Webinar

- Please use the Q&A Section to ask questions – We will answer as many as we can
- This is being recorded and will be available to review shortly
- The PDF slides are also available





Local Route Analysis and Risk Mapping Techniques

This one-off Agilysis webinar will explore the ways in which we can identify distinct routes, match data to roads, and finally analyse risk to prioritise safety interventions.

It will show how analysis can be made much more accessible without significant technical skills, and how it can be shared quickly and easily with colleagues and stakeholders.



- How to define 'routes' using Ordnance Survey maps
- Data sources available to create road attributes
- Creating risk metrics
- Visualising high-risk roads in your area
- Tools to identify 'hotspots' along route

How to analyse roads?

POLL: What routine spatial analysis do you undertake?

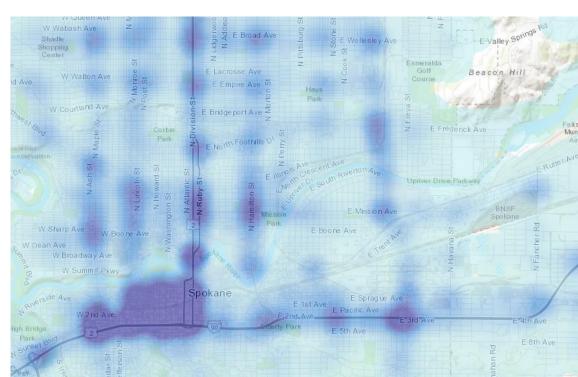
- Areas
- Clusters
- Routes

How to analyse roads?

- Ignore network Cluster analysis, heatmap
 - Crude density analysis tool
 - Lacks network-awareness
 - Frequently identifies busy junctions
 - Doesn't reflect how roads are used
 - Has been popular in the past



