

E-BIKE Safety

Discussion

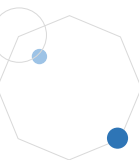
Lake Worth City

Commission

– May 5, 2026

Marc Wigder, JD MBA

E-BIKES (or Electronic bicycles) are traditional bicycles with a small electric motor mounted to them, allowing partial propulsion for limited distances and speeds of up to 25-40 miles per hour



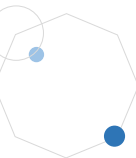


Marc D. Wigder, JD MBA

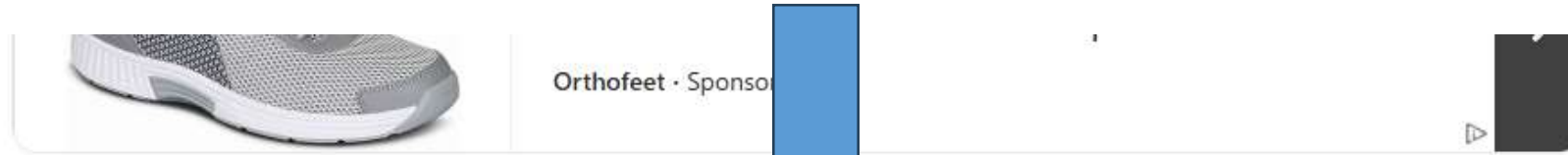
Retired City Councilman, Boca Raton

Retired Director, Palm Beach County League of
Cities

- * Florida Resident since 2005
- * Real estate/Corporate attorney licensed in NY NJ FL - 28 years + (Florida 2006)
- * Living in Boca Raton
- * 3 amazing children
Malcolm 21 (College Grad – Rice U)
Amelia 19 (Going to College – Also Rice)
Henry 16 (eating more than all of us!)
- * Prior career In house counsel in Coral Gables before starting own real estate investment company here in Boca Raton focusing on sustainable small business solutions.
- * Corp life led me (later in life) to Yale MBA with sustainability subfocus
- * Also Bike/Ped Board for 5 years before being elected. Runner, Biker, Tri's...



E-Bike safety issues and problems are all over the news.



[Sign up for our Newsletters](#)

Budensiek is urging parents to make sure their children understand the rules.

"Keep in mind, we're not anti-e-bikes, we're anti our kids getting killed on e-bikes or seriously hurt, and we've had that, we've had kids get seriously hurt on e-bikes," Budensiek said.

It's not just happening in Palm City.

Stuart resident Deb Potter said two boys on e-bikes have been seen racing on private property in her neighborhood.

Your neighborhood: Local coverage from WPBF 25 News

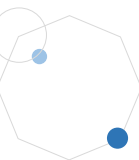
"They were on the sidewalk, going very fast," Potter said. "So, I just moved to the side. I let the one child pass, the other one was in the street. He slowed down a little bit, and as he got past me, he started screaming vulgarities at me."

Marge Broers also lives on the Treasure Coast and shared her incident with an e-bike.

"I had one shoot past me so fast it scared me to death one time, and it was on a sidewalk," Broers said. "You know,

['We're not anti-e-bikes': Martin County sheriff shares e-bike concerns as legislation proposed](#)

Your Logo or Name Here





FLORIDA'S E-BIKE LAW FOR THE ROAD

» In Florida, an e-bike is defined as a "bicycle," so long as it is capable of being propelled by human power and has a maximum speed of 20mph. The same rules of the road apply to both e-bikes and human-powered bicycles.

E-bikes are not subject to the registration, licensing or insurance requirements that apply to motor vehicles.

» Helmets are not required. There is a 16 year age minimum for e-bike use. E-bikes are allowed on sidewalks and bike paths.

* The following Florida laws are referenced: Fla. Stat. §§ 322.01, 316.003.

eMTB GUIDELINES

- » On federal, state, county and local trails, e-mountain bike (eMTB) access varies significantly.
- » Generally, any natural surface trail that is designated as open to both motorized and non-motorized uses is also open to eMTBs.
- » eMTBs may not be allowed on trails managed for non-motorized activities.
- » Do not ride your eMTB in areas where the local rules are unclear. Ride legally and only on authorized trails to show that mountain bikers are responsible trail users.
- » When in doubt, ask your local land manager about access to specific trails. Local land rules change frequently.

CHECK OUT

- » A map of great eMTB rides at peopleforbikes.org/emtb
- » eMTB "Adventures" at peopleforbikes.org/e-bikes

With an e-bike, bicyclists can ride more often, farther, and for more trips.

Electric bicycles are designed to be as safe as traditional bicycles, do not compromise consumer safety, and benefit bicyclists who may be discouraged from riding a traditional bicycle due to limited physical fitness, age, disability or convenience.

