

# New Mobility Ecosystems – Advancing Mobility Management

## How Transit Agencies are Using Emerging Mobility Services to Improve Access and Mobility and Solve Problems



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**Transit  
agencies are  
asking....**

***“How can my agency  
partner with innovative  
services like Lyft, Uber,  
Bridj and Chariot?”***

**What do  
they  
really  
want?**

*“ My agency wants to.....*

*Reduce the cost of ADA  
paratransit, and*

*Minimize the cost of serving  
customers trips in areas or at  
times unsuitable for fixed-route  
transit.”*

# 1. How can use of TNCs reduce the cost of ADA paratransit?

- a. Use TNCs as non-dedicated service provider for ADA paratransit service to potentially reduce the cost per trip
- b. Use TNCs as a “non-ADA paratransit” alternative for ADA customers to reduce the ADA paratransit demand and to potentially reduce the total cost

# 1a. Use TNCs (like taxis) as NDSP for ADA paratransit service to potentially reduce the cost per trip. How?



## FOR SCHEDULERS

Overall unit cost can be reduced by assigning to TNCs **unproductive trips**:

- Peak overflow trips
- Low-demand areas/times
- Long out of the way trips



## FOR DISPATCHERS

Overall unit costs can be reduced by using TNCs to respond to:

- Late-running vehicles
- Vehicle break-downs
- re-emerging no-shows



## FOR BOTH

TNCs don't have to have provide **accessible vehicles** – but if they do, they would provide more options for schedulers and dispatchers

**1b.** Use TNCs as a “non-ADA paratransit” alternative for ADA customers to reduce the ADA paratransit demand and hence to potentially reduce the total cost of paratransit

ADA paratransit  
service?



Taxi or TNC?

## 1b. Why is it a “non-ADA paratransit” alternative?

- Decision is totally up to the customer
- Transit agency can offer/suggest a service option without “steering” ADA paratransit customers
- Choosing to use the alternative service for a trip does not impact customer’s ADA paratransit eligibility or right to schedule trips on ADA paratransit service
- None of the vehicles used are owned, operated or controlled by transit agency

# 1b. Here is the “bet” that transit agencies are making when they implement a subsidy program as a cost-reducing strategy – whether using taxis or TNCs or both:

The total savings from each TNC/taxi trip that would have been made on the ADA paratransit service



THE TOTAL SUBSIDY FOR THE NEW TRIPS GENERATED

\$45 per trip - cost of ADA trip  
- \$15 per trip – TNC/taxi subsidy  
\$30 saved for each trip diverted



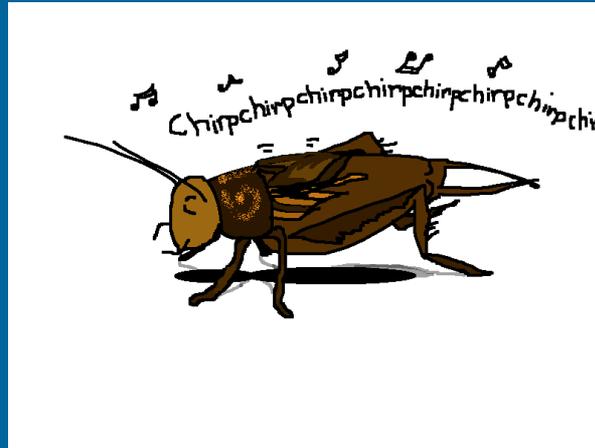
\$15 per TNC/taxi trip subsidy  
x 2 new trips  
\$30 in additional subsidies

2. How can TNCs/microtransit be used to for **general public service** for FMLM, low-demand areas and times and to better serve and reduce the cost of transit within or between hard-to-serve areas?

