the numbers increase, so are the expectations of those passengers. According to a survey conducted by Harris Interactive, 82 percent of baby boomers place a high importance on their mobility and worry about being stranded when they are unable to drive, or worry that, as they get older, they will be unable to get around altogether.

When questioned about public transit, four-in-five older adults agree that public transportation provides them with the mobility and freedom to do what they most want to do, with the same number agreeing that public transportation is a better alternative to driving alone, particularly at night. However, two-thirds of older Americans believe that their community needs to provide more transportation choices for older adults, such as easy-access buses and senior citizen mini-van services. Further, nearly half are unaware of public transportation services that serve senior

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Source

- Harris Interactive. 2000. "The Attitudes of Older Americans Toward Mobility and Transportation."

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citizens in their community. Consequently, nearly three-in-four report that they have never used public transportation services in their community, most living in small or rural areas.

However, there is an opportunity to increase usage. The Harris Interactive study found that nearly three fifths of older Americans would ride public transportation more often than they currently do if it were more readily available. In addition, there are a variety of incentives that would increase transit usage, such as accessibility, comfort, and discounts at businesses near transit stops to name a few. (See sidebar above.) Clearly, the growing elderly population is interested in transit. Aside from providing incentives, what else can your agency do to attract this market?

Meeting the need

According to Sandra Rosenbloom, director of the Drachman Institute and professor of planning at the University of Arizona, there are three primary long-term strategies your transit agency can adopt to improve elderly mobility:

• First, your agency should promote regionalization. Since most services— such as medical facilities or grocery stores—are located in larger communities, coordination at the regional level can dramatically enhance elderly mobility from more rural areas nearby that lack such amenities. Currently, this effort is being implemented by the Kansas Department of Transportation in pilot areas throughout Kansas.

• Second, your agency can target some of your public transit services directly to the elderly—increase the frequency of service in the middle of the day, educate drivers on how to provide assistance for disabled riders, locate routes that serve the origins and destinations of the elderly, purchase vehicles that are designed for the elderly, and market to that age group.

• Third, your transit agency can support alternative transportation options. Such options include ride-sharing, introducing voucher programs, and strengthening the role of for-profit transportation providers. By increasing the transportation choices of the elderly who reside outside your service area, mobility can be increased for those who need it the most.

Conclusion

There will be a growing need for transit service by the elderly in the next 20 years. Statewide, a 4 percent increase in the elderly population by 2030 means transportation providers may need to increase/adjust service or be ready to promote alternative forms of transportation for this growing segment of society. You can go a step further by promoting regional coordination with other transit agencies. By implementing these strategies now, your agency will be well prepared for the upcoming "boom" in transit demand.

Expected Increases in Elderly Population in Kansas, by County

Percent Change by 2030
- 1% - 5%
- 6% - 10%
- 11% - 20%
- 21% - 30%
- 31% - 49%

Source: U.S. Census Bureau, Census 2000.
The University of Kansas Transportation Center

