Intelligent Transportation Systems
Joint Program Office

Mobility on Demand Program
Webinar 3:

Integrated Platforms and Services

January 4, 2018

Today's Agenda

- Purpose of this Webinar
  - To present Mobility on Demand and examples of innovative approaches and technologies
- Webinar Content
  - Integration of ride-sharing services into transit operations
- Webinar Protocol
  - Please mute your phone during the entire webinar
  - You are welcome to ask questions via chatbox at the Q&A Section
  - Questions will be answered in the order in which they were received

Mobility on Demand Overview

Gwo-Wei Torng
Federal Transit Administration

Gwo-Wei Torng, PhD

Director, Mobility Innovation

Research, Demonstration & Innovation

Federal Transit Administration (FTA)

Trends/Setting the Stage

Societal Trends Driving MOD

•Redefining Longevity

•By 2045, the number of Americans over age 65 will increase by 77%

•Population Growth & Urbanization

•In 30 years, our population is expected to grow by about 70 million

Image Source: Thinkstock/USDOT

Technological Trends Driving MOD

•Big Data & Analytics

•Transportation increasingly relying on data to drive decisions and to enable innovative travel options

•Real-Time Travelers

•72% of Americans own a smartphone, with access to up-to-the minute traveler information

Image Source: Thinkstock/USDOT

Mobility & Environmental Trends Driving MOD

•Increasing Congestion

•On average, Americans spend over 40 hours stuck in traffic each year, costing $121 billion

•Mobility Choices

•There is growing popularity of shared mobility and shared modes, such as bikesharing, carsharing, and ridesourcing

Image Source: Thinkstock/USDOT

Public or Private?

Image Source: Thinkstock/USDOT

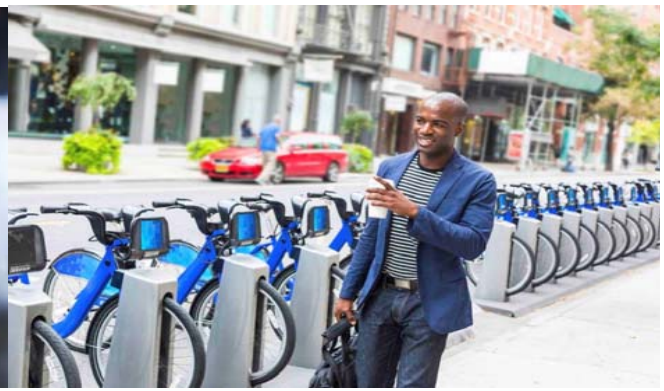
Public or Private?

Image Source: Thinkstock/USDOT

USDOT MOD Program

What is Mobility on Demand (MOD)?

An **integrated and connected multi-modal** network of **safe**, **affordable**, and **reliable** transportation options that are **available to all**

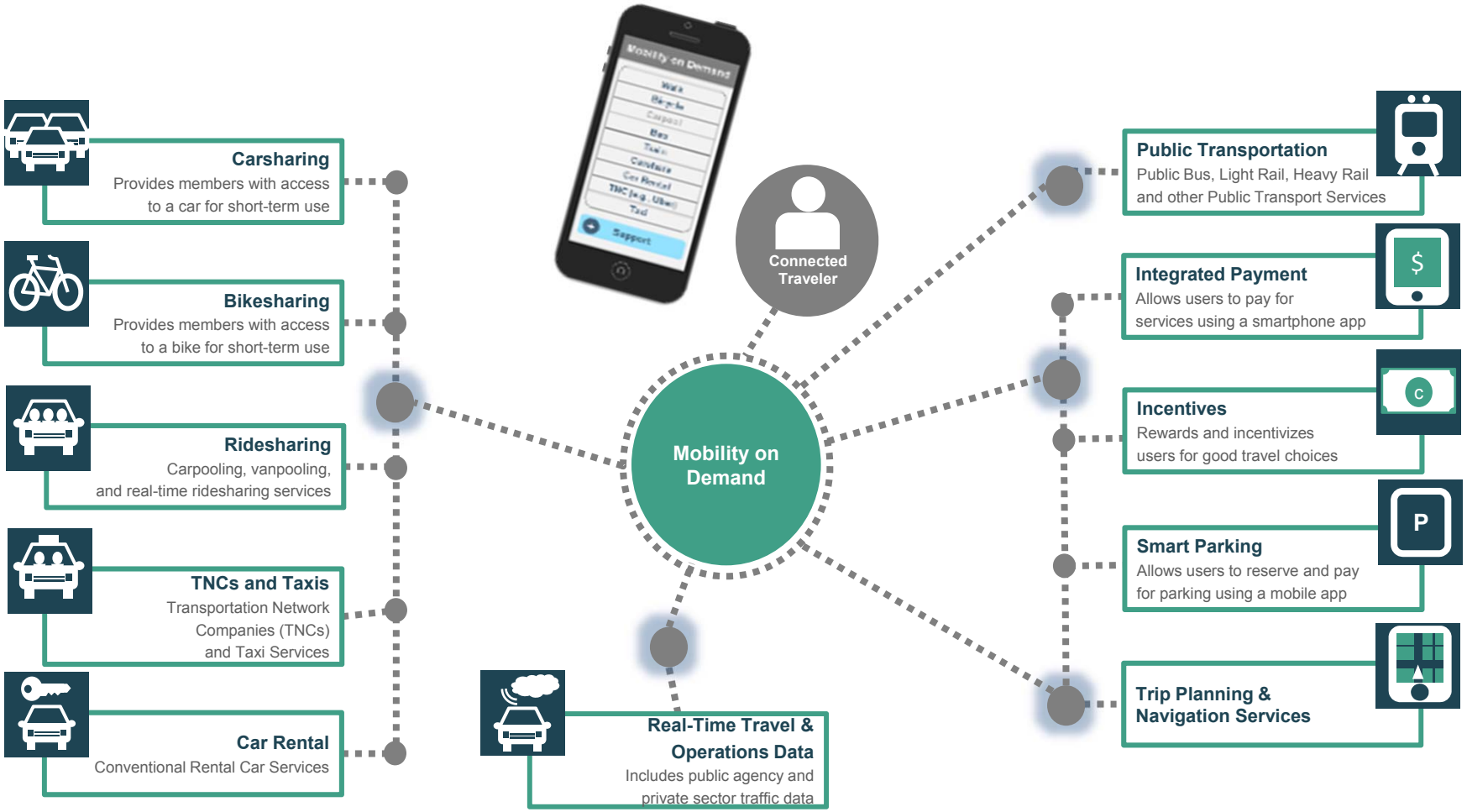


- User-focused options to improve personal mobility and access to more destinations
- Promotes choice in personal mobility & optimizes the transportation system through Intelligent Transportation Systems
- Advances connected vehicles & automation applications
- Utilizes emerging technologies & data exchange to enable personal mobility
- Encourages multimodal connectivity & system interoperability

Guiding Principles of MOD

- Traveler Centric/Consumer Driven
  - MOD is defined by quality and carefree personal mobility choice for individuals
- Data Connected/Platform Independent
  - MOD (the end state) drives the technology.
  - Technology doesn't change the MOD vision, it provides the capability to realize in an interoperable fashion
- Mode Agnostic/Multimodal
  - MOD embraces all modes and resources to support personal mobility choice in an integrated, connected and multimodal manner

User-centric Travel Options



Who Benefits from MOD?

Travelers

- Access to more transportation options
- Builds a more efficient, effective, and customer-centered transportation network

Public Transit Providers

- Connects ALL regional transportation services and assets into a seamless public transit network
- Extends service quality and coverage

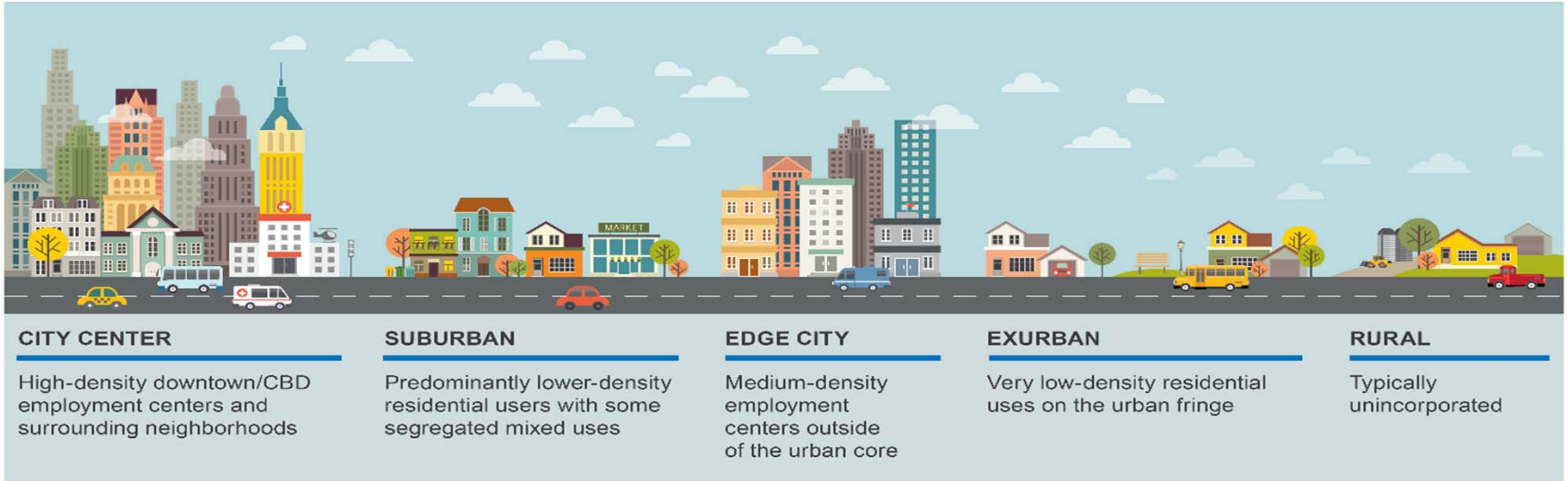
Shared-Use Transportation Providers

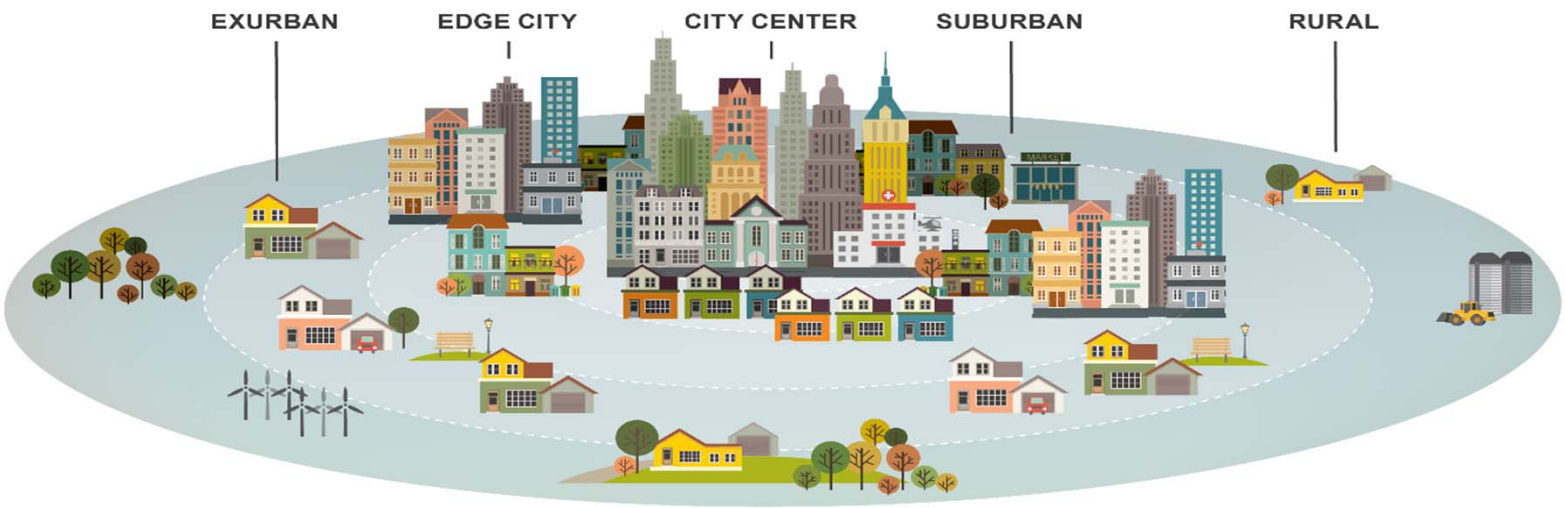
- Connects travelers to provider services
- Provides an easy to use, common technology platform for mobility options

•Mobility Managers

- Streamlines information for transportation options
- Growing employment and transportation partnerships

Not just city center





USDOT MOD Program Goals

- **Explore emerging technology solutions and new business approaches** that have the potential to transform mobility services.

