

TA Community Advisory Committee Meeting of February 4, 2025

Correspondence as of January 31, 2025

Subject

1. Re: Following up from John's Member comment last meeting

Re: Following up from John's Member comment last meeting

From John Fox <jd_fox@att.net>

Date Sun 1/26/2025 10:32 AM

To cacsecretary [@smcta.com] <cacsecretary@smcta.com>

Cc Peter Skinner < Skinner P@samtrans.com>

1 attachment (10 MB)

CPSC-2024-0008-0157_attachment_1.pdf;

You don't often get email from jd_fox@att.net. Learn why this is important

ATTENTION: This email came from an extermal source plant open attachments or click on links from

Lauryn and Peter

Thanks for getting my message into the CAC correspondence. Somehow this last part of my note, which I sent as a pdf file, didn't make it in. If easier you can post this link instead

This comment to the CPSC is lengthy but makes excellent points https://www.regulations.gov/comment/CPSC-2024-0008-0157

Thanks, John

On Jan 24, 2025, at 12:04 PM, John Fox <jd_fox@att.net> wrote:



Electric Bicycles ANPR CPSC-2024-0008

May 12, 2024

COMMENTS BY E-BIKE ACCESS

E-Bike Access is a non-profit based in Marin County, California, the home of mountain biking. We are dedicated to the safe and responsible riding of legal pedal-assist electric bicycles. We advocate that low-speed pedal-assist e-bikes should be given equal access with other bicycles. We oppose the throttle electric products that are being falsely marketed as e-bikes. They are responsible for the alarming, disproportionately high accident rate for 10-15 year old riders. They threaten public acceptance of legitimate e-bikes. Because they exceed this Commission's definition of "low-speed bicycles," they should be treated as "hazardous products."

Executive Summary

We start with an overview and then respond to several specific questions in the ANPR. Our main points are:

- **Pedal-assist** e-bikes should be encouraged. The more people who ride these bicycles, the fewer people driving in cars.
- Throttle electric products masquerading as e-bikes, on the other hand, are dangerous and should not be treated as bicycles. The industry has exploited the difficulties of enforcing the motor size and speed capability limits separating e-bikes from non-e-bikes. Nearly every throttle product being sold as a class 2 e-bike today has a top motor-assisted speed above the 20 mph limit. As the CEO of Super73, the most popular throttle device in Marin County, puts it: they are "fly[ing] under the radar" of enforcement and regulation.

- Even the brands that say on their websites that their top speed is 20 mph admit if you ask their customer support that their top throttle speed that it is at least 28 mph. Many provide an "unlimited" or higher mode with top speeds in the range of 30-35 mph or higher.
- Most throttle electric devices on the market today are not designed for pedaling even though they have pedals. As one brand's website admits, it is "basically an electric moped with pedals." Their high torque means the rider can comfortably cruise at top speed . . . without any need for pedaling." https://www.addmotor.com/collections/electric-bike. Their marketing pitch is: "It's like riding an electric motorcycle."

Subpoenas: As an initial matter, this Commission should ascertain exactly what it is dealing with. It should verify, from the horses' mouths, and announce publicly which electric motor throttle products exceed the definition of "low-speed bicycles" (as well as exceed the class 2 throttle e-bike standard adopted by most states).

The spreadsheet attached in the Appendix lists the electric motor two-wheeled products found at Marin County schools in April/May 2024, with information on their motor sizes and top throttle speeds according to their website, customer support emails and other reliable reviews. We have found that manufacturers vary in sophistication and caginess in disclosing this information, depending not so much on the specifics of their products as whether they are wearing their legal or marketing hats. To give the impression of complying with the law, some tend to understate the size and the speed capability of their motors. For marketing purposes, however, they boast about how fast their products can travel with no pedaling required.

