To:	Transport & Health Policy Makers, & Practitioners
From:	Professor Adrian Davis
Date:	22nd July 2024
Subject:	Essential Evidence 4 Scotland No.88 Acceptance of Intelligent Speed Adaptation to UK vehicles

Top Line: Research suggests that Intelligent speed assistance (ISA) could reduce the frequency and severity of road traffic crashes. Public acceptance before fitting ISA as standard or regulating use is seen as important as is voluntary and over-rideable systems.

ISA is an in-vehicle technology which can assist drivers to comply with speed limits and so avoid speeding penalties and reduce crash severity and frequency. ISA's road safety impact will depend on the extent to which drivers use it which in turn will be influenced by the actions of stakeholders involved in ISA roll-out.

Various countries have trialled ISA including Sweden (intervening and advisory), Denmark (advisory) and UK and Belgium (intervening and advisory). Intervening ISA has been found to have a larger effect than advisory ISA on speed compliance in field trials estimated that universal adoption of intervening ISA could reduce serious RT injuries by up to 29% compared to 12% with intervening ISA that could be overridden and 3% for advisory ISA.

To compliment previous work on driver perspectives, a 2024 study explored stakeholder perspectives on ISA adoption by interviewing representatives from a range of UK stakeholder groups, including policy and road infrastructure providers, road safety, the insurance industry, vehicle manufacturing and technology, police, driver training and motoring organisations. Interviews explored perspectives around effective ISA systems, whether and how to introduce ISA, and barriers to ISA adoption.[1]

Most stakeholders believed that ISA could reduce the frequency and severity of road traffic crashes, protect other road users and improve speed compliance. Therefore, the majority favoured ISA fitment although they differed in attitudes towards regulation. Many from the road safety, police and policy groups thought regulation was necessary to ensure drivers' access to ISA while others, including manufacturers, felt market forces would suffice. Road safety professionals usually preferred intervening ISA for its greater effectiveness in reducing road casualties while other stakeholder groups (e.g., manufacturing) tended to prefer advisory ISA to maintain driver control and avoid unpopular driver restrictions.

Some stakeholders thought ISA would prevent unintentional speeding. They considered that advisory ISA would be sufficient to avoid lapses or missed cues around speed and improve speed compliance, as they thought many drivers did not intend to speed. ISA was therefore seen as useful for generally compliant drivers but would not impact on habitual and dangerous speeders. Using ISA to stop purposeful speeding was seen as too restrictive for the majority of drivers. A previous study examined a more restrictive ISA system for speed offenders.[2] While ISA improved speed compliance, it only led to temporary changes in behaviour and was difficult to implement.

In the 2024 study, public acceptability was seen as a major issue in ISA introduction. Most stakeholders thought it was important to have public acceptance before fitting ISA as standard or regulating use. Intervening ISA was often seen as less acceptable to drivers, even by those who favoured an intervening system. Half of the group who favoured intervening ISA thought advisory ISA could be introduced initially to improve public trust and support the move towards future intervening systems. Voluntary and over-rideable systems were seen as important for public acceptability.

[1] Day, M., et al, 2024 Stakeholder perspectives on the adoption and application of Intelligent Speed Assistance in UK vehicles, *Journal of Transport and Health*, Vol 38, 101868

[2] Van de Pas, J. et al, 2014 The pros and cons of intelligent speed adaptation as a restrictive measure for serious speed offenders, *Transport Research, Policy and Practice*, 67: 158-174.