In many states, e-bikes are regulated under antiquated laws primarily aimed at combustion engine vehicles such as mopeds or scooters. PeopleForBikes and the Bicycle Product Suppliers Association are clarifying state laws governing the use of e-bikes in the U.S. Every state's law is different, but the objective is to ensure that low-speed e-bikes are regulated similarly to traditional, human-powered bicycles.

FLORIDA'S E-BIKE LAW FOR TRAILS

- » LOCAL: Consult your local land management agency.
- » STATE: The Florida Department of Environmental Protection allows Class 1 and 3 e-bikes wherever traditional bicycles are allowed. Contact the department for more information. PeopleForBikes is monitoring this policy and will update this document as needed.
- » FEDERAL: The majority of public lands managed for recreation in Florida are under the jurisdiction of the U.S. Forest Service, where eMTBs are considered motorized vehicles and have access to motorized trails. Contact the U.S. Forest Service Southern Regional Office for more information.

GREAT eMTB RIDES IN FLORIDA

- » **Alafia River State Park**
Lithia | 8.5 miles
- » **Jonathon Dickinson State Park**
Jupiter | 9 miles
- » **Oleta River State Park**
North Miami Beach | 17 miles
- » **Fort Clinch State Park**
Fernandina Beach | 5.4 miles



Learn more at PeopleForBikes.org/e-bikes

- » Blogs and webinars
- » E-bike laws around the country
- » E-bike statistics and research
- » Buying guide
- » Retailer materials
- » eMTB management resources

• E-bike Usage increasing substantially yet regulations have not caught up.

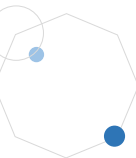
FL DMV treatment of e-bikes.

- **FL Statutes for e-bikes.**

- FLORIDA'S E-BIKE LAW FOR THE ROAD » In Florida, an e-bike is defined as a “**bicycle**,” so long as it is capable of being propelled by human power and has a maximum speed of 20mph.

(What about more than 20???)

- The same rules of the road apply to both e-bikes and human-powered bicycles.
- » E-bikes are not subject to the registration, licensing or insurance requirements that apply to motor vehicles. (SB243 did not pass)
- » Helmets are not required. There is a 16 year old age minimum for e-bike use. **E-bikes are allowed on sidewalks and bike paths if under 20mph.**
- * The following Florida laws are referenced: Fla. Stat. §§ 322.01, 316.003.



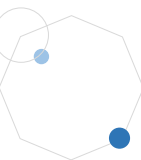
Lake Worth Bicycle code

- [Chapter 8 - BICYCLES | Code of Ordinances | Lake Worth Beach, FL | Municode Library](#)

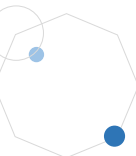
Sec. 8-1. - Defined.

"Bicycle," as used in this chapter, shall mean any **device propelled by human power** upon which any person may ride, **having two (2) tandem wheels** either of which is **sixteen (16)** inches or more in diameter, and including any device generally recognized as a bicycle though equipped with two (2) front or two (2) rear wheels.

(Ord. No. 2017-15, § 2, 8-1-17)



New Florida e-bike bill passes
Senate unanimously - here's what
riders need to know



Un Packing Florida's new SB 982

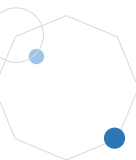


35

36 Section 1. Effective July 1, 2026, subsection (10) is added
37 to section 316.20655, Florida Statutes, to read:

38 316.20655 Electric bicycle regulations.—

39 (10) (a) A person operating an electric bicycle on a shared
40 pathway that is not located adjacent to a roadway, including a
41 shared pathway located in a park or recreational area, shall
42 yield to pedestrians and shall give an audible signal before
43 overtaking and passing a pedestrian.



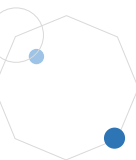
New ordinance is a 'move over' law



44 (b) A person operating an electric bicycle on a sidewalk or
45 any other area designated for pedestrian use may not operate the
46 electric bicycle at a speed greater than 10 miles per hour if a
47 pedestrian is within 50 feet of the electric bicycle.

48 (c) A person who fails to comply with this subsection
49 commits a noncriminal traffic infraction, punishable as a
50 nonmoving violation as provided in chapter 318.

At 20 mph \approx 29.3 ft/s. So basically if you have less than 2 seconds to avoid a collision...



But maintain statistics for the task force to make future recommendations.

110 | report, the task force shall expire.