KU Transportation Center
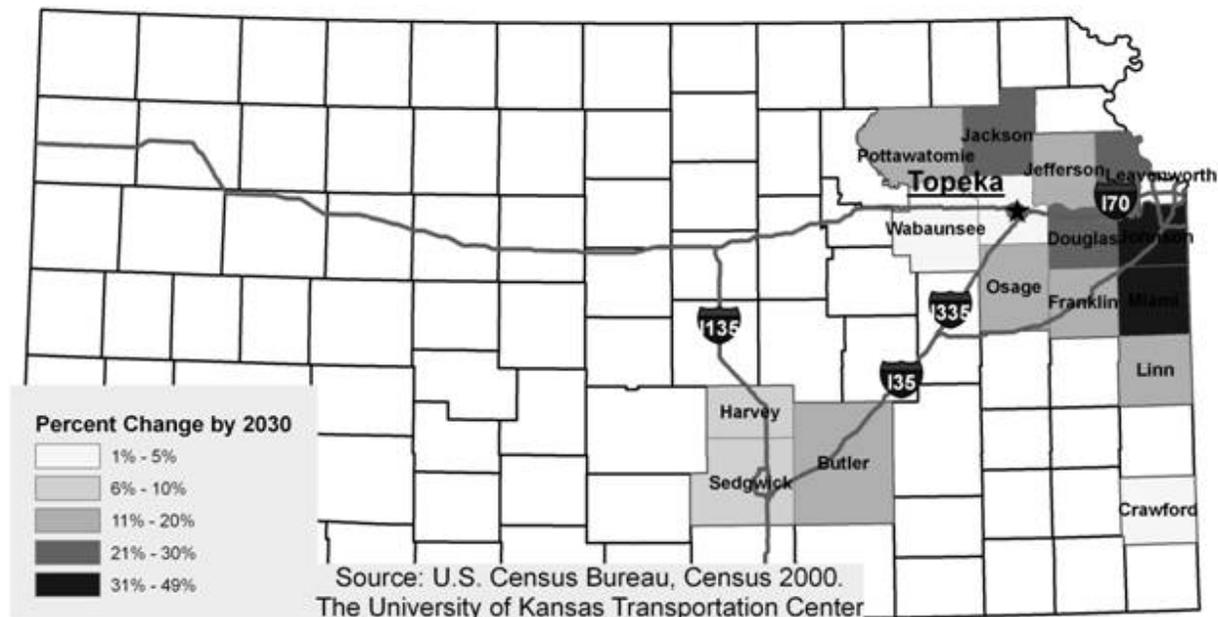
Securement: What to Seek and Avoid

By Anne Lowder

Some things to think about when securing a mobility device to your vehicle.

How safe is the mobility device you just secured? Did you secure is so it will not break apart or tip over during a crash?

The purpose of securing of a mobility device is to limit movement of the device and to protect its occupant (and other passengers) during a sudden stop or crash. It is accomplished by using securement straps to attach stable parts of the mobility device to stable attachment points on your vehicle. Basic "best practices" for securement promoted by the National Transit Institute (NTI) are:

1) The mobility device should be centered on the floor in the track/attachment area.

2) Wheel locks should be on and the power off.

3) Secure the wheelchair with a 4-point strap tie-down system using all four straps.

4) Secure the straps at a 30 to 45 degree angle, and

5) Make sure the mobility device cannot move more than two inches in any direction when secured.

The above steps presents an example of the perfect securement of a mobility device by best practices standards, but you should know that perfection is almost impossible with the range of designs for mobility devices in today's market. The American Disabilities Act (ADA) requires you to do the best you can (see sidebar). To help guide you in achieving the best possible securement for each type of mobility device it is helpful to ask these two questions: 1) *What potentially fragile parts of the mobility device should I* **avoid** *when attempting to secure it?,* and 2) *What parts should I* **seek** *in safely securing the device?*

What to AVOID when attaching securement strap tie-downs to a mobility device

Avoid wheels and wheel brackets. The wheel bracket is attached to the device using two bearings and a small metal shaft, and is not designed to withstand the forces exerted on it during a crash.

Avoid springs or suspension components. The springs or
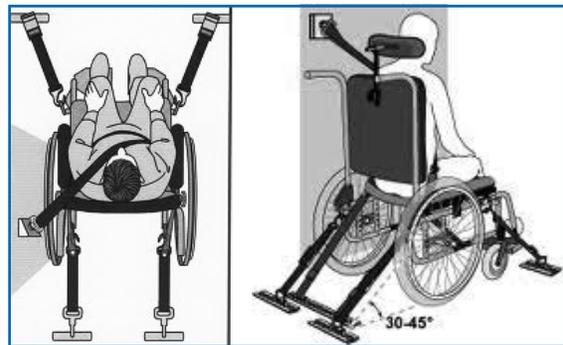
These images show proper securement using tethering straps. At left, the device is shown from above with the four straps clearly visible. The image at right shows the rear straps attached at a 30 to 45 degree angle.

University of Michigan Ride Safe

suspension components connect frame parts together and are not part of the base or seat frame. The components are not built or tested to withstand the forces placed on a mobility device during a sudden stop, hard turn, or impact.

