

In the era of new mobility, the streets of the future must change

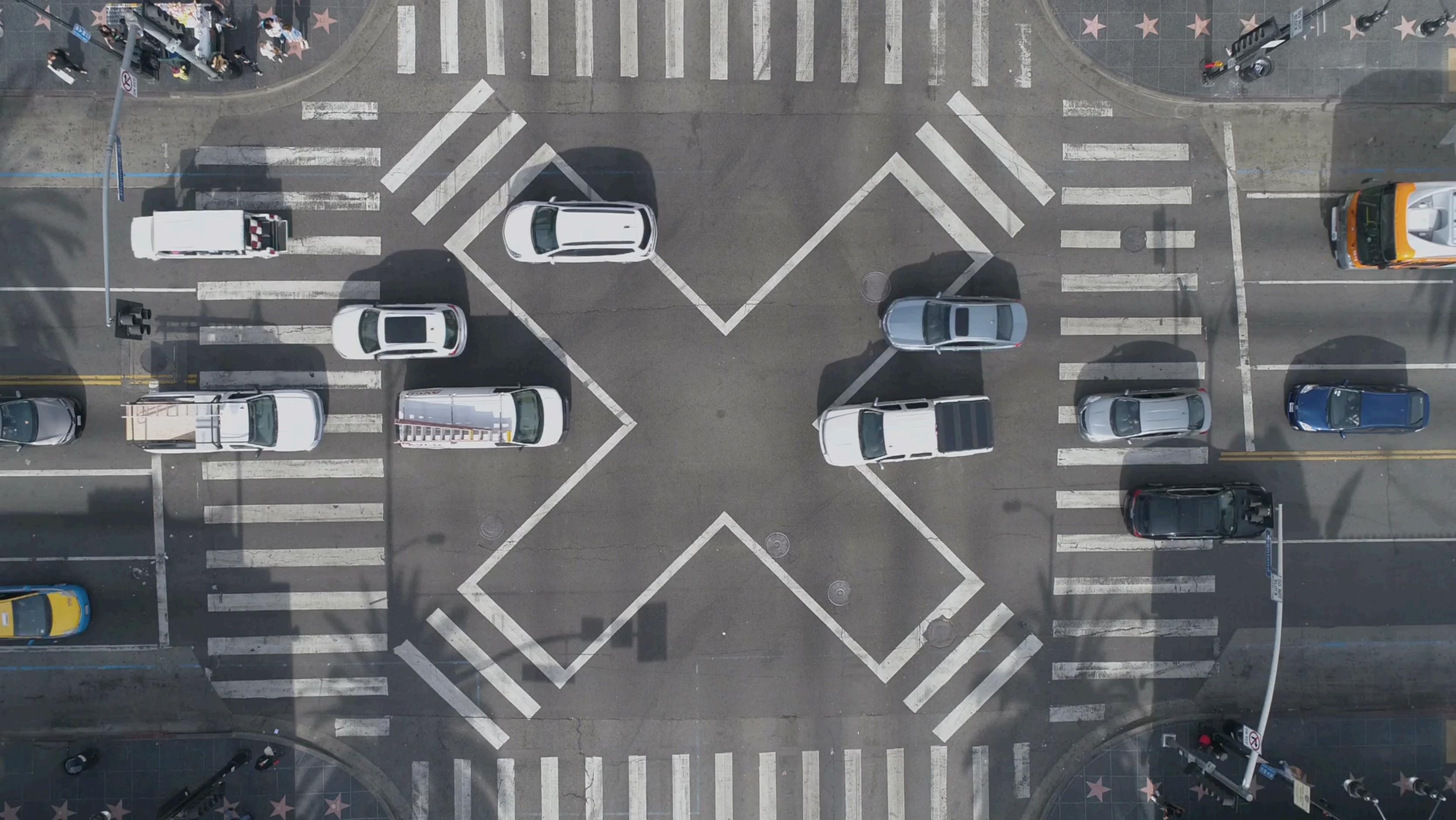
Tiffany Chu, Cofounder

tiffany@remix.com • @remix • @tchu88





“A Trip Down Market Street”
San Francisco, 1906





THE CHALLENGE

Transportation has changed faster in the last 12 months than it has in the last 12 years.



THE OPPORTUNITY?

Our streets are still our biggest asset.

Streets can be a city's platform to:

1. actively manage the diversity of new modes in the right-of-way, and
2. reach transportation and



Some key findings:

- **85% of cities have seen new modes of mobility** like bikeshare, scooters, electric bikes, dockless bikes, and TNCs enter their service area.
- **55% of cities have experienced challenges in expanding their mobility options**, including managing new private providers, communicating partnerships with the public, and successfully integrating these new forms of mobility into the existing transportation system.
- **Nearly 60% believe that the city should play a role** in making sure the right mix of modes are in place.
- **Only 20% have dedicated funding** to tackle new forms of mobility.

ABOUT REMIX

Trusted by 300+ cities to understand how streets, public transit, and new mobility work together.

We help planners explore new concepts, make informed decisions with data, and rally people around their vision — so that ultimately cities are safer, more accessible and equitable for everyone.

NEW MOBILITY PLAYBOOK



Version 1.0

September 2017



Our five plays are to:

PLAY 1: Ensure new mobility delivers a fair and just transportation system for all

PLAY 2: Enable safer, more active, and people-first uses of the public right of way

PLAY 3: Reorganize and retool SDOT to manage innovation and data

PLAY 4: Build new information and data infrastructure so new services can "plug-and-play"

PLAY 5: Anticipate, adapt to, and leverage innovative and disruptive transportation technologies

In this era of new mobility, what's the impact of not taking action?

IF CITIES LEAVE THE FUTURE TO CHANCE

IF CITIES PROACTIVELY SHAPE THE FUTURE

EQUITY

More modes and choices, but **only for those who can afford it.** New mobility cannibalizes public transit.

New modes are **well-integrated** and support the public transit backbone.

RIGHT-OF-WAY

Car ownership may go down, but VMT increases. Ride-hailing overwhelms our curbs and causes more **congestion.**

Better-designed streets and an **orderly public realm** encourages more space for people and active transportation modes.

SAFETY

New modes lead to **chaos and conflict.** Streets become hazardous to vulnerable modes (people walking and biking), and collisions increase.

People **feel safe** walking along and across streets. Serious traffic collisions are eliminated and Vision Zero is attained.