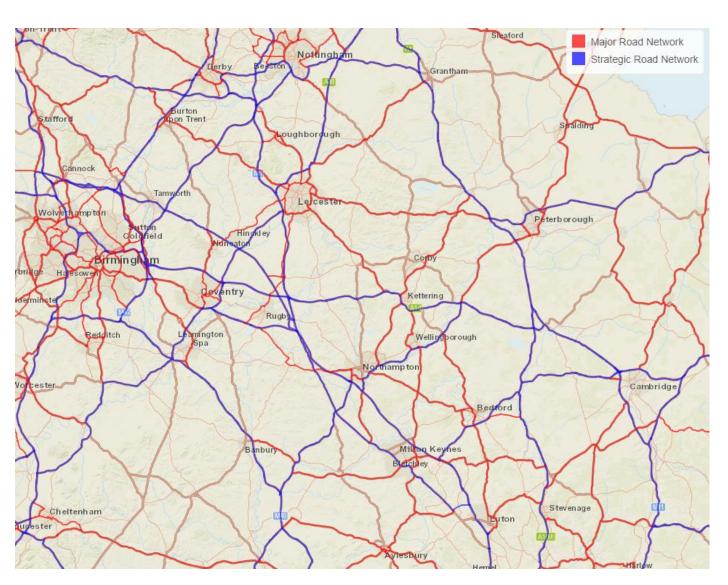


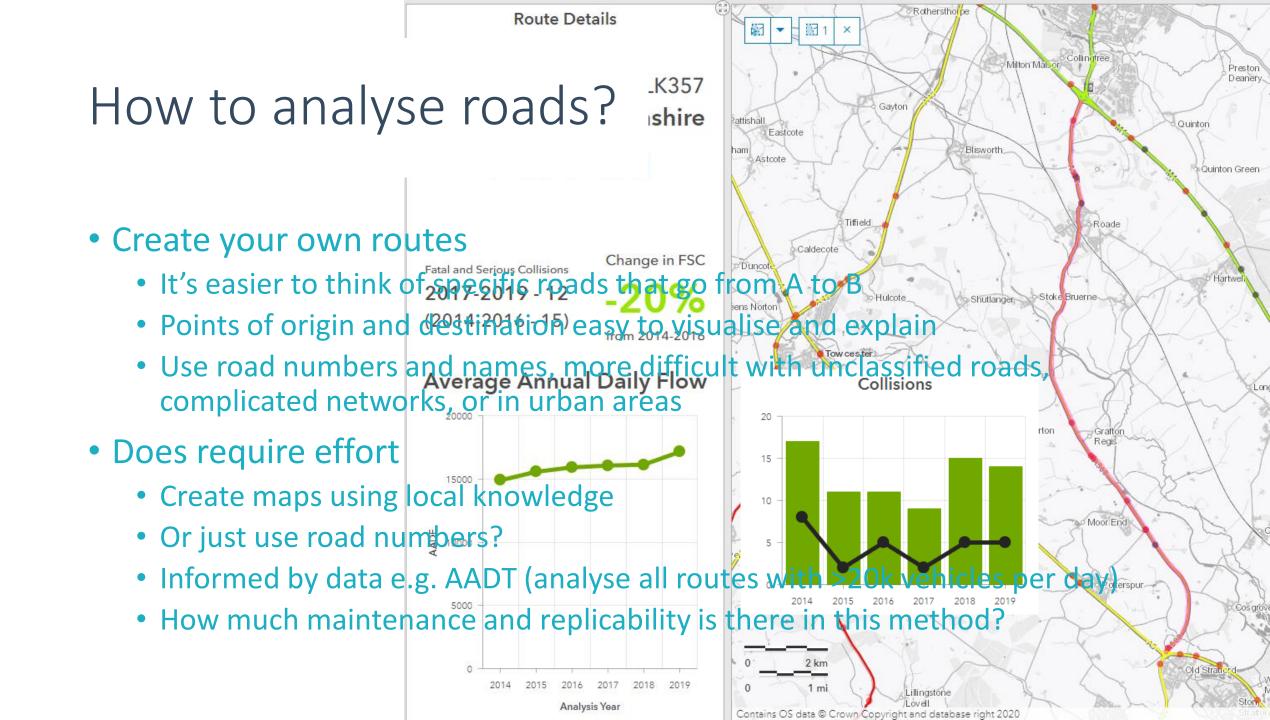


How to analyse roads?

- Use someone else's routes
 - MRN



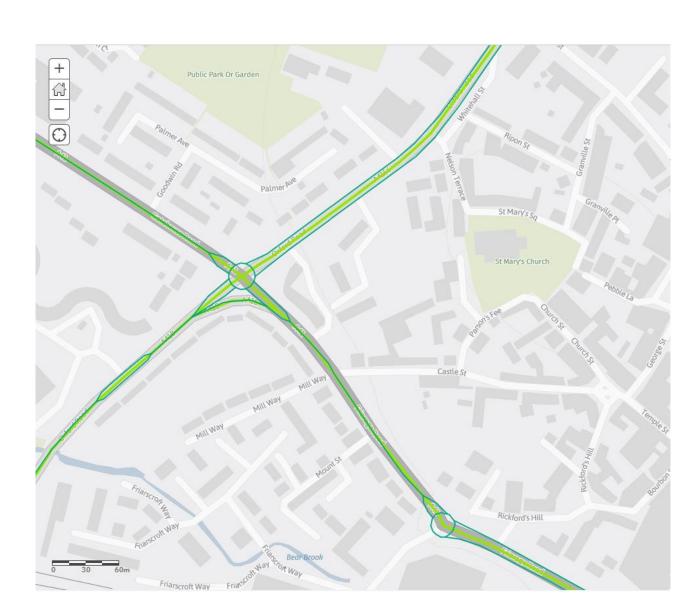




Selecting a Network

- OS Open Roads
 - More generalised
 - Good for longer distances
- OS MasterMap Highways
 - More detailed geometry
 - Extra data

