

Memorandum: The "Whatts" Regulatory Trap

I. Executive Summary

The American e-bike landscape is currently being reshaped by a legislative framework—championed by PeopleForBikes (PFB) and heavily influenced by major corporate stakeholders—that relies on a fundamental, unresolved technical ambiguity we define as the "Whatts" problem. By pushing for legislation at the state level that created a patchwork of inconsistent definitions, this coalition has fostered a regulatory environment that threatens to render millions of existing e-bikes technically illegal, potentially forcing "mass consumer abandonment" or a massive, forced upgrade cycle. The said they were *solving* a patchwork, and they said they would bring *clarity* to the matter. Instead, they have created great confusion, and currently, they are poised to deliver two more pieces of legislation, model e-moto legislation in the states, in conjunction with the Safe Speeds Act in Congress. If PeopleForBikes gets their way, the average e-bike consumer might find themselves in a nasty trap.

II. The "Whatts" Discrepancy: A Two-Faced Strategy

The legislative advocacy led by PFB—which counts automotive-industry giants like the Bosch Group as key stakeholders—utilizes a two-faced strategy to manage e-bike policy. While their legislative face aggressively lobbied for the adoption of "less than 750 watts" language in all fifty states, and succeeded in having "less than" adopted in 28 states, their public face markets and assures compliance of "Class 3 compliant, 750-watt" labeled e-bikes as a gold standard of legitimacy. Please note that PFB's State-by-State-Guide to E-Bike Laws utterly fails to note the distinctions between exactly how many watts is allowed, as described below.

<https://www.peopleforbikes.org/electric-bikes/state-laws>

Notably, PFB's state-by-state guide to e-bike laws is completely silent on this discrepancy; it fails to alert the consumer that in these 28 states, their "750-watt" bike is technically non-compliant. This omission is consistent: PFB hides the "Whatts" problem from the public at every level, save for the very model language that creates the trap, even in their fifty state guide.

See: [E-Bikes vs. E-motos: Legal Distinctions, Legislative Strategies, and Regulatory Actions](#)

@ 56:46 "Chris, this one's for you. And it asks, "Does the Safe Speeds Act address the 3 class system, specifically class three?"

Chris Bell, Director of Federal Policy, PeopleForBikes: "Uh, yes, the Safe Speeds Act is it does direct CPSC to create classifications, classification standards. It does not say which standards. Um, but the CPSC is well aware of the 3 class system. We've engaged with them on it before. Um, and it's also in place in many states around the country. Um, so we expect that that would be taken into account." It is clear that PFB is asking the federal government to adopt their 3 class model language, which is "less than 750W."

III. The State-by-State Regulatory Landscape

The following table illustrates the fractured legal status of e-bikes across the 50 states, resulting from PFB's state-level lobbying efforts. The "Whats" problem is exacerbated by how these states define their power ceilings:

Grouping	Description	States
Group 1: "Less Than" (Blind)	Adopted PFB language verbatim; 750W sticker is prima facie non-compliant.	AL, AZ, AR, CT, FL, ID, IL, IA, KS, LA, ME, MD, MS, MO, NH, NJ, NM, NY, ND, OH, SD, TN, TX, VT, VA, WV, WI, WY
Group 2: "No More Than"	Inclusive ceiling; 750W is generally acceptable.	CA, CO, DE, GA, HI, MA, MI, MN, NV, NC, OK, PA, SC, UT, WA
Group 3: "Averaging"	Vague power definitions; obscure "Whats" definition.	IN, NE
Group 4: Outliers	Rely on legacy/mechanical definitions; most compliant.	AK, KY, MT, OR, RI

The "Compliance" Outliers:

Group 4 states demonstrate a higher level of legislative awareness. By permitting motors up to 1,000 watts, these jurisdictions acknowledge the reality of electrical-to-mechanical conversion. Since a motor requires roughly 900–1,000 watts of electrical input to achieve 750 mechanical watts (1 h.p.) of output at the shaft after efficiency losses, these states are the only ones providing a realistic ceiling that accounts for the laws of physics. PFB's state-by-state guides fail to provide this critical context, leaving the consumer to guess whether their bike is legally "compliant" or an "illegal" e-moto.

