

STOP as YIELD -- traffic engineering principles / the 85th percentile rule

By Anders Swanson

The required changes (as per Idaho) follow well established traffic engineering principles whereby you use the infrastructure itself combined with observed behaviour to determine the signage which then is enforced. This is how streets are designed for cars. This makes enforcement more practical and fair.

The 85th percentile rule is commonly used to determine the posted speed limit on a given road. If 85 percent of the users of a system behave in a given way (in this case cyclists rolling through stop signs or not dismounting on a bridge) then the laws, signage and resulting enforcement should be changed to reflect this. If the infrastructure can't handle the behaviour, then it is an infrastructure problem, not a user problem. To continue the example, if 85% of the cars on a given road are breaking the speed limit, the solution is not to post police cruisers 24/7. The solution is to redesign the road in such a way that people do not feel comfortable traveling at high speed (narrow the roadway, more pedestrian crossings, more bikeslanes, furnishings like trees, light standards, etc).

This practice is already well enshrined in automobile design. The problem is that our transportation landscape had been designed for one user and one user only, and if we are to have a legal system guiding it all, it **MUST** protect the most vulnerable users first. It currently does not. They just need to take the same principles and apply them to the bicycle.

The engineering/legal community needs to begin to recognize that the mode share is subject to change, and the mode share can be changed by the design of the landscape. The 85th percentile rule must be applied to each user of the right of way separately. It also requires a bold recognition of the need to state a preference the modes that use the least land, do not pollute, and are cheap and accessible to everyone no matter their age or ability (walking and cycling).

But this change could use a catalyst: cyclists being ticketed.

An argument can be made that our basic rights are being infringed upon. The engineering principles are there; they are just not being applied equally. As applied now, they are benefiting automobiles at the expense of bicycles and pedestrians, and ultimately, benefiting automobiles at the expense of us all.