The Present & Future of Micromobility use on campus



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The rise of a whole new segment...

- Emergence of scooters though shared mobility platforms
- Micromobility was not in the lexicon until 2020
- Major acceptance is leading to more personal ownership
- Market growth is fostering innovation and interest from large and small companies

micromobility noun

Save Word

mi·cro·mo·bil·i·ty | \ mī-krō-mō-ˈbi-lə-tē 🕥 \ variants: *or* **micro-mobility**

Definition of micromobility

: transportation over short distances provided by lightweight, usually single-person vehicles (such as bicycles and scooters)

II The arrival of electric scooters and motor-assisted bicycles, backbones of a transportation mode known as *micromobility*, has been greeted as part of the solution to clogged roadways and unbearable travel delays.

— Norman Mayersohn

II If *micro-mobility* continues to evolve and gain in popularity, it will raise a host of questions for public officials. The demand for bike lanes could, for example, increase sharply ...

— Joshua Emerson Smith

First Known Use of micromobility

2000, in the meaning defined above



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PERSONAL VEHICLE MARKET EVOLUTION BY MODE



More diverse choices than ever

- PEV's- Personal Electric Vehicles will contribute the dominant percentage of growth in micromobility
- 2021 Global market of \$47.58 billion
- 2030 projections of 202.4 billion
 - CAGR of 17.45%
- E-bikes, scooters, OneWheel, electric skateboards, electric unicycle, and just introduced- electric rollerblades...

What are we seeing here?

- Fall '22- largest increase in PEV adoption we've seen to date
- More e-bicycles than before in racks
- More "not a bicycle"
- **Rise in ped/pev/vehicle conflict**
- **Rise in thefts of PEV's and other** micromobility
- Veo ridership is still very strong
 - Measured 1:6 Cosmo usage for **Miami gameday**
 - 70%+ rides are on Cosmo



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aggiephotogs Walking, running, scootering, biking... whatever way gets you to the first day of class! 🟃 🚶 #GigEm



...

Veo ridership January 2021-YTD

Rides: 1,008,643

Average Distance: 1.433

Average Minutes: 15.76

Total Distance: 1,283,906

Total Minutes: 8,541,505





2 related updates needed

Regulations to include PEV's

- **Considerations should include:**
 - Power limits (wattage, HP)
 - Safety Certifications-UL listing
 - TXDoT, Federal definitions/code and registration requirements
 - Speed limitations
 - Rules regarding charging devices

A robust registration system

- A more robust system would allow:
 - Better collection and use of data
 - Integrate with daily functions
 - Notifications in the event of a boot, impound, or need to remove a rack
 - 3rd party cataloging of emergent vendors and devices
 - Login/ access for UPD



Other considerations

Infrastructure

- Considerations should include:
 - Micromobility charging stations
 - Storage options
 - Bike/PEV lockers
 - Interior bike corral
 - Establish major multiuse arterial pathways
 - Foster multi-modal travel through
 infrastructure placement

Communication

- Targeted to specific audience:
 - Staff, Faculty
 - Students
 - Visitors
 - Vendor
- Timing sensitive
 - Fall needs
 - Special events





Questions/ Comments

Contact us:

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