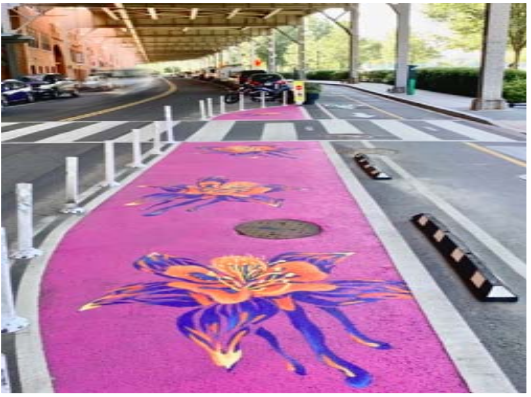
TRY IT BEFORE YOU BUY IT



DESIGNING EFFECTIVE PILOT PROJECTS

WGI INSPIRED BY DESIGN

COMPASS COMMUNITY PLANNING ASSOCIATION of Southwest Idaho

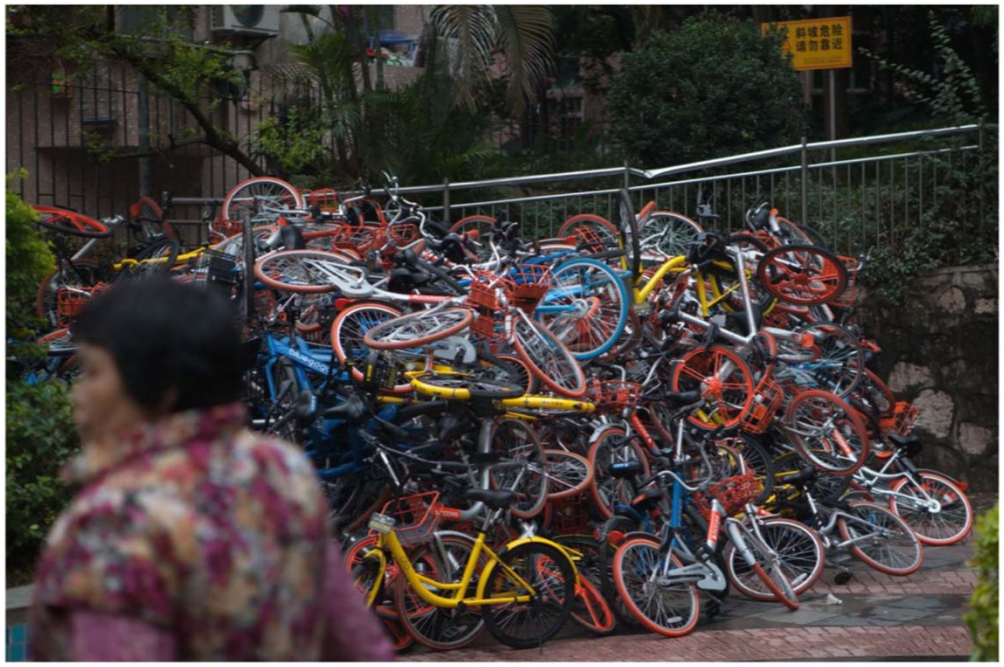
WHAT WILL WE COVER?

The What & Why of Pilot Projects:

Focus on Mobility Technologies

What Goes into Effective Pilot Project Design?

Examples (& What's Coming)



DEFINITION

AKA: demonstration, pilot study, prototype, test, or trial

A small scale … preliminary study …. conducted to evaluate:

- Feasibility
- Time
- Cost
- Adverse events

… and improve upon the design prior to full implementation

DEFINITION

AKA: demonstration, pilot study, prototype, test, or trial

New Pilot Projects

- Needed for New Technologies
- Used for Innovative Approaches
- Used for Public Engagement
- Focused on Numbers & Data

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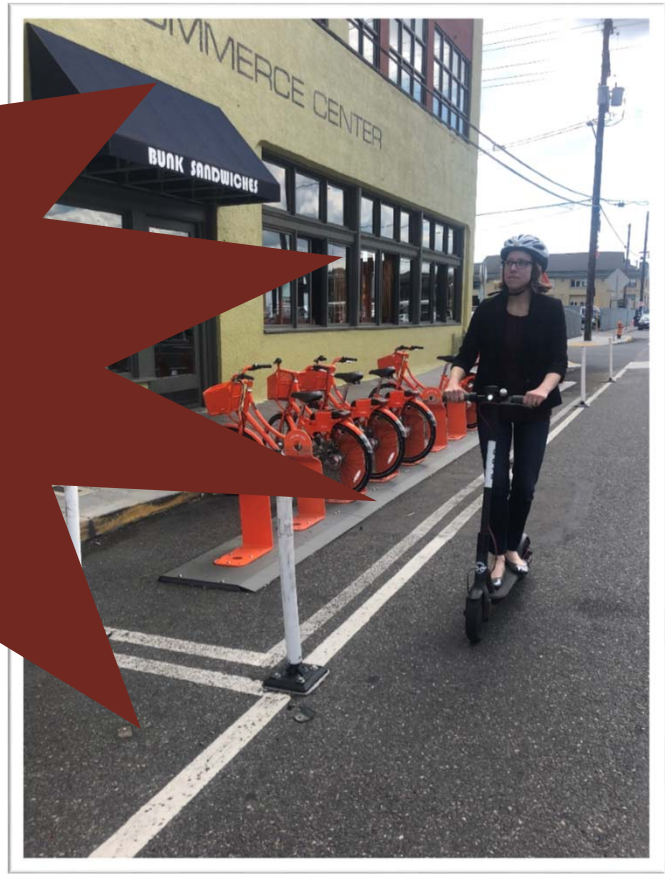
ROLE OF PUBLIC & ADVOCACY GROUPS

- Help Set &
- Public Inte
  - Us
  - Use of
- Show
  Benefits/Lim

Participate!

