

Automatica Limited

Presents

NecastleWebStats (NWS)

A web browser based environment for displaying transport planning information such as Road Traffic Collisions (RTCs), Traffic Congestion, near live CCTV pictures, Public Transport Networks, 2011 Census Information, and Accessibility Statistics for various modes.

This presentation gives an overview of a number of features. There are also short videos of selected topics.

Automatica Limited

Newcastle Web Statistics (NWS)

Transport Information for Newcastle and Beyond

- [Newcastle City Council website](#)
- [Automatica Limited website](#)

Target device PC

Statistics include

- Traffic Speeds
- Congestion/Speed Statistics
- Road Traffic Collisions
- CCTV Roads
- Public Transport
- Census Data

Further Information Email

- [Bruce Ramsey \(Automatica\)](#)
- [Trevor Arkless \(Newcastle\)](#)

Latest News

24 August Version 3.1

New features include:-
Public/private transport Accessibility

Bus Open Data Service data monitoring
Beta test

June 2022 public transport data

2020 national RTCs
Covid-19 monitoring added

Click for this page

Click to display data

Click for the version number etc.



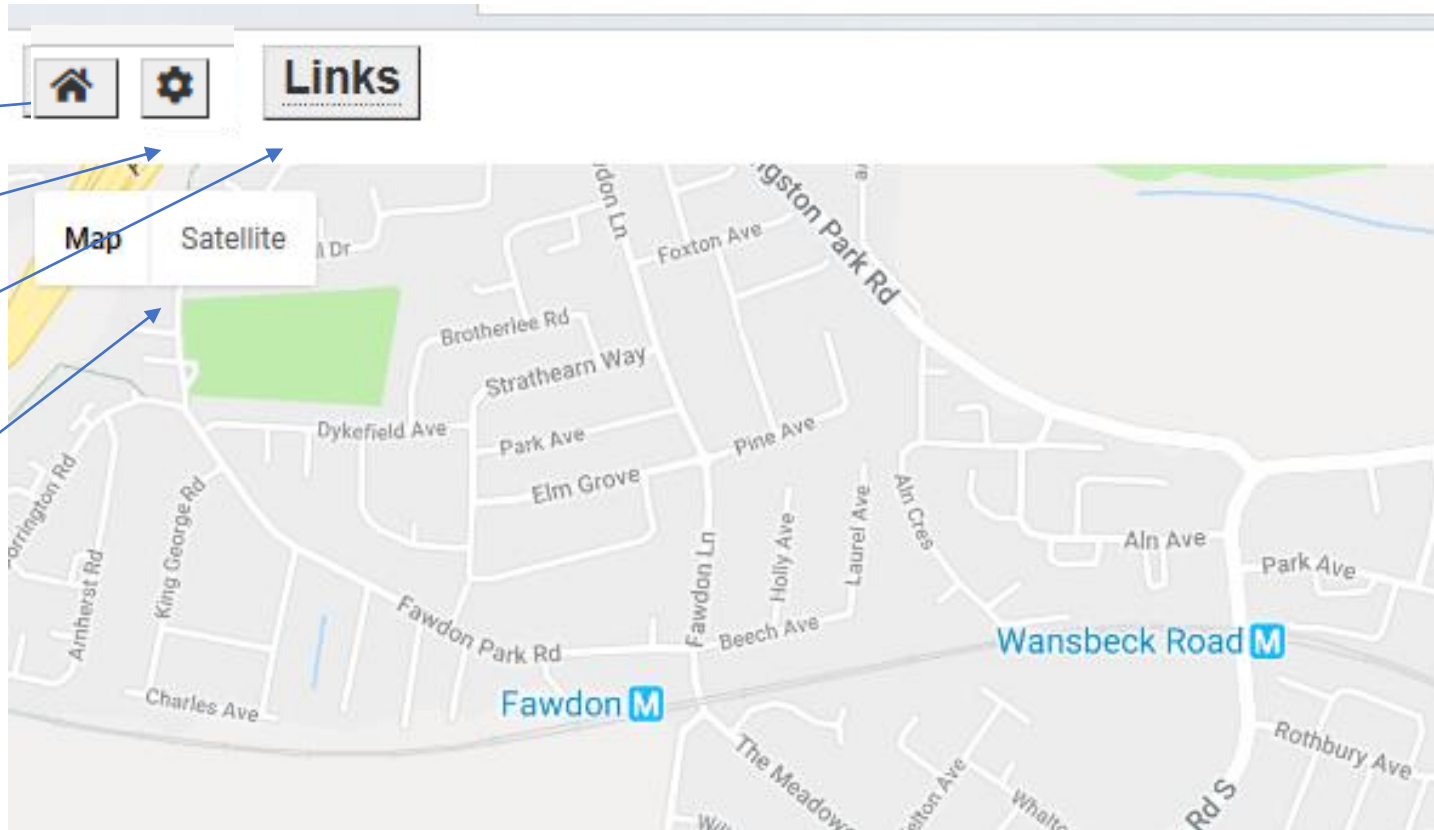
Options Page

Overview gives access to demonstrations as video, PowerPoint or PDF

To access data, first select a starting location then click on a topic. Clicking on video shows a sample session for the selected topic.

Set Location (not all have options) - click Topic (for demonstration click video, pptx,pdf)

Topic	Locations	Demonstrations
Overview		Video PPTX PDF
Congestion	<input type="text" value="Gosforth"/> ▾	Video
Road Traffic Collisions(NE)	<input type="text" value="Gosforth"/> ▾	Video
CCTV Images	<input type="text" value="Newcastle"/> ▾	Video
Census Area Data 2011	<input type="text" value="Newcastle"/> ▾	Video
National Public Transport Data	<input type="text" value="Newcastle"/> ▾	Video
Killingworth Impact Analysis	Killingworth	Video



Return to Options

Change Settings

Display Congestion

Switch Map Types

Map is recommended

If you are using a tablet or smart phone setting one of these may improve the sizing of the plot

The amount of data that individual browsers can plot varies. This can cause the browser to crash. These settings limit the amount of data that can be plotted. The default values should be fine for the vast majority of users. Take advice before changing them.

Any changes are saved in cookies.

Check to optimise for tablet or smart phone

Tablet

Smart phone

If checked tooltips DISABLED

indicates a different value for an iPad/iPhone

Number of links allowed (1000 [1000] > 40000 [10000])

Number of links between plots (1000 [1000] > 40000 [10000])