Avoid arm and foot rests: Arm and foot rests are designed to lift or move out of the way. They attach with small pins or bolts to the frame member. If too much force is applied to these pieces, they will break or snap.

Avoid the post for removable seats. A post for a removeable seat is unsafe for securement because the post can dislodge during a crash. While difficult to access on some mobility devices, securement must be to the base or seat frame and not to the seat post.

Avoid swivel seats. Swivel seats aid a passenger in getting in and out of the device. The seat can be rotated by using a knob or lever usually located near the side of the seat. A swivel seat can be unsafe because it is not a solid piece of the frame. When encountering a device with a swivel seat, see if the passenger will transfer to a bus seat. The passenger can refuse, though; if that is the case, continue to secure the device and the passenger as best you can.

Sources

• National Transit Institute. Advanced Mobility Device Securement Skills Workshop handouts. Lawrence, Kansas, September 21 and 22, 2010.
• http://www.ada.gov. 49 CFR 37.165 and 49 CFR 37 Appendix D.

What to SEEK when attaching securement strap tie-downs to a mobility device

When looking for securement points, which is better—the base frame or the seat frame? The answer is: It depends. Refer to NTI's general best practices guidelines and apply the steps to the particular mobility device. Try to obtain a 30 to 45 degree angle on the securement of the tie-down and consider center of gravity, which will be higher if the passenger is to remain in the mobility device and lower if the passenger transfers to a seat. The most important thing is to find the securement location that provides the safest securement for the particular mobility device.

Seek base frames. There are a variety of base frames, and each may require different securement locations. There isn't "a one size fits all" securement location. Sometimes the front base frame will have ideal securement points, but the back base frame will not. Some base frames are protected by plastic shields that hide securement locations.

The best tip for determining the best base frame securement location is to go online and search for "owner's manual" and the name of the powered wheelchair. The manual will deconstruct and identify parts of the wheelchair and is usually a great resource. This tip won't help you with a new rider with a mobility device unfamiliar to you, but may be useful if you have someone with a difficult-to-secure chair who rides frequently.

Once the frame characteristics are identified, you can place webbing loops or tie-down straps on the frame and determine if those locations will allow you to follow securement best practice guidelines. For example, there may be an exposed base frame area, but when the tie-down straps are attached, the angle may be less than the recommended 30 to 45 degrees.

Note: The use of straps with webbing loops (rather than S-hooks) helps prevent damage of the plastic shroud around mobility devices. A mobility device frame that is covered with fiberglass may easily get scratched or cracked by an S-hook, and the mobility device owner may then file a damage claim. The use of webbing loops or straps that tighten with D-rings can reduce the chance of damage and help make the mobility device easier to secure.

Seek seat frames. Each mobility device has a seat frame in addition to the base frame. The seat consists of the seat back, arm rests and the seat cushion, which is attached to a metal fame. The seat frame is most likely constructed using welded joints or hardened bolts and it is attached to the base frame with posts. The posts are usually removable and not considered securement locations. The seat frame is often difficult to access, but it can provide a good securement location. Permanent webbing loops added to a seat frame can make the securement process safer and quicker.

Seek welded joints. Welded joints are common on both base frames and seat frames. They can be identified by a weld with a slightly raised irregular surface and often attached frame cross pieces. Welded joints are considered effective securement locations. Look to attach the tie-down to the welded junction where the arm or foot rest attaches to the frame.

Seek hardened bolts. Some mobility devices are

Do you always have to secure a mobility device? If you possibly can, then yes. This decision should be guided by NTI best practices guidance, the Americans with Disabilities Act (ADA) in 49 CFR 37.165 and 49 CFR 37 Appendix D, and by your agency's policies.

An unsecured mobility device can result in tips, flips or a projectile hazard within the vehicle. Thus for the safety of the individual using the mobility device, and the safety of other vehicle occupants, it is best to have the mobility device secured. However, the ADA states that an agency may not deny transportation to a passenger using a "common wheelchair" if the wheelchair cannot be secured by a vehicle's securement system. (Common wheelchairs have 3-4 wheels, are up to 30" wide and 48" long, and fit on lifts.) It is up to the agency to secure the mobility device to the best of the agency's ability, but if the wheelchair cannot be secured, and the passenger will not move to a seat, you must transport the passenger in the unsecured device.