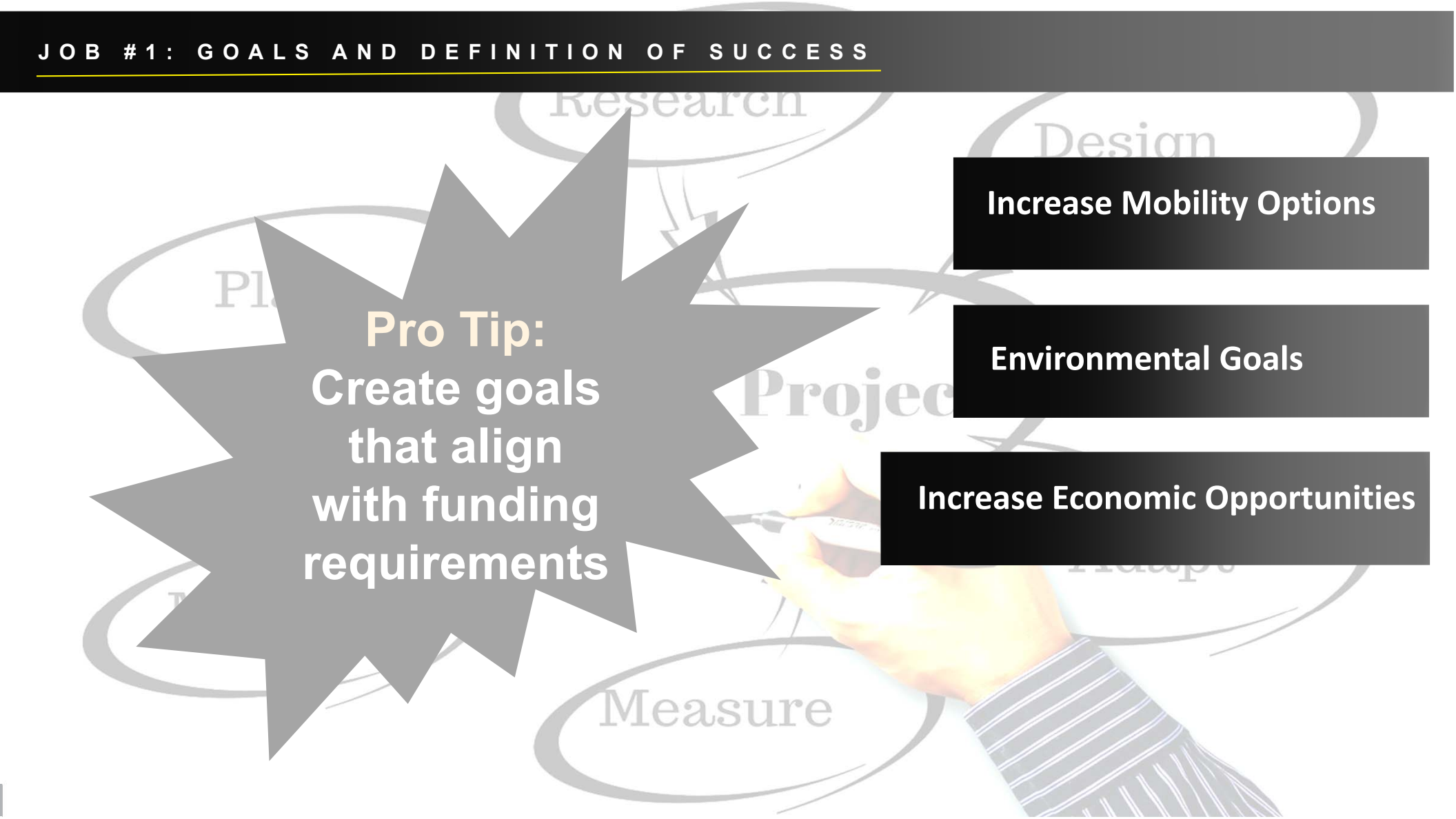
- Stakeholder Group
- Pilot User
- Pilot Ambassador



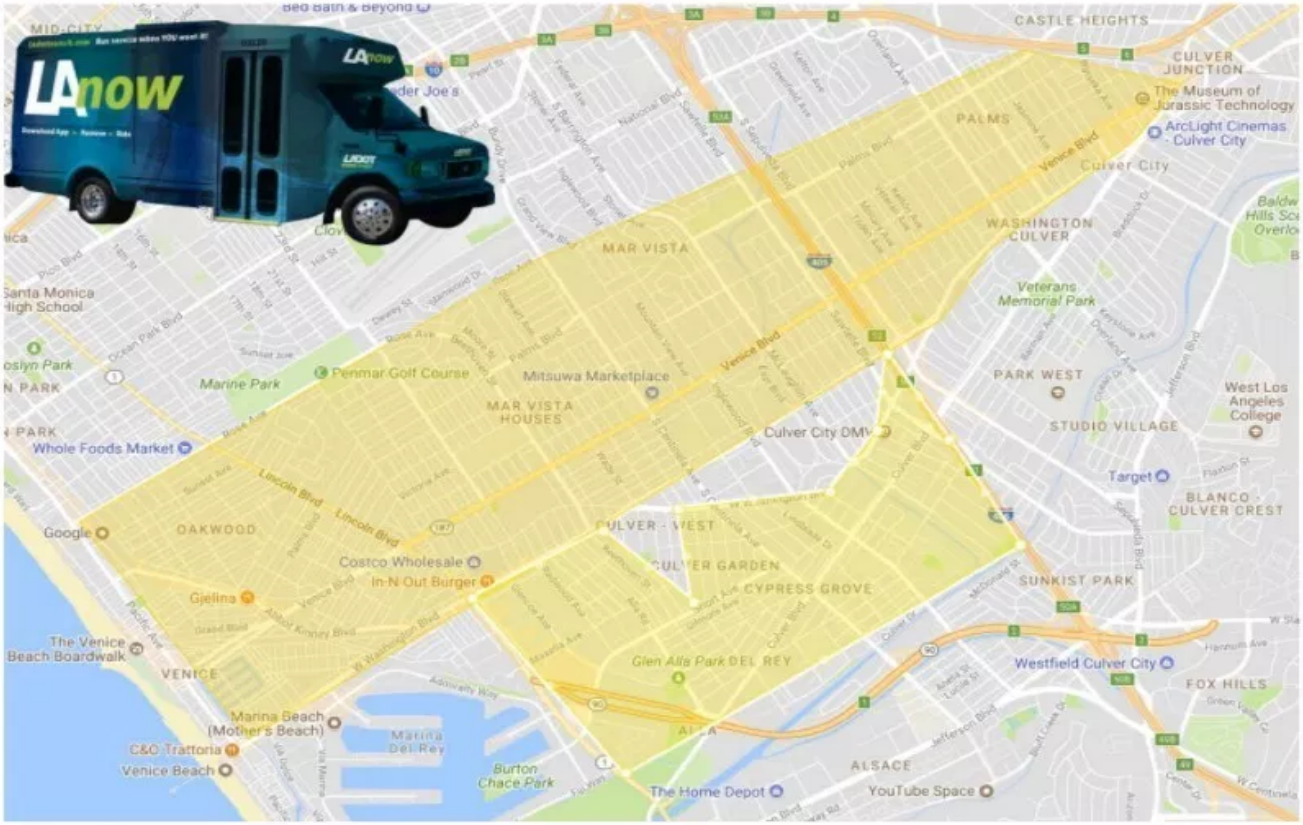
JOB #1: GOALS AND DEFINITION OF SUCCESS

Pro Tip:
Create goals that align with funding requirements

- Increase Mobility Options
- Environmental Goals
- Increase Economic Opportunities



MICRO TRANSIT PILOT PROJECT ON WESTSIDE



Length of Time

Geographic

Budget

LADOT TRANSIT

March 28, 2018

MARKETING & BRANDING THE PILOT

How to Promote the Service?

- **Community**: schools, Walmart, social services, senior residences, extended stays, management offices, library, rec center
- **Commuters**: reverse commute; TMO; residential; station
- **Competitive/Complementary Services**: employer or government shuttles
- **Direct marketing**: mail, flyers, direct contact, associations, municipalities, transit vehicles

Office Park

Target Audience

Design for Clarity

Tell Stories of Transformation

On-demand flexible shuttles in specified geographies

RTD

ON-BOARDING CUSTOMERS FOR THE PILOT

Customer Journey Map

Vanessa Smith

Persona Details	Scope Summary	Goals
Bio of key attitudes and behaviors	Detail the scope of the journey being detailed below	List the motivations driving this particular persona within the scope detailed

RESEARCH	APPLICATION	ENROLLMENT	ONBOARDING	ACTIVATED
Vanessa's sister tells her to look into XYZ Vanessa visits website and location	Completes and submits application	Completes in-person requirements, speaking with customer support once per week. Long wait of one month in this process.	Watches tutorials, reads boards and speaks to existing customers/co-workers.	Uses product for 2 weeks steadily then slowly falls off.

