BIRD

# Advancing Micromobility


DATE


The majority of motorised trips are
less than 5 kilometers.
In 2017, Bird was born out of a vision to replace the last mile with something greener, something more fun, something that would let you be free.
BIRD

## Collaborating with government on shared goals

- Bird is dedicated to bringing affordable, environmentally-friendly transportation solutions for all.
- Bird partners with local government to equip them with micro-mobility solutions to advance our shared goals.
- We also invest in communities through our supply chain.


BIRD

# Local approaches, global scale

**20M+**

Average rides per annum

**2021**

Listed on the NYSE

**900+**

Small business partnerships globally

**450+**

Cities operating globally

**40**

Trees equivalent to each vehicle's lifetime GHG offset

**$3,065+**

Additional spending at small businesses over a year, for each scooter deployed

# **Bird:** The evolution of our vehicles


**Bird**Zero
2018

**Bird**One
2019

**Bird**Two
2020

**Bird**Three
2021

**Bird**Bike
2021

BIRD

# 1. Supporting small businesses, new skills and jobs for liveable cities

# Micromobility can develop local entrepreneurs and create local jobs.

Developed in partnership with cities, our Fleet Manager Model builds entrepreneurship and local jobs.

## How it works

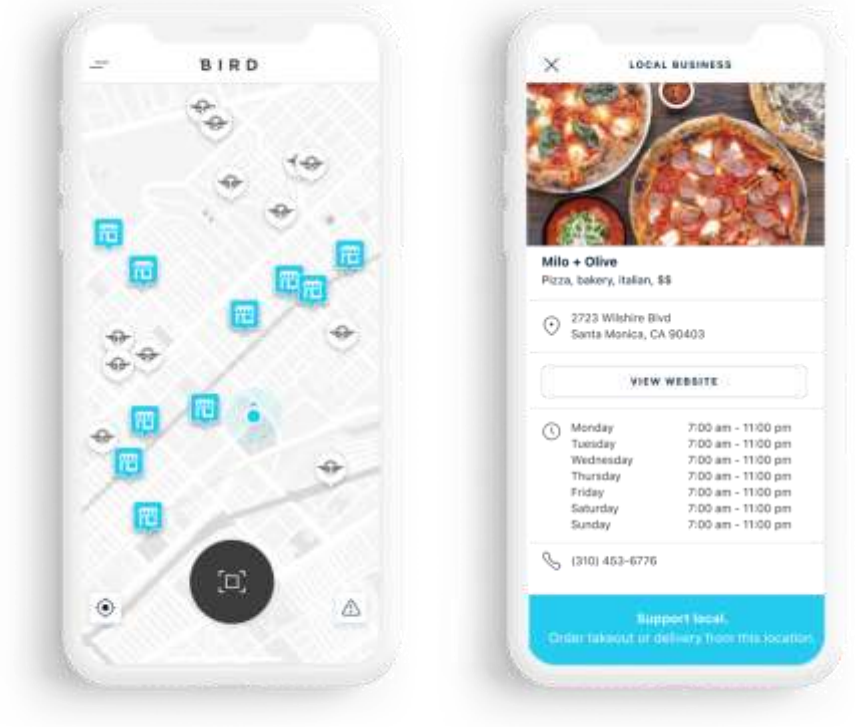
- We partner with cities directly and are the day-to-day contact
- We thoroughly vet local fleet operators to support logistics on-the-ground
- FMs are given small fleet and then scale up based on compliance metrics and other KPIs
- **Zero debt,** do not need to buy vehicles, no cost to leave the program
- We tightly regulate our fleet operations, and develop features, such as “Ride Ready,” to ensure compliance with local regulations

**Most fleet managers employ support staff**

**Operational experts, experience in vehicle management and logistics**

**Create local businesses opportunities within the community**

# In-app promotions co-designed with communities to promote local businesses.




In-app promotions of local small businesses, tourist landmarks and special events.

# Increasing Foot Traffic: Incentives for riders to stop at small businesses.

## Who can host a partner parking nest:

### BUSINESSES

Who would like to encourage more foot traffic to their storefront.

### APARTMENT BUILDINGS

Wanting to offer a unique benefit for residents that can improve the connectivity of your location and increase property value.

### HOTELS

Looking for a unique, local experience for guests, that is turn-key for hotel staff.