- By using TNCs to provide an on-demand mobility solution with no fixed and lower operational costs
- By using microtransit to provide more flexible and efficient service

# EXAMPLES

Transit agencies using TNCs to  
serve ADA Paratransit trips



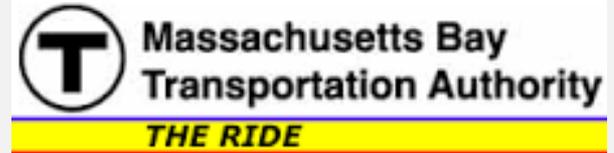
# EXAMPLES

Transit agencies using TNCs to provide a non-ADA paratransit alternative service for ADA paratransit customers

# Boston | MBTA | On-Demand Pilot

- “Non-ADA” alternative service -- TNC subsidy pilot program -- for The RIDE customers
  - Sept 2016 – Mar 2017: 400 participants
  - Mar 2017: 375 new participants
  - Trip caps per participant vary (see box)
- Customer pays first \$2.00 per trip;
- MBTA subsidizes up to \$13.00 additional (customer pays overages)
- Payment through app during pilot (no cash)
- Trip reservations primarily by accessible mobile app; call-in option available
- Equitable access for customers who need accessible vehicles
- Increased vehicle insurance provided by TNCs

Pilot started September 2016



In partnership with:



+  
Private Chair Car  
Carrier



+  
Accessible  
Taxis

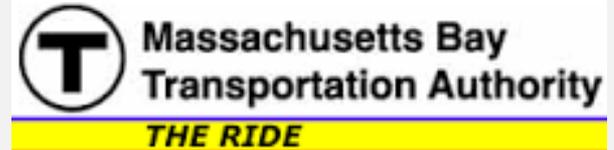
Trip caps: initially 20/month;  
Now 2, 20 and 25 based on  
customer's The RIDE ridership

# Boston | MBTA | On-Demand (Cont'd)

## Initial Outcomes (March 2017)

- ~13,000 total trips through mid-March
- < 1% of trips on wheelchair accessible vehicles
- Average subsidy per trip (thru Feb 2017): \$9.00
- Average fare paid (thru Feb 2017): \$4.50
- Use of The RIDE down about 20% among participants
- Cost savings on program participants trips on The RIDE and TNCs: 6%

Pilot started September 2016



In partnership with:



+

Private Chair Car  
Carrier



+

Accessible  
Taxis

# Washington DC | WMATA | ABILITIES-RIDE

- Non-ADA paratransit alternative for MetroAccess customers
- Part of Metro's successful paratransit alternatives, which include an accessible taxi subsidy program
- Customer pays first \$5.00 per trip; WMATA subsidizes up to \$15.00 (customer pays overages)
- 4 one-way trips/day; initial phase in Maryland
- Trip reservations primarily by accessible mobile app; can choose direct or shared ride
- Metro to partner with multiple providers; drivers must pass background checks/undergo training
- Equitable access for customers who need accessible vehicles/use service animals



RFPs now being evaluated

## Year 1 Estimated savings:

- \$4.35 to \$7.25 million
- \$29/trip (\$44 less \$15)
- assumes some new trips

# Broward County | BCT | Riders Choice Pilot

- Non-ADA paratransit alternative, loosely based on MBTA on-demand pilot
- BCT will partner with taxi companies (32 WAV taxicabs) or licensed TNC (7 companies; 10,000+ vehicles) who agree to pilot ground rules
- 12-month pilot approved in April 2017, currently being implemented; review after 6 months
- ADA eligible customers with highest paratransit ridership will be invited to participate; first 150 will be accepted
- Customers will call provider to arrange trip
- No base fare paid by customer; BCT pays maximum of \$15, customer responsible for any amount over \$15
- Currently identifying a vendor to provide ghost cards: payment card system limited to program



## Transportation

## Options



# EXAMPLES

Transit agencies using TNCs to provide for general public services

- FMLM services
- Suburban mobility

# LAVTA | GoDublin



- Launched Jan 2017
  - Valid until June 2017 or funds exhausted
- LAVTA goals:
  - Provide cost efficient transit coverage in low-density environment
  - Provide alternative to at-capacity BART parking
- Users can ride anywhere in Dublin using UberPool, Lyft Line, or DeSoto Cab (incl. cash payment and call-in option)
- Subsidize 50% of fare up to \$5 dollars
- Funded through STA and county sales tax