Super73 is a prime example. To counteract our recent efforts to educate the public that Super73s are mislabeled, Super73 responded that its products do not go faster than the class 3 limit of 28 mph (as if a product with a throttle could qualify as a class 3 e-bike regardless of speed). (https://www.marinij.com/2024/04/30/marin-grand-jury-urges-stronger-e-bike-restrictions-for-youths/) On its website, however, Super73 adds: "But that's not all — because Super73's Multi-Class Ride Modes also allow you to unlock Off-Road Mode and accelerate beyond the 28 mph on-road limit." https://super73.com/blogs/guides/pedal-assist-vs-throttle. "Beyond 28 mph" is apparently its way of saying 30-35 mph, which is the top speed for Super73s reported by knowledgeable sources.

Super73 is not alone in its dissembling. As detailed below (pp.), another popular brand, Aventon, says one thing on its website. But its unwitting customer support staff owns up to the faster truth, as do its online advertising videos.

To obtain the unvarnished facts, the Commission should exercise the full scope of its subpoena power and compel all manufacturers and the major retailers selling what they claim to be "low-speed bicycles" or "class 2 e-bikes" to provide documents and, if within the Commission's authority, sworn testimony as to the motor size and speed capability of their products. The manufacturers should also be required to explain why, in face of the specifications that motors must be "less" than 750 watts and the top speed be "less" than 20 mph, they chose to sell motors with 750 watts and speed capability of at least 20 mph. The extra watt and extra mile per hour, if that's all it were, would seem to be *de minimus*. But it is curious.

Solutions

The most effective way to deal with this flouting of the law and the enforcement difficulties described below is to limit the definition of low-speed e-bikes to those with pedal-assist only and to treat vehicles with throttles as the motorcycles they are.

To the extent the information shows that most of these products are "higher speed e-bikes" — falling between a "low-speed electric bicycle"(15 U.S.C. 2085(b)) and a motor vehicle (49 U.S.C. 30102(a)(7)) — performance and labeling product standards are warranted. The Commission should determine that these products are hazardous, declare them to be banned hazardous substances, and prohibit the use of throttles.

News releases and other informational materials warning consumers about the safety hazards associated with these products will be particularly useful. They will give guidance to States reluctant on their own to do the necessary research and determine which brands comply and which one do not.

LEGAL FRAMEWORK

Under the model legislation proposed by the bicycle manufacturing industry and adopted by California and most other states, three classes of bicycles with electric motors (or "e-bikes") are considered bicycles rather than motor vehicles. As bicycles, they are exempt from licensing, registration and other requirements that apply to motorcycles or other motor vehicles.

To qualify as an e-bike, its motor must be smaller than 750 watts and cannot be capable of providing assistance above a specified speed. The actual speed at which the e-bike is being ridden does not matter; it's the **capability** of the motor that matters. For Class 1 and Class 2 e-bikes, the capability limit is 20 mph; for Class 3 e-bikes, it is 28 mph.

Class 1 and Class 3 (the "pedal-assist" classes) are for bicycles that require pedaling to engage the motor. Sandwiched between those classes is Class 2, which is for bicycles with throttles (and optional pedaling).

So if a device has a throttle, it is an e-bike only if its motor cannot be "capable of providing assistance when the bicycle reaches the speed of 20 miles per hour." Cal. Vehicle Code 312.5(a)(2). For the "pedal-assist only" classes, the motor must stop at 20 mph for Class 1, and 28 mph for Class 3.

This chart summarizes the requirements.

Class	Туре	Motor Size	Motor Capability	Minimum Age
Class 1	Pedal-assist	Less than 750 watts	20 mph	None
Class 2	Throttle, with or without pedal-assist	Less than 750 watts	20 mph	None
Class 3	Pedal-assist	Less than 750 watts	28 mph	16

If the motor exceeds these limits, it is considered a type of motor vehicle and subject to regulations relating to driver's licenses, DMV registration, financial responsibility and safety equipment (depending on the type of motor vehicle.).

By contrast, this Commission defines e-bikes in a way that appears to combine the first two classes and excludes the third. Section 38 defines a low-speed e-bike as a "two or three-wheeled vehicle with fully operable pedals and an electric motor of less than 750 watts (1h.p.), whose maximum speed on a paved level surface, **when powered solely by such a motor** while ridden by an operator who weighs 170 pounds, is less than 20 mph." 15 U.S.C. 2085(b), 16 CFR 1512.2(a)(2). (Emphasis added)

The highlighted portion implies that vehicles that can be powered solely by motor with no pedaling required may be considered e-bikes. Throttles are the typical method of engaging the motor other than pedaling.