### OFFICE BUILDINGS

Encouraging employees to commute sustainably while reducing the parking burden on your building.

# 2. Scale, safety and inclusion


## Parking Enforcement

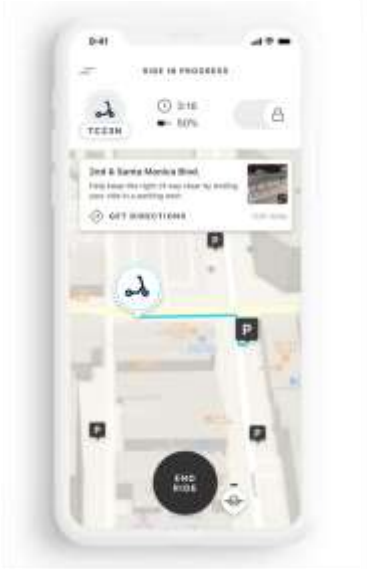
Infrastructure limitations, unreliable map data, and rider behavior make parking difficult to enforce.

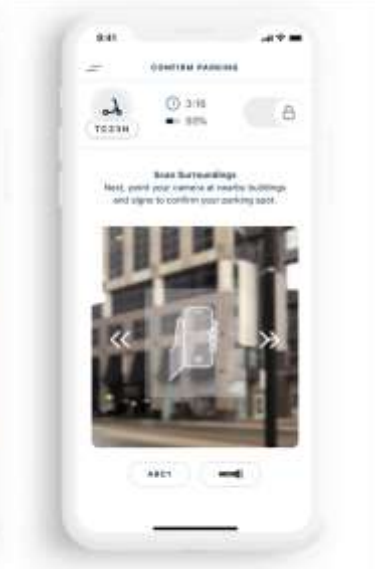
# Our Solution: Virtual Docks

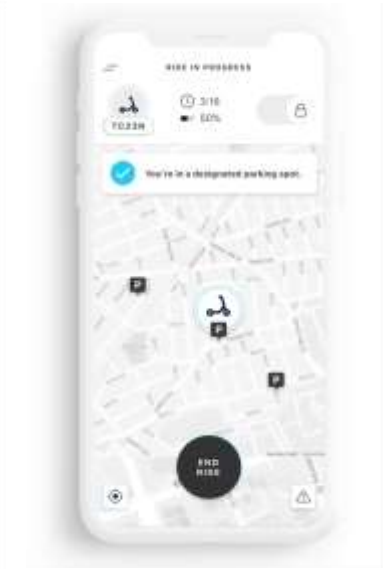
Virtual Docks use a camera positioning system to verify when a vehicle is parked in a permitted area

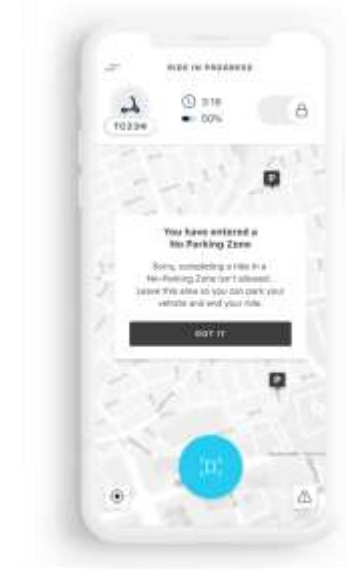
GPS Data is augmented with video captured by riders prior to parking to confirm the vehicle is parked in an approved location, or **Virtual Dock**

# Bird VPS: Parking compliance, in partnership with Google.









| | | | | | |
|---|---|---|---|---|---|
| 1. In-App Map: | 2. Scan Surroundings: | 3. Scan Surroundings | 4. Approved Location | | 5. Non-Approved Location |

**Bird Smart Path Detection: Different rules for different paths.**

# Ensuring the highest standards of battery safety.

One of the most important confirmations of battery cell integrity is called an “IP rating”. Cities should ensure the highest IP battery standards —IP68 - to offer the best protection against battery fires.

BIRD

# Ensuring inclusion is prioritised in micromobility partnerships

**Footboard size:** The right footboard size on a vehicle directly correlates to more stable, maneuverable rides and a more inclusive experience for riders.

**100M**
rides analyzed

We analyzed over 100M rides to determine a sweet spot when it comes to a safe riding experience.