Existing Conditions

Executive Boulevard

404 ft selected

Executive Blvd

Executive Blvd

Executive Blvd

Woodglen Dr

Woodglen Dr

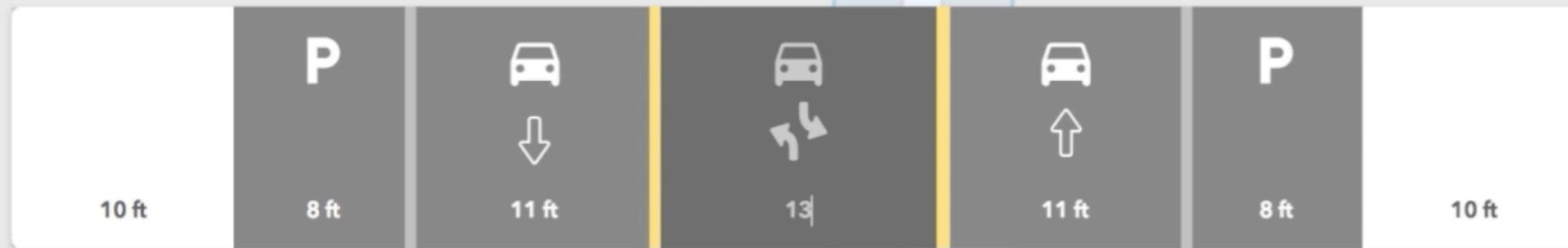
Exeter Hill Way

Ridgerock Ln



FLIP DIRECTION

DELETE



ROW - 71 ft

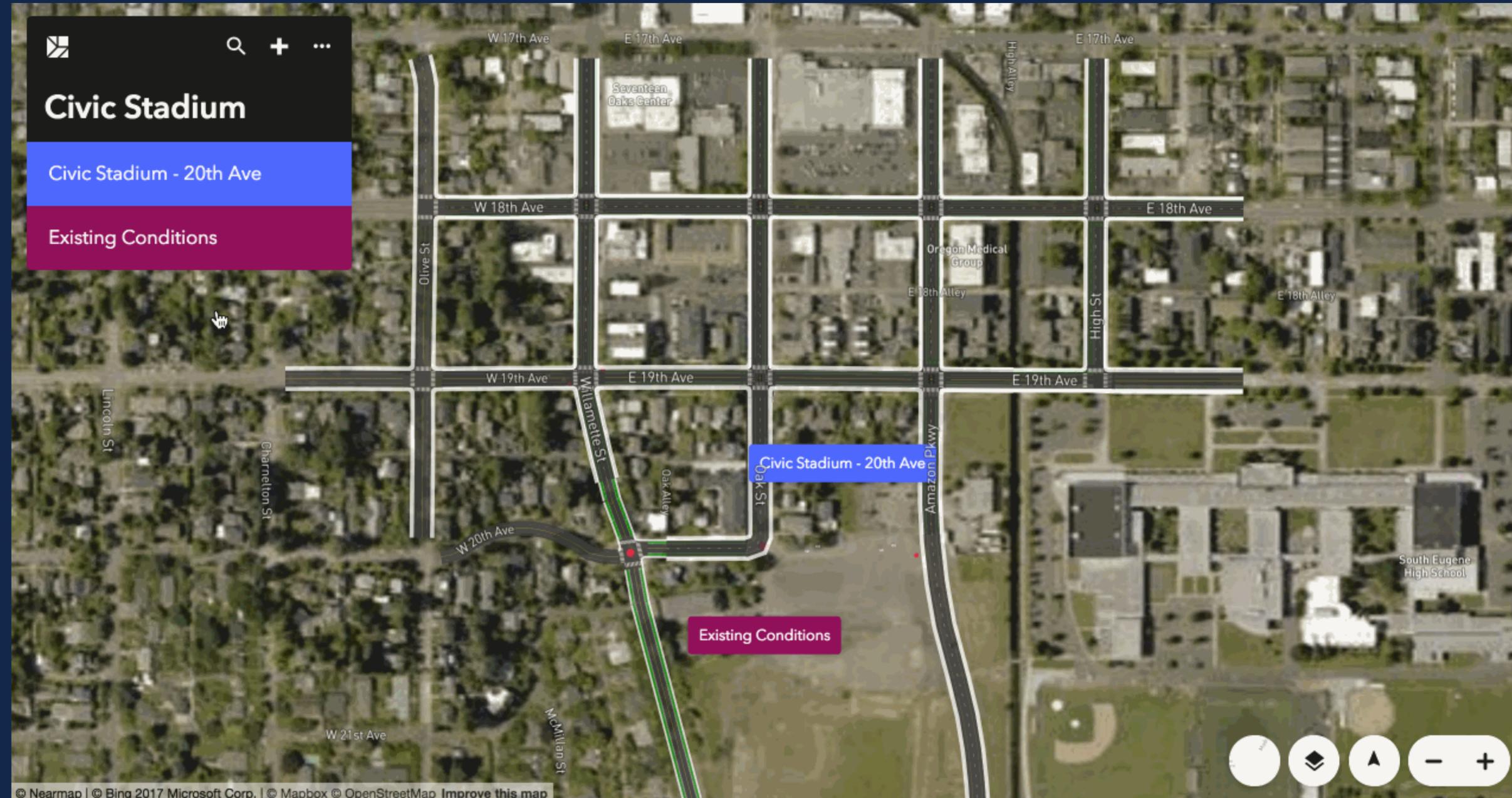
Offset 0 ft



EUGENE, OR

Redesigning the downtown grid

- Old stadium burned down and getting rebuilt soon. Will be a large destination
- Need to connect 20th Ave to the rest of the street grid; transit and bike lanes are prioritized
- Also has implications for the rest of the downtown street grid - change from 1-way to 2-way streets



Dale Drive Sidewalk Project

- Dale Drive from Colesville Rd to Georgia Ave has almost no sidewalks, crosswalks, or bike lanes (11 crashes occurred on this 1-mi stretch in 2017)
- 4,000 cars use daily, usually exceeding the 30 mph speed limit
- Many children wait on the side of the street at their school bus stop
- MCDOT presented these 6 alternatives live at a public meeting in July



SAN JOSE / VTA

Stevens Creek Boulevard Project



In the era of new mobility:

1) the streets of the future must change

2) new mobility must be planned to better serve the existing transit backbone.