Visit XYZ.com

"There are too many options. I don't know where to start!"

"Excited to get started and be more productive!!!"

App Started

App Submitted

"The application is sooo long. I didn't think I'd ever complete it. Relieved that's done!"

Automated Response

"They finally contacted me"

WAIT FOR APPROVAL
1 month

Approval Received

Troubleshooting Call

"The tech support team was very helpful"

First Success

Evaluates competitive tools

Opportunities			
Improve information on website and customer service.	Streamline process. Reduce steps and take online.	Reduce wait time by optimizing internal processes. Improve wait communications.	Accelerate success

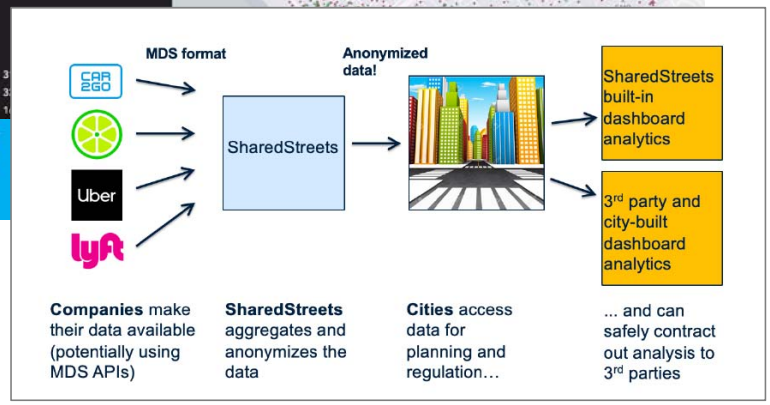
Treasure Data Blog

Develop User Journey Maps

Customer Service is Key

Design in Feedback

DATA FOR PILOTS



Goals -> Metrics (KPIs) -> Data Needs

Best Way to Collect & Analyze?

Data

- **Privacy**
- **Ownership**
- **Access**
- **Reporting**

PILOT IMPLEMENTATION DESIGN

Santa Monica CA

Anticipatory Scenarios

Permitting Requirements

Workplan & Training

PILOT TRACKING & EVALUATION

Midpoint Evaluation For Powered Scooter Share Pilot

Share this: Facebook Twitter Email

Tuesday, April 16, 2019

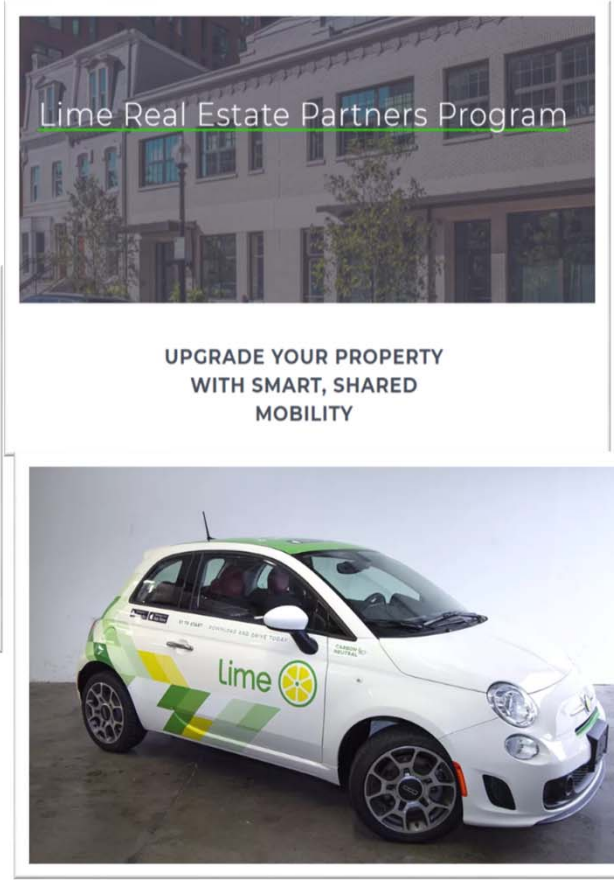
SFMTA

Tracking & Evaluation Process

Action Triggers

SUCCESS FACTORS

PILOT CLOSE OUT



Lime

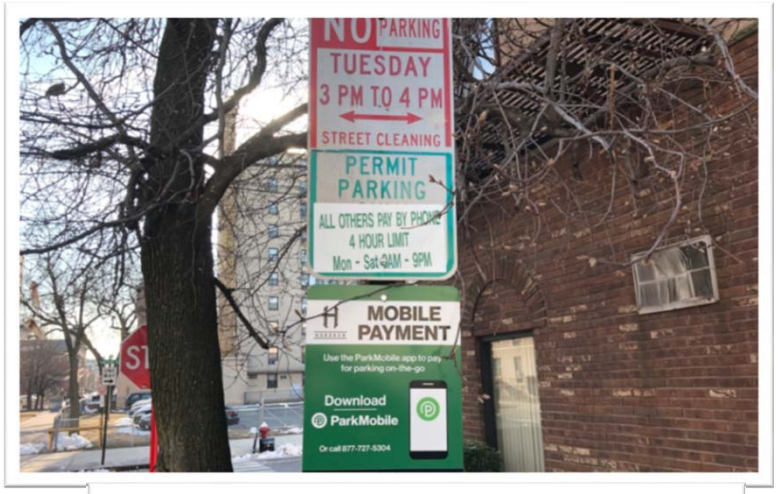
Decision to Proceed

Pilot Project Pivot

Close Out

QUESTIONS?

