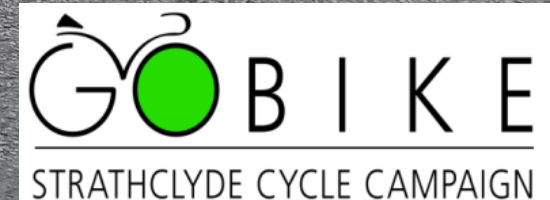


Where do Glasgow's Cyclists Cycle and How do We Know?

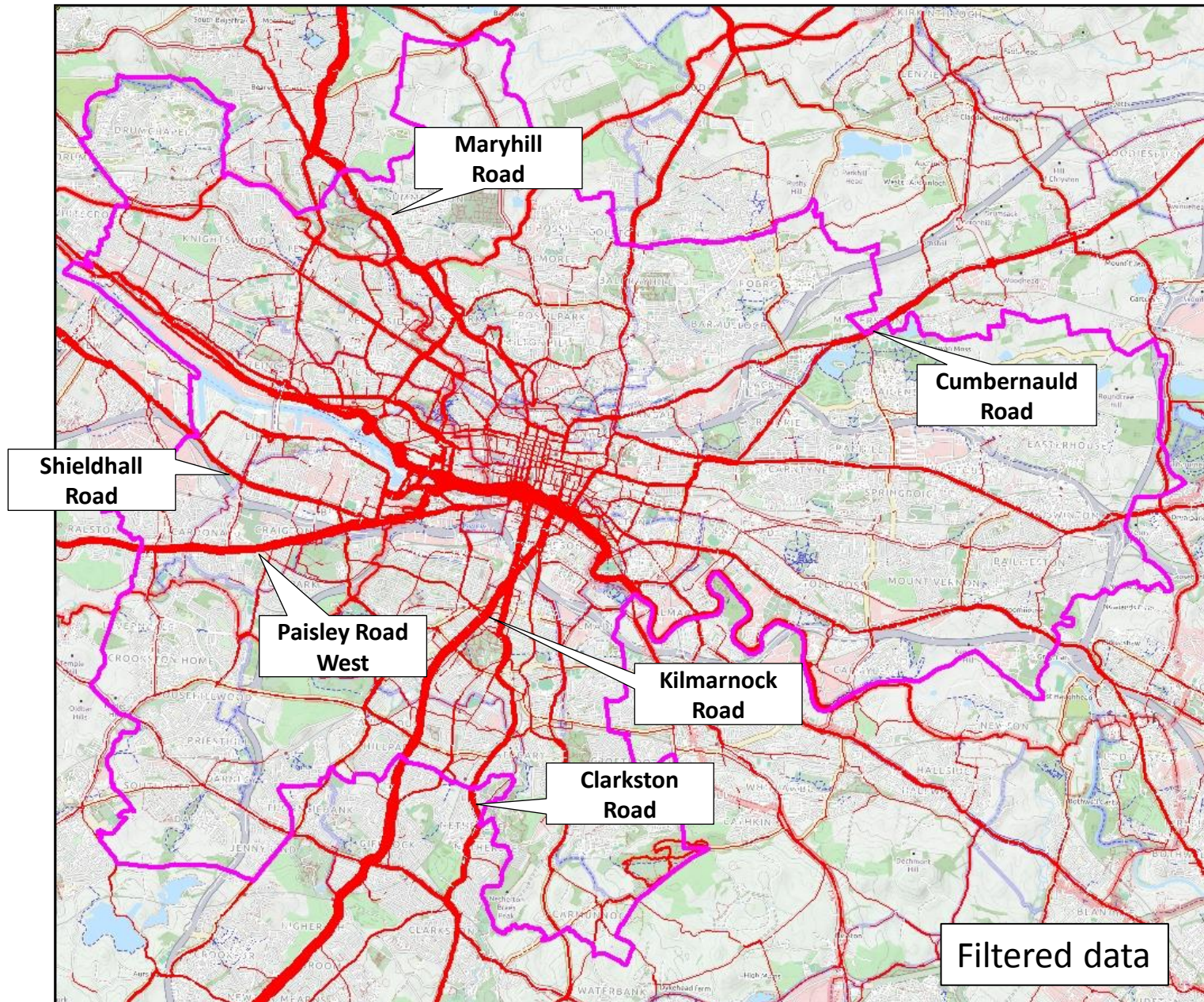
A non-expert's view on Strava, EU Cycling Challenge and STATS19 data