Micromobility Policy Survey

Remix Policy Team



Executive Summary

IN AN EFFORT TO UNDERSTAND emerging best practices in the micromobility field, the Remix team reviewed 17 cities' scooter and bikeshare policies. Four key 'practice' areas emerged from our research:

enforcement, fees, caps, and data sharing. This executive summary covers some of our initial findings and recommendations, illuminating how cities are putting policy into action and setting themselves up for success.

City (by population)	ENFORCEMENT			FEES				FLEET CAPS		DATA SHARING	
	Parking	Service Area	Maintenance /Safety	Annual Fee	Annual Per Vehicle Fee	Daily Fees, Per: Vehicle/ Trip/Station	Other Fees	Caps Over 1000	Performance Based Cap	Real-Time	Standard-Based
Los Angeles	●	●	●	●	●			●	●	●	●
Chicago	●	●	●	●	●				●		
Houston	●		●	●	●		●	●	●		
Dallas	●	●		●	●			No cap			
Austin	●	●	●		●					●	
San Francisco	●	●	●	●			●	●		●	
Columbus				●	●		●			●	
Charlotte	●		●								
Seattle	●	●	●	●	●			●	●	●	
DC	●	●	●	●	●						
Nashville	●	●	●	●	●			●	●	●	
Portland	●	●	●	●		●		●		●	
Kansas City	●	●	●	●		●				●	●
Atlanta	●			●			●	No cap		●	
Miami				●		●	●		●	●	
Minneapolis	●	●	●		●	●	●		●	●	
St. Louis	●	●	●	●	●			●	●	●	



Mobility Data Policy Survey

Elements of cities' micromobility data policies reviewed in September 2018

City	TRIPS	FLEET	CUSTOMER SURVEYS	PARKING	MAINTENANCE	SAFETY/ INCIDENTS	DATA VALIDATION
Austin, TX	Present	Present	Present	Absent	Absent	Absent	Absent
Chicago, IL	Present	Present	Absent	Present	Present	Absent	Present
Nashville, TN	Present	Present	Present	Present	Present	Absent	Present
Dallas, TX	Present	Present	Absent	Absent	Absent	Absent	Absent
Houston, TX	Present	Present	Present	Present	Absent	Absent	Absent
Minneapolis, MN	Present	Present	Absent	Present	Present	Present	Absent
Pittsburgh, PA	Present	Absent	Absent	Present	Present	Present	Absent
Portland, OR	Present	Present	Present	Absent	Absent	Present	Absent
Seattle, WA	Present	Present	Present	Present	Present	Present	Absent
Salt Lake City, UT	Present	Present	Absent	Absent	Present	Present	Absent
San Francisco, CA	Present	Present	Present	Absent	Present	Present	Absent
Santa Monica, CA	Present	Present	Present	Absent	Present	Present	Absent



CityOfLosAngeles / mobility-data-specification

Watch

51

Star

87

Fork

34

Code

Issues 25

Pull requests 11

Projects 0

Insights

Branch: 0.2.x

mobility-data-specification / agency /

Create new file

Find file

History



hunterowens update update_vehicle_status to use standard post

Latest commit 244a7d8 25 days ago

..



README.md

update update_vehicle_status to use standard post

25 days ago

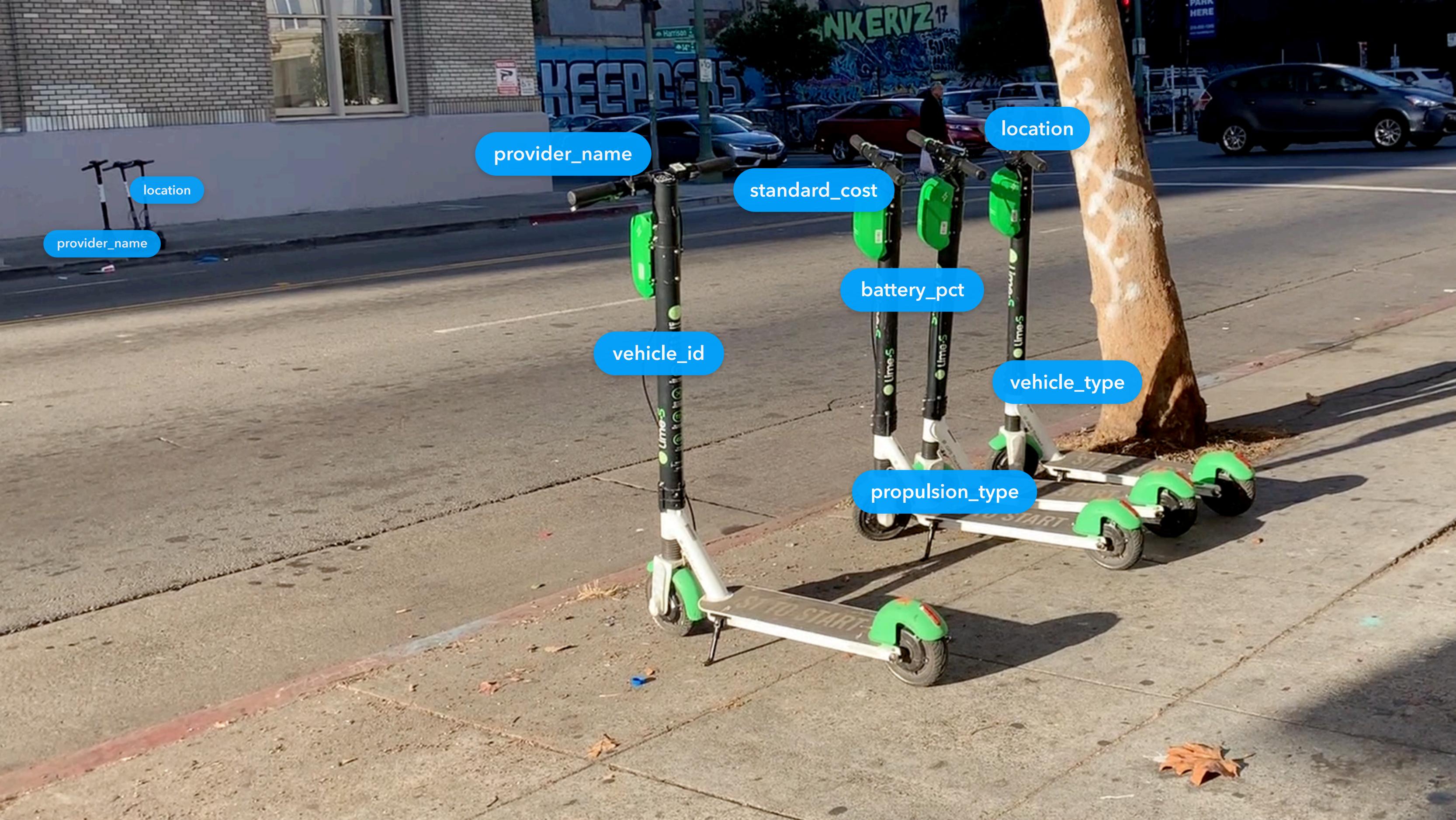
README.md

Mobility Data Specification: Agency

This specification contains a collection of RESTful APIs used to specify the digital relationship between *mobility as a service* providers and the agencies that regulate them.

