



City of
Oakland

Shared Mobility Advisory Committee #5:

Pilots and partnerships



June 26, 2019 City of Oakland Department of Transportation Parking & Mobility



Agenda

- 6:00-6:10 **Sign-in, eat and mingle**
- 6:10-6:20 **Introductions + Goals for Today**
- 6:20-6:30 **OakDOT Update**
- 6:30-6:40 **Lessons Learned from Adaptive Bike Share**
- 6:40-7:25 **Activity: Evaluate Proposed Pilots**
- 7:25-7:30 **Collect Feedback + Closing Remark**

Goals

For the Advisory Committee

- Help establish the **VISION** for shared mobility in Oakland
- Provide **FEEDBACK** on city policies and programs
- Help **IDENTIFY** and **REDUCE BARRIERS** and make shared mobility equitable and accessible to all Oaklanders

For Today

- Hear **LESSONS LEARNED** from the Adaptive Bike Share Pilot Program
- Provide **FEEDBACK** to proposed pilots and brainstorm pilot **EVALUATION** metrics
- **INFORM** you all about whats new in Shared Mobility in Oakland

Scooter Permit Updates

- **5 vendors conditionally approved for early July deployment**
- **3,500 scooters total**
- **Mobility Data Specification (MDS)-based Data sharing policy**
- **User survey results are in**
- **Expect permit announcement next week!**

Bike Share Update: Dockless E-Bikes



Photo: Kyle Kraft/Lyft

- **Coming soon!**
- **Up to 1,200 bikes**
- **Phased expansion of service area**
- **Can lock to bike racks or stations**
- **Pedal bikes to remain**
- **Concurrent with “Lyft Up East Oakland” partnership**

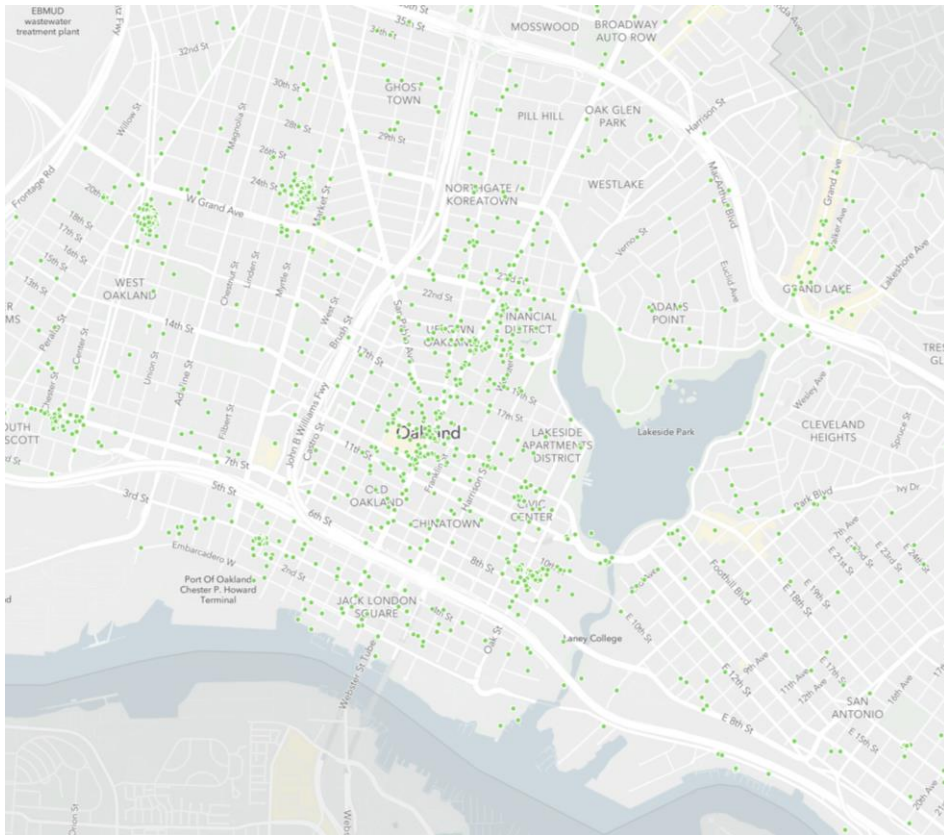
Data Sharing for Dockless Mobility Management



- Permit enforcement
- Equitable distribution
- Calculating parking fees
- Understanding utilization
- Designing new infrastructure
(bike lanes, parking zones)



The Mobility Data Specification (MDS)



Real-time Data Feed

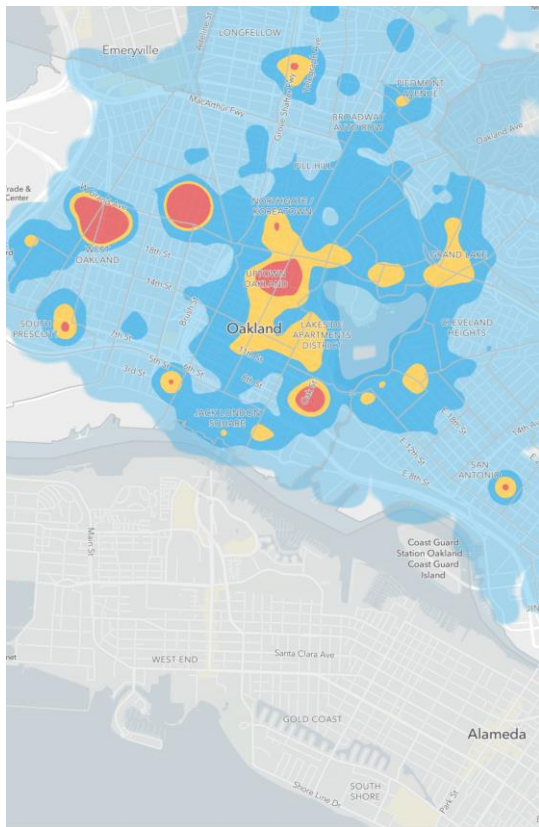
Includes...

- Trip origin, destination and route
- Trip start time, end time and duration
- Location and duration of parking events

Does NOT include...

- Personally Identifiable Information
- Customer name
- Credit card number
- Drivers license

Data Use Policy Approved by the Privacy Commission



Protecting Personal Privacy through...