**18”–25”**
safest deck size range

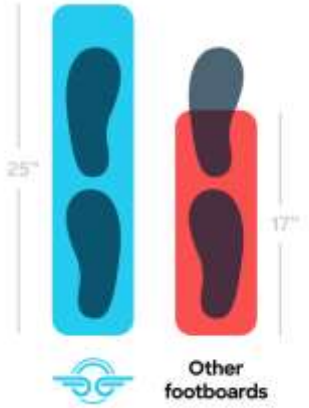
A smaller footboard encourages underage riding, while a footboard that is too large impacts the ability of a vehicle to safely turn.

**50th**
percentile accommodation

A wider footboard allows male riders in the 50th percentile and above to be able to place their feet on the footboard.

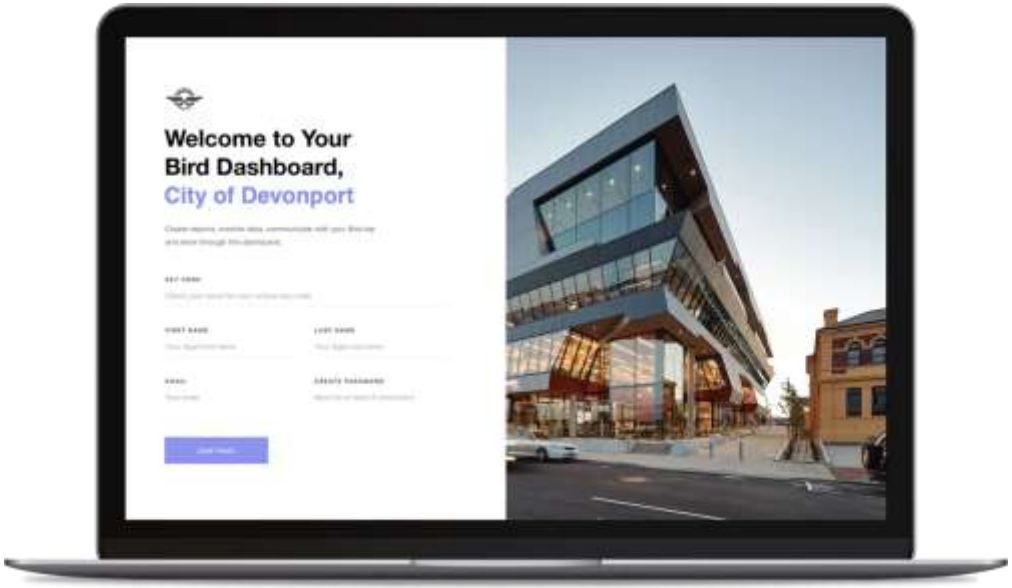
Excessive foot overhang

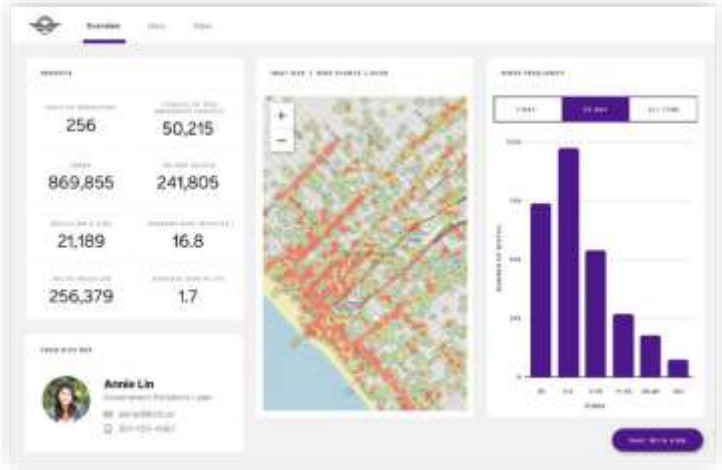
Unbalanced 1-foot riding



# 3. Using data to design and build liveable cities

# Bird Govtech: Helps local governments understand how their communities move.




BIRD

# Tel Aviv, IL

# Bird Data Used for Modeshift

- In 2020, Tel Aviv was ranked 5th worst in the world for traffic congestion.
- Last year, the city reversed that trend by launching an ambitious initiative that will add 160 km of new micromobility infrastructure by 2025.
- The coastal Israeli city has become a global leader in e-scooter adoption.
- In 2021, we announced that riders in Tel Aviv had surpassed 5 million trips on Bird alone.
- The data collected from these rides has been instrumental in helping city officials plan for infrastructure improvements.
- The city plans to use its new infrastructure to coax drivers out of their cars, increasing the amount of micromobility commuters from 11% to 25% over the next five years.