What about the person? Are you required to secure the *occupant*? The ADA looks at the overall policy of the agency. If you require all passengers to buckle up, then you can require individuals seated in mobility units to do so as well. If your agency does not have a seat belt policy for all passengers, then the ADA says you cannot require securement of the person just because he or she has a disability.

assembled using hardened steel bolts. Hardened steel bolts are identified by three or six raised lines or bumps on the bolt. They can be found anywhere on a mobility device. Joints with hardened bolts are actually stronger than welded joints. If accessible, these bolted joints can achieve the recommended securement.

Seek an alternative front frame securement, if needed. Three- or four-wheeled scooters are challenging because they often do not have exposed frame members or identifiable welded joints in the front area. Scooters also have safety issues such as a high center of gravity so they are easy to tip over in a crash, even is the passenger is secured with a seat belt and shoulder belt. If you are unable to secure a scooter using frame components, an alternative securement strategy to consider is to connect the two tie-down straps across the foot plate (a solid frame member running front to back). This is an alternative method only. If possible, try to have the passenger transfer to a seat, if they are willing.

More information to come

In our next issue look for more detailed information on marking and tethering materials to use when securing mobility devices to your vehicle.

Estimating Travel Demand: New Tools

By Erik Berg

Rural transit managers and planners in Kansas, like their counterparts in any other state, use demand estimates to compete for funding, to justify current service levels, and to plan for future service needs. The most challenging hurdles in producing demand estimates are to know what type of demand model to use to get results that fit the real-world conditions, and knowing how to obtain the most up-to-date data. To know what tools are available to meet these challenges, we will look at some examples of different models being used for rural transit throughout the country, discuss new data sources, and look at the new B-36 rural demand estimate model from the Transit Cooperative Research Program (TCRP) to see how it performs with Kansas data.

Different models, different places

Transit demand models all have the same goal, to produce the best estimate of ridership, but go about it in very different ways. While organizations like the TCRP put their focus on producing a standard model that any rural transit provider can use, other researchers at universities around the country have built models that work well for specific geographic regions. The ideal research model, considering rural budgets and data availability, requires little agency-level input combined with simplicity of execution.

In 1995 the TCRP published "Report 3," a transit demand estimating tool built for use by rural agencies throughout the country. The model produced transit demand estimates for rural areas with inputs for "program" and "non-program" trips weighted differently. Program trips are defined as those provided by social service agencies like Head Start or mental health agencies—trips taken only because the social service program is in place. Non-program trips could include general purpose trips but are not limited to them, and are provided by agencies that serve whole communities. TCRP Report 3 methodology calculates transit demand

estimates for existing levels of service in communities with populations less than 50,000 and population densities less than 1,000 persons per square mile. TCRP methodology does not estimate demand in cities that provide fixed route service. To obtain all the required data to generate estimates using TCRP Report 3, rural communities would have to look for data in sources other than the US Census; planners would have to survey providers, a difficult or prohibitively expensive proposition (TCRP Report 3, 1995).

Several demand estimate research projects have experimented with using simple regression calculations in Disaggregated Demand Forecasting; or forecasting demand for specific demographics and groups within the total population of a study area, rather than forecasting demand for the total population. This approach attempts to improve the accuracy of demand estimates by developing demand multipliers for

specific segments of the population or specific types of trips. The University of South Florida used cost-per-trip data and regression analysis to create demand multipliers in rural Florida counties. While accurate locally, its sophistication made use of the South Florida model in other places difficult (Florida Commission for the Transportation Disadvantaged, Technical Memorandum 6, 1996).