UBDC Active Travel Data Challenge Day
Nov 9th 2017

Bob Downie
email bob@downie-geo.co.uk
blog www.downie-geo.co.uk



Filtered Strava 2015 Total Activity Count (TACTCNT)



- STRAVA, smartphone tracking app.
- Line width proportional to use
- **Shows strong radial cycling patterns**

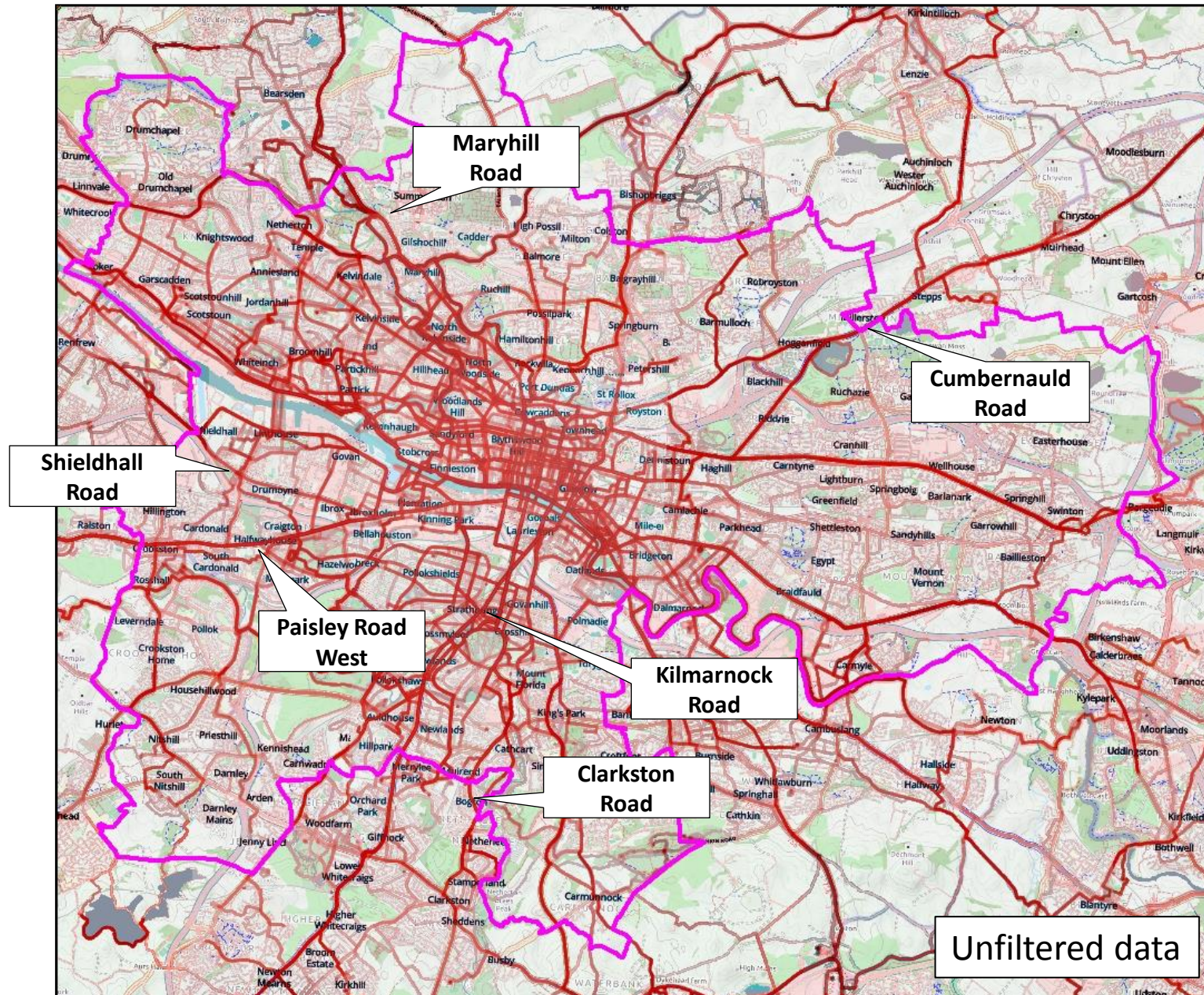
