



SIERRA CLUB

MAINE CHAPTER

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To: Committee On Transportation
From: Nathan Davis, Ph.D., Sierra Club Maine
Date: April 16, 2023
Re: **Testimony in Support of L.D. 1551: An Act to Increase Bicycle Safety by Allowing Cyclists to Treat Stop Signs as Yield Signs and Red Lights as Stop Signs**

Senator Chipman, Representative Williams, and members of the Committee On Transportation, my name is Nathan Davis, and I write on behalf of Sierra Club Maine, representing over 22,000 supporters and members statewide. Founded in 1892, Sierra Club is one of our nation's oldest and largest environmental organizations. We work diligently to amplify the power of our 3.8 million members nation-wide as we work towards combating climate change and promoting a just and sustainable economy. To that end, we urge you to vote "ought to pass" on L.D 1551: An Act to Increase Bicycle Safety by Allowing Cyclists to Treat Stop Signs as Yield Signs and Red Lights as Stop Signs.

L.D. 1551 would bring the celebrated "Idaho stop" to Maine, so named because Idaho was the first state to adopt such a law, in 1982. According to a National Highway Traffic Safety Administration fact sheet from 2022, "Based upon the current research and data available, these laws showed added safety benefits for bicyclists in States where they were evaluated, and may positively affect the environment, traffic, and transportation."¹ A robust and balanced 2016 study from DePaul University (whose data and recommendations are mostly confined to Illinois but which I think can be usefully generalized) mostly endorses Idaho stops at four-way stops, though it expresses more caution about signaled intersections.² It also observes that "Permitting Idaho Stops at stop sign intersections would also help bikers feel more confident that enforcement efforts are being directed toward cyclists who pose legitimate safety risks, and may help to bolster confidence that the law enforcement community is more wisely allocating its limited resources."

All that said, if any of you are cyclists, you know that the Idaho stop is already standard practice in Maine and elsewhere. The DePaul study shows that "only about one cyclist in 25 [in Chicago] presently complies with the law to come to a complete stop," and I suspect that the ratio is similar here in Maine. The reasons are rooted in physics as well as safety: coming to a complete stop on a bicycle and then accelerating back to travel speed entails a significant expenditure of energy, as explained in an ACCESS magazine article from 2012:

"With only 100 watts' worth [of power] (compared to 100,000 watts generated by a 150-horsepower car engine), bicyclists must husband their power. Accelerating from stops is strenuous, particularly since most cyclists feel a compulsion to regain their former speed quickly.

¹<https://www.nhtsa.gov/sites/nhtsa.gov/files/2022-03/Bicyclist-Yield-As-Stop-Fact-Sheet-032422-v3-tag.pdf>

²<https://las.depaul.edu/centers-and-institutes/chaddick-institute-for-metropolitan-development/research-and-publications/Documents/PoliciesForPedaling-120816-FNL.pdf>

They also have to pedal hard to get the bike moving forward fast enough to avoid falling down while rapidly upshifting to get back up to speed.

For example, on a street with a stop sign every 300 feet, calculations predict that the average speed of a 150-pound rider putting out 100 watts of power will diminish by about forty percent. If the bicyclist wants to maintain her average speed of 12.5 mph while still coming to a complete stop at each sign, she has to increase her output power to almost 500 watts. This is well beyond the ability of all but the most fit cyclists.”³

If enacted, to address any potential safety concerns, we do recommend that MDOT, Maine Office of Tourism, and other appropriate bodies institute a campaign to educate drivers, cyclists, and pedestrians about this change in traffic law, for example in the context of driver education classes.

Please codify and institutionalize the Idaho stop, which is already standard practice, and which promotes safety and efficiency. We encourage you to vote “ought to pass” on L.D. 1551. Thank you for your time and consideration.

Sincerely,
Nathan Davis, Ph.D.
Sierra Club Maine
Legislative Team member

³<https://nacto.org/wp-content/uploads/2012/06/Fajans-J.-and-M.-Curry.-2001..pdf>