Route Risk Tool for Advanced Vehicle Technologies

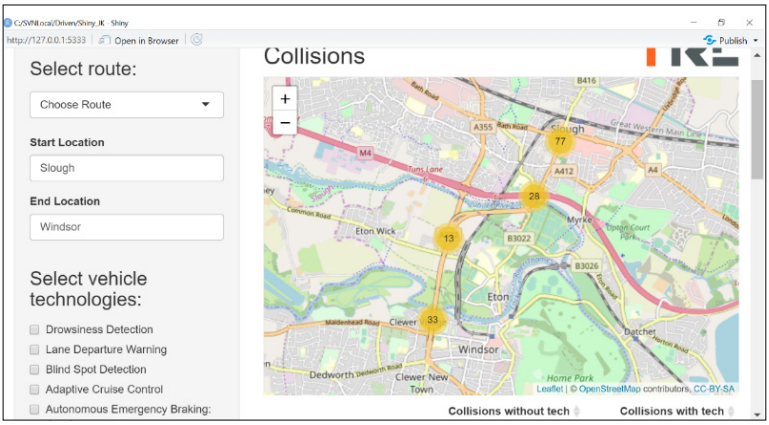
Map routes, compare risks, and see how new ADAS technologies affect risk on the road

TRL THE FUTURE OF TRANSPORT

Data from telematic sources mean that we have more information than ever on the actual journeys undertaken by drivers. At the same time advanced driver systems are becoming more prevalent; these technologies will reduce risk for road users and pave the way to autonomous technologies.

TRL have developed a tool to help the motor industry and drivers to understand the benefits of different ADAS technologies to drivers on routes across the UK.

The tool maps collision risk along user specified routes. Users can choose ADAS features and recalculate the risk along a chosen route. This allows an individualised view of risk and of which ADAS features can best reduce risk for drivers and for other road users.



A to B collision "hotspot" mapping

What the tool does

- Map collisions and collision risk (collisions per vehicle mile)
- Adjust collisions based on in-vehicle technologies available
- Calculate route risk both with and without technology adoption

Potential applications

Insurers
Assess risks for vehicles with ADAS technologies and/or black boxes

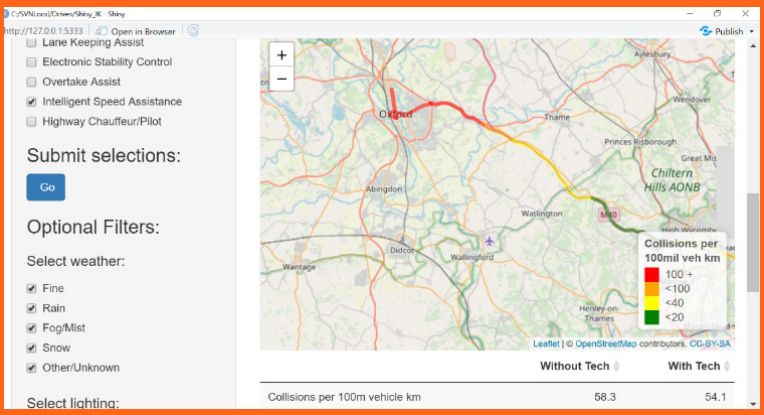
Highways managers
See how different technologies could benefit different areas

Fleet managers
Understand how ADAS technologies could help to reduce fleet risk and costs

OEMs
Communicate tailored ADAS technology effectiveness information to different customer groups

Collision risk is presented as accidents per vehicle km.

An overall route risk figure is calculated for both with and without the technology set.



Demonstration version

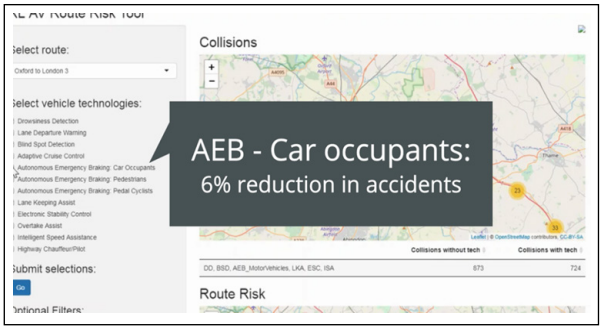
The tool was developed using police collision data (Stats19) and traffic flow data from Highways England.

Calculations are based on TRL research into the effectiveness of different technologies and accident reconstructions using RAIDS data (detailed collision investigation data collected for DFT by TRL).

The technology set was chosen to include the technologies for which effectiveness estimates are either 1) available, or 2) calculable using TRL reconstructions.

Additional technologies will be added when information becomes available. Specific technologies could be investigated in client funded projects.

A to B route mapping is available for the collision view and in development for the route risk view.



Technologies can be chosen from a list and applied to a route, collisions prevented by these technologies are removed and quantified.

The future development of this tool depends on client need. We are looking for partners interested in working with us to maximise the potential and use of this tool. Get in touch with us to explore possibilities and get a head start in the new risk landscape.

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