- **Prepare the transportation industry to deliver innovative mobility solutions** that will enhance transportation efficiency and effectiveness, improve customer service, and foster personal mobility and access to goods and services.
- **Enable the widespread deployment of integrated mobility solutions** that are connected, equitable, and effective to enhance the personal mobility of everyone and provide access to all users.

MOD Research Areas

Solutions for mobility management

Hello!

I am Justin

You can find me at:
justin@goin.org

Agenda

- Team
- Vision
- History
- Use Cases
- Services

Let’s get Goin together.

Transit Evolution

"A new transportation system… in both technology & social organization, with government providing frameworks & platforms for bottom-up change"

- RE-PROGRAMMING MOBILITY, The Digital Transformation of Transportation in the U.S.

Goin 1.0

Recurring Rides

Filter by creation date | ×Active ×Paused ×Expired | Filter by customer | Filter by days of week

Show 10 entries

Search:

✔	Customer	Days Of Week	Timezone	Sched.PU	Pickup	Sched.DO	Dropoff	Scheduled Rides	Service	Mobility	Vehicle	Type	Status	Edit
	Barbara	Mon, Wed, Fri	America/Los_Angeles	12:00	Newport	13:15	Westview Ct Spokane	Total - 83 Completed - 60 Cancelled - 0 NoShow - 0 Upcoming - 0	SMS		3 More ...	Appointment	Paused ▶ Resume Expiry Date: 02/01/2017	
	Steven	Tue, Thu, Sat	America/Los_Angeles	12:10	University Rd Spokane Valley	12:40	Pines Rd Spokane Valley	Total - 109 Completed - 16 Cancelled - 10 NoShow - 1 Upcoming - 0	SMS	Width : 33 In		Appointment	Active ❚❚ Pause	
	William	Tue, Thu, Sat	America/Los_Angeles	05:45	Ave Spokane	06:15	Westview Ct Spokane	Total - 20 Completed - 17 Cancelled - 1 NoShow - 0 Upcoming - 0	Veterans Home		2 More ...	Appointment	Paused ▶ Resume	

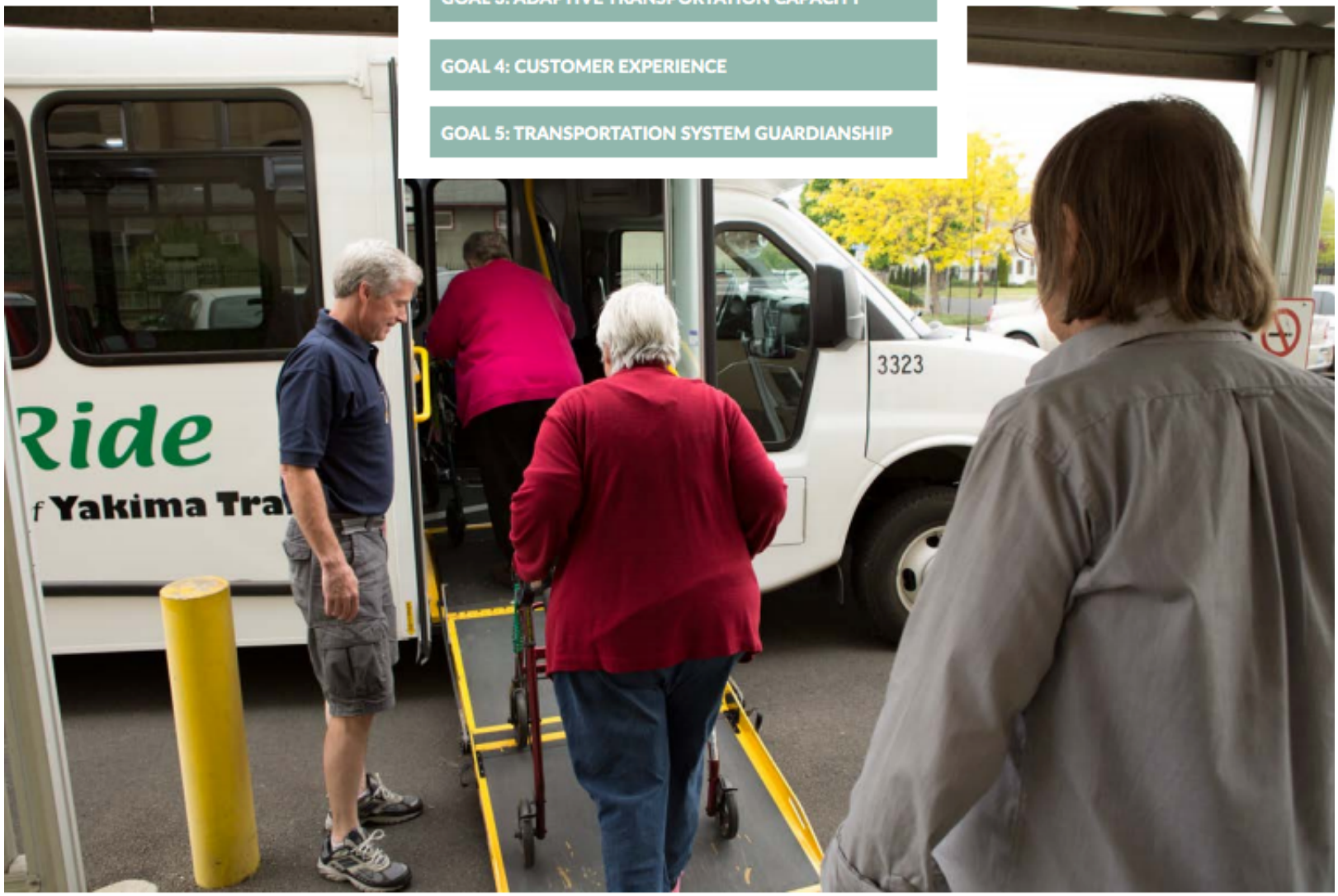
GOAL 1: THRIVING COMMUNITIES

GOAL 2: ACCESS

GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

GOAL 4: CUSTOMER EXPERIENCE

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP



Let's make getting there more reliable, acessible & equitable.