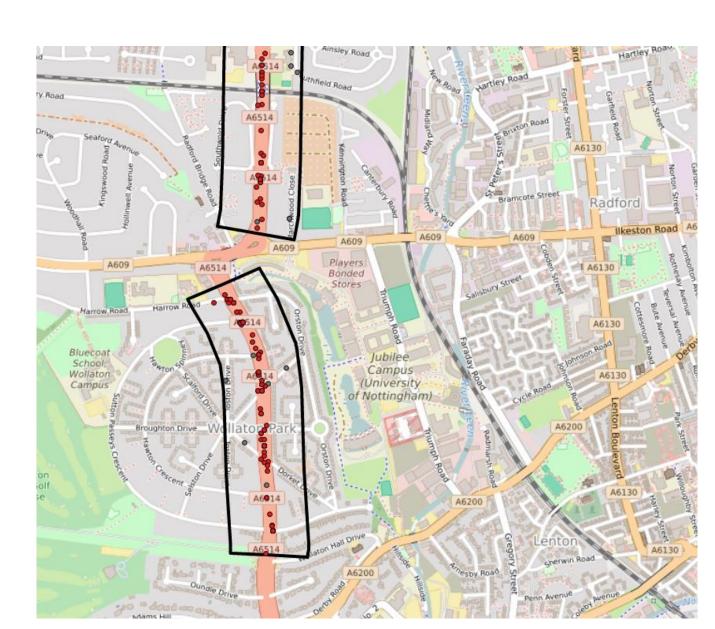




Matching Collisions

- Polygons
 - Collisions within
 - Option filter by road number / name

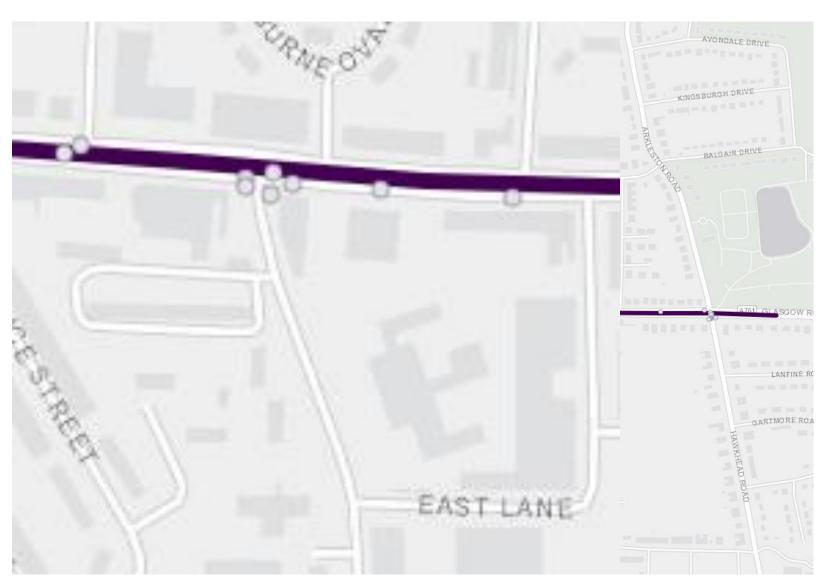




Matching Collisions

- Automated
 - Road Number
 - Proximity





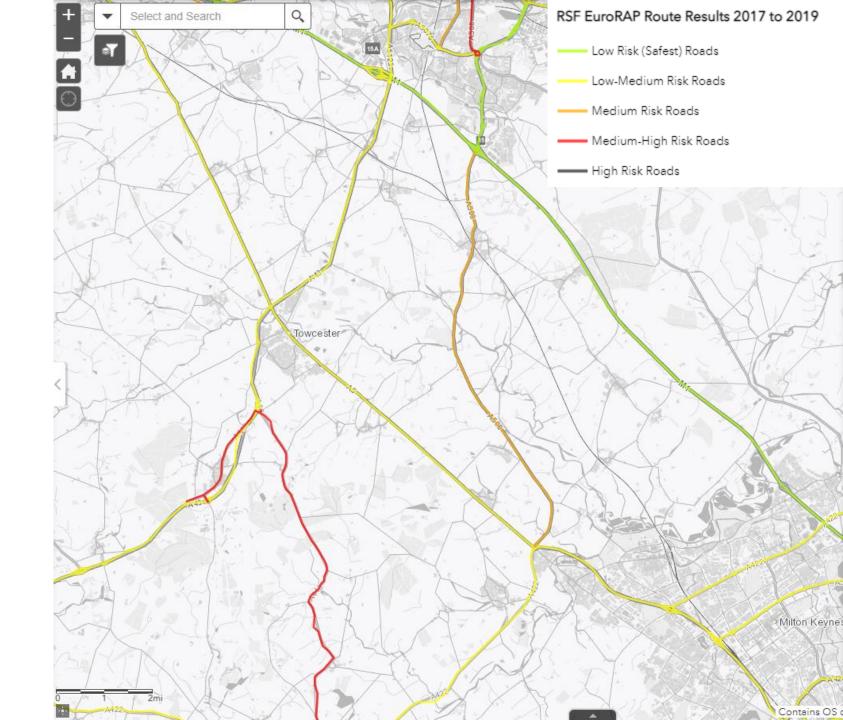
Density

- Collisions per Km / Year
- KSI / All
- Road User Group
 - Motorcyclists
 - Cyclists
 - Pedestrians
- Collision Type
 - Speed
 - Fatigue