The three-class system was built on the false premise that a pedal-assist e-bike capable of 28 mph is more dangerous and in need of more regulation that a throttle-operated motor device capable of only 20 mph. That is wrong. Throttle devices, even if limited to 20 mph, have much more torque, can accelerate much faster, and can sustain those speeds much longer than when pedaling is required. That makes them more hazardous even if limited to 20 mph. And in practice, the vast majority of throttle electric motor devices are not limited to 20 mph anyway.

The industry's three-class model legislation chose, however, to sandwich throttle ebikes (Class 2) in between the two classes of pedal-assist e-bikes — and to impose a minimum age requirement only on pedal-assist 28 mph e-bikes (Class 3). This approach led to widespread mistaken belief that speed was a more important determinate of hazard than the presence of a throttle. And we now know that manufacturers have combined both hazards: speeds of over 28 mph **plus** throttles.





Which brings us to Super73. To quote its website: "SUPER73® is an American lifestyle adventure brand based in Orange County, CA that develops products to help fuse motorcycle heritage with youth culture. Founded in 2016, SUPER73 has

quickly grown into one of the most recognizable electric vehicle brands in the world with a passionate customer base including A-list celebrities, professional athletes, and many more."

Super73 motors are actuated by a throttle. As Super73 explains, "You don't have to pedal to access your electric motor's power. All you need to do is add a little pressure to the throttle with your thumb, and you'll get as much or as little assistance as you like. . . . It's like riding an electric motorcycle."

Super73 boasts that its motors are capable of working in excess of the Class 2 limit of 20 mph. It admits that, by using the app provided by Super73, the rider can "unlock" the top speed of "28+ mph" (for all models except the new one for 4-8 year olds). According to reviews and surveys, the top motor-assisted speed is actually 30-35 mph. And that speed can be attained in 15 seconds or so, with no pedaling required, just the push of a throttle. No "modification" or "hacking" is required. It's similar to shifting gears on a manual transmission car, except easier. It's as effortless as changing volume on a smartphone.

As a further selling point, Super73 proclaims: "RIDE EASY: No license, registration, or insurance required." https://super73.com/products/super73-zx

To make that claim and to sell for use by children of all ages, Super73 affixes a Class 2 e-bike sticker to all its models, stating that its top speed is only 20 mph.

Super73's representation that its devices are Class 2 e-bikes is false. As illustrated below, a growing number of knowledgeable experts have now recognized that Super73s are not legal e-bikes.

In an effort to justify its mislabeling, Super73 contrived the counter-textual, counter-common sense argument that size and speed capability should be measured in the slowest gear, with children to be blamed if they used the built-in display or app to shift gears.

As noted, State law looks to the size and capability of the motor, not to the mode or actual speed of the vehicle. If the motor is **capable** of providing assistance above 20 mph, it is not a Class 2 e-bike, regardless how fast the vehicle goes on any particular ride—it is a motorcycle.

The same is true under this Commission's standard. The requirement is that the "**maximum** speed on a paved level surface, when powered solely by such a motor

while ridden by an operator who weighs 170 pounds, is less than 20 mph." It makes no sense to measure the maximum speed in the slowest gear.

Super73's position is akin to arguing that shipping a five-speed manual transmission car in first gear complies with a law allowing children to drive cars with motors not capable of exceeding 10 mph. That argument ignores the built-in capability of shifting into gears with higher speeds — just like the throttle devices at issue. This is not "hacking" or unauthorized "modification." It's simply using the display or app provided by the manufacturer to go faster than a class 2 e-bike or "low-speed" bicycle is allowed.

Super73's explanation that "industry leaders" are doing the same thing is no defense (as if it is not the industry leader in this regard). It is an indictment of others in the industry.