111 | Section 3. (1) Beginning 30 days after this act becomes a

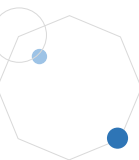
112 | law, the Florida Highway Patrol and each police department and

113 | sheriff's office shall maintain a list of all traffic crashes

114 | that the respective agency investigates which involve a

115 | micromobility device. Each micromobility device crash must be

116 | included in the list, regardless of whether the crash is



The World has changed – Even the definition of a Bicycle has changed.



Micromobility is super accessible...and affordable...Demand goes up...use way up

INMOTION V8S

RIDE LIGHT. MASTER FREEDOM.

★★★★☆ 78 reviews | No questions

\$599.00 ~~\$1,099.00~~ SAVE \$500.00



 Items Will Arrive Within **3-7 Business Days.**

 **INMOTION V8S PRODUCT MANUAL**

- 1000w motor reaches a speed of 22mph and 30° hill grade
- 6.5 hours charging time and last up to 47 miles
- Consist of the premium LG cells
- Equipped with rear brake lights

Your Logo or Name Here

Step 1- Recognize the problem – its not just bikes, its electric “everything”!

Micromobility devices



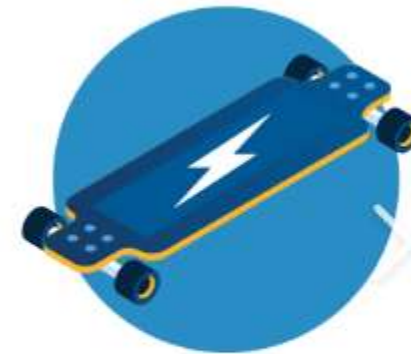
Bikes



E-bikes



E-scooters



E-skateboards &
other emerging
new devices



E-bike concerns

E-bike accidents are increasing.

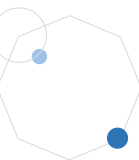
- Increased speed of bikes
- Reduced reaction times by bikes and pedestrians
- **Increased weight of bikes** (more difficult to maneuver)
- *Risk perception difference* (because it still looks like and acts largely like a bike).
- **Just like a car – breaking distances increase**



The force of impact of an electric bicycle and rider on a pedestrian can be almost four times harder. (1)

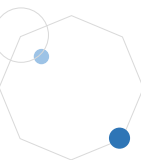
$$F = (0.5 * m * v^2) \div d$$

(1) <https://cleantechnica.com/2018/10/31/electric-bicycle-fatalities-injuries-are-rising/>



E Bike technology is already beyond existing Classifications.

- E-bike enforcement involves a combination of state and local regulations, speed limits, safety requirements, and community-focused policing strategies.
- Legal Framework and Enforcement
- E-bike laws in the U.S. are primarily state-regulated, with federal law defining low-speed electric bicycles for consumer safety but not for riding rules. Most states follow a three-class system:
 - electricbikeexplorer.com
 - Class 1: Pedal-assist only, up to 20 mph
 - Class 2: Throttle-assisted, up to 20 mph
 - Class 3: Pedal-assist only, up to 28 mph, often restricted to riders 16+



How do we deal with this?

Action Items - Issues and Solutions

Educate

- Educate on safety and Promote Healthy riding on streets, sidewalks and trails
- What is the law?
- What are the dangers?
- Community Workshops

Planning Policy

- Work with Tallahassee on updated regs
- Analyze city maps and traffic data for conflict points.
- Work locally with traffic and development services for better local planning
- Wider buffered sidewalks or bike lanes

Enforcement

- Enforcement
- Electric motorcycles are not E-bikes. We Need enforcement (20+mph on a sidewalk), license plate on the road

Partnerships

- Partnerships
- Work with Stakeholders – bike advocates, -advisory board, -police -traffic department- schools. Educate on safety and Promote Healthy riding and trails

Educate - Formal courses are available and widely used

Login | Account | Location



Course Overview

Buy

Expert Team

Bulk Purchases

The Ebike Pro Course is the most comprehensive training available for young drivers and pre-driving teens. Students will learn the skills teens need for safe and responsible ebiking—skills that will carry over into safer driving.

Buy the Course

Family Plans

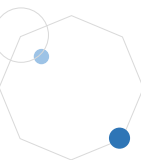
Bulk Licensing



- [Skills teens need for safe ebiking - Ebike Training for Teens](#)