- Authors: LADOT
- Date: 10 Aug 2018
- Version: ALPHA

MDS on GitHub



provider_name

location

provider_name

location

standard_cost

vehicle_id

battery_pct

vehicle_type

propulsion_type



Vehicles

10/21/2018 ▾



TOTAL VEHICLES 727

STATUS

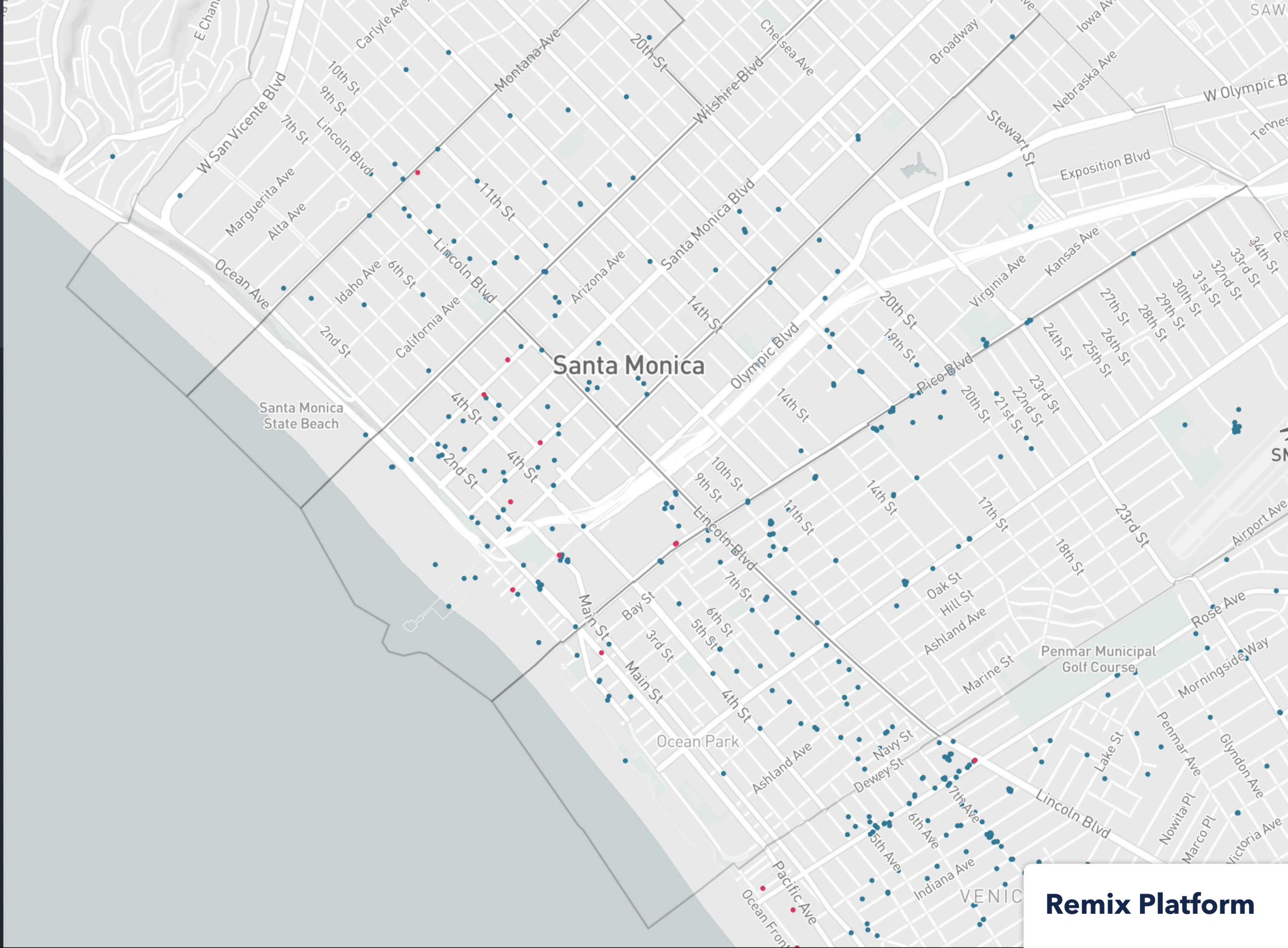
- ✓ Available 706
- ! Out of service 21

MODE

- 🚲 Bikes 92
- 🚲 E-bikes 40
- 🛴 Scooters 595

PROVIDER

- Bat 10
- Lemon 717
- fake 0



Remix Platform



Daily Trips

Last 30 days ▾ Destination ▾



TRIPS PER DAY 5,447

AVG DISTANCE 0.37 mi

AVG DURATION 13.11 min

DAY OF WEEK

Weekday 5,032

Weekend 6,279

TIME OF DAY

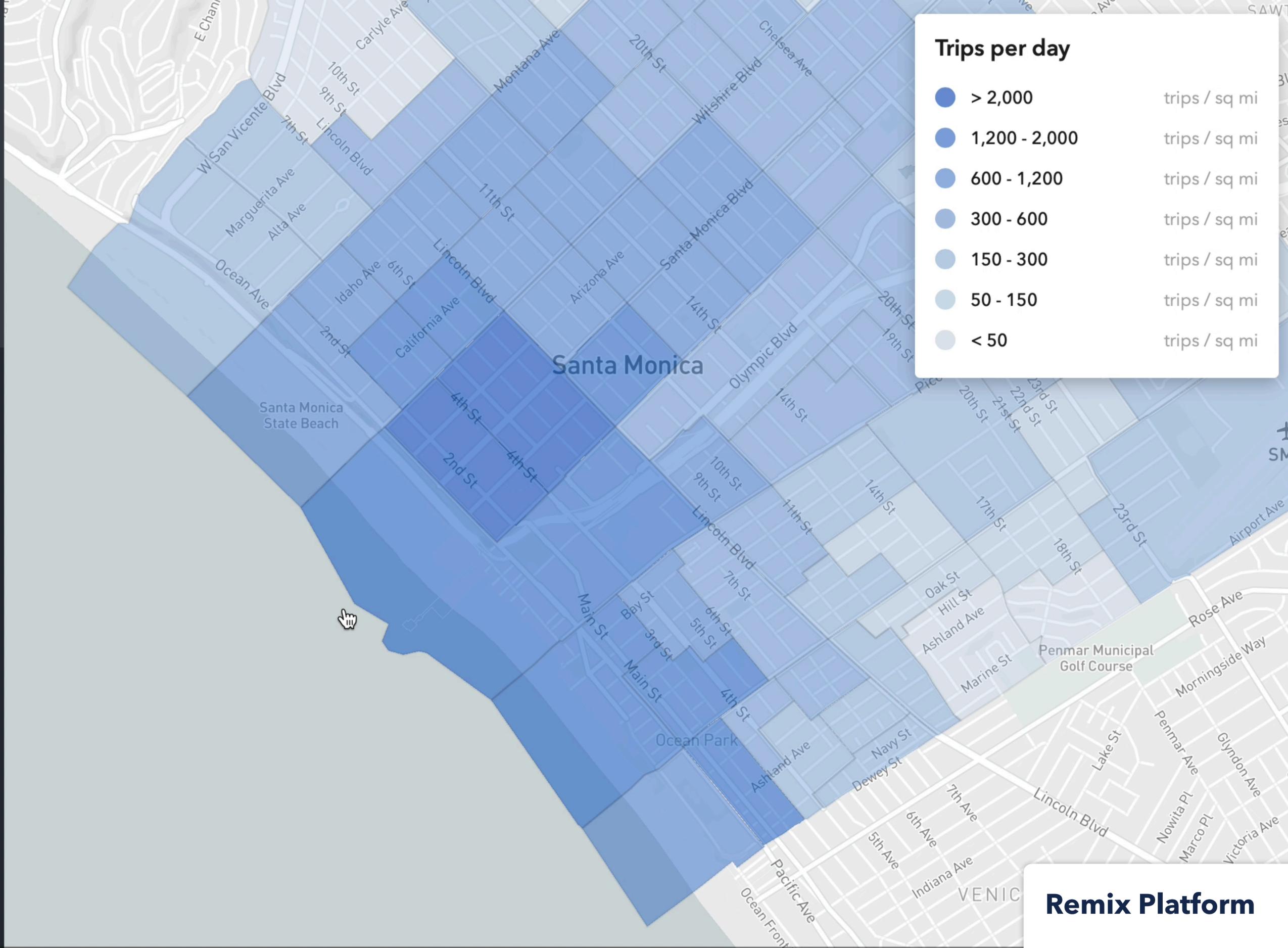
Morning: Before 10:00 439

Midday: 10:00 - 16:00 2,905

Evening: After 16:00 2,104

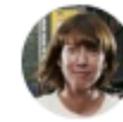
MODE

Bikes 676



Trips per day

- > 2,000 trips / sq mi
- 1,200 - 2,000 trips / sq mi
- 600 - 1,200 trips / sq mi
- 300 - 600 trips / sq mi
- 150 - 300 trips / sq mi
- 50 - 150 trips / sq mi
- < 50 trips / sq mi



Janette Sadik-Khan

@JSadikKhan

Follow



Microtransit is not mass transit, and the promise of door-to-door transit for all is a promise to perpetuate congestion. [@humantransit](#) explains why, in a digital age, still nothing beats the analog bus.



The Bus Is Still Best

Ride-shares aren't the most efficient way to move lots of people around cities.