IV. Meet Matt Moore, PFB Attorney

In-house counsel Matt Moore serves as part of the public face of PFB's "clarification" efforts. In a 2026 video, "E-Bikes vs. E-Motos: Legal Distinctions, Legislative Strategies, and Regulatory Actions," (the same link as above) and only after receiving a question about the vagueness of having no hard standard, Mr. Moore addresses the "Whats" confusion at 51:00, stating:

"PeopleForBikes' position is that 750 watts means continuous rated power. Uh that's how motor power, useful motor power is is measured. Uh, the federal definition is silent on that."

This is a question received precisely because no-one in 45 states knows what type of watts are being referred to in their state laws, laws which PFB said would clarify things and did not bother noting in their State law guides.

Also note at 5:29 Mr. Moore makes clear that “no more than” 750 watts is the upper ceiling for a 3 class e-bike, making no mention that it is simply not true in 28 states and is not their model language.

Mr. Moore’s statements are both legally and technically specious:

- **Fabricated Federal Vagueness:** Federal law is not "silent" on this; it uses the 1-horsepower mechanical standard (~746 watts) to define the threshold. Instead, it is PFB model language that is vague.
- **Post-Hoc Definition:** PFB spent 12 years lobbying for state laws that did not define "Whatts," only to "take a position" after the fact. Mr. Moore also claims an e-bike is legally defined as having "no more than" 750 watts, conveniently ignoring the 28 states where they successfully lobbied for "less than."
- **Mechanical Ignorance:** "Useful power" at the shaft is measured in mechanical watts, not "continuous" electrical watts. By conflating the two, PFB obscures the fact that their model language does not actually align with the federal mechanical standard.

Engineering Terminolgy and Distorted Usage

“Watts” Term	Definition as Applied	Engineering Purpose of Term	Legal Impact	PFB Treatment	Cartel Treatment
Nominal or Continuous Electrical Power	Maximum indefinitely sustained thermal capacity of motor	Correct engineering of and installation of electrical power sources	Only indirectly relevant. Can be used to calculate mech. power	Lynchpin of false PFB legal definition. Not stated in vague PFB model law	Understated to comply with exceedingly stringent European standards
Peak (Surge) Electrical Power	Momentary surge of electrical power to overcome inertia	Same	None	Unknown	Redefine term; Deceive public to believe 'peak' means

“Watts” Term	Definition as Applied	Engineering Purpose of Term	Legal Impact	PFB Treatment	Cartel Treatment
					boosted sustained power so they don't notice the above cannot be true
Mechanical Power	Physical power output at the motor shaft, mechanical watts, or horsepower	Measure of physical power output; performance, the “useful power” Mr. Moore is enamored with	The Standard of Federal Law, 1 h.p.	Invisible to PFB who claims there is no federal guidance though plainly stated	Avoided entirely except indirectly by switch to terms of torque

V. The De Minimis Fallacy and the "Whatts" Orphan

The common defense is that the one-watt discrepancy is de minimis—too small for law enforcement to care about. Viewing model 3 class legislation alone, it doesn't seem like it could lead to widespread problems even in the 28 “less than” states, and it wouldn't at all, in 17 more states.

This is a mirage. In a “less than 750” state, only “less than 750” is an “e-bike”, while PFB pushes hard for states to pass more legislation that “more than 750” is an “e-moto”. What on earth is a precisely 750 watt bike if it is neither of those two? What is this “orphaned” 750 watt bike? An owner of a stickered “Class 3, 750W” bike is trapped in a legal “no-man's land” where they are no closer to “clarification” than they were 12 years previously, and, in fact, are further from it, and wondering if they've been left vulnerable to seizure.