PARKING & CURBSIDES: TRENDS



Hmag

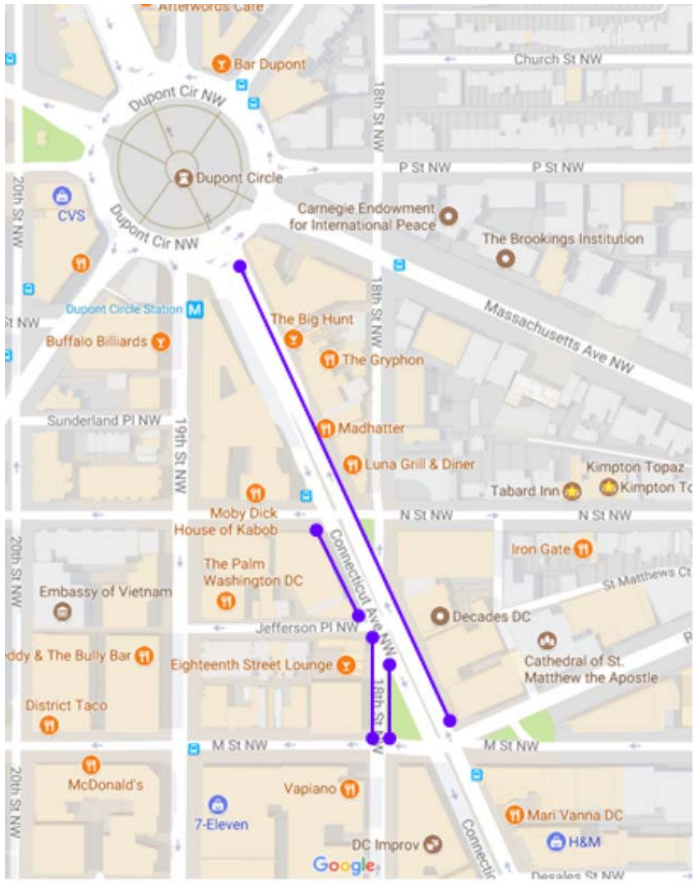
DDOT

Dynamic Parking Pricing

Uber/Lyft Pick-up Zones

E-Commerce & Deliveries

PARKDC: DESIGNATED TNC ZONE



DDOT

Replace parking with TNC pick-up & drop-off

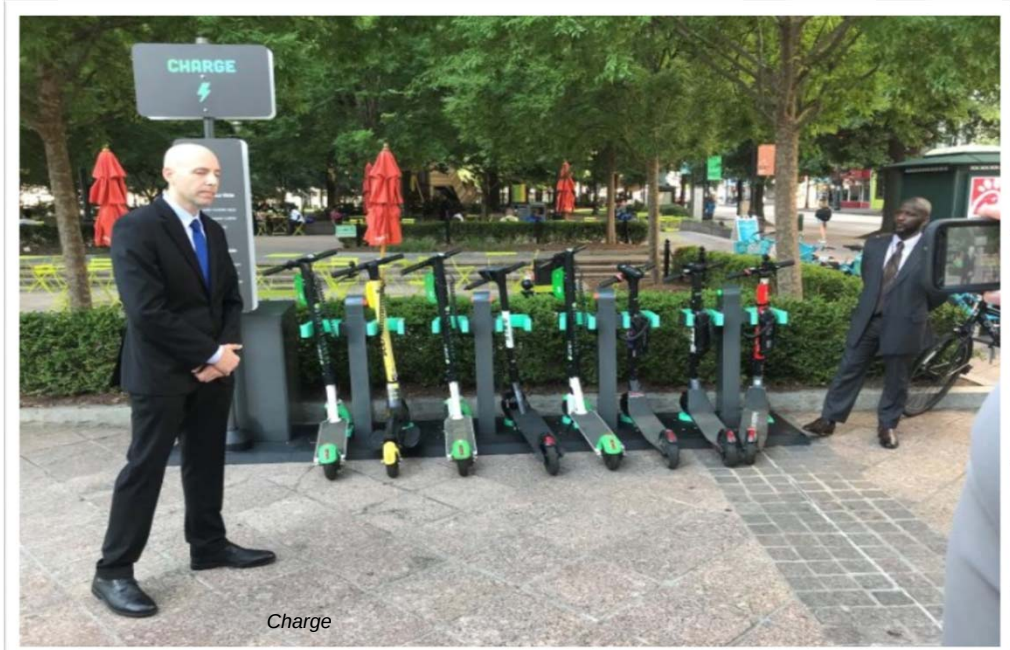
Goals: (1) Reduce congestion in entertainment zone, (2) Reduce drunk driving, (3) increase pedestrian safety

Results: (1) Positive reviews from businesses and enforcement, (2) Unofficially been advised of increased business & decreased congestion

Pivot: Continued issues with wayfinding and signage to prevent parking

MICROMOBILITY: TRENDS

Lyft

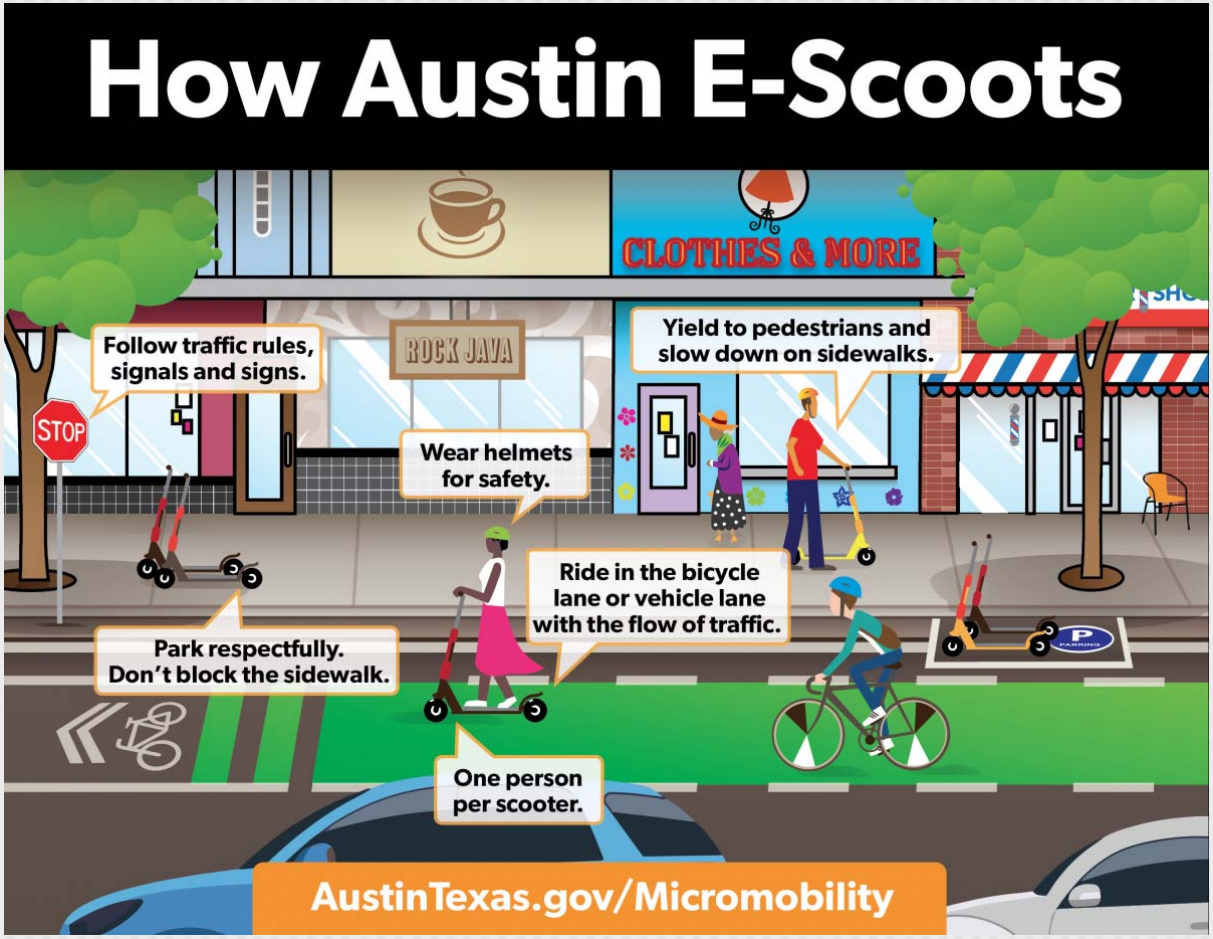


Charge

Bird

Sustainable Business Models

MICROMOBILITY EXAMPLE: AUSTIN TEXAS PERMIT PROGRAM



Guidelines:

(1) Pedestrians First
(2) Park Responsibly
(3) Stay on Right of Way,
(4) Know What You're Sharing
(5) Right and Report

Pivots:

(1) Expanded from Dockless to Micromobility Program
(2) Hired CDC to conduct crash study

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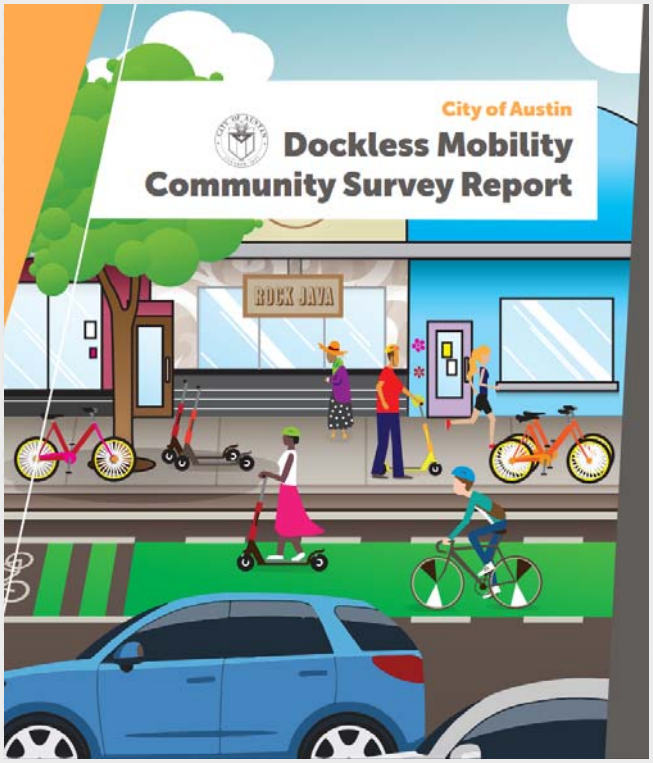
MICROMOBILITY EXAMPLE: AUSTIN TEXAS PERMIT PROGRAM



Austin Texas Micromobility Program

About 60% (2,035) included work among their trip purposes. 922 respondents ranked work trips the most frequent trip type they took.

About 96% (3,209) included recreation among their trip purposes. 908 respondents ranked recreational trips the most frequent trip type they took.

About 81% (2,707) included entertainment among their trip purposes. 645 respondents ranked trips for entertainment, such as to dinner, movies, or shows, the most frequent trip type they took.

About 70% (2,361) included errands among their trip purposes. 456 respondents ranked errand trips the most frequent trip type they took.

About 25% (844) included school among their trip purposes. 251 of respondents ranked school-based trips the most frequent trip type they took.

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AUSTIN TEXAS DOCKLESS DATA EXPLORER

Dockless Mobility Overview

Month

June 2019

All Modes

Total Trips	Total Miles	Average Miles	Average Minutes
425,064	489,997	1.15	11.99
Updated today at 03:33 PM | Data	Updated today at 03:33 PM | Data	Updated today at 03:33 PM | Data	Updated today at 03:33 PM | Data

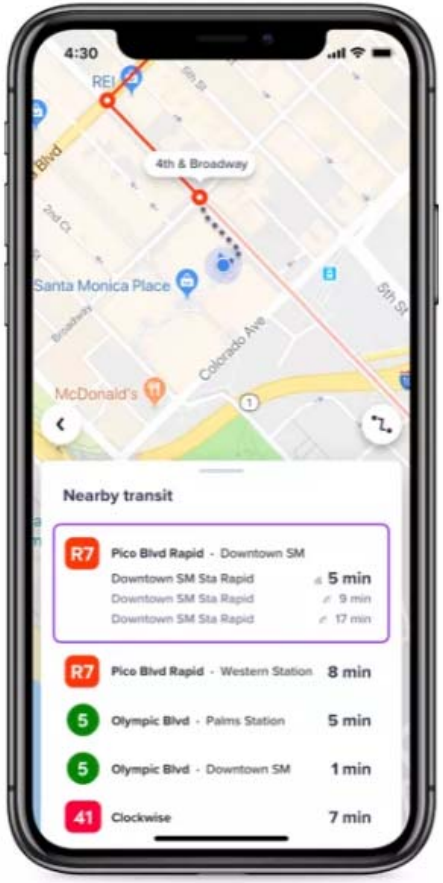
Total Devices	311 Service Requests
16,630	723
Updated today at 03:33 PM | Data	Updated today at 03:52 PM | Data

Dockless Scooters

Scooter Trips	Total Miles	Average Miles	Average Minutes
391,581	430,001	1.10	11.51
Updated today at 03:33 PM | Data	Updated today at 03:33 PM | Data	Updated today at 03:33 PM | Data	Updated today at 03:33 PM | Data

Total Devices
15,516
Updated today at 03:33 PM | Data

MICROTRANSIT & RIDEHAIL: TRENDS



Lyft

FreeRide

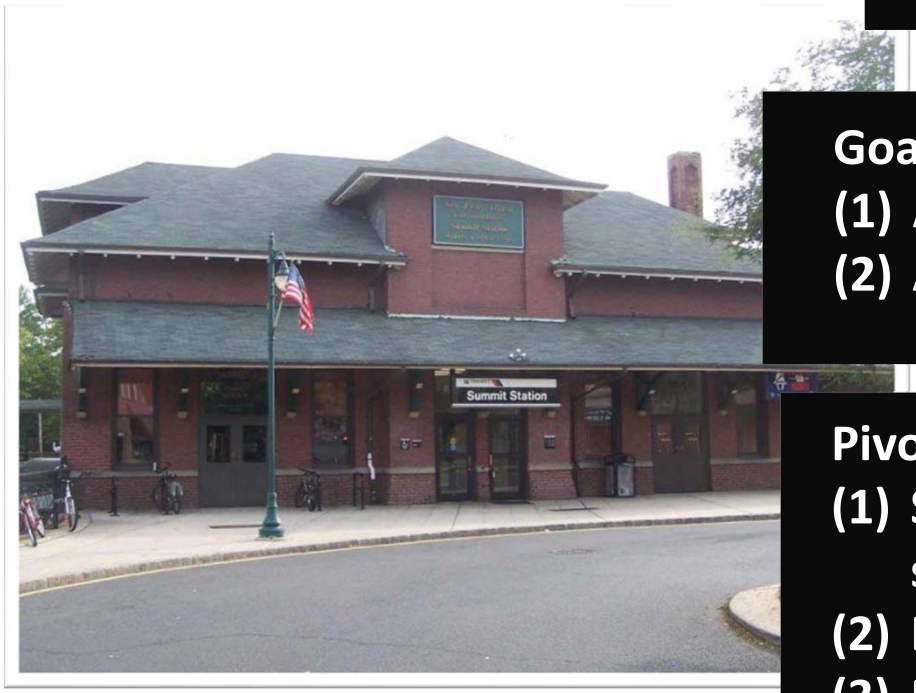
Downtowner

TNCS under scrutiny

Microtransit popular, but success mixed

Move to Mobility-as-a-Service

EXAMPLE: SUMMIT NEW JERSEY TNC PARTNERSHIPS



Parking congestion downtown/train station

Goals:
(1) Alternatives to inadequate parking
(2) Avoid cost of new parking structure