Choice

Provide the best options

Acesss for all

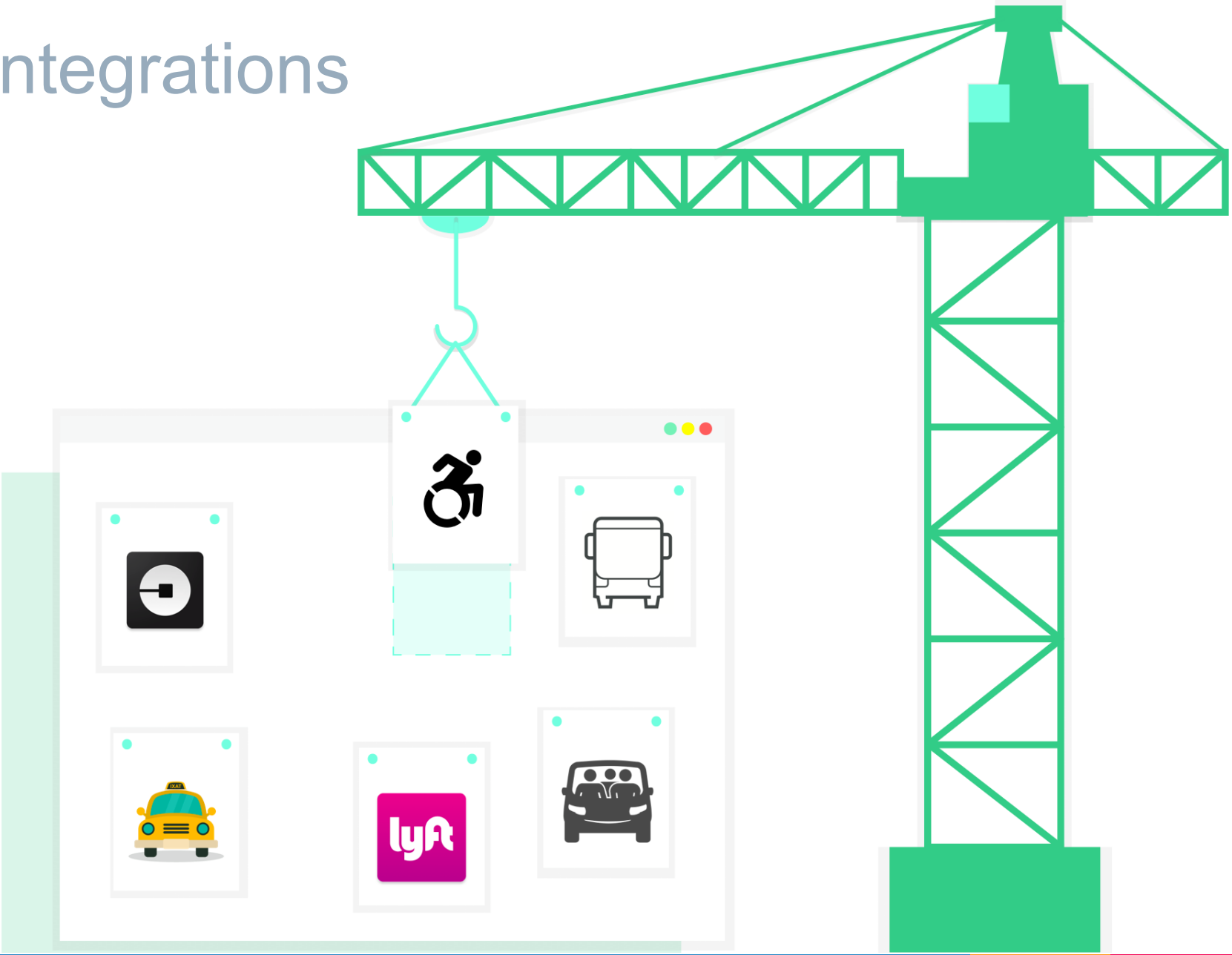
Remove barriers

Equitable

Sponsored eligible riders

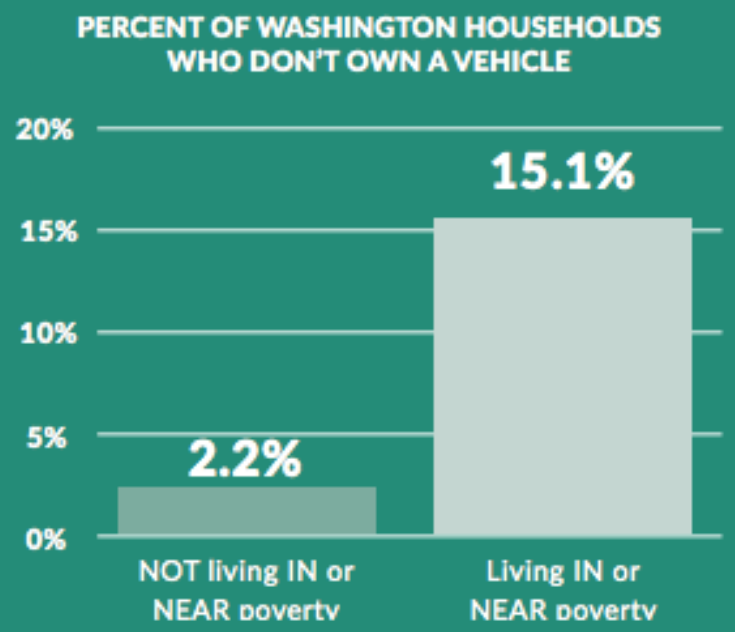
Our Principles

Integrations



Access

Equity

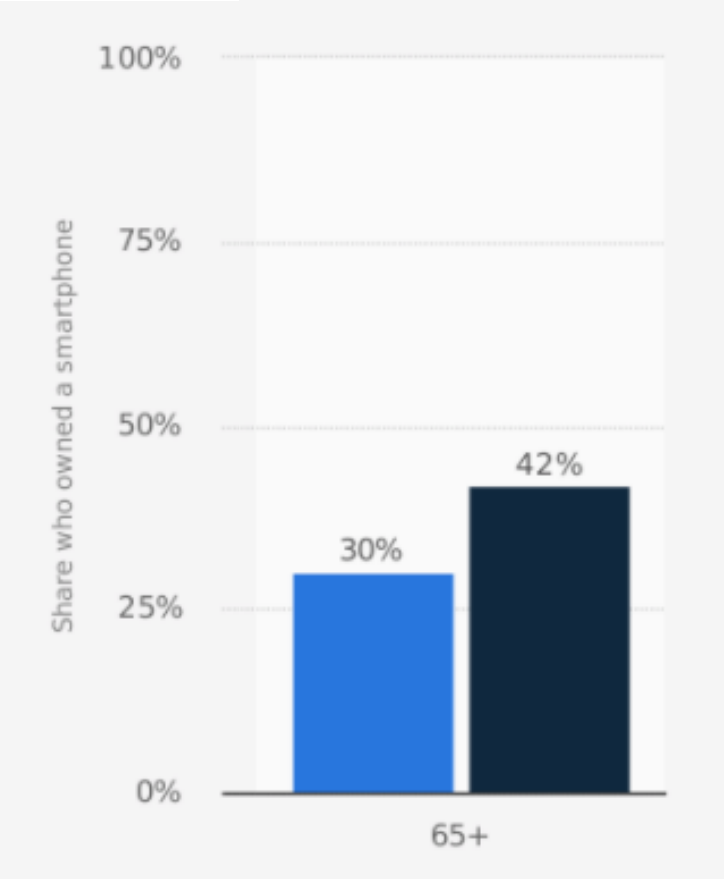


Households in or near poverty in Washington are

6.8 times

less likely to have a vehicle than households with higher incomes

Smartphone users



Pew Research Center 2015-2016

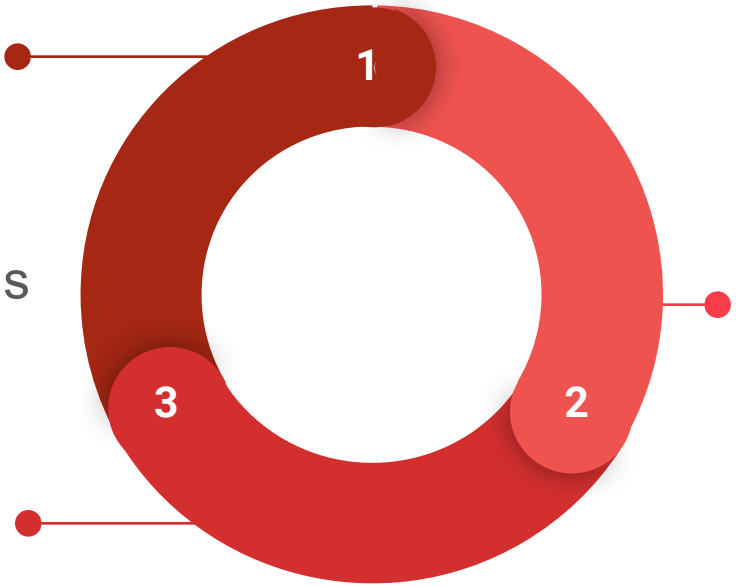
Many Challenges

Rider

1. Lack of on demand
2. Long waits
3. Uncertainty
4. Service quality
5. Segregation
6. Unaware of options

City

1. Transit ridership
   -5% per year
2. Baby boomers
3. Rising costs
4. Data conflicts
5. Branding



Ride Providers

1. Regulations
2. Rider choice
3. Open data
4. Accessibility
5. Equity
6. Trust

One Solution

Rider

1. Access to on demand
2. Multiple ride networks
3. Choice
4. Managed mobility

City

1. One platform
2. Trusted 3rd party for data & policy management
3. Subsidy splits
4. Cost savings
5. Better reliability & continued innovation

Ride Providers

1. Access to subsidies
2. Secure data, HIPAA & PHI storage
3. Data not accessible to information requests
4. Gain trust and verify
5. API Consistency

