Trending Topics in Accessible Transportation

Carol R. Wright
Assistant Vice President
Transportation and Mobility
Easterseals, Inc.
Trending Topics in Accessible Transportation

- National survey of transit providers, human service agencies, mobility managers, and other stakeholders

- Information gleaned from NADTC and FTA technical assistance requests

- Data gathered from national, regional and state conferences
Crossing Jurisdictional Boundaries

- Outside of major cities, at least ¼ of the U.S. lacks public transportation services to travel to a neighboring county.
- Local transit funding sources can limit boundaries of service area.
- Inability to cross county or state lines on public transit – barrier to needed services.

Cutaway transit bus
Potential Solutions

There is a need for:

- funding source flexibility
- improved cooperation
- better coordination
- Increased communication
Shared Ride/Transportation Network Companies

• Connect paying passengers with drivers who provide transportation in private vehicles – scheduled through an app on a smart phone (Uber/Lyft/Liberty)

• Difficult in a rural environment due to lack of population density
Shared Ride/TNCs

- Uber/Lyft have partnered with other organizations to enable customers without smart phones to access their services (available in limited areas: CA, FL, AZ, TX, but will grow)

- MedStar Health in MD/DC partner with Uber to arrange rides on hospital website for patient appointments
Shared Ride/TNCs

- Lyft has relationship with National MedTrans Network in NY to provide Medicaid rides

- Liberty is partnering with local transit agencies in rural areas to offer rides when public transit service is not available (evenings, weekends, holidays, etc.)
Connecting passengers to the public transportation system

- Lack of service connections & coordination between providers
- Incomplete sidewalk systems or no sidewalks at all
- Insufficient availability of alternatives to reach final destination after leaving transit system bus stop
- Inadequate information on bus availability/route structure

www.nadtc.org
First Mile/Last Mile Potential Solutions

There is a need for:

- improved pedestrian access
- benches along routes to bus stops
- coordination between public and private providers (TNCs, taxis, human service transportation)
Accessible Bike Share

- Offers increased transportation choices as an alternative to driving while assisting people to move about in their communities

- Helps people who do not own a bike or want to try out an accessible bike before purchasing one

- Some communities who have bike share programs are still slow to adopt accessible bicycles
Accessible Bike Share

To be truly accessible, bike share programs should include:

- E-bikes (electric bicycles) – assist in propelling & pedaling
- Hand bikes – eliminate the need for foot pedaling
- Trikes (3-wheeled devices) – provide stability & balance
Accessible Bike Share Examples

- Montgomery County, PA uses libraries to facilitate short-term bike loans where people can rent a bike for up to a day at a time at no cost. Bikes can be returned to any library in the county, not just to the point of origin.

- College Park, MD
- Ohio State University Bike Share
- Westminster, CO
Accessible Bike Share

The **City of Hernando, MS** received a grant from NADTC in 2017. As part of the grant, they are initiating a bike share which includes accessible bikes which can be loaned out at no cost through senior centers and the library. This program is just getting underway – Stay tuned for results as the program progresses!

Map showing Hernando, MS
Rural Travel Training

Travel Training teaches independent travel skills allowing people to travel safely & independently using public transportation.

Teaches 3 major skill sets:

1. Orientation to outline options and services available; learn how to reserve a ride
2. Learn how to board the bus with or without a mobility device; overcome anxiety about riding the bus
3. Learn how to use the transit system by riding the bus; learn how to pay the fare; learn how to get home again
Rural Travel Training

Small programs often rely on:

• Volunteers
• Peer-to-Peer models (Travel Ambassadors)
• Train-the-Trainer programs with other agencies (human service centers; senior centers; independent living centers; veterans programs; etc. that train their clients/participants how to ride)

www.nadtc.org
Rural Travel Training Example

STAR Transit Client Advocate Program, Terrell, TX

- Peer-to-Peer Model
- Volunteer Client Advocate matched with a rider in need
- Volunteer is picked up first/dropped off last
- Volunteer stays with passenger
- No cost to passenger for the service
- Assistance is repeated until traveler can safely travel alone
- Assistance can continue indefinitely if rider cannot travel independently
Rural Travel Training Example

Delmarva Community Services One Stop Travel Program, Rural Eastern Shore, MD

- Train-the-Trainer model
- Multi-disciplinary program includes agencies that serve people with disabilities & older adults
- Trainers include human service agency staff; senior center staff; & Hispanic services outreach staff
Seamless Mobility through Technology, Route Design & Coordinated Systems

Seamless mobility is made possible by connected infrastructure that allows people to reach their desired destinations. This includes:

- Public transportation
- Sidewalks
- Biking/walking trails
- Ramps
- Signage
Seamless Mobility

Seamless mobility uses technology to help people:

- Plan trips
- Schedule rides
- Pay for tickets/rides
- Receive real-time information while en route
Coordinated & Connected Transit Systems

- Regional transit coordination
- Ability to cross city/county/state lines
- Integrated fare collection
- Joint reservation systems (one call/one click)
- Mobility management
- Pedestrian safety-conscious, designated pick-up and drop off zones shared by taxis, buses, & TNCs, with places to secure bicycles
Example

Portland, OR

Integrated pass system: TriMet, C-Trans buses, the Streetcar, MAX light rail, & WES commuter rail (including Vancouver) all use the same payment system.