This ambiguity is the first step toward the “e-moto” plan now being pushed and even adopted in states like Utah. By effectively criminalizing the more than 750-watt “e-moto” PFB creates a regulatory environment where consumers face a choice: a massive, forced upgrade cycle (if the Safe Speeds act passes and adopts the 3 class system as PFB hopes) to new, “compliant” bikes, or walking away in widespread disgust—a shift that conveniently clears the

market for the proprietary, networked, and expensive systems favored by automotive giants like Bosch who will have both cornered the market of the drastically reduced e-bike market and continue to sell large numbers of automotive parts as a result of not getting people out of their cars.

VI. Conclusion

The "Whats" problem is not an oversight—it is the cornerstone of a legislative strategy that prioritizes corporate control over consumer protection. By failing to clarify "Whats" in their state-by-state guides and offering incompetent legal interpretations, PFB ensures that consumers remain soothed and unaware of the legal trap awaiting them if PFB continues its unparalleled success. Whether PFB is merely misguided or acting as an instrument for larger automotive interests, the result is the same: the electric bicycle is being forcibly transformed into a "managed device," and the "Whats" discrepancy is a cudgel being used to enforce that transition.

Appendix: State Statute Reference List

- **Alabama:** Ala. Code § 32-1-1.1
- **Arizona:** Ariz. Rev. Stat. § 28-101
- **Arkansas:** Ark. Code § 27-51-1702
- **California:** Cal. Veh. Code § 312.5
- **Colorado:** Colo. Rev. Stat. § 42-1-102
- **Connecticut:** Conn. Gen. Stat. § 14-1
- **Delaware:** Del. Code tit. 21, § 101
- **Florida:** Fla. Stat. § 316.003
- **Georgia:** Ga. Code Ann. § 40-1-1
- **Hawaii:** § 291C-1
- **Idaho:** Idaho Code § 49-106
- **Illinois:** 625 ILCS 5/1-140.10
- **Indiana:** Ind. Code § 9-13-2-49.3
- **Iowa:** Iowa Code § 321.1
- **Kansas:** K.S.A. § 8-1489
- **Louisiana:** La. Rev. Stat. § 32:1
- **Maine:** 29-A M.R.S. § 101(22-B)
- **Maryland:** Md. Code, Transp. § 11-117.1

- **Massachusetts:** Mass. Gen. Laws ch. 90, § 1
- **Michigan:** Mich. Comp. Laws § 257.13e
- **Minnesota:** Minn. Stat. § 169.011
- **Mississippi:** Miss. Code Ann. § 63-3-103
- **Missouri:** Mo. Rev. Stat. § 301.010
- **Montana:** Mont. Code Ann. § 61-8-102
- **Nebraska:** Neb. Rev. Stat. § 60-618.02
- **Nevada:** Nev. Rev. Stat. § 484B.017
- **New Hampshire:** N.H. Rev. Stat. § 259:27-a
- **New Jersey:** N.J. Stat. § 39:1-1
- **New Mexico:** N.M. Stat. Ann. § 66-1-4.11
- **New York:** N.Y. Veh. & Traf. Law § 102-c
- **North Carolina:** N.C. Gen. Stat. § 20-4.01
- **North Dakota:** N.D. Cent. Code § 39-01-01
- **Ohio:** Ohio Rev. Code § 4511.01
- **Oklahoma:** 47 O.S. § 1-104
- **Oregon:** Or. Rev. Stat. § 801.258
- **Pennsylvania:** 75 Pa. C.S. § 102
- **Rhode Island:** R.I. Gen. Laws § 31-1-3
- **South Carolina:** S.C. Code Ann. § 56-1-10
- **South Dakota:** S.D. Codified Laws § 32-20B-9
- **Tennessee:** Tenn. Code Ann. § 55-8-301
- **Texas:** Tex. Transp. Code § 664.001
- **Utah:** Utah Code § 41-6a-102
- **Vermont:** 23 V.S.A. § 4
- **Virginia:** Va. Code § 46.2-100
- **Washington:** Wash. Rev. Code § 46.04.169
- **West Virginia:** W. Va. Code § 17C-1-70
- **Wisconsin:** Wis. Stat. § 340.01
- **Wyoming:** Wyo. Stat. Ann. § 31-1-101