New research: “Eighty-five percent solution: historical look at crowdsourcing speed limits and the question of safety”

By Brian D. Taylor and Yu Hong Hwang

Excerpts from the abstract and article, first published online in the journal Transportation Research Record on June 30, 2020.

“The ‘85th percentile rule’ is commonly used to set speed limits in jurisdictions across the U.S. Modern interpretations of the rule are that it satisfies key conditions needed for safe roadways: it sets speed limits deemed reasonable to the typical, prudent driver, reduces the problematic variance in travel speeds among vehicles, and allows law enforcement to focus on speeding outliers.

However, Taylor and Hwang found that, “while most observers trace the rule to safety research and a 1964 report ... the 85th percentile rule actually emerged decades earlier,” when the transportation profession emphasized efficient vehicle movement.

“[T]he originators of the 85th percentile rule in the 1930s and 1940s saw considerable wisdom in setting speed limits based on the behavior of typical, prudent drivers, but were clear that such drivers would not always travel at the optimally safe speeds for a given road segment, and that adjustment might be necessary.

The authors conclude, “[T]o remain valid today, the 85th percentile requires a wide array of conditions to hold ... But it is not clear whether any of these conditions still hold today, and there is scant evidence that they are being systematically considered. Yet, as we have shown in this analysis, the originators of the idea viewed the 85th percentile as a starting point in setting speed limits, and not the final word. We can find no evidence from the intervening decades that this perspective should have changed.”

Read the full article here (paywall).

Related: On July 22, NACTO released its guide for setting safe speed limits on urban streets.