Your Logo or Name Here

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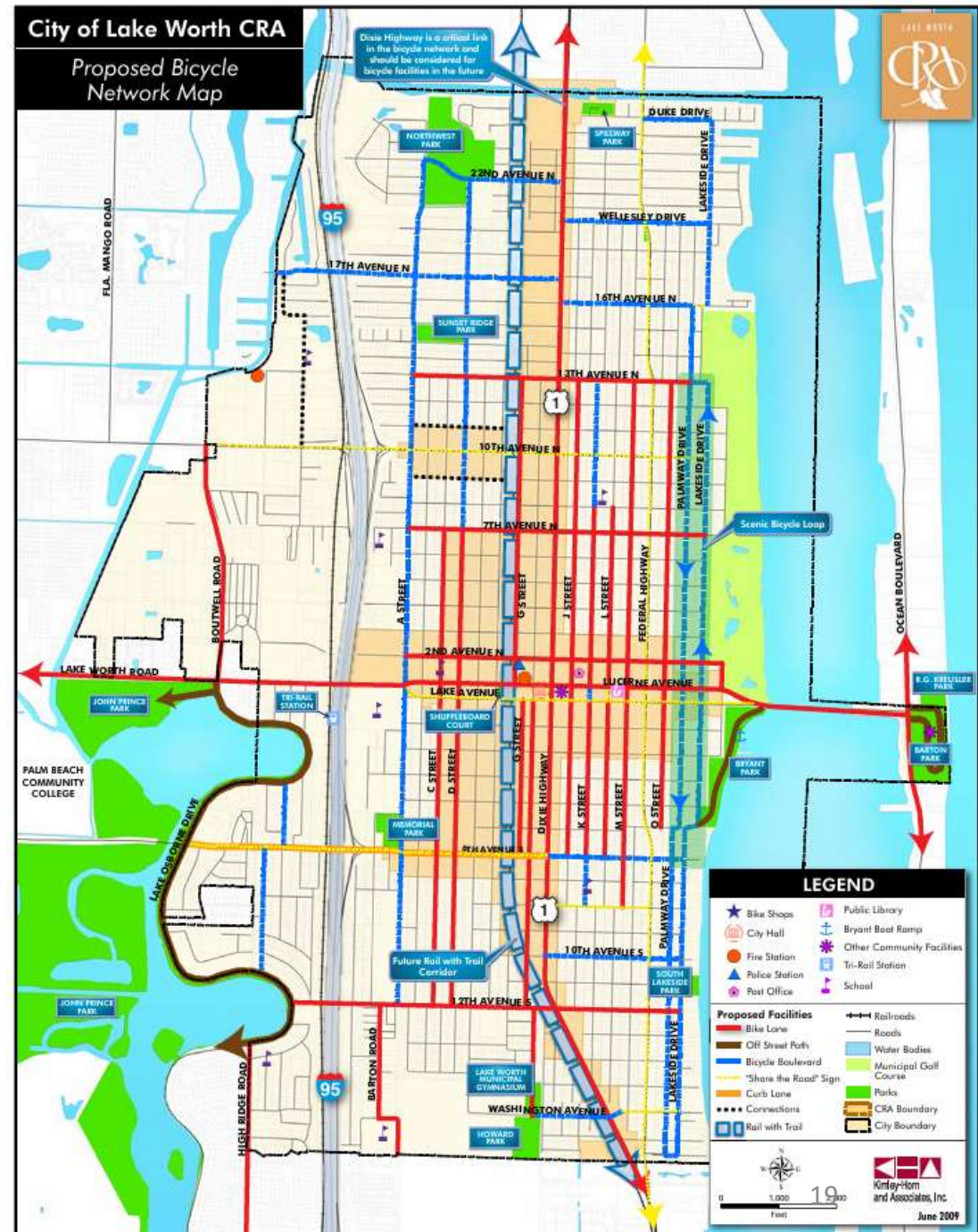


Planning Policy – Easy to plan expensive to implement



2009LWB
Comprehensive Bike
plan is great road
map...

How are we doing?



Plan is in place.
New technology
changes some
considerations..
more difficult to
implement.

Engineering:

- Implement recommended bicycle facilities and amenities identified in the future Bikeway Network Plan.
- Upon implementation of short term improvements, create a "bicycle suitability" map for distribution to provide residents with information on the routes where bicycling is safer and more comfortable.
- Adopt a "Complete Streets" policy to integrate bicycling (and walking) into all highway and transit projects, based on the USDOT policy model.
- Team with local bicycle shops, chambers of commerce and other downtown businesses to install bicycle racks and storage facilities at major commercial and recreational destinations. Provide bicycle parking at key destinations, starting with City Hall.
- Install bicycle activated signals at six key intersections and gradually install it along all significant bicycle corridors and crossings.
- Work with Palm Tran to increase the number of bicycle racks on buses.

Education:

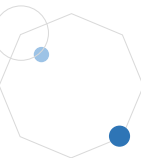
- Initiate a bilingual Share the Road safety campaign based on the Florida Bicycling Coalition materials.
- Establish a Safe Routes to School program, utilizing the Florida model.
- Create a bike safety education program for children using the Florida curriculum in all local schools.
- Develop a training program to reach adult cyclists, especially bicyclists who ride the wrong way (against traffic), on sidewalks, and without proper lighting at night.
- Develop a training program for local law enforcement officials.
- Encourage the Police Department to review the Florida Bicycle Law Enforcement Guide and the new Bicycle Law Enforcement Video.