Integration use cases

Micro Transit

Paratransit

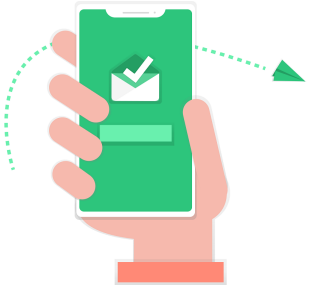
Low income to work

First mile, last mile

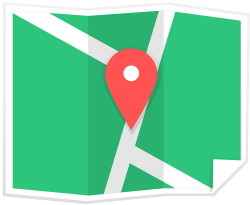
Medical Transportation

Human Services Transportation

Rider experience



Confirmations



Live tracking

Less waiting

Mobility monitoring

Requests

Account

Payment

Key Features

- Goin Geo-zones
- Fare types
- Service hours, days and dates

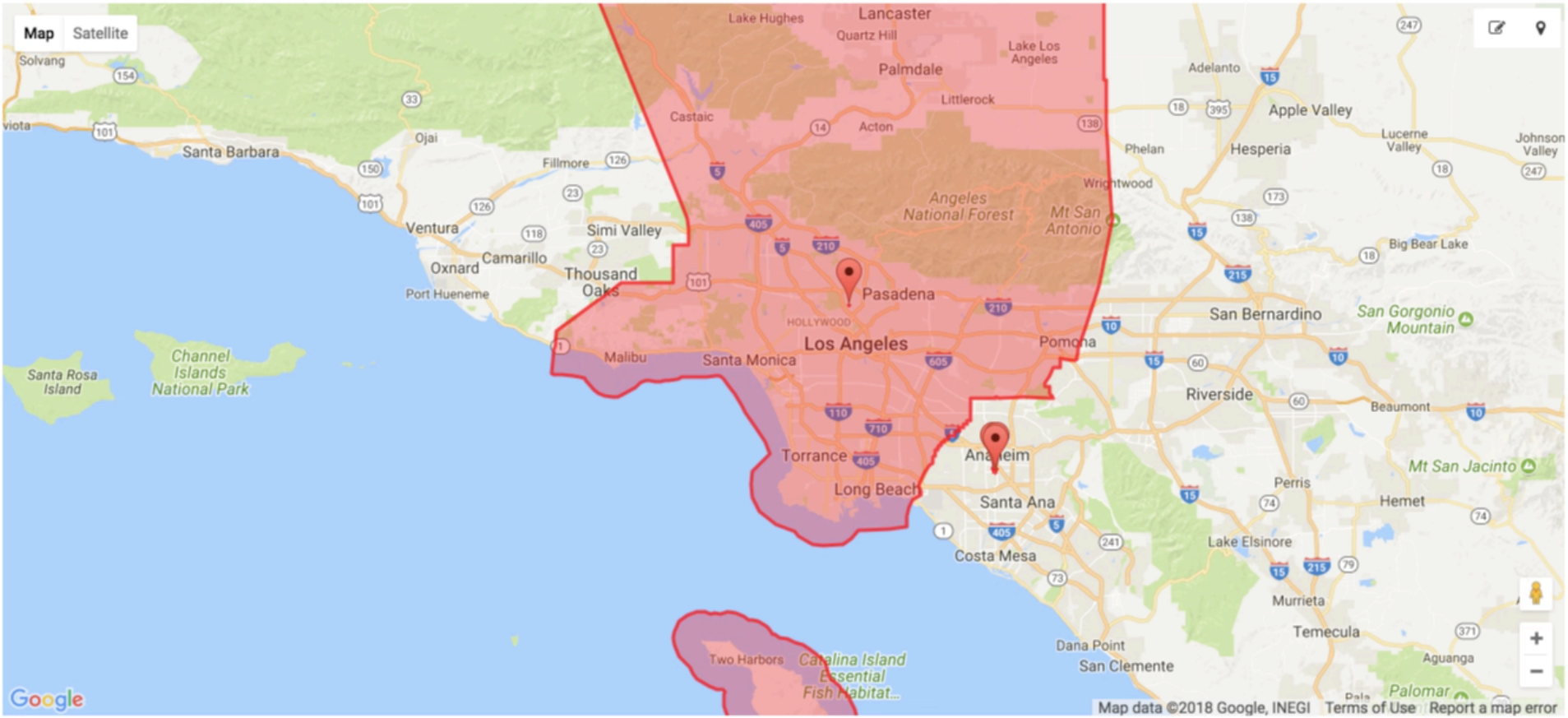
Goin Geo-Zones

Select area

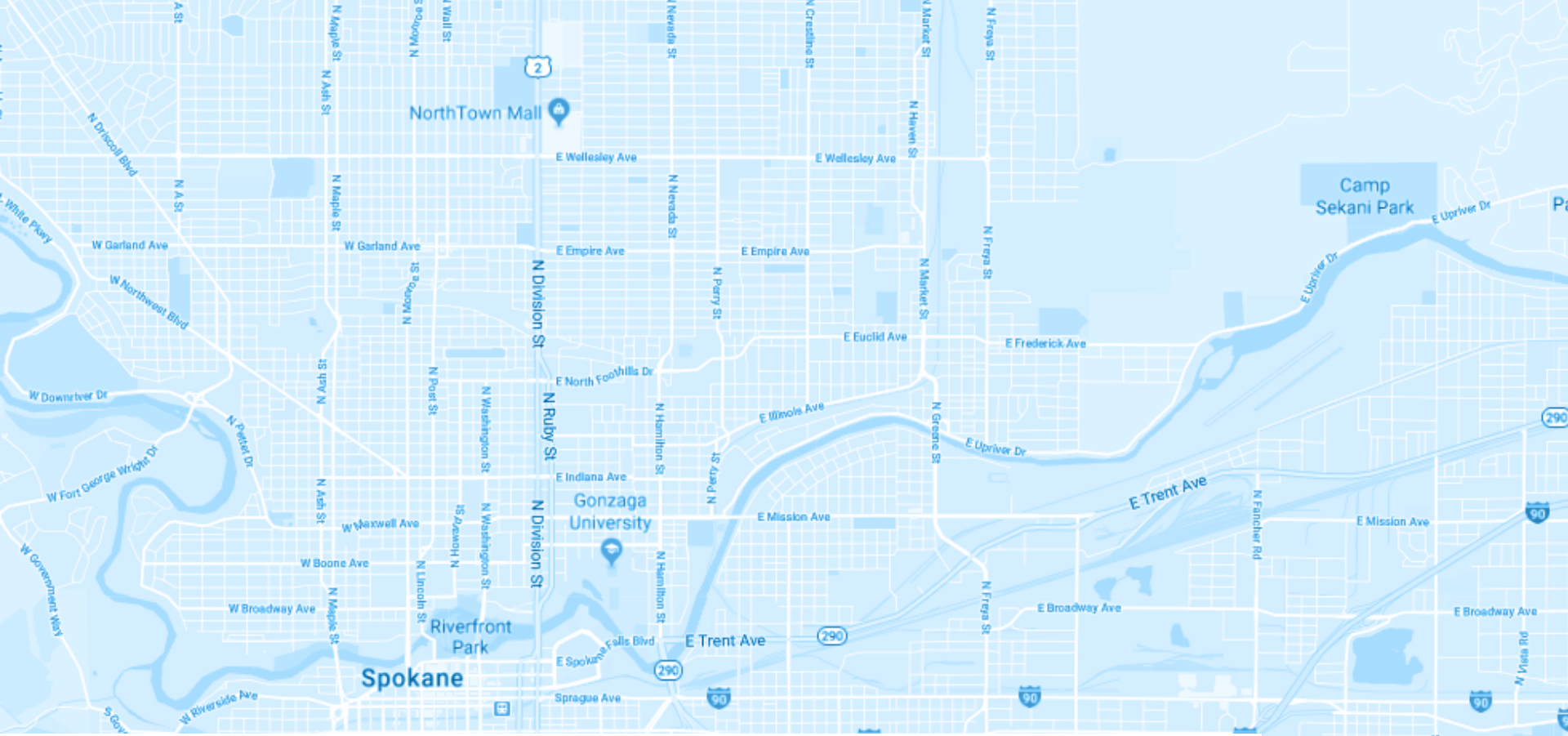
Los Angeles (City) × | Anaheim (City) × | Downey (Area) × | 1313 Disneyland Dr (Area) × | Glendale (Area) ×

Enter a location

Area | City | County | State

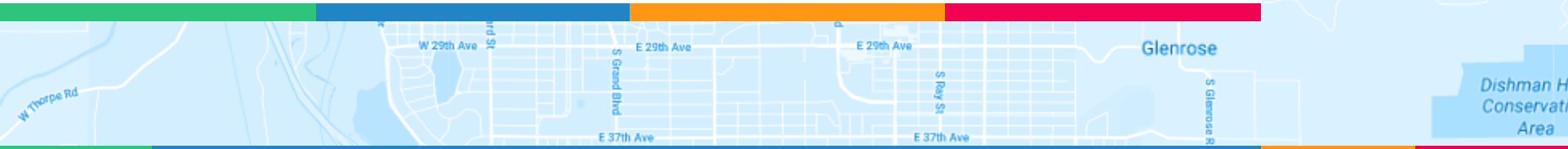


CANCEL | SAVE



Ride to Care

On Demand



Purpose

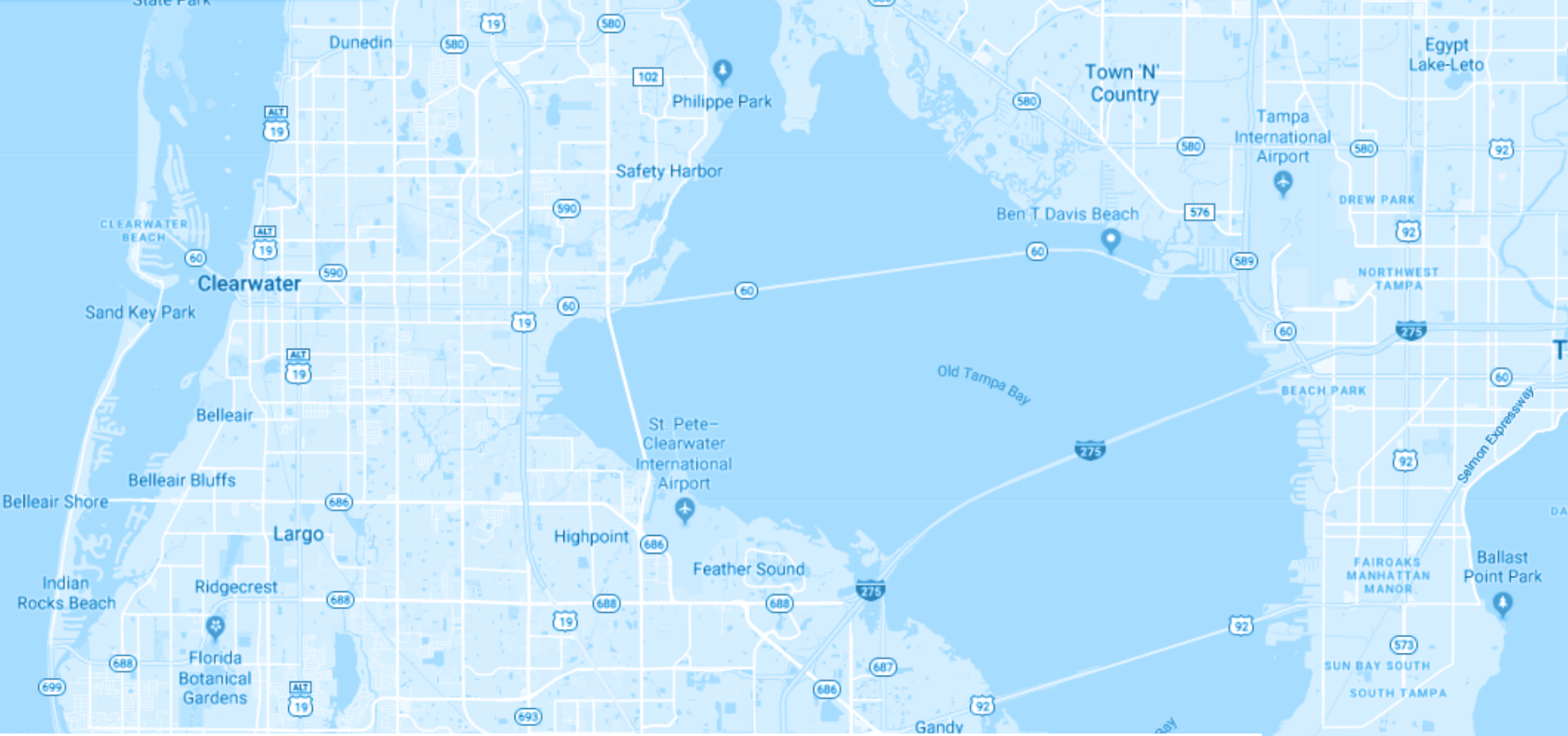
- Free up resources, appropriate ride
- Driver, mobility and vehicle match
- Policy management
- Cost savings

Low income citizens receive quality care, have decreased healthcare costs and our community will be stronger.

– Julie, CEO SNAP

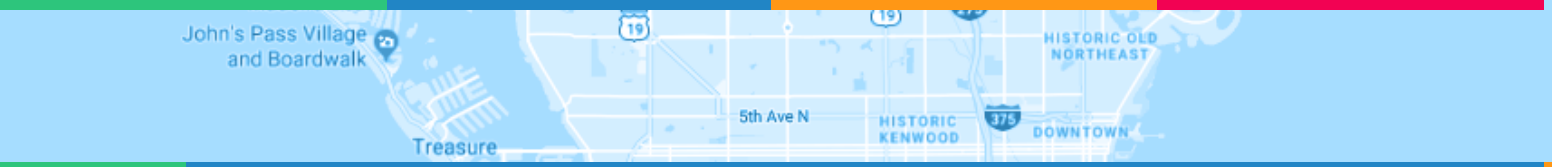
They are probably the only reason I'm standing here today.

– Cale, Ride to Care rider



Paratransit – PSTA DART

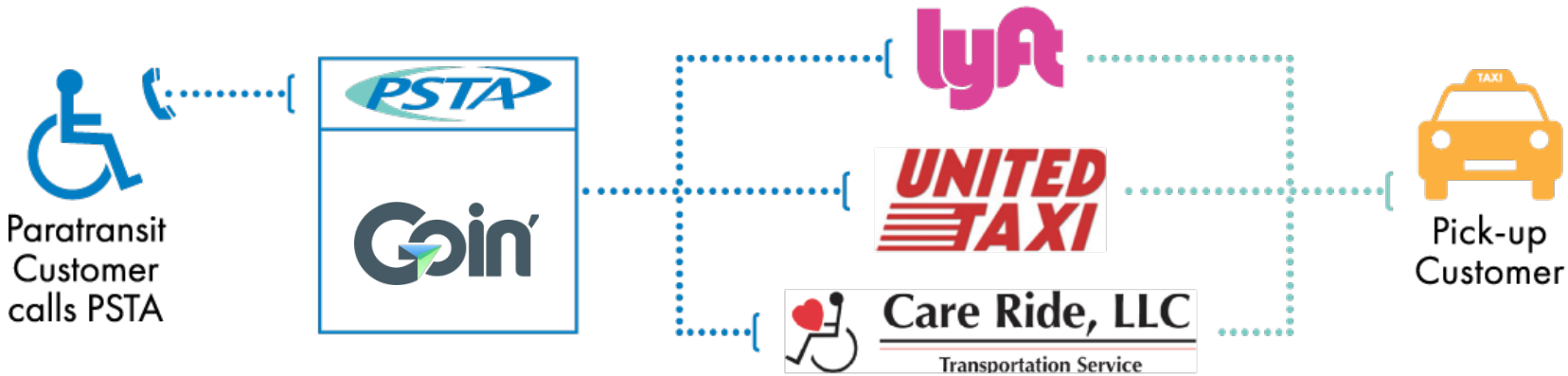
On Demand Integration Platform



FTA Sandbox Project

- Capitalize on success with other TNC programs

- Real-time trips to work, school, medical, and shopping areas



Goin allows you to keep a hand on the steering wheel.