Pivot:
(1) Switched vendors to allow riders to pre-schedule rides up to a week in advance,
(2) Extended hours
(3) Expanded area to serve downtown workers

EXAMPLE: KING COUNTY WASHINGTON

First/Last 1-3 miles to transit stations

Goals:

(1) Alternatives to inadequate parking

(2) Increase transit ridership

(3) Designated pick up points (5 min. walk)

Pivots:

(1) Ford discontinued its Chariot business, so service now through Via

(2) Added mobile app

(3) Expanding service to all transit hubs

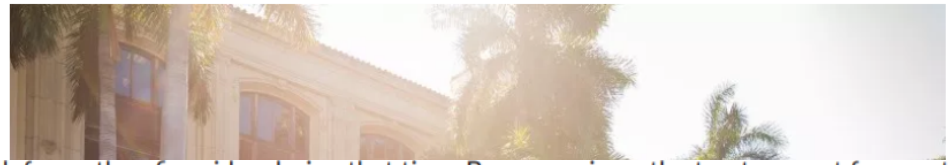
EXAMPLE: PINELLAS DIRECT CONNECT

STREETSBLOG USA

Podcast / Transit / Bike/Ped / Smart Growth

Are Uber and Lyft the Future of Transit? Not So Fast

By Aaron Short | Jul 22, 2019 | 7



60% of them took fewer than five rides during that time. By comparison, the top ten most frequent users had each taken at least 40 rides, as many as 75 times for two riders, and alone represented 40% of all rides. Trips through United Taxi followed a similar trend through the last point of analysis

This is a PTSA bus. Photo: City of St. Petersburg

rotransit to replace failing bus route

sts of poor performing bus route
mile access to transit
ransit ridership

subsidies
d zone system
l stops

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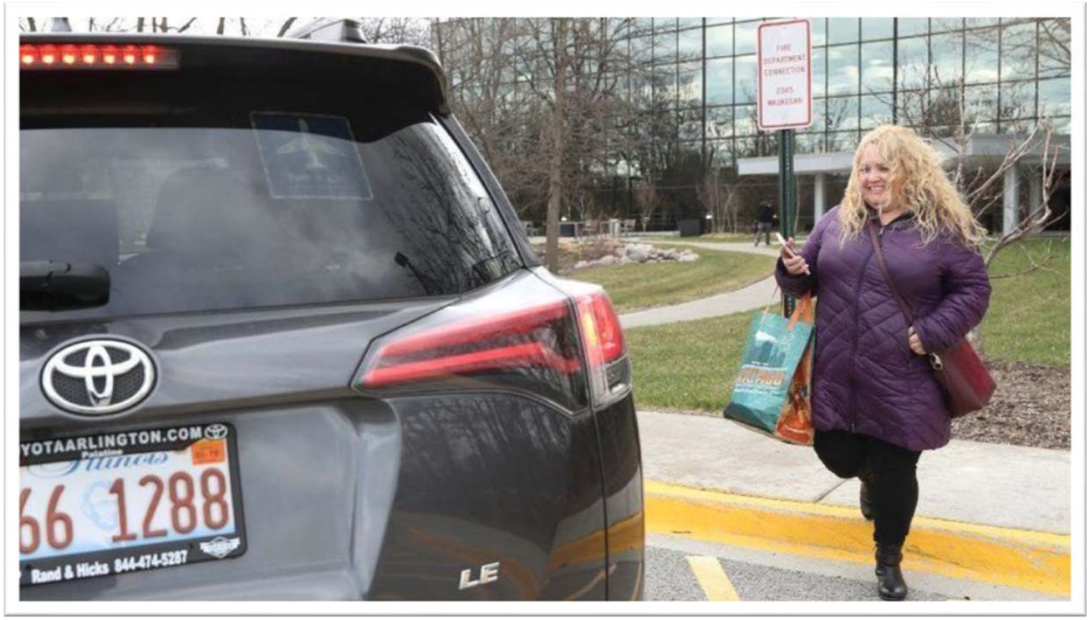
WGI

EXAMPLE: RTA, LYFT AND BANNOCKBURN LAKES - CHICAGO



Chicago Tribune

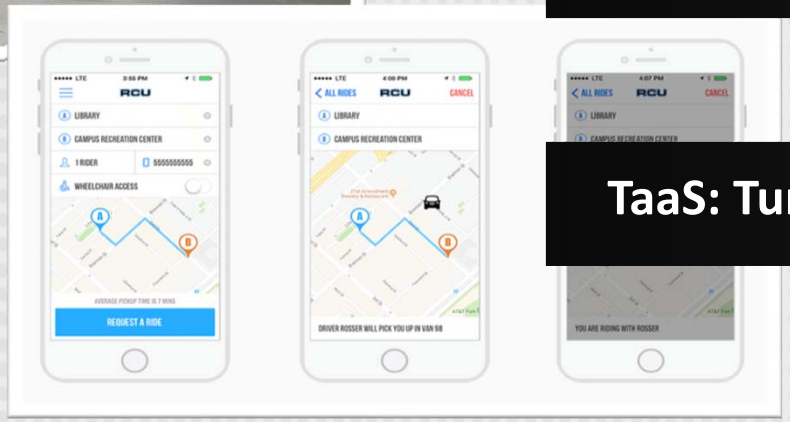
Microtransit for reverse commuters – 2 year pilot

Goals:

(1) Fill vacant suburban office space
(2) Eliminate cost of corporate shuttle
(3) Connect office parks
(4) Access to transit

VEHICLE SHARE: TRENDS

ROUND TRIP, POINT TO POINT, PEER TO PEER, AMENITY FLEETS



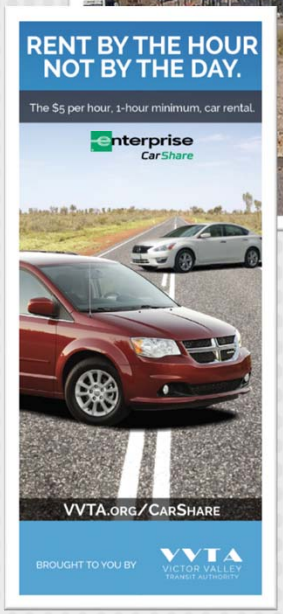
Amenity fleets for individual buildings

Moped share

TaaS: Turnkey vehicle share platforms

Envoy Technologies
IONEX/Ridecell

EXAMPLE: VICTOR VALLEY TRANSIT AUTHORITY CARSHARE PILOT



Small car share program

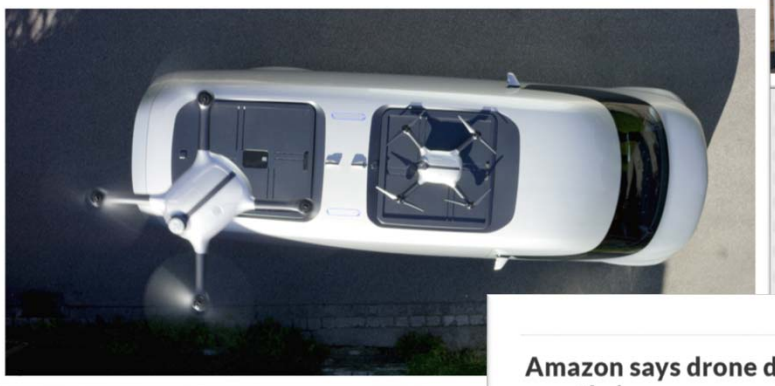
Goals:

(1) Increase mobility in low income, rural district

(2) Access to fresh food

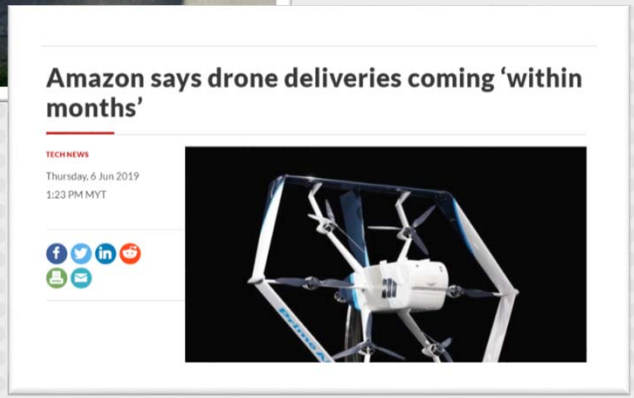
(3) Use existing partnerships for financial sustainability

DELIVERY TECHNOLOGY - TRENDING



Rise in e-commerce changing logistics

Real estate responding: warehouses & lockers



Automated delivery at all scales

Visit Addison/ Daimler

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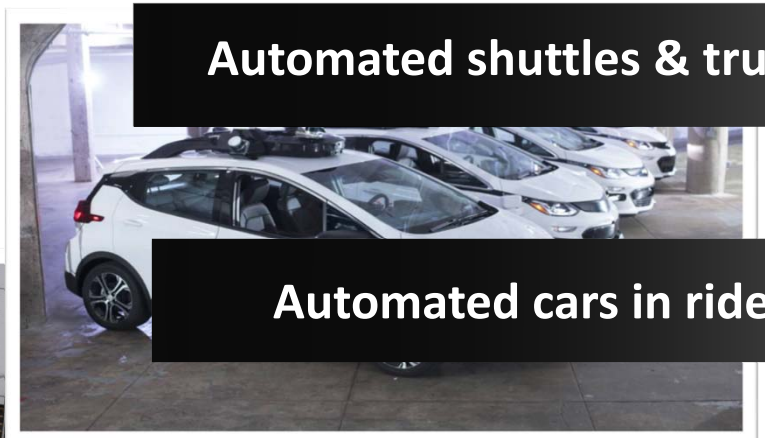
AUTONOMOUS TECHNOLOGY- TRENDS



Automated shuttles & trucks seem to have traction

Automated cars in ridehail or car share model

Automated deliverybots (air & ground)

GM/Local Motors/StarshipTechnologies

AUTONOMOUS TECHNOLOGY-DETAILS

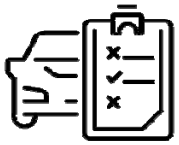
Local Motors

- Educational Campuses
- Health Care Services
- Employment
- Entertainment & Recreation
- Retail and Restaurants/Downtown Business Centers
- Parking Shuttles
- Residential developments & Retirement Communities

Service types that could be used for various use cases:

- Fixed route and schedule
- On-demand
- Pre-arranged route or zone-based
- Flexible route-based services
- Private property services

DESIGNING AN AUTOMATED SHUTTLE PILOT



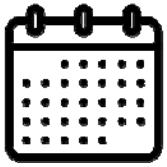
Technical Requirements

Feasibility

Financial & Funding

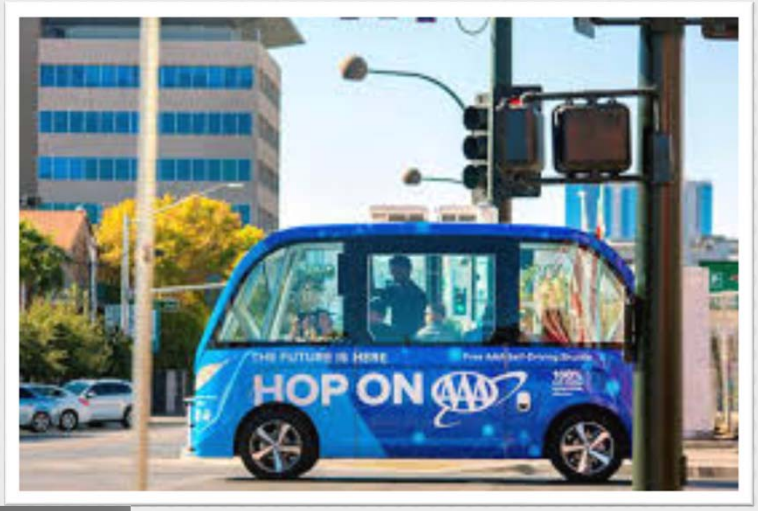
GOALS
PARTNERSHIPS
REGULATORY READINESS

Geographic Boundaries



Pilot Length

AUTOMATED SHUTTLES: OPERATIONAL DESIGN DOMAIN



Service types that could be used for various configurations:

- **Exclusive Off-street Guideway**
- **Off-street, Multi-use Pathway**
- **On-Street Pathway with Dedicated, Low Speed Lane**
- **On-Street Pathway with Dedicated Transit Lane**
- **On-Street, Mixed Traffic**

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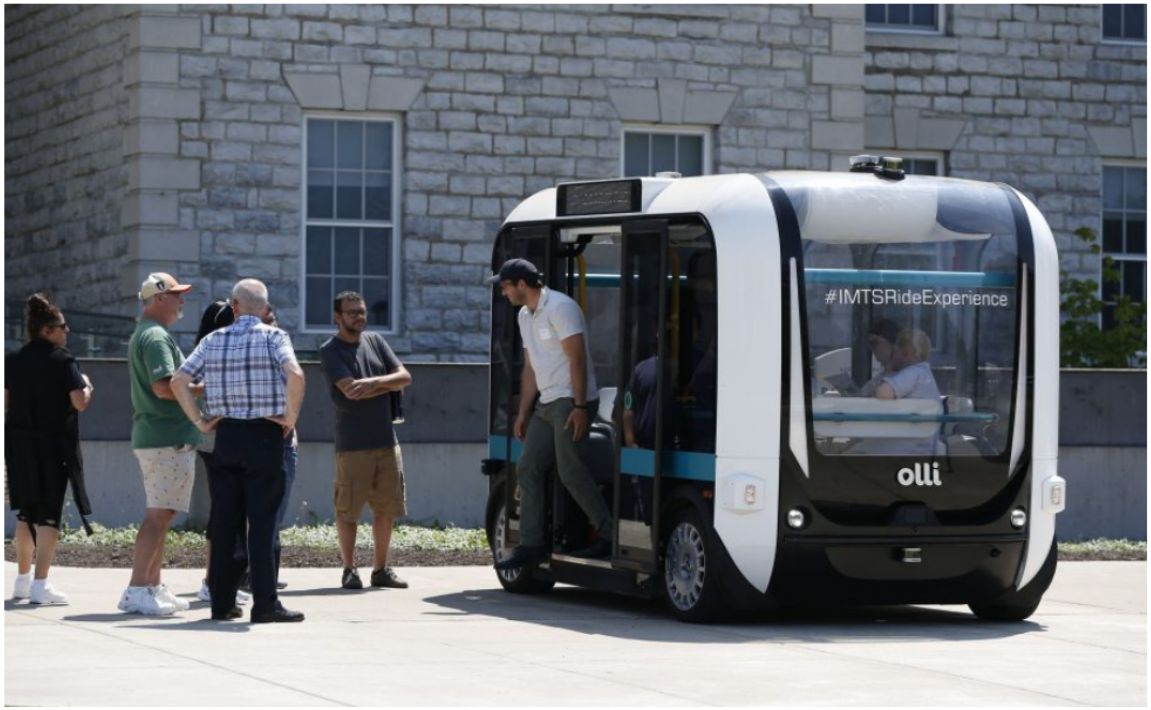
EXAMPLE: MILO SHUTTLE ARLIN