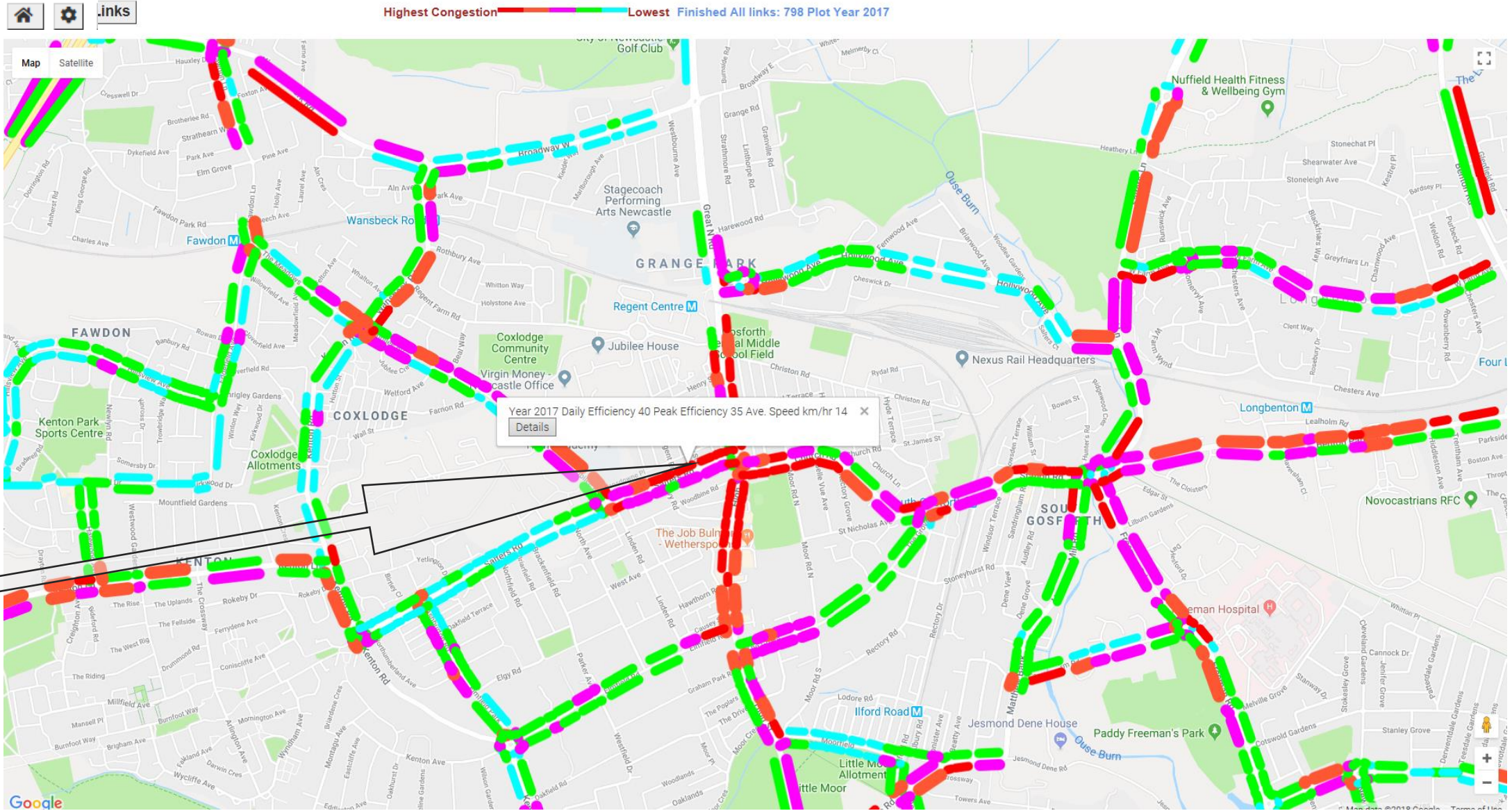
First year for speeds on links (2014 > 2021)

Last year for speeds on links (2014 > 2021)

[Click to reset all values to default](#)

If not checked mousing over or touching gives a tooltip. This can be annoying once you have become familiar with the system.

Congestion plot on Google Maps showing summary statistics for a link

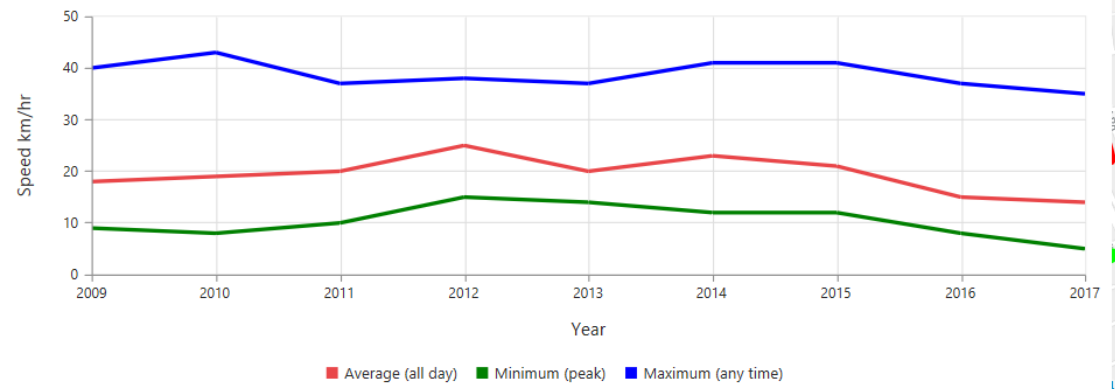


Excel and Graph Output 1 of 2

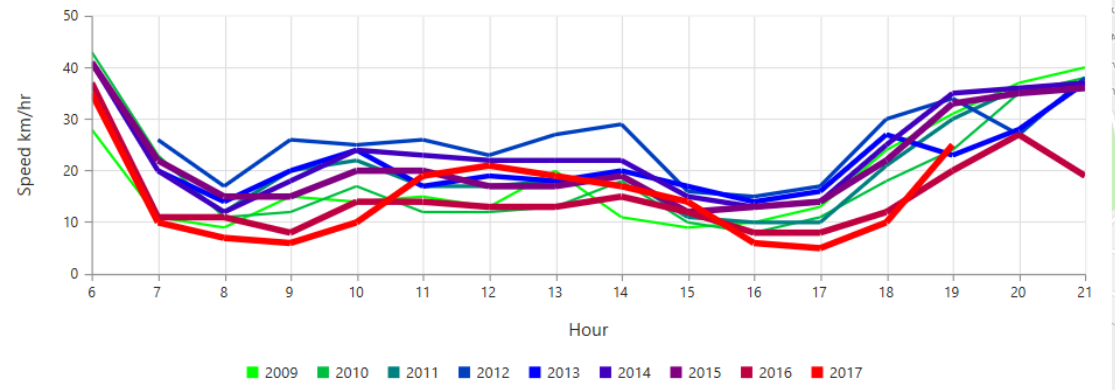
Home Settings Links Hide Excel Show Excel Ribbon Highest Congestion Lowest Finished All links: 798 Plot Year 2017

Year	km/hr Max. Speed	km/hr Min. Speed	km/hr Ave. Speed	% Peak Efficiency	% Daily Efficiency
2009	40	9	18	50	50
2010	43	8	19	42	45
2011	37	10	20	50	42
2012	38	15	25	60	44
2013	37	14	20	70	50
2014	41	12	23	52	54
2015	41	12	21	57	60
2016	37	8	15	53	65
2017	35	5	14	35	70