– Ross, Mobility Manager, PSTA

Sandbox Project

GOALS

▷Improve Efficiency

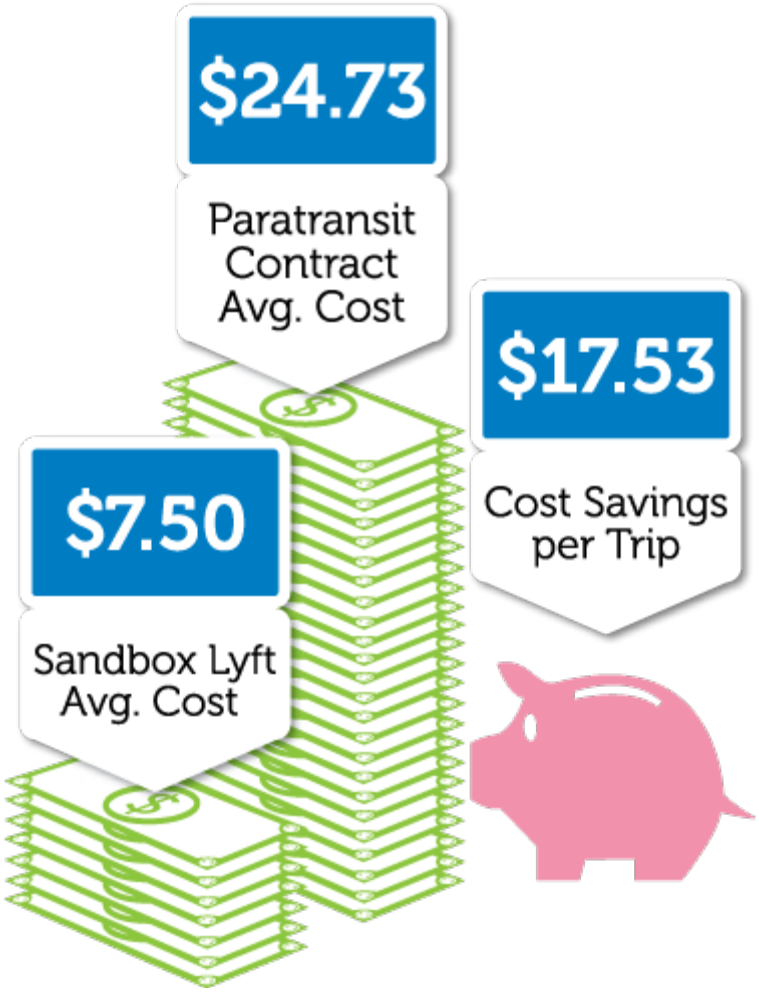
▷Increase Effectiveness

▷Enhance Customer Service

BENEFITS *of Real-Time Paratransit*

▷Cost efficient

▷Customers can now make on demand trips instead of scheduling in advance



Next generation rides as a pub

| https://www.goin.org

Goin

Jane Doe

Wallet: $62

Mobility
WheelChair

Create a ride for Jane Doe

On-demand | WAV

1 Tropicana Dr, St. Petersburg | 1530 4th St N, St. Petersburg

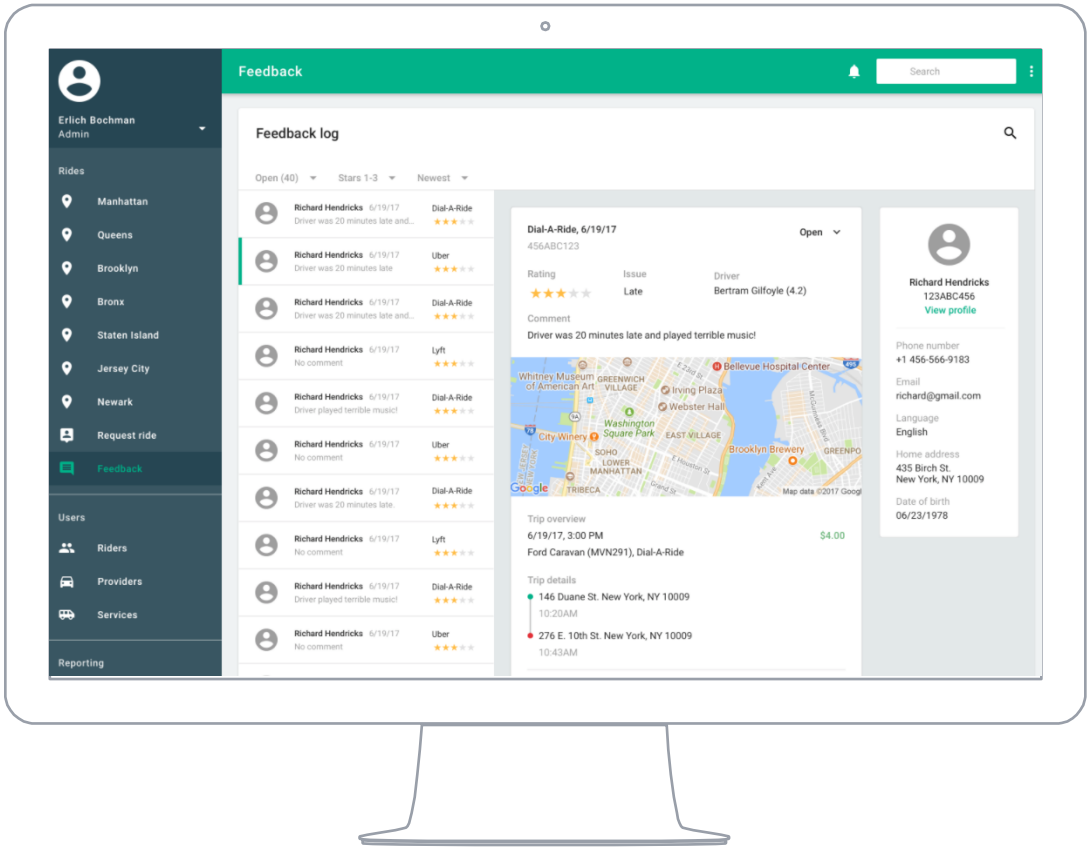
Shortest Arrival

6 mins	CareRide	$24.73
7 mins	Lyft	$7.50
8 mins	United Taxi	$11.25

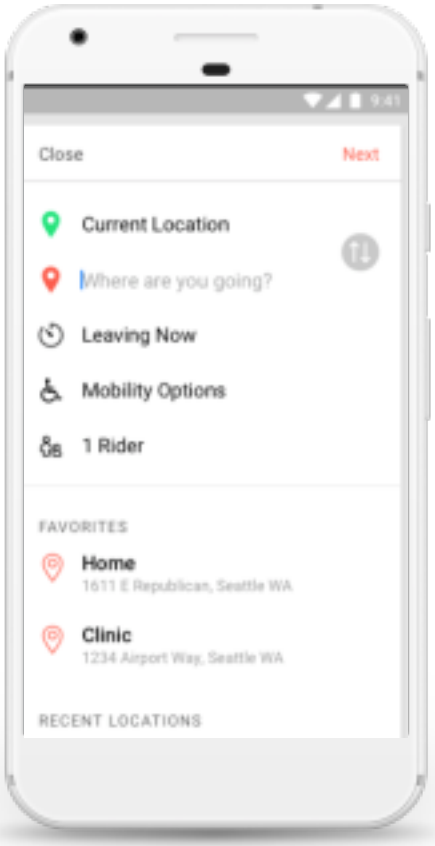
Goin has been an ideal partner, they are invested. Our pilot group is thrilled to take on demand paratransit trips, and we are looking forward to adding more users later this month.

– Bonnie, Transit Planner, PSTA

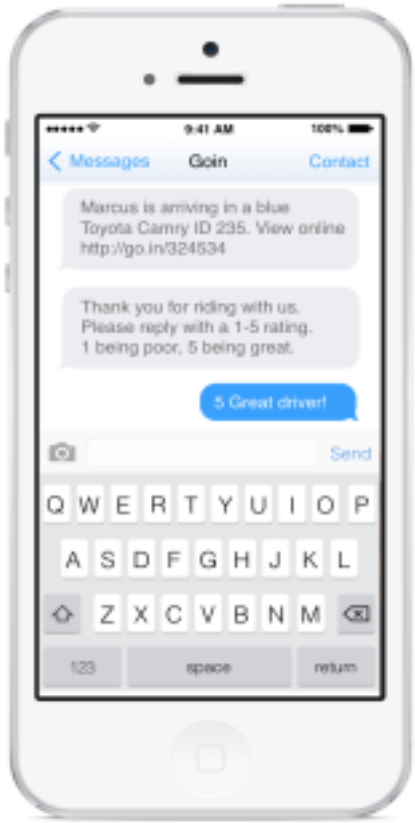
Desktop app


Feedback
Search
Erlich Bochman
Admin
Rides
Manhattan
Queens
Brooklyn
Bronx
Staten Island
Jersey City
Newark
Request ride
Feedback
Users
Riders
Providers
Services
Reporting
Feedback log
Open (40)
Stars 1-3
Newest
Richard Hendricks 6/19/17 Driver was 20 minutes late and... Dial-A-Ride
Richard Hendricks 6/19/17 Driver was 20 minutes late Uber
Richard Hendricks 6/19/17 Driver was 20 minutes late and... Dial-A-Ride
Richard Hendricks 6/19/17 No comment Lyft
Richard Hendricks 6/19/17 Driver played terrible music! Dial-A-Ride
Richard Hendricks 6/19/17 No comment Uber
Richard Hendricks 6/19/17 Driver was 20 minutes late. Dial-A-Ride
Richard Hendricks 6/19/17 No comment Lyft
Richard Hendricks 6/19/17 Driver played terrible music! Dial-A-Ride
Richard Hendricks 6/19/17 No comment Uber
Dial-A-Ride, 6/19/17
456ABC123
Open
Rating
Issue
Late
Driver
Bertram Gilfoyle (4.2)
Comment
Driver was 20 minutes late and played terrible music!
Trip overview
6/19/17, 3:00 PM
$4.00
Ford Caravan (MVN291), Dial-A-Ride
Trip details
146 Duane St. New York, NY 10009
10:20AM
276 E. 10th St. New York, NY 10009
10:43AM
Richard Hendricks
123ABC456
View profile
Phone number
+1 456-566-9183
Email
richard@gmail.com
Language
English
Home address
435 Birch St.
New York, NY 10009
Date of birth
06/23/1978

Smartphone



Text message



Automated Voice

Hi, Your driver Marcus is arriving in a Blue Toyota Camry. ID 2365.

Bring together your services & systems

Our process is easy

Set Goals → Launch → Monitor

Thanks!

Any questions?