Enforcement:

- Utilize targeted enforcement for both motorists and bicyclists to ensure that the rights of both groups are respected.
- Expand the use of police on bicycles.
- Develop a bicycle registration program to reduce theft.
- Develop a "bicycle traffic school" program for adult cyclists who have violated the vehicle code on their bicycle, with the purpose of teaching safe bicycling practices.


Encouragement:

- Support a local bicycling event in Lake Worth.
- Host local events for National Bike Month and Bike to Work Day.
- Work with local bicycle clubs and advocacy groups to organize additional bicycle-related community events and to act as an information source for bicyclists in Lake Worth.
- Work with local community organizations and non-profit organizations to promote bicycling.
- Hold contests for local artists for design of unique city-based bicycle signs, bicycle rack design and bicycle amenity concepts.



CRA Bicycle Network Plan is a great start!

Transportation & Mobility Improvements



The CRA is actively studying ways to improve the mobility and safety of individuals and vehicles within the City. This initiative began in 2005 when the agency was able to redesign the Gateways along 6th Ave. South and 10th Ave. North. Those projects helped to widen sidewalks and slow down vehicular traffic by installing landscaped medians, narrowing the roadway and adding traffic signals. In 2009, the CRA published the first ever Bicycle Network Plan for the entire City. This document helped to set new policy to aid and assist with the development of new bicycle infrastructure, programs and projects. The CRA used the Bicycle Network Plan to help obtain funding from FDOT to construct a half mile shared used path now known as the Royal Poinciana Trail. The CRA has also partnered with the City to create a downtown parking plan which eventually led to the construction of new CRA owned public parking lots in the historic downtown.



Walkable (Bikeable?) Downtown??

STRATEGY D3: EXPAND THE “SAFER ROADS” PROGRAM TO IMPROVE PEDESTRIAN SAFETY AND INCREASE WALKABILITY OF THE DOWNTOWN ³

ACTIONS

- Explore potential traffic-calming measures to actively reduce the volume and speed of traffic in all areas of the Downtown, but particularly along Dixie Highway and in the West
- Encourage more connections between Lake and Lucerne, prioritizing cross-streets and alleyways as shared pedestrian and cyclist thoroughfares⁴
- Improve and increase the number of crosswalks throughout the Downtown, particularly near City Hall and west of Dixie and create/delineate safety lanes and make it obvious where people can safely move about

PRIORITY IN ACTION

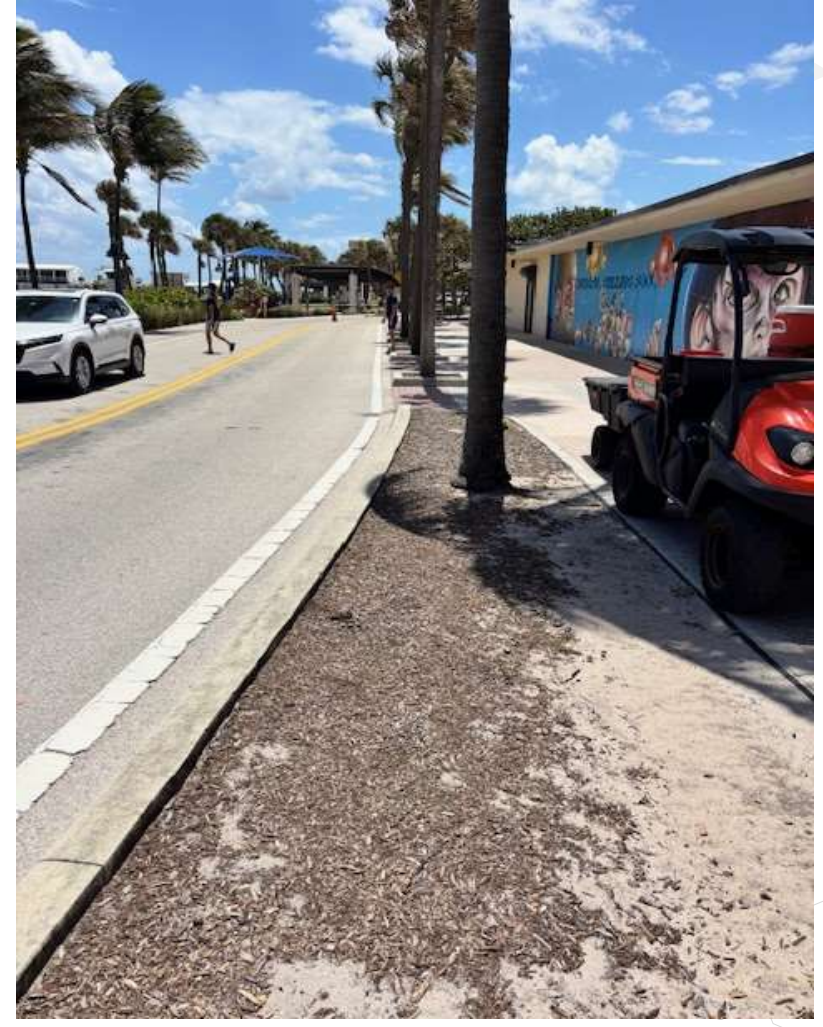
Encouraging Bicycling and Boarding LOS ANGELES BICYCLE FESTIVAL