This is not the only brand to misrepresent its throttle devices as Class 2 e-bikes. **Ariel Rider** is another prominent brand. As shown by a marketing chart on its website, its top motor-assisted speed is "38+ mph" compared to Super73's mere 34 mph. As a competitor, Ariel Rider has no incentive to overstate Super73's top speed.





Compare	ARIEL RIDER X-CLASS	SUPER73 S2
Motor	1000W (Sustained) (More power for hills)	750W (Sustained) (Struggles with steep hills)
Battery	52 Volt 20ah Capacity: 1040Wh LG Cells (More range, acceleration, speed)	48 Volt 20ah Capacity: 960Wh
Top Speed	38+ MPH on throttle*	34 MPH on throttle*

Another popular brand of so-called class 2 e-bikes in Marin County is **Aventon**. Its website claims that the top speed is only 20 mph. However, its customer support team readily admits that the top speed of its popular model Aventure is 28 mph using a throttle.



robert mittelstaedt

May 6, 2024, 06:56 PDT

Does Aventure have a class label? What is class? What is top speed with throttle?



Sean L (Aventon)

May 8, 2024, 08:14 PDT

Hello Robert

The Aventure should be a class 2 and top speed is 28mph

Sincerely

-Sean

--

Aventon Support

Aventon admits further that the same is true of all but two of its models, and that the rider simply pairs the vehicle with Aventon's app on a smart phone and changes the top speed.



robert mittelstaedt

May 10, 2024, 12:11 PDT

Thanks for this information. Two other questions if I might:

What setting do I use to go 28 mph with the throttle?

And does it work the same way for other Aventon ebikes with throttles?

Thanks.



Sean L (Aventon)

May 10, 2024, 13:03 PDT

Hello There

The bike would need to be paired to a phone to change max speed.

Yes, I believe the only bikes that do not reach that speed are the Sinch and Soltera.

-Sean

Aventon Support

Even that top speed is an understatement. This video shows that the top speed using Aventon's app is 51kph/31mph.



Appendix A provides examples of additional brands with advertised top motor-assisted speeds above the legal limit for throttle e-bikes. **Appendix B** is a spreadsheet with information about 57 brands found at Marin schools.

SUPER73s AND OTHER THROTTLE DEVICES WITH TOP MOTOR-ASSISTED SPEEDS ABOVE 20 MPH ARE NOT E-BIKES

Last year, Super73's CEO explained his view of the difference between gasoline motor "dirt bikes" of old and the electric ones like Super73. He said that the electric ones are smaller and quieter, and people were not clear on what they were. As a result, people who ride them are able to "fly under the radar." But, he continued, "those days are coming to an end, for sure" as "police departments are getting wise" in Southern California because of some "high profile accidents." https://www.dealernewstoday.com/podcast-legrand-crewse/. (starting at 17:55).

That awareness has now spread to Marin County and the California Legislature in Sacramento.

Marin Police Chiefs

On April 17, Chief Michael Norton of the Central Marin Police Department became the first local police chief to publicly call out Super73s as illegal. Before then, several police departments in Marin County had advised the public of the difference between legitimate e-bikes and e-motorcycles. But none had identified specific brands as being mislabeled as e-bikes.

Chief Norton pulled no punches in his statement to the board of trustees of the Tam Union High School District, as these excerpts from this videotaped presentation make clear:

"So there are certain bikes out there being sold to customers and marketed as ebikes, when in fact they are, legally, motorized bicycles or mopeds.

"And a lot of these bikes are being marketed as class two e-bikes, when in fact they're legally not, and they're mis-stickered, and they are essentially motorized bicycles or mopeds.

"The problem is on two fronts, and I'll use one brand specifically, because I'm gonna use this brand, I'm not picking on it, but I bring it up **because almost half**

the bikes we're seeing in schools that are e-bikes are this brand, and that's the Super 73 model R and S.

"Those bikes, when the parents bought them, have a sticker on it that is required by the state, by manufacturers to put on designating, if they are e-bikes, what class are they. And it says 750 watts, class 2.