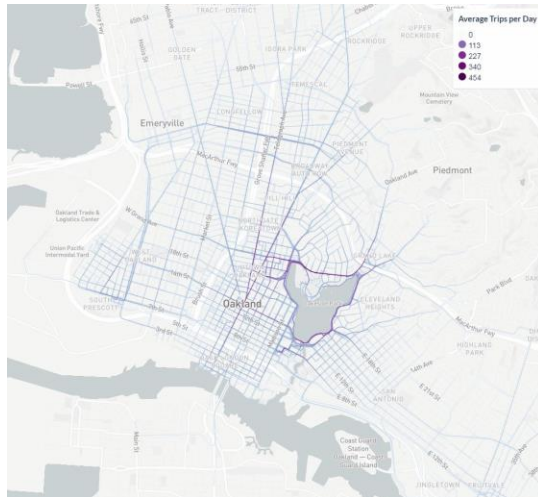
- **Obfuscation & Aggregation**
- **Retention & Security**
- **Access Controls**
- **Permitted Uses**
- **Public Access**

Data Sharing for Dockless Mobility Management

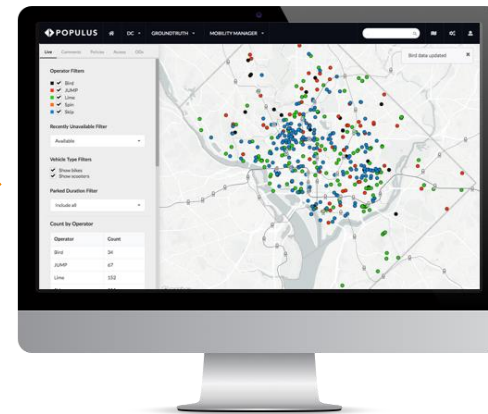
Operator



Third Party



DOT

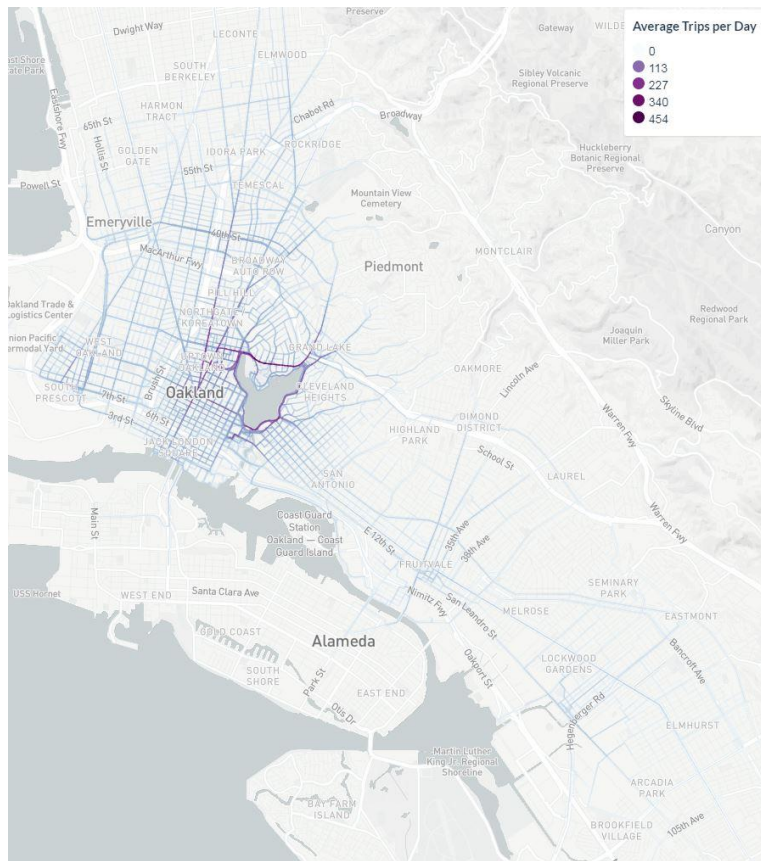


- Removes Personally Identifiable Information

- Ingests, Stores + Secures Data
- Aggregates + Obfuscates
- Visualizes for DOT

- Views data on mobility management platform

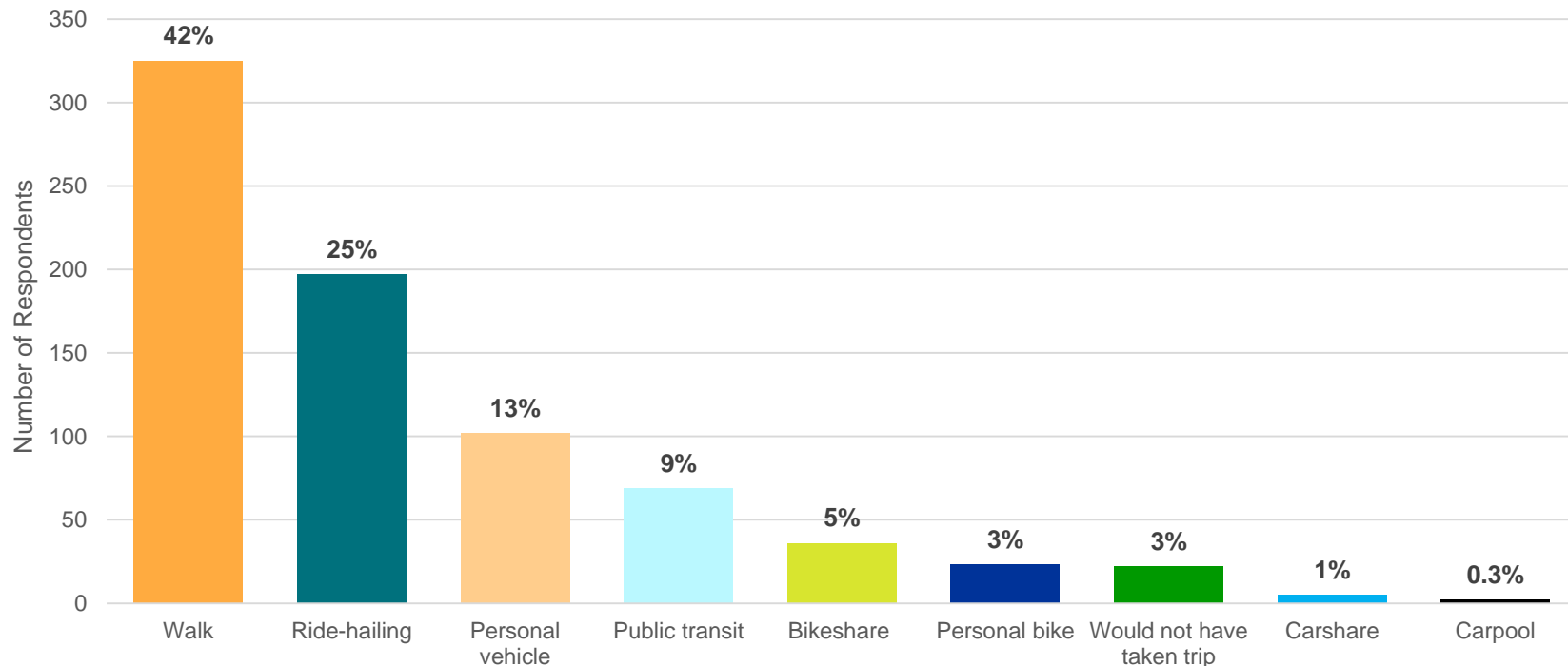
Data Summary



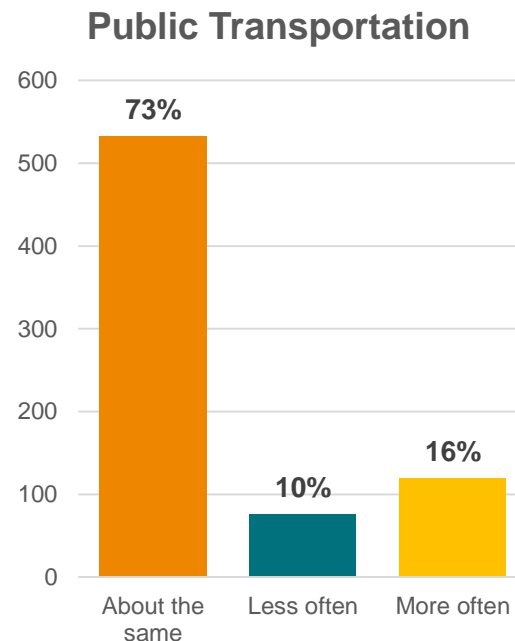
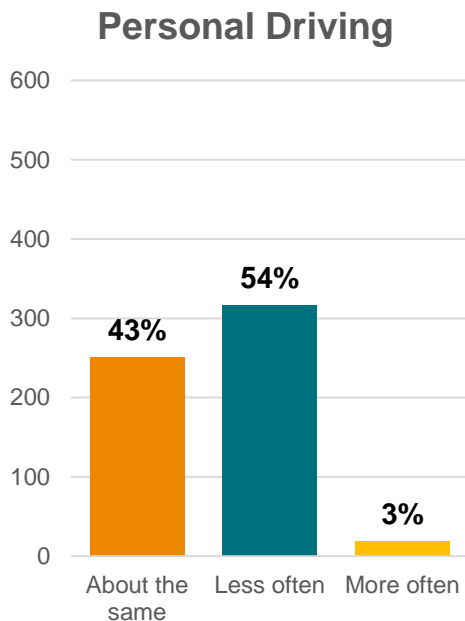
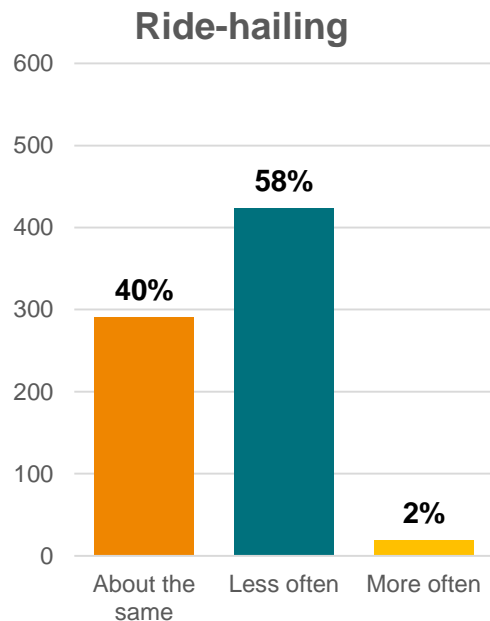
- over **1.65 million trips** (since last May)
- on average **3,000-7,000** trips per day
- average of **2.6-3** trips/vehicle/day
- Majority of trips start and end in Downtown, West Oakland, and North Oakland/Adams Point
- Popular routes: Telegraph, Broadway, 14th St, and around Lake Merritt

E-Scooter Survey Results: Mode Shift

What would you have used if an E-scooter wasn't available during your most recent trip? (n=864)



E-Scooter Survey Results: Reduced Reliance on Automobile



(n=864)

Adaptive Bike Share Pilot



Background

In October 2016 a grievance was received regarding the accessibility of the bike share program to persons with disabilities.

Staff responded by forming a technical advisory committee and studying best practices from other cities.

A survey was distributed to receive feedback on program aspects.

Launched in May, 2019



City of
Oakland

Department of
Transportation

Survey results summary

- Preference for a recreation and exercise use