Data thanks to
Strava.com &
UBDC

STRAVA



<https://labs.strava.com/>,
<http://ubdc.ac.uk/>

Unfiltered EU Cycling Challenge Heatmap 2017

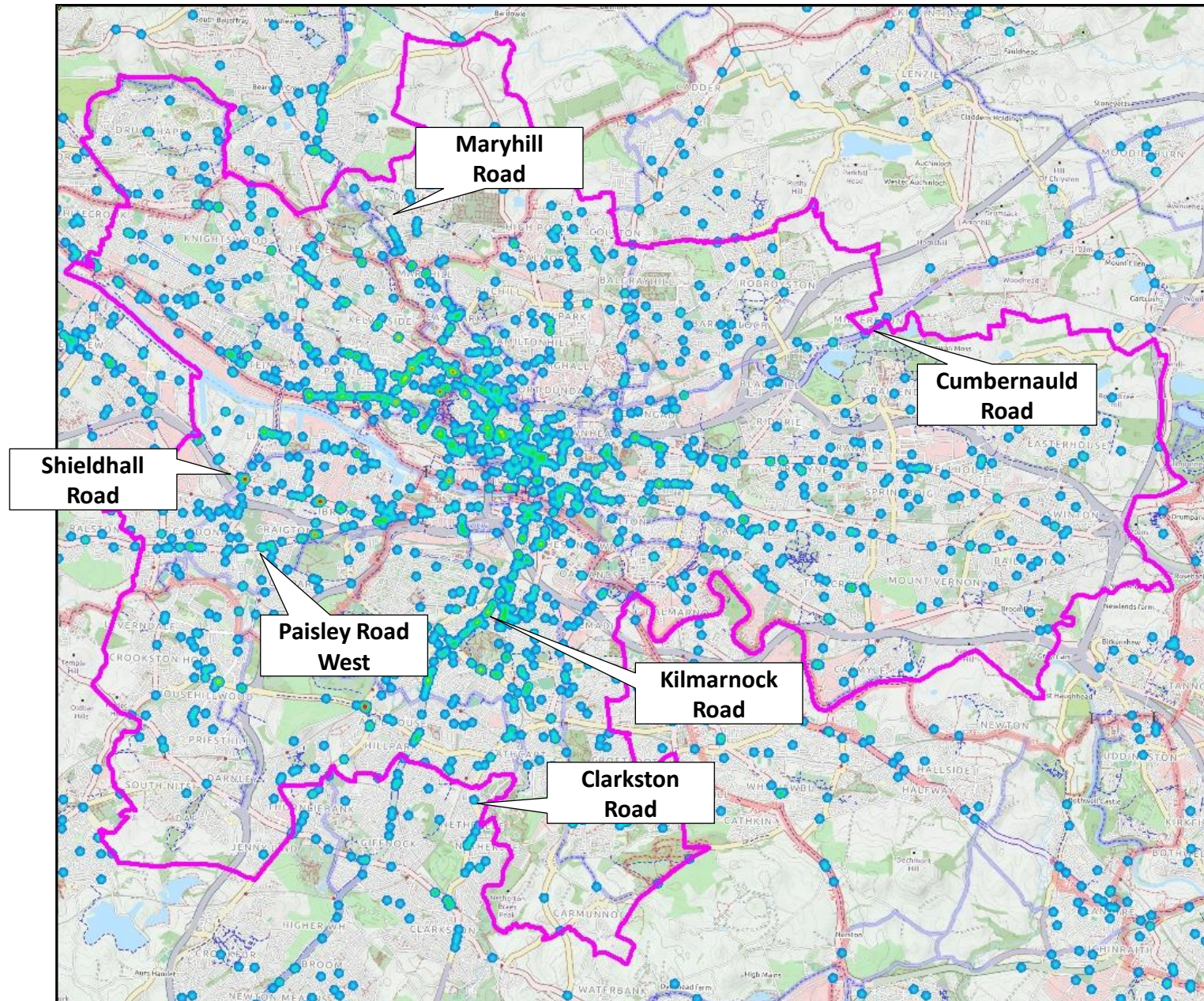


- EU Cycling Challenge, smartphone tracking app.
- Line width/colour intensity proportional to use
- Shows predominant radial cycling patterns