Utah State University developed a model focused on elderly and low-income populations that utilized fare pricing, reservation times and agency Vehicle Miles Traveled in a simple linear regression model. The linear regression model takes the population of elderly and low-income in the study area for the past several years, factors in utilizing fare pricing, reservation times, and agency Vehicle Miles Traveled, and then calculates the predicted demand for each of those populations for several future years. The data collection depended on a costly mail-in survey that suffered

Transit demand models help agencies predict increase in riders within demographic groups and based on geography. Some models are specifically designed for rural transit.

istockphoto.com

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Sources

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- Florida Commission for the Transportation Disadvantaged, Technical Memorandum 6: Demand Forecasting Methodology, University of South Florida Center for Urban Transportation Research. http://www.cutr.usf.edu/pub/reports.shtml.
- LCS Consultants, Inc and SG Associates, Inc. Montana Statewide Rural Passenger Needs Study – Final Report. Montana Department of Transportation, 2001. http://lsccs.com/projects/MDT/Final/tabofcon.PDF.
- Nielson Claritas, http://en-us.nielsen.com/content/nielsen/en_us/product_families/nielsen_claritas.html.
- Painter, Kathleen, et. al. Demand Forecasting for Rural Transit – Models Applied to Washington State. Transportation Research Record: Journal of the Transportation Research Board No. 1997, Transportation Research Board of the National Academies, Washington, D.C., 1997, pp. 35-40.
- TCRP Project B-36: Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation, http://www.tcrponline.org/.
- TCRP Report 3, http://www.tcrponline.org/.
- US Census Bureau, http://www.census.gov.
- Vanasse Hangen Brustlin and SRF Consulting Group, Inc. 2008 Greater Minnesota Public Transportation Plan. Minnesota Department of Transportation, 2009. http://www.dot.state.mn.us/transit/transitplan/PDF/AppE_DemandEstimates.pdf.

poor response rates (Attaluri, 1997).

Other researchers compared rural transit demand estimates in four rural counties in Washington State using the TCRP method and a Disaggregated Transit Demand (DTD) model of its own design. This model examined ridership within demographic groups with multipliers for each group's likelihood to use transit services. Researchers found the DTD model much more closely predicted ridership levels in the four county study area, but its multipliers wouldn't be useful in other locations (Painter, Kathleen, et. al., 2007). For Kansas rural transit providers interested in the disaggregated demand forecasting methods, multipliers would have to be developed.

Another demand estimation method gaining popularity is the Mobility Gap Method. LSC Transportation Consultants utilized this technique to determine demand for transit in rural Montana communities by examining trip generation rates for area households with and without automobiles—data obtained from the National Personal Transportation Survey (NPTS). Gap analysis presumes that all people would make the same number of trips with free access to transportation. The difference between zero-car household trips and those with access to automobiles is the mobility gap and, therefore, the demand for transit in the area (Montana, 2000).

Many consulting firms and state departments of transportation use Mobility Gap analysis, in addition to TCRP model estimates, as a second check on demand estimates. Minnesota uses TCRP, Mobility Gap and a peer review technique that surveys successful agencies across the state and nation in urban and rural areas. Minnesota assumes demand for transit in its economic zones at the 80th percentile level for peer communities (Greater Minnesota 2008). A challenge in using the Mobility Gap technique is data acquisition, as the most recent NPTS survey is from 2001, and more recent US Census American Community Survey data for household vehicle ownership is only available for Kansas counties with populations over 20,000.

TCRP recently published Project B-36, which builds on and refines the TCRP Report 3 methodology and incorporates elements of other models. B-36 has new estimates for need using Mobility Gap analysis, General Public Program and Non-Program Demand and expands demand modeling in rural areas to include estimates for small city (under 50,000 people) fixed route service and commuter trips to urban centers. Additionally, B-36 features a Microsoft Excel spreadsheet that automates demand calculations with input from transit agencies and demographic data, making the model much easier to use for transit agencies (TCRP B-36).

New data sources

The greatest challenge transit planners face in using any of the demand estimation models available is obtaining the right data. Most rural models depend on US Decennial Census Data, but this data becomes old and out-of-date quickly. New data sources are becoming available, and are worth considering for demand estimates.