"But unfortunately, those bikes, the R and S models of Super 73, which are basically most of the models we see, they're not e-bikes legally, because any motor that can output more than 750 watts is outside of that classification.

"In addition, they're not e-bikes, because they also have the ability to use the throttle to go in excess of 20 miles an hour. And a true e-bike class two, the throttle will shut off at 20 miles an hour."

Chief Norton repeated that these devices were marketed "a little deceivingly. . . I feel bad for the parents who spent all this money. But it's just something we're going to have to educate them on, that **their kids aren't going to be able to ride those anymore**." He added that he was asking the District Attorney's Office to review for "consumer fraud."

On May 3, Chief Norton along with his counterparts from three other municipalities in Marin County issued a letter to school parents. He emphasized that any throttle device with a motor larger than 750 watts or that can go faster than 20 mph is not a legal e-bike and requires, at a minimum, a driver's license and DMV registration. As an example, he referred to "one popular brand", identified earlier as Super73, and added that there were many others mislabeled as e-bikes. After a two week grace period, enforcement will follow. The police chiefs are working with schools to implement a registration process in the fall to "ensure that all of our students are riding legal and safe e-bikes."

Sports Basement

Sports Basement is a major sporting goods retailer in California with 12 stores across the state. In February 2024, it agreed to discontinue selling Super73 based on the CEO's conclusion that they were illegal. To quote the Chief Operating Officer's email dated February15, 2024:

"On Feb 5th, upon reviewing your 2 emails, we had an email discussion with our CEO Eric Prosnitz and we agreed to discontinue selling Super 73 brand. Our CEO in particular agreed with your arguments that these are not bikes."

With a less firm commitment, Best Buy reports that it is "moving away" from brands with top speeds in excess of the legal limits. Other retailers report that they are seriously considering doing the same. A notable exception is Last Mile Marin which, just as this issue was heating up, opened its doors to exploit the youth market demand for these illegal devices.

Safe Routes To School (SR2S) and Marin County Bicycle Coalition (MCBC)

These organizations hold e-bike safety classes in conjunction with the California Highway Patrol and Marin County police departments and courts. They no longer allow Super73s and other illegal throttle devices to participate in their safety training.

This is SR2S announcement:

"IMPORTANT E-BIKE LAWS VETTED BY INDUSTRY LAWYERS (March 12, 2024)

"Any throttle motor that can be switched to go speeds beyond 20 mph on motor power alone, is considered "out of class" – it is not an e-bike, it is a motor vehicle and requires a student to be at least 16 years old with a driver's license and registration. (Same as e-scooters)

"Under the guidance of our insurers and legal counsel, there are many brands (e.g. Super73, Surron) that fall into the "out-of-class" category that can no longer be accepted in classes."

https://www.saferoutestoschools.org/

And this is MCBC's announcement:

"UPDATE March 1, 2024: MCBC is unable to accept any device with the capability of operating 'out-of-class'. These devices are not considered an e-bike, and fall into the category of a motor vehicle. Any product that is capable of reaching speeds greater than 20 mph on motor assistance alone will not be accepted in class. The Super73's are incredibly common in Marin, and

unfortunately most of their models fall into the 'out-of-class' category that we can no longer accept in our classes."

https://marinbike.org/our-programs/road-advocacy/e-bike-smart-marin/

MCBC publishes an on-line e-bike buyer's guide with recommendations on which devices being sold as class 2 e-bikes are and are not legal. As of April 30, the buyer's guide stated:

A FEW BRANDS WE DON'T LOVE*

- Super73
- Sur-Ron
- Ride1Up
- Samebike
- Macfox
- Juiced Bikes

*Some or all models these brands sell are *not e-bikes* under the vehicle code (due to overpowered motors), and are thus illegal on Marin's trails and paths.

