

PURPOSE: Identifying where crime concentrates is one of the the principle aims of crime analysis. However, the spatial analysis techniques commonly used to identify of crime typically assume that crime can occur anywhere in a study area and ignore the effect that the built environment has on the spatial distribution of crime. As some crimes are particularly constrained by networks (e.g. street robbery by the street network, bus crime by the transport network) it is important that there are appropriate analytical methods available to capture such linear concentrations..

Hot Routes was devised to be a straightforward spatial analysis technique that analyses crime patterns that are associated with a linear network (e.g. streets and other transportation networks). It allows an analyst to map crime concentrations along different segments of the network and visualise this through colour. It is deliberately simple, meaning that an analyst just needs access to a regular GIS package and suitable data sets. More sophisticated tools are available¹, but access to them is usually limited by police IT systems protocols on installing software.

THEORY: According to crime pattern theory, the distribution of crime largely depends on how victims and offenders converge in space. In an urban environment an individual's 'activity space' is defined by streets and transport networks called 'paths'