Ant Scott
Analysing access to UK public rights of way with the QGIS Graphical Modeler

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0 Prep codepoint
1 RoW lengths in Centroid buffer
2 Continuous RoW
3 Wild RoW lengths inside Codepoint buffer
4 RoW Greenness
5 Continuous RoW analysis
6 RoW Greenness Length over 80pc
7 Merge additional RoW
8 Landscape type RoW analysis
9 Open Access Connection
9 Open Access Connection: all outputs

1. Because we could
2. Because it works
3. Transferability
1. Length of Rights of Way (RoW) in Open Access (OA) areas
2. Number of intersections of boundary of each OA by RoW
3. Distance from postcode to nearest connected OA area over 5ha

<table>
<thead>
<tr>
<th>Description</th>
<th>Precise definition</th>
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| Length of RoW in open access, and number of intersections of boundary by RoW | - Create buffer of 5m round all access land, with overlapping buffers joined  
- Merge polygons which fall inside a single buffer polygon (note that this will merge polygons 10m apart)  
- Calculate the area of each merged polygon  
- For all merged polygons, count no and length of RoW inside, and no of RoW intersections of boundary |
| Distance from postcode to nearest access land | Calculate distance from postcode centroid to nearest open access land polygon over 5ha with connections to RoW network, using buffered/merged polygons from output 11 |
1. Create a spatial index for each new output used later in the process.
2. Don't keep generating outputs that won't change - process once and save.
3. During development, work on smaller datasets.
4. Retain only fields you need.
5. Migrate to SQL (e.g. in PostgreSQL) if you need to.
6. Trust the progress bar no more than you would any other.

1. More of the things I just mentioned.
2. Saved models as files, not models in the project.
4. Save output when might have value, but document why so you know what and why
5. Use the graphic to sanity check logic and dependencies

**In**
1. More of the things I just mentioned
2. Saved models as files, not models in the project
3. Found the `Modeler tools` algorithms before rather than after the project
4. Built some models in here I didn’t bother
5. Not built some models where I did bother
6. Documented at model level as well as at process level
7. Saved the logs more often and read them more closely

**What we wished we’d done**
1. Conditioned inputs
2. More of the things I just mentioned

**Outcomes**

The ‘Graphical Modeler’ is robust, well-built and incredibly useful (though not necessarily the right tool for presentations...) It allowed us to develop, fine-tune, document and pass on the models which anecdotally the data used to support the work of this report.

Including these conclusions?

Any questions?
Public rights of way provision is deeply unequal, and missing from the communities that need it most.

- Residents of the least deprived areas of England and Wales see 80% more PRoW provision in their local area than the most deprived.
- Where health is worst (as indicated by heart attack prevalence) PRoW provision is also lowest.
Thanks and questions...

Ant Scott
@antscott