theatlantic.com

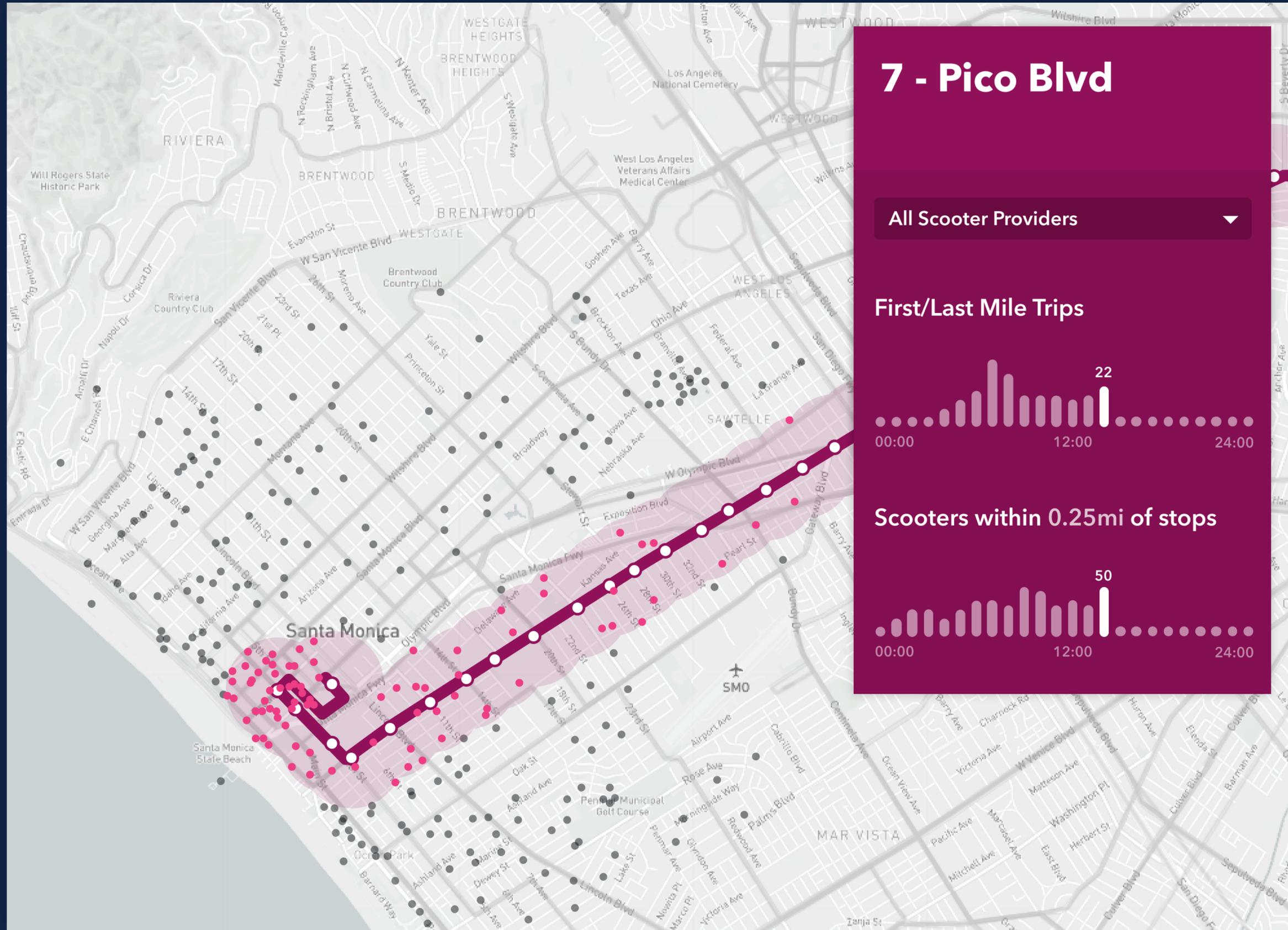
1:22 PM - 1 Nov 2018

249 Retweets 495 Likes



REMIX RESEARCH

Measure how different mobility services impact each other



7 - Pico Blvd

All Scooter Providers

First/Last Mile Trips

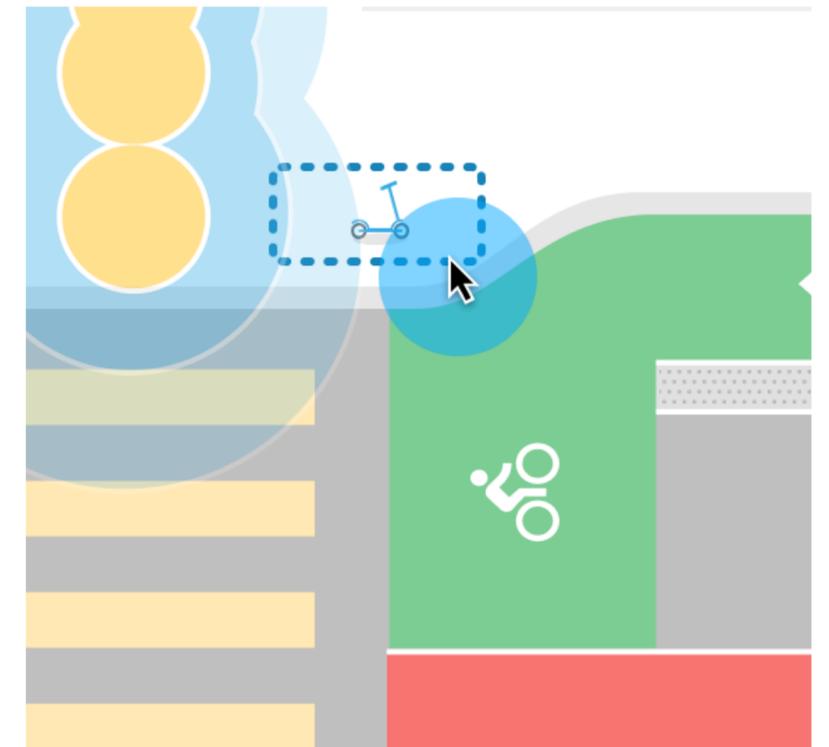
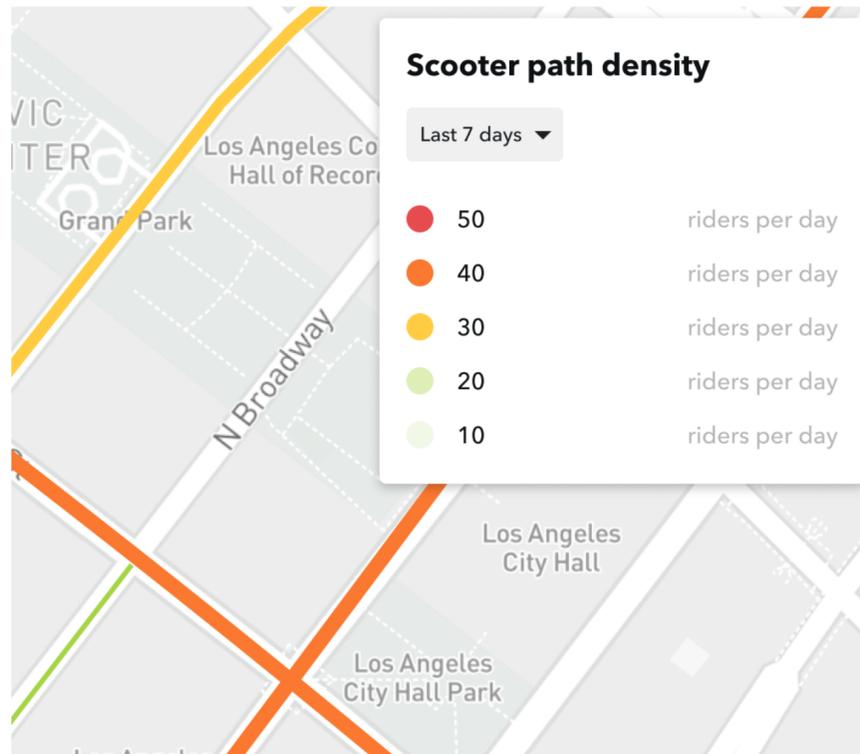


Scooters within 0.25mi of stops



DATA AND ANALYTICS BY ITSELF IS NOT THE ANSWER

It's about making decisions and taking meaningful action that everyone can rally around.