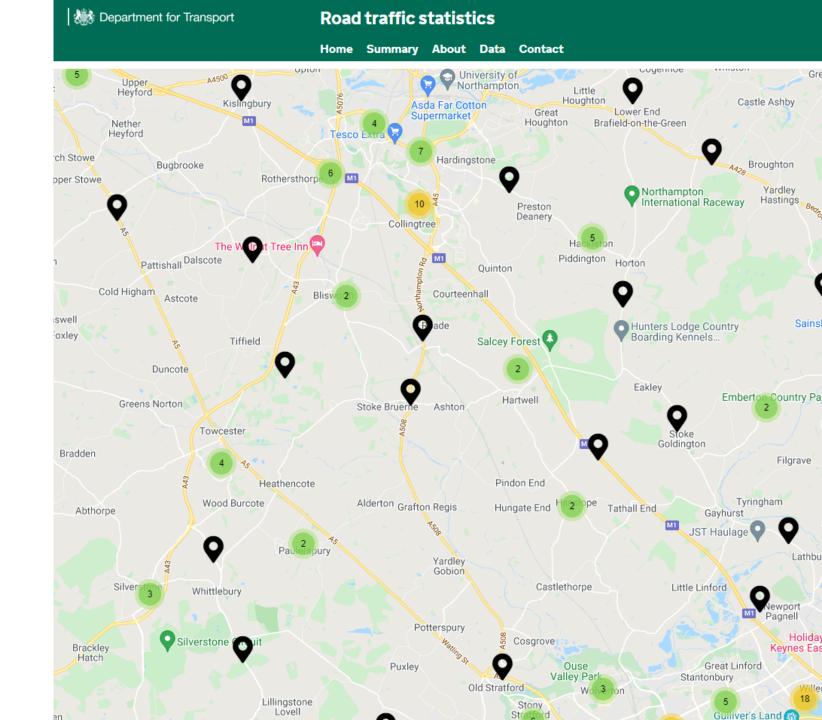


Risk

- Collisions per MvKM / Year
- KSI / All
- Requires AADT for Routes
- Road User Group
 - Motorcyclists
 - Cyclist
 - Pedestrians
 - HGV







Manual count point 7224

View count point profile

Region: East Midlands

Local authority: Northamptonshire

Road classification: 'A' road

Road: A508



About this data

All data used to make this map is available for download as .json and .csv formats.

Download the data

Download Count point 7224 data.

Annual Average daily flow

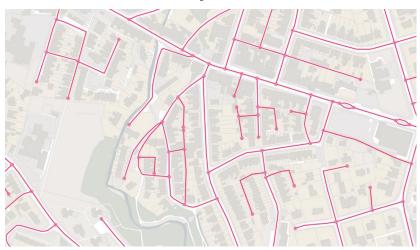
Year	Count method	Pedal cycles	Two wheeled motor vehicles	Cars and taxis	Buses and coaches	Light goods vehicles	Heavy goods vehicles	All motor vehicles
2020	Estimated using previous year's AADF on this link	15	131	10046	58	1820	1096	13151
2019	Manual count	12	176	13756	91	2126	1225	17375
2018	Estimated using previous year's AADF on this link	6	83	12241	81	2539	1045	15988
2017	Estimated using previous year's AADF on this link	6	85	12300	85	2424	1024	15917
2016	Estimated using previous year's AADF on this link	6	87	12315	87	2291	997	15777
2015	Estimated using previous year's AADF on this link	6	87	12164	89	2121	963	15424
2014	Estimated using previous year's AADF on this link	6	84	11808	90	1908	913	14803
2013	Manual count	8	81	11542	80	1778	911	14393



How can you do this yourself?