Speed Trend for Weekday Yearly Averages

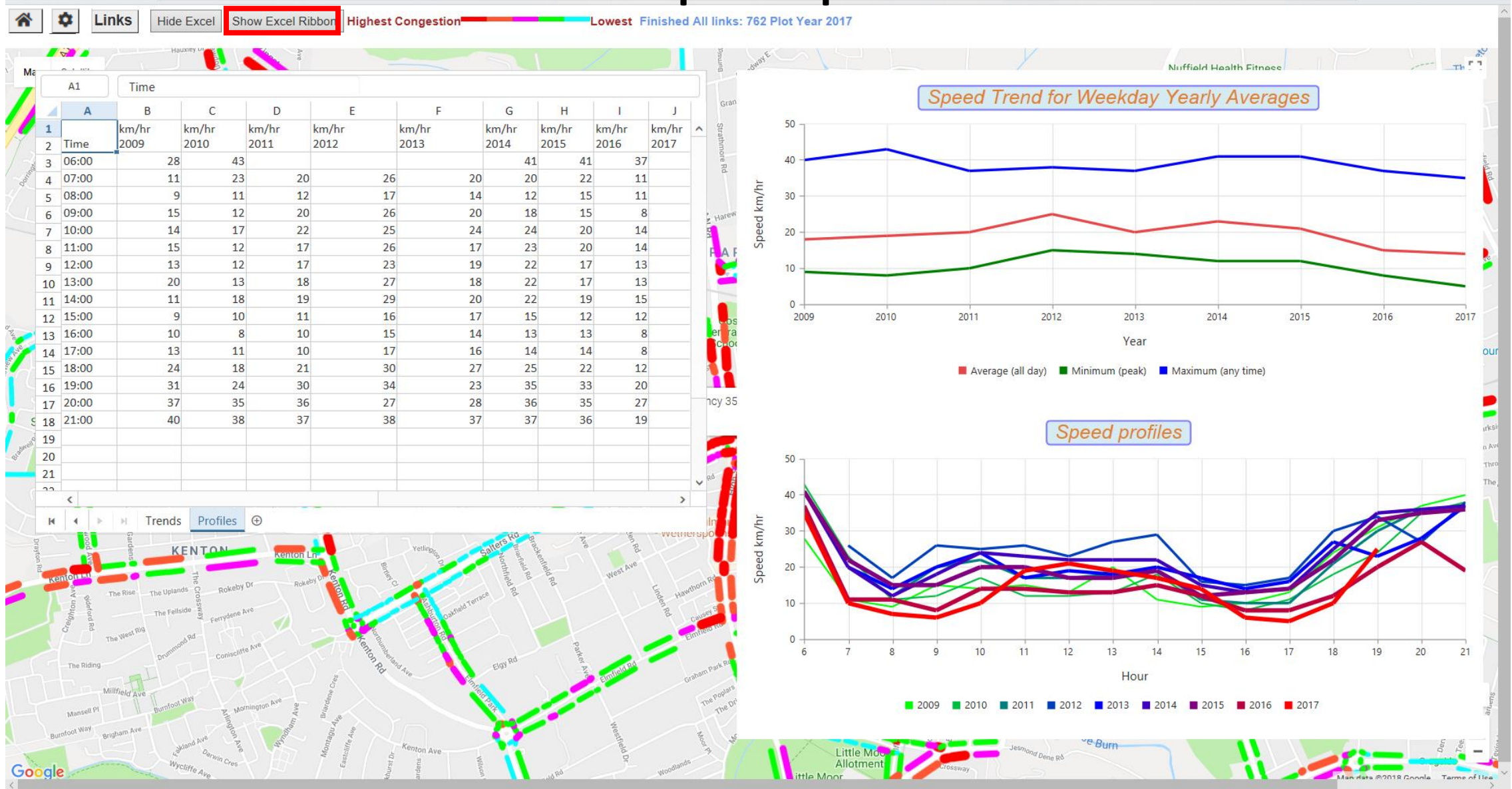


Speed profiles



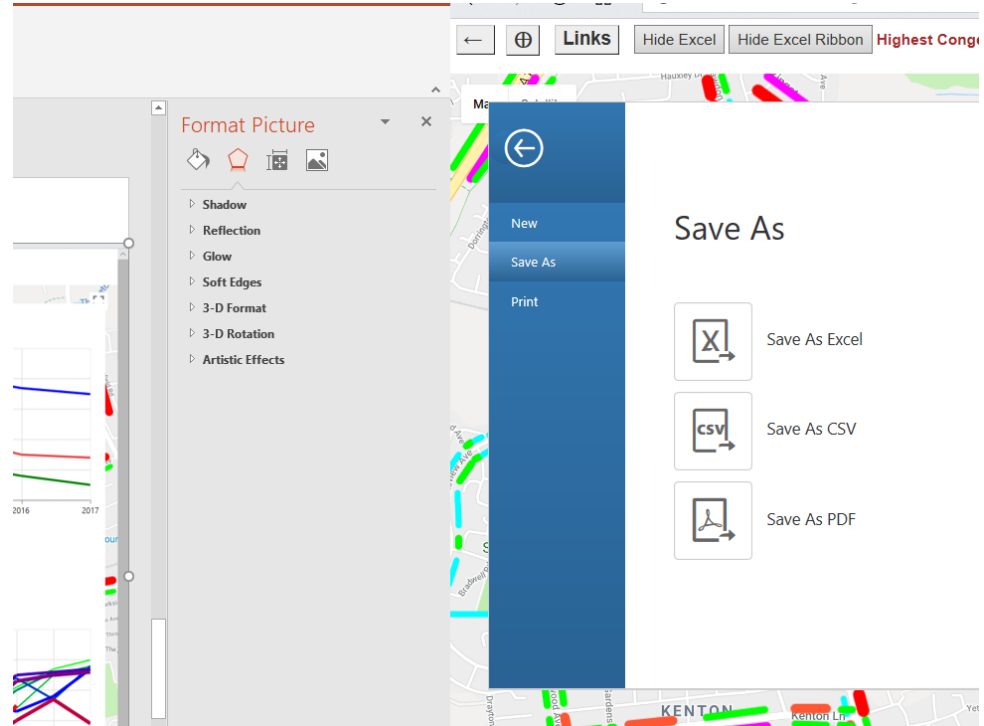
Trends Profiles

Excel and Graph Output 2of 2



Next slide after clicking Show Excel Ribbon

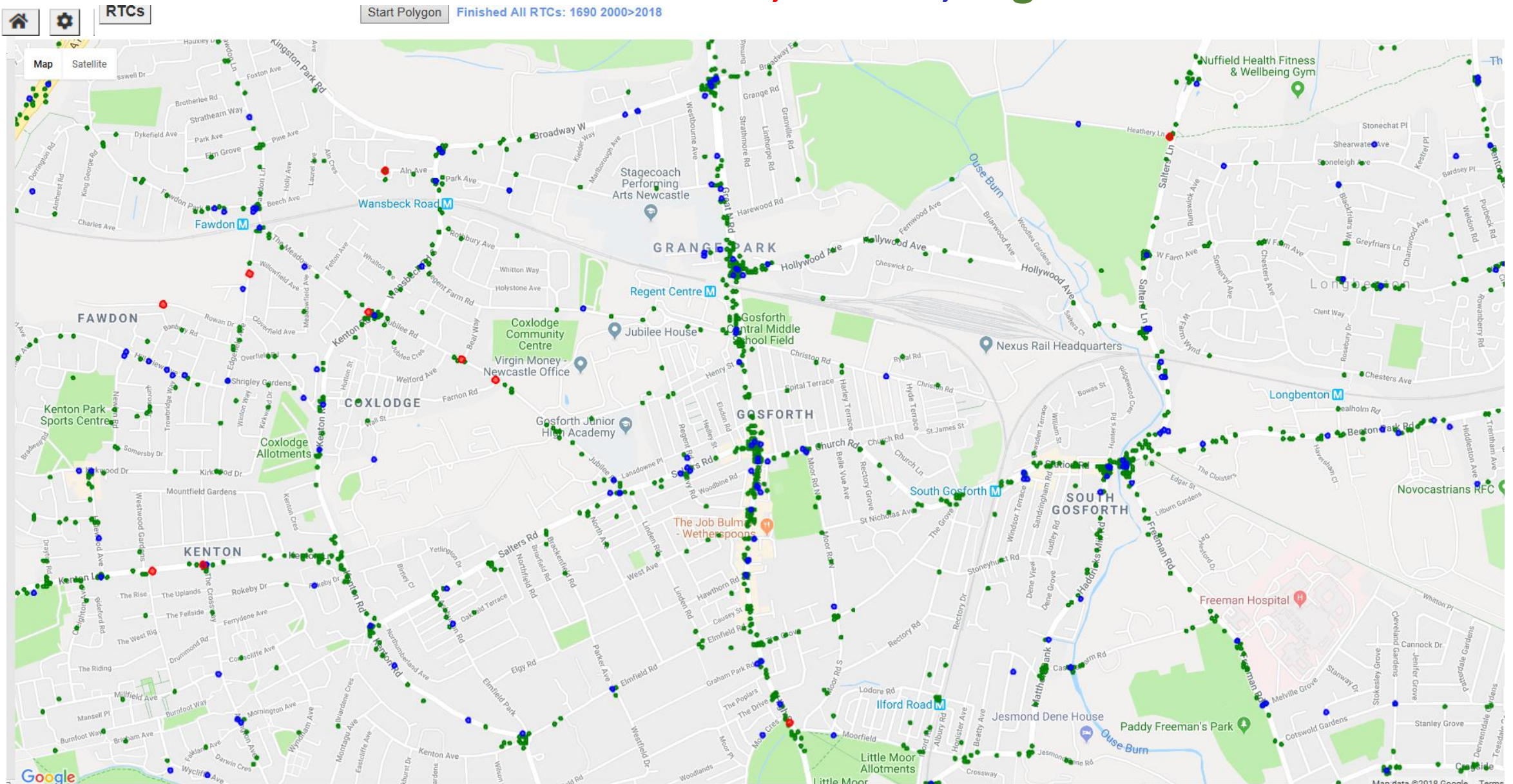
Clicking Show Excel Ribbon enables saving Excel



The graphics and spreadsheet shown on the previous pages use SynCFusion's library (click [website](#) for more details). A particularly useful feature of the spreadsheet is the ability to export it as an xls or csv to the client computer, thus enabling further analysis. The spreadsheet can also be exported as a pdf.

