How New Information and Scheduling Technologies Support Mobility Access for All

June 21, 2017
MISSION: To promote the availability of accessible transportation options that serve the needs of Older Adults, People with Disabilities, Caregivers and Communities.

MAJOR OBJECTIVES:
• Person-centered technical assistance and information & referral
• Training: webinars, online courses/forums
• Interactive communication and outreach strategy
• Coordination and partnership strategy, including stakeholder engagement
• Investment in community solutions
• Independent program evaluation

KEY STAKEHOLDERS:
Transportation providers; human services providers; disability organizations; Area Agencies on Aging; State Departments of Transportation; Tribal Transit and Tribal Elder Services; FTA; ACL; and more....

UPCOMING EVENTS & PRODUCTS include a Webinar on June 21 and Series of Blogs on Transportation Information and Referral; Preconference Intensive on Sunday, July 30 at the n4a Annual Conference on Increasing Transportation Options in Rural America for Older Adults and People with Disabilities.

www.nadtc.org
NADTC’s Information and Assistance Initiative

Transportation Information and Assistance includes varied approaches that communities may adopt to respond to ride requests and answer questions about transportation options. These may include the following:

- One-Call/One-Click Transportation Resource Centers
- Mobility Management
- Aging and Disability Resource Centers
- Area Agency on Aging (AAA) or Center for Independent Living (CIL) Information and Referral/Assistance Programs
- 2-1-1
Our Presenters today

[Images of two presenters]
NADTC

Questions?
How New Information and Scheduling Technologies Support Mobility Access for All

State DOTs Connecting Users and Rides for Specialized Transportation

Volume 1: Research Report

NCHRP REPORT 832

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

State DOTs Connecting Users and Rides for Specialized Transportation

Volume 2: Toolkit for State DOTs and Others

NCHRP REPORT 832

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

The National Academies of Sciences, Engineering, and Medicine

National Aging and Disability Transportation Center | June 21, 2017
Connecting Specialized Transportation Users and Rides

There are many types of transportation customers...

People with Disabilities

Older Adults

Veterans

Low-Income

General Population
Connecting Specialized Transportation Users and Rides

...traveling for many different trip purposes...

Work/Training  Shopping/Recreation  Dialysis

Medical Appointments  Human Services

Image Credits: Nelson\Nygaard, Public Domain Images, Wikimedia, Flickr (Tunstall)
Connecting Specialized Transportation Users and Rides

...that can be served by a wide range of transportation modes and services, each with different requirements and constraints.

- Voucher/Subsidy Programs
- ADA Complementary Paratransit
- Taxicabs and Livery Services
- Medicaid Non-Emergency Medical Transportation
- Private-For-Pay Chair Car Services
- Transportation Network Companies (Lyft/Uber)
- Volunteer Driver Programs
- Micro Transit
- Fixed Route and Flex Transit
- Human Services Transportation
- Senior Transportation
- Carpoools/Vanpools
- Dial-A-Ride Services
- Veterans Transportation
Linkages can assist transportation users in finding the transportation service that will best meet their current travel needs.

- One-stop shopping via phone or internet
- More accurate and accessible information about transportation services
- Many styles and functions
- Some using mobile technologies
- Accelerated with funding from Veterans Transportation and Community Living Initiative (VTCLI)
What Did We Find in Our Research?

- New funding sources, transportation services, and technological innovations have accelerated linkage program development.
- These new linkages fall along a continuum of functionality.
- Each level has unique benefits, challenges, and opportunities.

1. Central Repository
2. Matching Assistance
3. Trip Planning Assistance
4. Trip Booking Assistance
5. Direct Trip Booking
# Levels 1 & 2: Service Matching

## Level 1: Central Repository

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Static, hard copy list of services and programs distributed via phone or website</strong></td>
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<tr>
<td><strong>Centralized Source of Information</strong></td>
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<td><strong>Out of date quickly/hard to maintain</strong></td>
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<tr>
<td><strong>Online portal for updating service information (Level 1A)</strong></td>
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</table>

## Level 2: Matching Assistance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Customers supply search criteria or answer “triage questions” to reduce providers to viable options</strong></td>
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<tr>
<td><strong>Uses triage questions or key words (211) to narrow down options</strong></td>
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<tr>
<td><strong>Not linked with schedule information</strong></td>
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<tr>
<td><strong>Email follow ups with customers</strong></td>
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## Matrix of Publicly-Funded Transportation Services

<table>
<thead>
<tr>
<th>Trip Origin</th>
<th>General Public&lt;br&gt;&lt;small&gt;(see page 23)&lt;/small&gt;</th>
<th>Older Adults</th>
<th>Persons With Disabilities</th>
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<tbody>
<tr>
<td>Channahon Township</td>
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<td>Crete Township</td>
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<td>Will County ADA Paratransit&lt;br&gt;&lt;small&gt;(see page 26)&lt;/small&gt;</td>
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<td>Will County ADA Paratransit&lt;br&gt;&lt;small&gt;(see page 26)&lt;/small&gt;</td>
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<tr>
<td>Jackson Township</td>
<td>Central Will DAR&lt;br&gt;&lt;small&gt;(see page 15)&lt;/small&gt;</td>
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<td></td>
<td>Will County ADA Paratransit&lt;br&gt;&lt;small&gt;(see page 26)&lt;/small&gt;</td>
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<td>Joliet Township</td>
<td>Central Will DAR&lt;br&gt;&lt;small&gt;(see page 15)&lt;/small&gt;</td>
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</table>
211 LA County

Los Angeles, CA
Level 3: Trip Planning Assistance

Customers use online system or call mobility specialists to get detailed ways to make a particular trip