<http://www.cyclingchallenge.eu/>,
<https://heatmaps.naviki.org>

STATS19 Cycle Accident Heatmap 1999-2013

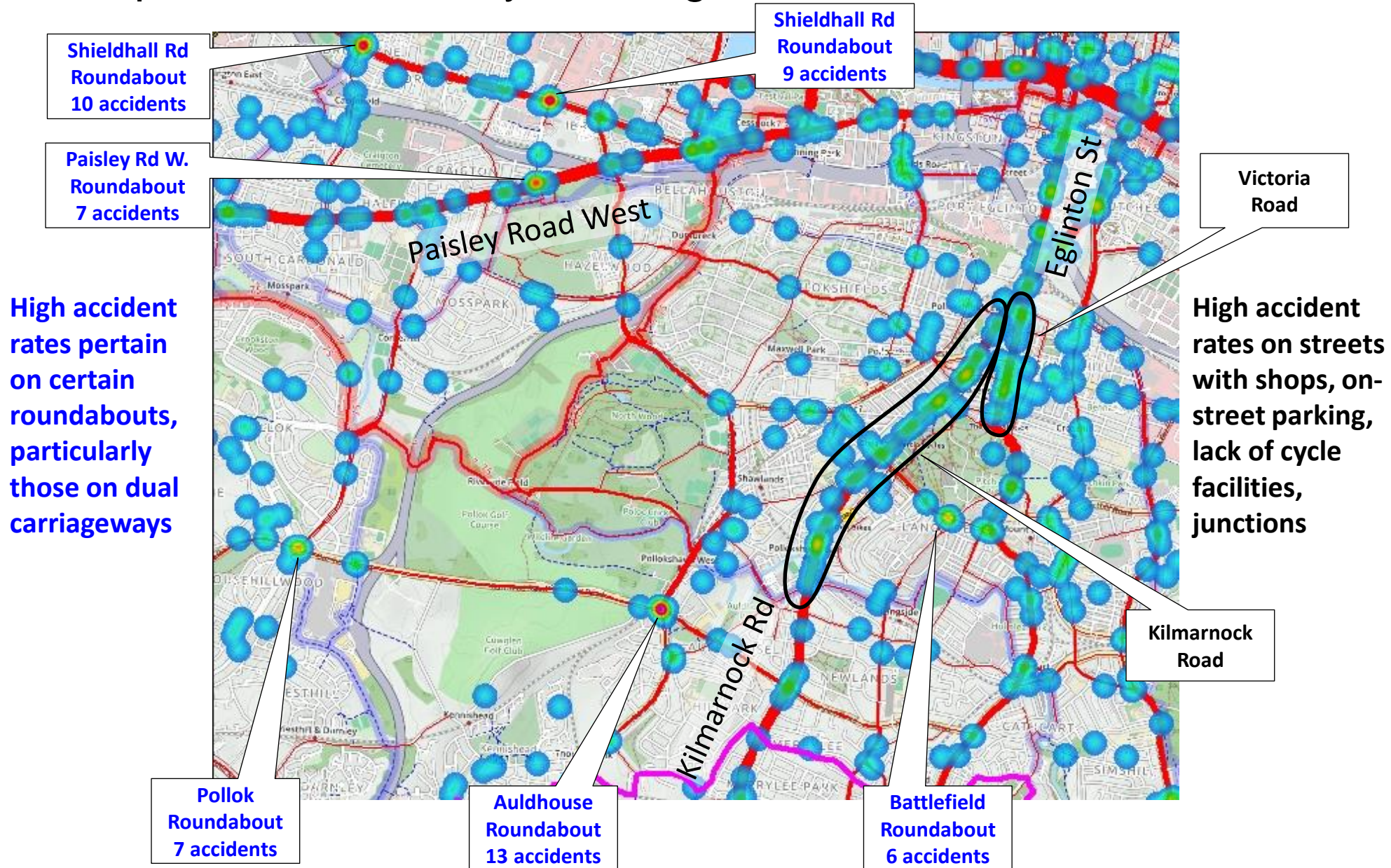


- STATS19 are traffic accident statistics collated annually by UK government
- Cycle accidents are relatively uncommon and data must be aggregated over multiple years to reveal meaningful accident patterns
- **Accidents substantially align along main radial roads**