Marin County Civil Grand Jury

On April 26, 2024, the Marin County Civil Grand Jury issued its report entitled "With Power Comes Responsibility, Youths Under Age 16 Operating Class 2 E-Bikes: A Safety Risk." The Report focuses on throttle electric two-wheelers that the manufacturers sell as "class 2 e-bikes" without a minimum age requirement. Unfortunately, "some young riders are operating e-bikes that have multiple power modes . . . that make them illegal." (Report, p. 1). It refers to the Super73 brand, which is "incredibly common" in Marin. It has advertised top speeds almost 50% higher than the class 2 limit of 20 mph. (Report, p. 5, fn. 25, and p. 7 (citing MCBC statement)).

The throttle feature on all these devices allows the rider to "accelerate quickly with no pedaling at all" (Report, p. 2) and to sustain top speed without pedaling. This makes them especially popular with children who are too young for a driver's license.

Based on this age group's "shocking" accident rate, the Report finds that children under 16 riding these devices "pose a significant risk" to themselves and others.

The Report (p. 9) outlines the challenges faced by law enforcement officers in enforcing the current bicycle/motorcycle laws. "Chasing down kids on e-bikes can be dangerous in itself.". "Determining the age of an operator, the speed being traveled, and the class of e-bike while . . . in motion" are difficult. And we don't want "young riders' first interaction with law enforcement [to] be an e-bike stop."

The Report recommends that, if AB 1778 (authorizing a pilot program in Marin) passes, the Board of Supervisors and each municipality in Marin should require that riders of class 2 e-bikes must be at least 16 and that they and passengers must wear helmets. Nothing is offered, however, on how any new law would be enforced.

Bicycle Industry

People4Bikes, the industry trade association which sponsored the three-class e-bike framework adopted by California and most other states, also acknowledges that Super 73s and its imitators, typically Chinese imports, are not legal e-bikes.

To quote PeopleForBike's memo to industry: "those with motors in excess of 750 watts and/or which can greatly exceed 20 mph on motor power alone . . .[are] not electric bicycles. These products are often advertised misleadingly and sold to the public as "e-bikes" and represent a threat . . "People4Bikes repeated the same point: "numerous companies have entered the e-mobility space with a variety of products that are not 'electric bicycles' due to power or speed, but look like electric bicycles and are marketed as such. "https://www.cpsc.gov/s3fs-public/PeopleForBikes-on-Lithium-Battery-Safety-for-ebikes-Meeting-Log.pdf?

VersionId=RxMV6q8YsbKyRuADpkRRL85CXMoZYMPL

As the Bicycle Retailer magazine editorial put it: "what consumers are buying online or at fly-by-night resellers are noncompliant motorized bicycles or full-on motor-driven cycles capable of 25 to 35-plus mph and all throttle controlled. Most of these come from Chinese distributors who offer white label bikes." https://www.bicycleretailer.com/opinion-analysis/2022/05/03/guest-editorial-out-category-electric-vehicles-only-acceptable-between.

California Legislature, Sacramento

The California Senate Transportation Committee legislative analyst also recently recognized that devices such as Super73s are illegal. In analyzing SB 1271 which would have legalized "multi-class" or "switchable bikes" if limited to the three existing classes, he wrote:

"Switchable bikes. Some manufacturers have been developing bicycles that are able to "switch" between modes, moving from a slower throttle mode (class 2), to a faster pedal assist mode (class 3). Such devices, technically, are not e-bikes.

They are not class 3 e-bikes because their motor is capable of providing assistance even when the bicycle is not pedaling. They are not class 2 e-bikes because the motor is capable of providing assistance at speeds above 20 mph. As such they do not actually meet the legal definition of an e-bike and instead are motorized bicycles." https://digitaldemocracy.calmatters.org/bills/ca 202320240sb1271?slug=CA 202320240SB1271.

Census of Two-Wheel Products at Marin County Middle and High Schools

In partnership with Safe Routes 2 School, we counted the bicycles, e-bikes and motorcycles at nine middle schools (up to 8th grade) and five high schools (9th-12th grades) in Marin County. See Appx. C.

For the middle schools, 24% of the products had motors, almost all of them the throttle variety. Of those, 81 (or 43%) were the Super73 brand. And a conservatively estimated 45 other products (or 24%) were brands that also did not qualify as class 2 e-bikes. The total of 126 non-compliant products constituted of 67% of the electric motor products.

