

Comment from Anonymous

Posted by the **National Highway Traffic Safety Administration** on Mar 21, 2022

(Part 2/2)

(15) It is not clear whether the Agency will evaluate LCA or differentiate ratings between vehicles that offer traditional LKS ('ping ponging') vs LCA. Additionally, the Agency should expand on whether it intends to evaluate LKS with respect to the action the system takes if the driver does not respond to the corrections after a period of time has elapsed. For example, if a driver becomes incapacitated and LKS activates, how long will it remain active without input from the driver? What will it do if input is not applied? There is clear differentiation between systems that deactivate and those that attempt to gain the driver's attention and then bring the vehicle to a stop with emergency indicators active.

(16) BSW testing should be performed without the turn indicator active because the unfortunate reality is that a non-insignificant percentage of drivers fail to utilize turn indicators. With respect to warnings that a vehicle is present in a blind zone, I am of the opinion that any warning is sufficient. For BSI, there should be more stringent requirements because the driver (intentionally or unintentionally) is taking action that could result in a collision.

(20) Yes, the Agency should include a BSI false positive test; this is necessary to validate that the system has appropriate performance and robustness.

(22) Similar to 16, BSI testing should be performed without the turn indicator active because many drivers fail to utilize turn indicators. The Agency raises a valid point in asking how BSI testing without a turn indicator active can be differentiated from an LKS intervention. The Agency can deactivate LKS to assess BSI as a way of independently assessing BS. Additionally, the Agency should consider how the system allows the driver to override the inputs of the system. For example, in the event that a lane marking is misread, the driver can override the LKS to maintain their desired course. When a vehicle is equipped with LKS and BSI, if a driver overrides the traditional LKS but the BSI detects a vehicle in a blind spot zone, what is the expected behavior?

(23) The Agency should consider increasing the upper end of speed testing to account for rural areas that have roads with speed limits of roughly 72.4 km/h (45 mph). Setting the S4 scenario to 80 km/h would cover this case.

(25) It is appropriate to conduct testing at night. If a vehicle has advanced lighting systems that automatically engage then those systems should be permitted to activate without driver intervention in the tests. This provides a safety baseline of how the lighting would operate in most cases. Vehicles that offer advanced lighting should be able to demonstrate their capabilities compared to vehicles with only standard low beam illumination.

(26) Yes, the Agency should perform PAEB testing under dark conditions with a vehicle's upper beams as a light source. This lighting condition should be assessed in addition to the proposed

dark test condition. Evaluation of PAEB performance in dark lighting conditions with overhead lights may be unnecessary given that testing without overhead lights can be viewed as a worst case scenario.

(36) The Agency should adopt testing procedures involving cyclists as soon as possible (in less than two years ideally).

(38) The Agency should award credit to FCW systems that provide auditory or haptic feedback to the driver. Visual alerts should be paired with auditory or haptic alerts but alone should not earn credit. Imminent warnings of collisions must gain the driver's attention.

(59) As discussed earlier, the Agency should adopt rear amber turn indicators into NCAP as soon as possible due to the demonstrated safety benefits. The Agency should also explore systems that deal with incapacitated drivers. The Agency should adopt the systems proposed for review in 2022-2023 as soon as possible: (1) adaptive driving beam headlights; (2) upgraded lower beam headlighting; (3) semiautomatic headlamp beam-switching; and (4) rear automatic braking for pedestrian protection.

(70) There may be opportunities for including alcohol-impairment technology in NCAP, but such a potential depends on what technologies are made available and the practicality of those technologies.

(80) Yes, the Agency should evaluate intelligent speed assistance technologies and differentiate between warning vs intervention type systems.

(84) The Agency should only consider systems that detect the presence of a child. Occupant detection technology already exists so every measure to detect the presence of a child should be required to earn top scores in NCAP.

(97) NHTSA should not accept self-reported test data that is generated by test laboratories that are not NHTSA's contracted test laboratories. The Agency may want to consider accepting data from laboratories that are contracted for UN ECE testing, but the Agency must take reasonable approaches to maintain integrity within its testing program.