In partnership with:



- Data sharing: frequent destinations, peak travel times

# PSTA | Direct Connect

- First/last mile solution initially to replace cut unproductive feeder links
  - Feb 2016: Pinellas Park (high transit ridership area w/ poor neighborhood feeder links) and East Lake
  - July 2016: expanded to 20 additional stops
  - Jan 2017: expanded countywide
- PSTA partners with Uber, taxi, and a chair car carrier
- Limited to rides that begin/end at bus stops within 8 designated zones covering the county
- PSTA pays half of fare up to \$5
- Can book through Uber or taxi app, or using taxi telephone dispatch



# PSTA | TD Late Shift



Care Ride™, LLC  
Transportation Services

- Late night service for low-income riders (from late shift jobs)
- Provides up to 23 free Uber or taxi rides per month to/from their workplace between 10 pm and 6 am for qualifying riders
- Funded with \$300,000 demonstration grant from Florida Commission for the Transportation Disadvantaged, with \$33,000 matching funds from PSTA

  
**Application for the Transportation Disadvantaged (TD) Program**  
(Page 3 of 3)

NAME: \_\_\_\_\_  
DATE OF BIRTH: \_\_\_\_\_

12. How many days in the next calendar month will you need PSTA to get to:

**Medical/Health:** \_\_\_\_\_ # Days \_\_\_\_\_  
Includes doctors, dental, pharmacy, mental health, drug treatment, and AANAP/PTSD support groups (list phone number for each in next section for verification).

**Food:** \_\_\_\_\_ # Days \_\_\_\_\_  
Includes grocery and other food stores, as well as food distribution sites and group meals.

**Vital Services:** \_\_\_\_\_ # Days \_\_\_\_\_  
Includes government and non-governmental social service agencies, banks, utility bill payment sites, and check cashing services.

**Employment:** \_\_\_\_\_ # Days \_\_\_\_\_  
Includes paying jobs only, not volunteering/unpaid work. (list phone number and work hours for each job in next section for verification)

**Job-Required Training:** \_\_\_\_\_ # Days \_\_\_\_\_  
Includes only courses required by your current employer

**Other Education & Training:** \_\_\_\_\_ # Days \_\_\_\_\_  
Includes any courses except for Job-Required Training above.

**Other Life-Sustaining Trips NOT already counted above:** \_\_\_\_\_ # Days \_\_\_\_\_

**Total number of all trips listed above** \_\_\_\_\_ **Grand Total:** \_\_\_\_\_

By signing this form, I am stating that the information I have given is true and complete to the best of my knowledge; if falsified, my TD services will be suspended.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Contact PSTA two weeks after submitting your application to find out your eligibility status. Bus passes are sold between the 1<sup>st</sup>–15<sup>th</sup> of each month, with a valid government-issued photo ID. See the Transportation Disadvantaged page at [www.psta.net](http://www.psta.net) for more details. If PSTA bus service will not meet your trip needs, you may be eligible for door-to-door service.

Bring this completed form to a PSTA Customer Service Representative, fax or mail to:  
TD Program, PSTA, 3201 Scherer Drive, St. Petersburg, FL 33716  
Fax: (727) 540-1923, InfoLine: (727) 540-1900

11-2014

# PSTA | Outcomes



- Jan 2017: Uber released program data to *Tampa Bay Business Journal* reflecting their participation in the Direct Connect and TD Late Shift Programs
- As of mid-Jan 2017:
  - 3,167 rides provided by Uber (and subsidized by PSTA)
  - Total cost \$36,350.66
  - Average \$11.48 cost per trip (including free rides provided through TD Late Shift program)

