

# Council Referral

## Robots, Drones, and e-Scooters

**City Council, Item 6-D**  
**December 4, 2018**



# Background

- April 2<sup>nd</sup> and May 1<sup>st</sup> Council Referral to Consider:
  - Banning Commercial Vehicles including Robotic Deliveries from Sidewalks
  - Banning Commercial Drone Aircraft used for Deliveries
  - Banning Electric (Powered) Scooters



# Background

- The “Last Mile” problem
- Private development of new technology
- Pace of change
- Pros, Cons, and City response



# Robotic Delivery



# Robotic Delivery: Pro / Cons

## Benefits:

- Saves a Vehicle Trip
- Convenience
- Operate at “Walking Speed”

## Main Concerns:

- Sidewalk Congestion
- Free use of Public r/w
- Liability



# Robotic Delivery

## Response of other Cities / States:

- Walnut Creek and Redwood City approved a Pilot Programs in 2016
- San Francisco Banned prior to requiring Permit in 2018
- Florida, Virginia, Idaho, and Wisconsin have State Laws



# Robotic Delivery: Recommendation

## Take No Action at this Time

- Emerging Technology – Uncertain Demand
- No Requests to Operate in Alameda
- Apply Lessons Learned from other Programs



# Robotic Delivery: **Alt** Recommendation

Introduce Reading to Ban Autonomous Delivery Devices from Public Sidewalks





# Commercial Drone Delivery



# Commercial Drone Delivery

- **Navigable Airspace Regulated by the FAA**
- Limited to 55lbs max and Line-of Sight requirements
- FAA Pilot Program in Ten Cities to Evaluate Operational Concepts, Safety, and Reliability Measures



# Commercial Drone Delivery

- **City cannot strictly Ban Drone Delivery**
- Can restrict (permit) take-offs and landings
- Protections for individual privacy, trespassing
- Limits on land use, hours of operation, noise



# Drone Delivery - Recommendation

## Take No Action at this Time

Staff will continue to Monitor Companies Proposed Use, the FAA Pilot Program and other Cities Response



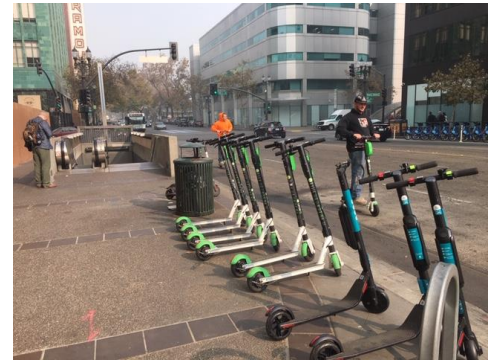
# Electric Scooters: Overview

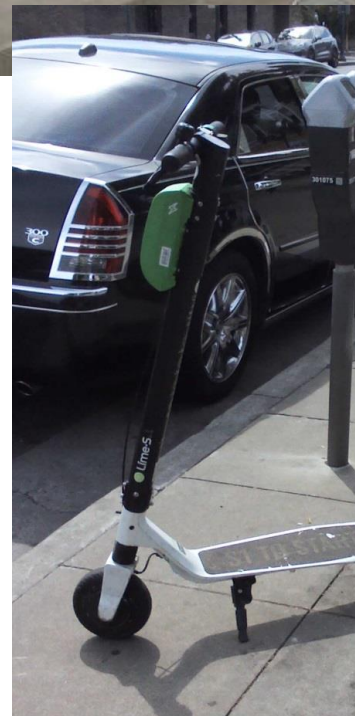
## Benefits:

- More transportation choices
- Reduce congestion and parking demand
- Reduce greenhouse gas emissions

## Portland User Survey:

- 1/3 of scooter trips replaced an auto trip
- Almost 50% of users had never ridden a bicycle



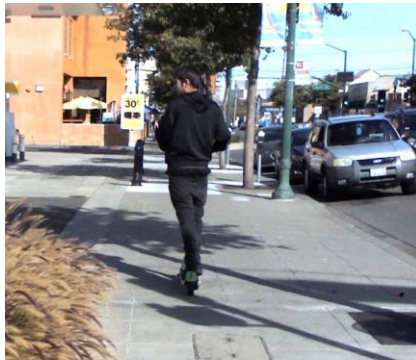




# E-Scooters: Issues/Concerns

## Main Concerns:

- Sidewalk riding
- Kids riding, especially without helmets



## Data:

- Complaints: 10
  - 3 via See Click Fix
  - 7 via email (from 1 individual)
- Collisions: 2
  - Child and e-scooter riders
  - E-scooter rider (solo)
- Citations
  - For riding on sidewalks or no helmet



# E-Scooters: State Laws

## State law requires:

- Have drivers license or instruction permit
- Wear a helmet (after Jan 1, only those under 18 years old)
- No sidewalk riding

## Note:

- City cannot restrict usage of motorized scooters on City streets
- Can restrict parking on sidewalks





# E-Scooters: Recommendation

- Develop pilot program within one year for Council consideration
- Continue to work with scooter companies to discourage deployment and parking in Alameda
- Continue enforcing state laws
- Educate public on safe and legal scooter riding



# E-Scooters: **Alt** Recommendation

- Develop pilot program within one year, for Council consideration
- **In the interim, ban parking of shared electric scooters in Alameda, via new ordinance**
- Continue enforcing state laws
- Educate public on safe and legal scooter riding

