## NTSB calls for action to curb spike in bicycle fatalities

he National Transportation Safety Board is calling for a major policy overhaul to combat the rise in bicyclists killed in crashes with motor vehicles.

The NTSB sounded the alarm Nov. 5 after completing its first study of bicyclist safety since 1972. The board called for safer roadway designs, new standards for rider visibility, and measures to speed the rollout of crash avoidance systems capable of detecting bicyclists.

The agency also urged state governments to pass laws requiring bicyclists of all ages to wear helmets.

"If we do not improve roadway infrastructure for bicyclists, more preventable crashes will happen and more cyclists will die in those preventable crashes," NTSB Chairman Robert Sumwalt said in his opening address at the NTSB's November board meeting. "If we do not enhance bicyclist conspicuity, more bicyclists will die in preventable crashes. If we do not act to mitigate head injury for more bicyclists, additional bicyclists will die."

According to the National Highway Traffic Safety Administration's most recent census of fatal motor vehicle crashes, 854 bicyclists were killed in collisions with motor vehicles in 2018. That's a 38 percent increase since the low point in 2010 and the highest number of fatalities in 30 years. Including pedestrian fatalities, which are up 46 percent over the same period, people outside of motor vehicles now account for a fifth of all traffic deaths.

NTSB researchers looked for ways to reverse that trend. They reviewed the latest scientific literature and analyzed data from motor vehicle crashes involving more than 5,000 bicyclists. They also interviewed road designers, law enforcement personnel, bicycle safety advocates and other stakeholders.

Based on their findings, the board called on various federal agencies to update their standards and undertake new initiatives. issuing 11 new recommendations and reiterating 10 others.

Most motor vehicle collisions with bicycles occur at intersections. However, crashes are more often fatal at midblock locations, where vehicles are generally traveling faster, the board noted. It called on the Federal Highway Administration (FHWA) to include protected bike lanes and safer intersection designs in its list of proven safety countermeasures.

IIHS research suggests that protected bike lanes vary in terms of injury risk (see "Some protected bike lanes leave cyclists vulnerable to injury," Aug. 15, 2019). Researchers found that protected bike lanes that are raised from the roadway are safer than those on the same level as the street, for example.

The board also recommended implementing road diets — reducing the number of vehicle travel lanes, often to make room for bike lanes. Road diets help slow vehicles in high-speed, high-volume areas. They were added to the FHWA's list of proven safety countermeasures in 2012.

Apart from infrastructure changes, the NTSB noted that the requirements for reflectors and other features to make it easier for drivers to see bicycles have not been updated since 1980. It called on the U.S. Consumer Product Safety Commission to look into revising its standards to make use of advances in materials and technologies.

The board said that delays in updating NHTSA's New Car Assessment Program have likely slowed the rollout of features designed to protect pedestrians and bicyclists. It called on the agency to incorporate a test of crash avoidance technology capable of detecting bicyclists in its updated ratings.

Twenty automakers have committed to installing automatic emergency braking systems in the vehicles they produce for the U.S. market with gross vehicle weights of 8,500 pounds or less by 2022. Many of these systems are capable of detecting and avoiding pedestrians as well. IIHS began rating pedestrian detection systems in February 2019 and issued its latest ratings for 16 midsize cars this October (see "Performance of pedestrian crash prevention varies among midsize cars," Oct. 29, 2019). Some manufacturers say their pedestrian crash prevention systems are also capable of avoiding bicycles. However, IIHS has not evaluated these claims.

The safety board reiterated its earlier

recommendation that NHTSA tighten requirements for headlights. More than half of the bicyclist fatalities in 2018 occurred in the dark or during dawn or dusk.

Automakers have made broad improvements since IIHS began rating the headlights of passenger vehicles in 2016. However, poor or marginal headlights still prevent many vehicles from receiving the Institute's TOP SAFETY PICK and TOP SAFETY PICK+ awards. On others, good-rated headlights



are only available as expensive options (see "Headlights improve, but base models leave drivers in the dark," Nov. 29, 2018).

The board also recommended that NHTSA work with stakeholders to promote helmet use and called on states to pass universal bicycle helmet laws. Currently, most states have no bike helmet requirements, and no state requires bicycle helmets for adult riders. The National Association of City Transportation Officials and several bicycle advocacy groups pushed back against that recommendation because of concerns that it would discourage people from riding. ■