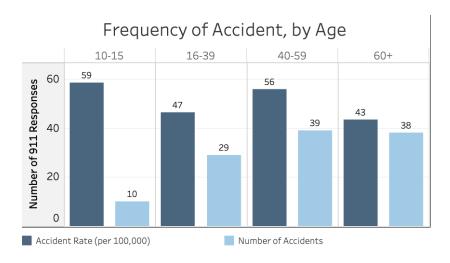
For the high schools, the percentage of electric to conventional bicycles was higher than the middle schools — 49% for the high schools compared to 24% for the middle schools. The number and percentage of Super73s was lower (24 and 16%), reflecting that children under 16 are the target audience for Super73s.

* * * * * * *

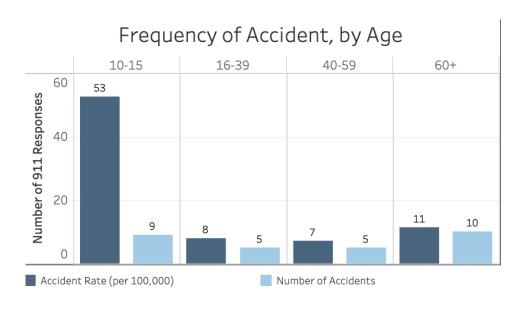
In short, the consensus is that, despite being labeled and marketed as e-bikes, Super73 and other electric motor/throttle products exceed the limits on motor size and speed capability for e-bikes under most state laws and this Commission's standard for low-speed bicycles.

HEALTH AND SAFETY CONSEQUENCES

Unfortunately, this is not just a technical violation with no real-life consequences. Since October 2023, the Marin County Health and Human Services department has tracked 911 calls resulting in ambulance trips involving bicycle accidents, stratified by conventional or e-bike and age of the victim. https://www.marinhhs.org/ bicycle-safety. For **conventional bicycles**, the accident rate (in dark blue) does not vary much by age group.



For electric products, the accident rate for 10-15 year olds is more than five to seven times higher than other age groups.



This disparity is attributable to the type of product the youngest group is riding: Super73s and other over-powered, mislabeled throttle devices.

PROPOSED SOLUTIONS

As the Marin Civil Grand Jury reported, it has proven difficult to enforce existing laws against the illegal throttle/electric motor products. The motorcycle industry was given 748 watts and 19 miles per hours; they took not just an extra watt and an extra mile but went overboard in competing on motor size and speed.

In hindsight, it was plainly a mistake to include throttle devices among the electric motor products to be treated as bicycles. This mistake produced the adverse public health and safety consequences outlined above.

The only feasible solution at this point is to limit e-bikes to those that require pedaling and do not have throttles — and to treat throttle devices as motorcycles or some other category of motor vehicles.

We are not experts on this Commission's regulatory and enforcement tools, so we cannot offer definitive views on how to accomplish this. But from what we can tell, the following approaches may be available.

A) The Commission could determine that they are "banned hazardous substances" under 15 U.S.C. 1261(f)(1)(D)(D), 1261(q)(1)(A), (q)(1) and 1262. They are intended for children, as illustrated by their prevalence in Marin middle schools. Perhaps hoping to head off action to declare them a "banned hazardous substance," Super73 recently added this "Age Requirement" to its website:

Age Requirements:

Riders must be at least 16 years old to operate our electric bikes. Helmets are required by law. [F]or riders under 16 years old, adult supervision is required.

This can be read as an implicit acknowledgement that they are not class 2 e-bikes. Under state law, no minimum age is required for those e-bikes. In any event, Super73's requirement is equivocal — if riders must be 16, why do they refer to riding under 16 needing adult supervision? Most important, a belated age

disclaimer cannot negate the reality that children have been an intended market for this product. And there's no indication that Super73 does anything at point-of-sale to enforce this "requirement."