1. Analyze.

Understand movement and the most frequently traveled paths

2. Prioritize.

Identify key gaps and opportunities for safer streets *and* people movement

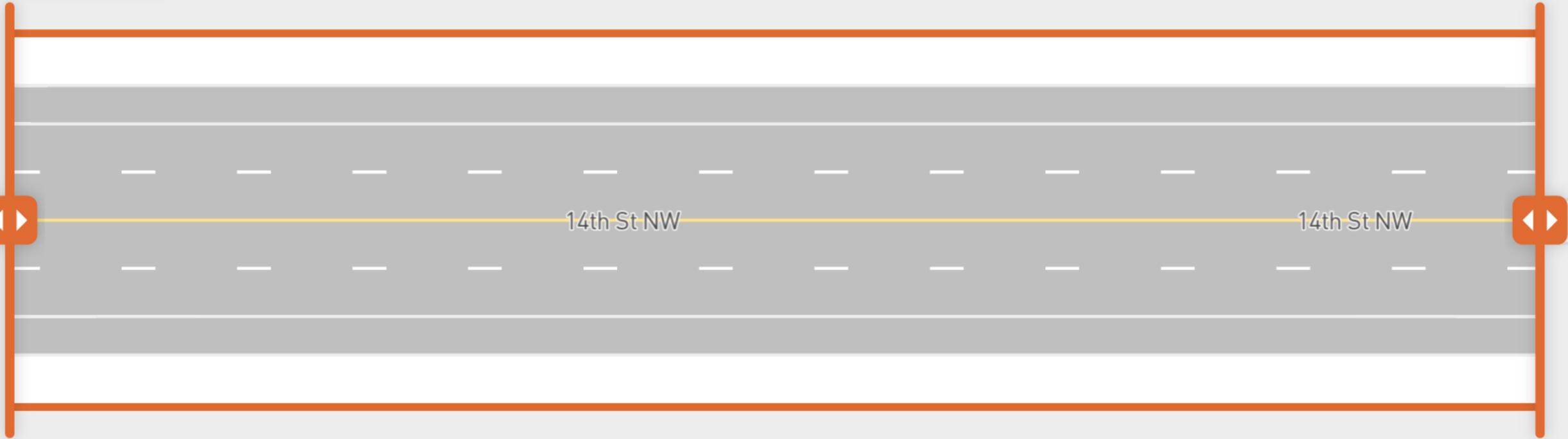
3. Take Action.

Plan and update streets + sidewalks for multimodality

← [Icons] ...

Before: 4 Travel Lanes

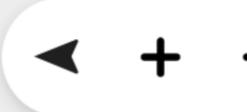
14th Street Northwest
388 ft selected



[Icons: Car, Bicycle, Bus, Train, Diagonal Lines, P, Pedestrian, Document, Trash]

