

# NATIONAL EXPRESS ROUTE RISK MAPPING DASHBOARDS

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# AGILYSIS RISK MAPPING



Road Safety Foundation EuroRAP UK 2017 - 2019 Select a route to reveal de

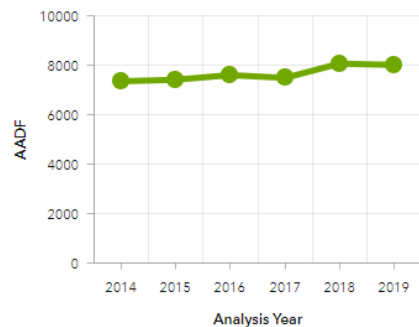
## Route Details

EuroRAP Route - JM643  
**A361, Oxfordshire**  
20.20 km

Fatal and Serious Collisions  
2017-2019 - 11  
(2014-2016 - 12)

Change in FSC  
**-10%**  
from 2014-2016

## Average Annual Daily Flow



Map demonstrating example functional links

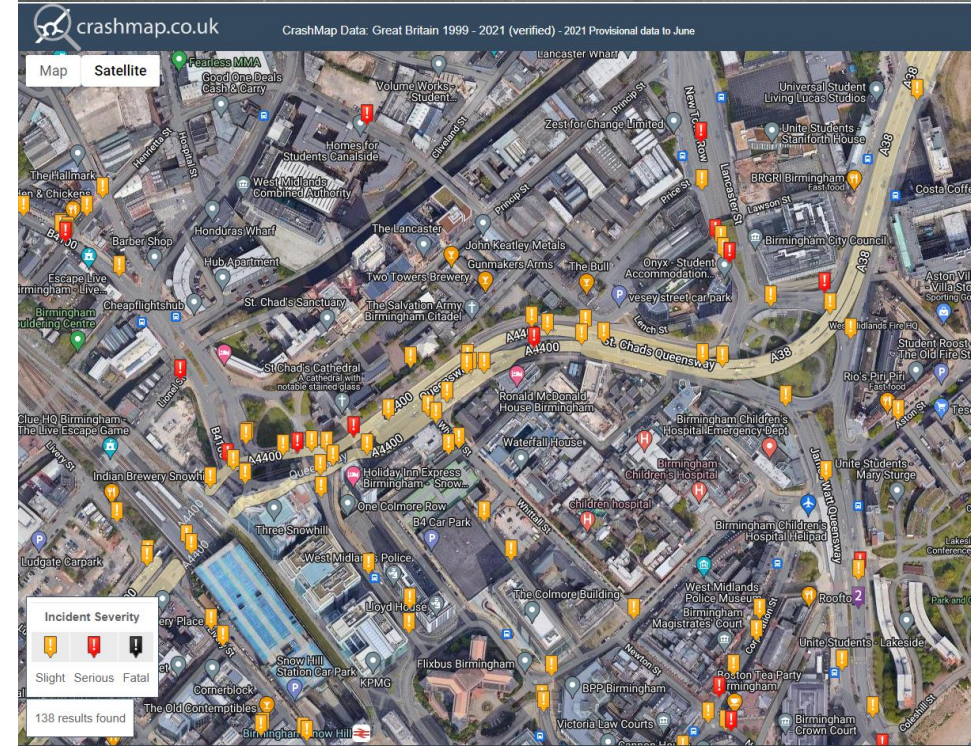


<http://rsfmaps.agilysis.co.uk/>



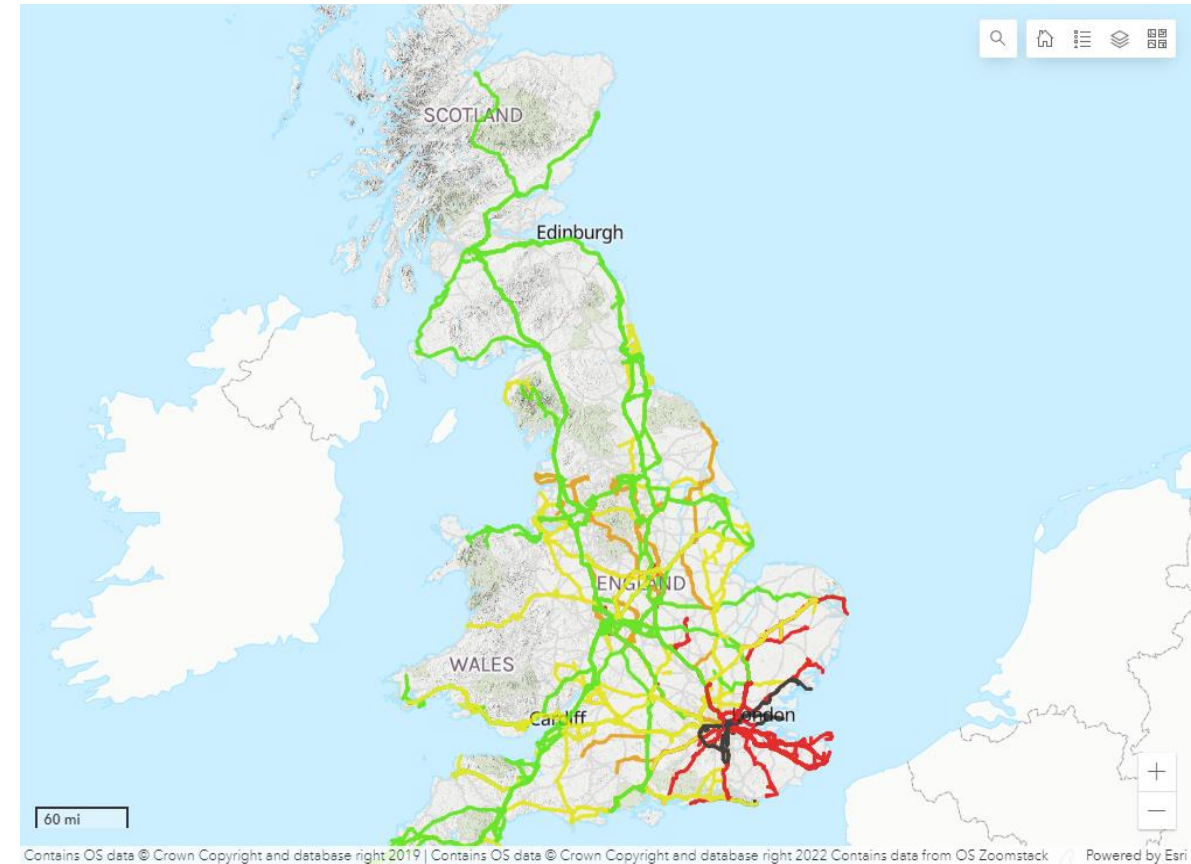


- Leading coach company in the UK
  - Operating for 50 years
  - Leading international transport provider
  - Strong commitment to safety
- 
- Inspired by [www.crashmap.co.uk](http://www.crashmap.co.uk) they approached Agilysis to carry out a bespoke analysis of risk on their routes
  - Work began in 2019



# NATIONAL EXPRESS TELEMATICS DATA

- National Express operate over 150 routes in the UK.
- Provided three years telematics data covering 159 million km of journeys
- Ping speed and GPS location every 2 minutes (580 million pings and 44.6GB data)
- Assigned pings to individual journeys so that we know how many times that route was driven
- The ping locations were matched to the road network by proximity using ArcGIS
- Output was a **bespoke national map** detailing routes

