

Title: Swingate Boundary Changes and Maintenance Responsibility – A Historic Map Case Study

Source:

Historic Map: TL2224-TL2324 - AA - Revised 1968 to 1971, Published 1973 ([Ordnance Survey historic map](#))

Modern Map: OpenStreetMap

Methodology:

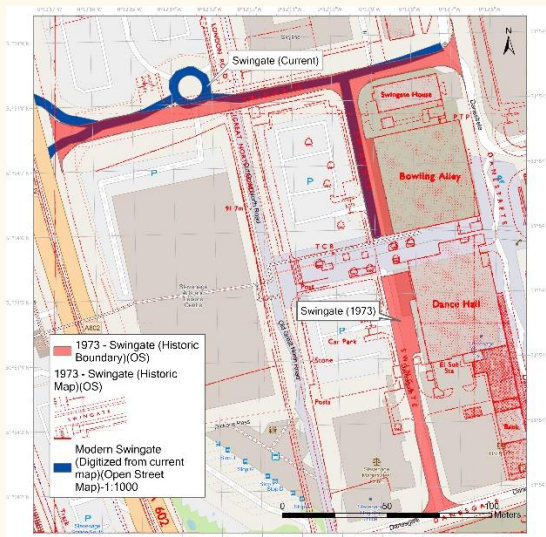
The 1973 Ordnance Survey map (red layer) was placed on top of the OpenStreetMap basemap in ArcGIS Pro. I matched key points to the British National Grid so the maps lined up.

I then drew the current boundary of Swingate (blue area) from the modern map and compared it with the 1973 map.

This boundary comparison also helps to understand who may be responsible for road maintenance today.

Key Findings: -

The result of analysing Swingate boundary shifts using a historic map is shown below.



Red area : 1973 Swingate (Historic Boundary/Map) (OS)
Blue area : Modern Swingate (Digitized from current map) (OpenStreetMap)

**Note: Due to map scale, the analysis image is provided at reduced size for this report. Full-resolution map and ppx are available via [data/layout-Swingate_analysis.jpg](#)*

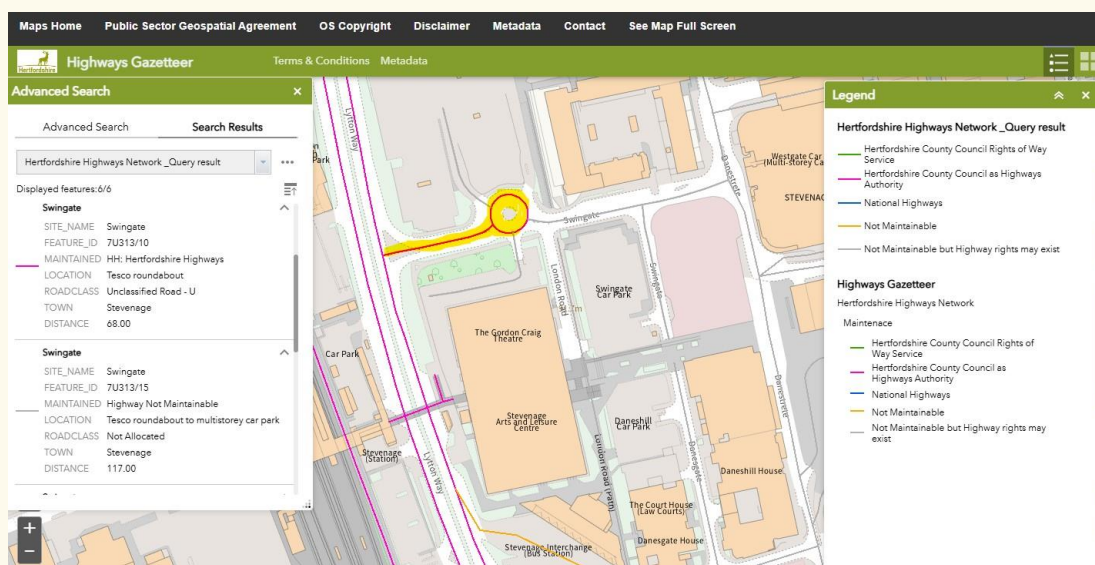
- The old and new maps match quite well at the T-junction with Great North Road.
- The T-shape of Swingate is clear in both maps, but there are small differences at the north and south ends. These may be from road widening or redevelopment.

Case study :Swingate

- The south end is shorter now than in 1973, and a roundabout has been added at the north end to access the car park.
- Key buildings (Bowling Alley, Swingate House) are still in the same place, which shows the geo-referencing is accurate.
- Small mismatches in the boundary are probably because of the scale and distortion of the historic map.

Discussion:

- This overlay shows how useful historic map geo-referencing is to check how road boundaries change over time.
- [Hertfordshire County Council Gazetteer](#) shows that only some parts of Swingate are looked after by the County Council (highlighted in yellow). Other parts are “Highway Not Maintainable.” Finding who is responsible often needs checking land records, past land use, or legal designations. Knowing the difference between adopted and unadopted roads helps to see if responsibility lies with property owners, private groups, or another authority.



Recommendations:

- Add OS MasterMap data and the latest datasets to make the position more accurate.
- Compare maps from more years and mark the main changes more clearly.
- Use extra details on land ownership and laws to better judge who maintains unadopted sections.