Next slide after clicking Road Traffic Collisions in Options and RTCs on the new page.

Road Traffic Collisions – Fatal, Serious, Slight



Next slide after clicking on or near an RTC followed by clicking Details

Details of RTCs within ~ 20m of the click point

The screenshot displays a software interface with a data table on the left and a map on the right. The table, titled 'localAuthorities', contains 36 rows of accident details. The map shows a street network with a yellow polygon highlighting a specific area. A red box on the map is labeled 'RTCs 7' and 'Details'.

	A	B	C	D	E	F
1	localAuthorities	Newcastle-Upon-Tyne				
2	classOfAccident	Slight				
3	date	2005/5/3 16:10				
4	Casualties	1 Slight/Serious/Fatal				
5	roadType	Single Carriageway				
6	Road No	C105				
7	2nd Road No.	Estate126				
8	speedLimit	30 mph				
9	junctionDetail	Crossroads				
10	junctionControl	Automatic traffic signal				
11	lightCondition	Daylight - No Street Lighting				
12	pedCrossPhysicalFacility	Pedestrian phase at traffic signal junction				
13	pedCrossHumanControl	None within 50 metres				
14	weather	Fine without high winds				
15	roadSurfaceCondition	Dry				
16	specialCondition	None				
17	policeOfficerInAttendance	Yes				
18	generalDescription	V1 TRAV NORTH ON JUBILEE ROAD SLOWING DOWN FOR TRAFFIC LIGHTS WHICH WERE ON RED WHEN PED RAN FROM N/SIDE AND COLLIDED WITH V1				
19	locationDescription	JUBILEE ROAD J/W REGENT AVENUE				
20	typeOfVehicle	Car				
21	manoeuvre	Slowing or stopping				
22	directionOfTravel	South East to North West				
23	junctionLocation	Approaching junction or waiting/parked at junction exit				
24	Skidding/Overturning	No skidding, jack-knifing or overturning				
25	hitObjectInCarriageway	None				
26	vehicleLeavingCarriageway	Did not leave carriageway				
27	pointOfImpact	Nearside				
28	sexOfDriver	Male				
29	ageOfDriver	66 years				
30	foreignRegisteredVehicle	Not a foreign registered vehicle				
31	hitAndRun	Other				
32	breathTest	Negative				
33	journeyPurpose	Other/Not known				
34	*****	Associated Casualty				
35	casualtyClass	Pedestrian				
36	casualtySeverity	Slight				

Next slide RTC Polygon Analysis

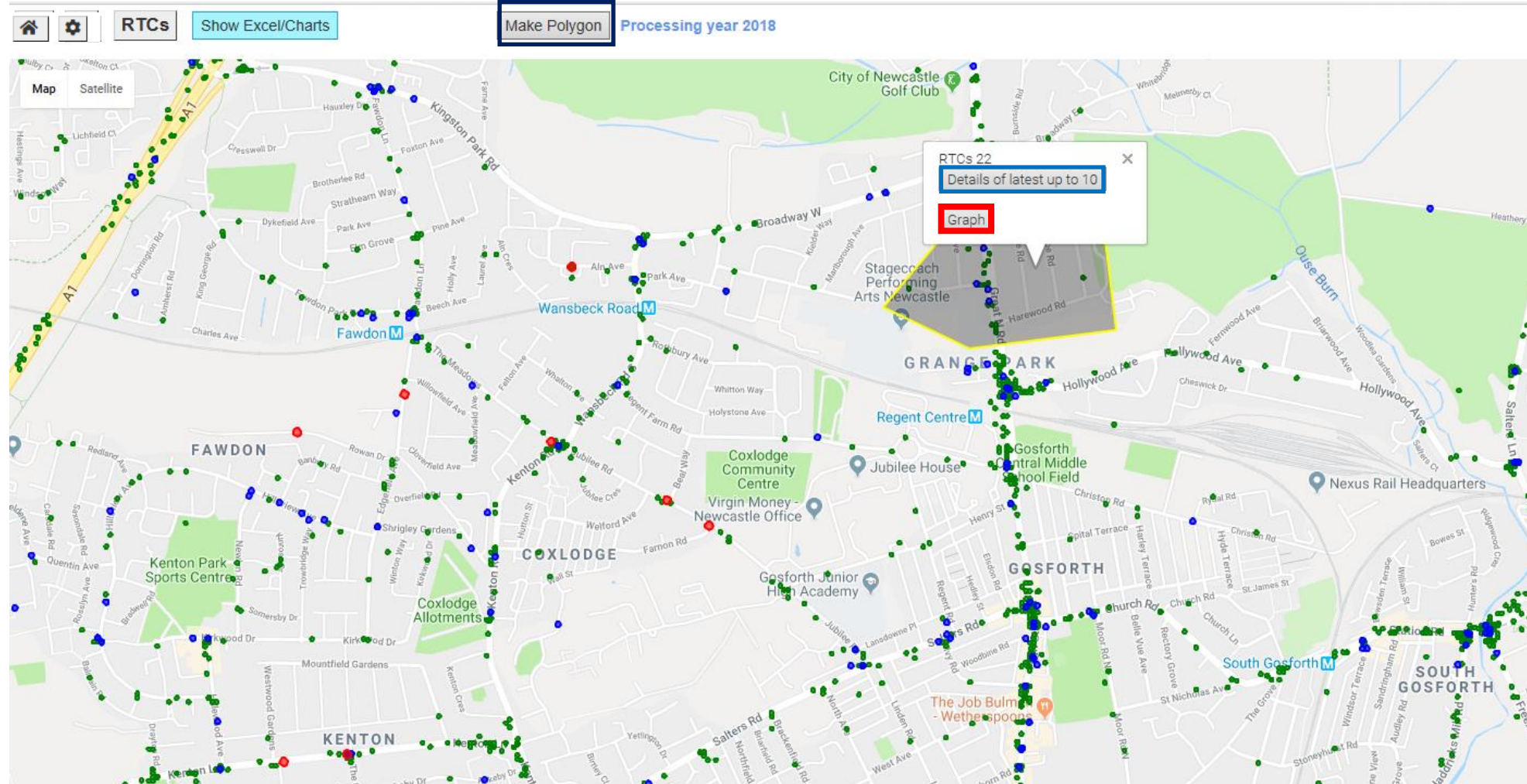
Road Traffic Collisions – Polygon Analysis 1 of 2

To make a polygon click the **Make Polygon** button. Then click the map repeatedly to make an unclosed polygon. Then click the same button, now called **Close Polygon**.

Click the polygon to display the count.