Bicycle Culture Institute

The Los Angeles Bicycle Festival transforms the car-obsessed city into cyclist's paradise. Hosted by the non-profit Bicycle Culture Institute, the aim of the festival is to entertain, educate people about bicycling, and connect the cycling community to the wider population of Los Angeles. Taking place in May, visitors can discover a world of bicycles, art, music and food and watch pro-demos, see interactive art installations, hear wandering musicians, talk with local ride groups and peruse innovative bike and gear brands. Attendees can explore MTB-land, LA Bike City, Roadland, e-Bikeland and the Kid's Bike Village, while enjoying refreshments at the beer garden or one of the many popular food trucks. Scheduled family-friendly workshops include everything from Bike Commuting 101 to Legal Rights for Cyclists to How to Ride in Heels or a Suit.

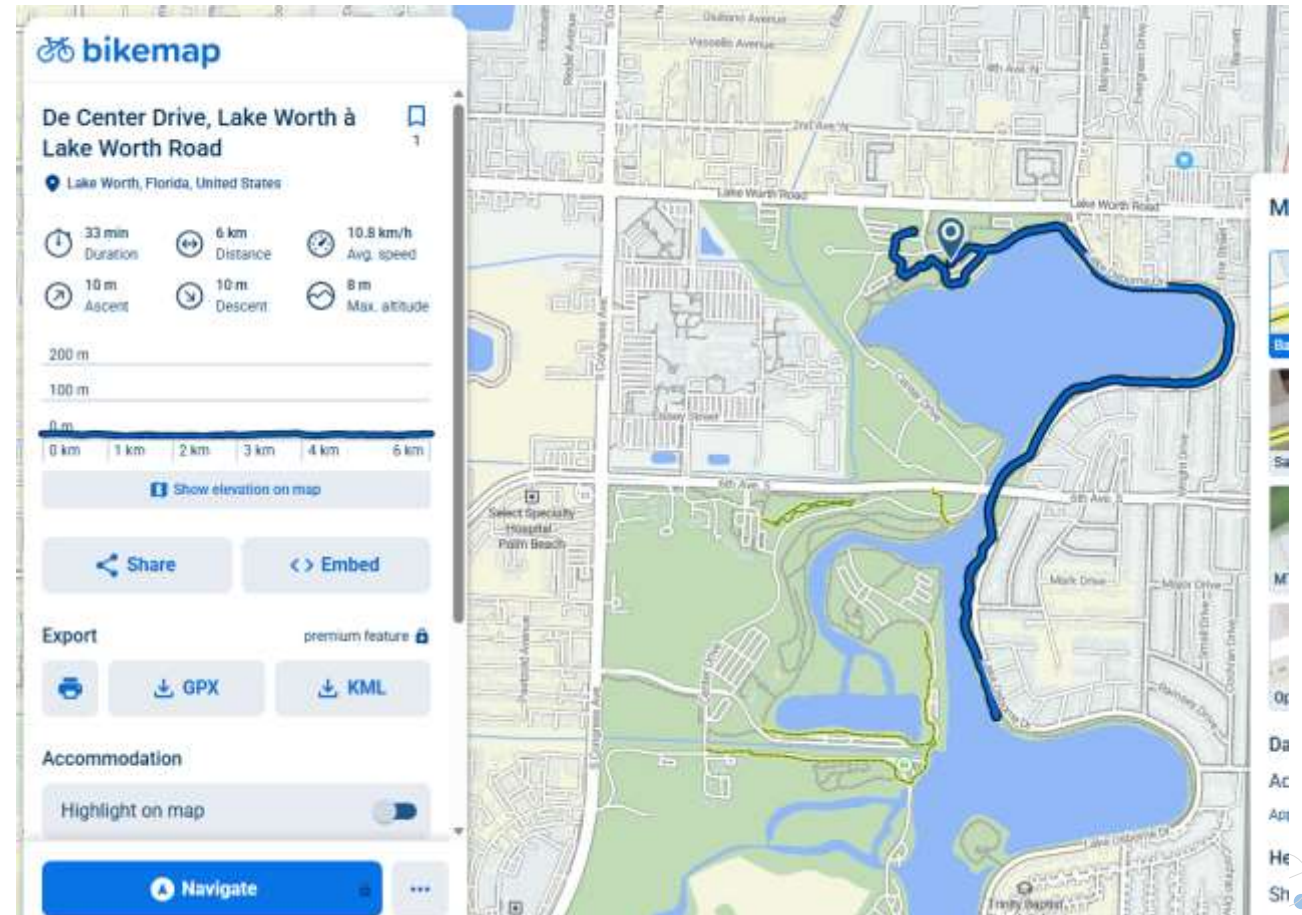


Beach bike path is beautiful ...for a slow cruise
not a 30mph e bike. (Lots of conflict points)



AI tools and apps pinpoint places of 'bike' interest in town.

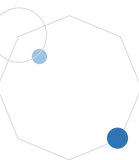
Embrace it!
Promote It!



Your Logo or Name Here

Enforcement

- Enforcement includes speed limits, helmet requirements, age restrictions, and equipment standards. For example, California requires e-bikes to meet battery and electrical safety certifications (UL 2849 or equivalent) and display proper classification labels. Local municipalities may impose additional rules for sidewalk riding, trail access, and pedestrian areas, and violations can be treated as noncriminal traffic infractions.




Regulation
and
Enforcement
are catching
up
(E-moto is
the newest
challenge!)

