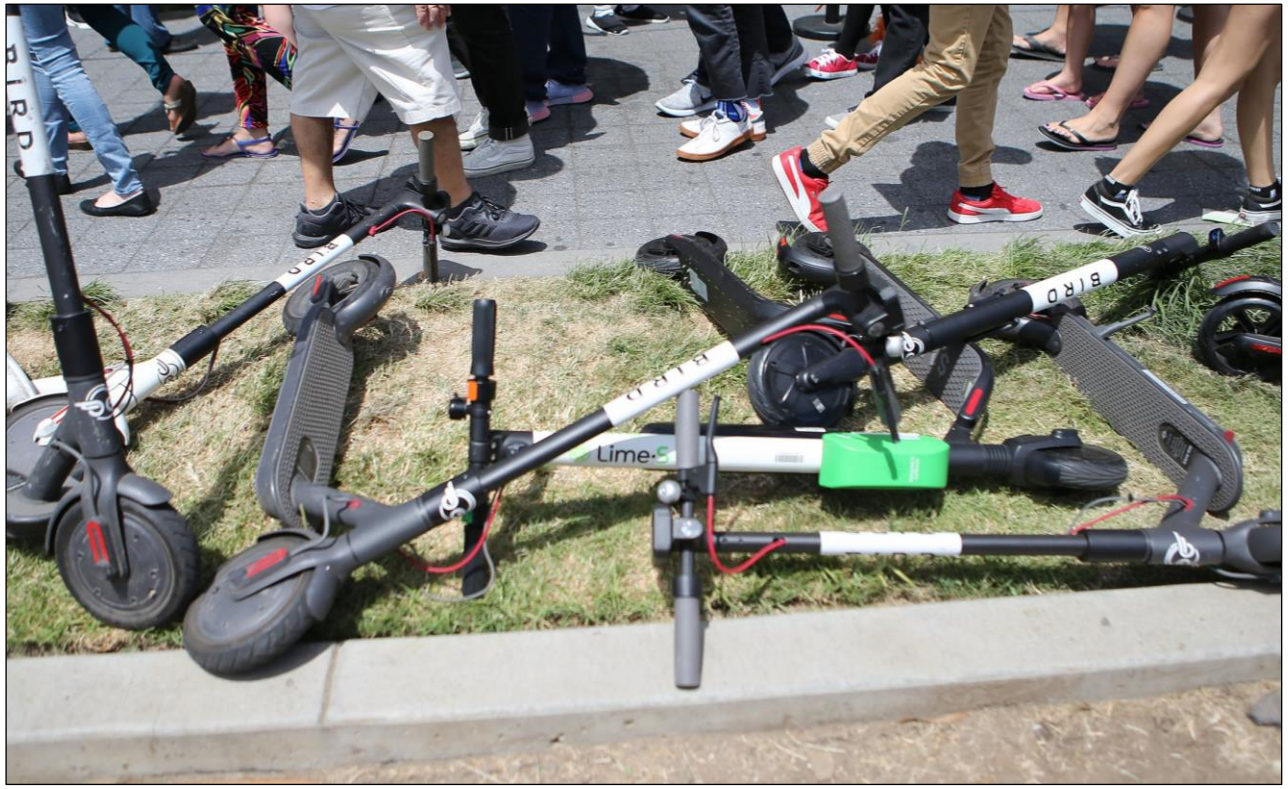
E-Scooters: Potentially Useful, Definitely Controversial, Likely Inevitable

- Part of a section on Micromobility we will be adding to the 2050 Bike/Ped (or Active Transportation- TBD) update
- E scooters showed up in cities starting in 2017, seemingly (sometimes literally) overnight.
- Useful for first mile/last mile- to get to the bus stop/VRE station/Park and Ride lot
- Car alternative for tourists seeing sites around the City.
- Shown to improve congestion measures: 2019 San Francisco study showed 40% of rides replaced single-occupancy car trips
- E Scooter companies currently operate in seven cities in Virginia: Roanoke, Blacksburg, Charlottesville, Richmond, VA Beach, Arlington, and Fairfax. Also in D.C.
- Rides are unlocked using a cellphone app tied to a credit card; however low-income users can apply to a program that allows for unlocking via reduced cash payment at participating stores
- Geofencing technology reduces speeds to 15 mph and restricts where scooters can be ridden and parked-- in “corral areas.” It is not perfect but is improving.

Concerns with E-Scooters

- Pedestrians are concerned about collisions with scooters. Virginia law allows them on the sidewalk, but that creates conflict.
- Likewise, scooters are too slow and vulnerable for the streets. Not enough infrastructure (that is, separated or buffered bike lanes) currently exists for safe scooter use.
- Even when not in operation, scooters can create tripping hazards, as seen in the photo to the right.
- Scooter popularity as correlated in a large increase in head injuries as of 2019



- These are not due to collisions with motor vehicles- rather they are due to collisions with the environment such as potholes or stationary objects.
- Helmet use is inconvenient on a shared scooter. New foldable helmet technology should help with this.
- There are equity concerns. Although cities are writing clauses that require companies to place fair percentages of scooters in Environmental Justice areas, some companies are using geofencing to keep scooters from operating in places such as Public Housing neighborhoods.
- Lastly, there are environmental questions: when a scooter is dropped in one section of town but must get back to another, the only way is by car. Scooter company employees spend the overnight hours picking up the units and driving them around to redistribution points- so does this phenomenon really save on VMT???

Conclusion: Plan for Success

- Scooters may take awhile to get to Fredericksburg, but it makes sense to start educating ourselves and coordinating on a regional policy.
- With advance planning maybe we can get to something like this picture instead of the preceding one.
- Questions?