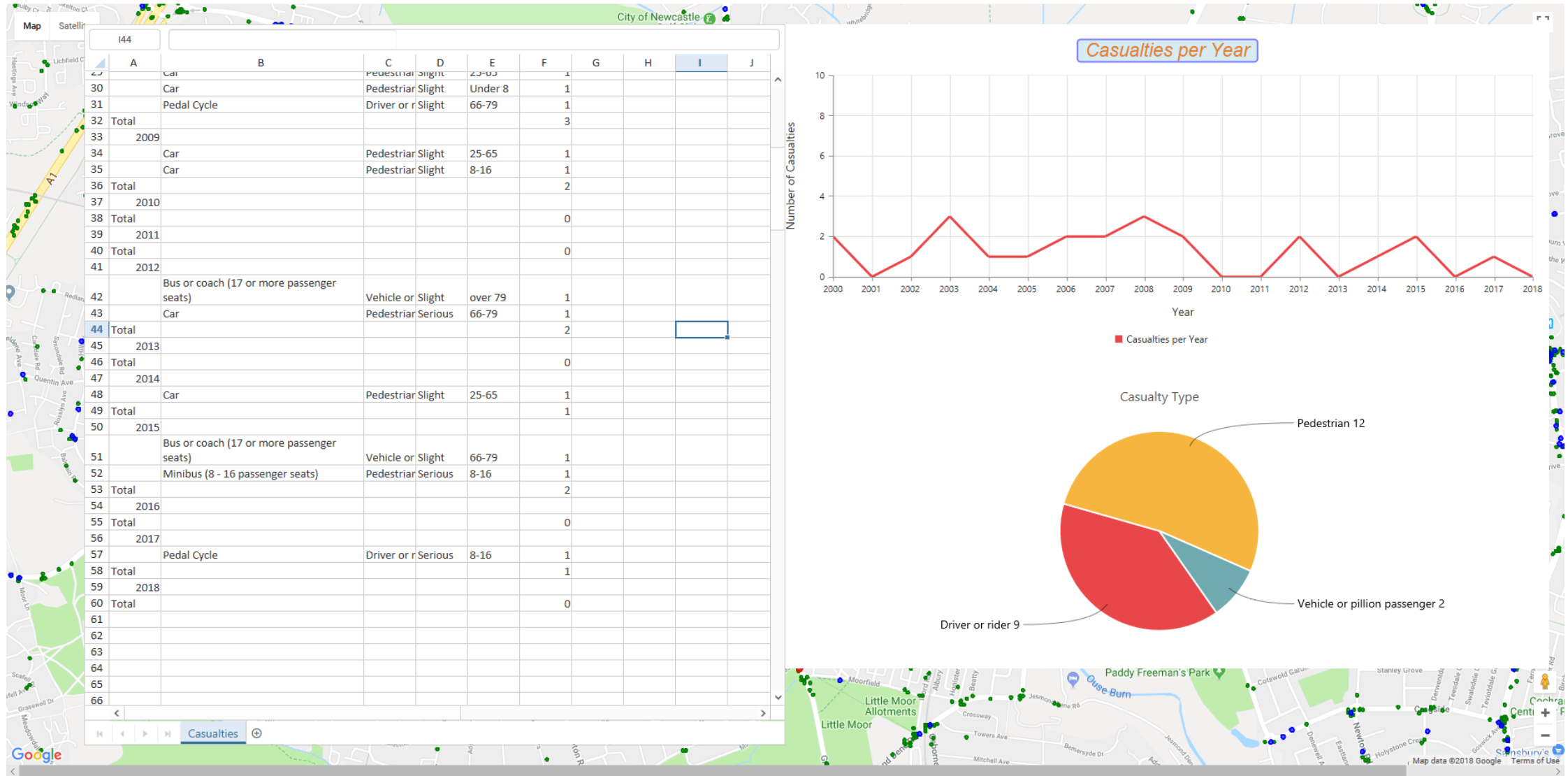
Details of up to 10 RTCs can be **displayed**, same format as on the previous slide.

Get a trend analysis by clicking **Graph**



Next slide after clicking Graph

Road Traffic Collisions – Polygon Analysis 2 of 2



CCTV Images

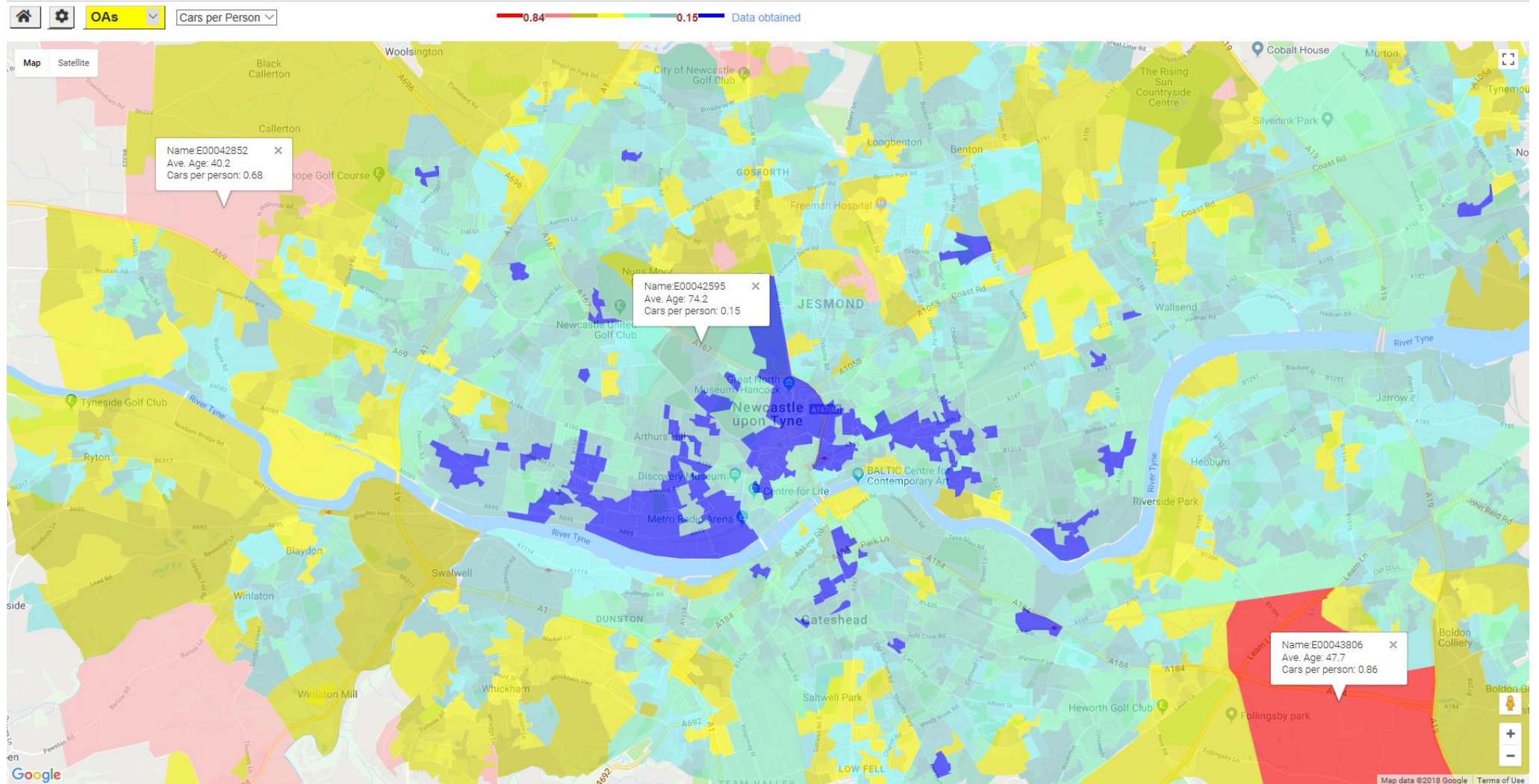
Clicking a site displays a small image. Clicking an image enlarges the images and enables auto refresh, about every 5-10 minutes. Click a large image to reverse the process.