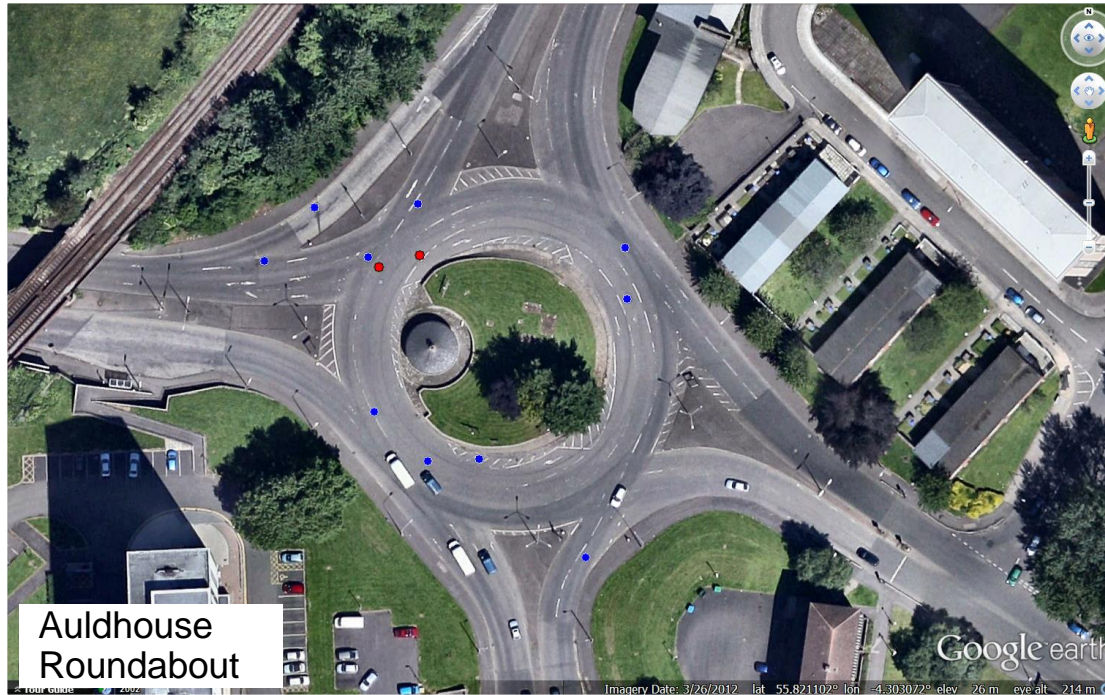


[https://discover.ukda
service.ac.uk/](https://discover.ukda.service.ac.uk/)

Combining Data Characterises Cycle Accident Hotspots Relative to Cycle Usage, Strava & STATS19



Combining Data Characterises Cycle Accident Hotspots Relative to Cycle Usage, Strava & STATS19



Auldhouse Roundabout

these on dual carriageways

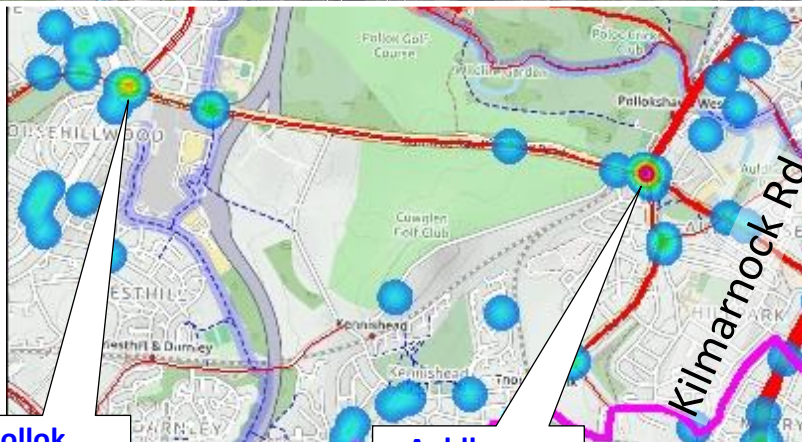
hieldhall Rd Roundabout
9 accidents



Victoria Road

High accident rates on streets with shops, on-street parking, lack of cycle facilities, junctions