You can find me at:
justin@goin.org

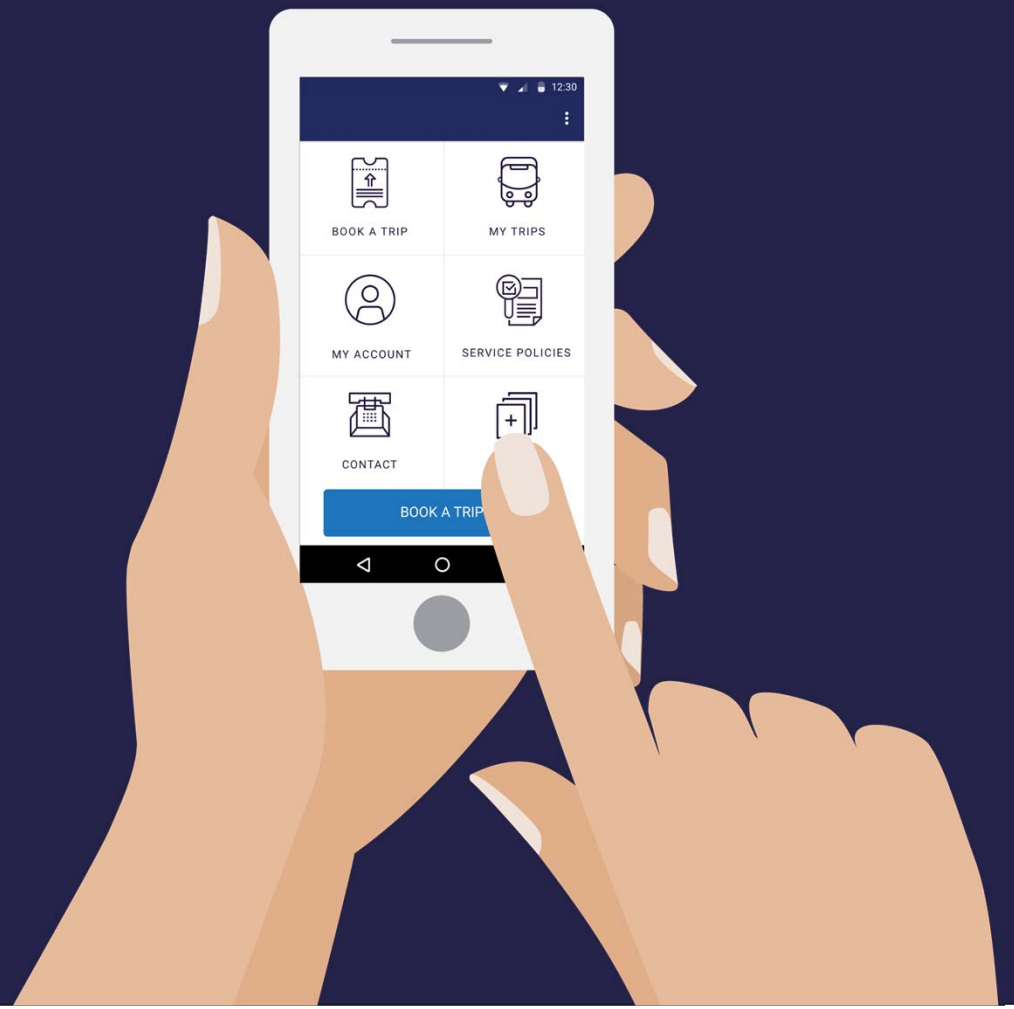
Routematch

Mobility for all

Rob Bryans

rob.bryans@routematch.com

404-851-4462



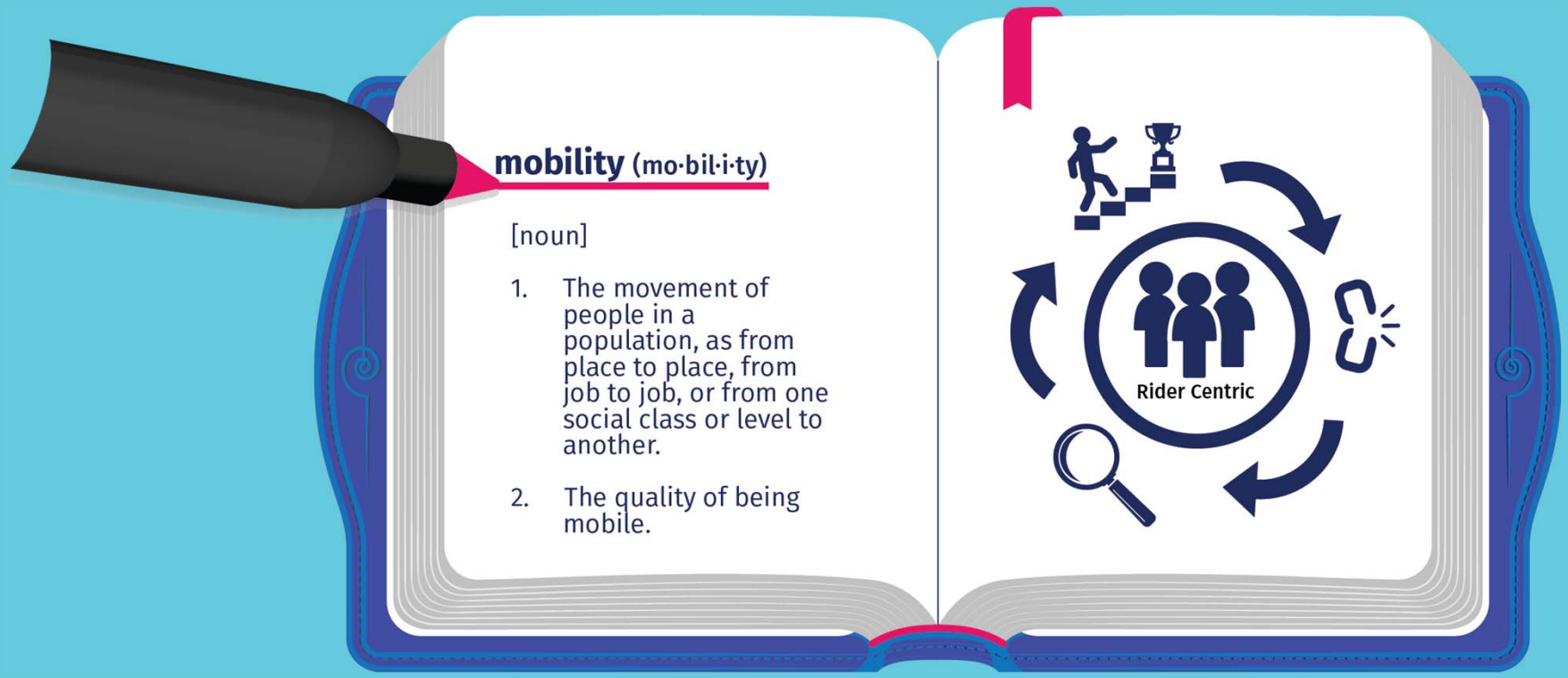
January 4, 2018

Hello

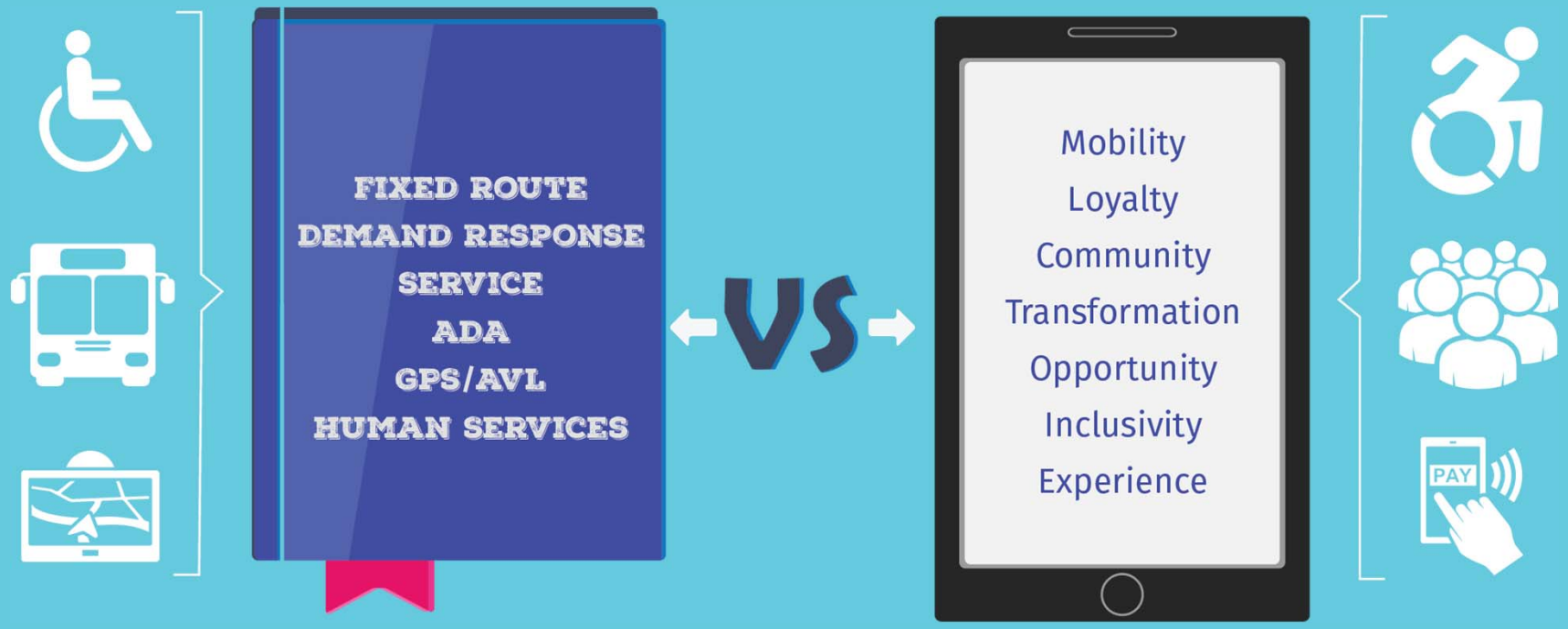
Rob Bryans

Regional Vice President

What is Mobility?