- Preference for rental service with staff present
- Three-wheel trike, hand cycle and side-by-side tandem preferred
- Preference for off-street trails
- Support for both Lake Merritt and Jack London locations
- Ambivalence about integrating with “look and feel” of Ford GoBike
- Other needs: Storage for mobility device, help transferring



Pilot proposal

- Solely funded by Lyft/ Motivate
- Operated by BORP through contract with Motivate
- Purchase 8 adaptive bikes
- Rental Duration: 1 hour with extension possible
- Every Saturday and Wednesday between Spring 2019 and Winter 2019
- Ford GoBike Membership Required, but free for persons w/ disabilities



The Adaptive Bikes



City of
Oakland

Department of
Transportation

Location: Lakeshore Ave Cul-de-sac



Launch

The shared bike and scooter industry often leaves out people with disabilities — but Oakland is changing that

The East Bay city is the first in the Bay Area and among the first in the country to launch an adaptive bike-share program



Bonnie Lewkowicz, front left, rides a tandem bike next to two kids during the launch of adaptive bike pilot for riders with disabilities by Ford GoBike and the Bay Area Outreach and Recreation Program around Lake Merritt in Oakland, Calif., on Saturday, May 11, 2019. (Ray Chavez/Bay Area News Group)

By ERIN BALDASSARI | ebaldassari@bayareanewsgroup.com | Bay Area News Group
PUBLISHED: May 15, 2019 at 6:05 am | UPDATED: May 15, 2019 at 2:38 pm

Oakland Adds Bike Share for People with Disabilities

As part of its efforts to make the city more accessible, its official bikeshare program now includes 'adaptive bikes'