yahoo! · 1d

Police crack down on dangerous e-bike activity across Northern California

From free-wheeling to full enforcement, while e-bikes are picking up speed, local law enforcement officials are pumping the ...



KCRA  · 2d · on MSN

E-bike & e-moto enforcement expands across Sacramento region amid safety concerns

From Lincoln crackdowns to Elk Grove classrooms: E-Bike safety efforts expand ...



bike enforcement



THE KANSAS CITY STAR · 1d

Olathe weighs new e-bike restrictions after public feedback. What could change

The rules align with state laws governing e-bikes and create a category in city code called "micromobility devices." ...



WCBD News 2 on MSN · 17d

Charleston working to improve enforcement for reckless e-bike riding

CHARLESTON, S.C. (WCBD) – E-bikes are becoming a safety issue for many people, and Charleston city councilmembers are working ...



 SAN DIEGO · 11d · on MSN

Santee steps up e-bike enforcement amid safety concerns

Santee has become the latest city in San Diego County to crack down on e-bike violations, following a series of late-night ...



New Legislation proposed (did not pass)

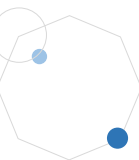
TALLAHASSEE, Fla. - [Florida](#) lawmakers are revving up new safety rules for electric bicycles and scooters.

Under House Bill 243, any e-bike capable of traveling more than 28 miles per hour or equipped with a motor of 750 watts or more would be reclassified as an "electric motorcycle."

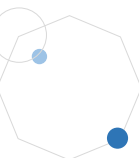
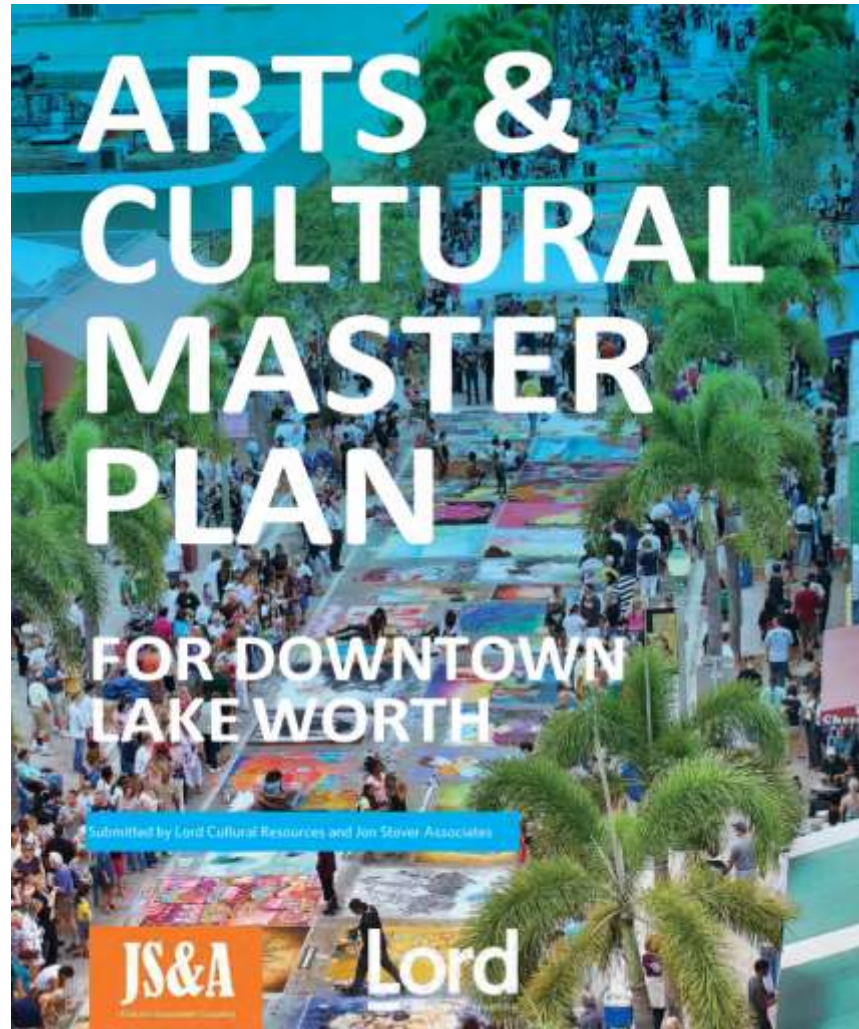
That means those bikes would need to be registered, and riders would be required to have a driver's license — and stay off sidewalks and bike lanes.