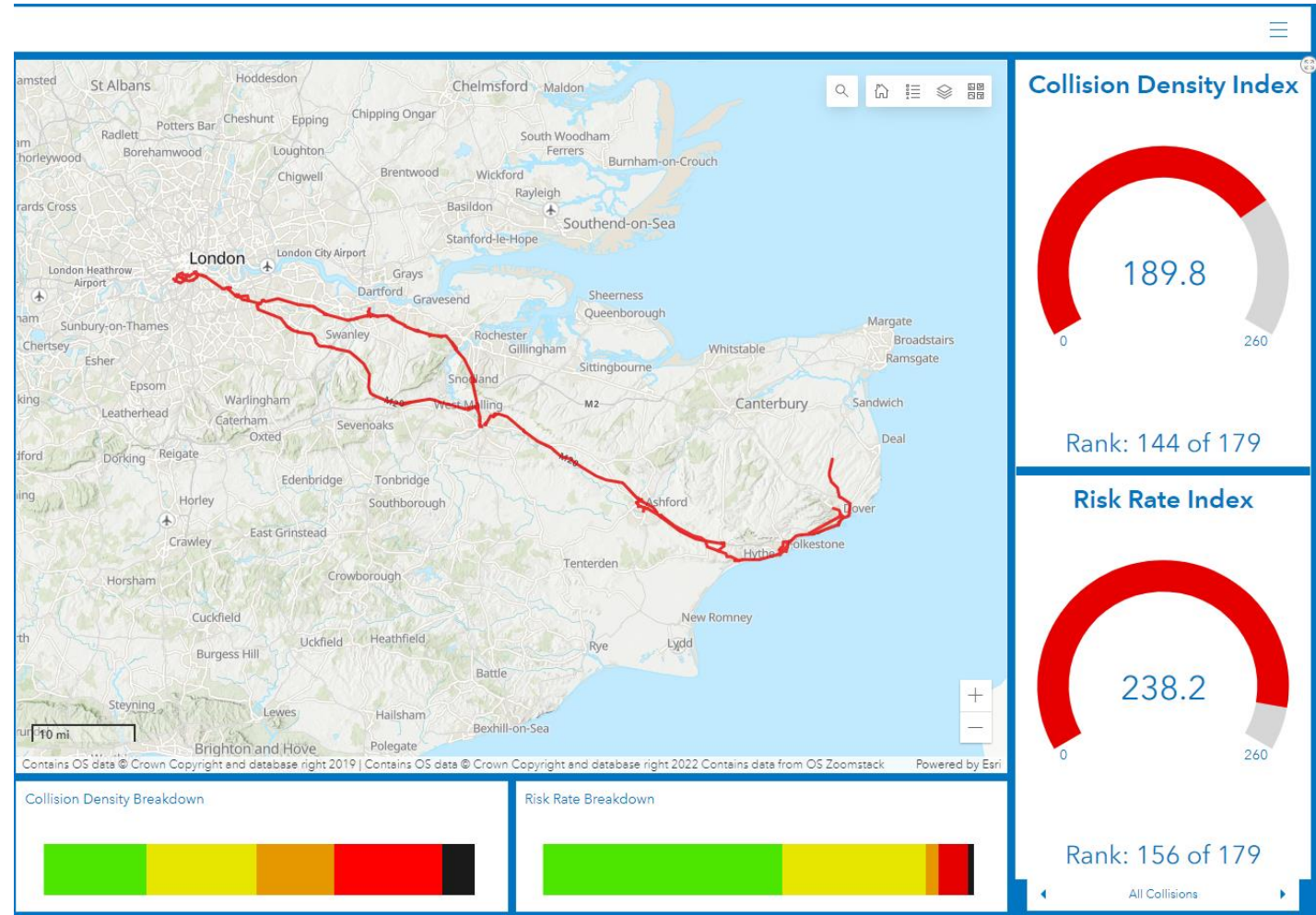


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# CALCULATING RISK

- Combined with open-source collision data [DfT STATS19](#) and traffic flow data [DfT Road Traffic Counts](#)
- Two metrics for the route 1) Collision Density and 2) Risk rate
- Output in a National Dashboard displaying the risk by numbered routes
- Additional 150 more detailed individual route dashboards
- Access for approximately 50 operators



# USE CASE SCENARIOS AND THE FUTURE

- Safety of customers and employees is a priority
- Use of the dashboards to carry out annual risk assessments
- Continued relationship with the client
- Annual updates/amendments to routes
- Bespoke training material
- User support in bespoke ESRI portal







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