By Roger Rudick | May 13, 2019 | 1

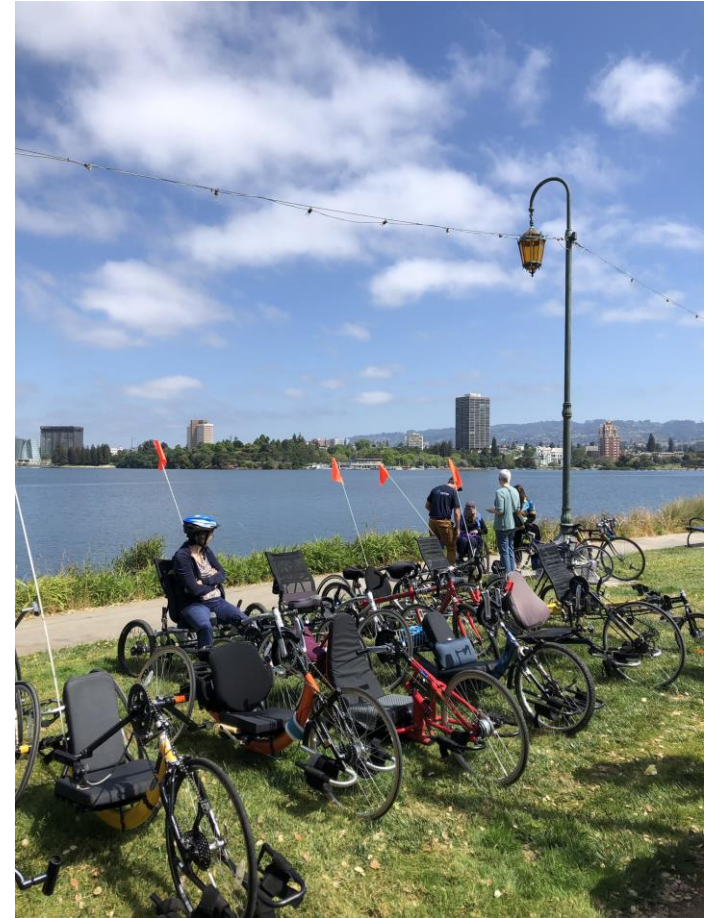
THIS POST IS SUPPORTED BY GJEL ACCIDENT ATTORNEYS



Disabled cyclists enjoy a ride on Oakland's new protected bike lane on Harrison Street along the lake. All pics Streetsblog/Rudick

Next Steps

- Evaluate user experience through “after” survey and focus group
- Test out a few alternative sites
- Continue outreach and public communication
- Work with Alta Planning and Design to make recommendations for a permanent program.



Lessons learned from the City's perspective

1. Include accessibility and inclusivity from the beginning
2. Listen to unmet needs, tailor the pilot to meet them.
3. Leverage existing strengths, be clear on roles:
 - A. In this case: OakDOT as facilitator, Lyft as funder/operator, BORP as expert/provider, Alta as evaluator
4. Evaluate and make recommendations for how to turn a pilot to a program
5. Apply lessons learned to other programs



OakDOT's Pilot Evaluation Framework

Goal: Develop an evaluation framework to align pilot programs with our shared mobility principles and department goals, and to measure program success.

Shared Mobility Principles:

- Inclusive Outreach & Engagement
- Racial Equity
- Traffic Safety
- Equitable Access to Services
- Public Transit
- Affordability
- Healthy Communities & Environment
- Employment & Economic Development
- Privacy & Personal Data
- Collaboration & Accountability

Pilot Evaluation Feedback Form

Pilot Evaluation Feedback Form

Presenter: _____

Reviewer Name/Org: _____

1. What are the key concerns this pilot should consider?

2. Who should this pilot work in partnership with (stakeholders, community orgs, etc.)?

3. After a 1-year pilot, what metric, data point, or outcome would demonstrate that this program was a success?

4. General Feedback:

Pilot Proposals - 5 min pitches + 5 min Q+A

- 1. Kevin Peterson – Marble, Autonomous Delivery Robots**
- 2. Daniella Henry – Revel, Electric Moped Share**
- 3. Bruno Schrader – Y-LECTRY, Micromobility Smart Parking and Charging Stations**
- 4. Daniel Migoya – Veemo, Enclosed Electric-Assist Three-Wheeled Bicycle**



THE URBAN LAST MILE

Highly Inconvenient

Clogs Our Streets

Causes Pollution

Costly

Stolen Packages



OUR MISSION

**Make last-mile logistics fast, accessible,
and frictionless — whether it's delivering
groceries, medicine, or any other kind of
package.**

EVERYTHING ON DEMAND

Groceries

Meals

Medicine

Packages



DELIVERY ROBOTS

- **Our intelligent robots navigate sidewalks at walking speeds to efficiently and affordably deliver goods within minutes of when they are ordered.**
- **Through the use of state-of-the-art 3D mapping and artificial intelligence, deliveries are shepherded securely and safely to their destinations.**

MEET THE ROBOT

Modular Design

Useful Capacity

Environmentally Friendly

Secure



DELIVERY OF THE FUTURE

On Your Schedule

Detailed ETA

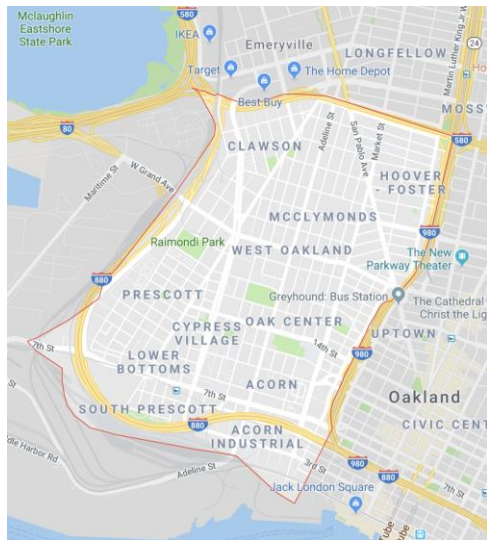
Accessible

Polite



MARBLE AND OAKLAND COLLABORATION

West Oakland



**3-5 robots
Conducting Testing**

**Marble will provide
feedback to DOT on
pedestrian
infrastructure
conditions**

Jack London Square



INCLUSIVE OUTREACH

McClymonds High School

- Education opportunities
 - Classroom
 - Field
- Internship program

Local Residents

- Operators = educators

Disability Groups

- MCDP

Business Groups

- Jack London Improvement Dist.



THANK YOU.

Kevin Peterson
CEO

kevin@marble.io

Revel

Shared Mobility
Technical Advisory
Committee

Oakland City Hall
Wednesday, June 26th, 2019



REVEL

Meet Revel. Seamless integration into the existing transit network.

Street Legal

Every vehicle has a DMV-issued license plate and requires a drivers license to operate. No motorcycle license required.

Space Efficient

Parks in curb dead space. An average parking spot fits 7 mopeds.

Affordable

Cheaper than rideshare, pool services.

Sustainable

100% of the fleet is 100% emissions-free. **Electrically powered, they're** also noise-free.

Multiple uses

Great for short trips, middle mile and complete trips. Replace car trips, relieve/supplement congested transit lines.