Kilburn Road

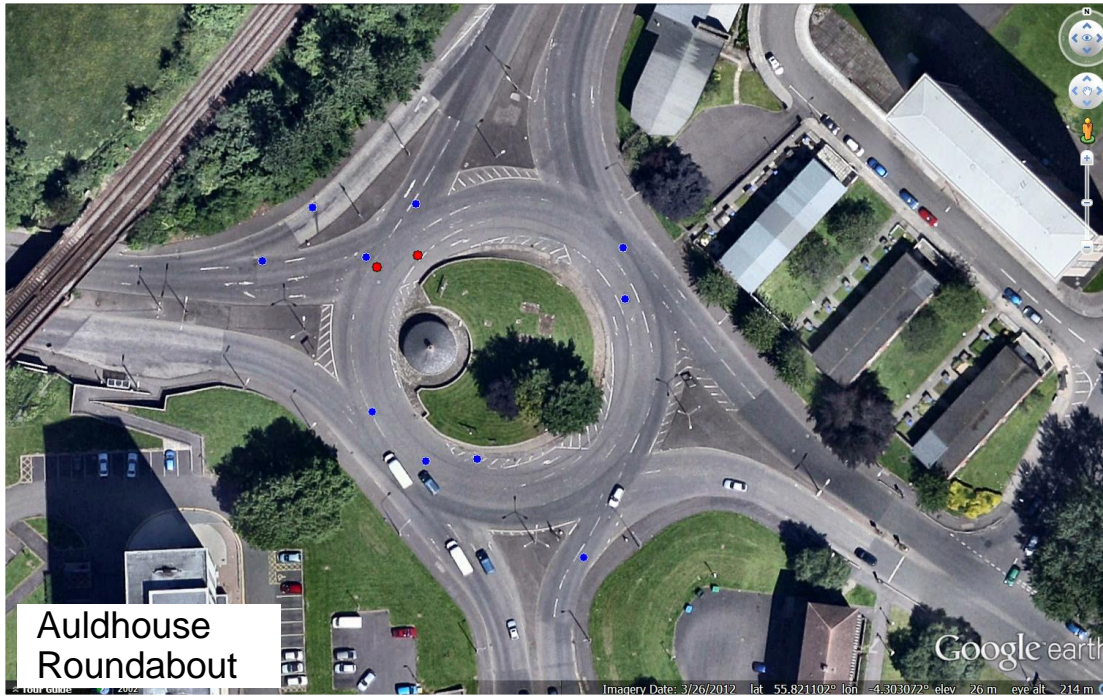


Pollok Roundabout
7 accidents

Auldhouse Roundabout
13 accidents

Battlefield Roundabout
6 accidents

Combining Data Characterises Cycle Accident Hotspots Relative to Cycle Usage, Strava & STATS19



hieldhall Rd
Roundabout
9 accidents

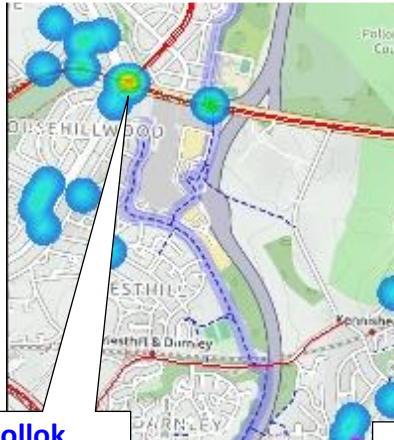


Victoria
Road

High accident
rates on streets
with shops, on-
street parking,
lack of cycle
facilities.

Auldhouse
Roundabout

these on dual
carriageways



Pollok
Roundabout
7 accidents



Typical "high
accident" shopping
street. Kilmarnock
Road, Govanhill

Some Cycling Behaviour Conclusions

- Both Strava and EU Cycling Challenge suggest cyclists preferentially travel on the main arterial roads, radially into and out of the city. The cycle accident distribution patterns are consistent with this.
- These observations pose a challenge. Should city authorities attempt to provide safe cycle facilities to satisfy the desires of the current cycle community (i.e. on the main roads), or should they seek to provide safe cycle facilities on less direct routes? Would the latter satisfy present and future cyclists?

Some Cycle Accident Conclusions

- Certain roundabouts and many roads flanked by small shops and on-street parking show egregiously high levels of cycle accidents relative to the levels of cycle traffic.
- Remedial action to increase the safety to cyclists at these locations is urgently required.



**Glasgow's most dangerous
location for cyclists?**

**Despite only moderate cycle
traffic, Auldhouse Roundabout
has been site of 13 recorded
cycle accidents in 15 years**