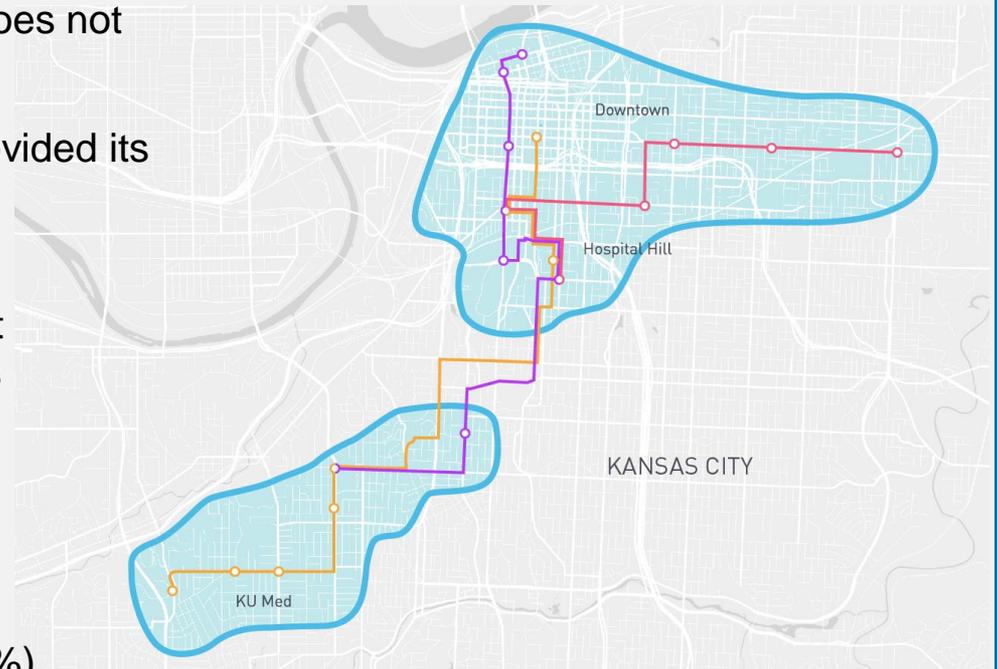
# EXAMPLES

Transit agencies using microtransit to provide for general public services

# KCATA | RIDE KC

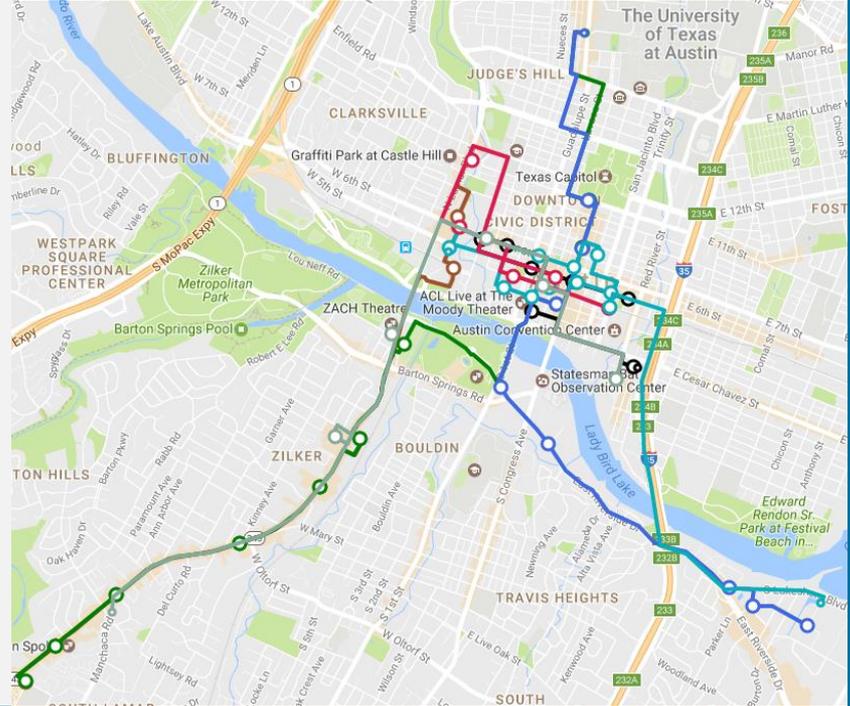
RideKC  BRIDJ

- Pilot: Mar 2016 – Mar 2017
- KCATA goal: test microtransit solution to bridge two areas where demand does not justify fixed route transit service
- KCATA partnered with Bridj but provided its own 14-pax vehicles and drivers
- Exact times and stops determined dynamically based on demand, but available during AM and PM peaks
- \$1.50 fare, same as local bus
- Poor marketing submarined pilot
- Users shifted from drive alone (33%), regular bus (33%) and Uber (22%)



# Capital Metro | Austin | Chariot

- Oct 2016-present
- Partnership with Movability Austin, the City of Austin, Capital Metro and Rocky Mountain Institute
- City of Austin Goal: reducing congestion and drive-alone commuting, particularly to and from major employment hubs
- Cost: \$3.50/ride, with monthly passes available
- 6 public routes and 2 private routes
- Crowd-sourced routes based rider votes
- The partnership was announced after Uber and Lyft withdrew from the city
- Chariot partners with local employers (e.g., Whole Foods) to offer company-subsidized shuttles for employees



# Issues, Obstacles and Solutions

# WHAT ARE THE ISSUES/OBSTACLES

to using TNCs for ADA paratransit?

Have they been – or can they be –  
addressed?

# BOOKING & SCHEDULING ISSUES

## ADA Paratransit

Trip requests are typically booked and scheduled in advance



## TNCs

Most apps provide immediate response only, however...

## SOLUTIONS

TNCs have introduced concierge services, which can intake trip requests in advance – from paratransit schedulers or dispatchers – and will dispatch them live to TNC drivers

Some TNC apps now allow advance scheduling, activating the request to ensure timely pick-ups