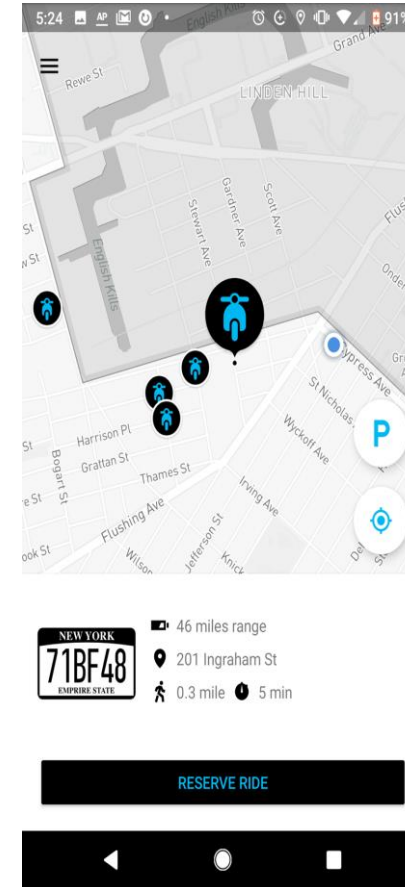
REVEL

How it works .

1. Open the Revel app to find a nearby moped.
2. Click to reserve, at vehicle click to start and unlock helmet case.
3. Take a free safety minute to check mirrors, get comfortable.
4. Begin ride and park in a legal parking spot when you reach your destination.



Open the App



Locate nearest Revel



Reserve and
ride
wherever you
need to go!

REVEL

S a f e t y i s o u r t o p p r i o r i t y .

- Drivers must be at least 21 years old with a valid license and safe driving record.
 - ✓ Before registration is complete Revel runs a DMV driver history **check to verify riders' information and a safe driving record.**
 - ✓ Users must also submit a selfie to verify they are the license-holders.
- USDOT certified helmets equipped with eye protection shields are stored in each Revel at all times.
- **As motor vehicles, Revel's** travel in traffic lanes, park curbside and have safety equipment consistent with or exceeding state DMV and insurance board standards.
- Riders are given a **free 'safety minute'** to adjust mirrors, fasten helmets and otherwise prepare for a safe ride.
- Speed throttled at 30mph to keep up with traffic, license plates ensure accountability.



REVEL

We're committed to continuous safety education for all drivers.

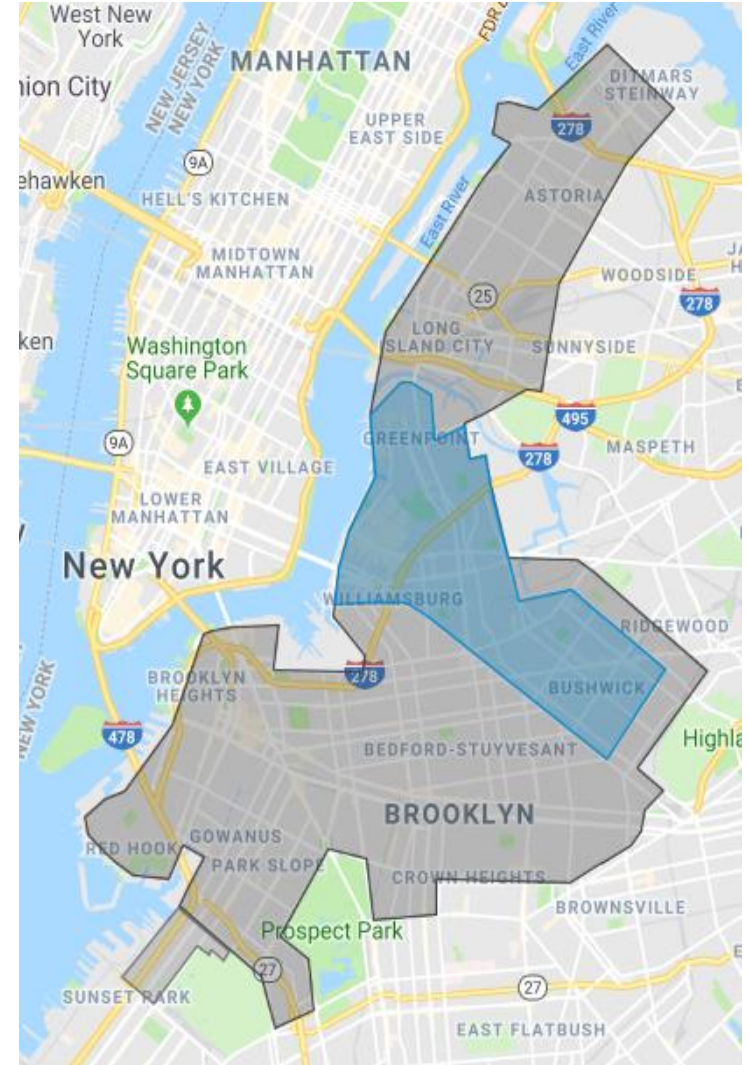
- Revel offers free in-person lessons to existing and potential riders 7 days a week
- Each trip begins with a safety checklist
- Ride ends with reminders to ensure proper parking
- Our team is available to provide immediate customer support during operating hours



REVEL

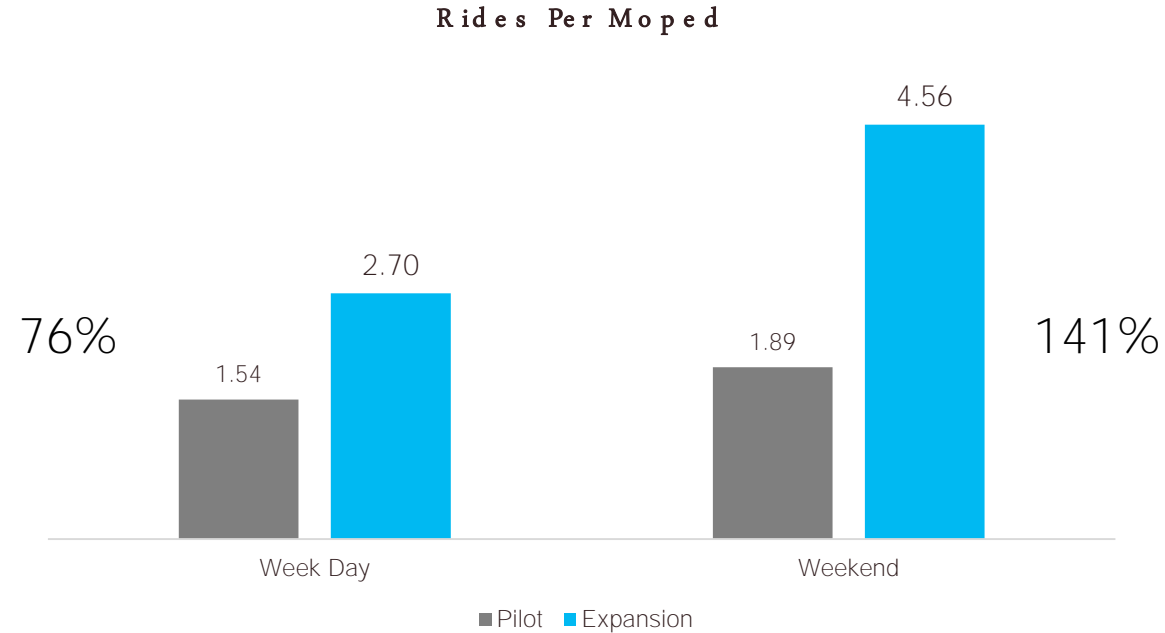
2019 NYC Expansion

- In June, based on user demand, Revel expanded its operating territory to include Brooklyn and Queens neighborhoods from Astoria to Sunset Park
- We increased our fleet to 1000 mopeds.
- We also launched an Equitable Access Program - offering riders on public assistance with a 40% discount off standard pricing.