2011 Census Car Ownership and Age Profiles 1 of 2

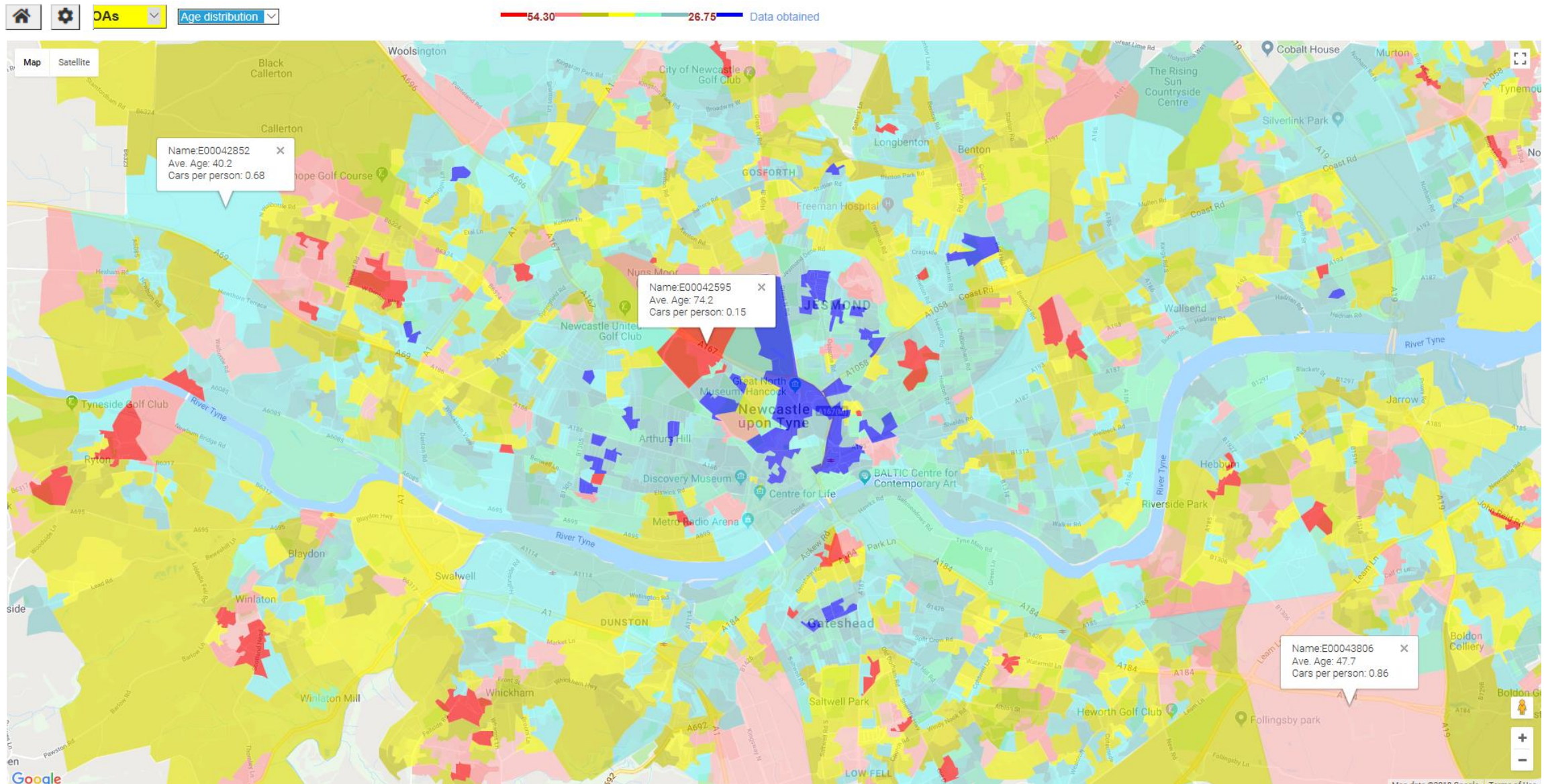
Select OAs,
LSOAs, MSOAs,
Regions, or
Ward, from the
drop down box.

Click the map
for details.



Next slide after selecting Age distribution in select box

2011 Census Car Ownership and Age Profiles 2 of 2



Next slide after clicking National Public Transport Data in Options + ⊕ on the new page

Public Transport Settings



North East Bus Tuesday 09:00:00 09:59:00

Check to force recognition of iPad

If checked tooltips DISABLED

[] indicates a different value for an iPad

40000 Maximum number of links allowed (1000 [1000] > 40000 [5500])

5000 Number of links between plots (1000 [1000] > 40000 [5500])

[Click to reset all values to default](#)

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Metro	Monday	06:00:00	06:59:00
Rail	Tuesday	07:00:00	07:59:00
Coaches	Wednesday	08:00:00	08:59:00
Ferry	Thursday	09:00:00	09:59:00
All Buses (some duplication)	Friday	10:00:00	10:59:00
East Anglia Bus	Saturday	11:00:00	11:59:00
East Midland Bus	Sunday	12:00:00	12:59:00
London Bus		13:00:00	13:59:00
North East Bus		14:00:00	14:59:00
North West Bus		15:00:00	15:59:00
Scotland Bus		16:00:00	16:59:00
South East Bus		17:00:00	17:59:00
Show West Bus		18:00:00	18:59:00
Wales Bus		19:00:00	19:59:00
West Midland Bus		20:00:00	20:59:00
Yorkshire Bus		21:00:00	21:59:00
		22:00:00	22:59:00

The default values associated with the location selected in the Options page can be changed. There are 11 bus areas, plus “All Buses” (some duplication between areas). Three national modes Metro (light rail), Rail and Coach.