The Brief

- Florida lawmakers are pushing new rules for e-bikes and electric motorcycles under House Bill 243.
- The proposal would make it illegal to modify e-bikes to exceed manufacturer speed limits.
- Riders of high-powered e-bikes could soon need licenses and registration, just like motorcycle operators.



Partnerships- Mobility Plan is part of Arts and Culture plan...





Better Bike Friendly Interviews



YouTube Channel of Biking Boca from cyclist perspective videos

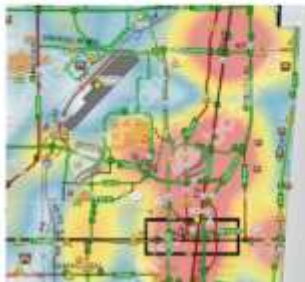
Resources



Boca Raton Citizen Pedestrian and Bike Advisory Board Projects Map



BocaFirst Detailed Bike Map



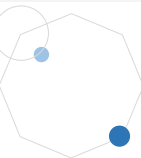
Bike Infrastructure Safety Analysis



Vision Zero Tracker

Boca Raton Bike and advisory committee filled with advocates – i.e. there are passionate & experienced stakeholders

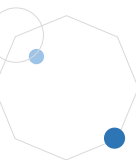
Courtesy of boca first.org.



Start planning for reality.
This is here and its not going away.



Start planning for reality.
This is here and its not going away.



What does success look like?



Measuring Success



Decrease in accidents (Vision Zero, SS4A)



Workshop attendance (Education sessions)



Online and campaign engagement (Marketing)



New policies, planning, and trails all over (Policy)

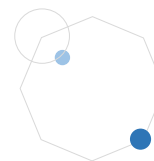




Summary

All cities must consider new types of vehicles in traffic and trail design and safety

- E-bikes (and their new ‘cousins’ like e-scooters and the like) present new modes of transportation to residents, but also present new challenges to municipalities where they are being used in increasing numbers.
- Safety concerns for these new e-vehicles has already increased substantially and will continue to do so until new regulations are put in place as well as new traffic design solutions.
- The wide-spread adoption of these vehicles necessitates immediate attention to the foregoing concerns and challenges and a **multi-prong strategy to keep ‘everyone’ safe.**



When asked to do a presentation on an E-bike program in 5 minutes, what do you do?

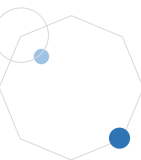
- **Ask Chat GPT!**

“A Community-Focused Safety Initiative
Presented by: [Your Organization Name]
Date: [Insert Date]...

Program Goals...

Educate all riders on safe e-bike practices
Partner with local stakeholders
Improve local e-bike policies and infrastructure
Promote helmet usage and rule compliance...

“Partnerships ... Police Department
Local Schools & PTAs
Bike shops (safety gear discounts)
City Departments (Transportation & Planning)
Non-profits (Safe Streets, Vision Zero, etc.)



When asked to do a presentation on an E-bike program, what do you do?

- **Ask Chat GPT!**

The future is here.
It includes e bikes and AI

...better get used to it,
or it will pass us by



Thank you.

Marc Wigder – marc@greenhouseoffices.net 561-759-8401

Your Logo or Name Here

35