REVEL

Growth since our pilot



73%

of the users who have signed up since the expansion have taken multiple rides on a Revel.

1 8.3K

New user sign ups since the launch of the expanded program, with growth continuing.

REVEL

Moving forward in 2019.

- This year we plan to expand our footprint to select cities across the United States.
- We will engage early and often with cities. Our approach is to listen, deploy, learn and refine.
- **Our goal is to fit seamlessly into cities' existing transportation networks, offering a new transit option for all residents.** Particularly in neighborhoods with limited transit options, lower rates of car ownership, and those historically underserved by companies offering innovative transportation options.
- We are also committed to equitable riding that is accessible to all residents. We will offer an equitable access rider program with a significant discount off our standard pricing.
- **Revel doesn't do gig economy. We will also establish a physical presence in every city we operate,** with locally-based employees on the ground so we remain responsive to our customers, city government and our community.



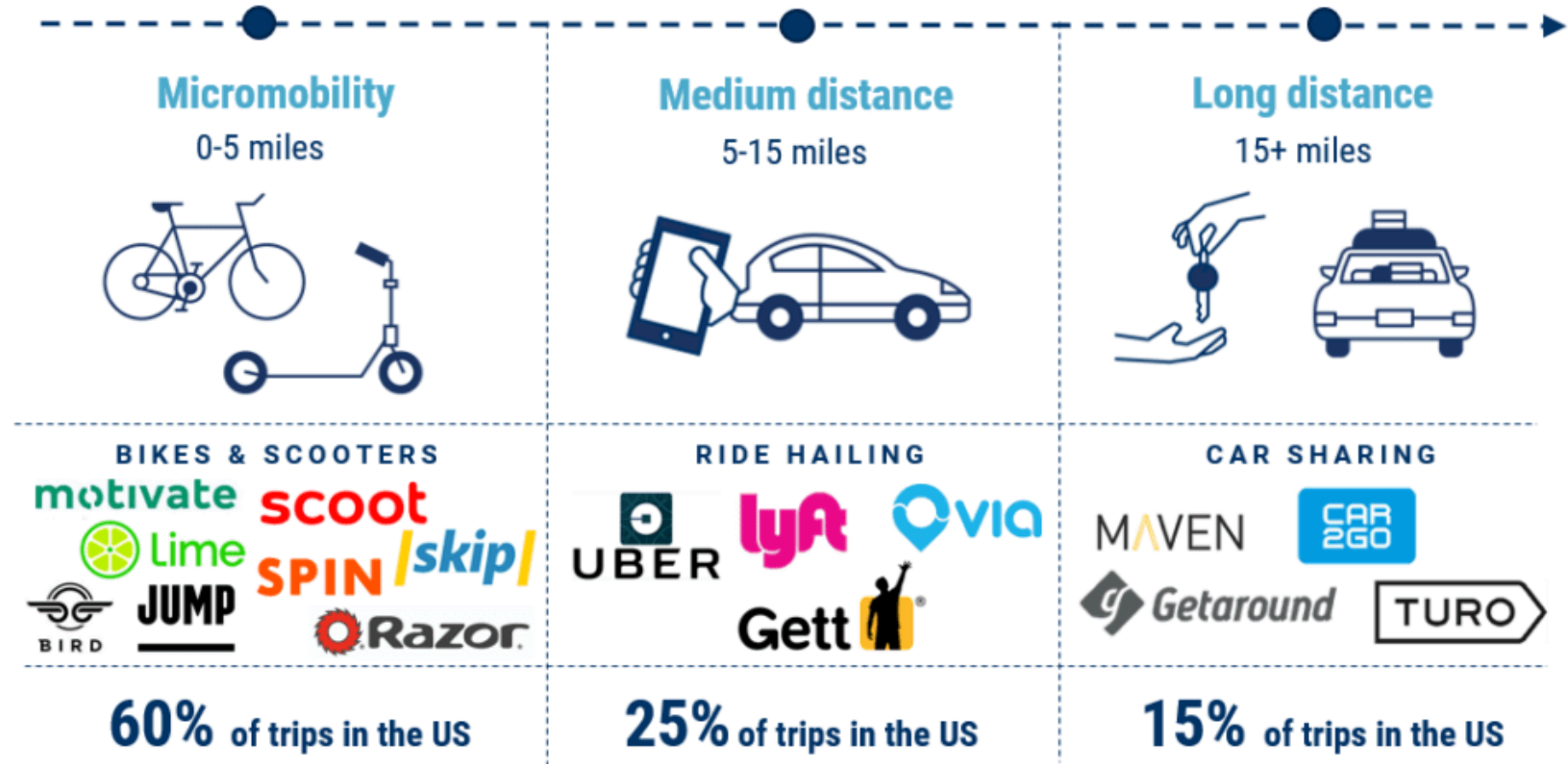
Y-LECTRY

Y-LECTRY makes the Green Transportation more accessible by enabling riders to park or charge their electric rideable in a safe and easy way.