# DISPATCHING ISSUES

## ADA Paratransit

Paratransit agencies/contractors or taxi companies coordinate service delivery. Know real-time location of vehicles

vs

## TNCs

Totally decentralized except for concierge services

## SOLUTIONS

New concierge services could serve as point contact for dispatchers

Through APIs, real-time vehicle location and events could be available to paratransit dispatchers

Many where's my ride calls would be no longer be placed if customers have smart phones and access to vehicle locations

# VEHICLE ISSUES

## ADA Paratransit

Minimum specifications for vans per the ADA

Age/mileage limits determined by transit agency



## TNCs

New accessible vans must meet ADA standards

Older modified accessible vehicles must have NMEDA\* label

TNCs have vehicle age limits; typically between no older than 10-15 years old; varies per city

## SOLUTIONS

May have to limit participation to drivers of new/NEMDA vehicles that meet transit agency age/mileage limitations

\* National Mobility Equipment Dealers Association

# INSURANCE ISSUES

## ADA Paratransit

Transit agencies require specific levels of vehicle insurance

Transit agencies require indemnification



## TNCs

No additional insurance is required

Third parties are required to indemnify TNCs; individual drivers are not

## SOLUTIONS

Voluntary vehicle owner participation, as is the case with taxis

# DRIVER ISSUES

## ADA Paratransit

Transit agencies require stringent eligibility criteria, background checks, and driver participation in drug and alcohol checking

Transit agencies also require consistency in driver training



## TNCs

TNCs eligibility criteria and background checks not as stringent.

Some cities (NYC, Houston and Austin) do require fingerprinting of all TNC drivers.

Massachusetts-required background checks screened out 11% of existing TNC drivers.

TNCs required training for drivers of accessible vehicles not as comprehensive.