- Map
- Data
- Software
- Skills





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MG NSRF/A 1.3 ACCIDENT REFERENCE	ACCIDENT STATISTICS	Incident URN Other ref.
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Outside House No. or Name or Marker Post No.	at junction with I or	metres N S E W * of
2nd Road Class & No. or (Unclassified - UC) (Not Known - NK)	2nd Road Name	
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OFFICER BCU/Stn	1.2 Force Tel Number	



Examples

- National Express
- Safety-focussed organisation
- Wanted more informed risk management for route planning
- 50+ local teams





National Express Demo



Examples

- Agilysis Road Network & RiskMap
- Analysable network using OS Open Roads
- STATS19 & DfT Count Point data
- Data + Online software





ARN & RiskMap Demo



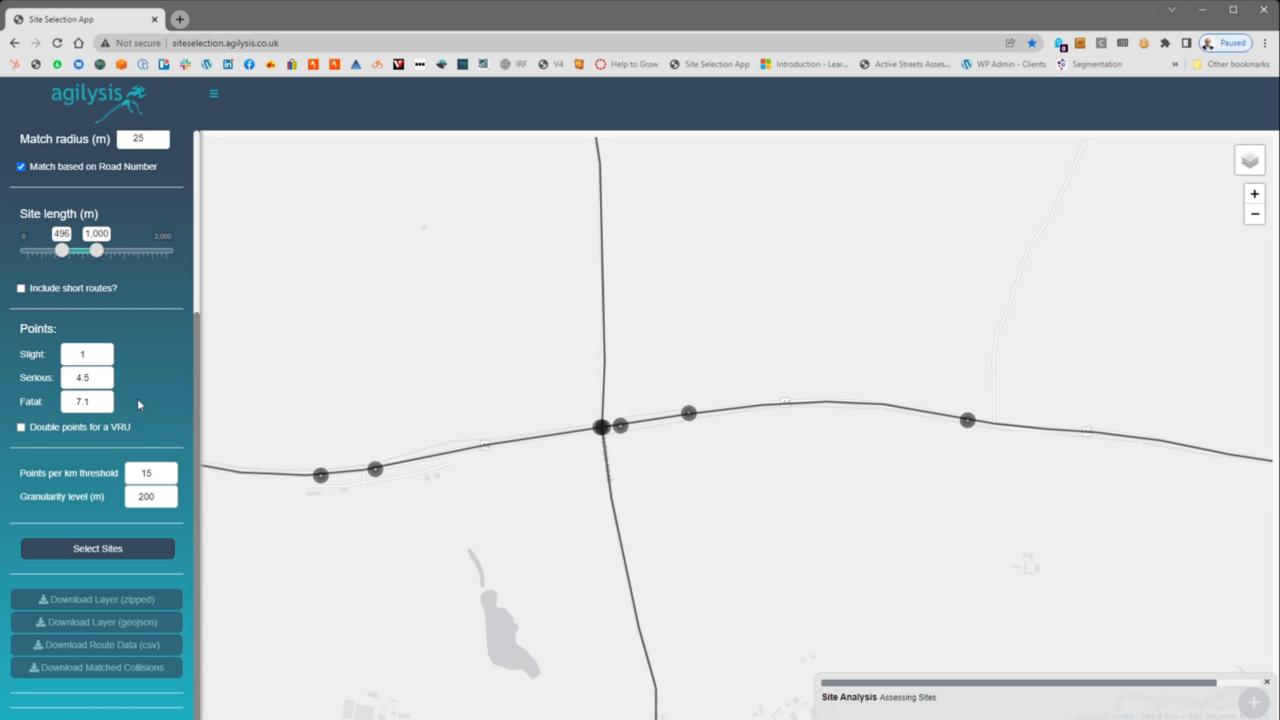
But what about clusters and hotspots?

- Is route analysis always the best approach?
- Needs more location specific analysis too
- Safety Camera site selection criteria









Accessing Agilysis Tools

- Riskmap £2,500 per authority per update
- Site selection tool £1,500 per year





Q&A

- Do you want to mentions techniques and methods you use?
- What other data are there?
- How to interpret and implement results?
- What barriers are there internally to this kind of work?
- Is this a high or low analytical priority?