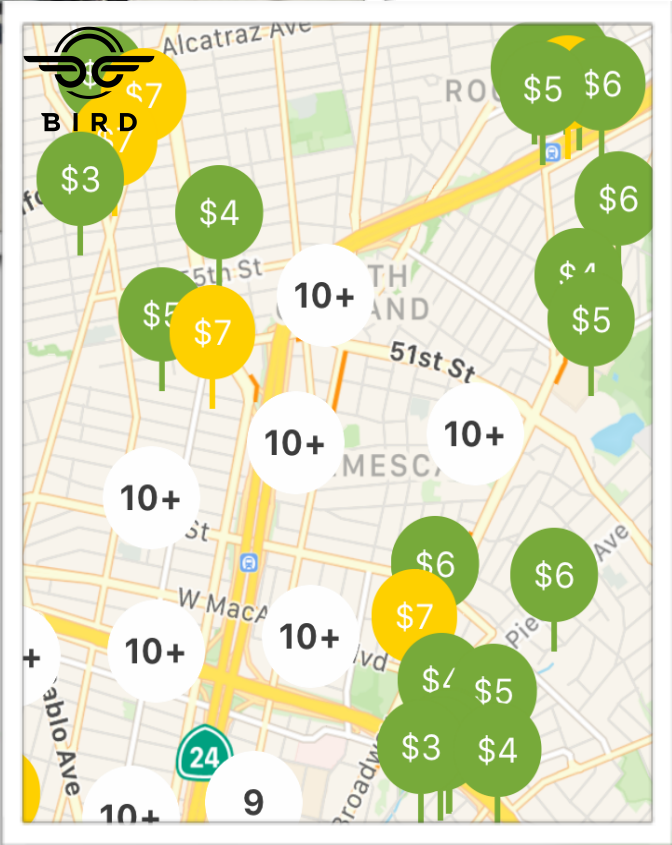
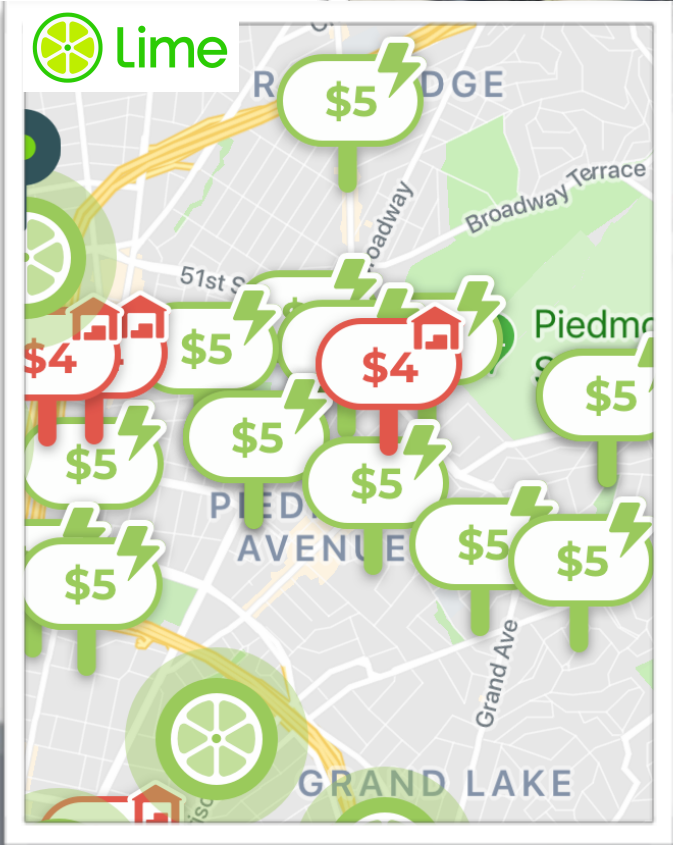
V20 - Oakland, April, 2019.

DISRUPTING THE CAR

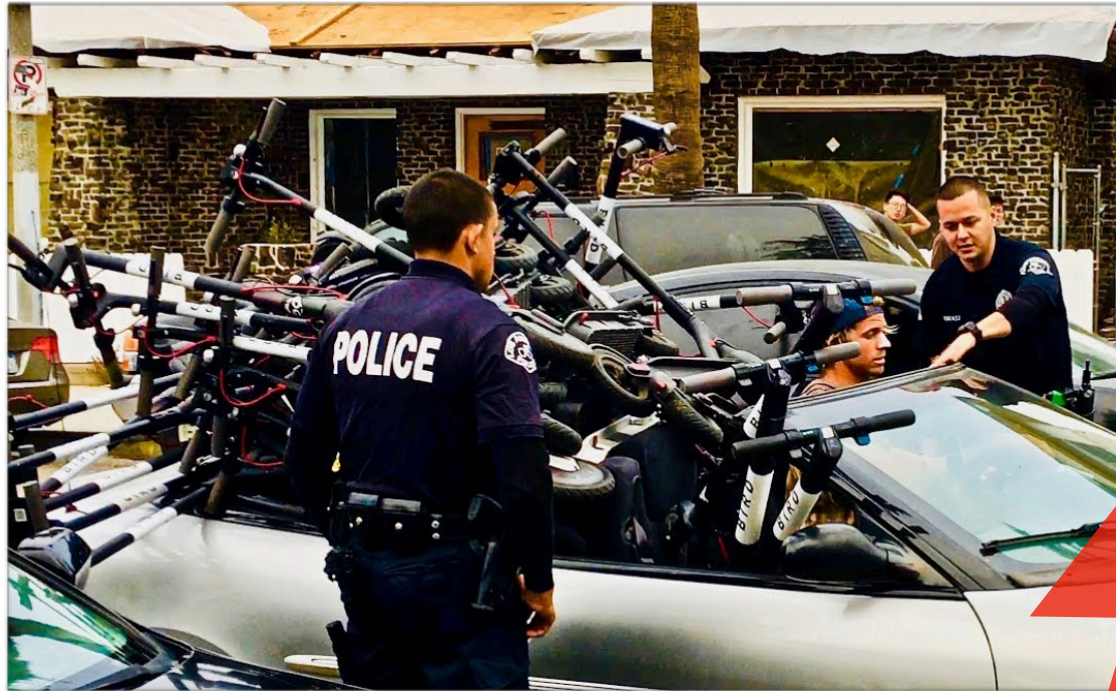
Alternatives to car ownership by trip length