The Census recently expanded its American Community Survey (ACS) to include data for Micropolitan Areas with populations over 20,000; Micropolitan Areas are geographic entities defined by the U.S. Office of Management and Budget (OMB) as containing an urban core of at least 10,000 (but less than 50,000) population, a core county or counties, and adjacent counties "that have a high degree of social and economic integration (as measured by commuting to work) with the urban core." For Kansas, this new data in the ACS, collected over three-year periods and calculated with weighted averages, fills in the gaps between census periods for 27 of the largest counties in the state and the principal cities in those counties. County level and Micropolitan level data in the ACS deliver recent estimates for zero-car households and estimates of the mobility limited population. The US Census' Local Employment-Household Dynamics Section also provides 1 and 3-year data on employment and commuting patterns.

In jurisdictions too small for inclusion in the ACS, state data can fill the gap. For Program Demand Estimates, social service departments like Kansas' Departments of Social and Rehabilitation Services (SRS)

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can provide data adequate to develop surrogate measures. State Departments of Transportation also keep ridership and vehicle mileage records for transit vehicles that are state or federally-funded.

Private data sources can also fill data gaps left by the Census. Companies that collect privately-derived business data can provide updated demographics, economic data (poverty level income), and transportation-related data (number of household without a vehicle, average travel times, etc.).

Generally, private data companies do not provide disability data. Data providers, like Claritas and its PCensus package, can often provide data at the county, block level, or zip code levels. Planners who use private data in generating demand estimates should be mindful that it was generated using private proprietary projection methods, and where possible should check it against US Census data.

An example: Estimating Kansas transit demand with the B-36 model

Let's now go through the process of generating a rural transit demand estimate using one of the models. In this case, we will use the TCRP Project B-36 Model for Rush County, Kansas.

The process begins by collecting the data. The most recent ACS population estimate available is 3,143 individuals for 2009, but for this test case we will use PCensus' 2009 estimate of 3,145.

US Census data is also used to fill in population Over Age 60 (884 for Rush), Persons Age 64 or Less Living Below Poverty (297 for Rush), and Number of Persons Residing in Households Below the Poverty Level (343 for Rush).

PCensus provides basic data on the number of Zero-Vehicle Households, which can be used as a basic proxy for the Number of People Living in Households Without a Vehicle (66 for Rush, data not available from ACS), and for the county's total square miles.

The most recent Vehicle Miles Traveled and ridership data collected by the Kansas Department of Transportation (KDOT) from state rural transit providers was from Fiscal Year 2009 (FY09) spanning July 2008 to

June 2009, so this is used. Total program VMT is zero because all transit providers in the county offer general purpose, disabled, and elderly service, so the county non-program VMT of 50,448 is used for total miles available for general purpose, as well as for disabled and elderly service.

Kansas SRS data shows population counts of 19 for Adult Developmental Services, 15 for Head Start, 20 for Job Training, 68 for Mental Health Services, 60 for Nursing Home, 34 for Senior Nutrition programs, and 4 in Substance Abuse programs.

We continue with demand estimate generation by opening the B-36 spreadsheet. We click on the Analysis Setup tab, and check boxes based on the data we have; in this case Need-Number of Persons, Need-Number of Trips, Demand-Program, Demand-Non Program, Developmental Service: Adult, Head Start, Job Training, Mental Health Services, Nursing Home, Senior Nutrition, and Substance Abuse. We then enter this data into fields on the Input Tab of the B-36 spreadsheet, and select Kansas from this page's drop-down list for Mobility Gap.

Now for the results: On the Output Tab, the B-36 Model showed an Annual Need (mobility gap) of 55,400 trips, Program Demand of 46,000, and Non-Program Demand of 1,900 trips.

The B-36 model is not a perfect model for predicting transit demand in Kansas. Research by Kansas University's Transportation Research Institute (KU TRI) has shown the B-36 Model tends to over-predict Program Demand and under-predict Non-Program Demand for Kansas counties. The model is only a starting place for Kansas transit planners looking to create transit demand estimates. KU TRI is examining the B-36 Model further to see how well it works with Kansas counties using data available from the sources listed here, and hopes to create an online tool where transit providers in Kansas can input their own data to get the best demand estimates.