## SOLUTIONS

Voluntary driver participation, as is the case with taxis

Use *LiveScan* fingerprinting technology to rapidly access state and Federal criminal records (typically 48 hour turnaround)

Use of carriers for trips requiring accessible vehicles

- ✓ Booking & Scheduling
- ✓ Dispatching
- ✓ Vehicle Issues
- ✓ Insurance Issues
- Driver Issues

**Objective #1b: Use TNCs  
as a “non-ADA”  
alternative for ADA  
customers**

# WHAT ARE THE ISSUES/OBSTACLES

to using TNCs for non-ADA  
paratransit alternatives

Have they been – or can they be –  
addressed?

# DRUG AND ALCOHOL TESTING

## ADA Paratransit

Current FTA policy interpretation:  
Drug and alcohol testing requirements  
waived only if customers have choice  
between multiple providers

However many agencies have one-  
company programs w/o requiring drug  
and alcohol testing.



## TNCs

TNCs do not require drug and  
alcohol testing

## SOLUTIONS

Open up program to any operator that meets ground rules

Do not invoke requirement if only one entity participates

Drivers volunteer

# EQUAL ACCESS TO SERVICE

## ADA Paratransit

Equivalent service for individuals with disabilities required (w/ Federal funds)

- Same fares, response times, driver training, etc.

Some transit agencies provide accessible vehicles to taxi companies



## TNCs

Both Uber and Lyft provide accessible service in some cities but not all, and service levels may not be equivalent

## SOLUTIONS

Transit agencies ensure equivalent service by infusing accessible vehicles into the TNC (or taxi) fleets.

TNCs contract with individual accessible taxi owner/operators and/or with an accessible service provider (TNCs in Boston use both)

# TITLE VI REQUIREMENTS

## ADA Paratransit

Dispatch and payment services that require credit cards and/or smartphones may violate Title VI

All taxis take cash and have multiple hailing options

Sponsoring agencies must monitor taxi response times to low-income neighborhoods



## TNCs

TNCs are cashless; most require credit cards.

TNCs mostly require smartphones  
New concierge services offer hailing alternative

## SOLUTIONS

Use both TNCs and taxis

Ghost cards

- ✓ Drug and Alcohol Testing
- ✓ Equal Access
- ✓ Title VI

# WHAT ARE THE ISSUES/OBSTACLES

to using TNCs for general public  
services

Have they been – or can they be –  
addressed?

# PRICING ISSUES

**Call-N-Ride / Dial-A-Ride  
Fixed-Route Transit**



**TNCs**

**Riders typically pay a fixed  
fare for service**

**Fares dynamically change  
based on supply and demand**

## SOLUTIONS

**Agency provides full or partial subsidy up to a fixed amount  
(i.e. half of fare up to \$5) and customers pay the rest**

**Customers pay a flat fare and agency fully subsidizes  
remaining cost**

# TELEPHONE ACCESS

## Call-N-Ride / Dial-A-Ride

Riders typically request a ride by calling driver or a telephone dispatching service



## TNCs

Riders can only request riders through a smartphone app

## SOLUTIONS

Provide service using both TNCs and taxis, with requests using regular telephones going to taxi company

TNCs provide portal/API link to “concierge” service, provided by partnering organization

# ACCESSIBILITY ISSUES

**Call-N-Ride / Dial-A-Ride  
Fixed-Route Transit**



**TNCs**

**All are accessible or  
accessible alternatives are  
provided**

**TNCs offer accessible services  
in some areas (although not  
compliant with ADA)**

## **SOLUTIONS**

**Same as non-ADA subsidy programs**

# PAYMENT ISSUES

## Call-N-Ride / Dial-A-Ride Fixed-Route Transit

Riders can pay with cash or payment card (which can be filled with cash or a credit card)



## TNCs/Microtransit

Fares are paid with a credit card connected to the app

## SOLUTIONS

Provide alternative taxi service that riders can pay for with cash

Eliminate fares for TNC/microtransit rides

### Emerging solutions:

- Ghost card accounts
- TNC/microtransit accept agency fare cards

- ✓ Pricing
- ✓ Telephone Access
- ✓ Accessibility
- ✓ Fare Payment

**Thank you!**  
**And let us know how we can be of help!**



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