***It is a revolutionary plan that for the first time turns segments of bike paths into one uninterrupted network. Thanks to the support from and data shared by micro-mobility operators like Bird, we've been able to identify where new infrastructure is most needed in order to encourage modeshift and reduce our dependence on private cars.***

- Meital Lehavi, Deputy Mayor for transportation at Tel Aviv Jaffa Municipality

BIRD

# Santa Monica, CA

# Santa Monica, California: Bird data enables 30kms of new micromobility infrastruc

- City passed a Bike Action Plan that was one of the first of its kind in the country.
- In 2020, the city decided to upgrade it to focus on protected bike and e-scooter lanes.
- Analysed scooter data from millions of trips along with information on car congestion and accidents.
- Able to lay out an additional 19 miles of separated micromobility infrastructure and amenities that will increase bike and scooter use and decrease reliance on personal cars and ride hailing.

BIRD

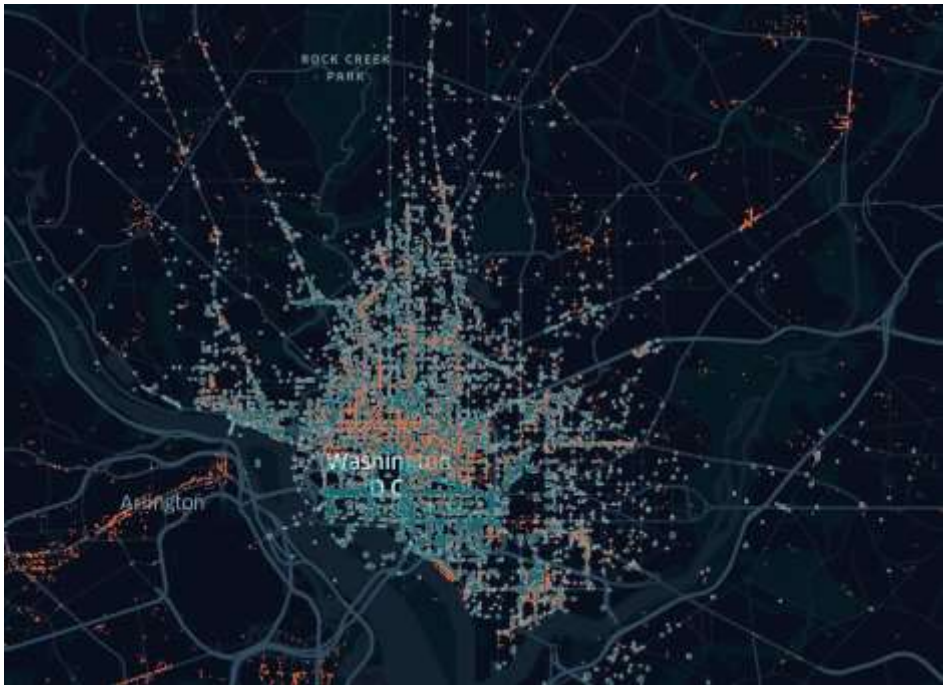
# Washington, DC

# Washington, DC: Bird data enables 7 new bike lane investments


- 2022 budget announcement that new bike lanes would be included.
- Goals: advance bike infrastructure, increase safety, declutter footpaths and encourage a modeshift away from cars.
- Bird provided data-driven insights to enable the city to optimise this infrastructure investment.
- Bird developed a heat-map of our most frequently ridden routes and superimposed it onto city's current bike map to identify gaps.
- Led to a recommendation of 7 investment opportunities.

# Washington, DC: Bird data enables bike rack data

- With D.C.’s launch of a bike lock program in October 2021, Bird anticipated a critical need for bolstered parking infrastructure in hot spots of e-scooter activity.
- Bird utilized ride start data alongside public bike rack data to highlight existing gaps in lockable infrastructure across all eight wards.
- We submitted roughly 20 suggested locations consisting of mostly in-street, metered parking spaces that we identified as parking corral locations based on ride start data.
- It is our hope that these corrals will provide improved access during this transition to a city-wide lock-to program.




DC Ride Start Heat Map Overlaid with Bike Racks