Traditional Transit & Future Transit

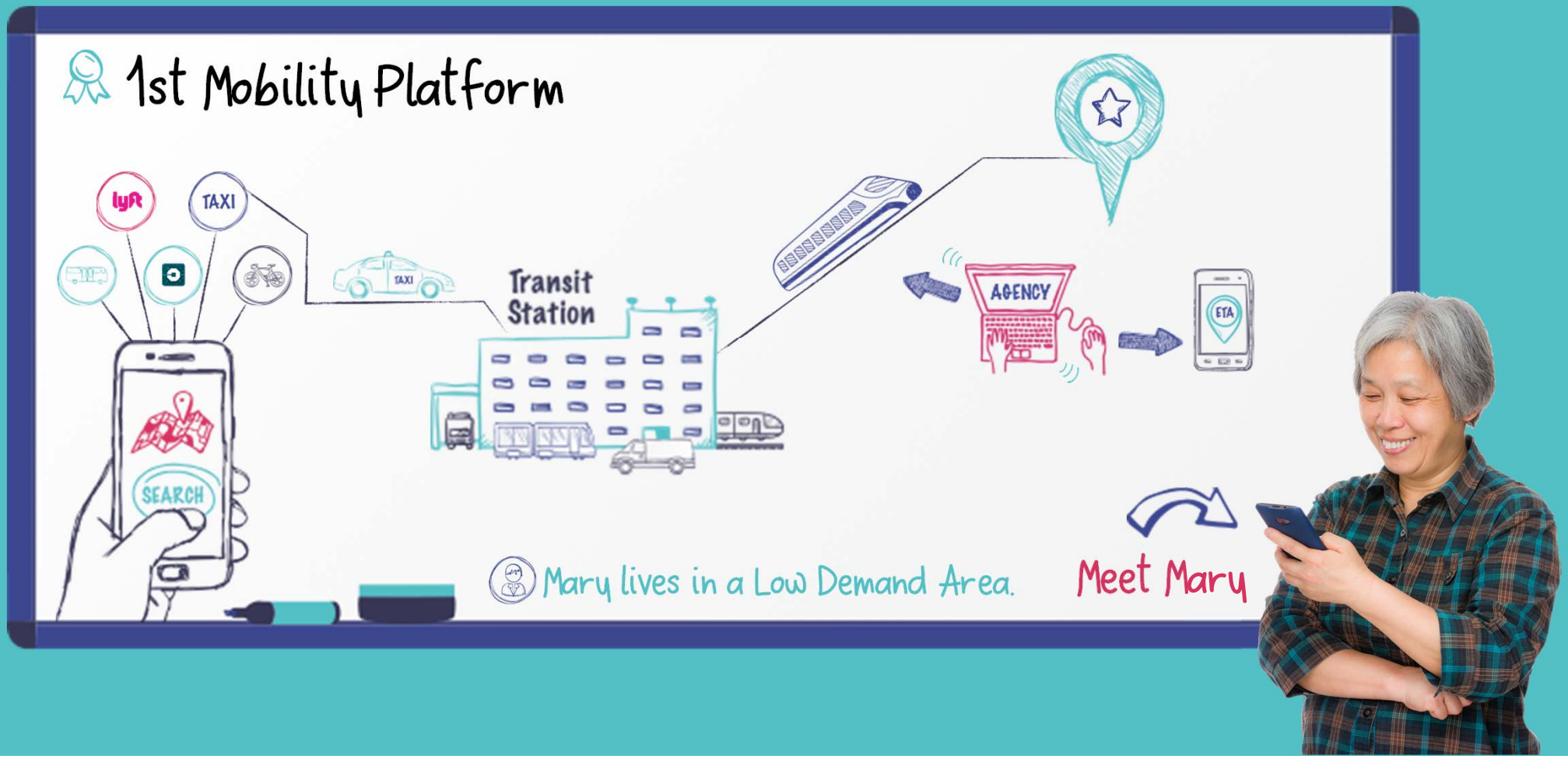


EVERY JOURNEY

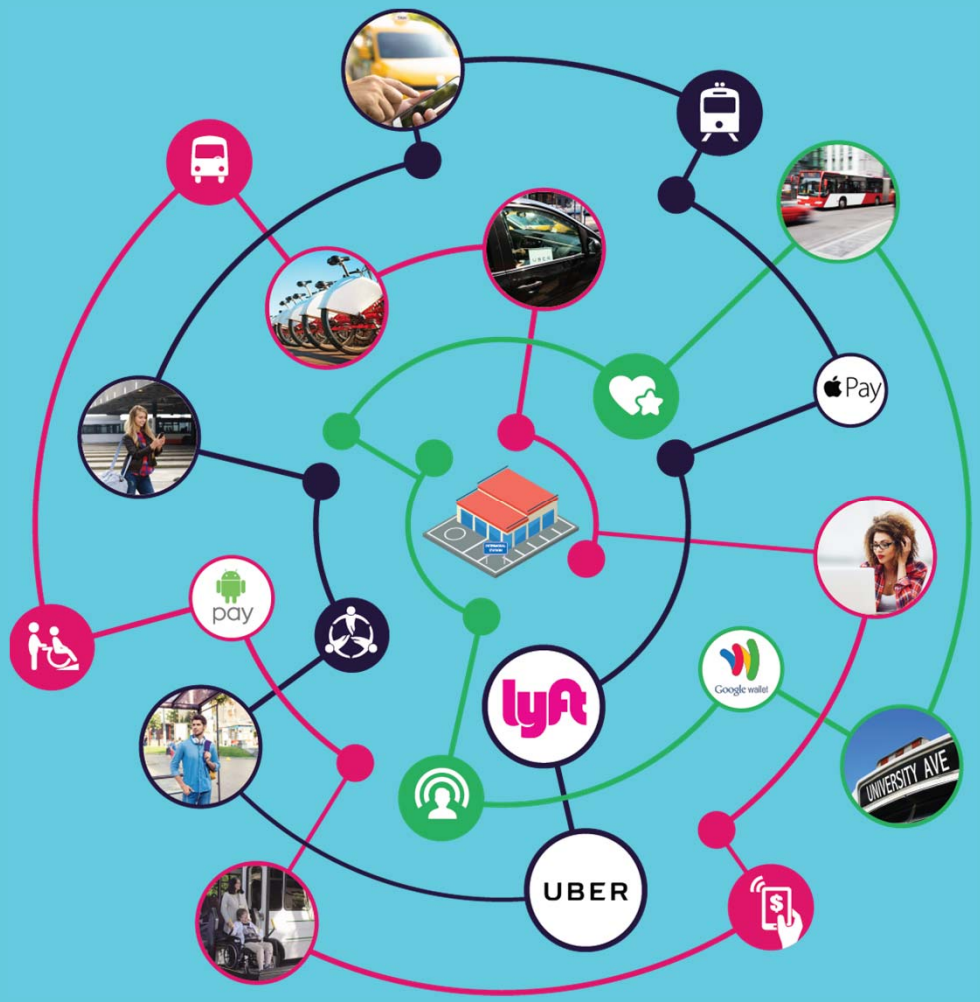
has a story.

EVERY JOURNEY

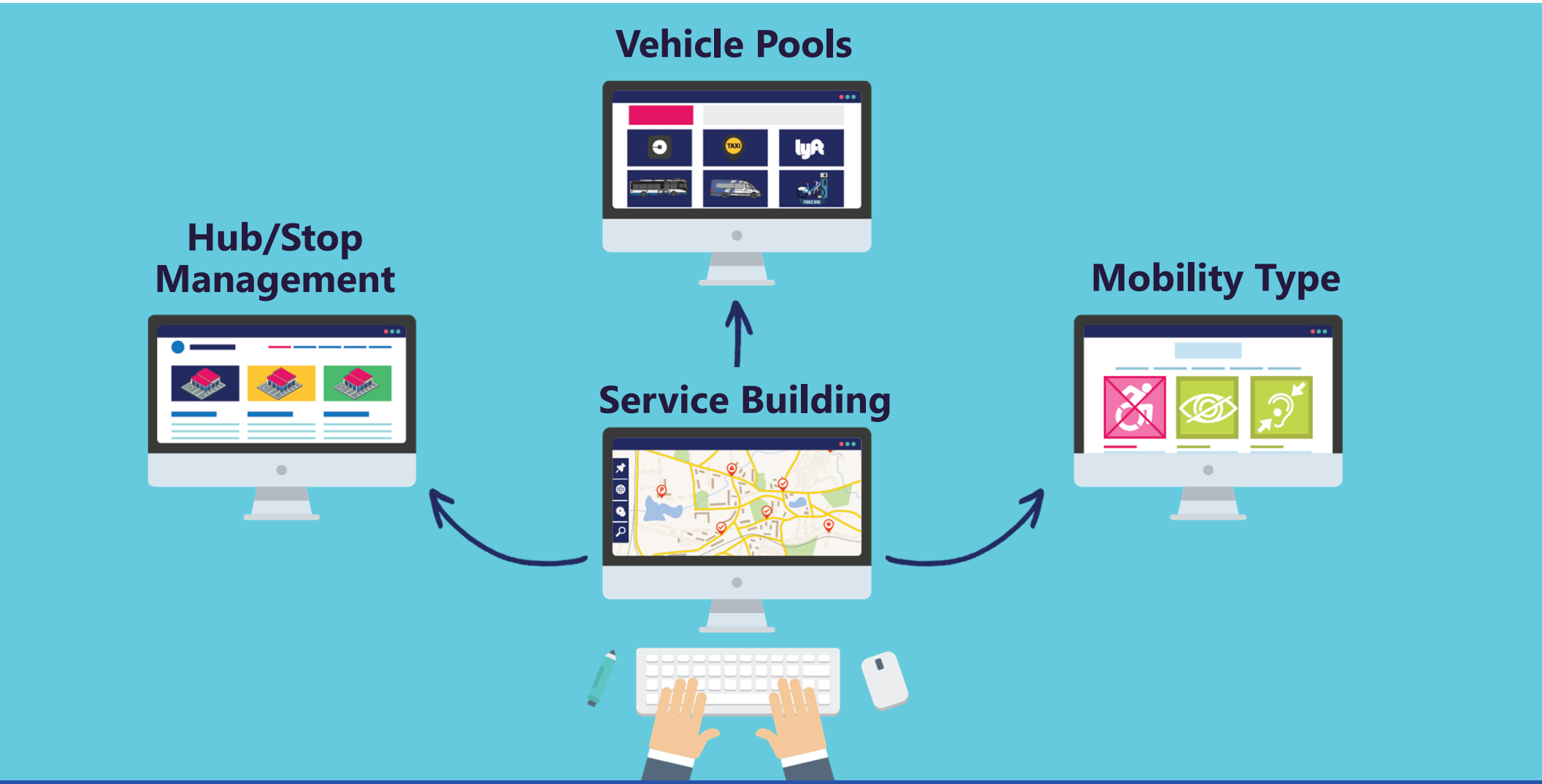
has a story.



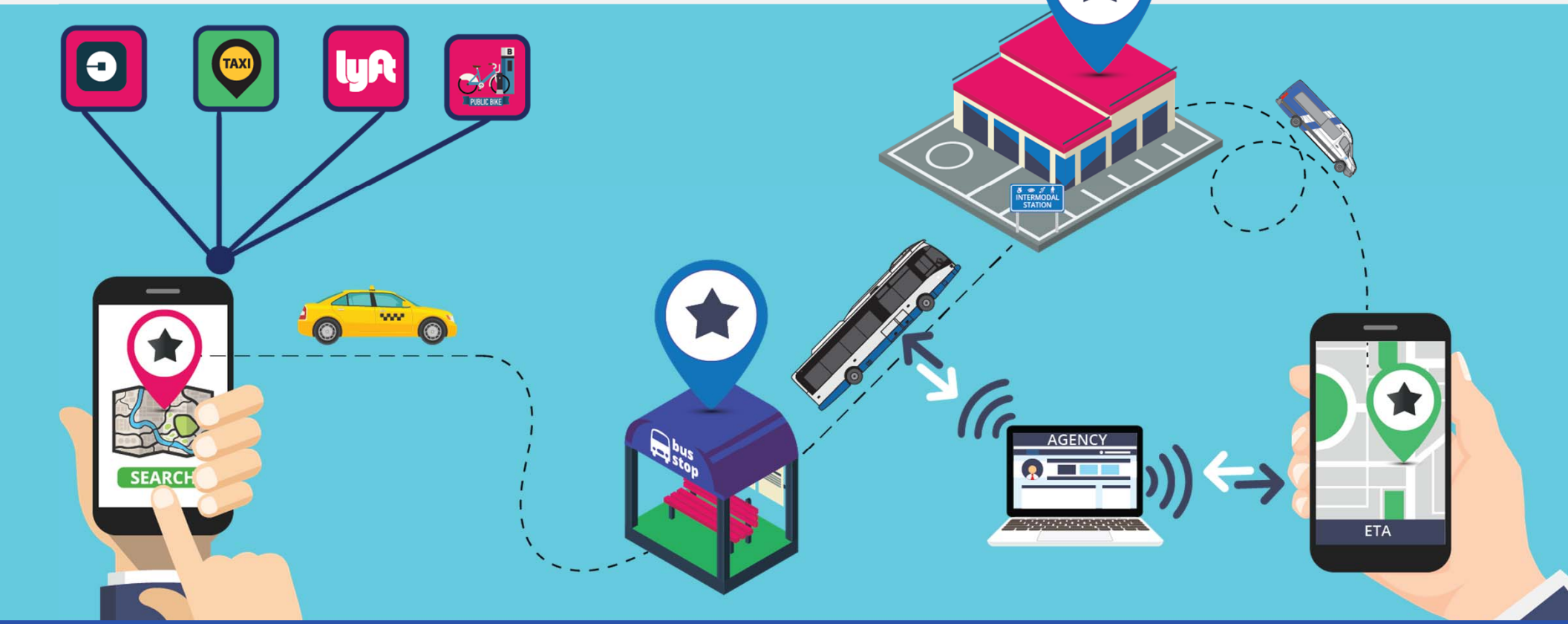
Aggregating, Connecting, & Personalizing Mobility

