

Charging Ahead: What Municipalities Can and Can't Do About E-Bikes



E-bike use is growing rapidly – and so are resident concerns. Here's how Wisconsin law distinguishes e-bikes from other vehicles, where municipalities have authority to regulate them, and where state law draws the line.

The number of electric bikes on Wisconsin streets has rapidly increased over the last few years and Wisconsin's municipalities are hearing about it. E-bike sales have climbed steadily since the pandemic, and this year's rise in gas prices has pushed them higher still. More e-bikes mean more riders of every age, skill level, and temperament, and many communities are feeling growing pains.

National studies show e-bike injuries climbing dramatically over the past five years.¹ SSM Health reported that patients discharged from Madison's St. Mary's Hospital with e-bike and scooter injuries rose more than 700% from 2014 to 2019. E-bike riders are not necessarily more likely to crash than riders of conventional bicycles, and on a per-mile basis some studies suggest crash rates may be lower.² But when e-bike crashes do happen, the resulting injuries are more severe on average.³

For these reasons and more, residents across the state have been asking their municipalities to do something about e-bikes. But regulating e-bikes is easier said than done. Municipalities can enforce existing state laws. But to do that, law enforcement needs to be able to tell whether something is an e-bike, a motor bicycle, a moped, or a motorcycle and know how state law regulates each of them. Municipalities can also add their own regulations to fill gaps left by state law, but they must be careful not to conflict with any state laws regulating the same conduct.

This article walks through how to identify these vehicles, how the state regulates each, and what municipalities can and cannot do to address the e-bike concerns their residents are raising.

What Is It? E-Bikes and the Vehicles They're Mistaken For

For an officer responding to complaints about a fast, silent two-wheeler, the first question that will need to be answered is what is it? From afar, it may be hard to see whether something is an e-bike, a motor bicycle, a moped, or a motorcycle. But these vehicles can all be distinguished by their top speed and motor.

Wisconsin adopted its e-bike framework in 2019 Wisconsin Act 34. Under that law, an "electric bicycle" is a bicycle

1. Namiri, et al., National e-bike injury trend study, <https://pubmed.ncbi.nlm.nih.gov/39902907/>.

2. A Fyhri 1 & T Bjørnskau, Per-distance crash rate comparison, <https://pmc.ncbi.nlm.nih.gov/articles/PMC12617241/>.

3. Ghanbari, et al., Injury severity comparison, <https://www.sciencedirect.com/science/article/pii/S2590198226002149>.