- Integrated with a variety of automated data sources (ex. GTFS)
- Must contact service provider for trip booking
- Mobile applications and third-party integrations

Emerging Functionality: GTFS Flex

- GTFS-flex is an emerging data standard for many variations of flexible and demand-response services
- Allows trip planners to include a wide range of transportation options beyond standard fixed-route transit
- Currently under development, with V-trans (Vermont) FTA MOD Sandbox pilot project
Levels 4 & 5: Trip Booking

Level 4: Trip Booking Assistance

Mobility specialists call transportation service provider(s) to book trip on behalf of the customer

- Customers can identify and book a trip with one call
- Customers have to call mobility specialist for trip booking assistance
- Can focus assistance on harder to book trips, such as transfers

Level 5: Direct Trip Booking

Customers (or mobility specialists) can directly book trips via links to paratransit systems

- Customers do not have to contact providers to book a trip
- Providers often use different software, requiring APIs
- Fare integration (emerging Level 6)
FindMyRidePA

1. Central Repository
2. Matching Assistance
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Image Credits: PennDOT/Cambridge Systematics
What steps should you take to develop a linkage?

- Toolkit for State DOTs and others available online
  http://www.trb.org/Main/Blurbs/174327.aspx

- Includes seven steps for developing a linkage program

- Uses the continuum of linkage functionality to help craft a program that best fits your market needs
What are the seven steps?

1. Identify Geographic Scope
2. Select Target Users, Trips, and Modes
3. Analyze Existing Linkage Functionality
4. Determine Desired Linkage Functionality
5. Develop Evaluation Criteria and Process
6. Evaluate Sources of Funding
7. Create a Marketing Plan
Study Goals:

- Identify ways to give people with disabilities and older adults better access to multiple transportation services
- Identify service tweaks & coordination opportunities

Funded by Administration for Community Living (ACL) Grant

Fall 2016 – Summer 2017
District Identified Challenges and Opportunities

1. Users often face long waits for travel confirmation and service. Most services, except TransportDC, must be scheduled at least 24 hours in advance of the travel time.

2. Uneven distribution of trips between agencies and inadequate fleet availability sometimes results in users being turned away from service.

3. Many users could potentially be eligible for more than one program but are unaware of their options.
Identify Geographic Scope

Geographic Scope
- Statewide
- Top-Down
- Framework
- Regional
- County-wide
- Municipality

Considerations
- Appropriateness to trip patterns
- Implementation Costs
- Ongoing Costs
- Evaluation Capability
- Ease of Use
Select Target Users, Trips, and Modes

- People with Disabilities
- Older Adults

Providers for People with Disabilities

Transport DC

Metrobus
Circulator
DC Streetcar
Metro

Seabury Resources for Aging
Seabury Connector ConnectorCard

Providers for Older Adults
Analyze Existing Linkage Functionality

- Many linkages providing telephone-based matching assistance
- Little coordination between linkages – multiple transportation information repositories
- WMATA has robust bus stop accessibility information
4 Determine Desired Linkage Functionality

- Initial Target: Level 5 “One-Call/One-Click”
- Challenges
  - One Call/One Click are most effective at a regional level
  - Potential to create a demand imbalance

- DC 211
- DCOA I & R/A
- Reach A Ride
- Seabury Hotline
- RideDC
- WMATA Trip Planner

1 Central Repository
2 Matching Assistance
3 Trip Planning Assistance
5 Direct Trip Booking
4 Trip Booking Assistance
What building blocks are available in the District?

- Multiple call centers providing linkage services – some with trained social workers
- Several robust and regularly maintained transportation service information repositories – including Reach A Ride database
- Robust transportation accessibility data – as well as customers interested in using public transit
Determine Desired Linkage Functionality

No Wrong Door Model

- Trains linkage and service operators to provide seamless access to transportation information and booking
- Leverages existing call center staff and infrastructure
- Centralizes transportation service information repository
Accessible Trip Planning

- Trip planners with routes based on accessibility requirements or preferences
- Allows customers to better understand when transit is a good mobility option
- Leverages existing transit accessibility data (w/ multiple use cases)
5 Develop Evaluation Criteria and Process

- Evaluation should be built into the initial design
- Evaluation data can be used to improve both linkage programs and specialized transportation services
  - Justify program and attract additional funding
  - Identify and address service gaps
  - Develop new features based on customer feedback

Primary Evaluation Topics

- Total usage and frequency of usage by customers
- Accuracy of transportation services information
- Types of trips planned (successfully and unsuccessfully)
# No Wrong Door Evaluation

## Participation Evaluation
- % of linkages/service providers participating in the No Wrong Door program
- % of call center employees that have completed No Wrong Door training
- % of transportation services with recently updated service information

## Linkage Evaluation
- # of calls received by each participating provider
- % of calls that result in a call transfer
  - Where are calls transferred to and from?
  - What are common characteristics of transferred calls?

## Gap Analysis
- % of calls that do not result in a successful trip
- What are common characteristics of unsuccessful calls?
  - Customer Demographics
  - Trip types/destinations
Evaluate Sources of Funding

- District Funds
- MPO Grants
- Other Federal Grants
7 Create a Marketing Plan

- Target customers should be involved in developing the marketing plan and materials
- Marketing materials should target customers, service providers, and linkage operators

<table>
<thead>
<tr>
<th>Target Audiences</th>
<th>Launch Party</th>
<th>Learning and Info Sessions</th>
<th>Info Packages</th>
<th>Informational Meetings/Funder Meetings</th>
<th>E-blasts and Mailings</th>
<th>Social Media</th>
<th>Press Releases</th>
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NCHRP Report 832 (Final Report and Toolkit) Available Online

http://www.trb.org/Main/Blurbs/174327.aspx
Thank you!

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