ROW - | 76 ft

Offset 0 ft

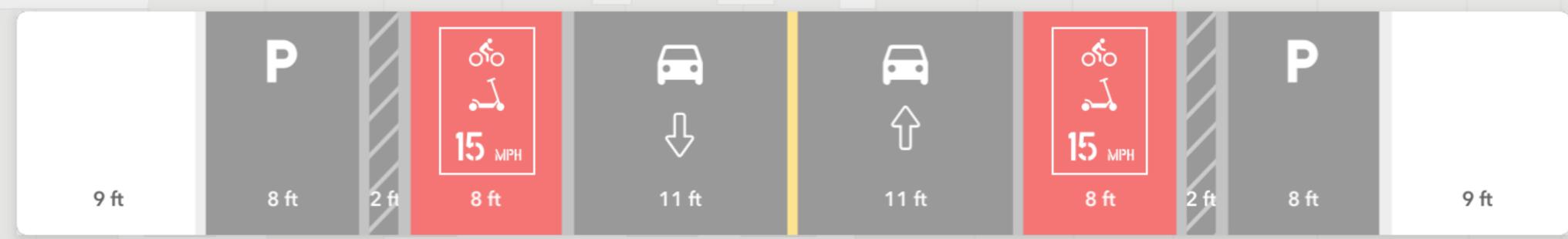


← [Map Icon] 🔍 ↶ ↷ ⋮

Future: Slow Lanes

14th Street Northwest

388 ft selected



ROW - 76 ft

Offset 0 ft

← + -

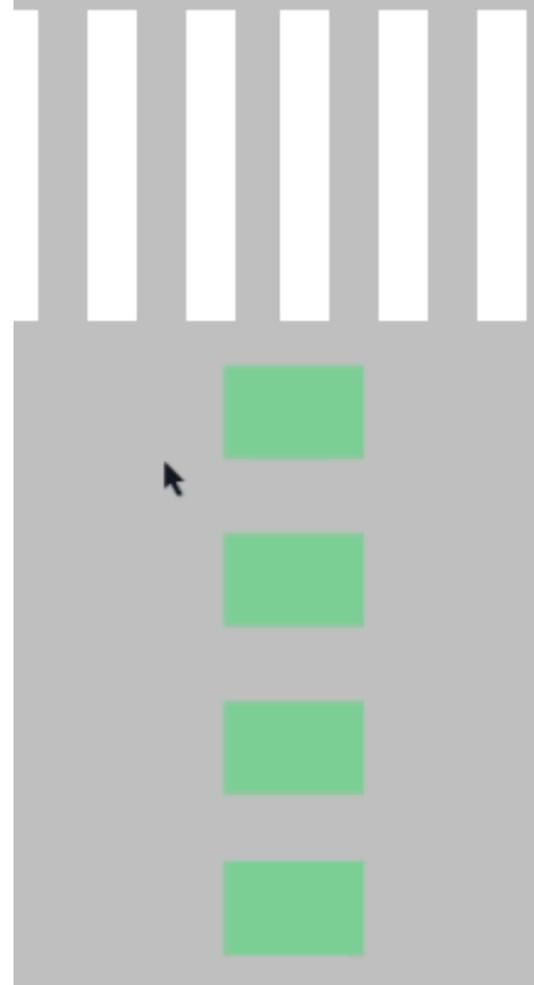
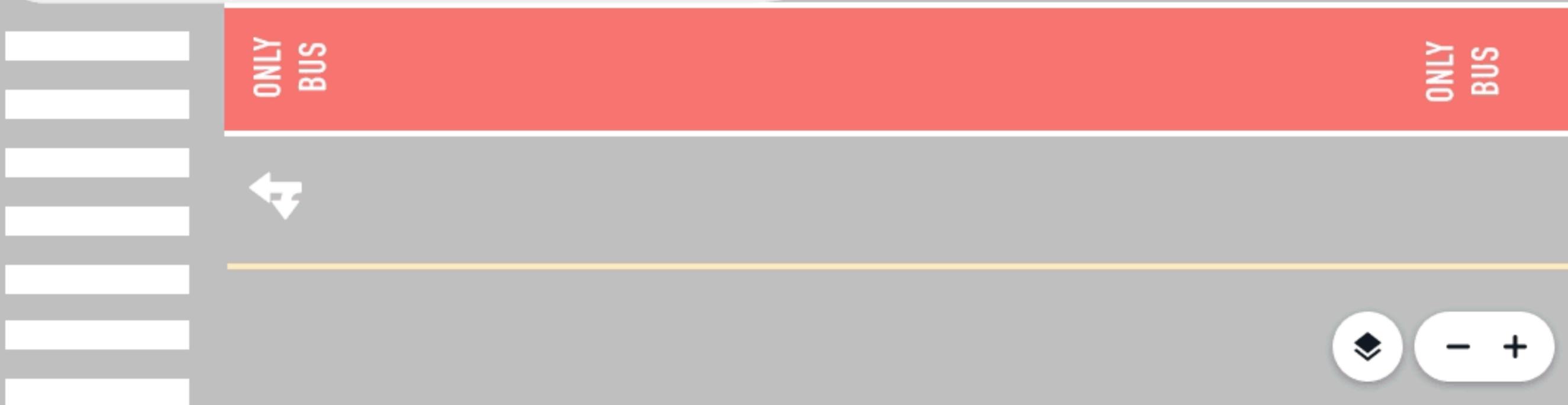
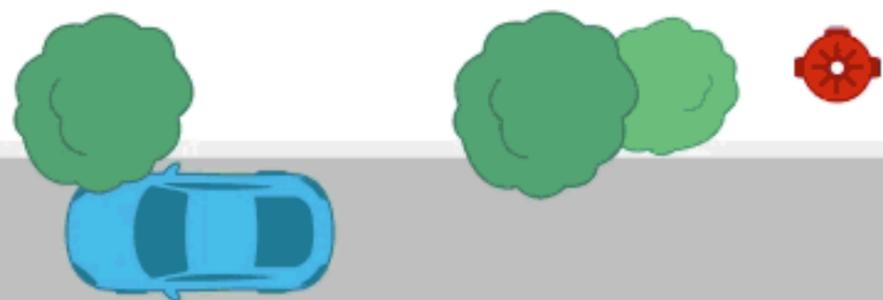
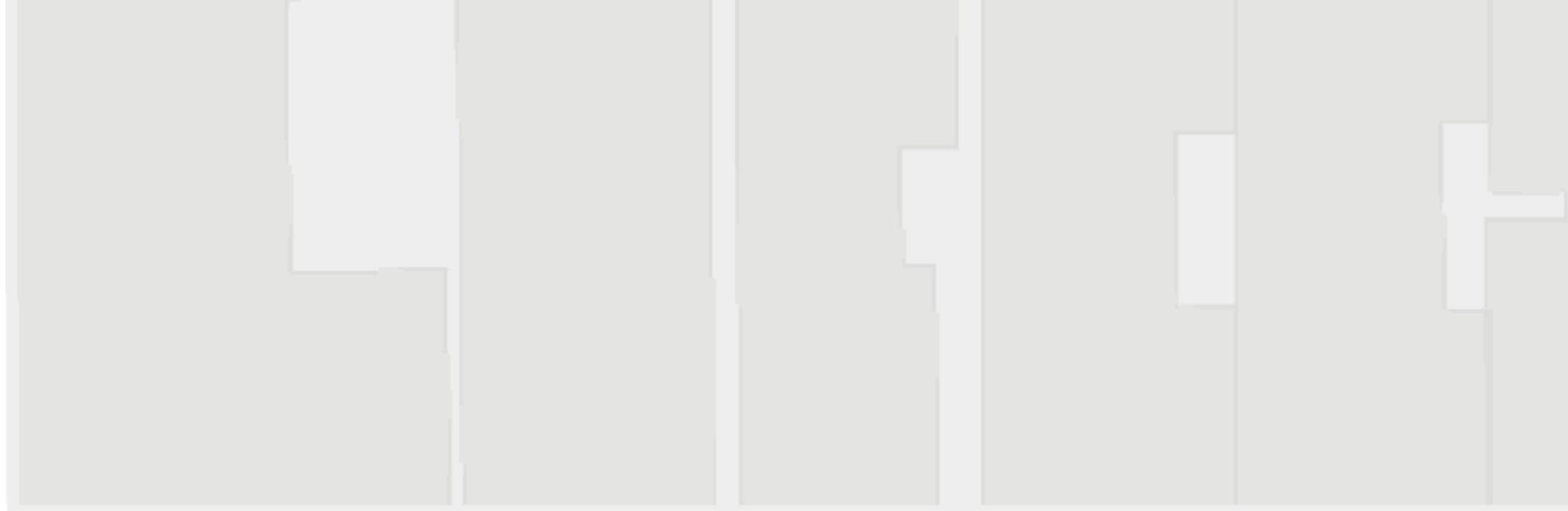


Shared Mobility



ONLY
BUS

ONLY
BUS





Rick Cole
@SaMoCole

Following

Redesigning our @santamonicacity streets for a multi-modal future.
First in-street drop zone for e-scooters & e-bikes.



Carter Rubin
@CarterRubin

Coming to Santa Monica:

- ✓ 19 miles of green lanes
- ✓ 39 bike signal detectors
- ✓ 1,250 bike racks

To be Accelerated thanks to Santa \$1.1M in expected dockless scooter/bike permit fees #freshkermit
santamonicacityca.iqm2.com/Citizens/Detail...



WHETHER YOU'RE READY OR NOT, THE TIME IS NOW

A rare convergence of 4 things happening right now that we can't ignore

 New mobility (bikes, dockless, TNCs) are clearly solving an unmet need.

 New forms of data to learn from.

 Renewed appetite for rebalancing the right-of-way.

 A second chance for cities to assert their central role in transportation.

All together — it's a once-in-a-lifetime opportunity to rethink transportation.

Will cities choose to watch from the sidelines, or play a central role in shaping their future?

Thanks.

tiffany@remix.com • @remix