Source: NHTS



INDEPENDENT CONTRACTORS



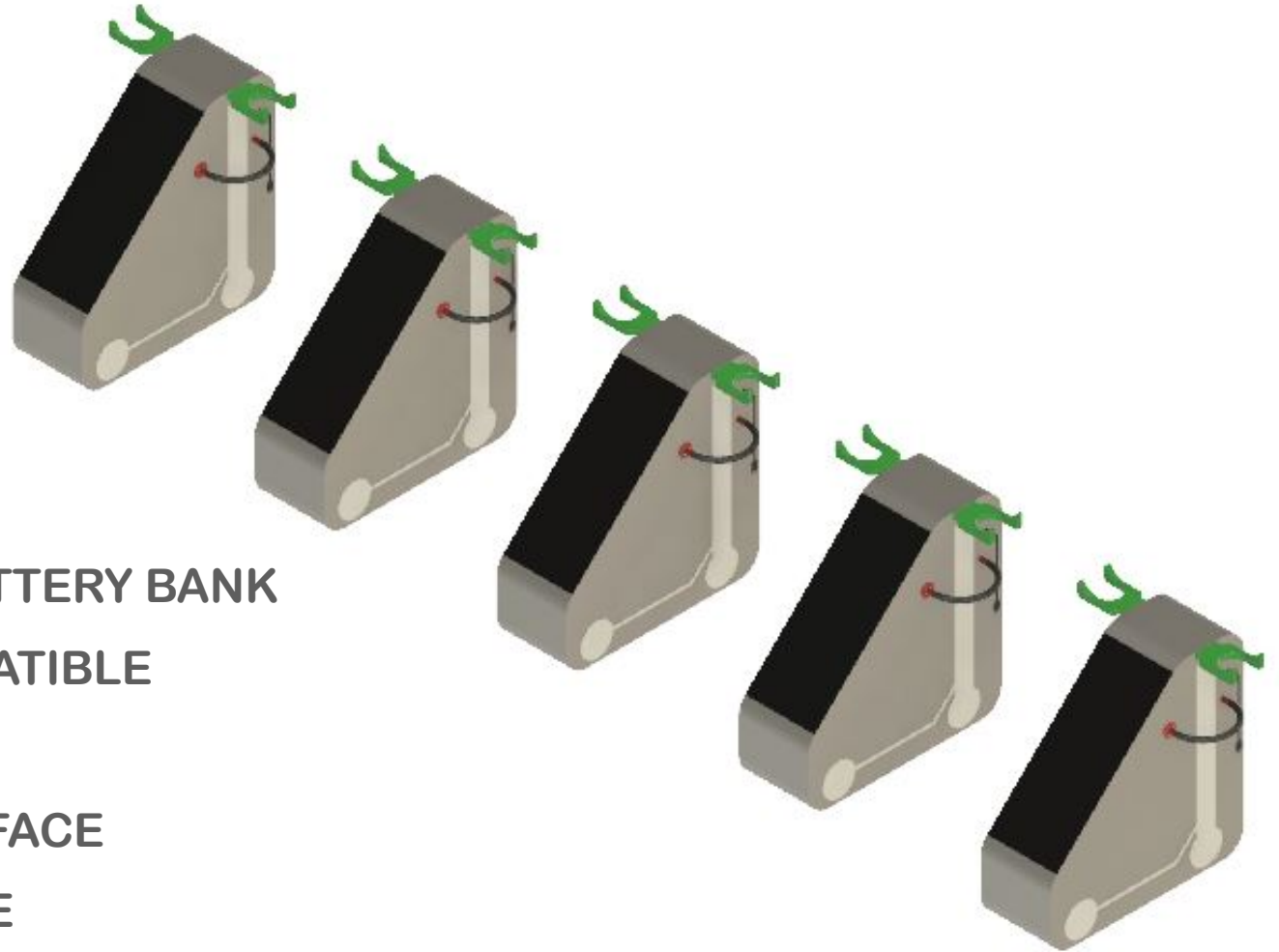
- RUN AROUND TO COLLECT
- LOAD AND CARRY
- HOME OR WAREHOUSE
- OVERNIGHT CHARGE
- DELIVERY BY 7am





#1 Compatible e-Rideables Station

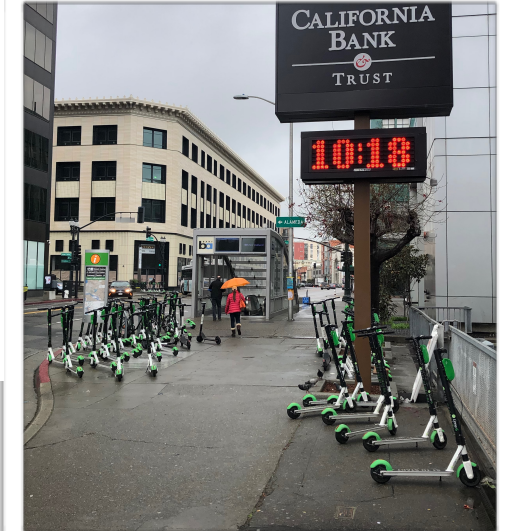
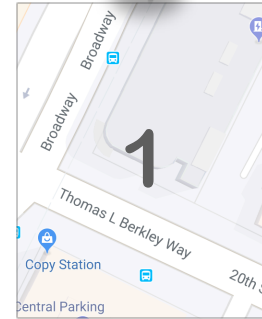
Parking and Charging is as easy as:



- HANDS-OFF WORKING
- SOLAR POWERED / BATTERY BANK
- CHARGER FULL COMPATIBLE
- OVERNIGHT LOCK
- API SOFTWARE INTERFACE
- CHEAP AND SCALABLE

City of Oakland

- 2 - STATIONS / 20 sct.
- HOSTING 100 % FREE
- LOCAL TAX PAYER
- INSURANCE REQ.





"I use my e-scooter to get around work and sometimes for a ride to the city.

Asking places to use their outlets because I forget to charge my scooter the night before is very frustrating, so a designated parking and charging station would be cool."

Richard Baltazar

Technician 2 at Digital Reality



"A charging station will make traveling easier for us if we were to get our own e-rideable. We are visiting from Seattle and these e-scooters have made transportation, but in places where these don't exist yet, having a parking station will definitely be a must."

Capri and Loc

visitors from Seattle



"I would like to park and plug my scooter in front of my work, so I do not have to fold and bring it in with me to charge."

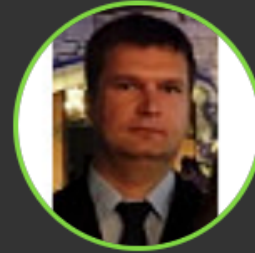
Santiago Thomaz

Entrepreneur Plug and Play Tech Center



Bruno Schrader
Founder / CEO

Project Developer and
International Trader with a
Mechatronic degree and 9 years of
dedication in the Scooter Industry.



Richard Schrader
CTO

Electrical Engineer - MBA in
Maintenance Engineering with 15+
years of extensive experience
developing hardware, software
and maintenance in Aerospace &
Defense systems and ROV
electronic systems.

Berkeley SKYDECK

UC Berkeley SkyDeck Spring 2018 - Fall 2019



City of
Oakland

Department of Transportation
Parking & Mobility
250 Frank H. Ogawa Plaza, Suite 4344
Oakland California 94612-2033

Shared Mobility Advisory Committee

Wednesday, June 26, 2019, 6-7:30 PM
Oakland City Hall, Hearing Room #3

Bruno Schrader - Founder CEO

bruno@y-lectry.com

(650) 660-0645



VELOMETRO

Daniel Migoya

Fleet Operations Manager

dmigoya@velometro.com

VeloMetro sells mobility as a service for short trips around a city using a new platform of connected, enclosed electric-assist trikes.

Homework – Pilot Evaluation

- **Feedback** on overall structure, specific content, and clarity
- **Suggestions** for metrics to measure progress and success of pilot programs

Potential topics for next meeting

- Home-grown mobility start-up incubation, funding
 - Accessible scooters
 - Zero Emission Vehicle Action Plan
 - Scooter Parking areas
-
- What would you like to add?

Thank You!



bikeshare@oaklandca.gov
carshare@oaklandca.gov
scootershare@oaklandca.gov