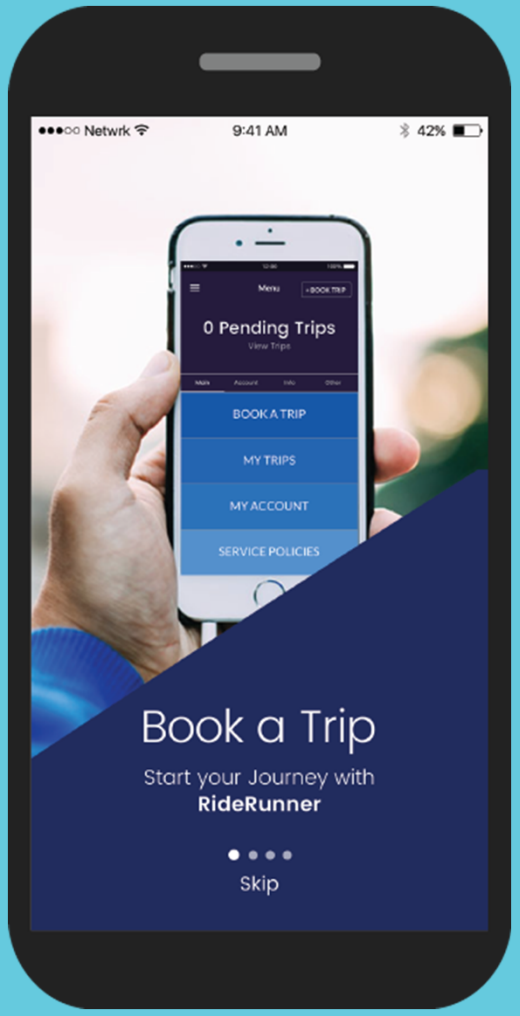


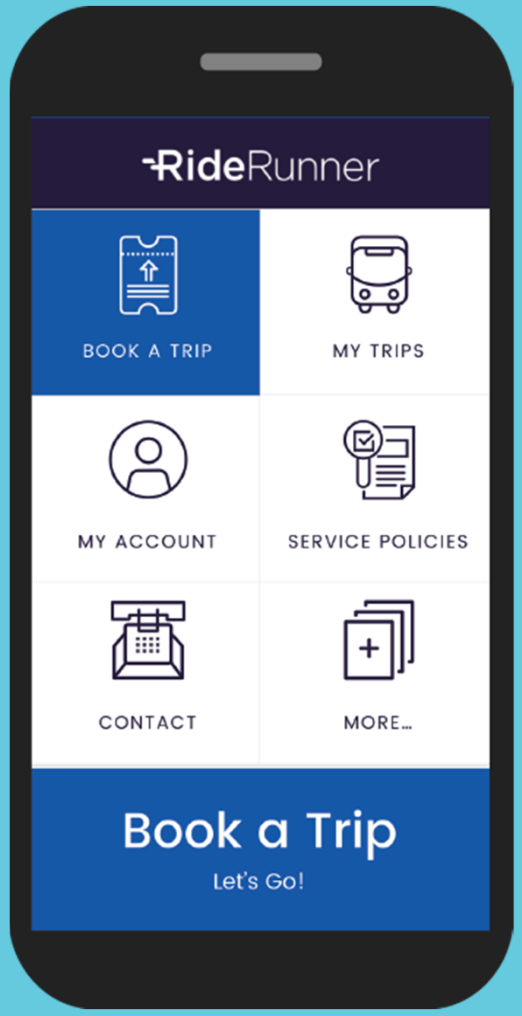
Measuring Success: Old vs. New

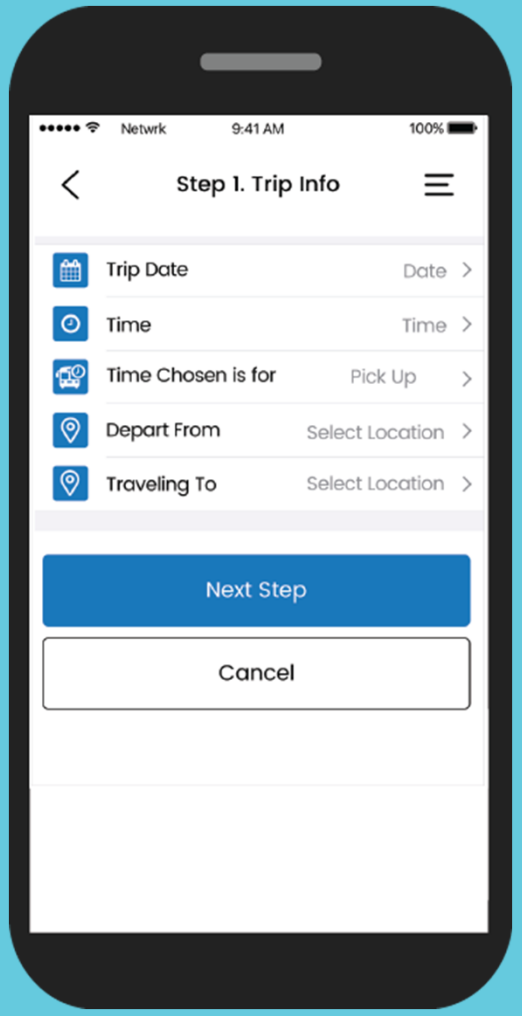

Vehicle Pools
Hub/Stop Management
Mobility Type
Service Building

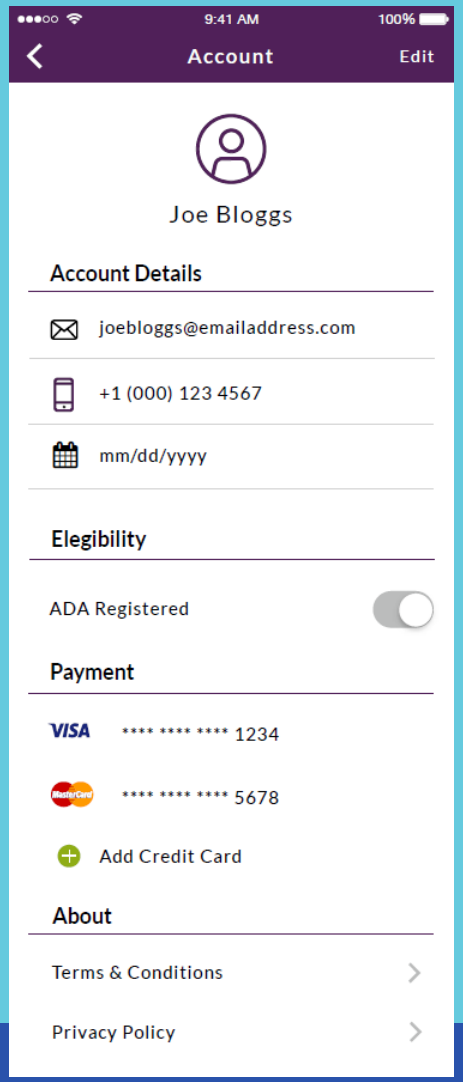
One App, One Experience

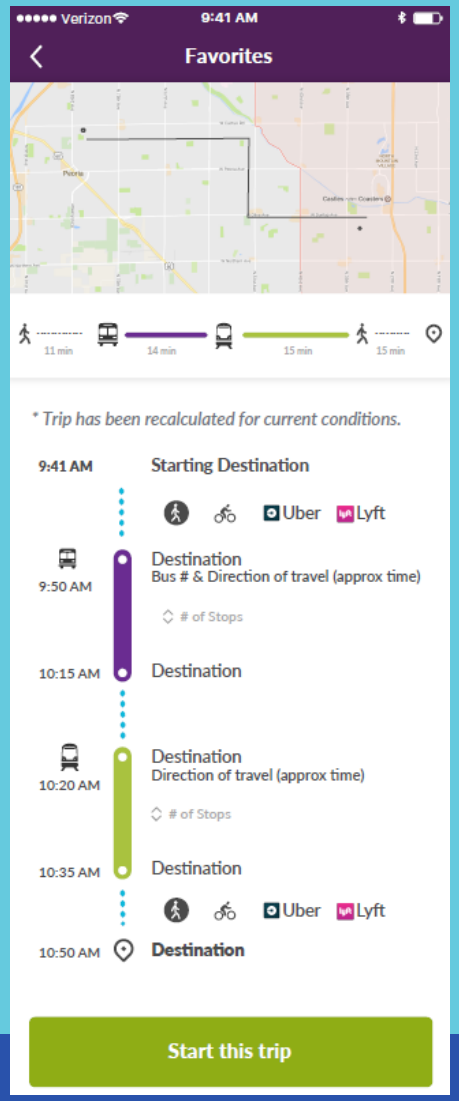


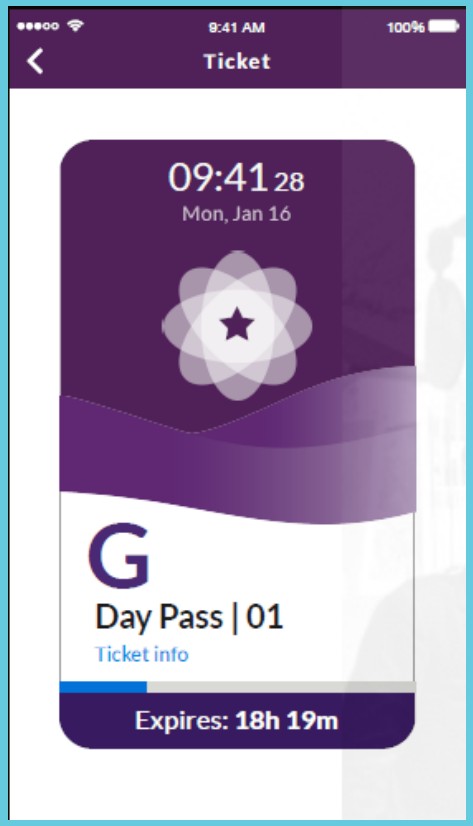

Netwrk
9:41 AM
42%
0 Pending Trips
BOOK A TRIP
MY TRIPS
MY ACCOUNT
SERVICE POLICIES
Book a Trip
Start your Journey with
RideRunner
Skip


RideRunner
BOOK A TRIP
MY TRIPS
MY ACCOUNT
SERVICE POLICIES
CONTACT
MORE...
Book a Trip
Let's Go!


Netwrk
9:41 AM
100%
Step 1. Trip Info
Trip Date
Date
Time
Time
Time Chosen is for
Pick Up
Depart From
Select Location
Traveling To
Select Location
Next Step
Cancel


9:41 AM
100%
Account
Edit
Joe Bloggs
Account Details
joebloggs@emailaddress.com
+1 (000) 123 4567
mm/dd/yyyy
Elegibility
ADA Registered
Payment
VISA **** **** **** 1234
**** **** **** 5678
Add Credit Card
About
Terms & Conditions
Privacy Policy


Verizon
9:41 AM
Favorites
11 min
14 min
15 min
15 min
* Trip has been recalculated for current conditions.
9:41 AM
Starting Destination
Uber
Lyft
9:50 AM
Destination
Bus # & Direction of travel (approx time)
# of Stops
10:15 AM
Destination
10:20 AM
Destination
Direction of travel (approx time)
# of Stops
10:35 AM
Destination
Uber
Lyft
10:50 AM
Destination
Start this trip


9:41 AM
100%
Ticket
09:41 28
Mon, Jan 16
G
Day Pass | 01
Ticket info
Expires: 18h 19m