- **B)** The Commission also has authority to ban a consumer product that "presents an unreasonable risk of injury" where "no feasible consumer product safety standard . . . would adequately protect the public from the unreasonable risk of injury associated with such product." 15 U.S.C. sections 2056-2057. We have seen the difficulty of enforcing existing law against the mislabeled class 2 e-bikes. No reason exists to conclude that a product safety standard, whether in terms of performance or warning/instruction, would be any more enforceable.
- C) The Commission can establish product safety standards in terms of performance and warnings/instructions. A throttle/electric motor device appears to be an article produced for sale to a consumer for use in and around a school and in recreation, within the scope of 15 U.S.C. section 2052 (5). Although the definition of "motor vehicle" in 49 U.S.C. section 30102(a)(6) and (7) is broad and vague, one does not normally think of this type of product as a motor vehicle. And they are not "primarily for use on public streets, roads, **and** highways."

But we've seen how the industry has circumvented performance standards already. Imposing additional or repetitive motor size and speed capability standards would be a fools' errand.

Warning consumers that these products go faster than the 20 mph limit for class 2 e-bikes and cannot be ridden by children under 16 is an approach worth considering. Better yet would be a more accurate warning that they also need to comply with state laws on registration, insurance and safety equipment would be even better.

RESPONSES TO SPECIFIC QUESTIONS IN THE APNR

With that background, we provide the following brief responses to selected questions in the APNR.

1. Our recommended alternative for addressing the identified risk is to limit the e-bike classification to bicycles that require pedaling and do not have a throttle. At the same time, these products should be banned because they present "an unreasonable risk of injury" and "no feasible consumer product safety standard . . .

would adequately protect the public from the unreasonable risk of injury associated with such product." 15 U.S.C. sections 2056-2057. Industry has already circumvented the basic performance standards, and enforcement has proven difficult. At a minimum, a warning should be required stating that these products do not qualify as e-bikes and must comply with state laws on driver's license, registration, insurance and safety equipment.

- 19. The question whether consumers use "off-road e-bikes, capable of speeds over 28 mph, on road" unintentionally buys into the notion that a device capable of speeds over 28 mph can be an "e-bike." Under the existing three-class framework (and this Commission's standard), any throttle device with an electric motor capable of working above 20 is not an "e-bike." If the question is whether consumers ride motorcycles mislabeled as Class 2 e-bikes on the road, the answer is yes. Therein lies the problem.
- 32-33. The requirements for class 1 and class 3 pedal-assist e-bikes seem to work well. Expert advice is needed on whether manufacturers can effectively make a pedal-assist e-bike function like a throttle device, by making it so easy to pedal that the effort required is no more than pushing a thumb on a throttle. In other words, it's not just the top motor-assisted speed but the acceleration and ease of attaining top speed that matter.
- 35. The problem with "laxer" requirements for "off-road" e-bikes is that it is difficult to prevent them from being ridden "on-road." So if you give the industry another "inch" it will assuredly take another "mile" absent an effective enforcement tool that no one has found to date.
- 41. "E-bikes outside of the classification system" is a misnomer. The industry uses the euphemism "out-of-class" or "out-of-category" products to avoid calling their members' products what they are: illegal. In our experience in Marin County, most of the devices labeled "class 2 e-bike" exceed the motor size and speed capabilities for e-bikes. The temptation to do so has proved irresistible. And for the rare manufacturer that does not succumb, after-market devices make it easy to override any speed limiters.
- 46. Again, it is a misnomer to refer to "e-bikes with higher top speeds (over 28 mph)." Marketing such devices as intended for "off-road use" does not make them e-bikes. Beyond that terminology, electric throttle products with top speeds above 20 mph (the limit for throttle e-bikes) are clearly being used on public roads. That

is how they are marketed, and ridden. In our survey of 15 local schools, many if most of the throttle devices had "off-road" capabilities above 28 mph. That's precisely why they are so popular — and why the electric product accident rate in Marin County for children aged 10-15 is more than five times higher than for any other age group. It is past time to stop the practice of treating any throttle products as a bicycle.

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Respectfully submitted, /s/
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/s/ Robert Mittelstaedt