Integrated transit pass
Common frustration among public transit riders:

- Inability to predict when a pick-up is going to be late
- What the destination arrival time will be
- If there are outages in accessibility functions (i.e., elevators, escalators, lifts)

Automated Vehicle Location (AVL) technology uses GPS to monitor time, location and speed to determine vehicle location in real-time, but it still doesn’t translate to the rider.
Real-Time Technology for Public Transit

What do we like about TNCs?

- Know exactly when we will be picked up for our ride
- Know who to look for
- Ease of payment
- May or may not be a shared ride

Mobile app on cell phone
Can this be accomplished with public transit?

The answer is yes! The issue is cost and the ability to procure the necessary technology.

Who does this technology benefit?

Passengers who can access the technology (e.g., has a smart phone)

What about those who do not have a smart phone? Can they still benefit from the technology?
Real-time technology can be made available to passengers through mobile apps on computers or phones and by using texts or email.

Information provided can include:

- Status of reservation request
- Pick-up times or notice of delayed pick-up
- Destination arrival time
- Updates on elevator, escalator, or lift outages
How many of you are old enough to remember the cartoon “The Jetsons”? 
Self-driving cars have been the stuff of fact & fiction since the early days of the automobile.

- 1925 – *Time* magazine reported on a radio-controlled self-driving car on NYC streets

- 1939 World’s Fair Futurama Exhibit – GM featured a self-driving car designed by Norman Bel Geddes
Autonomous Vehicles

Google has had 2 iterations of a self-driving car:

1) “Waymo” had a steering wheel & brakes for back-up in case a driver had to take over operation of the vehicle

2) Second generation version is entirely driverless – no steering wheel or brake pedal. The design is appropriate for people who are unable to operate a standard vehicle.

Goal: To enhance mobility for all while providing safe, efficient and affordable transportation.
Autonomous Vehicles

- **Nissan**’s CEO has promised it will offer a vehicle with autonomous drive technology by 2020, although it will require an able driver as back-up for operating the vehicle if needed.

- **Audi** recently obtained a permit to test self-driving cars on California’s public roads (but these cars also have manual controls so a driver can take over if necessary).
Autonomous Vehicles

- **University of Michigan, Ann Arbor** tested driverless 15-passenger shuttle buses and will be providing transportation to students & staff within a 2-mile radius while driving with regular vehicles on the road in early 2018.
Potential Benefits of Autonomous Vehicles

- Increased safety
  - Reduction in traffic accidents
  - Fewer vehicle/pedestrian accidents
  - Fewer injuries as a result of accidents
- Increased mobility
- Relieves drivers of navigation chores
- Facilitates business models for transportation as a service – especially shared rides

www.nadtc.org
Obstacles for Autonomous Vehicles

- Technological challenges
- Liability issues
- Government regulations
- Resistance to change/fear
- Time period needed to replace existing stock of vehicles (mixed use on public roads for decades)
- Security concerns such as hackers/terrorism
Where Can I Learn More About These Trends?

www.nadtc.org
Launched December 2015

Partnership of National Association of Area Agencies on Aging (n4a) and Easter Seals, Inc.

Builds on the earlier work of the National Center on Senior Transportation and Easter Seals Project ACTION
NADTC

- Promotes the availability & accessibility of transportation options that serve the needs of:
  - Older Adults
  - People with Disabilities
  - Caregivers

- Focus on Section 5310 Formula Grant

Man in wheelchair using lift on bus
Goals of the NADTC

- Promote the use of accessible public transportation for employment, healthcare, education, recreation, and to support independent living.

- Increase the effectiveness, efficiency, and quality of coordinated human service transportation.

- Ensure transportation planning is done in conjunction with broader planning activities at all levels.

- Highlight and assist in developing promising practices to solve transportation challenges, maximizing the effectiveness of federal investments in specialized transportation.

www.nadtc.org
What We Do...

- Communication and Outreach
  - Website
  - Blog
  - Facebook
  - YouTube
  - Twitter
  - Linked In
  - Yearly Trends Report
  - Technology-focused White Paper & Resources
  - Information & Referral Resources

Image of homepage on NADTC Website

www.nadtc.org
What We Do...

- Provide person-centered technical assistance
  - 800# Information & Referral Hotline
  - Information Clearinghouse (resources including past documents from National Center on Senior Transportation and Easter Seals Project ACTION)
  - New Online Publications

- Training
  - Webinars
  - Online Courses
  - In-person Events
What We Do...

- Coordination and Partnerships
  - Stakeholder Review Committees
  - Open Dialogues
  - Forums

- Investing in Community Solutions through Community Grant Programs
Resources

- National Aging & Disability Transportation Center: www.nadtc.org
- National Center for Mobility Management: www.nationalcenterformobilitymanagement.org
- National Rural Training Program: www.nrtap.org
- National Shared Use Mobility Center: www.sharedusemobilitycenter.org
Questions and Discussion
Many Thanks for Having Me at Your Conference!
Carol R. Wright  
Co-director, NADTC  
Assistant Vice President, Transportation and Mobility  
Easter Seals, Inc.  
202.403.8365 | cwright@easterseals.com  
www.nadtc.org