Day of week

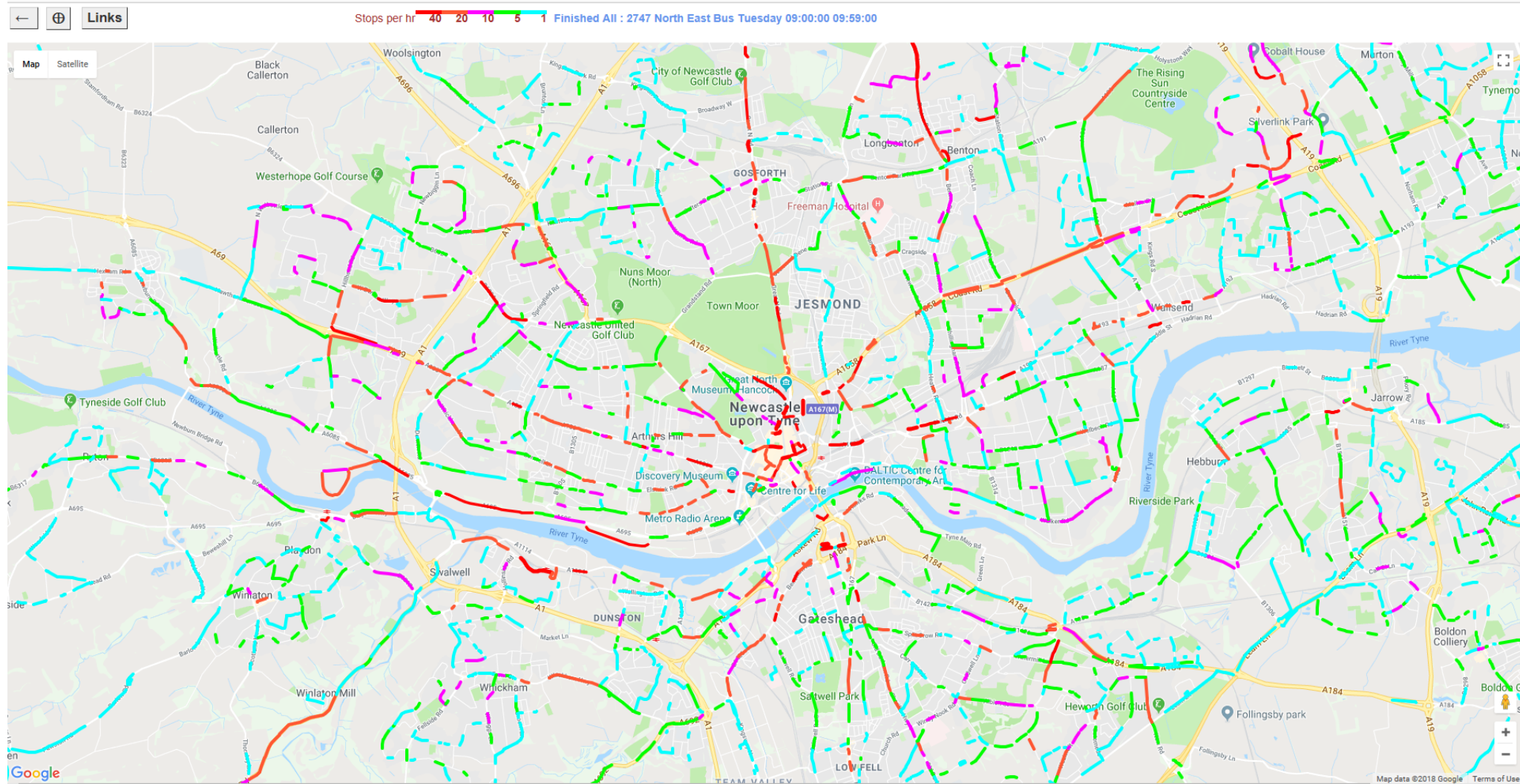
Time period

The data relates to November 2017

Next slide after clicking ⊕ and Links on the new page

Public Transport Bus Activity November 2017

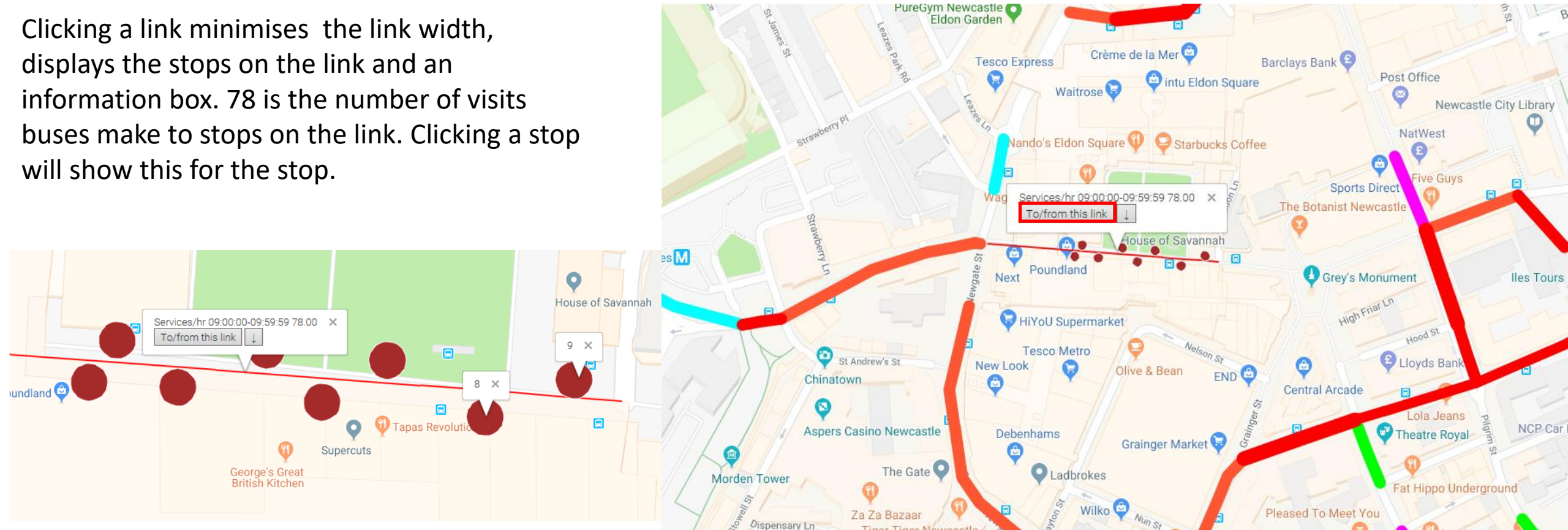
Bus stops have been mapped to OS Open Roads. Link colour reflects the number of times a bus stops on a link.



Next slide after clicking a link

Public Transport Bus Detailed Activity on a Link November 2017

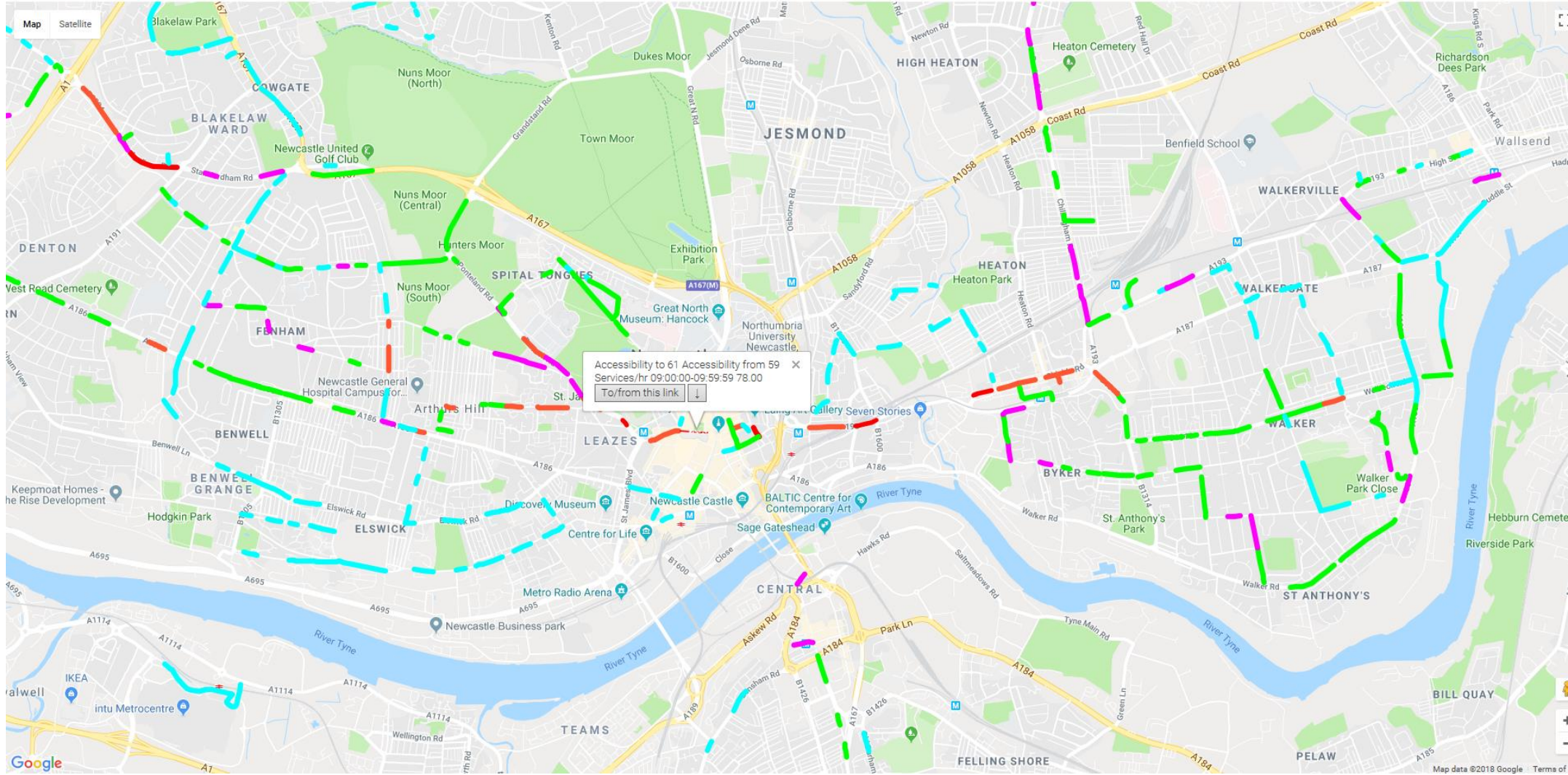
Clicking a link minimises the link width, displays the stops on the link and an information box. 78 is the number of visits buses make to stops on the link. Clicking a stop will show this for the stop.