THE BUFFALO NEWS

Asked for input on driverless vehicles, Buffalo group is less than thrilled

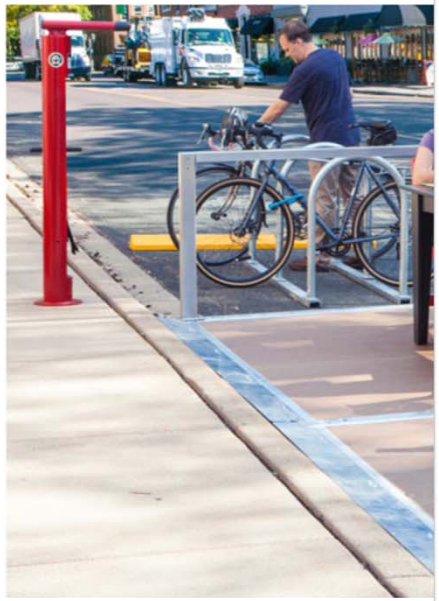


SOLVES PROBLEMS... & CREATES PROBLEMS

- Expanded mobility
  - The Elderly
  - Youth
  - Travelers with Disabilities
- Ability to Lower Tailpipe Emissions
- Feeders to Transit
- Automated Transit
- Economic Catalyst
- Potential to Lower Costs

- Privatization of Personal Data
- Cybersecurity
- Lack of Consumer Trust
- Preference for Vehicle Ownership
  - Subjugated Walk/Bike Modes
- Biased Algorithms
- Federal/State Preemption
- Cost of Mass Electrification

TRENDS: MODULAR INFRASTRUCTURE & QUICK BUILD



Dero/DezignLine

Mike Boos replied

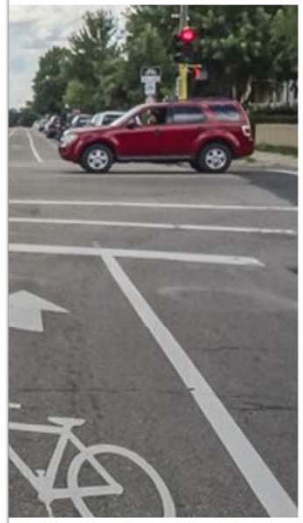
Graham Roe @roezone · 2h

Functional but not pretty but thats the way we do lots of stuff in #kw e.g. #bci bluevale collegiate, most of the buildings on #uwaterloo, all of the new student condos, -- Does it really cost too much to do it aesthetically pleasing e.g. Laurel Trail in Waterloo Park ?

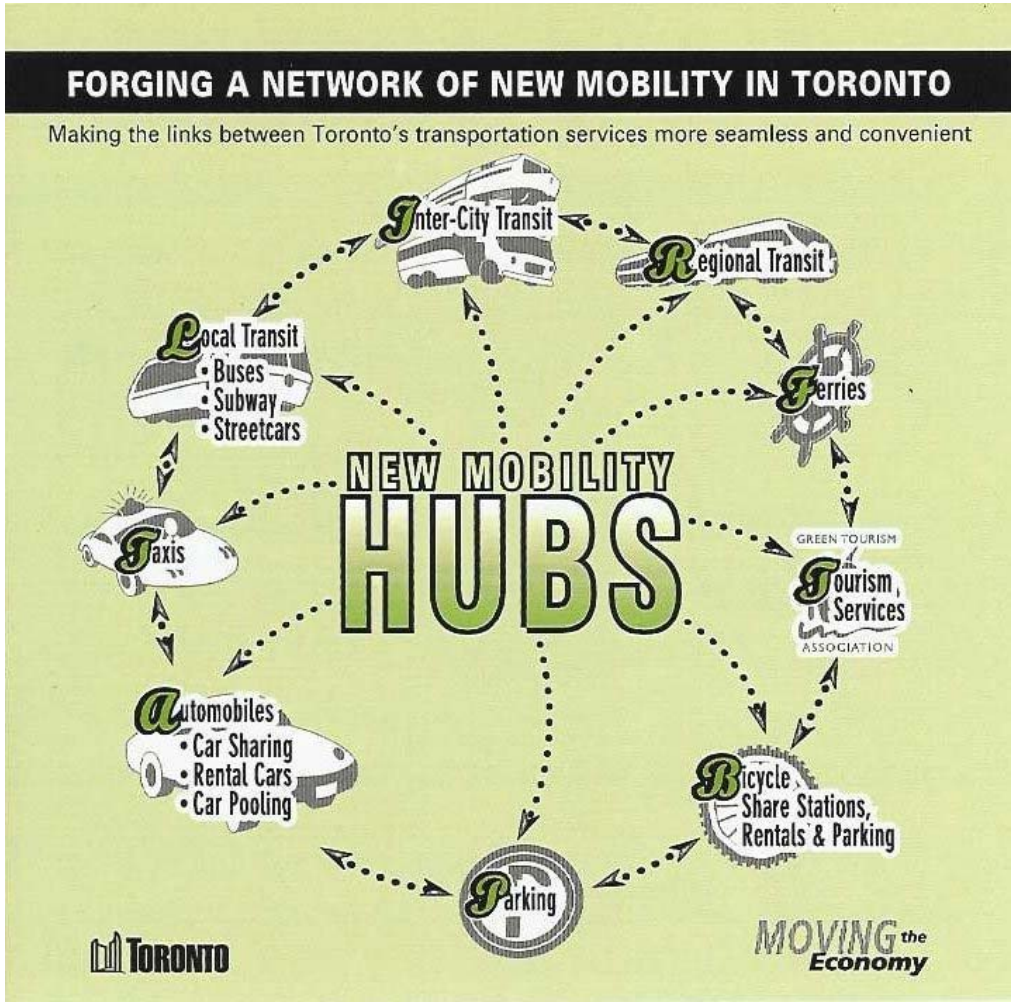
Matt Rodrigues @mattjrodrigues · 20h

COMING S O O N #CycleWR

3 3



SUM IT ALL UP: PILOT PROJECTS



- Pre-Investigation: Proof of Concept
- Regulatory Readiness
- Goals & Partners
- Adequate Funding (esp. Marketing)
- Potential Disruptions
- Anticipating Pilot Project Phases & Scale
- Pilot close out