To learn more about transit demand estimation, please see the sources for this article listed on page 13.

Transit Resources

Oxygen Tank Policy. The oxygen tank policy developed by the Village of Los Lunas Public Transportation, Los Lunas, New Mexico. 1 page. Download at http://bussafety.fta.dot.gov or
❑ send hard copy

Frequently Asked Questions About Service Animals. Easter Seals Project Action. This short booklet, revised in April 2007, answers common questions about service animals in the context of ground transportation for both people traveling with service animals and transportation providers. 8 pages. Download from the Project Action Web site at http://www.projectionaction.org or
❑ send hard copy

Revised Training Module on Emergency Procedures for Rural Transit Drivers. National RTAP. This module builds on the foundation established in the training module titled Safety Training and Rural Transit (START) developed by National RTAP and offers the most current training on preparedness for hazards and threats that may be encountered by a transit operator. http://www.nationalrtap.org/Admin/NationalRTAPNews/NewsArticleDetails.aspx?NewsID=31.

Second Installment of DigitalCT. Community Transportation Association of America. This edition looks at successful transportation coordination. Join the mailing list at: http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=2207&z=60.

A New Portrait of America: First 2010 Census Results. U.S. Census Bureau. http://www.census.gov/.

Paratransit Customer Rights and Responsibilities Bookmark: A Reference Guide to American with Disabilities Act (ADA). Easter Seals Project Action (A free download). https://secure2.convio.net/es/site/Ecommerce?VIEW_PRODUCT=true&product_id=7082&store_id=9663&JServSessionIdr004=qgxyldns12.app224b.

> **New From Kansas RTAP: Advanced Mobility Device Securement Skills Development Workshop**
>
> The goal of this new one-day workshop is to provide transit professionals with hands-on practice and problem-solving skills for securing a variety of powered mobility devices on transit vehicles. It covers best practices for securing devices that often lack traditional securement points and placing lap belts on the passengers who use mobility devices as transit seating.
>
> Participants will review pre-trip preparation, on-board tools and equipment, effective strap securement locations, safe work practices, and then practice securement techniques on a variety of mobility devices.
>
> See page 16 for dates and locations for this workshop.

ORDER FORM

A few of the above resources are available in hard copy for readers without internet access. Check the items you would like to receive and fill out the form below. Fax to (785) 864-3199.

Name_____   Title _____

Agency _____   Phone _____

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Kansas TransReporter

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.

Calendar

Rural Transit Training and Conferences

2011 Kansas RTAP Driver Training:

Defensive Driving and Passenger Assistance Skills
February 28 in Colby, KS
March 23 in Manhattan, KS
April 5 in Atchison, KS
Contact Kansas RTAP**

Defensive Driving and Emergency Response
March 1 in Dodge City, KS
March 10 in Wellington, KS
March 22 in El Dorado, KS
April 14 in Ottawa, KS
April 26 in Topeka, KS
May 3 in Wichita, KS
May 4 in Winfield, KS
May 11 in Chanute, KS
May 25 in Greenleaf, KS
Contact Kansas RTAP**

Advanced Mobility Securement
March 2 in Garden City, KS
March 8 in Great Bend or Hutchinson, KS
April 19 in Emporia, KS
May 5 in Salina, KS
May 10 in Girard, KS
May 24 in Leavenworth, KS
June 2 in Paola, KS

Other events:

SWTA Annual Conference & Expo – Joint conference with Texas Transit Association
February 28–March 3 in Austin, TX
http://www.swta.org

APTA Legislative Conference
March 13-15, 2011 in Washington, DC
http://www.apta.com

Community Transportation Association Expo
June 5-10 in Indianapolis, IN
http://web1.ctaa.org/webmodules/
webarticles/anmviewer.asp?a=2217&
z=100

***To register for a Kansas RTAP workshop, go to http://www.ksrtap.org. Click on "Register to attend."
Questions? Contact Kristin Kelly at (785) 864-2594 or kbkelly@ku.edu.*

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