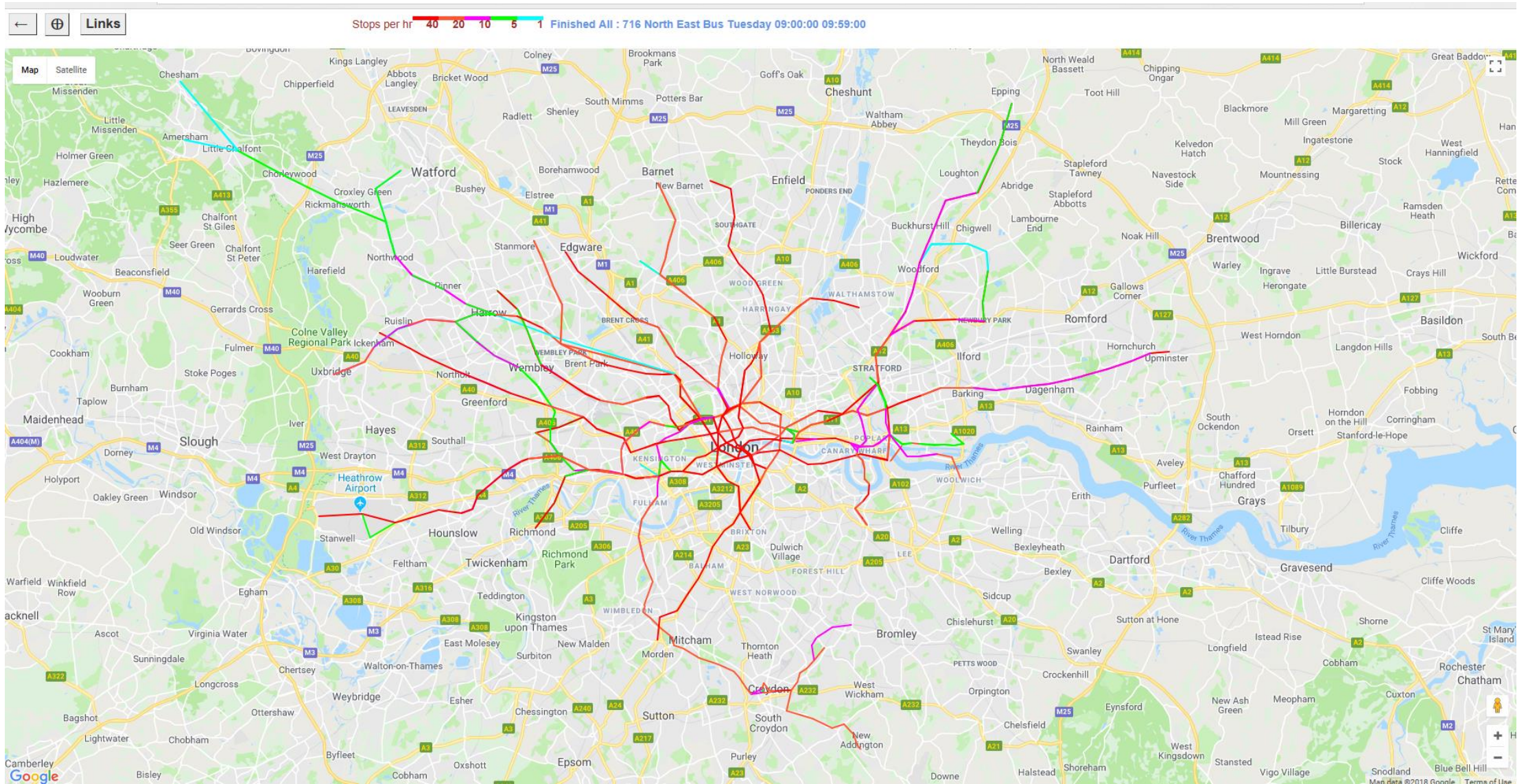
Next after clicking "To/from this link" then clicking the link again

Public Transport Bus Selected Link Analysis November 2017

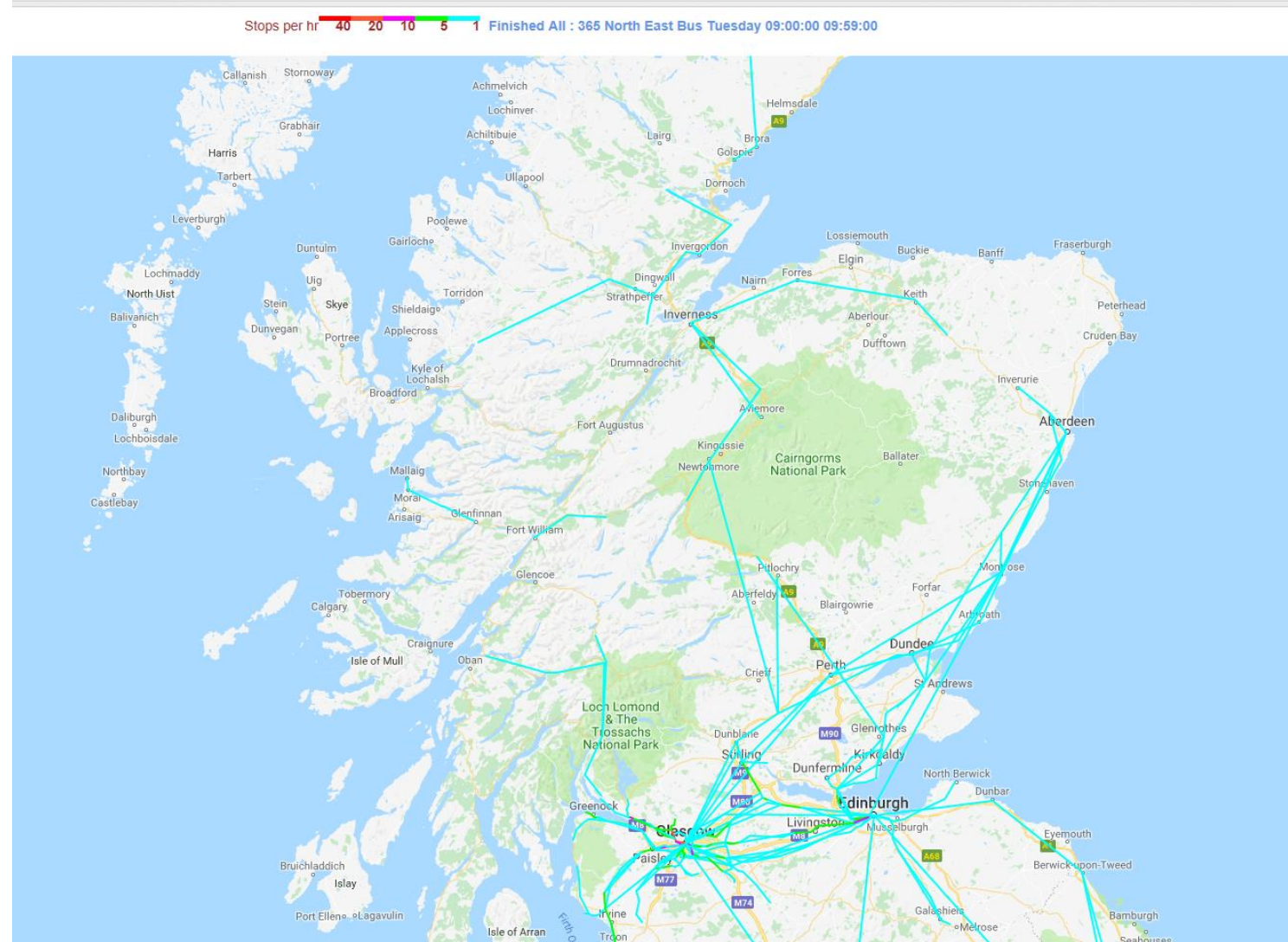
This plot shows all the links used by buses on the selected link. The accessibility statistic represents access to population on a scale of 1>100, further information on this statistic is available on request.



Public Transport Light Rail/Underground November 2017



Public Transport Rail Scotland November 2017



The End

Thank you for watching